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Introduction to Mentoring Program
Introduction to Mentoring Program

GOAL
Develop reciprocal, interactive relationships between junior and senior faculty that provide a context of broad support in which junior faculty are successful in achieving their own and the institution’s goals.

RATIONALE
A career in Academic Medicine provides varied, meaningful, and interesting opportunities in clinical care, research, teaching, and service. To have a successful career at UC Davis, you will need to keep your own personal goals in mind as well as understand and fulfill the requirements of the institution for the academic series you are in. To accomplish this, the Career Mentoring Handbook and Resource Guide will serve as a primer on your academic series and the merit and promotion process. It provides you with a worksheet to help you keep track of your progress on your academic goals. The Guide includes articles giving you collegial advice on work/life balance, mentoring, teaching, and research. You will be given a senior mentor, usually within your Department, who will meet with you on a regular basis and using this Guide go over your goals and the requirements of your series to help you stay on track and solve problems as they arise.

ESSENTIALS FOR SUCCESS
• Understand your needs and desires in your academic career
• Understand the missions of the institution
• Know the criteria for advancement in your academic series
• Know how the merit and promotion system works
• Know where to go for advice, help and training

YOUR CAREER IS YOUR RESPONSIBILITY. THE MENTORING PROGRAM IS DESIGNED TO HELP YOU BE SUCCESSFUL IN MAKING THE APPROPRIATE DECISIONS TO ADVANCE YOUR CAREER.
SCHOOL OF MEDICINE MISSION
“Discovering and sharing knowledge to advance health”

Education—Excellence in Education
Provide outstanding learning opportunities for students to attain the skills and passion needed for success in medicine

Research—Leadership in Innovative Research
Research – Position UCD as a leader in innovative research that is recognized as making high-impact discoveries in focused areas of excellence

Clinical Care—State-of-the-Art Clinical Care
Provide high-quality, patient-oriented services that respond to the needs of our community and attract patients from around the world

Community Engagement—Effective Community Engagement
Participate as a valued member of the community by enhancing the quality of life and the economic strength of our region and state.

CAREER PLANNING TOPICS
The career planning topics (listed below) should be a regular and structured part of the mentoring meetings and discussions. Each mentee should choose the career topics appropriate to the unique criteria of their academic series.

• Teaching
• Research
• Clinical Care
• Service
• Additional Mentors
• Self Development
• Networking
• Work/Life Balance

INDIVIDUAL DEVELOPMENT PLAN (IDP)
The Individual Development Plan (IDP) provides a framework for the mentee to annually review personal, professional career goals and institution goals. The latter are communicated via the chair/division leader and aligned with mentee’s academic series requirements.
Individual Development Plan (IDP)

1. Name ________________________________________________________________

2. Date ________________________________________________________________

3. Academic Series and Rank
   - Ladder Rank
   - In-Residence
   - Adjunct
   - Clinical X
   - Health Science Clinical

4. Primary Mentor _______________________________________________________
   Additional Mentor(s) __________________________________________________

5. Identify Personal and Institutional Long Term Goals
   Why did you decide to work at a medical school? What did you hope to accomplish?
   You’re about to go up for promotion, what are the accomplishments and/or activities that you want your chair to be able to write effusively about?

List your Academic Series requirements (see Academic Criteria for Series)
List other goals discussed with Chair/Division head.
6. **Areas of Focus: Definition and Distribution of Effort**

The following six areas of focus generally describe the areas where faculty direct their efforts to successfully accomplish their personal, institutional and academic series goals:

- **Teaching—Excellence in Education**
  Student and/or resident teaching, student advising, CME/curriculum teaching / involvement, new course development, etc.

- **Research/Creative Activity—Leadership in Innovative Research**
  Conducting basic science and/or clinical research, presentations and publications, funding and grant support and application, copyrights and patents, editing, and peer review.

- **Clinical Care—State-of-the-Art Clinical Care**
  Clinical Activities: direct patient care, chart reviews, related clinical activities, clinical budget performance.

- **Service—Leadership in UCDHS governance**
  Participation or leadership in governance, committee membership, collegial activities.
  Suggested service priority: Department, SOM, UCDHS, University, Professional, Community.

- **Self Development—Networking, Work/Life Balance and Additional Mentors**
  Faculty Development activities, leadership programs, CME training, earning advanced degrees, participation in professional academic associations or societies, developing professional contacts, consulting in one’s field, expanding network contacts, balancing work and personal life activities, utilizing additional mentors in specific areas of focus.

### Distribution of Effort

Estimate the hours per week spent in each focus area then list the % of total duties.

<table>
<thead>
<tr>
<th>Focus Area</th>
<th># Hrs/Week</th>
<th>% of Total Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration/Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Development (Networking, Work/Life Balance and Additional Mentors)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. **Specific Goals in Focus Areas**

Complete the focus areas that specifically apply to the criteria for your Academic Series and therefore will help you accomplish your personal and institutional long term goals.

**Teaching**

Year in Review: Please list last year’s goal(s) and significant accomplishments (teaching appointments, invitations, course or program improvements, etc). If goal not met, explain and identify barriers.

Upcoming Year’s Teaching Goal(s):
Identify Resources, Collaborators, and time commitment needed to achieve goal(s):

Identify Barriers to achieve new goal(s):

Research and Research Related/Creative Activities

Year in Review: Please list last year’s goal(s) and significant accomplishments (major publications, grants, presentations, invitations, etc). If goal not met, explain and identify barriers.

Identify in a single sentence the focus of your scholarly activity.

Upcoming Year’s Research Goal(s):

Identify Resources, Collaborators, and time commitment needed to achieve goal(s):

Identify Barriers to achieve new goal(s):

Clinical Care

Year in Review: Please list last year’s goal(s) and significant accomplishments (exceptional patient care, development of new techniques, clinical programs, etc). If goal not met, explain and identify barriers.

Upcoming Year’s Patient Care goal(s):

Identify Resources, Collaborators, and time commitment needed to achieve goal(s):

After completing your review consider:

Were there specific areas of the IDP that were difficult for you to complete? If yes — which areas and what was difficult. Consider need for more self-development in this area.

Are you “on track” to achieve your goals and series requirements?

Do your short term goals and accomplishments feed into your long term goals? If not, why not?

What can you do to enhance that alignment?

What resources are available to help you achieve your short and long-term goals?

Critically assess your own competencies relative to your goals — in what areas do you need to improve and enhance your continued development?

Answers to these questions can inform your discussions with your mentor. They can also be helpful in your annual review process with your department head.
Mentoring Program Introduction

Identify Barriers to achieve new goal(s):

Service
Recommended service priority: Department, SOM, UCDHS, University, Professional, Community Year in Review: Please list last year’s goal(s) and significant accomplishments. If goal not met, explain and identify barriers.

Upcoming Year’s Administration goal(s):

Identify Resources, Collaborators, and time commitment needed to achieve goal:

Identify Barriers to achieve new goal(s):

Self Development (Networking, Work/Life Balance and Additional Mentors)
Year in Review: Please list last year’s goal(s) and significant accomplishments. If goal not met, explain and identify barriers.

Upcoming Year’s Self Development Goal(s):

Identify Resources, Collaborators, and time commitment needed to achieve goal:

Identify Barriers to achieve new goals:

Self Development includes:
Networking: What important contacts have you developed this year? What plans do you have to expand your networking contacts?
Work-Life Balance: Are you content with your work/life balance? What actions might help you improve your work/life balance?
Additional mentors: Do you have mentors for specific focus areas (e.g., teaching, research) in addition to your career mentor?
8. **Optimal Distribution of Effort**

Revisit the table, “Distribution of Effort,” in step 6. Create a new Optimal Distribution of Effort table, taking into account your specific goals listed in step 7.

<table>
<thead>
<tr>
<th>Focus Area</th>
<th># Hrs/Week</th>
<th>% of Total Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration/Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Development (Networking, Work/Life Balance and Additional Mentors)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. **We have met and discussed this annual Individual Development Plan (IDP)**

Mentee ____________________________________________

Date ______________________________________________

Mentor ____________________________________________

Date ______________________________________________
Departmental Administration of Mentoring Program
Departmental Administration of Mentoring Program

THIS SECTION CAN BE CUSTOMIZED BY EACH DEPARTMENT. THE FOLLOWING SECTIONS ARE RECOMMENDED:

DEPARTMENT RATIONALE FOR MENTORING PROGRAM
• Include expectation for mentor-mentee pairs

FACULTY INCLUDED
• List Department Mentors/Mentees

DEPARTMENTAL RESOURCES
• Identify Departmental Director of Faculty Development (DDFD) and duties/responsibilities
• Identify Department Faculty Development Committee or Mentoring Committee
Departmental Administration of Mentoring Program

Department — [complete with your department information]

Chair: __________________________________________ Phone:  ______________________________________________
Email:   ______________________________________________
Vice-Chair: ______________________________________ Phone:  ______________________________________________
Email:   ______________________________________________
Vice-Chair: ______________________________________ Phone:  ______________________________________________
Director of Faculty Development:_____________________ Phone:  ______________________________________________
Email:   ______________________________________________
Department Manager:_____________________________ Phone:  ______________________________________________
Email:   ______________________________________________
Administrator:____________________________________ Phone:  ______________________________________________
Email:   ______________________________________________
Other Resource: __________________________________ Phone:  ______________________________________________
Email:   ______________________________________________

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Website for Vice Provost Office: http://academicpersonnel.ucdavis.edu/
Mentor/Mentee Relationship
Mentor/Mentee Relationship

“Mentoring is largely the art of making the most of a given situation.”
— Gordon Shea

FORMING A MENTORING MIND SET

- Demonstrate your commitment to be a mentor/mentee
- Expect guidance, not rescue

PREPARING FOR YOUR FIRST MENTORING MEETING

- Learn about each others academic career
- Review expectations
- Agree on parameters and define boundaries, complete Mentorship Agreement
- Review Individual Development Plan (IDP)

SETTING THE MENTEE’S GOALS

- Ascertain mentee’s goals
- Encourage personal vision and creativity
- Articulate and discuss how goals can be measured and achieved

PROMOTING EFFECTIVE COMMUNICATION

- Listen to each other
- Give your mentee your complete attention
- Give frequent feedback
- Maintain confidentiality
- Be a positive role model
- Share your passion about your academic career
- Foster strategic thinking and support risk taking
- Promote leadership development
- Encourage your mentee in participating in University development opportunities
- Understand and promote involvement in the School of Medicine Mission
- Assist mentee in establishing guidelines and responsibilities in achieving merit and promotion goals
- Identify professional network opportunities
- Celebrate success
STRATEGIES AND SUGGESTIONS FOR SUCCESS

The “Handbook of Career Development in Academic Psychiatry and Behavioral Sciences,” by Robert LS, Hilty DM (eds) is an excellent resource for academic career development. Many of the contributions are from UC Davis including the editor, Dr. Hilty. Following is a brief summary of the book’s findings.

The attributes of a faculty mentor include:
- Sense of purpose – teacher, clinician, scientist, administrator, mentor and advocate
- Willingness to engage in hard work
- Creativity – research, clinical care, education or administration
- Being organized – essential in order to be effective, accomplished faculty members
- Combination of tenacity and resilience – develop new skills, encounter new challenges and novel situations, take measured but definite risks
- Ability to build a reservoir of goodwill in one’s professional life
- Blending of insight, intuition and openness to opportunity

A good mentor:
- Helps the mentee understand formal and informal ways academics work
- Helps the mentee stay focused on activities consistent with the mentee’s career aspirations

The mentor must be an active partner in an ongoing relationship with a more junior colleague (i.e., mentee) for the primary purpose of nurturing the mentee’s optimal personal and professional development. A mentor serves as teacher, role model, resource, advisor, supporter and advocate.

The proper environment for optimizing the career development of junior faculty includes:
- Presence of mentors in the immediate environment who help the mentee understand formal and informal ways academia works and help the mentee remain focused on activities that will benefit their careers
- Provision of some measure of protection for professional growth and development

The ideal mentor:
- Believes in the mentee
- Is psychologically mature
- Listens to your dreams and facilitates your reaching them
- Gives honest feedback, both good and bad.
- Promotes your career; pushes you to publish; to present your work, and participate in research opportunities
- Facilitates your professional networking
- Teaches things that books cannot
- Celebrates your success
- Is not exploitive, smothering, or overly controlling

The ideal mentee:
- Is courteous, hard-working, and reliable
- Takes responsibility for his or her own growth and development
- Is efficient and respectful of time
- Asks burning questions
- Is responsive to advice from mentor
- Is enthusiastic and eager to contribute to ongoing work or projects
- Expresses gratitude
- Is not greedy, demanding, clinging, or ungrateful
Resources for Mentor/Mentee Meetings

CAREER PLANNING TOPICS
The career planning topics (listed below) should be a regular and structured part of the mentoring meetings and discussions. Each mentee should choose the career topics appropriate to the unique criteria of their academic series.

- Teaching
- Research
- Clinical Care
- Service
- Additional Mentors
- Self Development
- Networking
- Work/Life Balance

INDIVIDUAL DEVELOPMENT PLAN (IDP)
The Individual Development Plan (IDP) provides a framework for the mentee to annually review personal, professional career goals and institution goals. The later are communicated via the chair/division leader and aligned with mentee’s academic series requirements. (see IDP page 8)

MENTORSHIP AGREEMENT
The Mentorship Agreement is a contract between the mentor/mentee that outlines the expectations for the mentoring relationship. The Agreement should be completed at the beginning of the mentoring relationship (see Mentoring Agreement page 21).

MENTORING WORKSHEET
The Mentoring Worksheet is a form that allows mentor and mentee to track progress between mentoring meetings. The Worksheet provides a mechanism to: assess milestones, analyze gaps, trace course corrections, and discern new directions. (see Mentoring Worksheet page 22).
Mentorship Agreement

1. Check the topics you will address in mentoring sessions.
   - Teaching
   - Research
   - Clinical Care
   - Service
   - Additional Mentors
   - Self Development
   - Networking
   - Work/Life Balance

2. Check the frequency of meetings for this year.
   - Weekly
   - Bi-monthly
   - Monthly
   - Quarterly
   - Other ______________________________________

   The Administrative Assistant responsible for scheduling meeting is: ___________________________________________________

   The Administrative Assistant phone number is: ____________________________________________________________________

3. Information provided by mentee prior to each meeting.
   - None
   - Updated CV (with highlight of new additions)
   - Narrative of each topic to be discussed
   - Mentoring Worksheet
   - Other

4. Please review, discuss, edit and check the expectations for this mentoring relationship

   Responsibilities of Mentor:
   - Provide assessment and feedback regarding accomplishments in each topic area and help plan “next steps”
   - Emotional Support
   - Advocacy
   - Actively address any problems with mentorship relationship
   - Other (please specify) ______________________________________________________________________________________

   Responsibilities of Mentee:
   - Understand the academic series; review career with Department Chair annually and with Lydia Howell, Associate Dean of Academic Affairs, when needed
   - Provide goals and updates
   - Actively address any problems with mentorship relationship
   - Other (please specify) ______________________________________________________________________________________

5. If mentorship relationship not working, we will discuss with Departmental Director of Faculty Development and seek guidance and resolution.

   Mentor, Signature: ________________________________  Mentee, Signature: ________________________________

   Date: ________________________________  Date: ________________________________
Mentoring Worksheet

Mentor: ________________________________________________________________
Mentee: ________________________________________________________________
Date of Meeting: ________________________________________________________

Goal: Teaching

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: ________________________________________________________
______________________________________________________________________
______________________________________________________________________

Obstacles: ______________________________________________________________
______________________________________________________________________
______________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ________________________
______________________________________________________________________

Goal: Clinical Care

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: ________________________________________________________
______________________________________________________________________
______________________________________________________________________

Obstacles: ______________________________________________________________
______________________________________________________________________
______________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ________________________
______________________________________________________________________
Mentor/Mentee Relationship

**Goal: Research**

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: ____________________________________________

_________________________________________________________________

_________________________________________________________________

Obstacles: ____________________________________________

_________________________________________________________________

_________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ____________________________

_________________________________________________________________

**Goal: Service**

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: ____________________________________________

_________________________________________________________________

_________________________________________________________________

Obstacles: ____________________________________________

_________________________________________________________________

_________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ____________________________

_________________________________________________________________

**Goal: Self Development**

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: ____________________________________________

_________________________________________________________________

_________________________________________________________________

Obstacles: ____________________________________________

_________________________________________________________________

_________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ____________________________

_________________________________________________________________
Goal: Networking

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: _______________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

Obstacles: ________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ______________________________
_____________________________________________________________________________

Goal: Work/Life Balance

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: _______________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

Obstacles: ________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ______________________________
_____________________________________________________________________________

Goal: Additional Mentors

☐ Goal met  ☐ Making Progress  ☐ No Progress

Accomplishments: _______________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

Obstacles: ________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

New goal or strategy to overcome obstacles (if needed): ______________________________
_____________________________________________________________________________
Academic Series Criteria
Academic Series Criteria

BACKGROUND

The Special Committee on Academic Personnel Processes (SCAPP) recently made recommendations to improve the quality and efficiency of the UC Davis academic personnel process. Included among their recommendations is the following request:

“Each department should be requested to provide a written summary of the nature of scholarship within their academic discipline and their own criteria and standards for the evaluation of faculty performance. The goal of this exercise is to articulate the standards and practices of the department so that candidates and persons evaluating the candidate have a clear view of performance expectations.”

THIS DOCUMENT REPRESENTS THE RESPONSE FROM THE SCHOOL OF MEDICINE AND INCLUDES CRITERIA OF SCHOLARSHIP FROM EACH OF ITS DEPARTMENTS
GENERAL ROLES AND EXPECTATIONS OF THE FIVE ACADEMIC SERIES IN THE SCHOOL OF MEDICINE

There are five academic series within the UC Davis School of Medicine. Table 1 (page 28) summarizes the various requirements and defining features of each of these series, as delineated in the Academic Personnel Manual.

Three have a primary role in discovery-type research: Ladder-Rank series, the In-Residence series, and the Adjunct series. A focused, independent research program with work which is disseminated outside the institution and peer reviewed is required. Also required for each is a regular and meaningful contribution to teaching. Since the Ladder-Rank series receive state funds designated for the support of the medical school, faculty in this series carry the greatest teaching obligation of the three series. The expected teaching contribution of the faculty in the In-Residence and Adjunct series is less since they must earn their salary through grant support or clinical care, but is still required.

The Clinical X and Health Sciences Clinical series both have a primary role in both the delivery of clinical care and in clinical instruction of trainees. Faculty in the Clinical X series are clinician-investigators and educators who are expected to contribute to the advancement of their field by investigative programs that are focused and independent. Their work must be appropriately disseminated outside the institution and peer-reviewed, and may involve any of the following areas of scholarship: application, integration, translation, education, health services, or discovery-type research.

Faculty in the Health Sciences Clinical series are clinician-educators who play a primary role in clinical care and clinical education. This series does not require that the faculty member engage in creative work that is peer-reviewed or disseminated outside of the institution, or that they develop a focused, independent program. However, faculty in the Health Sciences Clinical series may be expected to support the research program of others as a collaborator, or create new internal programs or internal studies that influence clinical care or education within the institution.

When preparing your packet and thinking about the general roles and expectation of your series, keep in mind the following question: How will someone external to UC Davis and at arms-length recognize if you are successful?
# Table 1 - Definitions of Academic Series

<table>
<thead>
<tr>
<th></th>
<th>Ladder-Rank</th>
<th>In-Residence</th>
<th>Adjunct</th>
<th>Clinical X</th>
<th>Health Sciences Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salary support by state funds</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Member of Academic Senate</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td>Research Scholar and educator</td>
<td>Research Scholar and educator</td>
<td>Research Scholar and educator</td>
<td>Clinician-investigator and educator</td>
<td>Clinician-educator</td>
</tr>
<tr>
<td><strong>Investigative Creative Work (Research)</strong></td>
<td>Independent, thematic, hypothesis-based research with extramural support. Areas of investigation may include basic science, social science, educational scholarship, translational, or clinically-oriented work.</td>
<td>Independent, thematic, hypothesis-based research with extramural support. Areas of investigation may include basic science, social science, educational scholarship, translational, or clinically-oriented work.</td>
<td>Independent, thematic, hypothesis-based research with extramural support. Areas of investigation may include basic science, social science, educational scholarship, translational, or clinically-oriented work.</td>
<td>Independent, thematic clinical research program. May include clinical trials, translational or integrative projects, health services research, case series, educational research, or bench research. Extramural support is not required.</td>
<td>Supports dept's invest/creative mission. May include enrolling pts or collaborating in clin trials, enhancing clin efficiency; developing new clin or teaching programs or materials or assuming a large clin load to free up research time for other fac.</td>
</tr>
<tr>
<td><strong>Teaching</strong></td>
<td>Required. May include clinical, classroom or lab teaching of medical students, &amp; house staff, or graduate student/post-doc supervision.</td>
<td>Required. May include clinical, classroom or lab teaching of medical students, &amp; house staff, or graduate student/post-doc supervision.</td>
<td>Required, though less amount than LR and IR. May include classroom or lab teaching of medical students, or graduate student/post-doc supervision.</td>
<td>Required. Emphasis on clinical teaching of students &amp; house staff. Also usually includes classroom or lab teaching of medical students.</td>
<td>Required. Emphasis on clinical teaching of students &amp; house staff, May include classroom or lab teaching of medical students.</td>
</tr>
<tr>
<td><strong>Clinical Service</strong></td>
<td>Optional</td>
<td>Optional</td>
<td>No</td>
<td>Required by definition</td>
<td>Required by definition</td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
<td>Required</td>
</tr>
</tbody>
</table>
### Academic Review Periods

<table>
<thead>
<tr>
<th>Step</th>
<th>Assistant, I – 1st year</th>
<th>Professor I - 1st year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal – packet due During 4th year</td>
<td>2nd year</td>
<td>2nd year</td>
</tr>
<tr>
<td>Assistant, II – 1st year</td>
<td>3rd year</td>
<td></td>
</tr>
<tr>
<td>2nd year</td>
<td>Professor II 1st year</td>
<td></td>
</tr>
<tr>
<td>Assistant, III – 1st year</td>
<td>Promotion – packet due at the Beginning of 7th year</td>
<td>2nd year</td>
</tr>
<tr>
<td>2nd year</td>
<td>3rd year</td>
<td></td>
</tr>
<tr>
<td>Assistant, IV 1st year</td>
<td>Professor, III 1st year</td>
<td></td>
</tr>
<tr>
<td>2nd year</td>
<td>PROMOTION</td>
<td></td>
</tr>
<tr>
<td>OVERLAPPING STEPS *</td>
<td>Associate I 1st year</td>
<td>3rd year</td>
</tr>
<tr>
<td>2nd year</td>
<td>2nd year</td>
<td>Professor, IV 1st year</td>
</tr>
<tr>
<td>Assistant, VI 1st year</td>
<td>Associate, II 1st year</td>
<td>2nd year</td>
</tr>
<tr>
<td>2nd year</td>
<td>3rd year</td>
<td></td>
</tr>
<tr>
<td>Associate, III 1st year</td>
<td>Professor, V 1st year (*indefinite)</td>
<td></td>
</tr>
<tr>
<td>2nd year</td>
<td>Associate, IV 1st year</td>
<td>2nd year</td>
</tr>
<tr>
<td>OVERLAPPING STEPS *</td>
<td>2nd year</td>
<td>3rd year</td>
</tr>
<tr>
<td>3rd year</td>
<td>Professor, VI 1st year (*indefinite – Full Review with letters)</td>
<td></td>
</tr>
<tr>
<td>Associate, V 1st year</td>
<td>2nd year</td>
<td></td>
</tr>
<tr>
<td>2nd year</td>
<td>3rd year</td>
<td></td>
</tr>
<tr>
<td>3rd year</td>
<td>Advancement to IX w/ Eligible every 3 years</td>
<td></td>
</tr>
</tbody>
</table>

*Indefinite Steps but not less than 3 years may be served in this step

*Overlapping Steps

A faculty is eligible to be considered for a merit increase to an overlapping step if the initial appointment was made at Assistant Professor or Associate Professor, Step II or above. Assistant Professors who were appointed at Step II may be considered for a merit to Step V. Assistant Professors who were appointed at Step III may be considered for a merit to Step V and VI. Promotion after 1 year at Step V will be to Associate Professor Step I. Promotion after 2 years at Step V will be to Associate Professor, Step II. Promotion after 1 year at Step VI will be to Associate Professor, Step II. Promotion to Associate Professor after 2 years at Step VI will be to Associate Professor, Step III.

**Accelerated Actions

Since even normal advancement to these high levels requires considerable achievement, it is rare that CAP will support accelerations. Negative recommendations lead to disappointment and often resentment by the candidate – responses that could be avoided if the candidates were made aware of the rarity of such accelerations.
# Academic Review Process Review Periods

<table>
<thead>
<tr>
<th>ASSISTANT PROFESSOR</th>
<th>(Maximum Years at Rank = 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td>2 years</td>
</tr>
<tr>
<td>Step II</td>
<td>2 years</td>
</tr>
<tr>
<td>Step III</td>
<td>2 years</td>
</tr>
<tr>
<td>Step IV</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td><em>(Mandatory review in the 7th year; considered a technical acceleration)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overlapping Steps</th>
<th>2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step V</td>
<td>2 years</td>
</tr>
<tr>
<td>Step VI</td>
<td>2 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASSOCIATE PROFESSOR</th>
<th>(Normal years at rank = 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td>2 years</td>
</tr>
<tr>
<td>Step II</td>
<td>2 years</td>
</tr>
<tr>
<td>Step III</td>
<td>2 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overlapping Steps</th>
<th>3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step IV</td>
<td>3 years</td>
</tr>
<tr>
<td>Step V</td>
<td>3 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROFESSOR</th>
<th>(Normal Years at rank = Indefinite)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td>3 years</td>
</tr>
<tr>
<td>Step II</td>
<td>3 years</td>
</tr>
<tr>
<td>Step III</td>
<td>3 years</td>
</tr>
<tr>
<td>Step IV</td>
<td>3 years</td>
</tr>
<tr>
<td>Step V</td>
<td>Indefinite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper Level Steps</th>
<th>Indefinite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step VI</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Step VII</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Step VIII</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Step IX</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Above Scale</td>
<td>Indefinite</td>
</tr>
</tbody>
</table>
ACADEMIC SERIES CRITERIA

REVIEW PERIODS

1. Appraisals: Appointment to date

2. Promotion:
   a. to Associate Professor Appointment to date (see APM UCD-220C, Exhibit A for special instructions regarding 7th year cases)
   b. to Full Professor Period since appointment or promotion to Associate Professor
   c. to Senior Lecture with security of employment Period since appointment to Lecturer with Security of Employment

   Faculty are normally eligible for promotion to:
   • Associate Professor after 2 years at Assistant Professor, Step IV.
   • Full Professor after 2 years at Associate Professor, Step III.

3. Merit Increase:
   a. up to Professor, Step V Period since advancement to current position
   b. to Professor, Step VI Period since advancement to full professor
   c. to Professor, Step VII Period since advancement to current step (in the case of an acceleration, if the candidate has not yet been advanced to Step VI, the period of service as full professor will be reviewed)
   d. to Professor, Step IX Period since advancement to current step
   e. to first above-scale advancement: Period since advancement to full professor
   f. subsequent Above-scale advancements: Period since advancement to current salary level

   Normal eligibility is calculated on the basis of:
   • Two years of service at step for merits at the Assistant and Associate level
   • Three years at step for merits at the Professor level

4. Accelerated Merit Increase to Step VI, VII VIII IX and Above scale

   Since even normal advancement to these high levels requires considerable achievement, it is rare that CAP will support accelerations. Negative recommendations lead to disappointment and often resentment on the part of the candidate – responses that cold be avoided if the candidates were made aware of the levels of Professor require exceptional scholarship, beyond that normally required for such steps.
NORMAL PERIODS OF SERVICE

Instructor
Service in the rank of Instructor is limited to 2 years.

Assistant Professor
The total period of University service with the title Assistant Professor, or with this and certain other titles, shall not exceed eight years. (For complete information see the Academic Personal Manual)

The normal period of service at a given step in this rank is two years.

The first four steps in rank and corresponding salary levels are for normal use. Steps V and VI may be used in exceptional situations and with proper justification. Service at Assistant Professor, Step V, will normally be in lieu of service at Associate Professor, Step I, for which the published salary is slightly higher. Service at Assistant Professor, Step VI, will normally be in lieu of service at Associate Professor, Step II.

In those instances of service at Assistant Professor, Step V, followed by service at Associate Professor, Step I, the normal period of combined service with both titles at the steps indicated is 2 years. The same normal 2 year period of combined service applies when service at Assistant Professor, Step VI, is followed by service at Associate Professor, Step II. (See section V for the details on overlapping steps.)

Associate Professor
The normal total period of service in the rank of Associate Professor is 6 years. The normal period of service at any one of the first three steps of the rank is 2 years.

Steps IV and V may be used in exceptional situations and with proper justification. Service at Associate Professor, Step IV, will normally be partly or entirely in lieu of service at Professor, Step I, for which the published salary is slightly higher. Service at Associate Professor, Step V, will normally be partly or entirely in lieu of service at Professor, Step II.

The normal period of service at Associate Professor, Step IV, is 3 years if such service is fully in lieu of service as Professor, Step I. In those instances of service at Associate Professor, Step IV, followed by service at Professor, Step I, the normal period of combined service is 3 years. The situation for Associate Professor, Step V, and Professor, Step II, is exactly analogous to that for Associate Professor, Step IV, and Professor, Step I.

Professor
The normal period of service at step is three years in each of the first four steps. Service at Step V may be of indefinite duration. Advancement to Step VI usually will not occur after less than three years of service at Step V, and will be granted on evidence of great scholarly distinction and national recognition, highly meritorious service, and evidence of excellent University teaching. Service at Professor, Step VI, may be of indefinite duration.
Advancement to Professor, Step VII, usually will not occur after less than three years of service at Step VI, and will only be granted on evidence of continuing great distinction, national recognition, highly meritorious service and excellent teaching performance.

Advancement to an above-scale salary is reserved for scholars and teachers of the highest distinction, whose work has been internationally recognized and acclaimed. Except in rare and compelling cases, advancement will not occur after less than three years at Step IX. Moreover, mere length of service and continued good performance at Step VII, VIII, IX is not a justification for further salary advancement. There must be demonstration of additional merit and distinction beyond the performance on which advancement to Step IX was based. A further merit increase in salary for a person already serving at an above-scale salary level must be justified by new evidence of merit and distinction. Continued good service is not an adequate justification. Intervals between such salary increases may be indefinite, and only in the most superior cases where there is strong and compelling evidence will increase at intervals shorter than four years be approved.

**Off-Scale Salaries**
For specific guidelines for use of off-scale salaries, refer to Academic Personnel Manual 620.

**Overlapping Steps**

**Policy:**
The overlapping steps were added to provide departments more time to evaluate persons appointed at the higher steps of a rank without penalizing them financially. They enable departments that recruit in competitive markets to recommend adequate offers to attract excellent faculty members without forcing early consideration of promotion to the next highest rank. Without the alternative of advancement to an overlapping step, such action may result in either premature promotions or long, unfair periods without advancement. The overlapping steps were not intended as a compromise or consolation prize for persons whose regular advancement has been delayed for want of adequate performance, and they may not be so used.

Faculty at an overlapping step are on the call list every year. For promotions there is no increase in pay – these faculty are encouraged to defer.

**Eligibility:**

**Assistant Professor, Step V**
Eligibility for normal advancement to Assistant Professor, Step V requires:
- a. 2 years service at Assistant Professor, Step IV;
- b. initial appointment (to ladder position) at Assistant Professor, Step II or above.

Exceptions will require very strong justification. Any faculty member eligible for normal advancement to Assistant Professor, Step V is also eligible for normal promotion to Associate Professor, Step I. The decision to recommend promotion rather than advancement to an overlapping step is at the discretion of the department and should be based upon judgments of the candidate's progress and consideration of equivalent service as an Assistant Professor at other institutions. Accelerated advancement to Assistant Professor, Step V will be considered only for candidates originally appointed (to ladder positions) at Assistant Professor, Step II or above.

**Assistant Professor, Step VI**
Eligibility for normal advancement to Assistant Professor, Step VI requires:
- a. two years service at Assistant Professor, Step V;
- b. initial appointment (to ladder position) at Assistant Professor, Step III or above.

Exceptions will require very strong justification. Any faculty member eligible for normal advancement to Assistant Professor, Step VI is also eligible for normal promotion to Associate Professor, Step II. The decision
to recommend promotion rather than advancement to an overlapping step is at the discretion of the department and should be based upon judgments of the candidate's progress and consideration of equivalent service as an Assistant Professor at other institutions. Accelerated advancement to Assistant Professor, Step VI will be considered only for candidates originally appointed (to ladder positions) at Assistant Professor, Step III or above.

**Associate Professor, Step IV**

Eligibility for normal advancement to Associate Professor, Step IV requires:

a. two years service at Associate Professor, Step III;
b. initial entry into the Associate Professor series at Associate Professor, Step II or above.

Exceptions will require very strong justification. Any faculty member eligible for normal advancement to Associate Professor, Step IV is also eligible for normal promotion to Professor, Step I. The decision to recommend promotion rather than advancement to an overlapping step is at the discretion of the department and should be based upon judgments of the candidate's progress and consideration of equivalent service at ladder rank at other institutions. Accelerated advancement to Associate Professor, Step IV will be considered only for candidates who initially entered the Associate Professor series at Step II or above.

**Associate Professor, Step V**

Eligibility for normal advancement to Associate Professor, Step V requires:

a. three years service at Associate Professor, Step IV;
b. initial entry into the Associate Professor series at Associate Professor, Step III or above.

Exceptions will require very strong justification. Any faculty member eligible for normal advancement to Associate Professor, Step V is also eligible for normal promotion to Professor, Step II. The decision to recommend promotion rather than advancement to an overlapping step is at the discretion of the department and should be based upon judgments of the candidate's progress and consideration of equivalent service as an Associate Professor at other institutions. Accelerated advancement to Associate Professor, Step V will be considered only for candidates who initially entered the Associate Professor series at Step III or above.

Faculty serving in overlapping steps are eligible for promotion each year of service in the overlapping step.
### Dossier

<table>
<thead>
<tr>
<th>Item</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division Letter</td>
<td></td>
</tr>
<tr>
<td>List of Referees</td>
<td></td>
</tr>
<tr>
<td>Sample Letter</td>
<td></td>
</tr>
<tr>
<td>Confidential Letters</td>
<td></td>
</tr>
<tr>
<td>Candidates Statement (optional)</td>
<td></td>
</tr>
<tr>
<td>List of Annual Report of Professional Activities</td>
<td>Not applicable for new appointments</td>
</tr>
<tr>
<td>List of Student Evaluations</td>
<td>Not applicable for new appointments</td>
</tr>
<tr>
<td>List of Student Contact Hours</td>
<td></td>
</tr>
<tr>
<td>List of University Service activities (name and date only)</td>
<td></td>
</tr>
<tr>
<td>Biography</td>
<td>Must be signed on page 4. Fill in the top of page 1 with Campus, Department and Title</td>
</tr>
<tr>
<td>Publication List</td>
<td>Publication list must be in University format. Titles must match those on the reprints.</td>
</tr>
<tr>
<td>List of Research Funds (optional)</td>
<td></td>
</tr>
</tbody>
</table>

### Support Documentation

(Original)

<table>
<thead>
<tr>
<th>Item</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reprints</td>
<td>Reprints should be clearly labeled to correspond with the numbers on the Publication List.</td>
</tr>
<tr>
<td>Annual Report of Professional Activities</td>
<td>Not applicable for new appointments</td>
</tr>
<tr>
<td>Student Evaluations</td>
<td></td>
</tr>
<tr>
<td>Promotion/Merit Review Summary Sheet (with attachments)</td>
<td>This material is sent to each faculty member for voting.</td>
</tr>
</tbody>
</table>
Dossier

Your department will assign administrative help to assist you in developing your packet. Your comprehensive self-statement is a great contribution to the task. The following items comprise the dossier and should be submitted in the order presented below. Follow the checklists provided for each action.

1. Department Chair/Division Chief letter .................................................. ☐
2. Candidate's Disclosure Certificate, this must be dated on or after the date of the Department Chairs Letter .............................................................. ☐
3. List of names and addresses of referees solicited for extramural letters (required for appointments, upper level merit increases to Professor, Step VI and above-scale merits, and promotions) ............................................................................................................. ☐
4. Sample copy of solicitation letter marked “SAMPLE” .................................. ☐
5. Extramural letters stamped “CONFIDENTIAL” for promotion actions .......... ☐
6. Candidates Statement.................................................................................. ☐
Candidates for promotion or advancement have the option of providing a 1-3 page personal statement about the unique aspects and special significance of their work for the review file. It may include any information concerning teaching, research and creative work, professional competence and activity and University and public service that the candidate believes is important for reviewers to consider. The candidate's statement may list accomplishments or it may focus on areas of achievement including honors and awards. It doesn't need to address each area of review. It may include a statement of the candidate's philosophy of teaching, the aims of specific courses, the choice of teaching strategies, reasons for problems that may have arisen in the candidates teaching or any other information related to teaching. Chairs need not repeat information included in the candidate's statement. Chairs must evaluate the information presented in the statement as part of the department evaluation.

7. List of Research Funding ........................................................................... ☐
In some disciplines, research funding may be an indication of research or creative activity. In disciplines in which funding, especially substantial extramural funding, such as a list of grants, funding agencies and project titles, is properly include in the review file.

8. List of Annual Report of Professional Activities submitted for each year of the review period .......................................................... ☐

9. List of all student evaluation submitted .................................................... ☐

10. List of Student Contact Hours .................................................................. ☐

11. List of University Service Activities separated by Department, School of Medicine, Health System, University, Profession and Community ................................................................. ☐
This list should include the title of the University service activity and the dates of service — but should not include any discussion of these activities. A brief discussion or summary should be included in the departmental letter, with possible augmentation in the optional binder. It is natural and expected that faculty members in the University of California will
participate in activities that are distinct from but related to their roles as teachers and scholars. Among such activities are various forms of service in the areas of University administration and governance. Contributions to student welfare through service on student-faculty committees and as advisors to student organizations should be recognized.

12. Updated Biography Form ....................................................

13. Publications List (must be prepared in University format and submitted in the following order) ........
   a. List of all Publications appearing in peer reviewed journals. Do not include proceedings, letters to the editor, case reports, limited distribution items, abstracts, etc. on this list. Books and book chapters may be included on this list or may be prepared on separate lists.
   b. List of Books and Book Chapters (if not included in regular publications list above)
   c. List of publication sin press — please attach acceptance letter to In press manuscripts submitted and the In press publications list. No acceptance letter is required if galleries are submitted
   d. List of books and book chapters in press (if not included in regular list above)
   e. List of publications submitted
   f. All other lists, i.e., proceedings, letters to the editor, limited distribution, and abstracts may follow in any order.

You may mark on the publication list 5-7 publications or creative works as their most important contributions. If a candidates statement is included this information should be incorporated in it.

DRAWING THE LINE
Nothing published or in press and considered in the last review should be counted in the current review. A line should be drawn on the publication list to designate where the new publications begin. Refer to the publication list submitted at the last successful action. (for merits this would be the last successful merit, for promotions this would be the appointment or promotion to the current rank).

Draw the line below all publications and in press items that were reviewed for that action. It is helpful to label the lines that you draw indicating what the last review was. Asterisk (*) all items that will be submitted (below the line) for this review period. Please refer to the annual call if you have questions on determining the appropriate review period.

SUPPORTING DOCUMENTATION
(the following items are not included in the dossier—we need two copies, they will be returned to the department)

1. Reprints of items published or in press for the review period. .........................
   Reprints must be labeled to correspond to the number on the various publication lists. Append an acceptance letter to the in press manuscripts. If a percentage of effort list is prepared, submit one copy only with reprints.

2. Annual report of professional activities. ...........................................
   One copy should be included for each year of the review period.

3. Student evaluations. ...............................................................
   Student evaluations for the entire review period should be included. It is required that at least one complete set of original evaluations from two courses be included. Statistical summaries of student evaluations, if available, should be included with student evaluations.
Tips in Preparing for Merits and Promotions

Tip #1

✓ Show evidence of having met the criteria for advancement in each mission
  - Quantity, quality, significance and impact.
  - Highlight accomplishments rather than promise.
  - Describe your leadership role if it is not obvious (example: first author is a trainee)

✓ This is often best accomplished in your candidate’s statement.

Tip #2

✓ Be sure to use appropriate criteria.
✓ Do not use non-academic issues:
  - Hard-luck stories
  - Personal/health issues
  - Clinical load
  - Inequities in teaching or staff support
  - Length of time spent in a project
Tip #3

✔ Don’t rely on a “special deal” with the Dean or chair
  – Dean/Chair frequently has no knowledge of such a deal.
  – Reviewers (SPC, CAP, Dean) does not recognize deals that foster inequitable treatment of faculty.

Tip #4

✔ Outside letters from external referees for promotions must be “arms-length”
  – Don’t ask your mentor, frequent co-author, best friend, mother, etc.
  – Looking for objective reviewers who can place your accomplishments within context of your field.
  – Less than arm’s length letters make review committees believe you lack an independent reputation
Tip #5

✔ Preparing your packet is ultimately your responsibility!!
  – Keep a file to place teaching evals, reprints, things you don’t want to forget to include!!
  – You will be given the opportunity to review your packet before submission – check to be sure it is complete and accurate!
  – Learn to use MyInfoVault!

Tip #6:

Don’t buy into the myth that “only research counts”

✔ All missions are important! But …
  – Research is the reason for most denials. It is:
    • the mission that distinguishes the different series.
    • the only activity that isn’t scheduled for you -- you need to make time yourself!!
    • the only activity without immediate reward -- discipline yourself, learn to say no!
Tip #7 Beware of excessive service

✓ Don’t take on excessive service obligations early!
✓ Assistant professors are not expected to have heavy service obligations
✓ Service obligations increase with rank, internally and in the profession

Tip #8 Let us help you!

✓ People to talk to:
  – Ed Callahan, PhD, Associate Dean, Academic Personnel
  – Jesse Joad MD, MS, Associate Dean, Diversity and Faculty Life
  – Gregg Servis, MDiv, Director, Faculty Development

✓ Contact Academic Personnel Office
  – 916-734-4610
For more information:

✓ http://www.ucdmc.ucdavis.edu/facultydev/
  – Calendars of faculty development events
  – Definitions of series
  – Mentoring information
  – And more!!

✓ Frequently asked questions and answers: http://academicpersonnel.ucdavis.edu

✓ Or call us! 916-734-4610
Frequently Asked Questions (FAQs) Concerning the Academic Personnel Review Process at UC Davis In the Academic Senate

WHAT ARE THE GUIDING PRINCIPLES FOR ADVANCEMENT IN THE UC SYSTEM?

UC policy states: “Superior intellectual attainment, as evidenced both in teaching and in research or other creative achievement, is an indispensable criterion for appointment or promotion in an academic position. Merit increases will be awarded only on the basis of continuing excellence in teaching, research and university and public service in the rank at which the candidate is presently serving.”
I. TERMS/DEFINITIONS

Preface: In the APM, as well as this document, the faculty member being reviewed is referred to as the ‘candidate’. ‘Reviewer’ refers to all who participate in the review process: department members, Chair, Dean, Ad Hoc Committee, Committee on Academic Personnel-Oversight Committee (CAP-OC) and Committee on Academic Personnel-Appellate Committee (CAP-AC), extramural referees, and the Vice Provost-Academic Personnel.

What is the APM?
The APM is the University of California Academic Personnel Manual (‘the rules of the game’), which encodes all university policies regarding academic employment. There are two components of the APM, one containing UC system wide policies, and the other containing the UC Davis guidelines implementing those policies. There are hard copies of both manuals in all departments. The Internet address for both components of the APM is:

http://manuals.ucdavis.edu/apm/apm-toc.htm

Under Appointment and Promotion, the following APM sections may be helpful as references:

• 200: General Information
• 210: Review and Appraisal Committees
• 220: Professor Series
• 220-10: Criteria for merit and promotion advancement
• 220-17: Terms of Service
• 220-80: Recommendations and Review: General Procedures
• 220-82: Appointment or Promotion-Assistant Professor
• 220-83: Appraisal of Assistant Professors
• 220-85: Appointment or Promotion of Associate and full Professors
Academic Series Criteria

Who are the members of the Academic Senate?
Within the university, the Regents have given the Academic Senate faculty responsibility for Admissions, Degree Requirements, and Curriculum. The Academic Senate faculty are those who hold a position in one of the following title series:

- Professorial (Assistant Professor, Associate Professor, and Professor); sometimes called the 'ladder rank' or 'regular' faculty
- Lecturer or Senior Lecturer With Security of Employment (SOE)
- In Residence (Assistant, Associate and full Professor)
- Clinical ____ (Assistant, Associate, and full Professor)
- Acting Professor (Associate, and full Professor).

What is an FTE?
FTE = Full Time Equivalent. A 1.0 FTE is a 100% appointment in a tenure track position (Professorial series) or Lecturer SOE, funded by the state of California. A certain number of FTEs are allotted to each Dean to fulfill the teaching and research obligations of his/her unit.

What are the roles of Department Chair, Deans and Vice Provost-Academic Personnel in the personnel process?
The Chair is responsible for overseeing the departmental review of the candidate's record and for writing the recommendation letter, which presents the department's evaluation (including the vote) of the candidate's teaching, research/creative activity, and service for all personnel actions (APM 245 and UCD APM 245).

The Dean (in some colleges an Associate Dean has responsibility for academic personnel matters) is the administrator responsible for reviewing the following actions within the school, college, or division:

- Appointments
- Merits
- Promotions
- Accelerations
- Deferrals
- Appraisals

Dean's personnel actions, which need no further review by the Vice Provost are called redelegated actions. Currently these include: all normal merits (excluding Professor VI and Above Scale), and appointments at or below the Assistant Professor III level (http://academicpersonnel.ucdavis.edu/delegations/cfm).

The Vice Provost-Academic Personnel is the administrator responsible to the Chancellor for reviewing all non-redelegated actions. See Delegation of Authority at: http://academicpersonnel.ucdavis.edu/delegations/cfm
What personnel committees have responsibility for reviewing Academic Senate faculty?
How are they appointed?
The Committee on Academic Personnel (CAP) has been recently reconstituted as two subcommittees:

CAP-OC (CAP Oversight Committee), an Academic Senate standing committee which advises the Vice Provost-Academic Personnel by reviewing files and making recommendations on non-redelegated personnel actions. CAP-OC consists of 9 senior faculty from across the campus appointed by the Committee on Committees.

CAP-AC (CAP Appellate Committee), an Academic Senate standing committee of 5 faculty appointed by the Committee on Committees, advises the Deans and Vice Provost concerning appeals of all merit and promotion decisions. The FPCs are the 'local level' Faculty Personnel Committees in each school/college/division (formerly called the School or College Personnel Committees), which advise the various Deans by reviewing redelegated
personnel actions. FPCs are considered subcommittees of CAP-OC and their members are nominated by the school, college, or division Executive Committee and approved by CAP-OC.

**What are series, ranks, and steps?**
Series are the various job titles described above, i.e., Professorial, In Residence, Lecturer SOE, etc. The Dean, the CAP-OC, and the Vice Provost must approve a faculty request for a change in series.

Ranks are the various levels within a series, such as Assistant Professor, Associate Professor, and Professor within the Professorial series. Rank and salary are increased by promotion.

Steps are the various levels within a rank, e.g., Assistant Professor, Step II, III, IV, or V. Each successful merit review results in an increase in both step and salary. The number of steps at each rank and the usual step at which faculty apply for promotion are as follows:

* Assistant Professor: Steps I-VI (Steps V and VI are overlapping steps), most faculty apply for promotion at Step IV
* Associate Professor: Steps I-V (Steps IV and V are overlapping steps), most faculty apply for promotion at Step III
* Professor: Steps I-IX and Above Scale

**What are overlapping steps?**
Within the Assistant and Associate Professor ranks there are steps above the ones where most faculty apply for promotion, and they are considered to overlap with the first steps of the next rank. Within the Assistant Professor rank, Steps V and VI overlap with Associate Professor Steps I and II, respectively. Within the Associate Professor rank, Steps IV and V overlap with Professor Steps I and II, respectively.

**When are overlapping steps used?**
Overlapping steps at the Assistant Professor level (V and VI) are most commonly used when the individual is hired at Step III or above and although making good progress toward tenure, he/she has not achieved a record commensurate with promotion. Overlapping steps at the Associate Professor level (IV and V) are most commonly used when the individual is initially promoted to Associate Professor at Step II or higher and again reflects the need for more time to achieve promotion. Only individuals who are making good progress toward promotion are eligible for overlapping steps.

**What is the Ad Hoc Committee?**
Each Ad Hoc Committee has three members nominated by CAP-OC and appointed by the Vice Provost to review the teaching, research/creative activity, and service performance of a particular candidate. One member is from the candidate’s department and the other two have expertise in the candidate’s field of research. Although the candidate does not know the composition of the Ad Hoc committee, he/she has the right to request that certain individuals not be appointed to the committee; this is accomplished by way of a letter to the Vice Provost. Ad Hoc committees are normally appointed for all promotions, as well as for high-level merits at Professor Steps VI and Above Scale. Streamlined Processes
however, allow CAP-OC the discretion to waive an Ad Hoc review when it deems appropriate (APM 210-1 and 220-80c).

**What is a merit review?**
A merit review is an evaluation by the department, FPC, and the Dean of a faculty member’s record of teaching, research/creative activity, and service. A positive review will result in advancement in step within rank.

**What is the period of review for a merit increase?**
Merit reviews normally occur at two year intervals at the Assistant, I-IV levels) and Associate Professor, I-III levels, every three years at the Associate Professor, IV and V and full Professor levels I-IX, and every four years at the Above Scale level (APM 220-18b). Merit increases from Professor V to VI and from Professor IX to Above Scale are treated procedurally like promotions, i.e. they require extramural letters and generally include evaluation by an Ad Hoc Committee (see below). For Professor VI, the merit review covers the period since promotion or appointment to full professor (i.e., Steps I-V). For Professor Above Scale, the review period is the period since promotion or appointment to full professor, i.e., Steps I-IX. Subsequent Above Scale merits do not normally occur more frequently than once every four years.

**What is a promotion review?**
A promotion review is an evaluation for advancement in rank; i.e., from Assistant to Associate Professor, or Associate to full Professor. At both of these levels, there is a mandatory extensive review, which includes peer review of teaching, solicited extramural letters, Ad Hoc committee review, and CAP-OC review (APM 220-85, UCD APM Procedure 1).

**What is the period of review for promotion?**
The length of the review period may vary slightly among faculty. For promotion from Assistant to Associate Professor, the review includes all teaching, research, and service accomplished during the period since the date of the terminal degree. The period of appointment at UCD in the rank of Assistant Professor (including Acting or Visiting Assistant Professor) cannot exceed eight years. Since an Assistant Professor must be given one year of notice if there is to be a termination, the candidate must be reviewed no later than the seventh year (APM 220-20c). For promotion from Associate Professor to full Professor the review covers the whole period since promotion to Associate Professor.

**What is the Eight Year Limit (“Seven Year Rule”) regarding tenure?**
Tenure is the University of California’s guarantee of continued employment and is granted with promotion from Assistant Professor to Associate Professor. A tenured faculty member’s appointment can be terminated for such reasons as violation of UC ethical principles, unacceptable conduct, or incompetence. The department, the Dean, the Ad Hoc Committee, CAP-OC, the Vice Provost, the Provost and the Chancellor, conducts the tenure review. A final decision on whether tenure is to be granted must be made by the end of the seventh year of service. Those who do not receive tenure, are given a final year notice, during which they may pursue an appeal of the decision. In the 2001-2002 academic year, 95.5% of the tenure requests at UCD were approved (APM 015, UCD 220 IV D). Under what circumstances can the normative time for tenure be extended to more than seven years? The tenure clock may be extended for major illness, and parental responsibilities associated with the birth or adoption of a child (APM 133-17h). The Chancellor also has the authority to extend the tenure clock in other extraordinary circumstances, but maximum extension for all circumstances is two years (APM 133 and APM 715).

**What is an appeal?**
A faculty member has the right to appeal his/her denied personnel action within 30 days of notification of denial, by submitting an appeal letter via the Chair and the Dean or to the Vice Provost, addressing each of the specific criticisms of the reviewers (see APM UCD 220, Procedure 5). Before deciding whether to appeal a decision, a candidate can consult with a Faculty Privilege/Academic Personnel Advisor (see Senate website for a list). The Vice Provost will refer the appeal letter and the file to CAP-AC for its review. The CAP-AC
recommendation is sent back to the Vice Provost who will forward it to the Dean for final decision if it is a redelegated action (APM UCD 220, Procedure 5).

**What is an appraisal?**
At the Assistant Professor level, an appraisal of teaching, research/creative activity and service, is performed in the faculty member’s fourth year to determine if he/she is ‘on track’ for promotion. The dossier is submitted in the fall and the FPC (acting as the ad hoc committee doing the appraisal) forwards their report and the dossier to the Vice Provost’s office. After review of the file by CAP-OC and the Vice Provost, an appraisal letter is sent to the candidate with reviewer’s comments on performance in teaching, research/creative activity and service. The intent of the appraisal is to provide feedback on the areas of satisfactory performance, as well as collegial advice as to how the candidate can improve those areas where there are problems (APM 220-83, APM UCD Procedure 1 A.).

**What is acceleration?**
An acceleration is a merit or promotion review, which occurs prior to eligibility for normal advancement. Thus, it is a more rapid movement through the ranks and steps than the norm due to the extraordinary record of the candidate. One-year accelerations for Assistant and Associate Professors and one or two year accelerations for Professors are normally reviewed by FPC and submitted to the Dean for final decision. Requests of one step or more are reviewed by CAP-OC, with final decision by the Vice Provost. Accelerations are usually sought when there has been unusually high academic achievement in at least one category (teaching, research, or service) since the last advancement, and at least normal progress in the other categories, i.e., accelerations are not granted if any component of the record is below par. CAP-OC normally conducts an equity review of each case that comes before it to assure that faculty are at an appropriate level, commensurate with the entire record.

**What is a deferral?**
A deferral occurs when an academic employee who is eligible for normal advancement is not considered for this advancement. (Refer to UCD 220 and UCD 220AF for a list of those employees for which written deferral requests must be submitted to the Dean/Vice Provost-Academic Personnel).

**What is an “Acting” title and how is it changed to a regular title?**
With the exception of the Law School, ‘Acting’ is placed before the title, under the following circumstances: 1) when individuals are appointed before their Ph.D. thesis is completed/accepted by the degree granting university (i.e., Acting Assistant Professor). There is a two year limit on the use of the ‘Acting’ designation for Assistant Professors, and it can be removed when there is documentation that the degree has been granted; 2) for Associate and full Professors with exemplary backgrounds in research (usually from industry or government), but who have little or no teaching experience. There is a four year limit on the ‘Acting’ title for Associate and full Professors and the candidate can apply to have the ‘Acting’ removed from the title after he/she has taught and had the courses reviewed as satisfactory. Removal requires review by the Dean, CAP-OC, and the Vice Provost (APM 235). In the Law School, the ‘Acting Professor’ title is used for all new untenured Professorial appointees, in lieu of Assistant or Associate Professor titles. When those faculty become tenured, the ‘Acting’ is removed and they are given the full Professor title.
What is the five-year review policy?
To ensure that faculty standards are being met, UC policy requires that the performance of every Senate member must be evaluated at least once every five years.

II. DOSSIER

What is the dossier?
The dossier, or ‘packet’, is the file compiled to describe a faculty member’s teaching, research/creative activity, and service activities for a specific review period. It is prepared by the department and forwarded to the appropriate administrators and faculty personnel committees for review.

What is the Annual Call?
The Annual Call is a document issued in the spring by the Vice Provost's office that describes current changes in the APM, the UCD APM, and personnel procedures along with dates of submission of dossiers. http://academicpersonnel.ucdavis.edu/anncall/default.cfm or http://academicpersonnel.ucdavis.edu/anncall/04-05/2004-05AnnualCall.cfm

When are faculty members notified that they are up for a merit or promotion action and are expected to submit a dossier?
In the spring or early summer the Dean’s office prepares an eligibility list of individuals in each department who should be reviewed for merit and promotion during the next academic year and the Chair notifies each individual. Dossiers are usually due in the fall quarter, and the specific due dates for submission of the file for various types of merit and promotion actions are listed in the Annual Call.

Specifically, what is in the dossier and who puts it together?
The department usually has a designated staff member who works with the Chair and the candidate in assembling his/her dossier. The following documentation for the review period must be assembled for each dossier: the teaching record (course numbers/titles/credits, class sizes), summaries of student and peer evaluations of teaching; descriptions of any teaching or training grants; numbers of undergraduate and graduate students; and number of postdoctoral fellows being trained in research. The research record includes a list of publications in a standardized format; letters of acceptance of articles, which have been submitted but not yet published (i.e., items in press); description of research or creative activity presentations; reviews of the publications or presentations; list or description of any grants supporting the research. The service record includes a list of committees and other forms of service to the campus, the candidate's discipline, and to the public.

The Annual Report of Professional Activities is a form which each faculty member fills out annually in the department, reporting such activities as invited research presentations, participation in scholarly societies and off-campus activities (e.g., reviewing grants or manuscripts, holding office in professional societies, serving on government panels, etc). These forms can be referred to when the dossier is being assembled.

In addition, the Candidate’s Statement and the Departmental Letter are included in the dossier. In the case of promotions and high level merits at Professor VI and Above Scale, a list of extramural reviewers who have been contacted (with notation as to whether they were suggested by the candidate or the department) and their confidential letters in response are added to the file by the Chair. There is a Candidate's Disclosure Certificate for the candidate to review and sign, verifying that he/she has seen the non-confidential content of the file and that it is complete and error-free, and also that a summary or redacted copy of confidential materials has been provided.
The following supporting documents are submitted in a separate envelope or box with the dossier:

- Copies of all publications in the review period, art work or descriptions of it
- Summaries of teaching evaluations from all courses and original copies of teaching evaluations from two different courses
- Teaching materials, such as a syllabus or textbook, written by the candidate.

What is the Candidate’s Statement?
Each candidate has the right to include a personal statement in the file (up to 5 pages), describing the teaching, research/creative activity, and service accomplishments in his/her own words. Although it is optional, this is the opportunity for the candidate to describe: how his/her research fits together; what his/her teaching approach is; as well as to explain unusual circumstances, both good and bad, which have affected performance in the various areas. For example:

- Problems with teaching and any solutions the candidate has developed
- Description of the significance of the research, any unusual problems, which had to be overcome, or any breakthroughs, which pushed the research forward
- Discussion of reviews of the research
- Explanation of the significance of any awards or honors received during the review period
- Description of any difficult, time-consuming, or particularly noteworthy committee assignments

What is included in the Departmental Letter?
The Departmental Letter is an evaluation of the faculty member’s record as presented in the dossier. It reflects the views of the departmental Senate faculty, not just those of the Chair. It usually discusses if the candidate meets departmental standards and goals with regard to teaching, research/creative activity, service and professional competence. The letter also states the vote, i.e. yes, no, or abstention, as well as any reasons for the no or abstention votes, (APM UCD 220 Procedure 1 and Checklist 1).

What can the candidate do if he/she doesn’t agree with the Departmental Letter?
The candidate must be provided an opportunity to review the redacted (names deleted) Departmental Letter before the file goes forward for review. Although the content of the letter is not negotiable, the candidate should alert the Chair to factual errors. After these errors are corrected, if the candidate still disagrees with the department’s recommendation or wants to clarify statements made in the letter, he/she can write a rebuttal. Any rebuttal letter must be submitted within 10 calendar days from the candidate’s receipt of the departmental letter and his/her signature on the disclosure form (indicating that he/she has read the file and certifies that it is complete and factually correct). A rebuttal may be sent directly to the Dean or Vice Provost-Academic Personnel if the candidate does not want to submit it to the Departmental Chair.
Who votes on personnel actions within a department?
UCD Academic Senate Bylaw 55 defines the rights of Senate faculty to vote on personnel actions of their departmental Senate: Voting is confidential, and all Senate faculty at or above the rank of the candidate have the right to vote on an action. The bylaw also allows departments to extend the vote to Senate faculty below rank, as well as emeriti, by following the process described in Bylaw 55. If the vote is extended, the new voting procedures must be sent to the Senate office for evaluation by CAP-OC. Thus, in some departments all Senate faculty can vote on all Senate candidates. Although departments may consult with non-Senate faculty on Senate faculty personnel actions, non-Senate faculty may not vote on their Senate colleagues.

When a candidate has an appointment split between two different departments, which one prepares the dossier? Do they both vote?
When there is a split appointment, the home department of the candidate prepares the dossier; the Chair of the secondary department may also supply a letter. Senate faculty in both departments vote on the action according to their individual departmental voting procedures.

What is the Dean’s Letter?
After the dossier leaves the department, it goes to the Dean’s office. For actions that are not redelegated, the Dean/Associate Dean reviews the whole file and writes a letter of support or non-support of the action. This letter becomes part of the file, which then goes forward for further review by the Ad Hoc Committee, CAP-OC, and the Vice Provost.

What are Extramural Letters? How many are needed? What is meant by ‘arm’s length reviewers’?
Extramural letters reviewing the candidate’s qualifications for promotion, or advancement to Professor, Step VI and Above Scale, are requested by the Chair (faculty should not request them directly from reviewers). The chair submits a list of outstanding researchers in his/her field who could write such letters and the Chair, in consultation with the departmental faculty, makes up a second list of potential extramural reviewers (not revealing the names to the candidate). The Chair then solicits letters from reviewers on each list, asking for an evaluation of teaching, research, and service, and an opinion as to whether the candidate would likely be considered for promotion at the reviewer’s institution. Many reviewers do not feel that they can knowledgeably comment on any area other than the research record, and they restrict their remarks to that activity. These letters are considered to be confidential.

‘Extramural’ means outside the UCD campus. Thus, letters can be requested from faculty on other UC campuses. [These are particularly useful when faculty are being evaluated for Professor VI and Above Scale, because many universities outside the UC system do not have comparable steps in the Professor rank and are thus unfamiliar with them]. ‘Arm’s length’ means reviewers who are qualified to evaluate the work, but have no connection with the candidate, e.g., they are not a recent mentor, collaborator, or advisor. This assures that reviewers do not have a conflict of interest (See UCD APM 220 Exhibit B). Between 5-8 letters are usually expected in the review dossier. Regardless of number however, reviewers find that detailed, informative, evaluative, arm’s length letters are the most valuable. Reviewers will look to see if the extramural referees:

• Are well known/respected in their field
• Are at least of rank comparable to the position being sought
• Discuss the impact of the candidate’s research
• Consider the candidate’s career to be on an upward trajectory

What is the process by which dossiers are reviewed, how long does it take, and who does it?

Redelegated Merits: The file is sent by the department to the Dean’s office, where the FPC reviews it; the committee writes a report and the Dean makes a final decision.

Non-Redelegated Merits: High level merits at Professor VI and Above Scale, two or more year accelerations in the Assistant or Associate ranks and three or more year accelerations at the Professor rank, are all reviewed by
the Dean/Associate Dean, who writes a letter, and sends the file on to be reviewed by CAP-OC and the Vice Provost, who makes the final decision.

**Promotions:** The department sends the file to the Dean for comment (i.e., Dean's Letter); from there it goes to the Vice Provost and then to CAP-OC where it is read. CAP recommends a slate of faculty who could serve on the candidate's Ad Hoc Committee. These are faculty who are familiar with the research area. The slate is sent to the Vice Provost, who makes the final selection and appoints the committee. It meets and writes a report, which includes a recommendation for or against the action. The whole file then goes to CAP-OC for review; CAP-OC makes a recommendation to the Vice Provost, who makes the final decision, in consultation with the Provost and the Chancellor if it is a tenure decision.

The length of time the process takes varies with the complexity of the review. At each step, knowledgeable staff review the dossier to ensure adherence to policy and process. While merit actions may take only a few months, promotion actions take longer. Dossiers are due at some specific date in the fall quarter, and the first announcements of the promotion actions are made in the spring, starting in mid-March. Most merits/promotions are effective as of July 1.

**Appraisals:** The file goes from the department to the Dean's office, where it is reviewed by the FPC, acting as the ad hoc committee. Detailed collegial advice is given to the candidate via a written report, which goes to the Dean for signature. It then goes to CAP-OC and the Vice Provost for additional review and comment.

**Are awards, prizes, and commendations considered in the merit/promotion review?**
Yes. They should be fully described in the Departmental Letter and the Candidate's Statement. Letters of thanks/appreciation for service to the university, the government, a research society, etc., while not included in the dossier, can be discussed in the Departmental Letter as reflecting the impact of the candidate's service. Prizes, commendations, honors for research, as well as awards given to students/fellows working with the candidate, should be described under the Research category. Awards for teaching should be described under the Teaching category.

### III. EVALUATION CRITERIA FOR MERIT/PROMOTION

Senate members (except Lecturers SOE and Senior Lecturers SOE who have no responsibility to engage in research, but who are assigned a heavier instructional load than faculty in the Professorial series) who are candidates for merit or promotion are to be judged by the following criteria (APM 220-10 and 210-1):

- Teaching
- Research and creative work
- Professional competence and activity
- University and public service
TEACHING

How is teaching evaluated in the personnel review process?
The file should contain a complete record of all teaching during the review period: lectures, labs, discussion sessions, one-on-one teaching, etc. The department should already have student evaluations for all courses as well as the official DESII list of undergraduate courses (titles/hours/credits) taught by all departmental faculty each year. The candidate, however, may need to supply information on courses taught outside the department, — e.g., Graduate Group courses or guest lectures in other departments; he/she may need to request evaluations from those Instructors of Record. For all promotions, peer evaluation of teaching is also required. If there is no departmental teaching committee that routinely reviews teaching for the department, the Chair may designate certain faculty members to evaluate the lectures, labs and teaching materials of the candidate.

What are reviewers’ particular concerns when evaluating the teaching record?
What is considered appropriate quantity (minimum number of courses/credit hours) and quality of teaching, as well as the appropriate balance between upper and lower division courses and graduate and undergraduate courses, will vary by department and school/college. It is important that the candidate understand what is considered an average load and distribution, as well as what is considered acceptable student evaluation scores, in his/her own department and college. New faculty should discuss these departmental expectations with the Chair or a senior faculty member.

In evaluating the teaching record, reviewers consider the following points to be important:

With regard to quantity of teaching, they want to know if it is within the norm for the department:
• Is the candidate carrying his/her share of the teaching load in the department?
• What is the balance between lower and upper division courses?
• What is the balance between undergraduate and graduate courses?

With regard to quality, reviewers want to determine if the candidate demonstrates excellence in teaching:
• Does he/she have good-excellent student and peer evaluations?
• Has he/she shown evidence of trying to improve in areas where student or peer comments have been negative?
• When there has been a serious problem with a class, has the candidate sought help from the Department Chair, the Teaching Resources Center, or a departmental mentor?
• Is the department satisfied with the level of learning in fundamental undergraduate courses; i.e., are the students well prepared for subsequent advanced courses?
• Are there graduate students working with the candidate and are they making good progress toward finishing degree requirements?
• Are graduate students getting good jobs or postdoctoral positions?

With regard to quality, what documents are usually submitted to indicate quality of teaching?
Confidential student evaluations should be sought for all courses. The department usually arranges to have courses evaluated, numerical results tallied, and comments recorded. Sometimes the department uses a standard form, which doesn't specifically include guest lecturers, so the Instructor of Record should do that separately. Student evaluations are required for all merit and promotion actions; peer evaluations are required for all promotions. Faculty who evaluate those courses for the department usually include an assessment of the effectiveness of teaching materials, such as syllabi, slides, PowerPoints, overheads, textbook assignments, as well as the lecture or lab presentations themselves. If original teaching materials such as a textbook, videotape, CD, or website have been developed by the candidate, copies should be submitted with the packet as part of the supporting documentation for the teaching record.
What kinds of teaching assignments are included, outside of lecture, lab, and conference/discussion sessions? Is off-campus teaching included?

All teaching should be reported (even if there is no course number), including one-on-one teaching, demonstrations, teaching of other faculty, discussion sessions in the dormitories, etc. Off-campus teaching, (e.g., courses or lectures for the government, community groups, hospital groups, research societies, other colleges and universities, etc.) should also be reported. If these lectures are evaluated, the evaluations should also be included for assessment of teaching quality.

When the candidate is located in a specific department largely because of the nature of his/her research program, how does he/she amass teaching credits, a problem faced by many basic scientists in clinical departments of the medical school?

All Senate faculty are expected to teach, perform research, and provide service, regardless of their home department. Under circumstances where they are unlikely to be assigned courses in the home department, they should actively seek teaching opportunities elsewhere, which might include the following:

- Develop courses within their Graduate Groups
- Offer a Freshman Seminar on a topic related to the research or a special area of topical interest
- Develop relationships with faculty of similar interests in other colleges/schools who may need courses or guest lectures on specific topics or research areas
- Volunteer to oversee an undergraduate science lab or discussion section
- In the School of Medicine, a basic scientist might offer to participate in a course in a preclinical science department.

RESEARCH/CREATIVE ACTIVITY

What is meant by ‘research or creative activity’?

In the APM, ‘research’ usually refers to scholarly investigative endeavors, while creative activity usually describes activities in areas of the humanities and the arts, such as music composition/performance, theater and dance, creative writing, etc. Evidence submitted to document achievements in this category include published articles, books, recordings, works of art, videos, etc. How does Research/Creative Activity differ among Senate members of the medical school faculty in the Professorial and Clinical__series? Research activities of the Professorial faculty of the medical school, including those in the In Residence series, are similar in many respects to those of Professorial faculty on the rest of the campus, i.e., discovery-type research which tends to be characterized by a focus on hypothesis-driven questions and laboratory or other investigative techniques requiring significant grant support; investigative results are usually published in peer-reviewed journal articles, monographs, and reviews. Creative Activities of the Clinical__faculty tend to fall into the following four categories:

- innovations in medical education/training
- improvement or integration of new information into clinical practice
- study of community health education, health policy and health care delivery
Academic Series Criteria

• discovery-type research.
Creative activities of the Clinical__faculty must be documented by peer-reviewed publication and/or by dissemination in the medical community and documentation of their use at other institutions, (UCD APM 275).

Does the publication list have to be arranged in any particular format?
Yes. The categories of the bibliography are prescribed in the APM, and it generally separates items into published, in-press, submitted, and in preparation. Abstracts, reviews, and reports having limited distribution are listed separately. It also prescribes the format of the bibliographic entries. Faculty who co-author publications are required to describe their role in each publication (idea, development, benchwork, data analysis, writing, etc.) as well as give a description of co-authors, i.e., are they undergraduate, or graduate students, postdoctoral fellows, staff, faculty colleagues (APM UCD 220 Exhibit C). Although work that is submitted and in preparation may be listed, only work that is published or in-press is generally considered.

How do reviewers evaluate your contribution to a project when there are many authors on the papers?
The Departmental Letter should explain the details of the research, who participated in it, and the candidate's specific role. As stated above, the candidate should include a statement with the publication list, explaining his/her role in each study, who the co-authors are, and who the primary (or corresponding) author is on each paper, if it is not the first author.

How does a reviewer evaluate the research/creativity category?
Are both quality and quantity evaluated?
All reviewers consider both quality and quantity important. Quantity during the review period, i.e., productivity, is evaluated, but the specific minimum level of productivity expected will vary by department and discipline, and the Departmental Letter should discuss whether productivity meets the departmental norm. Quality is judged by the importance and the impact of the work. Some of the factors used to judge impact are:
• Venue where work is published; i.e., high quality, peer-reviewed journals, and highly respected presses for books.
• Citations; i.e., where and how many. Whereas citations in journal articles are important indicators of the timeliness and impact of a work, citations in reviews, monographs and textbooks are important indicators of a candidate's national or international reputation and often put the research into perspective with regard to a whole field. National and/or international impact is an important factor in the review for full Professor.
• Critiques of the work.
• Exhibitions or performances in highly respected galleries, museums, concert halls, etc.

How do reviewers evaluate independence?
Independence in research/creative activity is an important criterion for merit and promotion. A candidate must show that he/she has established a productive research program at UC Davis, as opposed to simply a continuation of research associations with previous training programs or colleagues. The candidate must also show that he/she has a cohesive program of research, rather than a mere collection of unrelated papers. Collaboration with colleagues is strongly encouraged, but reviewers will look to see if:
• The candidate's contribution to the body of work is distinct and can be clearly associated with his/her name
• The candidate is sole, first, or corresponding author on a significant number of the papers
• The candidate is the Principal Investigator (PI) on funding of a significant number of the projects in his/her program.

How does a reviewer evaluate the quality of the journals in which you publish?
Are online publications acceptable?
Journal quality is important, and it is definitely considered by reviewers. In some departments, the Departmental Letter lists the most important journals in their field ('top tier') or discusses the relative qualities of the most common journals in their field. There are also rating services which assign 'impact factors' to
journals, which some reviewers use (however impact factors refer to the journals, not the individual papers and thus have limited value); others refer to publications like Citation Index to determine the frequency of reference to the candidate's work.

In a number of fields, online publication is becoming as important as print journal publication and research societies are rapidly establishing competitive online journals. Whether or not it is peer-reviewed however, is the important factor for both print and online publication. Does it matter if you have national funding (e.g., NIH, DOD, NASA, NSF, NEA, AHA, etc.) as opposed to campus or local funding? Can you be promoted if you have no grant funding? Do you have to be PI (i.e., Principal Investigator) on a grant to get promoted?

The first priority is to have the funding you need to support the studies you propose to carry out, regardless of whether it comes from campus, local or national sources. All money, whatever its source, buys the goods and services you need to do the experiments, gather the data, or create the artwork. With regard to national vs. local funding, reviewers look on national funding as not only providing the money to do the studies, but also providing some assurance that a national standard of review has been met; i.e., when a federal grant application undergoes review it is usually by a national panel of experts. The same can be said about being PI. Although you may have more than enough money as a co-investigator on grants, being PI implies that you have the stature and ability to oversee the whole project and its quality; i.e., you have leadership skills. Reviewers look on that as a definite plus, but it is not necessarily a sine qua non for promotion in all fields.

If you need grant money to carry out the studies and you have none, you are not likely to be promoted. If you don't need money to carry out your program of research/creative activity (i.e., you can be productive without grants), then grantsmanship should not be an issue in the promotion review. Many departments, however, view grant/fellowship money not only as support for the research and validation that the candidate has a national audience, but also as support for graduate students. Some departments look on the lack of grants as a serious failing — i.e., a lack of concern for the department and its ability to attract and support graduate students. Since this opinion about grant funding varies across the campus, new faculty should be sure they understand the expectations of their own department and school/college with regard to grant funds by discussing this with the department Chair or a senior faculty member.

**PROFESSIONAL COMPETENCE AND ACTIVITIES**

An assessment of professional competence is important for which faculty?

In certain positions in the professional schools and colleges, such as architecture, business administration, dentistry, engineering, law, medicine, a demonstrated distinction in the special competencies appropriate to the field and its characteristic activities should be recognized as a criterion for appointment and promotion.
Academic Series Criteria

**What kinds of professional activities are usually engaged in by faculty?**
The candidate's professional activities should be scrutinized for evidence of achievement and leadership in the field and of demonstrated progressiveness in the development or utilization of new approaches and techniques for the solution of professional problems. Examples of the types of professional activities, which are common, include: reviewing of articles, books, or works of art; membership on editorial boards and on research society committees; organizing of symposia; and other such activities which give faculty opportunities to use their leadership skills. Invitations to work with professional groups may also indicate that one's research or creative work is recognized and valued nationally and/or internationally.

**What are the expectations with regard to professional service for faculty in the Assistant Professor rank?**
For untenured faculty ad hoc reviewing for journals, book publishers, or granting agencies, or participation in a professional society committee or a public service organization (e.g., American Heart Association) are generally considered sufficient. Greater involvement is expected as the candidate advances in rank and step, (APM: 210-1d(3).

**Service: University and Public**
Service is assessed in two categories: that performed for the university, and that for the public sector.

**University Service:**

**What is ‘shared governance’ and how does it relate to the individual faculty member?**
‘Shared governance’ is the University of California’s policy of having the Senate faculty share with the Administration in running of the university and formulation of campus policies. Faculty usually participate in this endeavor by serving on departmental, college, campus, or system wide committees, and/or participating in leadership roles, such as Department Chair, Dean, Vice Provost, etc.

**In addition to student advising and committee work, what other activities constitute university service?**
Committees are generally organized in departments, schools/colleges, Graduate Groups, campus, or system wide. The Academic Senate has both standing and ad hoc committees, which serve the campus and system wide. There are also standing and ad hoc administrative committees. In addition to committees, other service activities include: advising students, mentoring students or junior faculty, managing a departmental website, overseeing/sponsoring student activities, overseeing departmental equipment or facilities, using one’s expertise to solve a problem for the department or college, serving as Chair of a department, etc.

**How much service is enough? How much is too much?**
It is important to develop a workable balance between teaching, research, and service activities. Too much is when service encroaches upon time that should be used for teaching or research. At the early stages of one’s career, i.e., before achieving tenure, faculty are expected to have a relatively lighter service load, perhaps consisting of student advising and assignment to a few committees at the department, college, or Graduate Group level. After achieving tenure, faculty are expected to take on a heavier service load at both campus and system wide levels. At the rank of Professor, including the upper levels, in addition to serving on committees, faculty are expected to serve in leadership roles on committees.

**Public Service:**

**What kinds of public service are usually included?**
Faculty are expected to use their expertise to participate in local community, state and federal government review panels and committees, to respond to solicitations for advice in developing public policy, to help government agencies organize research meetings, brief legislative staff on current issues, testify at hearings regarding proposed bills, serve on government delegations to foreign countries, and other such activities.
Are some activities more important than others; i.e., does the reviewer ‘give more credit’ for some activities?

Yes. Reviewers recognize that there are hierarchies of activities and that the most important assignments are those requiring lots of time, effort, and/or expertise. Specific credit is given for extraordinary activities like chairing committees/panels/societies/public service organizations, acting as an expert witness, editing a journal, representing the university, organizing a scientific congress, giving invited lectures or keynote speeches, advising federal, state or foreign governments, advising other colleges, universities, or foundations, etc.

SUGGESTIONS FOR NEW FACULTY

Keep a current copy of your CV on your computer, so that new information can be readily added to keep it up to date in the following categories:

1. Publications (published, in press, and submitted)
2. Abstracts
3. Professional activities
4. Seminars/invited lectures given

In another computer file organize information for the review period by keeping a current list (with dates) of:

• Departmental and campus committees you have served on
• Courses or guest lectures you have given
• Teaching materials you have developed
• Grants acquired and submitted
• Student advising assignments

A mentor: Discuss departmental culture and expectations with respect to teaching, research and service with your Chair and the senior faculty of your department. In addition, you might find it helpful as a new faculty member to have a mentor during the early stages of your career, i.e., someone who can advise you on questions regarding your teaching and research, and departmental expectations.

In selecting a mentor look for:

* A senior faculty member who has successfully moved through the ranks and is willing to mentor
• Someone whom the faculty consider to be an outstanding teacher and researcher
• Someone in your research field, a related field, or knowledgeable about your field
• Someone with whom you would feel comfortable discussing problems which may arise with teaching or research
Academic Series Criteria
Frequently Asked Questions (FAQs) Regarding the Personnel Review Process for Academic Federation Titles (Health Sciences Clinical & Adjunct)

HEALTH SCIENCES CLINICAL

I. Introduction: FAQ Aims

II. Terms, Abbreviations and Definitions

III. FAQs for Each Academic Federation (AF) Title Series

IV. Managing Data for Your Personnel File

V. Quick Reference Guide to AF Personnel Information

PREPARATION OF THE DOSSIER

1. As a Health Sciences Clinical Professor (School of Medicine or School of Veterinary Medicine), where do I find information on the personnel review process for my series?

   Academic Personnel procedures are outlined in the Academic Personnel Manual (UCD 220 and UCD 220AF). The review process is summarized in the Delegation of Authority Chart. For all academic titles, the Vice Provost-Academic Personnel sends an Annual Call to the deans which is updated and issued after the end of each academic year. It outlines information on changes in the APM and a timeline for submitting documentation for merit and promotion dossiers to the office of the Vice Provost. Since these actions must pass through the deans' offices, each dean provides his/her deadlines for specific types of actions. The Annual Call, APM, and Delegation of Authority Chart are available on the Vice Provost-Academic Personnel web page. Health Sciences Clinical Professors should review the specific criteria for advancement outlined in APM 278 and the "Instructions to Review Committees Which Advise on Actions Concerning the Health Sciences Clinical Professor Series in APM 210-6."

2. What is the normal time between merit and promotion reviews, i.e., how often will I be reviewed?

   The normal period between merit reviews is two years at Assistant rank and Associate Steps I-III, and three years at Associate Step IV-V and at full rank. Promotion to the Associate rank entails a career review of the period since terminal degree, with particular emphasis on accomplishments since appointment to Assistant rank in the series. Promotion to full Health Sciences Clinical Professor rank entails a review of the whole period spent at the Associate rank. The specific salary range and years at rank/step are listed on the Academic Salary Scales, Tables 5-1 and 5-2 for School of Medicine, and Table 7 for Veterinary Medicine, located on the Vice Provost-Academic Personnel web page.
3. **When will I be notified that I am up for a merit or promotion review and that I am expected to prepare a dossier?**

In the spring/early summer each dean's office sends to department/program chairs a list of individuals who are eligible to be reviewed for merit and promotion during the next academic year. The Chair (or his/her delegate) then notifies each eligible individual. Due dates for dossiers span the period October to April. All Health Sciences Clinical Professor reviews are redelegated actions; due dates are set by the deans.

4. **On what criteria will my work in the review period be evaluated?**

As specified in APM 278-10, Health Sciences Clinical Professors are evaluated on the following criteria:

- Professional competence and activity
- Teaching: Clinical Educator
- University and public service are desirable and encouraged
- Research and creative work are not required; however, both the School of Medicine and the School of Veterinary Medicine have issued specific guidelines regarding creative work.

*School of Medicine Guidelines* from 'Definitions of Academic Series in the UC Davis School of Medicine' (complete document is available from the SOM Office of Academic Affairs). The School of Medicine has developed the following criteria for creative work for the Clinical Professor title series: In support of the department's investigative/creative mission, the candidate's efforts may include enrolling patients or collaborating in clinical trials, enhancing clinical efficiency; developing new clinical or teaching programs or materials, or assuming a large clinical load to free up research time for other faculty.

5. **Specifically, what is in the dossier and who puts it together?**

Departments often have a designated staff member who works with the chair and the candidate in assembling the dossier. The candidate's performance in each of the designated categories in question # 4 (professional competence and activity, teaching, and university and public service) will be described by the candidate, either in a **Candidate's Statement (UCD 220-IV F.2)** to be optionally included in the dossier, or in a separate document that is not included in the dossier, but does go to the chair and the approved voting group. The candidate's Annual Report of Professional Activities can be very helpful in assembling professional achievement and public service information for the dossier. The dossier also includes: a list of all student evaluations submitted, teaching, advising and curricular development record, list of service activities, a list of honors and awards, and a publication list.

From information on the candidate's performance in the various categories as supplied by the candidate, the chair, and supporting documents (e.g. teaching evaluations, publications, etc.), the approved Voting Group (for the Health Sciences Clinical Professor series the approved Voting Group may vary by department) in the department votes. The chair writes the department letter that summarizes the departmental evaluation of the candidate's record, the results of the vote and a recommendation for or against the advancement. In the case of promotion and merit advance: to HS Clinical Professor Step VI and to first step Above Scale), a list of extramural reviewers who have been contacted and their confidential letters in response are part of the dossier voted on by the department voting group and submitted as part of the dossier going forward. Also included is a list of all of the external reviewers solicited, with notation as to whether they were suggested by the candidate or the department, whether they responded, and any reason they gave for not responding. This list is a confidential document and is therefore not reviewed by the candidate.

6. **How is the performance record documented and prepared for evaluation?**

The performance record is assessed according to the review criteria listed above in question #4, APM-278 and APM-210-6, instructions to review committees. Documentation, supplied by the candidate or the department, is needed to support performance descriptions in each category, and it can consist of the following:
Professional Competence and Activity: Examples of some important activities for evaluation (they will vary by department/specialty, and some may overlap with Public Service) that can be described by the candidate:

- Performance of their clinical duties
- Integration of new techniques and developments into their clinical practice
- Consultant to other hospitals, medical/health groups, or research groups,
- Consultant to government agencies, legislature
- Participation in medical groups that donate medical services to medically-underserved populations or countries

Teaching:

- Describe/list the teaching record for clinical and/or basic sciences courses: (course numbers/titles/credits) and numbers of professional students, residents, fellows taught and/or advised;
- Describe participation in other university courses/training/graduate groups: undergraduate/graduate students, postdoctoral fellows, junior faculty, if applicable;
- Describe any teaching for: a clinical society, the AMA, a hospital, or other medical groups, etc.;
- Describe any substantive pedagogical materials (books, articles, manuals, etc.) written by the candidate (provide copies to be appended).

Research/Creative Activity (Not required): Since Research/Creative Activity is not required for this series, there are no examples; however, if there are any publications:

- List them in the standardized format (UCD 220 Exhibit C); include letters of acceptance of articles that are in press and copies of all of these publications;
- Briefly describe each publication, detailing candidate’s specific role in each article (if multi-authored), and roles of the other authors.
- List/describe research/creative activity presentations (i.e. talks/posters at meetings, etc.)

Service: University and public service are desirable and encouraged. According to the:

- Vet. Med. Guidelines for the HS Clinical Professor Series, expectations are for HS Clinical Professor faculty to provide university and public service similar to faculty in the Professor and Professor of Clinical (__) titles; they are expected to be good hospital, departmental, school and university citizens.
- The School of Medicine Guidelines for the HS Clinical Professor series just state that service is required by definition.

University Service: Participation in the governance of the University, i.e. maintenance of its facilities, provision of services to its faculty and students, such as:

- List committee assignments (departmental, school, hospital, campus, system wide) with inclusive dates;
- List committees you have chaired;
• List/describe departmental/school/hospital facilities/web sites/equipment you have been asked to oversee;
• Describe any mentoring programs (students, junior faculty, etc.) you have been asked to participate in, etc.

**Public Service:** Service to government agencies, consumer/health groups in areas related to the candidate's expertise, such as:
• List/describe your role:
  • In a government committee:
  • In a consumer/health group committee (example: American Cancer Society committee);
  • Consultant to California Department of Public Health;
  • Activities for a medical association.

7. **Are awards, prizes, and commendations considered in the merit or promotion review?**
Yes. They should be fully described in the department letter and the Candidate's Statement. A list of honors, awards and prizes is also included as part of the dossier. Letters of thanks/appreciation for service to the University, the government, a research society, etc., while not included in the dossier, can be discussed in the department letter as indicators of the impact of the candidate's service. Awards for teaching should be described under the Teaching category.

8. **Once the candidate, or the department, assembles all of the above information, how is it presented in the dossier?**
The candidate may send the above information described in questions #5, 6, and 7 to the chair with/without further commentary; or, he/she may send a Candidate’s Statement (UCD 220-IV F2) that would be used by the Chair in writing the Department letter. The Candidate’s Statement would also be considered by the Voting Group. It may also be included in the dossier that goes forward for review outside the department. The department will include the student/resident evaluations for courses taught by the candidate.

**Candidate’s Statement** (UCD220-IV F2): Each candidate may include a personal statement in the file (up to 5 pages), describing their perspective on any or all aspects of their performance during the period of review. Although optional, it is an opportunity for the candidate to describe in their own words: the significance of their accomplishments during the review period; philosophy of teaching and service; any unusual circumstances, both good and bad, that have affected performance in the various areas.
For example:
• Problems with teaching or clinical assignments and any successful solutions the candidate has developed;
• If the candidate has included any creative activity as one of their accomplishments, they may explain it here
• Explanation of the significance of any awards or honors received during the review period;
• Description of any difficult, time-consuming, or particularly noteworthy committee assignments.

**Department Letter:** The letter reflects the department’s views (not merely the chair’s views) on the adequacy of performance of the candidate, i.e. whether he/she meets departmental expectations and goals in the various areas of responsibility. In addition to the analysis of professional competence, teaching, and university/public service, it includes the vote (yes, no, abstentions), and separates the AF and AS votes; it gives the reasons expressed for the no or abstention votes. There are Sample Departmental Letters in the APM.
9. **When are extramural letters needed?**

For promotions, and merit advancement to Health Sciences Professor, Step VI and for merit advancement to first Above Scale, evaluation of the quality of the work or service is sought from extramural individuals who would have the expertise/knowledge to provide an objective review of the candidate's accomplishments during the period of review. Such external reviewers could include administrators of government programs or agencies with whom the candidate has interacted, scientists, researchers, clinicians or other experts in their field, etc. The candidate provides the chair with a list of extramural reviewers and their qualifications to serve as referees. The chair, sometimes after consultation with senior members of the department generates another list that is not revealed to the candidate. The chair then selects names from each list and solicits the letters. The combined list of reviewers who were contacted is included in the dossier, with notation as to whether the names were suggested by the candidate or the department and a notation for a “decline to write”.

Letters can be requested from faculty on other UC campuses, particularly from people holding comparable positions who are familiar with the candidate's work. The confidential letters in response to the solicitation are added to the file by the Chair as soon as they are received. They are confidential documents so the candidate will be shown redacted copies of these letters.

10. **How many extramural letters are needed? What is meant by “arm’s length” reviewers?**

A minimum of five letters are expected in the review dossier. The chair may solicit more than five in order to be sure that at least five responses will be available for the file. “Arm’s length” means reviewers who are qualified to evaluate the work, but have no personal connection with the candidate — e.g., they are not a recent (i.e. not in the last 5 years) mentor, collaborator, or advisor. This assures that reviewers do not have a conflict of interest. We solicit letters from more than 5 because not everyone responds and we need five letters. Half of the letters must be arms length. Campus reviewers will look to see if the extramural referees:

- Are well known/respected in their field;
- Are at least of a rank comparable to the position being sought if they are university employees;
- Discuss the impact of the candidate's research or service;
- Consider the candidate's career to be on an upward trajectory;
- Discuss the context in which they have known the candidate (below their signature line).

11. **What supportive documentation is appended to the dossier?**

The following types of documents in support of teaching or research efforts are to be submitted in a separate envelope or box along with the dossier:

- Though not required, if any research publications have resulted from clinical trials or other creative activity in the review period related to the candidate's areas of responsibility, they may be appended;
Academic Series Criteria

- Summaries of teaching evaluations from all courses and original copies of teaching evaluations from two different courses;
- Teaching materials, such as syllabi, textbooks, course guides, etc. written by the candidate.

12. Does the candidate see the department letter?
The candidate must be provided an opportunity to review the materials before they are reviewed by the Voting Group. The Department Letter which contains the vote is also provided to the candidate before the file goes forward to the dean’s office for review. This gives the candidate an opportunity to alert the chair to any factual errors.

13. What can the candidate do if he/she doesn’t agree with the department letter?
Although the content of the letter is not negotiable, the candidate should alert the chair to factual errors. After these errors are corrected, the candidate can write a rebuttal if he/she still disagrees with the department’s recommendation or wants to clarify statements made in the letter. Any rebuttal letter must be submitted within 10 calendar days from the candidate’s receipt of the departmental letter and his/her signature on the disclosure form (indicating that he/she has read the file and certifies that it is complete and factually correct). A rebuttal may be sent directly to the dean or Vice Provost-Academic Personnel if the candidate does not want to submit it via the department chair.

14. What is the Candidate’s Disclosure Certificate?
This is a standard form which the candidate reviews and signs, verifying that he/she has seen the non-confidential content of the file and that it is complete and free of factual errors, and also that a summary or redacted copy of confidential materials has been provided, if applicable.

15. In summary, what documents are in the dossier, or appended to it, when it leaves the department?
The Health Sciences Clinical Professor candidate can use either the AS ‘Checklist for Merit Increases’ or the AS ‘Checklist for Promotion’ forms, both of which are on the Vice Provost-Academic Personnel web site under Forms and Checklists to determine whether they have included all the necessary information in the file. The ‘Candidate’s Disclosure Certificate’ and the ‘Teaching, Advising, and Curricular Development Record’ are both on the Vice Provost’s web site under Forms and Checklists.

DOSSIER INCLUSIONS:
- Department Letter (including: the vote; peer teaching evaluations for promotion actions)
- Candidate’s Disclosure Certificate
- Extramural Reviewer’s Letters (for promotion actions, Clinical Professor Step VI, Above Scale)
- List of Invited Extramural Reviewers (for promotion actions, Professor Step VI and Above Scale)
- Candidate’s Statement (optional)
- List of student evaluations submitted
- Teaching, Advising, and Curricular Development Record
- List of service activity
- Publication list and list of contributions to jointly authored works (not required but included if publications are submitted)
- List of honors and awards

APPENDED MATERIALS (TO BE RETURNED TO CANDIDATE):
- Student Evaluations (summaries from all courses and 2 complete sets of evaluations)
- Publications/Evidence of Creative Activity (if there are any)
- Educational Materials (i.e. course outlines) written by the candidate (if there are any)
REVIEW OF THE DOSSIER

1. What is the dean’s letter?
   After the dossier leaves the department, it goes to the dean’s office. All personnel actions for Health Sciences Clinical Professors are redelegated to the dean for final action. For merits and promotions the file goes first to the FPC for review and recommendation. The FPC writes comments regarding their evaluation of the candidate’s performance and makes a recommendation to the dean regarding the advancement. In general, the dean writes comments only if he/she disagrees with the recommendation of the FPC. The Dean (or Associate Dean for Academic Affairs/Personnel) makes the final decision.

2. What is the process by which dossiers are reviewed, how long does it take, and who does it?
   The process is summarized in the Delegation of Authority Chart.

   Department: Once the dossier has been assembled, it is reviewed within the department by the faculty, i.e., the Voting Group. Because members of this series have teaching responsibilities, AF votes and AS votes are tallied separately and reported in two separate departmental letters. (However, only one letter needs to include a detailed evaluation/discussion about the candidate’s performance unless the views of the AS and AF voters differ.) In addition, the chair may include comments from the faculty. The complete dossier is then forwarded to the dean.

   Dean/Associate Dean for Personnel: All personnel actions in the Health Sciences Clinical Professor series are redelegated to the dean for final decision. The file is first sent to the FPC for review and recommendation. It is then sent back to the Dean/Associate Dean for final decision.

   Process/Time Frame: Process/Time-Frame: The length of time the process takes varies with the complexity of the review. Staff check the file at all stages (Department, Dean’s Office) to ensure that all necessary documents are included and that the correct processes have been followed; every effort is made to expedite the file through the process. Redelegated merit actions may need only a few months to reach the dean’s office for final decision. Most actions are completed by the end of the academic year (June 30th). Any that are not, but met the deadline leaving the department, will be completed in the summer or early fall; actions will be effective retroactive to July 1st.

3. What personnel committee has responsibility for reviewing Health Sciences Clinical Professors?
   The Faculty Personnel Committee (FPC) in the School of Medicine and in the School of Veterinary Medicine assist the deans by reviewing and evaluating personnel files, and making recommendations for approval, or disapproval.
REVIEWER’S CONCERNS:

The following topics are typical of the concerns of the various reviewers (i.e. Peer Group, Department Chair, Voting Group, Dean, Personnel Committee, Vice Provost-Academic Personnel) who will evaluate the file.

PROFESSIONAL COMPETENCE AND ACTIVITIES:

1. **What kinds of professional competence and activities are usually expected of Health Sciences Clinical Professors?**
   
   Essentially, the candidate’s professional competence is the measure of how well he/she carries out the clinical duties: making the proper diagnoses/assessments, performing the necessary procedures skillfully and expeditiously, interacting well with the patient/family/other clinicians/staff; writing up the records in a timely manner, keeping up with the literature in their field, etc. The candidate’s professional activities should be scrutinized for evidence of achievement and leadership in their clinical field and of demonstrated progressiveness in the development or utilization of new approaches and techniques for the solution of professional problems. Examples of other types of professional activities that are common include reviewing articles and books; membership on editorial boards and on professional society committees; organizing symposia; and other such activities that give them opportunities to use their leadership skills.

2. **What are the expectations with regard to professional activities for Health Sciences Clinical Professors at the assistant level?**
   
   For all medical faculty members at the Assistant level, ad hoc reviewing for journals, book publishers, or granting agencies, or participation in a professional society committee or a public service/consumer health organization (e.g., American Heart Association) are generally considered sufficient for professional activities. Greater involvement is expected as the candidate advances in rank and step. An individual’s role in the organization of training programs for health professionals and the supervision of health care facilities and operations may provide evidence of exemplary professional activity. In decisions bearing on academic advancement, these activities should be recognized as important contributions to the mission of the University (APM: 210-6.b.1b).

TEACHING:

1. **What teaching documentation is needed for the teaching review?**
   
   The file should contain a complete record of all teaching during the review period: lectures, labs, discussion sessions, one-on-one teaching, etc. The department should already have student evaluations for all courses as well as a list of courses (titles/hours/credits) taught by all departmental members each year. The Teaching, Advising, and Curricular Development Record form should also be included in the dossier. The candidate should check this list and teaching record form and make sure they are accurate. For example, he/she may need to provide additional information on teaching done outside the department — i.e., as a guest lecturer in other departments. Additionally, he/she may need to request evaluations for these other courses from the Instructors of Record. For all promotions, peer evaluation of teaching is also required. If there is no departmental teaching committee that routinely reviews teaching for the department, the chair may designate a certain faculty member(s) to personally evaluate the lectures, labs and teaching materials. Candidates should consult with the chair for the department’s specific procedures for peer review.

2. **What are reviewers’ particular concerns when evaluating the teaching record?**
   
   Each department will determine what the appropriate teaching workload will be. This will be reflected in the individual’s assignments. The emphasis is on clinical teaching of students and house-staff; it may include classroom or lab teaching of medical students. It is important that the candidate understand what the department’s expectations are, i.e. what is considered an average load and distribution, as well
as what is considered acceptable student evaluation scores. For example, if
the departmental faculty scores on teaching evaluations average 3.0 (out of a total of 5) and the candidate's score for effectiveness of teaching is 3.2, departments will describe the teaching quality in different ways: one might say the teaching was 'good', i.e. better than average; another might say the teaching was 'average' and didn't meet the goal of 'very good to excellent'. In evaluating the teaching record, reviewers consider the following questions (where appropriate for the candidate's title series):

- Is the candidate carrying his/her share of the teaching load as specified at appointment?
- What is the nature of the courses taught (i.e., one-on-one, lecture, discussion, laboratory, seminar, etc.), and for whom: medical students, residents?
- Has the candidate developed/used appropriate pedagogical materials for the courses?
- Are the courses taught with the appropriate rigor?
- Does the candidate demonstrate excellence in teaching?
- Do student and peer evaluations indicate excellence?
- Is there evidence the candidate improved in areas where student or peer comments had provided constructive criticism?
- When there has been a serious problem with a class, has the candidate sought help from the department chair or a departmental mentor?
- Is the department satisfied with the level of learning in fundamental courses i.e., are the students acquiring the proper clinical knowledge and skills?

3. **With regard to quality, what documents are usually submitted to indicate quality of teaching?**

Confidential student evaluations should be sought for all courses. The department usually arranges to have courses evaluated, numerical results tallied, and comments recorded. Sometimes the department uses a standard form, which doesn't specifically include guest lecturers, so the Instructor of Record should do that separately. Student evaluations are required for all merit actions, while student and peer evaluations are required for all promotions. Faculty who evaluate those courses for the department usually include an assessment of the effectiveness of teaching materials, such as: syllabi, slides, PowerPoint presentations, overheads, textbook assignments, exams, as well as the lecture or lab presentations/discussions themselves. If original teaching materials such as a textbook, videotape, CD, or website have been developed by the candidate during the period of review, copies should be submitted with the packet as part of the supporting documentation for the teaching record.
4. **What kinds of teaching assignments are included, outside of lecture, lab, and conference/discussion sessions? Is off-campus teaching included?**

   All teaching should be reported (even if there is no course number), including one-on-one teaching, demonstrations, teaching of other faculty, discussion sessions, etc. Off-campus teaching, (e.g., courses or lectures for the government, community groups, hospital groups, professional societies, other universities or medical schools, etc.) should also be reported although the weight they are given will depend on how well they fit the candidate's position.

**SERVICE: UNIVERSITY AND PUBLIC**

Service is assessed in two categories: that performed for the university and that for the public sector. Expectations are that Health Sciences Clinical Professors will sit on departmental, hospital, and SOM/VM committees.

1. **What are the typical types of university service expectations for Health Science Clinical Professors?**

   University service usually includes participation in the department, college, hospital, campus and, systemwide committees. In addition to committees, other service activities include: advising/mentoring students or junior AF members, overseeing departmental/hospital/facilities, etc.

2. **What kinds of public service are usually included?**

   To the extent applicable to their area of expertise, the appointees may be expected to use their expertise to participate in local community, state and/or federal government review panels and committees; respond to solicitations for advice in developing public policy; help government agencies organize research/clinical meetings, interact with consumer health groups in their field; brief legislative staff on current medical issues; testify at hearings regarding proposed bills; serve on government delegations, or as medical envoys to underserved countries, and other such activities.

3. **Are some activities more important than others; i.e., do reviewers give more credit for some activities?**

   Yes. Reviewers recognize that there are hierarchies of activities and that the most important assignments are those requiring lots of time, effort, and/or expertise. Specific credit is given for extraordinary activities like chairing committees/panels/societies/public service organizations, acting as an expert witness, editing a journal, representing the university, organizing a scientific congress, giving invited lectures or keynote speeches, advising federal, state or foreign governments, advising other colleges, universities, or foundations, etc.

**RESEARCH/CREATIVE ACTIVITY IS NOT REQUIRED FOR THIS SERIES.**

1. **What is meant by ‘research or creative activity’?**

   Within the scope of investigation in SOM/VM clinical departments, ‘research’ usually refers to scholarly, hypothesis-based investigative endeavors, having extramural support, in basic science, social science, translational or clinically-oriented projects, etc. ‘Creative activity’ however, in this context refers to investigational activities which might include enrolling patients or collaborating in clinical trials, enhancing clinical efficiency, developing new clinical or teaching programs or materials, etc. Although creative activity is not required for academic advancement, the School of Medicine Guidelines acknowledge that some Clinical Professors want to participate in creative endeavors, such as clinical trials. The following questions are for those who plan to participate in some creative activity.

   - If the candidate participates in a large clinical trial involving many institutions and many participants, he/she may not be named among the primary authors, but should be included in the UC Davis participants in the study.
• Creative activities consisting of development of new clinical or educational methodologies or techniques may be documented by peer-reviewed publication or by dissemination in the medical community and documentation of their use at UCDMC or other institutions.

2. **If the candidate has engaged in research/creative activity resulting in publications, does the publication list have to be arranged in any particular format?**

Yes. The categories of the bibliography are prescribed in the APM (UCD 220 Exhibit C) and it generally separates items into published, in-press, submitted, and in preparation. Abstracts, reviews, and reports having limited distribution are listed separately. It also prescribes the format of the bibliographic entries. Faculty who co-author publications are required to describe their role in each publication (idea, development, bench-work, data analysis, writing, etc.) as well as give a description of co-authors — i.e., are they medical or graduate students, fellows, staff, faculty colleagues. The list of publications must also indicate which articles were peer-reviewed. Although work that is submitted and in preparation may be listed, only work that is published or in-press by December 31 is considered unless the action is an “up or out” promotion.

3. **How do reviewers evaluate your contribution to a project when there are multiple authors on the papers?**

The department letter should explain the details of the research/creative activity, its significance, who participated in it, and the candidate’s specific role. As stated above, the candidate should include a statement with the publication list, explaining his/her role in each study, who the co-authors are, and who the primary (or corresponding) author is on each paper, if it is not the first author.

**SPECIAL REVIEW CONSIDERATIONS**

1. **What special review considerations apply to the Health Sciences Clinical Professor Series?**

The review processes that apply are summarized in the Academic Personnel Attribute Chart. For specific procedures see APM 220: Academic Senate Review and Advancement.

In addition to normal merit and promotion actions, Health Sciences Clinical Professors are eligible for the following:

**Acceleration:** Acceleration is a merit or promotion action that occurs prior to eligibility for normal advancement; i.e., the candidate can be considered for review if the record of performance has been exceptionally strong in at least one major aspect of the candidate’s position description since the last advancement and there was at least normal progress (i.e., very good to excellent) in all other categories. Accelerations are not granted if any component of the record is below expectation. See Delegation of Authority.
Academic Series Criteria

Deferral (UCD 220, II.A): A deferral must be requested for Health Sciences Clinical Professors when the candidate is eligible, but is not to be considered for normal advancement — i.e., the candidate is not prepared to go forward for merit or promotion.

Eight-year Limit (APM 133): Generally, appointees at the assistant rank may serve at that rank no more than a total of eight years. For example, an Assistant Health Sciences Clinical Professor who has completed eight years of service in that title, or in that title in combination with other titles as established by the President (APM 280-16-b), shall not be continued after the eighth year unless promoted to Associate Health Sciences Clinical Professor. This rule applies to Clinical Professors at 50% time or more. An academic appointee subject to the eight-year rule is eligible to “stop/extend the clock” for child bearing, according to the terms of APM 760-30.

Appeal: A Health Sciences Clinical Professor has the right to appeal his/her denied personnel action within 30 calendar days of notification of denial, by submitting an appeal letter via the Chair, to the Dean, addressing each of the specific criticisms which led to the denial recommendation by the reviewer(s).

Term Appointment: A term appointment is an appointment for a specific period that ends on a specified date. An appointment with an established ending date is self-terminating subject to the notice requirements of APM 137-32. The University has the discretion to appoint and reappoint non-Senate academic appointees with term appointments; reappointment is not automatic. If an appointee also holds a Senate title, this policy applies to the non-Senate title only. All titles in this series have term limits.

ADJUNCT PROFESSOR

I. Introduction: FAQ Aims

II. Terms, Abbreviations and Definitions

III. FAQs for Each Academic Federation (AF) Title Series

IV. Managing Data for Your Personnel File

V. Quick Reference Guide to AF Personnel Information

PREPARATION OF THE DOSSIER

1. As an Adjunct Professor, where do I find information on the personnel review process for my series?
Academic Personnel procedures are outlined in the Academic Personnel Manual (UCD 220 and UCD 220AF). The review process is summarized in the Delegation of Authority Chart. For all academic titles, the Vice Provost-Academic Personnel sends an Annual Call to the deans which is updated and issued after the end of each academic year. It outlines information on changes in the APM and a timeline for submitting documentation for merit and promotion dossiers to the Office of the Vice Provost. Since these actions must pass through the deans’ offices, each dean provides his/her deadlines for specific types of actions. The Annual Call, APM, and Delegation of Authority Chart are available on the Vice Provost- Academic Personnel webpage. Adjunct Professors should review the specific criteria for advancement outlined in APM 280, UCD 280 and APM 210.

2. What is the normal time between merit and promotion reviews, i.e., how often will I be reviewed?
The normal period between merit reviews is two years at Assistant rank and Associate rank Steps I-III, and three years at Associate Steps IV-V and full Adjunct Professor rank. Promotion to the Associate rank
entails a career review of the period since terminal degree, with particular emphasis on accomplishments since appointment to Assistant rank in the series. Promotion to full title (i.e., to Adjunct Professor) entails a review of the whole period spent at Associate rank. The specific salary range and years at rank/step are listed on the University-wide Academic Salary Scales, Table 1 for Professorial rank, Academic Year, linked from the Vice Provost—Academic Personnel webpage.

3. **When will I be notified that I am up for a merit or promotion review and that I am expected to prepare a dossier?**
   In the spring/early summer each dean’s office sends to department/program chairs a list of individuals who are eligible to be reviewed for merit and promotion during the next academic year. The chair (or his/her delegate) then notifies each eligible individual. Due dates for dossiers span the period November to April, and the specific dates for file submission to the office of the Vice Provost-Academic Personnel are listed in the Annual Call. For redelegated actions, due dates are set by the deans.

4. **On what criteria will my work in the review period be evaluated?**
   As specified in APM 280-10, Adjunct Professors are evaluated on the following four criteria:
   - Teaching
   - Research/creative activity
   - Professional achievement and activity
   - University and public service

5. **Specifically, what is in the dossier and who puts it together?**
   Departments often have a designated staff member who works with the chair and the candidate in assembling the dossier. The candidate’s performance in each of the designated categories in question #4 (teaching, research/creative activity, professional achievement, university and public service) will be described by the candidate, either in an informal letter to the Chair or in a formal Candidate’s Statement (UCD 220-IV F.2) that can be included in the dossier. The candidate’s Annual Report of Professional Activities can be very helpful in assembling information for the dossier. The dossier also includes: a list of all student evaluations submitted, teaching, advising and curricular development record, list of service activities, a list of grants, honors and awards, and a publication list.

   In the case of promotions, and merits to Adjunct Professor Step VI and to Above Scale, a list of extramural reviewers who have been contacted and their confidential letters in response are part of the dossier voted on by the department Voting Group and submitted with the dossier. The list of reviewers includes notation as to whether they were suggested by the candidate or the department, and whether they responded. This list is a confidential document and is therefore not reviewed by the candidate.

6. **How is the performance record documented for evaluation?**
   The performance record is assessed according to the criteria for review listed above (question #4). Documentation (supplied by the candidate or the department) is needed to support performance descriptions in each category, and it can consist of the following:
Teaching:
• Teaching assignment record (course numbers/titles/credits, class sizes)
• Description of any teaching or training grants
• Number of undergraduate and graduate students advised
• List of postdoctoral fellows trained in research (and where they are now)
• Syllabi and any substantive pedagogical material developed
• Teaching recognition/awards
• Teaching evaluation summaries for every course, and original evaluations for two of them

Research/Creative Activity:
• List of publications in the standardized format; letters of acceptance of articles that are in press; copies of all of these publications
• Brief description of each publication which details candidate's specific role in each article (if multi-authored), and the roles of the other authors
• List/description of research/creative activity presentations (i.e., talks/posters at meetings, exhibitions, etc.)
• List of any reviews of the publications or presentations
• List/description of any grants supporting the research (i.e., name of Principal Investigator and all co-investigators, title of grant, amount of funding, inclusive dates, and a brief description of the purpose of the grant and the role of the candidate).

Professional Achievement and Activity: Participation in activities specifically related to one's discipline/expertise, such as:
• Chairing a session at a research meeting
• Serving as officer, or on a committee, of a professional (discipline) society/public health organization (e.g., American Physiological Society, American Cancer Society, etc.)
• Giving a keynote address
• Serving as an editor or editorial board member of a scholarly journal
• Writing an invited review article
• Organizing a research meeting/symposium, etc.

University and public service:

University Service: Participation in the governance of the university, maintenance of its facilities, provision of services to its faculty and students, such as:
• Committee assignments (departmental, college, graduate group, campus, system wide): list with inclusive dates and with role
• Chairing a committee
• Overseeing department/college facilities
• Managing a department website
• Mentoring students or junior faculty, etc.

Public Service: Participation in local/state/federal programs, review panels and committees where the candidate's expertise is needed or in public organizations related to the candidate's discipline. For example:
• Government committees (review panels, study sections, advisory committees, etc.)
• Briefing legislative staff
• Testifying at bill hearings, etc.

7. Are awards, prizes, and commendations considered in the merit or promotion review?
Yes. They should be fully described in the department letter and the Candidate's Statement. A list of honors, awards and prizes is also included as part of the dossier. Letters of thanks/appreciation for service to the University, the government, a research society, etc., while not included in the dossier, can...
be discussed in the departmental letter as indicators of the impact of the candidate's service. Prizes, commendations, honors for research, as well as awards given to students/fellows working with the candidate, should be described under the Research category. Awards for teaching should be described under the Teaching category.

8. Once the candidate, or the department, assembles all of the above information, how is it presented in the dossier?

The candidate may send the information described in questions #5, 6, and 7 to the Chair with/without further commentary; or he/she may send a Candidate's Statement (UCD 220-IV F2) that would be used by the Chair in writing the Department Letter. The Candidate's Statement would also be considered by the Voting Group and may optionally be included in the dossier that goes forward for review outside the department. The following examples describe the kinds of information which may be included in the Candidate's Statement and the Department Letter.

**Candidate's Statement (UCD220-IV F2):** Each candidate may include a personal statement in the file (up to 5 pages), describing their perspective on any or all aspects of their performance during the period of review. Although optional, it is an opportunity for the candidate to describe in their own words not only important contributions to UC Davis and significant career accomplishments during the review period, but also their philosophy of teaching and service. They also have the opportunity to describe any unusual circumstances, both good and bad, that have affected performance in the various areas of responsibility.

For example:

- Teaching: Description of any problems that may have occurred and any successful solutions the candidate has developed; description of any newly developed lectures or courses; description of any invited lectures which the candidate has given in his/her own department, in another department, or even outside the university;
- Research: Description of the significance of the research, any unusual problems which had to be overcome, or any breakthroughs which pushed the research forward; description of any new grants which have been obtained and whether they support the previous projects, or whether they are starting a new area of research;
- Explanation of the significance of any awards or honors received during the review period; description of any awards given to the candidate's students;
- Description of any difficult or time-consuming new assignments where new strategies had to be developed in order to accomplish the goals; or describe any particularly noteworthy committee assignments that could be considered a significant career asset.

**Department Letter:** The letter is written by the chair (or a designated senior faculty member) and is based on the information submitted by the candidate, including supporting documents. It reflects the department's evaluation of the adequacy of performance of the candidate — i.e., whether he/she meets departmental expectations and goals in the various areas of responsibility. In addition to the analysis of performance in the required
areas (teaching, research/creative activity, professional competence, and university and public service), the letter may include the views of departmental members reviewing the dossier, as well as the official vote (i.e., that of the approved Voting Group). The vote includes the number of yes, no, and abstention votes and any reasons expressed for the no or abstention votes. There are Sample Departmental Letters in the APM.

9. **When are extramural (non-UC Davis) letters needed?**

For promotions, for merit advancement to Adjunct Professor, Step VI and for merit advancement to Above Scale, evaluation of the quality of the work or service is sought from extramural individuals who would have the expertise/knowledge to provide an objective evaluation of the candidate’s accomplishments during the period of review. Such external reviewers could include directors of government programs or agencies with whom the candidate has interacted, faculty at other research institutions or other experts in the field, etc. The candidate provides the chair with a list of extramural reviewers and their qualifications to serve as reviewers. The chair, sometimes after consultation with senior members of the department, generates another list that is not revealed to the candidate. The chair then selects names from each list and solicits the letters. The combined list of reviewers who were contacted is included in the dossier, with notation as to whether the names were suggested by the candidate or the department and a notation for “decline to write”.

Letters can be requested from faculty on other UC campuses, particularly from people holding comparable positions who are familiar with the candidate’s work. The confidential letters in response to the solicitation are added to the file by the chair as soon as they are received. They are confidential documents so the candidate will be shown redacted copies of these letters.

10. **How many extramural letters are needed? What is meant by “arm’s length” reviewers?**

A minimum of five letters are expected to be included in the review dossier. Departments will always solicit letters from more than five individuals to ensure they are able to receive five responses. “Arm’s length” means reviewers who are qualified to evaluate the work, but have no personal connection with the candidate — e.g., they are not a recent (i.e., not in the last five years) mentor, collaborator, or advisor. This assures that reviewers do not have a conflict of interest. Campus reviewers will look to see if the extramural referees:

- Are well known/respected in their field;
- Are at least at a rank comparable to the position being sought if they are university employees;
- Discuss the impact of the candidate’s research or service;
- Consider the candidate’s career to be on an upward trajectory;
- Discuss the context in which they have known the candidate (below their signature line).

11. **What supportive documentation is appended to the dossier?**

The following types of documents in support of teaching or research efforts are to be submitted in a separate envelope or box along with the dossier:

- Copies of all research publications in the review period, including articles, books, art work (descriptions/pictures of it, CDs, DVDs, etc.), or other creative activity related to the candidate’s position description;
- Summaries of teaching evaluations from all courses and original copies of teaching evaluations from two different courses;
- Teaching materials, such as syllabi, textbooks, course guides, etc. written by the candidate.

12. **Does the candidate see the department letter?**

The candidate must be provided an opportunity to review the materials before they are reviewed by the Voting Group. The Departmental Letter, which contains the vote is also provided to the candidate before the file goes forward to the dean’s office for review. This gives the candidate an opportunity to alert the chair to any factual errors.
13. What can the candidate do if he/she doesn’t agree with the department letter?
Although the content of the letter is not negotiable, the candidate should alert the chair to factual errors. After these errors are corrected, the candidate can write a rebuttal if he/she still disagrees with the department’s recommendation or wants to clarify statements made in the letter. Any rebuttal letter must be submitted within 10 calendar days from the candidate’s receipt of the departmental letter and his/her signature on the disclosure form (indicating that she/he has read the file and certifies that it is complete and factually correct). A rebuttal may be sent directly to the dean or Vice Provost-Academic Personnel if the candidate does not want to submit it via the departmental chair.

14. What is the Candidate’s Disclosure Certificate?
This is a standard form which the candidate reviews and signs, verifying that he/she has seen the non-confidential content of the file and that it is complete and free of factual errors, and also that a summary or redacted copy of confidential materials has been provided.

15. In summary, what documents are in the dossier, or appended to it, when it leaves the department?
The Adjunct Professor candidate can use either the Checklist for Merit Increase or the Checklist for Promotion forms located on the Vice Provost--Academic Personnel website (under “Forms and Checklists”) to determine whether they have included all the necessary information in the file. The Candidate’s Disclosure Certificate and the Teaching, Advising and Curricular Development Record are both on the Vice Provost’s website as well (Forms and Checklists).

DOSSIER INCLUSIONS:
- Department Letter (including the vote and peer evaluation of teaching for promotion actions)
- Candidate’s Disclosure Certificate
- List of Invited Extramural Reviewers (for promotion actions)
- Extramural Reviewers Letters (for promotion actions, professor steps VI and above scale)
- Candidate’s Statement (optional)
- List of student evaluations submitted
- Teaching, Advising, and Curricular Development Record
- List of service activity
- Publication list
- List of contributions to jointly authored works
- List of grants, honors and awards

APPENDED MATERIALS (TO BE RETURNED TO THE CANDIDATE):
- Student Evaluations (summaries from all courses and original evaluations from two courses)
- Publications/Evidence of creative activity
- Educational Materials written by the candidate
Academic Series Criteria

REVIEW OF THE DOSSIER

1. What is the dean’s letter?
After the dossier leaves the department, it goes to the dean’s office. For actions that are redelegated to
the dean for final action, the dean’s office sends the dossier to the FPC which evaluates the dossier and
appended materials and makes a recommendation on the action. This recommendation then goes
to the dean for final decision. In general, the dean writes comments only if he/she disagrees with the
recommendation of the FPC.

However, if the action is non-redelegated, the dean (or Associate Dean for Personnel) reviews the whole
file and writes a letter of support or non-support for the action. The dean’s letter becomes part of the file
that then goes forward for further review by the CAP and then to the Vice Provost-Academic Personnel for
final decision.

2. What is the process by which dossiers are reviewed, how long does it take, and who does it?
The process is summarized in the Delegation of Authority Chart.

Department: Once the dossier has been assembled, it is reviewed by the chair who will evaluative
comments to the voting members of the department (i.e., the Voting Group). The latter will review the
entire file and vote on the action. AF votes and AS votes are tallied separately and reported in two separate
department letters for those AF members who have teaching responsibilities. (However, only one letter
needs to include a detailed evaluation/discussion about the Candidate’s performance unless the views of the
AS and the AF voters differ). The complete dossier is then forwarded to the dean.

Dean/Associate Dean for Personnel: When advancement is a redelegated action, the dean’s office
sends all of the materials to FPC for review and recommendation. The dean makes the final decision after
reviewing all of the information, including the recommendations of the FPC. In the case of non-redelegated
actions, the dean reviews the materials after receipt from the department, evaluates the record, and makes a
written recommendation (with justification) that is added to the materials sent forward to the office of the
Vice Provost—Academic Personnel.

Vice Provost-Academic Personnel: All materials are sent to CAP, the members of which evaluate the
materials and add their written recommendation to the file. All of these materials are then reviewed by the
Vice Provost, who makes the final decision based on all the information in the file.

Process/Time Frame: The length of time necessary for the whole process varies with the complexity of
the review. Staff check the file at all stages (Department, Dean’s Office, and Vice Provost’s Office) to ensure
that all necessary documents are included and that the correct processes have been followed; every effort
is made to expedite the file through the process. While redelegated merit actions may need only a few
months to reach the Dean for a final decision, non-redelegated actions which have to also be reviewed by a
personnel committee and the Vice Provost may take several months longer. Most final decisions are made
by the end of the academic year (June), but any that are not completed and had met the deadline leaving
the department, will be completed during the summer or early fall and are made effective retroactive to
July 1st.

3. What personnel committee has responsibility for reviewing Adjunct Professors?
Because Adjunct Professors have similar duties as Professors, their dossiers are reviewed in the same way as
AS faculty — i.e., by the FPC at the dean’s level and by the AS Committee on Academic Personnel (CAP) at the
Vice Provost--Academic Personnel level. Appeals of actions reviewed by CAP are handled by CAPAC--the
CAP Appeals Committee.
REVIEWER’S CONCERNS:

The following topics are typical of the concerns of the various reviewers
(Department Chair, Voting Group, Dean, Personnel Committee, and
Vice Provost-Academic Personnel) who will evaluate the file.

TEACHING

1. **What teaching documentation is needed for the teaching review?**

   The file should contain a complete record of all teaching during the review
   period: lectures, labs, discussion sessions, one-on-one teaching, etc. The
department should already have student evaluations for all courses as
as well as the official DESII list of courses (titles/hours/credits) taught by
each departmental member each year. The candidate should check the
list of teaching evaluations and the Teaching, Advising, and Curricular
Development Record form and make sure his/hers are accurate. For example,
he/she may need to provide additional information on teaching done outside
the department -- i.e., in graduate group courses or as a guest lecturer in
other departments. Additionally, he/she may need to request evaluations
for these other courses from the Instructors of Record. For all promotions,
peer evaluation of teaching is required. If there is no departmental teaching
committee that routinely reviews teaching for the department, the chair
may ask specific faculty member(s) to personally evaluate the lectures, labs
and teaching materials, etc. of the candidate and report back to the voting
members of the department.

2. **What are reviewers’ particular concerns when evaluating the teaching record?**

   It is important that the candidate understand what is considered an average
teaching load and distribution, as well as what is considered acceptable
student evaluation scores, in his/her own department and college/school.

   For example, if the department faculty scores on teaching evaluations
average 3.0 (out of a total of 5) and the candidate's score for effectiveness of
teaching is 3.2, departments may describe the teaching quality in different
ways: one might say the teaching was good, i.e., better than average; another
might say the teaching was average and didn’t meet the goal of “very good to
excellent” In evaluating the teaching record, reviewers consider the following
questions (where appropriate for the candidate's title series):
   • Is the candidate carrying his/her share of the teaching load as specified in
     the position description/percent time?
   • What is the nature of the courses taught (i.e., lower division, upper
division, graduate, professional, lecture, discussion, laboratory,
seminar, etc.)?
   • Has the candidate developed/used appropriate pedagogical materials for
     the courses?
   • Are the courses taught with the appropriate rigor?
   • Does the candidate demonstrate excellence in teaching?
   • Do student and peer evaluations indicate excellence?
   • Is there evidence the candidate improved in areas where student or peer
     comments had provided constructive criticism?
• When there has been a serious problem with a class, has the candidate sought help from the department chair, the Teaching Resources Center, or a departmental mentor?
• Is the department satisfied with the level of learning in fundamental undergraduate courses; i.e., are the students well prepared for subsequent advanced courses?
• Are there graduate students working with the candidate and are they making good progress toward finishing degree requirements?
• Are graduate students getting good jobs or postdoctoral positions?

3. **With regard to quality, what documents are usually submitted to indicate quality of teaching?**
Confidential student evaluations should be sought for all courses. The department usually arranges to have courses evaluated, numerical results tallied, and comments recorded. Sometimes the department uses a standard form, which doesn’t specifically include guest lecturers, so the Instructor of Record should do that separately. Student evaluations are required for all merit actions, while student and peer evaluations are required for all promotion actions. Faculty who evaluate those courses for the department usually include an assessment of the effectiveness of teaching materials, such as syllabi, slides, PowerPoint presentations, overheads, exams, textbook assignments, as well as the lecture or lab presentations/discussions themselves. If original teaching materials such as a textbook, videotape, CD, or website have been developed by the candidate during the period of review, copies should be submitted with the packet as part of the supporting documentation for the teaching record.

4. **What kinds of teaching assignments are included, outside of lecture, lab, and conference/discussion sessions? Is off-campus teaching included?**
All teaching should be reported (even if there is no course number), including one-on-one teaching, demonstrations, teaching of other faculty, discussion sessions in the dormitories, etc. Off-campus teaching (e.g., courses or lectures for the government, community groups, hospital groups, research societies, other colleges and universities, etc.) should also be reported although the weight they are given will depend on how well they fit the candidate's job criteria.

**RESEARCH/CREATIVE ACTIVITY**

1. **What is meant by ‘research or creative activity’?**
In the APM, ‘research’ usually refers to scholarly investigative endeavors, while creative activity usually describes activities in areas of the humanities and the arts, such as music composition/performance, theater and dance, creative writing, etc. Evidence submitted to document achievements in the ‘research’ category is usually publication of the results in articles or books; documentation of ‘creative activity’ may include publications, as well as recordings, works of art, videos, etc.

2. **Does the publication list have to be arranged in any particular format?**
*Yes.* See **UCD 220 Exhibit C: Guidelines for Preparation of Publication and Other Creative Efforts Lists**. The categories of the bibliography are prescribed in the APM, and include separate lists of references to published and in-press works. Abstracts, reviews, and reports having limited distribution are listed separately. It also prescribes the format of the bibliographic entries. Faculty who co-author publications are required to describe their role in each publication (idea, development, bench-work, data analysis, writing, etc.) as well as give a description of co-authors — i.e., are they undergraduate, or graduate students, postdoctoral fellows, staff, faculty colleagues (APM UCD 220 Exhibit C). The list of publications must also indicate which articles were peer-reviewed. Although work that is submitted or in preparation may be listed, only work that is published or in-press by December 31st is considered, unless the action is a “promotion in the last year of service” from Assistant to Associate Adjunct Professor.
3. How do reviewers evaluate your contribution to a project when there are multiple authors on the papers?
The department letter should evaluate the candidate's research with respect to its quality, its impact on the field, who participated in it, and the candidate's specific role. As stated above, the candidate should include a statement with the publication list, explaining his/her role in each study, significance of the work, who the co-authors are, and who the primary (or corresponding) author is on each paper, if it is not the first author.

4. How do reviewers evaluate the research/creativity category?
Are both quality and quantity (i.e., productivity) evaluated?
All reviewers consider both quality and quantity to be important. Quantity during the review period, i.e., productivity, is evaluated, but the minimum level of productivity expected will vary by department and discipline, and the department letter should discuss if productivity meets the departmental norm. Quality is judged by the importance and the impact of the work. Some of the factors used to judge impact are:
• Venue where work is published; i.e., high quality, peer-reviewed journals, and highly respected presses for books;
• Citations; i.e., where and how many. Whereas citations in journal articles are important indicators of the timeliness and impact of a work, citations in reviews, monographs and textbooks are important indicators of a candidate's national or international reputation and they often put the research into perspective with regard to a whole field;
• Critiques of the work;
• Exhibitions or performances of artistic works in highly respected galleries, museums, concert halls, etc.

5. How do reviewers evaluate independence?
Independence in research/creative activity is an important criterion for merit and promotion of Adjunct Professors. A candidate must show that he/she has established a productive research program at UC Davis, as opposed to simply a continuation of research associations with previous mentors/colleagues. The candidate must also show that he/she has a cohesive program of research, rather than a mere collection of unrelated papers. Although collaboration with colleagues is encouraged, reviewers will look to see if:
• The candidate's contribution to the body of work is distinct and is clearly associated with his/her name by other scientists;
• The candidate is sole, first, or corresponding author on a significant number of the papers;
• The candidate is the Principal Investigator (PI) on funding of a significant number of the projects in his/her program.

6. What are the specific research criteria used by reviewers to evaluate the work of those in the Adjunct Professor series?
The Adjunct Professor series is used for appointees who teach and engage in independent research equivalent to that required for the Professorial series. Thus, the standard used by reviewers for Adjunct Professor appointees is the same as that used for evaluating the research of Professorial appointees (APM 220), including the necessity for “great distinction and recognition nationally or internationally for scholarly or creative achievement” at the
level equivalent to full professor. Appointees are expected to be PIs and to have major responsibility and leadership for their research programs.

7. **How do reviewers evaluate the quality of the journals in which you publish?**

   **Are online publications acceptable?**

   Journal quality is important, and it is definitely considered by reviewers. In some departments, the department letter lists the most important journals in the candidate's field ('top tier') or discusses the relative qualities of the most common journals in the candidate's field. There are also rating services which assign “impact factors” to journals, which some reviewers use. (However, impact factors refer to the journals, not specific articles, and hence have limited value). Publications like Citation Index determine the frequency of reference to the candidate's work.

   In a number of fields, online publication is as important as print journal publication, and some research societies have established competitive online journals. Whether or not it is peer-reviewed, however, is the important factor for both print and online publication.

8. **Do reviewers evaluate the quality of venues for creative activity used by artists?**

   For certain fields, particularly those in the arts (e.g., studio art, theatre, dance, music, etc.) the main venues for creative expression are exhibitions or presentations, rather than, or in addition to, publication. Reviewers look at the quality of these venues and take into consideration the location (i.e., local, regional, national, international) and the prestige of the various galleries, museums, concert halls, and theatres, etc. where the work is presented. Reviewers will also consider newspaper and magazine critiques of exhibitions and presentations as an aid in determining how influential the works may be in the candidate's field.

9. **Does it matter if you have national funding (e.g., NIH, DOD, NASA, NSF, NEA, AHA, etc.) as opposed to campus or local funding? Can you be promoted if you have no grant funding? Do you have to be PI (i.e., Principal Investigator) on a grant to get promoted?**

   The first priority is to have the funding you need to support the studies you propose to carry out, regardless of whether it comes from campus, regional, or national sources. Funding, regardless of source, buys the goods and services you need to do the experiments, gather the data, or create the artwork. With regard to national vs. local funding, reviewers look on national funding as not only providing the money to do the studies, but also providing some assurance that a national standard of review has been met; i.e., when a federal grant application undergoes review it is usually by a national panel of experts. The same can be said about being PI. Although you may have more than enough money as a co-investigator on grants, being PI implies that reviewers have confidence in your ability to oversee the whole project and its quality and to achieve the grant's objectives -- i.e., you have leadership skills and have established an independent research program.

   If you need grant money to carry out the studies and you have none, you are not likely to be promoted. If you don't need money to carry out your program of research/creative activity (i.e., you can be productive without grants), then grantsmanship should not be an issue in the promotion review. Many departments, however, view grant/fellowship money not only as support for the research and validation that the candidate has a national audience, but also as support for graduate students. Some departments look on the lack of grants as a serious failing — i.e., a lack of concern for the department and its ability to attract and support graduate students. Since this opinion about grant funding varies across the campus, new AF members with research responsibilities should be sure they understand the expectations of their own department and school/college with regard to grant funds by discussing this with the department chair or a senior faculty member.
PROFESSIONAL COMPETENCE AND ACTIVITIES

1. What kinds of professional activities are usually engaged in by Adjunct Professors?
   The candidate's professional activities should be evaluated for evidence of achievement and leadership in the field and of demonstrated progressiveness in the development or utilization of new approaches and techniques for the solution of professional problems. Examples of the types of professional activities that are common include reviewing articles, grant proposals, books, or works of art; membership on editorial boards and on professional/research society committees; organizing symposia; and other such activities that give Adjunct Professors opportunities to use their research expertise and leadership skills. Invitations to work with other professional groups may also indicate that one's research or creative work is recognized and valued nationally and/or internationally.

2. What are expectations with regard to professional service for Adjunct Professors in the Assistant rank?
   For Adjunct Professors in entry level positions, ad hoc reviewing for journals, book publishers, or granting agencies, or participation on a professional society committee or in a public service organization (e.g., American Heart Association) are generally considered sufficient. Greater involvement is expected as the candidate advances in rank and step, (APM: 210-1d (3)).

SERVICE: UNIVERSITY AND PUBLIC

Service is assessed in two categories: that performed for the university and that for the public sector.

1. What are the typical types of university service expectations for Adjunct Professors?
   University service includes participation in the activities of the Academic Federation, department, college, graduate group, campus, and system wide committees. In addition to committees, other service activities include: advising students, mentoring students or junior AF members, managing a departmental website, overseeing/sponsoring student activities, overseeing departmental equipment or facilities, using one's expertise to solve a problem for the department or college/school, etc.

2. Are some activities more important than others; i.e., do reviewers give more weight to some activities?
   Yes. Reviewers recognize that there are hierarchies of activities and that the most important assignments are those requiring lots of time, effort, and/or expertise. Specific credit is given for extraordinary activities like chairing committees/panels/societies/public service organizations, acting as an expert witness, editing a journal, representing the university, organizing a scientific congress, giving invited lectures or keynote addresses, advising federal, state, or foreign governments, advising other colleges, universities, or foundations, etc.
SPECIAL REVIEW CONSIDERATIONS

1. What special review considerations apply to the Adjunct Series?

The review processes that apply are summarized in the Academic Personnel Attribute Chart. For specific procedures see APM 220 Academic Senate Review and Advancement. In addition to normal merit and promotion actions, Adjunct Professors are eligible to be considered for the following.

**Acceleration:** Acceleration is a merit or promotion action that occurs prior to eligibility for normal advancement; i.e., the candidate can be considered for review if the record of performance has been exceptionally strong in at least one major aspect of the candidate's position description since the last advancement and there was at least normal progress (i.e., very good to excellent) in all other categories. Accelerations are not granted if any component of the record is below expectation. All AF series are eligible to be considered for accelerations; and the series, the rank, and the number of steps to be skipped determine if the action is redelegated or not. See Delegation of Authority.

**Deferral** *(UCD 220, II.A)*: A deferral must be requested for Adjunct Professors when the candidate is eligible, but is not going to be considered for normal advancement -- i.e., the candidate is not prepared to go forward for merit or promotion in the normative time. This requirement applies until Adjunct professor, Step V is reached.

**Appraisal** *(UCD 220, IV.B)*: An appraisal is a detailed analysis and evaluation of an Assistant Adjunct Professor's achievement and normally occurs in the fourth year at the assistant rank (APM 133). The appraisal is intended to provide a candid assessment of the appointee's performance and collegial recommendations for further career development. Assistant Adjunct Professors in the School of Medicine undergo an appraisal; those in other Schools and Colleges do not.

**Five-year review** *(UCD 220, II.B)*: Adjunct Professors (like all faculty) must be reviewed at least once every five years. This review occurs during the fifth academic year since the last review. This policy ensures that the performance of every faculty member is evaluated at a regular interval.

**Eight-year Limit** *(APM 133)*: Generally, appointees at the assistant rank may serve at that rank no more than a total of eight years. For example, an Assistant Adjunct Professor who has completed eight years of service in that title, or in that title in combination with other titles as established by the President (APM 280-16-b) shall not be continued after the eighth year unless promoted to Associate Adjunct Professor. This rule applies to Adjunct Professors at 50% time or more. An academic appointee subject to the eight-year rule is eligible to “stop/extend the clock” for child bearing, according to the terms of APM 760-30.

**Off-Scale Salaries:** A salary for an Adjunct Professor appointee at a certain rank and step is designated as off-scale if it is above that associated with the given rank and step in the University-wide published salary scale for the Adjunct Professor series (i.e., same as the Professorial scale).

Salaries should be on-scale to the greatest extent feasible; but when justified, an off-scale salary may be approved when necessary to meet competitive conditions, etc. Deans have the authority to approve an off-scale equivalent to no more than $100 below the next step; all other off-scales must be approved by the Vice Provost – Academic Personnel.

**Appeal:** An Adjunct Professor has the right to appeal his/her denied personnel action within 30 calendar days of notification of denial by submitting an appeal letter via the Chair, to the Dean, addressing each of the specific criticisms which led to the denial recommendation by the reviewer(s). Redelegated actions are sent by the Dean to the Appeals subcommittee of CAP (i.e., CAPAC) for review and recommendation and back to the Dean for final decision. If the action is non-redelegated, the Dean evaluates the appeal, writes a recommendation, and forwards all of the material to the office of the Vice Provost-Academic.
Personnel. These materials are then referred to CAPAC for review and recommendation. The Vice Provost-Academic Personnel makes the final decision after reviewing all materials including the recommendation from CAPAC.

**Term Appointment:** A term appointment is an appointment for a specific period that ends on a specified date. An appointment with an established ending date is self-terminating subject to the notice requirements of *APM 137*. The University has the discretion to appoint and reappoint non-tenured academic appointees with term appointments; reappointment is not automatic. All appointees in the Adjunct Professor series have term appointments.
THIS SECTION IS RESERVED FOR EACH DEPARTMENT TO PLACE THEIR DEPARTMENT CRITERIA FOR ADVANCEMENT
Resources

UCD Work/Life Balance Resources

Mentoring for the New Millennium

Mentoring Clinical Researchers

Collegial Advice for Assistant Professors

Creating a Teaching Portfolio

Nature’s guide for mentors

The Joy of Research
UC Davis Work Life Balance for Faculty

The birth, adoption, or placement of a child may entitle UC faculty to a leave, reduced teaching load, and/or an extension to the eight (8) year limit at the Assistant Professor rank. Academic Personnel Manual (APM) 760 outlines these policies in detail. http://www.ucop.edu/acadadv/acadpers/apm/apm-760.pdf

Since January 2003, ladder rank faculty are entitled to the following, in relation to Work Life Balance:

**Central Funding to cover teaching release for birth or adoption for a quarter of leave —**
A quarter of leave is provided for the affected faculty member in the event of a single or multiple birth, adoption, or placement, for up to two separate events, maximum. (NOTE: Leave must be taken in the quarter in which the child is born, adopted or placed, or in the following quarter.)

**Central funding to cover teaching release for faculty who are on modified duties for care of children —**
One quarter of modified duties (teaching release equivalent to 50% of the average teaching load per quarter) in the event of a single birth, adoption, or placement, up to two separate events. Two quarters of modified duties for the birth of twins or triplets or the adoption or placement of two or three infants four years old or younger, up to two separate events. (NOTE: Modified duties must be taken within 12 months following the birth, adoption or placement of a child.)

**EXTENDING THE “TENURE CLOCK”**
An Assistant Professor, who has substantial responsibility for the care of a newborn child or newly-placed or adopted child under age five, may request an extension of the tenure clock, of up to one year for each event of birth or adoption during the probationary period provided that all time off the tenure clock totals no more than two years in the probationary period. The tenure clock may be stopped no more than two times during the probationary period.

**DEFERRAL OF POST-TENURE MERITS AND PROMOTIONS**
Faculty members may apply for deferral/postponement of post-tenure merits and promotions to accommodate childbearing and adoption or placement of a child. The length of a deferral may not exceed one year per event for a total of two years.

The above information is accessible on the Vice Provost’s web page at: http://academicpersonnel.ucdavis.edu/worklife.cfm
UC DAVIS WORK LIFE BALANCE RESOURCES

Through a variety of programs and services, we support our faculty in their attempt to balance their lives while honoring their commitments to work, home and community. We offer these resources and their websites:

  cfm#sloan
- **Partner Opportunities Program** — http://popprogram.ucdavis.edu
- **Benefits** — http://atyourservice.ucop.edu
- **Child Care** — http://worklifebalance.ucdavis.edu/balancing/child.html
- **Work/Life Programs** — http://www.ucop.edu/worklife
- **Elder Adult/Dependent Care** — http://worklifebalance.ucdavis.edu/balancing/elder.html
- **Health & Wellness** — http://worklifebalance.ucdavis.edu/balancing/health.html
- **Flexible Work Arrangements** — http://worklifebalance.ucdavis.edu/balancing/flexible.html
- **Short & Long-Term Disability Plans** — http://atyourservice.ucop.edu/employees/life_changes/disability/index.html
- **Faculty Friendly Policies & Programs** — http://www.ucop.edu/acadadv/family/welcome.html

For any questions regarding this program, call (530) 752-0963
Mentoring for the New Millennium

William O. Walker, M.D., Patrick C. Kelly, COL MC USA, Roderick F. Hume, Jr., M.D

Abstract:
The challenges and benefits of a formal mentoring program are considered within the context of learning organizations: specifically, graduate medical education and professional development. While no single definition addresses every aspect of mentoring, this process is a distinct one with established traditions and expectations. The core requirements of attraction, action and affect remain and are essential for this adult developmental process to be successful. This paper's review of the literature supports the belief that mentoring has value, even into the next millennium, with some conceptual evolution. We are encouraging a paradigm shift from the traditional dyad model of mentoring to a triad model: organization, mentor, and protégé. The future development of outcome measures will be a necessary goal to demonstrate that both personal and organizational goals can coexist. Available from http://www.med-ed-online.org

In his national best seller Hope Is Not A Method, former Army Chief of Staff General Gordon Sullivan identified leadership development, “preparing tomorrow's leaders today”, as a core function of learning organizations and of critical importance to their future success. 1,2 The Accreditation Council for Graduate Medical Education (ACGME) has similarly called for the professional development of future academic leaders through mentoring.3 The American Board of Obstetrics and Gynecology (ABOG) implemented major training curriculum changes to create future academic leaders in subspecialty fellowship programs, renewing an emphasis on scholarly activity and faculty development.

Medical education research, including investigations of the mentoring process, is expanding. The Army's Office of Graduate Medical Education (GME) cites mentoring as an important faculty and trainee developmental tool throughout its New Program Directors Course. Madigan Army Medical Center (MAMC) established an institutional award, The Mentor's Cube, recognizing this special relationship and its importance to continued institutional success. 4,5

This paper seeks to define the mentoring process and identify its challenges and benefits within this graduate medical education system. Is there sufficient evidence of success to support establishing formal mentoring programs within academic institutions? Is there a single definition or model that will be effective in diverse situations? We have undertaken a review of the literature with the goal of redefining the mentoring relationship to include the institution or organization. In effect, we are proposing that the traditional dyad model is, in fact and by necessity, a triad model.
BACKGROUND

It is apparent that much is made of this rather elusive term, mentoring. What is a mentor? Is it a person, a process, a noun or a verb? In Homer’s *Odyssey*, Athena, goddess of wisdom, takes the shape of Mentor and advises Odysseus’ son, Telemachus, while his father is away. Why has that mythical advisor and relationship had such a continuing impact on professional growth and development? But just what is a mentor, and how can we improve mentoring for the new millennium?

Interest in mentoring as a method for personnel development substantially increased following the appearance of two articles in the *Harvard Business Review* in the late 1970’s: “Everyone who makes it has a mentor” and “Much ado about mentors”. This interest continues today with the publication of more recent articles such as “Take my mentor, Please.” The focus of mentoring programs necessarily differs between business and academic settings. In an academic setting, mentoring focuses on development of the person rather than the organizational outcome focus of business-based programs: the conflict between “learning” and “earning.” Mentoring and the benefits derived from these relationships create high expectations by all parties within organizations. Some view mentoring as an entitlement. Should the measure of success be personal or organizational goals, both in the short and long-term? There may not even be agreement on what is the best measure of a successful mentoring relationship; mentors value the career related behaviors exhibited by their protégés while protégés value the social support behaviors exhibited by their mentors.

**Table 1**

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<th>Darling’s Parameters of Mentoring (1994)</th>
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DARLING’S PARAMETERS

In 1994, Darling defined the mentor’s role using 14 specific parameters (Table 1). The numerous descriptive systems of mentoring share six common attributes: teaching/learning process; reciprocal role; career development relationship; knowledge differential between the participants; duration of several years; reciprocity. Although there are many definitions of mentoring in the literature, this one may capture all of the essential elements of this transactional relationship. “Mentors are resource persons and counselors with whom protégés clear their thinking or sound out the validity of an important decision. A mentor is an individual whom the protégé can trust to have his or her best interest at heart, someone who would risk telling them what they need to know even though it might be painful to them. A mentor is someone whose perspective and judgment a protégé values and trusts implicitly.”

THE THREE ESSENTIAL CORE REQUIREMENTS

Three essential core requirements must exist for a significant mentoring relationship: Attraction, Action, and Affect. These core requirements, in varying proportions, are integrated throughout the four traditional phases of the mentoring relationship. In the initiation phase, the relationship between the mentor and protégé is established. The career and psychosocial functions provided by that relationship expand to their maximum benefit, both for the mentor and the protégé, during the cultivation phase. During the separation phase, the established nature of this relationship is substantially changed, either by organizational contact or psychological factors. Finally, the relationship between the mentor and protégé may evolve into a new form or end entirely.
during the redefining phase. There is clear interplay between these mentoring stages and the career stages described by Dalton: apprentice, colleague, mentor, and sponsor. 16 Mismatches in any or all of these variables can certainly doom or limit the value of the mentoring relationship.

WHAT DO MENTORS DO?
The best response to the question “What do mentors do?” may be “It depends.” Mentors may be thought of as teachers. They may develop their protégé’s intellectual and career skills. They model, inform, confirm or disconfirm, prescribe, or question. Mentors may also act as sponsors, assisting protégés in developing and sharing their own network of personal contacts. They protect, promote and support.

Mentors may act as counselors, providing advice, guidance, moral support and nurturing. They listen, probe, clarify and advise. 17 The mentor may act simply as a host or guide, sharing an informal social network with the protégé. Mentors may serve as exemplars to their protégé. The mentor may provide a standard of excellence that the protégé will aspire to surpass. Mentoring is a long-term adult developmental process. It is not an “all or nothing” phenomenon. It is a “new and whole way of seeing things.” Mentoring differs by its context and its role definition. It may be either task centered, social support centered or career guidance centered. It may be affected by organizational, occupational, positional, and interpersonal variables. One can describe mentoring either in terms of the person, the mentor, or the process, mentoring. 18 Interestingly, neither the Oxford or Webster’s dictionaries define mentoring as a verb.19 Mentoring is centered more on the relationship than any specific structure. It is a strategy to share intellectual and emotional resources. Kram described the various dimensions of mentoring in the late 1980s.20 Recognizing the multiple components of mentoring, he defined two broad categories: Career Mentoring and Psychosocial Mentoring. Career mentoring depends on the mentor’s degree of power while psychosocial mentoring is based on the mentor’s network and ability to establish beneficial relationships for the protégé. The goal of career mentoring is advancement while psychosocial mentoring’s goal is to provide a sense of competence and clarify the identity of the protégé.

Several categories of Kram’s career mentoring should be noted. The concept of coaching is often confused with mentoring. Coaching is a managerial technique to develop an explicit set of employee expectations. Supportive bosses are often thought of as “coaches” rather than mentors. The benefactor of coaching is, very often, the mentor and organization rather than the protégé. Sponsorship is also confused with mentoring. Organizational sponsors are often top-level managers without close individual or personal contact. Sponsorship is, instead, a transition method for an individual seeking the most appropriate group or network. It may not contribute to a long term and interpersonal relationship that is implicit in the traditional definition of mentoring. 14 Professional mentors may be paid career counselors or advisors. Patrons, that is, supporters with status and financial resources are sometimes confused with mentors, as are “invisible godparents”, those providers of behind the scene recommendations and arrangements.
Mentoring should not be confused with other learning activities such as precepting, role modeling, or networking. Precepting is most often an orientation technique, formally assigning qualified established employees to assist in the transition of new staff into a setting over a very limited period of time. It is characterized by its brief duration and its lack of emotional content. In role modeling, one individual internalizes another's appearance, mannerisms, behaviors, values, or standards. There does not have to be an actual personal relationship between the one who incorporates these characteristics and the one who is the model. There is reciprocal learning between the individuals involved in networking. Each seeks to identify how resources can be mutually shared. Other learning activities that have been confused with mentoring include collaboration and peer strategizing. Collaboration is more often a partnership between peers having a short-term goal of increasing productivity, increasing resources or refining specific skills. Peer strategizing is a relationship between peers of similar age and experience seeking reciprocal benefit. It is characterized by an equality of experience and does not include the different levels of expertise seen most often between mentor and protégé.

LEARNING ORGANIZATIONS

A “learning organization” establishes a culture where individual development is a priority. This culture may be more of an aspiration than an objective state to be measured. No organization can choose and control all of the variables that impact mentoring relationships within it. If such control were possible, these relationships would appear significantly different. Ideally, mentors would find protégés who exhibit intelligence, ambition, the desire and ability to accept power and risk, loyalty, and the ability to eventually perform the mentor's job. Protégés would have perceptions of work in the organization similar to those of the mentor and a commitment to the organization or discipline. They would be organizationally savvy, have a strong ability to establish alliances within the organization and, finally, have the capacity to be positively perceived by the organization. Likewise, protégés would seek out mentors who perform their job well, who have the power or influence in the company or discipline to move the protégé forward, to be a good teacher and motivator, to be secure in their own position and to be judged well by the organization.

Mentoring should be considered within the broad spectrum of social learning and adult learning theory, as learning occurs across an entire continuum of educational activities. Adults are goal oriented. They are less flexible and more impatient in their pursuit of specific objectives. Social learning theory argues that both direct and observational learning is used to acquire behavioral patterns and to strengthen specific expectations. Experiential teaching methods provide activities, guidance, feedback and application of principles to practice. Their primary goal is to avoid trial and error learning that is unproductive. Mentoring, based in adult learning principles, can be viewed as guided learning. The mentor provides structure or “scaffolding” to the learning process, shares knowledge that could otherwise only be attained through experience and supports the protégés efforts without “rescuing” them from their failures. The challenge in effective, successful mentoring is to decipher and integrate the unique learning history of both the mentor and protégé to their mutual benefit. The best mentoring will always occur within this framework of adult learning.

It has also been suggested that the process of mentoring can be described using the concepts of behavior management or behavior analysis. Behavior management and analysis takes an “A, B, C” approach: antecedents, behaviors, and consequences. Antecedents are those events or incidents that occur prior to the development of some concept or action. The behavior is that concept or action and the consequences are the outcomes. With this as a starting point, we may be able to see the value of these “A, B, Cs” in developing effective mentoring.

The two critical antecedents in any mentoring relationship are the mentor and the protégé. Other antecedents that must be considered include altruism, belief in the other's potential, the capacity to work hard, integrity, mastery of concepts and ideas, unselfish gifts of time, energy, trust and a willingness for self-disclosure. The mentoring process is the desired behavior. The consequences of mentoring should be examined in general...
terms and for their specific benefit to the protégé and the mentor. Mentoring may result in career progression, in the development of new investigators, in empowerment, in expanding professional knowledge, in a feeling of generativity, that is the “passing of the torch”, in institutional stability and continuity and, finally, in professional socialization. As a result of mentoring, the protégé may become more self-confident and optimistic about his future. The mentor’s reward may be a feeling of empowerment and personal satisfaction. They can observe the extent to which they have influenced the organization and its structure through mentoring and organizational citizenship.

MENTORING IS WONDERFUL, RIGHT?

There are negative consequences to mentoring. The literature presents the consequences of mentoring through “rose colored glasses.” There is a fine line between “mentor” and “tormentor.” There are certainly areas of concern and potential pitfalls. Either party may enter the relationship with unrealistic expectations of time commitment or objective benefits. To answer the question, “Is mentoring always a good thing with a happy ending?” the reality is “No.” A better question may be “When does a mentoring relationship become truly dysfunctional?”

There are toxic mentors, toxic protégés, and toxic environments. Any one of these three elements can adversely affect the balance within the mentoring relationship.” It should be considered dysfunctional if it frustrates the major needs of either the protégé or the mentor. It should be considered dysfunctional when one or both members perceive the long-term cost of that relationship to outweigh its long-term benefit. Finally, a relationship should be considered dysfunctional if one or both partners engage in specific concrete behaviors to sabotage the work projects, or the career success of the other.

FORMAL MENTORING PROGRAMS

Many organizations have established formal mentoring programs; the number of business with mentoring programs doubled between 1995 and 1996. Formal mentoring programs are seen as the most expeditious and immediately beneficial approach to a clear need: to provide valuable career enhancement to more than just a select few. Such programs have been shown to have benefits comparable to those promoted by informal mentoring programs. In some organizations, time and personnel turnover requires this formal mentoring program. While many organizations have implemented a variety of formal mentoring programs, few have aligned their mentoring programs either with their long-term objectives or the strategic positioning of their organization.

Several key points should be considered when instituting a formal mentoring system: determine who will be mentored; decide on a matching method; ensure the voluntary participation of the mentors; minimize the rules; maximize the mentor’s personal freedom within the relationship. The temptation to “mechanize” this process should be avoided. To prevent a corporate mentoring program from being a “fad,” a business analysis to allocate appropriate organizational resources may be needed. The organization can contribute to the success of formal mentoring by
creating networking possibilities for the identified protégés. This provides not only a system of mutual support for the protégés but may encourage the emergence of a “constellation model” of support – support from a number and variety of sources. Organizations must insure that the managers of the specific protégé are included in the process.

Organizations can reward mentors by increasing their visibility within the organization and recognizing mentoring as a valuable component of organizational citizenship. The organization can further assist the process by sharing and negotiating expectations between the mentors and protégés, before and during the relationship.

SHIFT FOR SUCCESS

Mentoring has been traditionally thought of as a dyad between mentor and protégé, between assistance and assessment, between formal and informal approaches and finally, between the conditions that can and cannot be controlled. It is hard to untangle the effects of mentoring from the effects of supervision, to distinguish assistance from assessment, when mentors are supervisors. Informal mentoring implies a mutual selection process and may take significantly more time to develop. In contrast, formal mentors are usually assigned. At the organizational level, there must be a balance between the optimal conditions and the optimal match between mentor and protégé. An organization should try to create these optimal conditions but may not always be able to guarantee them. Organizations often set themselves up for failure, trying to control the uncontrollable personal chemistry that is so vital to effective mentor/protégé relationships. Their efforts are better focused on other more controllable aspects. Organizational characteristics believed to positively influence protégé mentoring include hierarchical structures, specific task designs, reward structures, performance appraisal systems and organizational ranks. This has many of the characteristics that are deeply ingrained in the military system.

We are encouraging a paradigm shift from this traditional dyad model of mentoring to a triad model: organization, mentor, and protégé. The traditional dyad model limits the protégé’s exposure to a single perspective and information source. There may also be a significant shortage of senior mentors in an organization, limiting the number of dyads that can be developed. Issues of unmet expectations, personality conflicts, and inconsistency may be much more critical and disruptive these dyads.

The conflicting research regarding mentoring and its benefits may be due, in part, to not considering the effect of an organization on the mentoring that is occurring there. Clearly, mentoring and mentoring relationships affect organizations. The exchange of knowledge and experience in such relationships contributes to the “organizational memory.” The culture of mentoring is based on the individuals’ ability to trust each other and can exist only in an atmosphere where trust and openness are valued. Organizations, cannot, by fiat, dictate trust and liking among colleagues. Mentoring is not subject to mandate, but must be nurtured within the organizational culture.

FUTURE STEPS

The goal of future mentoring initiatives should be toward a concept of mentoring as a triad rather than the incomplete dyad, recognizing the essential components: mentor, protégé, organization. Mentoring must be an active process involving higher professional development and life long “co-learning” among the participants. While the demands of managed care models affect all aspects of the health care profession, the fostering of mentoring relationships cannot be abandoned. This active learning must be paired with reflection (praxis). The question can then be asked, “Where do we go from here?” Defining the optimal metrics of the mentor-protégé relationship within an organization will be critical to continued success. What qualities exist in the optimal exchange between mentor and protégé? Multimodal educational intervention outcome studies to evaluate the impact of mentorship programs should identify the best methods and benefits attributed to mentoring.
The measure of success within these relationships should be the participants' perception of adequate, rather than more, support.

There have been virtually no empirical assessments of mentor/protégé relationship over time. The tendency is to look at mentor/protégé relationships as single points, rather than longitudinally. Qualitative data of a longitudinal nature looking at specific outcome and performance measures for all aspects of mentoring must be collected. Survey results based only upon recall or opinions are inadequate to assess the consequences of any systematic effort to improve the quality of medical education through mentoring or mandating.

Can the two initial questions be answered? Can mentoring be defined? Is there a single systematic formal approach to mentoring? The definition and approach are intimately entwined. If the triad model is accepted, the mentoring process, both as a noun and a verb, as a definition and as an approach, is outcome based. That outcome is built on the goals and the investments, short and long term, of the involved partners: protégé, mentor, organization. That outcome is the acculturation of an individual to an organization and their attainment of expected professional skills and attitudes. For that outcome to be the one desired, mentoring must be thoughtfully planned and implemented. It cannot be left to chance or good fortune.
References


In the United States, over the past decade there has been increasing recognition of the importance of clinical research as evidenced by the birth of a new federal agency and commitment of funds from the National Institutes of Health (NIH) and private foundations. I have been fortunate to mentor a number of fellows and junior faculty over the past decade, and would like to share my experiences with others. The importance of mentoring has been acknowledged for decades. Many successful senior investigators identify early positive role models and mentors as critical to their success. More recently, in a survey of over 1100 junior faculty from 24 nationally representative US medical schools, faculty with mentors reported more professional support from their institutions for teaching, research, and administrative activities. Faculty who were mentored also had a higher perception of their research skills and an increased likelihood of being awarded research grants.

WHAT IS A MENTOR?
Mentoring can be defined as a reciprocal relationship between an advanced career incumbent (the mentor) and a junior faculty member (the protégé) aimed at fostering the development of the junior person/protégé. At various times the mentor serves as teacher, sponsor, advisor and model. Levinson argues that the most critical function of the mentor is to support and facilitate the realization of a Dream—a Dream to succeed, accomplish, and leave a legacy. The concept of mentoring is drawn from a Greek myth. Odysseus leaves to fight the Trojan war—Mentor, his friend, is left behind to guide the journey of Telemachus, Odysseus’s son, from youth to manhood.

Mentoring is often divided into two categories: research and career. It is important to distinguish between research and career mentoring because they differ in: (1) goals; (2) skills; and (3) the fundamental relationship between mentor and mentee. The goal of the research mentor is to develop the research career of the mentee. This involves the acquisition of research skills, selecting and conducting research projects, presenting research findings at national meetings, ensuring the completion and submission of manuscripts, assisting in networking and finally, teaching the mentee how to obtain extramural funding. This contrasts with the career mentor who focuses on more global aspects of an academic career, including balancing family demands and work, career promotion, juggling the different aspects of academic life (teaching, administration, clinical care, and research) and major career decisions, such as changing institutions or research direction. Different skills are needed for each type of mentor. Commonly, career mentors have accumulated years of experience and wisdom in academia. This may not be true for research mentors, who may be well versed in epidemiology, biostatistics and other research methods, but lack comparable years of experience in academic medicine.
Although, many mentors are often involved in both aspects of providing support and guidance, fellows and junior faculty should understand the difference between these two types of mentors. The research mentor-mentee relationship can also be divided into two categories—informal and formal. Informal mentors are important, but for various reasons, the relationship lacks the intensity and commitment that is necessary to ensure that the mentee has a successful research career. I often help faculty with grant applications and questions related to questionnaire or study design, serving as a project-specific mentor. In addition, I also review abstracts and manuscripts for fellows and faculty prior to submission. These tasks are important, but do not represent formal mentoring. My commitment is to a fellow or faculty member for individual projects, but not to their research careers.

RESPONSIBILITIES OF THE MENTOR

The relationship between mentor and mentee

A formal mentor-mentee research relationship engenders commitments from both individuals, and an agreement to certain basic principals. The responsibilities of the mentor include: (1) being available; (2) acting as an advocate for the mentee; (3) insisting on completion of project(s); (4) assisting with networking; and (5) seeking extramural funding.

Undoubtedly, the single most important ingredient in the mentor-mentee relationship is a sufficient ongoing time commitment from the mentor. Effective mentoring requires formal, scheduled meetings and informal discussions. I am aware of too many fellows who have needed to wait months until their mentor is available. Since many aspects of academic life can consume long periods of time, such as submissions of grants and papers, in order to ensure that the career of a mentee progresses at a reasonable pace, the mentor must be available on a regular basis. Initially, formal meetings should be conducted regularly as mutually agreed upon by both individuals. During these meetings, interruptions must be kept to a minimum. In addition to formal meetings, informal interchange is also important. Often, between scheduled appointments, faculty have quick, but important questions that can hold up progress on studies, or grant applications. I recall fondly when one of my initial research mentors, when I was preparing for my first presentation at a national research meeting said, “I know you’ll be in this weekend to finish up your presentation and practice—when can I come in to help.” Informal conversations often represent teachable moments and they may leave lasting impressions. It is important for mentors to be available on both a formal as well as informal basis.

Finding time for research

For the generalist clinical researcher there is constant tension between the proportion of protected time for research and clinical and other responsibilities. This is true at virtually every level of academia, but is most pronounced for junior faculty. My experience suggests that protected time varies between 30 and 70%. Although there is no magic percentage which ensures success, I believe it is best if mentors ensure that junior faculty have 50–70% protected time for a number of years. Equally as important is for the mentor to protect the mentee from other responsibilities. For example, 50% protected time may be sufficient if it is guaranteed for three to five years, is consistent from year to year, and the faculty member does not become overburdened with administrative and teaching responsibilities. Obviously, as faculty mature, there are often other responsibilities that are added to their work life. The mentor must assure that if this occurs, there is some reduction in clinical work.

Completing projects

It is not uncommon for faculty and fellows to let studies linger, unnecessarily prolonging or never completing projects. A study may be submitted as an abstract, and even presented at a national meeting, but the final paper is never prepared and submitted for publication. This is often the case with individuals who are transitioning from fellowship to faculty. Since they are often changing institutions, no one takes responsibility for ensuring that they complete their recent work. Abstracts are nice accomplishments, but peer reviewed publications and
extramural funding are far more important. It is difficult to acquire extramural funding without some record of productivity. When new junior faculty first join our Division, I often focus their efforts on completing papers begun during their fellowship. Then we discuss and establish a time line for completing preliminary research projects, new manuscripts, and grant submissions. My experience with faculty is that most are very responsive to mutually agreed upon timetables.

NETWORKING

A great deal of success in academics is related to networking. Meeting faculty from other institutions, and representatives from foundations, industry, and governmental agencies, can help jump start an academic career. Networking also involves the mentor identifying individuals who can help the mentee with specific questions. Although I am the mentor for a number of junior faculty and fellows, it is not possible for me to have expertise in all areas in which they need help. Mentors have a responsibility in helping mentees begin to network. Reviewing which meetings to attend, and whom to call or write for help or guidance, is also part of this process.

Funding issues

The mentor must be proactive in helping the mentee seek extramural funding. In a time of shrinking resources and greater accountability, few divisions or departments can protect junior faculty from clinical and other responsibilities for prolonged periods of time. New faculty often receive a commitment from an institution for some period of protected time. At the end of that time period, there is an expectation that extramural funding will have been obtained. Since obtaining extramural funding can often take two to three years, it is critical that the mentor discusses this issue early in the career of a faculty member. Few junior faculty realize that most governmental grants are not approved and funded on the first submission. It often takes two years from the time a grant is first submitted, then revised and resubmitted, and funding actually begins.

Success or failure as a researcher

The most difficult aspect of mentoring occurs when a mentor believes that a mentee is not going to succeed as a researcher. This often occurs after a two to three year relationship when progress with a research project, either in collecting or analyzing data, or writing and submitting a manuscript for publication, slows to a snails pace. When this has occurred in my relationships with fellows or faculty, I have found that they are remarkably relieved when the issue of their future is discussed. Many faculty know when they are not succeeding and need to focus on a different career track.
RESPONSIBILITIES OF THE MENTEE

The mentee also has certain responsibilities in this dyadic relationship. First and foremost, the mentee must hold the mentor accountable for various details of the relationship: time commitments; reading manuscripts and grants in a timely fashion; etc. This can be difficult, since the mentee is dependent on the mentor. Second, the mentee must seek out and be willing to hear criticism. It is difficult to achieve success in the academic world. Individuals must be prepared to discuss how they can improve themselves. Third, the mentee must commit appropriate time and effort to analyze data and complete and submit manuscripts for publication. I believe that most successful faculty work as hard today as in the past. The obvious changes in society—dual careers and many men playing a greater role in the lives of their children—have made life far more complicated for junior faculty. However, building a successful academic career requires hard work, a great deal of time, and sacrifices. Finally, mentees should also foster relationships with more than one mentor in order to gain various perspectives. Many of my colleagues use senior faculty from other institutions or outside of their own division as career mentors. I continue to consult colleagues about important research and career questions at other institutions.

Dilemmas in the mentor-mentee relationship

There are a number of possible conflicts that may occur in the mentor-mentee relationship. I have already discussed the issue of availability. Despite the best of intentions, the mentor’s availability can diminish as they become busier in their own careers. The mentee must hold the mentor accountable for time commitments. Second, mentors must attend to their own careers. This can be a source of conflict with junior faculty. This conflict is often hidden, and rarely discussed. Mentors must avoid inappropriate authorship and fostering their own careers at the expense of mentees. Mentors sometimes ask junior colleagues to co-author review articles or chapters in books. This can be quite time consuming and distracting from progress towards independent, extramural funding. Mature individuals must be willing to discuss possible conflicts. Third, relationships need to mature. The goal for the mentor is to support individuals as they become independent investigators. Often, as the relationship matures it is difficult for the mentor to allow this to occur. The mentor and the mentee must be aware of the need for the relationship to change with time. The later two points represent the most interpersonally complex components of the mentor-mentee relationship.

Good mentors champion the careers of people they are helping. Fourth, the mentor must hold the mentee responsible. The mentor must develop a feel for how a particular junior faculty member responds best to direction. For some, encouragement is the most effective tactic; for others, criticism is helpful. My experience suggests that a mix of carefully timed encouragement and constructive criticism works best. Regardless, the mentor must document, in writing, on a regular basis, ways in which the junior faculty member is succeeding and ways in which they must improve. Finally, as mentioned above, junior faculty often confuse research productivity—papers, review articles, talks, book chapters—with the ability to sustain academic success. It is critical that faculty understand that in order to ensure continued academic success, peer review papers represent a first step in a clinical research career. In an environment of limited resources, only extramural funding will guarantee ongoing success.
FINDING A MENTOR

Identifying appropriate mentors can be a frustrating task. First, individuals seeking mentors need to understand what they are searching for. They need a certain level of self-awareness. I have already mentioned that there are different types of mentors—career, research, project-specific. I often help colleagues articulate what type of person they need. Second, the search for a mentor should not be restricted to one’s own division, department, or even institution. Although it is almost always more difficult to have mentors that are in different places, the relationship can still work. In the case of career mentors, often individuals from other institutions will have a perspective that is not available from faculty at one’s own place. Third, prior to selecting a mentor, the mentee should meet and discuss goals and expectations. They may also want to talk with other junior faculty who have worked with that individual in a mentor-mentee relationship. Finally, junior faculty need to recognise that sometimes, despite the best of intentions, the relationship is not working, and they need to change mentors.

CONCLUSION

This overview of mentoring is not meant to be exhaustive, but rather a starting point. I am sure that there are other clinical research mentors in pediatrics who could add to my list of important aspects of the mentor-mentee relationship. Some may even disagree with the paradigms I have discussed. However, we need more clarity and activism around the mentor-mentee relationship in order to ensure success. I am delighted that there is growing interest and resources for clinical and health services research. The cadre of young and mid-career investigators in this area is increasing. We must provide the same ongoing support and environment for clinical researchers that has been available for basic scientists—time, commitment, resources, and mentors.
REFERENCES
Experienced Clinical Educators Improve Their Clinical Teaching Effectiveness

(Ambulatory Pediatric Association 93 March–April 2003)
Patricia Lye, MD, MS; et.al.

Objectives — To determine if experienced clinical educators (CEs) can improve their teaching by incorporating 4 literature-based teaching methods into their instruction.

Methods — We trained 7 experienced CEs on the teaching methods during a monthly faculty development program. Each CE recorded use of these methods during 10 months on a personal digital assistant. We compared the CEs’ teaching evaluations with those of nonparticipating faculty by analysis of variance at baseline, during the study period, and for 1 year after the study.

Results — Reported use of 2 teaching methods (priming and feedback) increased significantly over use at baseline; use of 2 other methods (teaching in the patient’s presence and 1–2 focal teaching points) remained constant. Scores on the CEs’ teaching evaluations were significantly higher during the study period on 1 item, whereas the comparison group showed no changes. The changes persisted during the follow-up period. CEs reported that the teaching methods focused the learner and teacher, making subsequent encounters more productive. They also found that the act of entering data daily prompted them to reflect on their teaching.

Conclusions — Experienced teachers can be persuaded to incorporate new methods into their daily teaching. Reflection on teaching is enhanced with group support and daily reminders. With these interventions, teaching effectiveness of these experienced educators improved.

The double helix of clinical productivity and teaching is compelling academic physicians to seek more effective ways to teach. In particular, experienced clinical educators (CEs) seek teaching methods that will help them with patient care while at the same time allow them to educate students and residents. Is it really possible to achieve educational goals and “productivity” quotas?

Skeff et al argues that the charge to physicians to teach more efficiently so that they have time for patient care is merely an illusion, as teaching takes time. A recent literature review identified 11 clinical teaching methods used in the ambulatory setting and found limited data on either efficiency or effectiveness for these methods. Indeed, only a few of the described methods were systematically studied, and those studies were limited by weaknesses associated with single-specialty focus and/or lack of longitudinal data collection.

The purpose of this study was to determine if experienced educators could improve their teaching effectiveness over a 12-month study period. Two research questions guided the study design: 1) will experienced CEs incorporate selected teaching methods into their teaching repertoire? and 2) did adopting selected teaching methods improve learner evaluations of the teaching effectiveness of experienced CEs?
METHODS

Sample
The study group consisted of 7 experienced CE faculty (4 general internists and 3 pediatricians; 3 men and 4 women). These physicians participated in a 2-year faculty development program focused on enhancing clinical teaching skills. All participants taught in inpatient and/or outpatient settings with residents and medical students. Teaching experience averaged 12 years, ranging from 4 to 16 years. Before beginning the study, 2 participants had won departmental teaching awards. At the time of enrollment, 2 participants were past or current residency program directors, and 3 were past or current clerkship directors. Four were associate professors, and 3 were assistant professors in the tenure-eligible clinician educator pathway.

Teaching Methods and Training on Methods
After a critical review of the 11 literature-based clinical teaching methods during the first year, we chose 4 methods: priming, 1–2 focal teaching points, teaching in the patient’s presence (TIPP), and feedback. We used 3 criteria to select these 4 methods.

Table 1. Targeted Teaching Methods and Staged Implementation

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Rationale: Efficiency and Effectiveness</th>
<th>Date Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priming</td>
<td>Teacher orients learner immediately before entering the patient’s room. Orientation focused on learner’s task and expected product, time frame, when/how preceptor will reconnect with learner, and any patient-specific information needed. 3–9</td>
<td>Focuses the learner and teacher</td>
<td>Sep 1998</td>
</tr>
<tr>
<td>1–2 Focal teaching points</td>
<td>Teacher focuses on 1–2 key concepts per teaching interaction. 3–5,8,10–12</td>
<td>Emphasizes major concepts to focus learner and teacher</td>
<td>Sep 1998</td>
</tr>
<tr>
<td>Teaching in patient’s presence</td>
<td>Learners present the findings in front of patient, with teacher teaching selected concepts with patient’s input. 3,4,13</td>
<td>Increases patient-teacher and patient-learner contact and directness of feedback</td>
<td>Nov 1998</td>
</tr>
<tr>
<td>Feedback</td>
<td>Ongoing provision of information regarding performance. 3–6,8,10–22</td>
<td>Guides learner’s performance in short, specific, timely units</td>
<td>Feb 1999</td>
</tr>
</tbody>
</table>
First, each method was described in the literature as being efficient and/or effective. Second, the method was cited by multiple authors. And third, the method was adaptable and appropriate to the spectrum of teaching interactions, sites, and levels of learners taught by both medicine and pediatric faculty. The 4 teaching methods were introduced sequentially over a 6-month period during year 2 (Table 1). We logically ordered the methods following the normal process of clinical teaching interactions, with initial methods providing groundwork for subsequent strategies (eg, 1–2 focal teaching points and priming first, followed by TIPP, then by feedback). The first 2 methods, priming and 1–2 focal teaching points, were introduced simultaneously in September 1998, given their interdependence.

Training on Methods
Participants were trained on the teaching methods during the monthly faculty development sessions immediately preceding the implementation date. Training sessions used a combination of strategies, beginning with a brief lecture to introduce each method’s key elements as derived from the literature. All participants then practiced the targeted method using structured exercises (eg, role plays, simulations, short written exercises to identify key teaching points for a series of commonly presenting problems) to standardize each teacher’s approach. Between faculty development training sessions, the project director prompted teachers to exchange e-mail to clarify any questions and concerns about implementation. During the subsequent faculty development sessions, the targeted method was revisited and reviewed to address concerns and inconsistencies, and to share successful adaptations (eg, how to use the method with a pediatric patient or a patient with complex problems).

Data Collection Instruments and Analysis
Baseline data collection on teaching methods began in August 1998, with continuous data collection specific to targeted teaching methods occurring from September 1998 through July 1999 using a personal digital assistant (PDA). Although participants had not been formally trained in the methods during the baseline data collection, all were familiar with the general concepts from our previous literature review.2 Each CE received a PDA (Palm III, Palm Inc, Milpitas, Calif) pre loaded with a data collection form to be completed at the end of each clinic/hospital session. The form was created using Pendragon Forms (Pendragon Software Corporation, Libertyville, Ill) and included a series of multiple-choice questions requiring CEs to check the appropriate response. The CEs recorded demographic data on learners (eg, number, level) and the frequency with which they used the teaching method during that session on a 4-point scale (high, medium, low, none). We asked the CEs to use the Palm’s Graffiti writing system to make short narrative comments about their teaching and the methods. The form took approximately 1–3 minutes to complete. PDA data were downloaded monthly into a Microsoft Access file (Microsoft Corp, Redmond, Wash) for subsequent analysis using SPSS for Windows (version 9.0, SPSS Inc, Chicago, Ill). We used chi-square analysis to determine if CEs used the teaching methods more frequently after their formal training.
During the study, students and residents continued to complete the college’s standard clinical teaching evaluation (CTE) form. This form contains 23 items, each with a 5-point Likert scale, and was developed based on an extensive review of the literature on clinical teaching characteristics. We compared baseline CTE data (July 1997 to June 1998) with CTE data collected during the study period and for 1 year thereafter for 2 cohorts: CEs (intervention group) versus all other general internists and pediatricians who were not enrolled in the advanced faculty development program (comparison group). We used an analysis of variance to determine if the teaching performance of the CEs (intervention group), as rated by learners, was affected by use of targeted teaching methods as compared with that of the comparison group. We identified 6 items on the CTE form a priori to measure the effectiveness of the targeted teaching method (Table 2).

### Table 2. Clinical Teaching Evaluation Items Associated With Teaching Method(s)

<table>
<thead>
<tr>
<th>CTE Item*</th>
<th>Teaching Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clear/organized</td>
<td>Priming and 1–2 focal teaching points</td>
</tr>
<tr>
<td>2. Actively involved me with patients</td>
<td>Teaching in patient’s presence</td>
</tr>
<tr>
<td>3. Provided timely/constructive feedback</td>
<td>Feedback</td>
</tr>
<tr>
<td>4. Clearly communicated expectations</td>
<td>Priming</td>
</tr>
<tr>
<td>5. Emphasized comprehension of concepts</td>
<td>1–2 Focal teaching points</td>
</tr>
<tr>
<td>6. Specific cases were well connected to general principles</td>
<td>1–2 Focal teaching points</td>
</tr>
</tbody>
</table>

*CTE indicates clinical teaching evaluation.

**RESULTS**

The CEs recorded more than 1200 teaching sessions using the PDA form. Seventy percent of the recorded teaching sessions occurred in the outpatient setting. Nearly all sessions involved interns, with 40% involving MS-3s and 21% involving MS-4s. Forty-four percent involved senior residents. Before the training on teaching methods, baseline PDA data revealed that priming and feedback were used minimally, with CEs reporting middle or high use at 39% (priming) and 20% (feedback). At baseline, TIPP and 1–2 focal points were already in frequent use (75%–85% of teaching sessions). During the study period, CEs reported frequent use of all teaching methods, with significant increases over baseline in use of priming and feedback (P < .05). The rates of use of 1–2 focal teaching points and TIPP were maintained at their high baseline rates of use (Figure 1).

**Qualitative Reports Regarding Clinical Teaching Method Use**

Participants’ narrative comments revealed that use of the 4 teaching methods focused the learner and teacher, making subsequent encounters more productive both clinically and educationally. More specifically, priming was found to be particularly helpful for less experienced learners (e.g., MS-3s and interns), especially early in the academic year. Use of 1–2 focal teaching points cued the learner to the take-home message and equally important, directed the teachers as well. As one participant reported, over time her ward team would “remind” her when she had exceeded her 1–2 teaching point limit. Teachers reported that TIPP enabled them to move teaching from the hallway/conference room to the patient’s room. As a result, these teachers stated that they spent more time with patients, had greater opportunity to observe learner-patient interaction, and were able to successfully use patients as a direct source of feedback to learners while complying with regulations of the Centers for Medicare and Medicaid Services (formerly known as Health Care Financing Administration). Feedback increased, according to CEs, due primarily to the cueing effect that resulted from completing the form...
after the teaching session. A representative comment was, “I know I should give more feedback, and every time I fill out that form I’m reminded that I need to do it.” The self-recording of teaching behaviors, although not formerly identified to the participants as a new method, emerged as a technique to reinforce the concept of reflection. 24–26

**Clinical Teaching Evaluations**
Learners completed 299 evaluations for the intervention group faculty (n = 7) and 7382 evaluations for the comparison group faculty (n = 176) 1 year before the study. Scores on the overall teaching effectiveness item 1 year before the study period revealed that CEs had a mean rating of 4.33 on a 5-point scale (where 1 = major weakness and 5 = major strength), whereas the comparison group had a mean rating of 4.27. During the study period and the 1-year follow-up period, faculty in the intervention and comparison groups received 171 and 3601 evaluations, respectively. We found no significant improvement in ratings on the overall teaching effectiveness item for either the intervention or the comparison group. All of the 6 identified items correlating with use of the teaching methods improved by 0.18 to 0.41 of a rating point in the intervention group, but not in the comparison group. Scores for 1 item (emphasized comprehension of concepts rather than merely factual recall) improved significantly in spite of the small CE sample size (P < .05). During the follow-up period, the improvements in CTE scores in the intervention group persisted (Figure 2).

**Teaching Recognition/Awards**
Teaching awards are another measure of teaching excellence. Two of the CEs had received teaching awards before the study period. During the study period and the 1 year thereafter, 2 participating faculty who had not previously received any recognition won major departmental teaching awards, and 3 received prestigious and highly selective college wide teaching awards.

**DISCUSSION AND CONCLUSIONS**
This study was designed to answer 2 questions: 1) would experienced CEs incorporate selected teaching methods into their teaching repertoire? and 2) did adopting selected teaching methods improve learner evaluations of the teaching effectiveness of experienced CEs? CEs dramatically increased their use of priming and feedback and maintained their high baseline use rates for 1–2 focal teaching points and TIPP. Faculty felt that they were already using the latter 2 teaching methods but that use of these methods became more deliberate, with incorporation of the key features of these methods according to the literature. The overall teaching evaluation scores for the CE group were very high at baseline, but did improve on 1 item despite a possible ceiling effect. The comparison group’s ratings did not change significantly during the study period. In addition, the improved ratings of the CEs persisted for 1 year after they stopped the study, suggesting a persistent change in their behavior.
We purposely selected a small, experienced, and highly motivated group of CEs. Although this does limit the generalizability of our study, this decision was guided by 2 important factors. First, longitudinal analysis of our teaching evaluations (CTEs), consistent with other studies, has demonstrated that teachers’ clinical teaching ratings are relatively stable over time.27 Second, faculty spend many years as senior educators, but there are no published accounts of faculty development efforts targeted at senior faculty with the exception of the Medical College of Wisconsin’s program.28

Attention to enhancing the clinical teaching skills of senior faculty prevents burnout and encourages the senior role models who are essential to the advancement of medical education. The small CE sample size limited the potential for detecting significant changes, but the sustained retention of high ratings in the CE group even 1
year after the intervention suggests that experienced CEs can adopt new teaching methods and improve their teaching effectiveness. Can experienced teachers improve their evaluations by incorporating effective and efficient teaching methods? The results of this project indicate that use of selected methods increases, as do ratings on associated CTE items, with the overall increase in teaching effectiveness approaching a rating ceiling. This study demonstrates that creating forums in which experienced CEs learn new teaching approaches, discuss their successes and failures, and reflect on them more frequently with PDA prompts results in improvements in evaluations, awards and recognition for teaching, and perceived teaching effectiveness.

ACKNOWLEDGMENTS
This project was partially funded by a faculty development grant in General Pediatrics–General Internal Medicine (1 D28PE50072) from the US Department of Health and Human Services (Deborah Simpson, PhD, Project Director).
REFERENCES
Collegial Advice for Assistant Professors

Hints for Success and Stress Reduction as an Assistant Professor at UC Davis

Written By: Dr. Evelyn M. Silvia
Professor, Department of Mathematics

FORWARD

Prior to preparation of this document, I sent a request to members of the Faculty Women's Research Support Group for words of advice they would give and suggestions of concerns that should be addressed. The 40 responses received and information I have collected since coming here in 1973 were incorporated. Three drafts were sent out for review. Comments and suggestions were received from 25 people—nineteen of whom were ladder ranked faculty (assistant, associate, and full professors). What I have tried to do is share in-house information, making suggestions for such things as keeping track of professional endeavors, setting priorities, choosing committees on which to serve, and recognizing warning signs that could influence progress up the academic ladder. I hope that the information will be of use to you during your time as an assistant professor.

INTRODUCTION

This guide offers tips on how to be successful during your climb up the academic ladder at UC Davis. It is important to minimize energy dissipated on worry about tenure. As a first step, seek out clarification of the criteria for advancement and tenure as they are being applied in your department or program. Then, except for occasional updates on that information, concentrate your energy on professional endeavors.

The procedures for advancement, assessment and promotion are described in the Academic Personnel (APM). Specifically, APM sections 200--220 describe the basic rules and procedures governing appointment and promotion in the professorial series. In addition, Section 220 of the Davis Division APM elaborates on local implementation of the review process. Your department or program administrative assistant can be a valuable resource person to help you understand the APM. Other helpful sources of information include the Annual Call (AC), the FAQ dealing with personnel actions for Senate faculty (FAQ), and Ad Hoc Committee Appointments and Instructions [for promotion to tenure, promotion to Professor, for faculty with clinical responsibilities, etc. (clinical)]. In addition to your own selective reading of these fairly detailed documents, you should feel free to ask your department chair and colleagues for clarification of the procedures and for “in house” pieces of information. Because it does happen that people trying to help you are misinformed, don't be afraid to cross check what you are told. Accurate information is an important foundation on which to build your professional career.
A professor is often confronted with a barrage of decisions regarding responsibilities in service, teaching, and research. There is an art to choosing wisely. The choices made determine how your work time will be distributed. On the other hand, those choices make a statement to your colleagues concerning your professional priorities. This guide seeks to improve your ability to make choices related to establishing a satisfying and productive professional life. It offers personal perspectives and is NOT a substitute either for reading relevant parts of the Academic Personnel Manual or for direct consultation with your department chair or program director.

PRIORITIES

Your professional responsibilities include teaching, research, and service. The University schedule is set up primarily around its teaching mission, and teaching responsibilities are an immediate demand on your time. Research includes all forms of creative activity that are established means for achieving professional recognition in your area of expertise. Developing a viable, focused, and productive research program is essential to having a successful career as a UC Davis professor. Because service includes administrative duties, professional service and public service, requests for service commitments come from many directions. In order to achieve successful academic advancement, assistant professors must focus their efforts on the primary responsibilities of productive research and effective teaching. Any service responsibilities that are accepted should be done well. The level of service activity should not interfere with meeting the primary research and teaching responsibilities. In fact, heavy service commitments may interfere with the advancement of assistant professors. According to the APM, it is theoretically possible to obtain merit increases as a result of outstanding performance in teaching and service with acceptable research. In practice, however, it is very difficult to obtain outstanding ratings in both teaching and service when there is a belief that the research quality and/or quantity is not good enough. Consequently, the safest assumption to make is that nothing substitutes for having a high quality research program with a consistent record of good to excellent teaching. Establishing and maintaining a quality research program must be your primary professional priority in order for UC Davis (or any research institution) to be the right place for you. For a fulfilling professional life, it is important that the goals and focus of the institution fit well with your professional priorities.

The APM provides descriptions of types of appointments, timing of career advancement or review actions, and information expected for inclusion in personnel packets. The following three sections will give hints and suggestions for setting and maintaining a good balance with research, teaching and service responsibilities.

RESEARCH

It is essential for you to start early and push hard to focus energy and time towards becoming a respected and productive scholar. A first step in this direction is to set aside blocks of time for work on your research activities. If other commitments threaten to infringe on these blocks of time, then reduce the other commitments. In working towards the goal of successful professional advancement at UC Davis, absolutely nothing is more important than developing a viable, ongoing research program. You are your strongest advocate. Convey your enthusiasm for research verbally, but demonstrate it via your professional choices.

Quality of research is more important than quantity, but most departments have expectations of quantity that are often unstated and not fixed. In order to obtain a sense of the most current standards, it can be helpful to talk to the most recently tenured members of your department (or program) or of departments in research areas that are closely related to yours. In some cases, the recently tenured faculty members might be willing to let you see their curriculum vitae and/or (comments they received from the reviewers of their dossier. In addition, current campus policy requires that before any packet goes forward for merit or promotion, the Chair must make the penultimate draft of the department/program letter available to all voting faculty in the unit for
comment. Even if your unit does not permit Assistant Professors to vote, you should ask your Chair if you may read the letter and the packet in order to better understand current standards.

You are the best person to offer an overview of your research program. At the time of review, provide your chair or program director with a carefully prepared research statement. Include brief descriptions of your creative accomplishments and their significance or relevance to other work. It is also important to include indication of research in progress as well as future plans. Your statement should make it clear that you are actively engaged in an ongoing research program about which you are enthusiastic. The information you provide can be useful to the chair during preparation of the departmental letter that will be forwarded with your packet.

If publication is the usual outlet for your creative endeavors, be aware that not all publications are alike. In many disciplines, short book reviews are fairly insignificant contributions which are considered as service to the profession rather than scholarship. The weight assigned to papers appearing in conference proceedings may be lower than that assigned to work appearing in refereed journals. You need to ask your department chair for clarification of the current weightings and expectations. Regular consultations with the chair or program director can be useful for obtaining information such as changes in evaluation criteria. If the chair or program director is either not helpful or not supportive, consult with supportive senior faculty in your department or in a closely related department. If you experience persistent problems in relating to your chair, you may want to talk to your Dean.

Another activity that can contribute to professional stature is work within professional societies. Although involvement in professional societies is service, it can have direct benefits for your research posture. Since research is judged by peer review, giving invited lectures, refereeing, and reviewing can lead to increased visibility. Increased visibility, in turn, can open the doors to collaborative work with co-researchers who, in the process, become familiar with your work. Finally, citations and awards from professional organizations provide visible evidence of your own academic excellence, while enhancing the university’s image at the same time. Needless to say, all such forms of visibility are helpful in obtaining grant money which can benefit your research.

The need for funding varies significantly among different fields. If funding is needed for development of your research program, one of your first tasks should be to apply for intramural and/or extramural funding. On this campus, there are special funds available to new faculty. If you are in an area where extramural funding is available and needed, successful grant applications lead to enhancement of your research and provide concrete evidence of professional recognition which can impress review committees.

We conclude this section with mention of a few benchmarks that are by no means all inclusive. By the time of your tenure review, you should have publications or results of creative activity beyond the original dissertation topic and reflecting work done at UC Davis. Most of your published work should be refereed and
should have appeared in well established peer-reviewed outlets (journals, monographs, exhibitions, etc). Some of your publications should be sole authored or first authored. If your research area is one in which extramural funding is available or necessary, you should have been in active pursuit of such funding.

**TEACHING**

Teaching can be a most enjoyable and personally satisfying part of your responsibilities. The fundamental expectation in this area is that each of us is a good to excellent teacher. Failure to meet that expectation might result in lack of professional advancement. On the other hand, meeting it certainly will not be sufficient—by itself—for promotion. In other words, since being a good to excellent teacher is a normal expectation, being a very good teacher is essentially *no big deal*. It is especially true that ranking as an excellent teacher does not substitute for having a high quality research program, though it may enhance your research and often goes hand-in-hand with it.

There are many endeavors that fall into the realm of teaching. These include but are not limited to course instruction at the undergraduate and graduate levels, curriculum/course development, advising, writing textbooks and preparation of class materials. For an extensive description of teaching related contributions, see *(UCD 220)*.

Since teaching is one of our primary responsibilities and it is one of the missions of the University of California, it is important that we strive for high quality teaching. The Teaching Resources Center provides many services designed to assist faculty with their efforts to achieve excellence in teaching: It can also help you address any problems with your teaching, swiftly and decisively.

An additional source of help with teaching can come from supportive colleagues in the form of observations, consultation concerning exams, and discussions related to the mechanics of a course. As you begin to teach, it is often helpful to ask colleagues to sit in on your classes or review your didactic material. For tenure review, the campus requires peer as well as student evaluation of your teaching. Your chair will seek comments from colleagues concerning the quality of your teaching. In many units, the chair appoints one or two of your colleagues to provide this input. It is important to keep in mind that personnel packets are supposed to contain documentation of teaching that goes beyond written teaching evaluations from students. Some materials that could be used for this purpose include course syllabi and information sheets, exams which illustrate level of expectation with some indication of how students did on them, a selection of “before” and “after” papers that can be used to show students’ improvement in writing or quality of thought, and copies of explanations of any special materials you designed for use with your classes.

Many faculty choose to spend time on “extras” such as supplementary class handouts, additional (unscheduled) problem or discussion sessions, solution sets, private consultations, etc. Such things may be done as a matter of personal commitment to quality teaching and it is advisable for you to act upon your own personal standards for excellence in this arena. However, spending time doing little or big extras should be viewed as a personal preference and should never be viewed as a means to increase the weighting of teaching in promotion or advancement considerations.

By the time of your tenure review, you should have had several successful teaching experiences at different levels. Save or collect evidence of teaching successes. These can include synopses of written evaluations from students, unsolicited letters of appreciation from students with whom you have worked, letters from people who have either observed your teaching or attended guest lectures that you have given, and evidence that your students have performed well in subsequent courses or on common finals. These examples of your successes can be incorporated into the Candidate’s Statement that you provide to your unit or include in your packet at the time of your review.
SERVICE

This area of professional activity will be discussed at length because it is the one in which we are most often led astray. University service is an important responsibility. It is also an opportunity to interact with members of the university community outside of your department. It is necessary to do service and that the service be done well. There are many endeavors that fall into the realm of service. These include but are not limited to committee assignments (department, Academic Senate, administrative advisory, university wide, search, curriculum review, ad hoc for personnel review, etc.), program development and/or coordination, public speaking, participation in oral exam and/or thesis committees, report writing and/or review, some forms of consulting, and some work through university extension.

While it is your responsibility to contribute service to the professional and academic community, it is essential for your survival to be cautious in making commitments of blocks of time. Some departments are inclined to protect their junior faculty in this respect; others are less considerate. Maintaining a quality research program and being a good to excellent teacher are not negotiable, while service is the responsibility over which you have control. Your level of service should never exceed what can be done well without interfering with research and teaching. Once tenured, you will have many years ahead of you to take advantage of the numerous service opportunities that this campus has to offer.

Never say yes to a service commitment immediately upon request. This leaves two choices: “NO”-- the one most appropriate for assistant professors during their first two (or more) years -- and “I will need to think about it because of the possible time demand.” Some form of the latter response allows time to assess whether or not acceptance is a good idea. Some factors to consider are the charge to the committee, the expected time commitment (per week, per quarter, etc) and the perceived value of the responsibility. Feel free to consult with several colleagues concerning what they know about the committee and the advisability of agreeing to a requested commitment.

The belief that a service request from a chair should automatically be accepted is a commonly held misconception. It should be clear that beginning assistant professors should not be revising programs, running search committees, and/or writing department curricula. If your chair cannot find other, more established members of the department to do such major projects, then you might agree to do them in lieu of some teaching responsibilities. For example, a one course reduction in your teaching load might be a fair exchange for a particularly heavy service commitment. Until one says yes to the commitment, the conditions under which it will be done are negotiable. But remember, no amount of service will ever substitute for a publication. Consequently, you should never accept a heavy service responsibility -- regardless of offered compensation -- if it will interfere with developing an ongoing, productive and high quality research program. Keep in mind that if a chair demonstrates poor judgment by asking you to overextend in the service area, you need not demonstrate poor judgment by accepting. It is your career that will be put at risk by over commitment. If it
is necessary to say no to your chair, do it tactfully! One approach is to say something to the effect of, “I would like to help out, but my desire to make progress on my current research project(s) necessitates that I not take on such a service responsibility, at this time.”

Faculty either on joint appointments or hired specifically for program development need to be especially careful to limit the number of additional responsibilities accepted. Joint appointments logically lead to a higher level of departmental service because of the natural desire to contribute to each unit. During a time of heavy program development, it is best to avoid all other official service commitments.

Prior to accepting service commitments, it is a good idea to have established limits or goals concerning the number of such commitments you are willing to make and/or the amount of time per week you are willing to devote to service. If you are a member of a traditionally underrepresented group, it is likely that service requests, official and unofficial, will be more frequent and persistent. The possibility of extra demands makes the setting of personal limits on official acceptances particularly important. Reasonable limitations allow room to respond positively to a few extra unofficial requests. Keep in mind that the kind of professional life we live becomes a model that many of our students will either want to emulate or avoid. A beginning assistant professor might participate in one departmental committee along with doing some undergraduate advising. This might translate to 1-2 hours of “official” university service per week. A time demand that is difficult to anticipate is “unofficial” advising of students in your classes who encounter personal or academic difficulties. In addition, keep in mind that there may be extra requests for outside lectures, seminars, attendance at special functions; etc., that will take additional time. A second or third year assistant professor might add service on a committee of the Academic Senate. This might increase the university service commitment to a total of 2-4 hours per week. Note that there are several university committees that average up to 10 hours of work per week. In addition, chairing a committee is more time consuming than being a member. Adding service commitments very slowly allows you to determine the impact of each commitment on your efforts to meet research and teaching responsibilities without having either suffer.

By the time of your tenure review, a good to excellent record of service is one which consists of several well met commitments in different arenas. By keeping track of everything you do, you should be able to describe a consistent record of ongoing, high quality service.

**RECORD KEEPING**

In order to present a relatively complete overview of your professional accomplishments, it is important to keep good records related to your contributions. Accurate ongoing record keeping can do much to lessen the stress of putting together a personnel packet. One way to keep a record of actions and accomplishments is to maintain a simple 3 x 5 card file system having a section heading for each general professional commitment area. Alternatively, many people prefer to use a computer --based spreadsheet with headings for various activities. Some obvious headings are teaching; research publications; public service publications; lectures; service with separate subcategories for department, Academic Senate, university and professional societies; and advising. If you spend a lot of time doing unofficial advising or conferencing, you should keep track of that time. Each professional activity undertaken can be recorded (with at least title and date) and listed/filed (if you use cards) in chronological order. Your system, which can be kept from year to year, with continuous updating, can lead to quick compilations of lists of service done, lectures given, classes taught, publications, grants applied for, grants received; etc. Perhaps even more useful is the quick overview it gives you concerning where your time is being spent. The length of your list (or the thickness of the cards) under a particular heading indicates, at a glance, where your priorities appear to be focused.
It is important to keep track of your professional growth and development and to be able to compile the information quickly. If you are not the sort of person who sits down periodically to keep files up to date, at least keep a box labeled “works and praise.” Items to be collected include, but are not limited to, letters of acceptance for submitted manuscripts, reprints, copies of submitted grant proposals, letters of commendation that are clearly beyond the perfunctory thank you, letters from students, complimentary citations of your work that have appeared in the work of others; etc. It is a good idea to review and order the contents of your documentation box at reasonable intervals of time. While copies of these materials are not submitted as part of your merit/promotion packets, they do serve to remind you of activities and successes and provide information that you can include in your Candidate's Statement. Note that materials reviewed for the “first” merit increase (See the AP Manual) are reconsidered at the time of tenure review. The tenure decision is based on an assessment of your professional accomplishments since your terminal degree, with emphasis on your record from the start of your hire as a faculty member at UC Davis.

MENTORSHIP
Potential mentors are senior people who are knowledgeable about the system and who are willing to share that knowledge while being supportive and encouraging. Developing a mentor relationship with a faculty member who is experienced in personnel matters and who has established a successful research program can be very beneficial. If you prefer to seek mentors who are outside of your department, make sure that some of them are in closely related research areas. You can start building a mentorship relationship just by asking questions of colleagues and noting their availability for discussions. The level and type of responses you get to your questions will indicate those faculty who are better at being helpful. Presenting papers at scholarly meetings can lead to contacts with senior people who are very experienced and successful in seeking and obtaining extramural funding. Initially, be open to collaborating with an established professional colleague on research and grant applications. This can be a beneficial and enlightening extension of the usual mentoring situation and can increase the feelings of excitement about research activity. The intellectual stimulation of collaborative research makes such efforts worth pursuing independent of extramural funding consideration.
A TWO YEAR “RULE”

Your initial appointment as an Assistant Professor is for two years with consideration for reappointment due after one year of service. If the first reappointment is not a tenure review, it is based on a judgment of satisfactory professional progress and is relatively automatic. Thus, the first two years can be used as a time for adjustment to your new position. Unfortunately, this information isn’t enough to prevent some feelings of doubt or concern regarding success.

When some of your colleagues were asked for suggestions for what to include in this guide, several of them reported either having experienced doubts about the move here or having new colleagues with such doubts. There was striking similarity in how they successfully dealt with the natural feelings of transition turmoil. A descriptive title for this successful tactic is a two year rule. In order to devote your professional energy and time towards developing into a respected, professional, productive scholar who loves to do research and work with students, it is important to be free from the inner turmoil associated with career movement decisions. Rather than having an ongoing, from day one, debate concerning a possible career change, set aside a date when you will allow time specifically for the purpose of deciding whether UC Davis is the best place for you. The key is to pick a date or time period that is at least two years after your arrival. It takes at least that long to make a reasoned decision. There are many factors, both personal and professional, that need to be weighed. Is the professional atmosphere conducive for optimal research productivity? Do the department and campus climate offer ample opportunities for intellectual exchanges? Are there appropriate avenues for obtaining research support? Is there good potential for establishing a satisfying personal life? Do you, on the whole, like it here and feel valued? If the answer to any of these questions is an unambiguous no, then UC Davis may not be the right place for you.

For completeness, we close this section with mention of a delicate matter. It is practically impossible to receive tenure in a department where you have no professional support. There are several warning signs that may suggest “tough going ahead.” These include the repeated minimizing or belittling of your professional accomplishments and the reinterpretation or ignoring of positive letters of evaluation or other forms of commendation of your work. Such signals suggest that you will have a difficult time advancing. While conflict may lead to the outcome you seek, you need to decide whether the energy expenditure is worth the potential gain. No one can make this decision for you. It needs to be based on your goals and priorities since the political situation may have little to do with you or your professional efforts.

A FIVE YEAR PLAN

Make a reasonable but comprehensive 5-year schedule for research, publishing, and grant seeking. As a part of that plan select some goals with long term payoff and some short term goals that will demonstrate your ability to become a productive research scholar. It is important to establish a good track record. Having a clear picture of where you think you want to be five years from now can give you a better basis for making professional decisions than immediate surroundings and demands. Once you have a reasonable 5-year schedule, put it where you can see it every day as a reminder. No matter what, try to stick to reaching your goals. By anticipating that there will be plenty of interference, you can act to minimize its effect. The visibility of the plan can help you focus your professional efforts.
QUOTES FROM YOUR COLLEAGUES

Prior to the preparation of this document, the author asked some of your colleagues to share words of advice that they thought should be included. Many of their responses have been incorporated into this document. We close with what some of your colleagues said.

“Discipline your skills and energy and time toward developing into a respected, professional, productive scholar who loves to do research and loves to work with students. An inability to do this in a relatively short time means you have chosen an inappropriate profession, the wrong field, the wrong campus, or the wrong period of your life.”

“Put impressions on ‘hold.’ Culture shock in coming into a new environment is both extreme and insidious. Give the place a chance -- and then another. (Personally, it takes me years to settle in.)”

“Set priorities for research and publications and keep them. Believe in what you choose to accomplish academically and share that belief with others. Seek your own research funding, at first locally and then nationally.”

“Aim early and push hard for your research focus. Figure how selfish you need to be to achieve that goal and then be twice as selfish, if you can. Network with other assistant professors.”

“Please focus on your research. Avoid overloading yourself with committee meetings. Keep your sense of humor and have fun off campus.”

“Do at least one conference paper a year. It is an enforced deadline that helps you get material together that can be worked up into a publication. Also, you may meet potential outside evaluators for your tenure process.”

“Believe in yourself. If you’re finding things tough, chances are that it is because they are tough -- not that you’re inadequate. Remember there really is more to life than UCD.”

“Find out who are the helpful staff members in your department, those who can get you through and around the bureaucracy. Try not to take on many extra duties, e.g., independent studies, during the first year! Find a mentor/advisor.”
“Learn to say ‘no’ to requests for committee duties. Talk to your department chair to get his/her support for saying ‘no.’ Organize your time so that you make yourself very available during certain scheduled hours and unavailable during other times.”

“Set aside part of each working day for research. Include both the gathering of data and an interpretive sentence or two. Carry a small book with you at all times to write down important things regarding research and the politics of the University. Don’t be afraid to ask questions.”

"Write many good grant proposals and get funded. Be a good teacher. Leave politics out, unless it is your subject."

“Keep in close contact with the subject bibliographer in the University Library who purchases materials in support of your teaching and research. Inform that person in a timely manner about your needs, especially if it will take awhile to process your requests. Your teaching will go smoother and so will your research.”

"Be very, very selective in participating in non-research related activities at the university, especially if you are a minority female. Committees and other worthwhile but time consuming activities can rob you of valuable time during the first three years on campus."

“There isn’t enough time to do everything. You should think of time you are willing to devote to service as personal time you are willing to give up. You may still decide to do it, but don’t trade in teaching or research time to do so.”

CONCLUSION
As an assistant professor, you can get so caught up in worrying about criteria for advancement that you lose sight of the fact that you really want to do both research and teaching. You are here because you have the potential to be a successful and productive faculty member. The Davis campus is one where accomplishments in several areas are encouraged and appreciated. So, do what you love and love what you do! Laugh a lot and enjoy all the professional rewards that are available. If you get to feeling isolated or confused, seek support and encouragement from your colleagues. There are many of us, and many of us have been where you are now.
Teaching Portfolio

The following is a document that may be useful in crating a “Teaching Portfolio,” with suggestions for divider headings that could be used to categorize teaching contributions and methods in a binder. This document was developed by the Committee on Educational Policy’s Subcommittee on Teaching to support junior faculty in better documenting their teaching contributions. Please use it as best suits you.

1. School of Medicine Educational Activities
   a. courses and clerkships taught
   b. lectures, seminars and grand rounds
   c. curriculum development
      • new or revised courses, clerkships, lecture series
      • innovative teaching methods in the classroom, clinic, operating room, ward, or other health care settings
      • New teaching materials such as books, syllabi, video tapes, software, literature reviews, annotated bibliographies
      • New instruments to evaluate the outcome of educational programs
      • Administrative activities associated with medical education
d. advising/mentoring of undergraduate, medical and graduate students, house staff, fellows, and faculty
e. student and peer evaluations of School of Medicine Educational activities

2. Local Postgraduate Educational Activities
   a. training of residents and fellows; directorship of training programs, attendant as inpatient, consult, outpatient services
   b. participation in resident and fellow special educational programs such as board review, grant and manuscript writing
   c. participating in School of Medicine programs in continuing medical education
d. invited workshops
e. student and peer evaluations of local postgraduate education activities

3. Graduate Educational Activities
   a. courses taught in part or in their entirety by the faculty member
   b. graduate student supervision as a major prof.
c. Thesis committees served on
d. Qualifying committees served on
e. New courses developed for graduate education
f. Student and peer evaluations of graduate educational activities

4. Prebaccalaureate Educational Activities
   a. courses taught in part or in their entirety by the faculty member
   b. participation in undergraduate research opportunities
   c. other undergraduate educational contributions
d. new courses developed for undergraduate education
e. student and peer evaluations of prebaccalaureate
5. Regional, National and International Educational Activities
   a. invited lecturerships or presentations
   b. visiting professorships
   c. participation in educational programs of professional and academic societies
   d. student and peer evaluations of regional, national and international educational activities

6. Other Medical Center, University and Community Educational Activities
   a. participation in instruction of allied health professional including nurses, technologists, physician assistants, paramedics, and social workers
   b. involvement in community education programs such as seminars, TV series, invited presentations, roundtables, periodicals
   c. service on educational committees
   d. student and peer evaluations of other medical center, university and community education activities.

7. Evidence of Teaching Improvement
   a. attendance at seminars on teaching
   b. teaching honors and awards
   c. summary evaluations of extramural teaching activities

8. Summary of Teaching Philosophy
The Joy of Research

Peter G. Szilagyi, MD, MPH
Ambulatory Pediatrics 2003;3:68-70

The APA has been my pediatric and my intellectual home for the past 15 years, and I am deeply grateful to this wonderful organization for selecting me to receive the APA Research Award. I accept the award as simply a representative of the hundreds of general academic pediatricians who work tirelessly in an effort to improve the lives of children through their research. I also have many individuals to thank, and begin by thanking my most important colleague and buddy, a truly bright light who always, always has the best interest of children and families at heart—my major role model—my wife Moira.

I was going to talk about mentoring, but one of my mentors from afar—John Leventhal—said it best in his talk when he received this award. I was going to discuss the ingredients necessary for good research, but Ruth Stein captured it perfectly in her recipe for research that she presented in her award talk. I wanted to delve into the role of passion in research and the critical importance of helping poor children, but Michael Weitzman expressed this so eloquently when he received his award.

I have decided instead to focus on a subject that is rarely discussed in academics yet is nevertheless absolutely critical to the success of any researcher—the joy of research. I direct these words particularly toward younger members of the APA and the next generation of child health researchers. There are literally hundreds of books about joy, involving writing, speech, sex, meditation, and so on. But there is no book on the joy of research. In Medline and PsychInfo, nothing is listed about the pure joy and fun of doing research, about the aspects of research that are so fulfilling. Yet it is the joy of research that provides the sustenance, the life-bread to this difficult and challenging academic endeavor. What does the joy of research entail?

THE FIVE JOYS OF RESEARCH

JOY #1: RESEARCH IS CREATIVE
JOY #2: THE JOY OF COLLEAGUESHIP
JOY #3: MENTORSHIP
JOY #4: MAKING A DIFFERENCE
JOY #5: ROOTS AND WINGS
JOY #1: RESEARCH IS CREATIVE

Remember that feeling when you came up with a really good idea, when you made that novel connection or had that sudden inspiration? These creative moments are priceless!

We are all creative, we all have unique perspectives, and research allows us to express that creativity in a way that clinical medicine cannot. I have found that creative ideas come mostly in the midst of talking with others. I’ve had very few “eurekas” in the shower, and I’ve never had a great idea appear in a dream. It doesn’t take high-tech applications to come up with creative ideas. Here is an example: Years ago, after having spent several years trying to figure out the reasons for underimmunization in children and armed with a few potential interventions, Lance Rodewald and I went down to the cafeteria to plan our “definitive intervention study.” We discussed ideas, critiqued each other’s thoughts, and finally drew on a napkin an innovative design for a randomized controlled trial to simultaneously test the effectiveness of two promising interventions. The details aren’t important; the point is that this was a moment of inspiration, a creative leap that led to several years of further study and a breakthrough toward an effective intervention that enhances both immunizations and primary care. Those moments of creativity, those synaptic jumps, these are what make research a joy. These moments are best when shared with others. Remember the napkin!

Some creative inspirations come from clinical care, and I always encourage our fellows and younger faculty to keep trying to link their clinical experiences with possible research questions. Every clinical encounter can potentially generate a research idea—you just never know! Perhaps my first such experience came in 1985, the year before my fellowship when I was in full-time private practice for a short time. At this time, most of our patient population was converting from fee-for-service to managed-care coverage. In primary care practice, we felt that this transition in insurance was causing a major change in practice visit patterns. However, these impressions were anecdotal. I decided this might be an important area to study, and during my fellowship, I learned how to study the impact of financing and insurance on health care. With the mentorship of Ry Foye, Klaus Roghmann, Bob Hoekelman, Lissa McAnarney, and Bob Haggerty, I gradually learned how to address these questions through health services research. I moved from studying the impact of managed care on suburban populations to evaluating Medicaid managed care and other aspects of health care financing as it relates to poor children and the uninsured. The questions are all variations on the same theme—What happens to kids in this complicated, changing health care system? And how can we improve the system to better serve children? Research is creative, it often emanates from your clinical work, and sometimes it takes just one good idea!

JOY #2: THE JOY OF COLLEAGUESHIP

I have been blessed with the most wonderful colleagues in the world, in Rochester and nationally. First, my closest research colleague for years was Lance Rodewald. For years, we were inseparable, doing all of our research together. In fact, at these APA meetings, some people would call us the Rochester “Bobsy twins.” My wish for each of you, especially for the younger generation, is that you find a close colleague who shares in the thrill of the chase, in the small daily tasks of research, the rewards, and the failures. Seek out colleagues. As my friend Ally Kempe has said, “working with colleagues you love is as important as working in the field you love.”

I have 3 pieces of advice regarding colleagues. First, find colleagues from outside your discipline, outside pediatrics. In my two major areas of research—health care financing and immunizations—I absolutely depend on PhD colleagues who are economists and methodologists and on policy gurus, social workers, and public health experts. Seek out and work with colleagues who bring a different perspective and a fresh approach. You can also offer these colleagues your clinical expertise that they so cherish. Second, seek out colleagues from outside your hometown. I love these APA meetings! It is exciting to talk with others, share ideas, and celebrate the
successes of other researchers. Through the APA, I have become friends with many wonderful colleagues and met some of my heroes. Go to other national meetings as well and seek out colleagues! Third, make your research staff your colleagues.

For the past 8 years, my two closest comrades in Rochester have been Laura Shone and Rich Barth. These two people help translate some of my crazy ideas into practical research and lead the rigorous, daily work of a busy research program. They deserve a large part of this research award. Cultivate the people who work with you and make them as important as your faculty colleagues.

JOY #3: MENTORSHIP

I’ve heard this described as “The Circle of Life in Research”: AKA mentorship. Medicine used to be an apprenticeship, and I believe that the process of learning how to do medical research is still an apprenticeship, with its most critical component mentorship. There is nothing better, no greater joy, than making an impact on the research career of a junior colleague. My greatest joy now comes from mentoring our younger faculty in Rochester and in mentoring fellows. Mentoring others will only help you. Others bring new ideas and open your eyes to fresh approaches. Mentoring makes you more rigorous in your own work. In mentoring, you receive more than you give.

JOY #4: MAKING A DIFFERENCE

I’d like to talk about this as a joy but also as a challenge. Think about these questions. In what way has your research really improved the health of a child or adolescent, the education of a student, or the functioning of a health program? What more can you do to ensure that your research makes a difference? Have you done all that you can to promote the truth and to use research findings as tools for decision makers?

Research can help the lives of children in many ways. Publishing is certainly one means, although often not enough. We need to learn new venues of communication, such as talking with policy makers and writing policy briefs. In our studies of the uninsured and of health insurance programs for poor children, we found that state and federal policy makers didn’t read pediatric journals; we needed to get the research findings into their hands so that they could use it to enact SCHIP and other health care financing reforms. In our immunization studies, we spend lots of time putting the latest research findings into the hands of the Centers for Disease Control (CDC) and others who could make policy decisions. I recommend charting a timeline for research from beginning to end, and the end is not an APA presentation, not even a manuscript, but rather the difference in the lives of children that comes from your research.

Here is another challenge about “making a difference”— has your research helped to make your own community better, and can you do more in your own backyard through your research? Here again, I have an example from our immunization work. As the nation emerged from the shame of the measles epidemic in 1990, the result of low vaccination rates, those of us in the field felt tremendous
pressure to implement interventions that really worked to raise immunization rates. Doing so took research. In 1993, we measured Rochester’s immunization rates, thinking that we were better than the rest of the nation. Lo and behold, we found terribly low immunization rates in the inner city compared with the suburbs. So we performed a reminder/recall/outreach intervention, found that the intervention worked, and published the findings of the clinical trial. This was only the first step. The next step, which took years, was to implement the intervention throughout the city of Rochester. I am proud to say that we have virtually eliminated disparities in immunization rates in our county between the inner city and the suburbs and across racial and ethnic populations. Making a difference in research requires more than just a creative idea and great colleagues; you need passion and perseverance, with the driving force being the insistence on making a difference in the lives and health of children.

JOY #5: ROOTS AND WINGS

I’d like to end with Joy #5: Roots and Wings. In my family, Moira and I have a favorite saying, one that I am sure you all know—“there are two lasting bequests we can give our children. One is roots. The other is wings” (paraphrased from quote by Denis Waitley, chapter 25). When our daughter went to college, we gave her a memory book about her roots and about finding her wings. We’ll do the same next year with our son. Moira and I are very much grounded in our immigrant roots, our emotionally rich but economically poor backgrounds. Research forces me to think about my roots, about what aspects of pediatrics I care enough about to work long hours and many years to achieve some small successes. And research gives me wings—it offers me a chance to try to be creative, to learn from and work with colleagues, to mentor others, and maybe, just maybe, to make a difference. So what are your roots? What are you really grounded in? And what aspect of research would give you wings?

Having a good mentor early in your career can mean the difference between success and failure in any field. Adrian Lee, Carina Dennis and Philip Campbell look at what makes a good mentor.

The Nature awards for creative mentoring in science were created on the premise that the mentorship of young researchers — although fully deserving of recognition — is perhaps the least remarked on of all the activities that take place in the lab. Indeed, there is no established definition of what constitutes good scientific mentoring. This article attempts to remedy that situation, drawing on the evidence from competitions for Nature’s awards. These are held on a national or regional basis, with the most recent taking place last year, when the focus was on Australasia. Previous competitions have been held in the United Kingdom, and the next competition will be in South Africa (see www.nature.com/nature/mentoringawards/southafrica/index.html).

The response to the competition in Australasia was remarkable, with more than 70 groups of ‘mentes’ submitting their achievements and the reasons why they believed their mentor excelled, with each of the nominated mentors giving a personal view of how they approach mentoring. The quality of applications was outstanding and the panel, all experienced in refereeing papers and grant applications, commented that this was one of the hardest evaluative tasks they had ever undertaken. However, there could be only two winners and they have been lauded elsewhere (see Nature 444, 966–968; 2006).

Having been involved in judging the awards — either in Australia or in the United Kingdom — we realized that within the pages of the applications was an immense resource that could provide a basis for reflection on what comprises good mentoring. These reflections are presented here, with examples of just a few of the hundreds of quotable quotes included in the nominations supporting the mentors. The attributes that we highlight represent a distillation of the opinion of more than 350 scientists writing as nominated mentor or their nominating mentees (and it was the latter whose comments were all-important for the judges).

We hope that this material will be especially useful to younger scientists as they start out on their careers as mentors — be it PhD supervisor or scientific team leader. But others stand to benefit from it too. Indeed, we challenge readers who are established leaders of groups and supervisors of young scientists to look at the evidence of what comprises good mentoring, reflect on your practices and determine whether there are lessons here that could see you alter your approach. Such changes could be to the ultimate benefit of those under your charge and, given the lasting and broad influence of good mentors highlighted by the competition, to science as a whole.

All the quotes included here were taken word-for-word from the applications, either from proposing mentees or the mentors themselves. For obvious reasons they have been depersonalized and are unattributed.

A mentor for life

“M, without any doubt, sees all his interactions with people as lifelong. He always keeps in touch with ex-students, postdocs and so on after they have moved on. Even if he is not directly helping them, he keeps himself aware of their activities and at times informs them of things he believes would be of interest or useful, to them. He genuinely treats his ex-students and postdocs as part of an extended family.”

Many of the proposing mentees started out as students of the mentors but later became well-supported colleagues. But a distinctive feature of a great mentor as opposed to a great supervisor seemed to be a special focus on helping to build the mentee’s career. A natural consequence of the care and effort the mentors put into supporting the careers of their students/staff was that the majority of them became mentors for life: their advice continued to be valued, friendships grew and the links were maintained.

“For me there is a difference between a supervisor and a mentor. With the latter you find that you are not simply a student with a research project, but a student with a career in front that the mentor helps you start.”

Personal characteristics

Enthusiasm

“First and foremost, M is incredibly passionate about science. She eats, sleeps and breathes science. Her enthusiasm is absolutely infectious, and it creates a wonderful atmosphere in her laboratory.”

“It is the nature of supervision that you have to explain/teach some key concept time after time as each new student arrives. Each time I had to make it feel to the student postdoc that it was the first time I had ever explained the concept; each time I had to tell it with sparkle to help inspire them to seek to know more. At times it was hard to stay ‘inspirational’; but to fail would have meant to me that I should quit as a supervisor. You need to understand, as an old and wise friend once said to me, ‘Remember, they stay the same age, you get older!’”

Passion, enthusiasm and positivity were words dominating the majority of the mentor reports. Whether these are traits we can cultivate or create is debatable. The lesson seems to be that it is very important to be as enthusiastic about your students’ research as you are about your own. If you are not, then the question becomes: is the student working on the correct project? If you are not passionate about their project, how can you properly support them? This should also be a lesson to administrators, who may sometimes allocate students to projects and supervisors for expediency rather than a genuine concern for the student or indeed the staff member.

Sensitivity

“When things go wrong, it is important to find out why things happened the way they did. There could be personal factors (sickness, relationship break-ups) that contribute to unhappy decisions or results. Although I may not be able to provide the solution to personal problems, I can provide a sympathetic ear as well as advice or direction to support services.”

This quote speaks for itself but there were a number of examples in which mentors were
very sensitive to their charge’s circumstances and showed compassion and understanding. When a student or colleague exhibits unusual behaviour or lack of progress there will be a reason. Mentors need to listen, hear and support. Also, many mentors were sensitive to mentees’ needs that were not strictly professional, such as finding the right balance between work and family responsibilities; coping with cultural transitions after a move from a different part of the world; developing confidence in a culture that may not be welcoming; or opposing ethnic or gender bias if it arises.

“M also knows that it is important to have a work-life balance. He’s made it easy for a postdoc with young children to return to the lab part time. It’s encouraging as a young scientist to see that there are lab heads who are supportive of people being able to spend time with their family but still have a chance to develop their careers.”

Appreciating individual differences

“Again it is important to cater for personal traits. Some of my student colleagues need to dot every i and cross every t as they design a set of critical experiments that we have all agreed are important. Others, with, I suspect, an equal success rate, need to jump in, risk making a mess of a few highly critical experiments but gain an instant understanding of either what not or what to try. Allowing both approaches is sometimes difficult, but necessary.”

We are all different in how we work and in what motivates us. The mentees were clearly very appreciative of an ability to carefully craft development activities to enhance and extend personal strengths. Special effort is needed to try to understand all those in a team and deal with them differently. And however much you want that student/colleague to work on that project, sometimes you have to help them make decisions about their career directions.

“Not everybody wants to be a leading researcher and some have skills that make them better suited to other occupations. There is little point in encouraging young people to take on a career to which they may be unsuited or that they will find stressful or uninteresting. So I believe it is necessary sometimes to encourage them into other directions.”

Respect

“She treats her colleagues, regardless of whether they are doing a PhD or if they are a fellow professor, with the same high regard. In doing so, M inspires confidence in her collaborators.”

It is sadly true that laboratories exist where the PhD students are seen as extra pairs of hands rather than genuine collaborators. Although the supervisors may well be successful and grants be funded courtesy of those extra hands, they will never have the satisfaction of working in the stimulating environments described in all of the applications for the mentor awards and will never truly be respected themselves.

Unselfishness

“His magnanimity in sharing his own ideas and delight in seeing others succeed has also been an inspiration, not just for myself but for a whole generation of younger scientists.”

“Most importantly, M has no intellectual jealousy. She was always happy to see others succeed, pushing them forward into the limelight while standing back in the shadows herself.”

There are leaders of some big and important groups who are more concerned with using group members to promote their own scientific standing. Letting your students/colleagues take your ideas and run with them, and being free and willing for them to take credit is not always easy but is always appreciated. What do you lose by allowing them to be lead authors even if the idea was yours?

“His lack of defensiveness was very important to me. On several occasions I’ve published papers that were critical of some aspect of his work — and he helped me to articulate the issues and supported me in getting them published.”

“I believe it is important for mentors to suppress the desire to paint the grand picture, instead it is imperative that they learn to understand their colleagues and how to assist them to fulfill their dreams.”

“It was not uncommon to hear that she had lobbied for an opportunity for a postdoc to speak at a conference rather than doing so herself because she recognized the value of becoming known, especially given our distance from North America and Europe.”

Support for other than one’s own

“M is just as diligent in fostering careers of people who he thinks can advance science as he is at fostering his own students. This action is consistent with a motive that goes beyond mere ego and represents service to the advancement of science.”

The impact of a good mentor goes far beyond his or her own boundaries. Within the applications were many examples of support outside the mentor’s group. Indeed a number of the mentee support documents were from those who had never actually been in the mentor’s laboratory but whose lives had nevertheless been touched.

Teaching and communication

“M’s enthusiasm was infectious for many undergraduate students, and I have no doubt in saying that her delivery of the subject matter was instrumental in fueling my interest in X as a subject.”

The tension between research and teaching remains at all universities. Success in both is not mutually exclusive and it was striking, but not surprising, that many of the exemplary mentors were exemplary teachers. Many of the mentees who themselves have gone on to very successful careers and have international reputations in science would not have gone down that pathway if they had not been exposed to their future mentor as a teacher.

Those who work in university administration need to remember the benefit of exposing undergraduate students to top scientists to increase the number of graduate students. Up-and-coming young scientists should put effort into their teaching in order to inspire and interest their future mentees. Good mentors encourage their students to teach as soon as they start their PhD, not only to supplement their income but, more importantly, to develop skills that will benefit them in the long term.

Also, many of the great mentors were great communicators, not only of science itself but also of enthusiasm for it to diverse audiences such as schools or local societies. This is not a universal talent and can even be damaging to all concerned if done badly. The good mentors appreciated that such activities can be very valuable training for the communicators.
and encouraged their students and younger colleagues to develop these skills.

“I first encountered M as a year-11 high-school student in a small country town. The Royal Australian Chemical Institute had commissioned M to travel to regional Victoria and put on a ‘chemistry show’. I remember the explosions, the foam tower spilling its contents over the stage, and M pretending that he hadn’t noticed the chemical mayhem around him. And I remember that it was about this time that I became interested in chemistry.”

“Students need experience talking about their research in many different forums. Conference attendance is crucial so that they have the opportunity to discuss with other researchers and to develop new ideas. But it is equally important that students have the opportunity to discuss their work in lay terms, whether it is being presented to parents, teachers, or to doctors and nurses as S has done.”

**Tips for mentors**

Throughout the mentees’ reports and the mentors’ reflections on their mentoring styles were descriptions of activities used by the mentors that contributed to their success. A number of these tips are reproduced here for those readers embarking on a scientific career — or those in full flight — in order to stimulate thinking about mentoring. There is no magic formula; these are simply examples of what the mentees thought worked for them.

**Availability: the open door**

“First, her door is always open, even now in her retirement she can never say ‘come back later’. I now greatly admire this skill for I find myself struggling with administration and feeling guilty in making appointments to see students. M always puts scientific discussion first.”

“I cannot remember him ever cancelling an appointment with me despite the tremendous demands on his time (he was head of department for some of the time that I was his student).”

“M was always accessible, and she always made it abundantly clear to her students that she would rather talk about science with them than do just about anything else.”

If there was one theme that came through all the reports it was this one. Availability is the standout quality appreciated by the mentees. Despite enormous workloads and responsibilities, the mentor was always there and the door was always open. They never failed to respond to an urgent request immediately. Mentees marvelled at e-mails answered in 20 minutes, responses made to drafts in two days and the willingness to listen to their problems.

The regular meeting is clearly an important strategy that some mentors use as well as having an open door. The most impressive was the mentor who set aside a whole day to meet each group member individually for half an hour. The day included a journal-club meeting for all, followed by a research discussion over drinks at the end of the day. An advantage of having a routine that all knew was that it made it easier for students to plan their work and for the mentor to avoid committee meetings on that day. Morning or afternoon coffee breaks are also great daily opportunities for discussion. In these meetings, good mentors encouraged troubleshooting unsuccessful experiments rather than discarding them as a result of incompetence. Indeed there was a common theme that analysis of failure was as important as success.

**Inspiration, optimism**

“Going to M’s office with your head down, armed with a plot or calculation showing that the project seemed to be going nowhere, you will leave believing that you’ve solved the mysteries of the Universe.”

“On many occasions I remember walking into her office convinced that I had been wasting my time, and then ten minutes later walking out with a smile and the sure knowledge that what was a bad result was indeed just what I needed.”

The ‘walk into the office dispirited/failure/miserable and yet walk out inspired and optimistic’ phenomenon is a special feature of interaction with the great mentors. There were many comments similar to those above. Attributes that allowed the mentor to cause these almost spiritual experiences included: a broad vision of how science works, a big-picture view and a conviction that unexpected results are often the most interesting and point towards novel insight.

**Balancing direction and self-direction**

“M displays the right balance of direction in a project and letting someone discover and develop insights for themselves.”

Supervisors who micromanage their students or have very specific ideas of how the science in a lab should be done can stifle the student.”

“The scientific acumen to, on the one hand, encourage promising ideas and, on the other, recognize a ‘dead end’ is one of M’s great mentoring skills.”

Given the large number of comments on getting the balance right, this is a major component of good mentoring. Just how much guidance to give can be a challenge. There were many negative comments about those who have been seen to micromanage. Yet there was also criticism of those who let students run free and learn by their mistakes.

The skill lies in giving young researchers the freedom to expand on their ideas but gently reining them in when they are off track. There were no clear clues as to how to develop this skill. Possibly awareness of how you do it could encourage you to change. Where do you place yourself on the direction–self-direction scale?

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The direction–self-direction scale

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“His advice was almost always given in the form of suggestions, so that we were able to digest them and form our own judgment about their worth. With hindsight I recognize this as a deliberate strategy designed to encourage independence of thought and critical thinking. As a PhD student, M made me feel like his collaborator. This is probably the greatest single lesson I have tried to take from M and apply to my own research group, to encourage and prompt students to follow their own ideas and judgement, and to provide an environment where this is possible.”

A special challenge is, even if you are prepared to encourage independence, what can you do that nurtures research creativity?
The art of questioning and listening

There is always another question to ask. The questions seem innocuous but nothing is as it seems to be; there are more insights to be gained by probing away. M also never imposes her will, but she persistently keeps the questions flowing to help the answer come along.

One of the strategies used in developmental workshops to help young academics become better small-group teachers is to practise answering students’ questions with a question, in order to lead them towards both an answer and a better understanding of what they are learning. It is always easier to give the answer. The same is true when you start to mentor your PhD students and younger colleagues.

Rather than directly providing me with interesting ideas, he is able to ask the right questions to allow me to come up with my own theories and ideas.

This is a skill and it can be practised even though it is time-consuming. It is a skill highly valued by the mentees, as was the equally important skill of active listening.

The major aspects of practice and personality are her ability to listen patiently, even when she knows better, and to point the mentored person to a more complete understanding of the issues implicit in a particular problem. This she does with deceptively simple questions that frequently do not elicit an immediate response, but ultimately allow a more rational interpretation of all the facts.

Being widely read and widely receptive

As a new assistant professor with my own young graduate students, I can appreciate the subtle ways in which M fostered good habits of constantly surveying the literature and exploring research outside the immediate bounds of my own interests. I hope that I can guide my students in a similar, low-key way that M encouraged in me.

Often, M would leave the latest, hottest paper on my desk, with an enthusiastic note attached that not only conveyed his own excitement about the field, but also piqued my interest.

An enabler of good science is keeping abreast of the literature. A defining characteristic of many of the great mentors was wide reading outside their field. Mentees appreciated sharing in this reading, and also the deliberate strategy of using key papers as a base for discussion either at group or individual meetings or by the casual dropping of reprints as described above. Again, time-consuming but valued.

For a rigorous scientist of international acclaim, I found her to be very open-minded, and she encouraged my exploration of different avenues of research, even when these fell outside her direct expertise. I found her open to ideas and solutions from all other disciplines. You need to be ready to accept that you might be wrong, to acknowledge and study new directions you have never considered, and to congratulate your mentees for taking you down that pathway.

The initial project

Ensure that all students have projects with at least some guaranteed biologically relevant results. Risky work (such as making a knockout mouse) should be balanced with other work that will ensure some results.

This is related to getting the balance right, but a number of comments highlighted the fact that, in the beginning, students do not have the experience to make a decision on the first project. One mentee drew attention to the fact that, at the start of a PhD, it is the supervisor who has the knowledge, but as the PhD draws to a close, it is the student who has the knowledge and who becomes the teacher. Those readers who are on graduate-student committees will probably have seen instances in which the initial project was a key question to be asked in the supervisor’s research programme, but was simply too hard to be the basis of a starting-off project. Many mentees identified being given the right kind of project as a key factor in their ultimate success.

Building communities

A constant theme from the groups supporting their mentor was the sense of community. This was not a widespread observation but was clearly a positive feature to those who received this advice.

Celebration

The first time a person comes up with a novel idea or experiment of their own. This should be an occasion for public recognition within the lab as it is a milestone of great significance for most young scientists.

The importance of celebration and rewarding successes, large and small, is often neglected. Yet it can be highly encouraging to individuals and can contribute to the building of communities. It is a strategy that all mentors can introduce, although the extent of the celebration will vary depending on personalities and level of extroversion.

The guiding principle is that celebration, however large or small, is a powerful motivator. The range of celebrations mentioned in the awards nominations is worth listing here as a challenge to your imagination: off-campus lunches, the weighing of the PhD thesis on submission, cakes at morning or afternoon tea, barbecues at the mentor’s home or cocktail parties on graduation.

Life after science

I will always remember him telling me as a first-year PhD student that I needed to take up other activities besides science. My life has been a lot more fun because of his advice.

UC DAVIS
SCHOOL OF MEDICINE

Resources

“When I conducted an experiment using two different sources of the one tissue that was never in the research programme, M, instead of saying ‘No, stick to the programme’, asked me why I thought that was a good experiment to do and then complimented me for thinking laterally about the programme.”

“If and when your ideas did not come to fruition there was no criticism, only encouragement to learn from the mistakes made, if any, and encouragement to develop other avenues of scientific attack. This ‘judgement’-free environ allowed one to attempt to implement challenging techniques, knowing that there was no ‘skin off one’s nose’ for trying.”

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you experienced the negative impact of silo-building within departments? Positive and sustaining communities do not just happen, they have to be nurtured.

Of scientists

"M takes an inordinate amount of trouble to involve all the people around her in all aspects of the life of the lab, such as seminars, research-planning meetings and informal meetings with outside visitors. All these make you feel a valued member of the research team from the outset."

Regular meetings have been commented on before. They include: whole-group planning meetings; meetings with external visitors; subgroup meetings with a specific task to report to the whole group; group-writing tasks; assigning a new junior staff member or student to a senior staff member or student mentor. Especially important meetings were ‘journal club’, which many team leaders set up but often do not sustain.

"The journal club helps to make sure all of us read something other than immediately relevant research, at least once a week. The menu wanders around, sometimes classic papers, sometimes high-impact pieces in Nature or Science, sometimes chapters from a popular-science book, sometimes philosophy or psychology of science. Over time we have evolved the practice of going round the table first with each participant speaking for 3 minutes. There are always some people who have intelligent comments, but would never put them forward if it were left to them to find the right time to speak. The 3 minutes also restrains the talkative."

Of people

"The most useful single thing I’ve learned is that chocolate biscuits do more for everyone’s good humour and enthusiasm than any amount of feel-good talk. The role of blood sugar should probably have been obvious to a biologist from the outset, but I only learned this by experience. Mind you, cheerful and encouraging conversations are good too, as are gin and tonic."

Again some mentors’ disposition might not always lead to easy support and nurturing of a social group. But there is no doubt about how much such social activities were valued. Activities can be as simple as the chocolate biscuit or more adventurous, for example ‘Shakespeare under the stars’, wine tastings, ethnic dinners, dinner parties with visiting scientists, bird-watching days, video nights or celebration of every birthday at morning or afternoon tea. One group formed a jazz band, but commented that their gigs were not as favourably reviewed as their articles. One successful mentor noted that, having initially created the social events, he/she now left it to the group, with a resulting range of events that reflected their interests from canoeing to cake-baking to karaoke.

Skill development

"M has focused on equipping people with the skills to be fully functioning members of the scientific community, able to prepare grant applications, review manuscripts, speak at conferences and engage with scientific administrators in a constructive manner. Such a holistic approach to running a scientific group will ultimately bring enormous benefit to the group’s alumni, giving them all the skills necessary to carve out their own niches in the academic world."

It is clear that successful mentors work hard at developing the scientific skills of their charges. Again this depends on deliberate strategies and activities rather than leaving the outcome to chance. Not surprisingly, the following three skills were the ones that were most often commented on.

Criticism

"Our regular meetings would often entail the discussion and evaluation of recent published works. This process provided a great insight into the method of critiquing and assisted in driving our work into new methodological areas to answer questions in a greater depth."

"The critical analysis of scientific publications is encouraged. No conclusions are taken at face value and fearless discussion of the analysis and interpretation of results takes place during our weekly laboratory meetings and, of course, in the preparation of papers."

Again this is where a journal club has been used to good effect — students regularly take turns dissecting one or two relevant current papers and their background, with input from other students and faculty members. The successful strategies highlighted involve requiring students or young colleagues to write reviews of journal articles, referees’ reports and grant applications and then critiquing their efforts.

Instinctively you probably know the value of such activities, but do you always ask for individuals or groups of staff/students to have a go first? Or do you simply involve them in critiquing your writing or your grant application? The last approach is not the way that works.

"M does not only guide his students in their research, but ensures that they learn how to critically review the literature. He often challenges his students with an exercise of reviewing a paper. He then patiently remarks on their review."

As this quote illustrates, another way these activities benefit science is by preparing the mentees for their role as peer reviewers in the future. This is an activity often taken for granted. We believe that it shouldn’t be. Peer review is all too easily done badly, and is also too easily put aside under the pressure of other commitments.

It is essential that the motivation to review papers and grant applications is instilled in young scientists. It is equally essential that they be required to practice such activities, under the scrutiny of their mentor. Only then are they likely to learn how to provide a combination of specific and constructive advice about significance, technical strengths and weaknesses, and (for papers) presentation (see Editorial, page 754.)

Writing

"Writing my first paper was a true experience. M asked me to write it, but the paper that was submitted had no resemblance to my initial written draft. Nevertheless, M went through my mistakes patiently and thoroughly, a writing experience from which I learned a great deal. This paper was accepted by Cell without any corrections, which is a very rare event."

Writing is such a critical part of being a scientist that its development must not be taken for granted. Among outstanding mentors, rapid turnaround over one to two days with clear feedback seemed the norm, as did resisting the temptation to do the rewrite for the student but, rather, assisting the mentees to rewrite several times. Also, it seems essential that this attention is paid to writing from the very beginning of a studentship. This requires deliberate action and task-setting by the mentor.

Oral presentation

"Although few students have a natural gift for giving a scientific talk, all can learn if given sufficient practice and advice. I always suggest that the student provides me with a run-through a week or two before
Networking
All successful scientists have extensive networks spread across the globe. But do they all link their students into those networks as actively as they could? This was another of the standout attributes of the *Nature* finalists and, as commented on above, is one of the distinguishing features of a good mentor. Good mentors saw it as their role to ensure that their charges had ample opportunity to speak at international forums, and all highlighted the need for practice and critique beforehand. An often-neglected skill is the art of questioning as described in the second quote about the practice of an experienced mentor.

"I recall that one day M suggested that she and I should have a wager on who could ask the best question of the speakers at the chemistry seminars held weekly in the department. This meant you had to listen closely to the work being presented and to think about it, in order to come up with an insightful question. I recognized that what she really wanted to do was show the students how to get involved in a seminar and she used us as examples of how to engage with the topic presented. Her questions were always informal but probing. The audience, largely made up of postgraduate students in chemistry, of course loved this and soon got into the act."

The quotes speak for themselves, but all mentors saw it as their role to ensure that their charges had ample opportunity to speak at international forums, and all highlighted the need for practice and critique beforehand. An often-neglected skill is the art of questioning as described in the second quote about the practice of an experienced mentor.

Use their contacts and promote their students/young staff
"M always made a large effort to develop the scientific careers of his students. He would actively encourage his students to attend national and international conferences and at these conferences would make a significant effort to introduce his students to other researchers in their field. He would also make a great effort to make sure others were aware of his students’ achievements and work."

When it came time to leave his laboratory and develop links with others, M was a great source of contacts and ideas.

All the mentors made special efforts to ensure that their charges were exposed and introduced to visitors who came into a laboratory. And they encouraged collaboration by introducing their mentees to potential collaborators. This was never left to chance but was planned.

"Similarly another practice was to try to secure a few hours of time from visiting international scientists during which students would present their work. This practice has a number of benefits. First it provided good-quality feedback and a range of helpful suggestions on the direction of particular pieces of research. Second, and perhaps of particular importance to Australian trainees, this practice gave an insight into the way some of the world’s outstanding researchers think and helped demystify the work of such researchers."

Departmental tradition often expects the visiting scientist to present his or her findings to the department. Good mentors ensure that the visitor also gets to hear of the work of their students and staff.

As support for those who have left the laboratory continues, the advice of one mentor rings very true:

"Write only honest references. One slanted recommendation will damage the prospects of all that follow, because the writer’s credibility goes out of the window."

Send overseas
"With the wisdom of hindsight, I think the single most important thing I did as supervisor of PhD students was to send each one of them overseas at least once in their candidature."

Another recurring theme was gratitude from the mentees at the special efforts their mentors made to allow them to travel overseas to conferences and/or visit the laboratories of colleagues in their networks. Some unselfishly suggested that their protégés should go instead of themselves. Others, when overseas, ensured that they arranged exposure of the work of their charges to world experts. Hence:

"She would attend conferences with her students and at such events would always make a point both of introducing her students to the leaders in the field, and of actively encouraging anyone to whom she was talking to go and see the students’ work. She was renowned for arranging at her students’ or postdocs’ posters with a bemused world-expert in tow and then encouraging the student to explain the poster, letting the student do the talking but with M adding encouraging and supportive comments from the sideline. This is another practice I have adopted from M."

Once aspiring young mentors appreciate just how important it is for all their students/staff to have opportunity to travel, it is important to negotiate financial support from the department or professional society or elsewhere. There are sources of funding available, and good mentors seek these out, just as they actively look around to find the best match of conference and/or laboratories for their mentees.

Advice on career decisions
"But perhaps the most important thing is his tireless attention to the needs and development of the younger people around him. M always finds top placements for his students and postdocs."

Perhaps a defining feature of the *Nature* nominees was that the goal of networking was not simply linked to their own research progress, or to ensure that the PhD was successful, or that the work of the postdoc or research assistant moved their projects forward. Rather, there was evidence of extensive communication, discussion and negotiation behind the scenes to ensure that when the student or colleague left the group they could travel along a pathway that was most likely to set them on a successful career. All the supporting mentees had successful careers and in all cases their mentor had helped them with their career.

Conclusion
"Having a good mentor early in one’s career can mean the difference between success and failure in any career."

"Those who are good mentors get inestimably more out of it than they put into it."
**Self-assessment: how good a mentor are you?**

<table>
<thead>
<tr>
<th>Activity/Strategy</th>
<th>Question/Task</th>
<th>Example</th>
<th>What could be done better?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciating individual differences</td>
<td>Give an example of an incident that illustrates your acknowledgement of individual difference</td>
<td></td>
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<tr>
<td>Availability</td>
<td>Give an example of the strategy you use to be available to your students/staff</td>
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<td></td>
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<tr>
<td>Self-direction</td>
<td>What was your rating on the scale on page 793?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questioning</td>
<td>Describe how you last used active questioning to lead a mentee towards a solution</td>
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</tr>
<tr>
<td>Celebration</td>
<td>When did you last celebrate a student/staff member’s achievement? How did you celebrate?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building a scientific community</td>
<td>Describe a deliberate strategy you use to build a scientific community in your group</td>
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<td></td>
</tr>
<tr>
<td>Building a social community</td>
<td>Describe a deliberate strategy you use to build your group as a social community</td>
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<tr>
<td>Skill development</td>
<td>Describe steps you take to develop the critical, writing and presentation skills of you students/staff</td>
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<tr>
<td>Networking</td>
<td>Describe one example of how you have introduced each of your students/staff into the scientific network of your research area</td>
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</tr>
<tr>
<td>Mentor for life</td>
<td>How many of your past students/staff are you in contact with?</td>
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<tr>
<td>What one thing will you do</td>
<td>different after reading the description of the mentoring behaviour of the Nature mentors?</td>
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</table>

This article concludes as it starts, with reference to just how important mentoring is to those under your care. The second quote highlights the positive satisfaction of being a good mentor.

From the entries we have read, it is clear that there are second generations of mentors now out there who learnt from their own mentors how to provide superb support for the scientists under their charge. Many reading these pages will themselves have been privileged to have been mentored by those applying many of the strategies described. Indeed, in the pages of nominations that was the inspiration for this article, it was also clear that the proposing mentees had taken on board the behaviours of their mentor and were themselves well on the way to being the next generation of successful mentors.

Our purpose, based on the rich resource provided by both mentees and mentors, is to challenge you to reflect on how you are currently mentoring those under your charge. Is there anything you can learn? More importantly, can you improve what you do? What examples of exemplary mentoring activities do you use?

Equally important, for those young scientists newly embarked on a career in science or about to start building a research team: can you plan your approach to mentoring that team by including strategies, processes and behaviours described here that clearly work? If so, you will not only influence the next generation of scientists but also increase your own satisfaction by being in charge of a productive, enthusiastic, challenging and fun team.

As a stimulus to these reflections, we have drawn up a simple table (above) designed to aid your reflections. Whether you are setting out on a mentoring pathway or simply want to see how your mentoring strategies stand up, we encourage you to fill out the table. It asks for the provision of specific examples: we consider this to be the best way to stimulate reflection on your approach to scientific mentoring.

Just as the values and strategies of the great mentors, nominated for the Nature awards, have benefited the careers of hundreds of now successful scientists, we hope that this distillation of approaches will have a beneficial effect on your mentoring of our future successful scientists.

Adrian Lee was pro-vice-chancellor (education and quality improvement) at the University of New South Wales, Australia, from 2000 to 2006.

Carina Dennis is Australasian correspondent of Nature.

Philip Campbell is editor-in-chief of Nature, and founded the Nature mentoring awards.
REFERENCES


