Executive Summary:

Mentoring is a critical function to sustain the excellence of HIV research at the University of California, San Francisco (UCSF), the Gladstone Institute of Virology and Immunology (GIVI) and other key affiliates. The UCSF-GIVI Center for AIDS Research (CFAR) initiated the process to develop a mentoring model and plan to facilitate the career success of all individuals whose interests targets HIV or the consequences of HIV infection. The plan was formulated to meet the following requirements:

1. Consistency with established process and complementary to planned programs within the institutions.
2. Provide specific guidelines and guidance for mentoring at each level of academic development: junior faculty, post-doctoral scholars and pre-doctoral students.
3. Include a plan to develop measurable outcomes to assess the effectiveness of the model.
4. Be capable of identifying new candidates for mentoring.
5. Develop support to expand the model to include new persons who would benefit from mentoring.
6. Include mechanisms for modification of the program in response to measured outcomes or the occurrence of new needs.

The outcome from the CFAR Mentoring Development Plan and Process then is the development of a model of mentoring to support the careers of scientists whose work is focused on some aspect of HIV. To develop the plan CFAR proposes to conduct a smaller focused mentoring experiment implemented for a targeted group that would include a pre-enrollment needs assessment followed by program evaluations at 6 and 12 months. Following the evaluation, modifications to the mentoring model will be developed. If the evaluation process demonstrates successful mentoring (that is the mentoring brings value to the mentee) then the senior leadership group at CFAR working with the AIDS Research Institute would provide the support to expand and extend the program.
Overview

Mentoring, a term that describes a relationship and process that leads to greater understanding via shared experience and strategic advice, is ancient in its origins. In Homer’s Odyssey, Athena, the goddess of wisdom, takes the shape of Mentor and advises Odysseus’ son Telecmachus, while Odysseus is away. The continued need for mentoring today is highlighted by recent studies and resultant recommendations. Mentoring is a complex process that is often greatly beneficial to the two principals, mentor and mentee, but unfortunately today’s mentors are not endowed with the magical abilities of Athena, but mentees may want and expect magic.

Prior to the development of modern organized medical schools, the mentoring was connected to the process of learning about medicine and science. The process of learning was modeled on the apprenticeship model. The apprentice-master model was, at its best, a model of effective and close mentoring by a respected, capable practioneer. The model of respected leaders providing individual guidance to eager, capable and inquisitive students or young colleagues is an important historical image that still resonates with some individuals however, with the organization of knowledge and the development of technology, a more formal process of education, modeled by Sir William Osler at Johns Hopkins, was developed. In this new model, students needing to acquire a specific quantifiable knowledge base replaced apprentices. Teachers replaced masters.

In some respects the formalization of the teaching process was a key development, however there was a cost. Students were now more independent and responsible for acquiring their knowledge. To some extent the older model of effective mentoring persisted and acquired even greater importance. In fact many outstanding modern scientific leaders acknowledge that one of the key reasons for their own professional success and even, to some extent, their professional satisfaction, was the consistent and exceptional mentoring they received at an early point in their career. If mentoring is important for career development to the mentee and brings satisfaction to the mentor then why does mentoring receive such little support? And while there is strong acknowledgement of the importance of mentoring, there is a relative lack of coherence to mentoring programs and a significant lack of an established, cohesive mentoring program to promote a career focused on understanding HIV. To fill this perceived gap in mentoring and to facilitate the advancement and commitment of the next generation of HIV scientists and investigators, CFAR will invest in the development of a mentoring model and develop a plan to effectively mentor individuals considering a career focused on HIV research.

What is Mentoring?

In some circles, “mentor” is often used synonymously with “faculty adviser” or even “senior collaborator” . A recent National Academy of Sciences publication states that mentoring extends beyond advising; it is a personal and professional relationship. An adviser may not be a mentor, but a mentor is always an adviser and more. They also note that the relationship forms over a period of time, and will adjust to the extent and type of need that the mentee needs at any point in time. The NAS cites a useful summary of the multiple roles of mentors articulated by Morris Zelditch, “mentors are advisers, people with career experience willing to share their knowledge;
supporters, people who give emotional and moral encouragement; tutors, people who give specific feedback on one’s performance; masters, in the sense of employers to whom one is apprenticed; sponsors, sources of information about and aid in obtaining opportunities; models, of identity, of the kind of person one should be to be an academic.”

There exists mentoring gap at UCSF. Most of the concern for mentoring developed from a focus on junior faculty, however many of the findings from junior faculty are similar to concerns among post-doctoral scholars at UCSF and perhaps in pre-doctoral students. Recent focus groups conducted as part of a UCSF review of the experiences of clinician scientists at UCSF found that:

1. Mentoring is not consistently recognized or rewarded;
2. Faculty have little time or inclination to provide mentoring;
3. Faculty need help on how to interpret review statements on grant applications;
4. There are few faculty who are knowledgeable enough about clinical research to be mentors;
5. Division chiefs as mentors may be biased with regards to the content and direction of mentoring;
6. Finding a good mentor is currently a function of luck;
7. The quality of mentoring depends on department, and is not uniform.

This task force also recommended functions of mentoring:

1. Mentoring become part of the evaluation for promotion
2. Assist in goal setting, planning, identifying needs for and how to obtain assistance;
3. Should not be assigned but voluntary;
4. Administered top down with resources and admin support;
5. Mentors need not be in same department or division as mentee;
6. Need list of available mentors;
7. Separate mentors from collaboration to ensure unbiased assistance (second mentor idea);
8. Senior faculty should be assessed in skill as mentor;
9. Provide assistance in how to organize work hours and grant writing;
10. Two types of mentoring needed: career of junior faculty; research mentoring and collaboration;
11. New faculty need different mentoring than those who have been at UCSF for a long period of time;
12. Cross school, dept, division boundaries;
13. Faculty development program;

**Definitions and Objectives of the HIV specific mentoring program**

**Definitions:**
**Mentee:** A mentee is an individual engaged in the development of a set of knowledge and skills and whose professional satisfaction would benefit from a relationship with a senior faculty member at the institution.

**Mentor:** A mentor is someone engaged in the development of a set of knowledge and skills and takes a special interest in helping another person develop into a successful professional.

**Mentoring to foster a career focused on HIV research:** A process supported by CFAR to encourage the selfless sharing of intellectual and emotional resources in order to facilitate professional satisfaction and individual development.

**The Objectives for the CFAR mentoring are:**

1. Develop to a model that fosters mentoring in order to encourage pre and postdoctoral students and junior faculty to have successful careers focused on HIV and the consequence of HIV infection.

2. Complement other mentoring programs to insure that the CFAR mentoring aims are met for all eligible HIV investigators.

3. Provide ongoing evaluation of key mentoring endpoints.

**Goals of the Mentoring Program**

Several points were considered prior to developing a formal mentoring program. Specifically we considered who would be mentored; we selected a matching method; we focused on the voluntary participation of the mentors; we have tried to minimize the rules for mentoring; and we place value in maximizing the mentors’ personal freedom within the relationship.

To ensure that we can establish a program of high value that is consistent, we propose to begin with post-doctoral students and the following steps:

1. Conduct small focus groups to determine what is important to mentees
2. Develop and adapt a survey tool to assess the needs of the post-docs for a new mentoring program.
3. Respond to the survey by providing the post-docs with fine-tuning of the mentoring program.
4. Implement the mentoring program (training of mentors, creating information bank).
5. Assess the program at six months with a survey to the mentees and the mentors.
6. Assess the program at twelve months with the same 6-month survey in addition to a qualitative focus group of the mentees and mentors.
7. Refine the mentoring program as dictated by the survey and any focus group feedback.
8. Provide feedback to the stake-holders and determine if the mentoring program should be expanded or if another focused mentoring experiment should be undertaken.
Prior to initiating the plan, we will meet with the Chancellor’s Council, the School Deans and, if possible, the Department Chairs to review the mentoring plan and request their support for this initiative. Coordinate with the UCSF post-doctoral mentoring program to complement other initiatives.

**Proposed Pairing Process:**

**The Process of Identification of Mentors:**

The Senior Leadership Group of CFAR working with the AIDS Research Institute will identify 75 faculty members willing to be a mentor. The mentors will be at the Associate Professor level or higher. The mentors will belong to the UCSF-GIVI CFAR membership list. The Senior Leadership Group will send a letter and the mentoring plan to the mentors. A copy will be sent to the Division, Department and School leadership. There will be an orientation for mentors to review the expectations, responsibilities and the evaluation process.

**The Process of Identification of Mentees**

Mentees will be obtained by a number of sources including: Mentor referral; Mentee self-referral; Faculty (non-Mentor identified) referral; Unsolicited email to potential mentee via assistance from Department Chairs, and the Schools of Dentistry, Graduate, Medicine, Nursing and Pharmacy.

**CFAR SLG will be responsible for selecting the pairings based on the translational model.**

For instance, a basic science mentee would be paired with both a basic scientist and a clinical mentor. A mentor will not be matched with a subordinate from the same division or laboratory.

To conduct this pilot, CFAR will work the existing UCSF-GIVI infrastructures to identify 50 mentees. CFAR will invite 30 of the mentees to participate in this initial experiment. There is no formal application process to become involved in the mentoring process; requests to participate will be logged into the CFAR contacts database. This will serve as the initial formation of a database for persons interested in participating in the CFAR sponsored mentoring process. The process of reducing the initial list from 50 to 30 will be done on a first come first served basis. The priority of the remaining 20 will be assigned also by first come first served. A process for applying to the mentoring program was discussed but felt to be onerous and having the potential for reducing the enthusiasm for persons to participate and also opening up the potential for selection biases.

Depending upon the results of the survey, the current plan for the mentoring process will include:

For Mentees

1. A one half-day **Seminar**—a “Crash course” on HIV Biology by Mentors.
2. **Workshops** during the pilot period - a selection of workshops that would be monthly from September through June.
a. First Grant Submission – Tom Mitchell, a PI, and C&G representative.
b. Internal Review and Human Subjects – IRB representative, a PI, and C&G representative
c. Life/work issues – Ruth, Jim, and Teri Liegler
d. Career Development – Paul, Warner, Terry Wright
e. Networking at UCSF
f. Networking at scientific meetings
g. How to get the most out of poster sessions

3. **Program Meetings**:
a. Semi-annual meeting or dinner for mentees
b. Annual reception for mentors and mentee
   i. Poster presentation by mentees
   ii. Awards or recognition for outstanding work/progress

**For Mentors**

1. An orientation to effective mentorship
   a. Organizational help for mentoring
   b. Resource guides
   c. Feedback on strengths and challenges

2. Participation in all seminars, workshops and program meeting

3. CFAR and campus recognition for mentoring activity in annual progress reports

4. Annual mentors meeting or dinner

**Resources and Methodology to Assess the Mentoring Model and Plans**

CFAR leadership and administration will provide for web-enabled documentation of all programs and develop and support a “chat” room for the mentees and mentors. In addition CFAR coordination will include monitoring and support; training; assessment; mentor/mentee identification and recruitment; pairing methods; evaluation methods; long term planning; advertising and future funding.

Allocate appropriate resources-CFAR will work with ARI and infrastructure to support the mentoring process by committing to assign 0.3 FTE to a faculty member to coordinate the mentoring process. CFAR will contribute a 0.5 FTE for administrative support to coordinate the mentoring process. This support will begin following re-competition for the CFAR grant in 2005. Institutions on campus and the ARI will share the support.

Create networking opportunities for mentees at all CFAR events - mentees and mentors will be identified and emphasis will be placed on including mentees for presentation at CFAR events.
Semi-annual mentee dinner for mentees and mentors.

Organize an annual mentoring reception with poster session

Organize mentoring seminars

Prioritize mentee presentations at seminars

Negotiate mentor and mentee expectations – before and during mentoring relationship

Establish basic requirements for mentors.

Define responsibilities with both mentor and mentee

Provide visibility for mentors as reward for their participation

Inclusion on websites and university publications

Provide training for the mentor

Annual dinner for mentors

Engage the various schools (Medicine, Dentistry, Nursing, Pharmacology) to provide awards to outstanding mentoring relationships

Utilize current structures and information sources

Include mentoring in all CFAR strategic planning meetings.

**Assessment and Measurement Benchmarks**

**Quantitative Short Term Measurements**
- 1. Number of mentees who attend seminars
- 2. Number of mentees attending conferences
- 3. Number of “hits” to the CFAR Mentee web pages
- 4. Number of Mentors who attend seminars/ conferences/ events
- 5. Number of Mentors who wish to continue in program
- 6. Drop out rate

**Qualitative Short Term Measurements**
- 1. Surveys of mentee satisfaction
- 2. Survey of mentor satisfaction
- 3. Survey seminar participants of value of seminars.

**Longer-term Measurement/Benchmarks**
- 1. Mentees publication rates and successful grant applications
2. Expansion of program to include more mentees
3. Expansion of the plan to pre-doctoral students
4. Expansion of the plan to junior faculty
5. Expansion of models to other diseases at UCSF by schools or departments
6. Expansion of mentoring model to other CFARs
**Implementation Timeline**
A timeline will be created based on the information contained in this final document.

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Documents Reviewed for this Report:

Academic Senate Mentoring Task Force (Mary Croughan and Dorothy Bainton co-chair)


Climate for Faculty Report of the Chancellor’s Task force on the Climate for Faculty
February 2003 [http://chancellor.ucsf.edu/CWF/Appendix%20A.pdf](http://chancellor.ucsf.edu/CWF/Appendix%20A.pdf)
[http://chancellor.ucsf.edu/CWF/Appendix%20C.pdf](http://chancellor.ucsf.edu/CWF/Appendix%20C.pdf)

Academic Senate Mentoring Task Force Executive Summary 5/27/2003

Response to Recommendations of the Task Force on Faculty Life (10/8/03) Chancellor J. Michael Bishop MD [http://chancellor.ucsf.edu/responsetotaskforce/chancellor.htm](http://chancellor.ucsf.edu/responsetotaskforce/chancellor.htm)

UCSF Postdoc mentoring program: guidelines for faculty mentors

Mentoring for the New Millennium William O. Walker, M.D., Patrick C. Kelly, COL MC USA, Roderick F. Hume, Jr., M.D [http://www.med-ed-online.org/f0000038.htm](http://www.med-ed-online.org/f0000038.htm)

Faculty Mentoring Guide from the Medical College of Virginia

On Being a Mentor to students in science and engineering National Academy Press. 1997
[http://www.nap.edu/readingroom/books/mentor/](http://www.nap.edu/readingroom/books/mentor/)

A guide to training and mentoring at the Intramural Research Program, NIH
**LINKS TO POSTDOC MENTORING RESOURCES:**

**Mission Statement from the Office of Postdoctoral Affairs**

The UCSF Graduate Division's Office of Postdoctoral Affairs provides an avenue of communication among postdoctoral scholars, faculty, and administrators. The purpose of this website is to demystify the processes of recruiting, hiring, training, mentoring and placement of postdoctoral scholars and to empower postdocs through access to information.

UCSF Office of Postdoctoral Affairs  
Dr. Christine D. Des Jarlais  
Assistant Dean for Postdoctoral Affairs  
1308 Third Ave., Room 102 (location address will change in August or September 2003; box number, phone and fax numbers will remain the same)  
Box 0523  
476-1558  
desjarlais@saa.ucsf.edu

UCSF Postdoc Affairs Website  
[http://postdocs.ucsf.edu](http://postdocs.ucsf.edu)

[http://postdocs.ucsf.edu/information_for_postdoc_administrators_and_faculty_sponsors/mentoring_guidelines.html](http://postdocs.ucsf.edu/information_for_postdoc_administrators_and_faculty_sponsors/mentoring_guidelines.html)

UCSF Postdoctoral Scholars Association (PSA)  
[http://saa49.ucsf.edu/psa/](http://saa49.ucsf.edu/psa/)

UCSF Career Center  
[http://saawww.ucsf.edu/career/](http://saawww.ucsf.edu/career/)

UCSF Office of Student Academic Enrichment (for postdocs too)  
[http://student.ucsf.edu/enrich/home.jsp](http://student.ucsf.edu/enrich/home.jsp)

UCSF Office of Sexual Harassment, Prevention & Resolution  
[http://www.ucsf.edu/oshpr/](http://www.ucsf.edu/oshpr/)

National Postdoc Association  

UC Academic Personnel Manual Policy 390, Appointment and Promotion, Postdoctoral Scholars  

Postdoc Jobs  
Website listings of American Universities (with links to international universities, Canadian universities and community colleges)
http://www.clas.ufl.edu/CLAS/american-universities.html

Writing Letters of Recommendation for Academic Jobs
http://www.mla.org/Job_counseling/125044.htm

Form for Individual Development Plan for Postdocs
http://www.faseb.org/opar/ppp/educ/idp.html

Postdoc Annual Review Form
http://www.faseb.org/opar/ppp/educ/idp_annrev.html

Important: HIPAA Training Module. All new UCSF employees, postdocs, and students must complete the Health Insurance Portability & Accountability Act of 1996 (HIPAA) training module, which can be found at:
http://www.ucsf.edu/hipaa

Women in Life Sciences (WILS) is a graduate student run organization that is dedicated to supporting women graduate students and postdoctoral fellows at UCSF by organizing networking, mentoring, and career-building activities. Graduate and postdoctoral studies can be difficult and isolating at times for anyone who undertakes them. Moreover, it has been documented that women leave technical and scientific training programs at a significantly higher rate than men do. WILS hopes to reverse this trend by enhancing the educational and personal experiences of all women scientists at UCSF. To accomplish this, WILS provides a forum for women scientists to meet, discuss issues, and form relationships at the personal and professional levels.
http://itsa.ucsf.edu/~wils/WILS.html

UCSF Chancellor's Advisory Committee on the Status of Women
http://student.ucsf.edu/gsa/

UCSF exchange—a contact point for all UCSF folks and their families to make friends and get support

American Women in Sciences (AWIS) Also, see above (Bulletin Board) for local AWIS chapter links

To Survive and To Flourish-A Survival Guide for Graduate Women at UCSF (this is a four-part pdf file)
Intro / Part 1 / Part 2 / Part 3 / Part 4