Development of Physician Scientists During Dermatology Residency:
Responsibilities of physician-scientist trainees and their mentors

UCSF
Department of Dermatology

Background: Fostering an environment which nurtures and promotes young physician scientists is central to the mission of the UCSF Department of Dermatology. Residents desiring a career that includes science are selected into the residency program for their potential to develop into outstanding physician scientists. To assist such residents in achieving a successful path to a research career, the Department's mentoring program has been created.

Purpose: To clarify the responsibilities of the trainee and of their mentors in the trainee's career development. While no two career paths are exactly alike, there are some important tasks that most trainees must accomplish along the way, and these can be challenging within the timeline and constraints of a dermatology residency. This document is intended to alert both trainees and their mentors to the steps and milestones that are usually required, and to offer additional advice.

The mentoring relationship: The dermatology career mentor is a faculty member who may also supervise the resident in clinical duties. However, as a mentor, the role is not evaluative or supervisory, but rather to serve as a guide and when necessary as an advocate for the resident's interests, and not to factor in departmental or programmatic interests. As a corollary, the mentor will hold all communications with the resident in complete confidence and not share information with other faculty unless mutually agreed upon with the resident. The one exception to this rule is any instance where the mentor receives information that indicates that safety of the resident or others is at significant risk, in which case the mentor will confidentially communicate with the Department Chair.

The mentoring team: Each resident/trainee will have a mentoring team that will meet at least annually, and often more frequently.

The resident/fellow trainee is the most important part of the team. The trainee recognizes that he/she is ultimately in charge of the career and must be highly self-motivated. While the mentoring program is in place to assist the trainee, it will not substitute for the trainee. Thus, the trainee is primarily responsible for initiating and maintaining regular contact with mentors, for ensuring that recommendations are followed up in timely fashion, and for seeking help when needed. Failure to do these can be regarded as signs that the trainee is interested in another career path.

The dermatology career mentor is the lead mentor. This mentor is a member of the full-time faculty and is responsible for overall career guidance, and when appropriate coordinates communication and integration of mentoring plans among other team members. The career mentor is responsible for monitoring the overall career progress of the resident, including providing advice on selecting the research mentor and on developing areas of clinical and research expertise, working closely with the research mentor, encouraging opportunities for academic visibility at UCSF and nationally, and providing guidance in seeking funding and becoming a competitive faculty candidate at UCSF and other comparable institutions. The career mentor communicates regularly with the Residency Director and, later with the appropriate Division Chief (when the resident becomes a research fellow), to ensure that academic progress/clinical competency is in harmony with the resident's career goals. The career mentor always attends the Departmental Resident Mentoring Committee meetings to report on progress and to seek input on any issues. The career mentor recognizes this is a significant time commitment and thus should not mentor more than 3 trainees at a time.

The research mentor directly oversees the fellow's research. This mentor may be any faculty member at UCSF or at another institution but must be approved by the chair and mentoring committee and will be committed to developing the fellow's career in investigative dermatology. Wide variety is expected in how this relationship is developed, reflecting the different styles of doing research among the faculty, but the research mentor is responsible for ensuring the scientific education and training of the fellow and for working with the career mentor in optimizing the fellow's career progress. If the research mentor identifies significant issues that are affecting or will affect the trainee's scientific career path, the research mentor will initiate communication with the career mentor in a timely fashion.

Co-mentors (advisors) may include other dermatology faculty, as well as faculty in other departments, who the resident feels can contribute to his/her professional development (clinically or in research). Although opinions vary on whether it is helpful to include a formal supervisor, the resident may choose to include the Department Chair, a Division Chief, or other supervisor on the mentoring team or even have these individuals serve as lead mentors. Many also feel it is important to have a mentor outside the home department. The decision as to whether to include these types of mentors should be discussed with the career and research mentors.

The Mentoring Committee Chairs are not routine members of the mentoring team. However, in instances where the trainee perceives a problem in his or her relationship with the lead mentor or other members of the team, the Mentoring Committee chairs can be consulted to assist the trainee. These consultations will be held in the strictest confidence as stipulated above, and absolutely no action will be taken without the trainee's consent.

Mentoring Timeline (Underlined tasks must be done on schedule)

Yr	Month	Task	Resident responsibility	Career Mentor's responsibility
1	July	1. Meeting your advisor	• You will be assigned an advisor prior to your first day of residency	• Advisor will contact the resident to arrange meeting to get acquainted, discuss the mentoring system, discuss possible dermatology and research mentors • Remind resident to use the Molecular Medicine mentor, too.
1	August-April	2. Selecting mentors	• Make appointments to meet with potential career mentors in the department • Make appointments to meet with potential research mentors at UCSF • Stay in touch with your advisor at least monthly, either by meeting or by email/phone.	• Continue to suggest potential candidates to be the career mentor and research mentor, and offer guidance for any issues the resident has identified • Ask resident how things are going academically with the residency.
1	November	3. Advisor-resident meeting	• Discuss progress in meeting with potential mentors, any hurdles in doing so. • Bring up possibility of applying to SID Resident Retreat for Future Academicians (nominations due in January (http://www.sidnet.org/Resident_Retreat.asp). • Consider submitting abstract for SID	• Prior to meeting, call up Residency Program Director to inquire if any academic issues are developing that need to be discussed with resident at formal meeting • Continue to encourage search for mentors, and discuss those that the resident has already considered. • Discuss SID Resident Retreat for Future Academicians

			annual meeting if there is data left from prior research	
1	February	4. Advisor-resident meeting	• Discuss progress in meeting with potential mentors, any hurdles in doing so.	• Prior to meeting, call up Residency Program Director to inquire if any academic issues are developing that need to be discussed with resident at formal meeting • Continue to encourage search for mentors, and discuss those that the resident has already considered. • At Mentoring Committee meeting, detail progress resident has made in selecting a dermatology career mentor
1	April	5. <u>Dermatology mentor selection</u>	• By mutual consent, select a member of the full-time dermatology faculty to be permanent mentor. Co-mentors allowed. • Inform the Mentoring Committee Chair by email, with a cc to the selected mentor	• New mentor should contact prior advisor and ask if there are any issues that need to be followed up.
1	May	6. SID annual meeting	• Attend meeting if possible • Attend junior-senior investigator dinner	• Help resident network
1	May	7. Mentor-resident meeting	• Start seriously narrowing selection of potential research laboratories/groups	• Prior to meeting, call Residency Program Director to inquire if any academic issues are developing that need to be discussed with resident at formal meeting • Contact Molecular Medicine mentor to discuss progress on selecting research lab/group. • At meeting, review upcoming tasks
1	June	8. SID Retreat for Future Academicians	• Network (NIAMS program director, other faculty, peers) • Ask lots of questions (how to select a lab group/mentor, where to get funding,	•

			timeline for academic positions, etc.)	
2	August	1. Mentor-resident meeting	• Near completion of research group/lab selection, or ideally complete • If research group/lab selection is complete, consider applying for extramural fellowships	• Prior to meeting, call up Residency Program Director to inquire if any academic issues are developing that need to be discussed with resident at formal meeting • Discuss research groups/labs that the resident has already considered, and advise on final selection. • Contact Molecular Medicine mentor to discuss progress on selecting research lab/group. • At Mentoring Committee meeting, detail progress resident has made so far in selecting research mentor or present resident's choice.
2	September	2. <u>Selection of research group/lab</u>	• Inform mentor, Mentoring Committee Chair, Residency Program Director of research group/lab selection • Consider applying for extramural fellowships to start in Year 3.	• Discuss research group/lab choice with Department Chair, Residency Program Director and Mentoring Committee Chair, and make recommendations on approval. • Discuss whether it is appropriate to apply for extramural fellowships (October-December deadlines), and keep in mind eligibility requirements for more prestigious awards.
2	September-June	3. Prepare research plan proposal	• Talk with research mentor about potential projects and directions. • If time allows, consider limited research work, possibly in lab, for pilot experiments and preliminary data (consult with Residency Program Director and career mentor) • Write the research plan (Dermatology Foundation format) in consultation with research and career mentor	• Available to discuss plan and provide feedback

2	November	4. Mentor-resident meeting	• Discuss research projects that are being considered • Ask Department Chair about attending Rothman Club dinner at AAD	• Presentation of resident's choice of research group or lab before mentoring committee. • Communicate any discussion points to resident
2	February	5. Attend AAD Annual Meeting	• Attend Rothman Club dinner • Network with faculty and peers	• Help trainee network
2	May	6. <u>Presentation of Research Plan and meeting of mentoring team</u>	• Submit research plan and deliver talk to present it before mentoring team • Revise plan to reflect feedback from mentoring committee	• Invite research mentor to meet with you, Residency Program Director, Mentoring Committee Chair, Department Chair and other interested faculty to hear resident present research plan and discuss issues (clinical duties during research, funding plan for training period, attendance at AAD and SID meetings, etc.)
2	May	7. SID meeting	• Attend talks relevant to interest • Attend junior-senior investigator dinners	• Introduce resident to other relevant scientists
2	May	8. Resident-mentor meeting	• Submit Individual Development Plan (IDP) for upcoming year to mentoring team • Discuss any other issues	• Contact Residency Program Director for any academic issues. • Inquire about balance of research and clinical activities in coming years • Discuss IDP • At mentoring committee, present brief summary of resident's plan and any possible issues
3	July	1. Start research	• In research group/lab, maintain contact with career mentor and other mentors periodically • Further evolution of potential subspecialty expertise	• Assist with subspecialty formation • Continue to assist resident in networking at meetings, and on campus
3	August	2. Resident-mentor meeting	• Consider applications for extramural fellowships and discuss strategy to do so.	• Contact Residency Program Director for any academic issues. • Encourage application to appropriate

				fellowships, particularly those specific to dermatology that the research mentor may not know.
3	October	3. Submission of extramural fellowship grants	• Have mentors review fellowship applications	• Write letters of support, be available for advice and readings of drafts
3	November	4. Resident-mentor meeting	• Discussion of progress/issues	• Contact Residency Program Director for any academic issues • Continue subspecialty and niche development in dermatology • At mentoring committee meeting, discuss progress/issues
3	December	5. Submit progress report and prepare SID abstract	• Submit progress report to mentoring team • Convert progress report into abstract submission for SID (applications due in January)	• Help review progress report and abstract
3	February	6. Attend AAD	• Attend Rothman Club dinner	• Help trainee network at meeting
3	May	7. Attend SID	• Present work • Attend Junior-Senior Investigator dinner	• Assist in networking, feedback on presentations
3	May	8. Resident-mentor meeting	• Prepare IDP for coming year and submit to mentors.	• Contact Residency Program Director for any academic issues • Review IDP • Continue subspecialty and niche development in dermatology • At mentoring committee meeting, discuss progress and any issues
3	June	9. <u>Progress report and meeting of mentoring team</u>	• Prepare progress report and talk to present it	• Invite research mentor to meet with mentoring committee. Discuss with research mentor need for Board preparations
4	July-August	1. Pass board exam	• Prepare for boards	

4	August	2. Fellow-mentor meeting	• Consider fellowship applications if not already obtained • Consider submitting abstract to AAD Residents and Fellows Symposium if you have data	• Encourage application to appropriate fellowships/awards • If Year 3 has been exceptionally productive (published or in press 1st author publications) for fellow and he/she would be competitive, can consult with research mentor whether to consider seeking junior faculty positions (see Year 5 guidelines).
4	October	3. Submission of extramural fellowship	• If not done in Year 3, apply for Derm Foundation, NIH K08, Burroughs-Wellcome or other career development awards. Give your mentors time to review the applications	• Assist in applications by writing letters of support, reviewing applications
4	January	4. SID abstract	• Submit abstract for SID	• Available for reading of abstract
4	November	5. Fellow-mentor meeting	• Review progress/issues in research lab/group • Review progress/issues in clinical niche development	• Assist with subspecialty development and advice on appropriate research progress
4	February	6. Fellow-mentor meeting	• Review progress/issues in research group/lab • Review progress/issues in clinical niche development • Discuss outcomes of career development award applications	• Assist with subspecialty development and advice on appropriate research progress • Discuss outcomes of career development award applications. Offer constructive advice and strategy for re-submission if appropriate • Monitor publications by fellow. If no publications, inquire whether work so far is approaching publication stage.
4	February	7. AAD meeting	• Attend Rothman Club dinner	• Help trainee network
4	May	8. Attend SID meeting	• Present work • Attend Junior-Senior Investigator dinner	• Assist in networking, feedback on presentations
4	May	9. Fellow-mentor meeting	• Prepare IDP and academic CV, and submit to mentoring team 1 wk prior • Review progress/issues in research	• Review IDP with resident • Assist with subspecialty development and advice on appropriate research progress

			• Review progress/issues in clinical niche development • Discussion of upcoming issues (resubmission of CDA applications, transition to faculty position if appropriate)	• Joint meeting with research mentor • Discussion of upcoming issues (CDA resubmissions, transition to junior faculty if appropriate) • Update mentoring committee
4	June	10. <u>Progress report and meeting of mentoring team</u>	• Prepare progress report and talk to present it	• Invite research mentor to meet with mentoring committee • Committee and trainee to discuss suitability for academic job search and transition to junior faculty
5	August	1. Fellow-mentor meeting	• Review progress/issues in research • Review progress/issues in clinical niche development • Discussion of upcoming issues (resubmission of CDA applications, transition to faculty position if appropriate) • Begin to make inquiries of positions at other programs if desired (use mentoring team contacts, notify Department Chair and senior faculty of intent and to spread word of availability) • Submit CV to mentors for feedback • Consider submitting abstract to AAD Residents and Fellows Symposium	• Assist with subspecialty development and advice on appropriate research progress • Monitor publications by fellow. No first author publications by year 5 is cause for concern and should be discussed with research mentor. • Discussion of upcoming issues (CDA resubmissions, transition to junior faculty if appropriate) • Assist in identifying potential programs to investigate for job openings if appropriate (ask colleagues in other programs of openings) • Review CV and offer constructive feedback
5	September onward	2. Identify, apply for, and obtain a position	• Make inquiries of potential positions • Interview • Negotiate, decide • Transition to junior faculty position	• Write letters of support • Help trainee network at meetings • Provide advice in giving a job talk, negotiating job offers, selecting a job, transitioning to new position
6	New job	3. Start as junior faculty	• Join junior faculty mentoring program • Keep in touch with prior mentors if not	• Continue to offer support and advice

			continuing in same institution	• Send opportunities to trainee

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