RESEARCH ADVISORY BOARD (RAB)
April 5, 2016
8:30-10am
Medical Sciences Building, Chancellors Conference Room S-118

Attendees: Jane Czech, Pam Den Besten, John Ellis, Clarice Estrada, MC Gaisbauer, Vanessa Jacoby, Jean Jones, Jim Kiriakis, Gretchen Kiser, Steven Lazarus, Larisa Kure, Georgina Lopez, Wallace Marshall, Irene McGlynn, Teresa Moeller, Suzanne Murphy, Michael Nordberg, Christine Razler, Bill Seaman, Paul Volberding, Winona Ward
On Phone: Matt Springer
Not here: Chip Chambers, Jennifer Grandis, Xiao Hu, Mounira Kenaani, Synthia Mellon, Thomas Neylan, Theresa O'Lonergan, Nirao Shah, Brian Smith
Guests: Sarah Nelson, Pat Phelan

PRESENTATION: Use of Government Funds to Provide Additional Support for T32 Trainees, Michael Nordberg & MC Gaisbauer
See PowerPoint presentation attached
• In 2001, the NIH tied their rates for post docs and graduate students together so that the total of all costs associated with graduate students (tuition, salary, etc.) cannot be greater than what a post doc receives in year 0/the year their PhD is awarded.
  o Note: NIH looks at total compensation for graduate students, but just salary for post docs.
• We can adjust the stipend level to market rates as long as we provide justification and it is consistent with institutional policy. However, today, institutional policy sets stipend levels based on the NIH stipend levels.
  o During FY2004, given the cost of UC systemwide mandatory tuition assessed to all graduate students, we ran into problems where the total compensation exceeded the stipend levels.
• NIH does allow for a secondary appointment in addition to the trainee post doc appointment. However, the other Employment/funding sources must come from another project (i.e., different PI or same PI with different science).
• We believe that we can change our policy with UCOP (for just UCSF) so that the policy could establish salaries at market rates and, thus, there would be capacity to recover these costs from the federal grants.
  o We need to ensure the policies carefully distinguish how tuition is included in the market rates.
  o We need to consider the impact where the stipends are being covered by another funding source.

Questions/Comments:
• Can we pay someone more without paying someone else in a comparable position the same?
  o Stipend levels must be established based on a person’s qualifications and market not based on funding sources.

Next Steps:
• A workgroup will convene to explore possible policy changes and possible secondary appointments
  o Members: MC Gaisbauer, Michael Nordberg, Christine Razler, Jim Kiriakis, Larisa Kure

PRESENTATION: Overview-Limited Submission Program (LSP), Sarah Nelson
See PowerPoint presentation attached
• For visibility of opportunities: LSP has an op-in listserv and calendar of upcoming opportunities
• LSP is now providing feedback to applicants
  o i.e. strengths and weakness to provide context why a given application were nominated or not (via a drop down option checkbox that reviewers fill out)
    • It can also provide context as to whether the overall pool of applicants played a role in who was nominated
  o This is a big change, due to the timing and quick turnaround needed for the submission process
• As RMS needs a month to process once the reviewers approve applicants, LSP follows up with everyone who applied; RMS is then pulled in along with any needed corporations/foundations.
• If someone applied for a given opportunity outside of the LSP nomination process, RMS stops the progress, as LSP makes all nominations for UCSF

Questions/Comments:
• Do we have a standing group of reviewers?
LSP does try to switch things up as to who is reviewing a given opportunity (as issues/areas of opportunity change) but for something that is more stable (such as cancer research) yes, individuals are asked to sit on 5 or so reviews a year.

LSP focuses on having reviewers be someone that was awarded a grant in the past through this process.

We are guessing at times how many applications may be received for a given opportunity, which impacts how much time a reviewer will need to commit to a given opportunity.

- Could we plan ahead for possible standing research opportunities?
- LSP does have a list of standing grant opportunities, but there no guarantee that they will all go forward in a given year.
- Do we have a process for resubmissions?
  - Not currently, resubmissions are not tracked from year to year, i.e. it is not noted to reviewers if someone has applied for the same opportunity in the past.
- Given that the listserv is an op-in, some junior faculty do not know about LSP, how do you reach out?
  - Faculty development day
  - Suggestions:
    - Utilize PAMDash to help get the word out
    - Request that CTSI have the listserv sign-up information on their website
    - Yearly invitation to faculty to join listserv

Next Steps:
- None noted beyond the suggestions made.

PRESENTATION: FireEye, Pat Phelan
See PowerPoint presentation attached

- UCOP purchased software to track 'bad' activity after the security breaches at UCLA. The software monitors all network traffic, looking at specific patterns of activity.
- It was tested at UCB and was noticed by and was of concern to individuals who saw what that they were being tracked.
- UCOP presented the plan to the Academic Senate. There was no technical violation of policy, but it was agreed that people should have been told what was happening (even when considering attorney/client privilege).
- Fire Eye has two services: hardware and consulting services. UCSF is purchasing both; the contract is still being finalized.
- As we cannot prevent all threats from getting into our system, we have to have a way to identify and to stop bad activity once they get in.
- With FireEye, we will have the ability to virtually detonate things, have software that can track threats, evaluate and destroy as needed.
  - This is especially important for the 1-2% of the time were we are being specifically targeted, but we will be able to track all suspicious activity.
- Concerning privacy, if the need to analysis is triggered, we are just going to look at Meta data and will not be breaking encryptions.

Next Steps:
- None beyond those discussed. FireEye will be instituted at UCSF.
Discussion of Graduate Student Researcher & Trainee Funding

Research Advisory Board
April 5, 2016

MC Gaisbauer, Assistant Controller
Michael Nordberg, Associate Dean
Agenda

- Current Limitations on Compensation
- Alternative Paths to Increase Compensation
  - Change in UCSF Policy
  - Additional Appointments
- Questions & Answers
# 2016 NRSA Stipend Levels - Postdoctoral

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Annual Stipend</th>
<th>Monthly Stipend</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$43,692</td>
<td>$3,641</td>
</tr>
<tr>
<td>1</td>
<td>$45,444</td>
<td>$3,787</td>
</tr>
<tr>
<td>2</td>
<td>$47,268</td>
<td>$3,939</td>
</tr>
<tr>
<td>3</td>
<td>$49,152</td>
<td>$4,096</td>
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<tr>
<td>4</td>
<td>$51,120</td>
<td>$4,260</td>
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<tr>
<td>5</td>
<td>$53,160</td>
<td>$4,430</td>
</tr>
<tr>
<td>6</td>
<td>$55,296</td>
<td>$4,608</td>
</tr>
<tr>
<td>7 or More</td>
<td>$57,504</td>
<td>$4,792</td>
</tr>
</tbody>
</table>
Current Limitations on Compensation

National Institutes of Health (NIH) Notice NOT-OD-0217

- GSR Compensation level is tied to the National Research Service Award (NRSA) Postdoctoral stipend level 0 that is in effect at the time the grant award is issued.
- Compensation includes total salary or wages, fringe benefits and tuition remission from all NIH sources.
- Institutions may justify a higher level stipend if it is consistent with institutional policies and other similar positions at the institution.
  - Compensation will not be considered reasonable if in excess of the amount paid to a first-year postdoctoral scientist at the same institution performing comparable work.
Current Limitations on Compensation

- Compensation level for a **first-year postdoctoral scientist** is tied to the NRSA Postdoctoral stipend level 0 that is in effect at the time the grant award is issued.

- Compensation is also bound by the Bargaining Contract:
  - The Bargaining Contract prescribes the NRSA scale.
  - The University is not precluded from providing compensation to Postdoctoral Scholars at higher rates.
  - Prescribes benefits in addition to compensation amount.

- Trainees are required to devote full-time effort to the training program.
Current Limitations on Compensation

- Trainees supported by NRSA-Kirschtein awards are allowed to find other employment to offset their expenses
  - There should be no conflict with the research being completed under the NRSA-Kirschstein supported award, or detract from or prolong the fellow’s approved training program
    - Limited to part-time employment which is considered up to 20 hours per week
    - Compensation may not be paid from a research grant that supports the same research that is part of the fellow's planned training experience
  - Supplementation can be provided based on institutional policy, if consistently applied, and cannot be provided by federal funds unless previously authorized by the program
# Funding Allowability Matrix

<table>
<thead>
<tr>
<th>NIH RXX, UXX, PXX</th>
<th>NRSA F30, F31, T32</th>
<th>PRIVATE OR FEDERAL NON-NIH</th>
<th>COMPENSATION RULING</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td></td>
<td></td>
<td>NIH: Compensation maximum is NRSA Postdocs level</td>
</tr>
<tr>
<td>x, x</td>
<td></td>
<td></td>
<td>NIH: Combined compensation maximum is NRSA Postdocs level</td>
</tr>
</tbody>
</table>
| x                 | x                   | x                        | NIH: Compensation maximum is NRSA Postdocs level  
Private and Federal Non-NIH:  
• Follow sponsor's compensation guideline  
• UCSF does not define a maximum that can be received from these sources  
• Specific graduate programs determines compensation levels annually |
| x                 | x                   | x                        | NRSA: Defined by grant  
Private and Federal Non-NIH:  
• Follow sponsor's compensation guideline  
• UCSF does not define a maximum that can be received from these sources  
• Specific graduate programs determines compensation levels annually |
| x                 | x                   |                          | NIH: Compensation maximum is NRSA Postdocs level  
NRSA: Defined by grant  
• This is separate from supplementing the NRSA stipend level to the level set by UCSF graduate programs  
• Only allowed if research under Mentor's research grant is different from fellow's NRSA's planned training experience, as verified by the Mentor on the NRSA |
| x, x              |                     |                          | NRSA: Unallowable |
## Current GSR Gap (based on FY2014)

<table>
<thead>
<tr>
<th>Home Department Description</th>
<th>Count</th>
<th>Amount Over Salary Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>M_Biochemistry and Biophysics</td>
<td>8</td>
<td>34,719.20</td>
</tr>
<tr>
<td>P_Pharmaceutical Chemistry</td>
<td>5</td>
<td>21,812.40</td>
</tr>
<tr>
<td>M_Microbiology and Immunology</td>
<td>5</td>
<td>21,220.19</td>
</tr>
<tr>
<td>M_Radiology</td>
<td>6</td>
<td>15,275.81</td>
</tr>
<tr>
<td>M_Physiology</td>
<td>3</td>
<td>14,506.28</td>
</tr>
<tr>
<td>M_MED-INFD-CORE</td>
<td>2</td>
<td>9,767.52</td>
</tr>
<tr>
<td>N_Social Behavioral Sciences</td>
<td>1</td>
<td>7,480.36</td>
</tr>
<tr>
<td>M_CMP (Cellular Molecular Pha)</td>
<td>2</td>
<td>7,170.24</td>
</tr>
<tr>
<td>M_CMP-General</td>
<td>1</td>
<td>4,883.76</td>
</tr>
<tr>
<td>M_Cardiovascular Research Inst</td>
<td>1</td>
<td>4,883.76</td>
</tr>
<tr>
<td>M_Anatomy</td>
<td>1</td>
<td>4,883.76</td>
</tr>
<tr>
<td>M_Urology</td>
<td>1</td>
<td>4,883.76</td>
</tr>
<tr>
<td>M_Psych-LPPI-Core-General</td>
<td>1</td>
<td>4,883.76</td>
</tr>
<tr>
<td>M_Psychiatry</td>
<td>1</td>
<td>4,883.76</td>
</tr>
<tr>
<td>M_PEDS-Hematology/Oncology</td>
<td>1</td>
<td>3,514.48</td>
</tr>
<tr>
<td>M_Neurological Surgery</td>
<td>2</td>
<td>1,334.23</td>
</tr>
<tr>
<td>D_Cell and Tissue Biology</td>
<td>1</td>
<td>1,092.92</td>
</tr>
<tr>
<td>P_Bioengineering</td>
<td>1</td>
<td>793.74</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>43</td>
<td>167,989.93</td>
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</tbody>
</table>
Alternative Paths to Increase Compensation

- Change in UCOP Policy
- Additional Appointments
Change in UCSF Policy

- Establish policy to provide for a market-based, total compensation that is higher than NRSA Stipend Base 0 for both GSRs and First-Year Post-Doctorates
  - Analyze impacts to non-federally funded positions
  - Confirm interpretation with UCOP
Additional Appointments

- Process to approve the secondary part-time appointments for trainees to provide supplemental income
  
  - Review for conflict with trainee program
    - Example peer review Process: Department of Medicine at the University of Washington
  
  - Requests for funding under this exception must be approved by the Associate Chair of Medicine for Research

  - Prefer that the grant used to pay the trainee not be a grant on which the T32 mentor is a PI, but they will allow this if the work is clearly distinct from the T32 project
Limited Submission Program (LSP)

Sarah Nelson
Research Development Office (RDO)

4/4/2016
About the LSP

- The Limited Submission Program (LSP) is responsible for notifying the campus of limited submission opportunities, coordinating the internal review and selection process, and notifying all applicants of outcomes.

- Limited submission opportunities (LSOs) are extramural funding opportunities that either limit the number of applications UCSF may put forward to a given sponsor or require another kind of internal coordination.
LSP Governance

Executive Vice Chancellor & Provost (EVCP)

Vice Chancellor of Research (VCR)

Research Development Office (RDO)

Limited Submission Program (LSP)

LSP Advisory Committee
LSP Process Overview

UCSF Receives Invitation / Funding Opportunity Announced / LSP Receives Notification of, or Identifies LSO

The LSO is announced to the campus via the LSP listserv (opt-in) and (depending on the anticipated interest for the opportunity) LOIs or applications for an internal competition are invited. *A list of all current LSOs is also maintained online.*

All applications or internal LOIs are due to limitedsubmissions@ucsf.edu by 10AM on the internal due date, unless otherwise noted in the announcement.

Letter of Intent Process

- Used to gauge interest
- LSP Advisory Committee Chair provides institutional approval
- If multiple LOIs received, full internal competition is run

Full Pre-Application Process

- Used when multiple applications are anticipated
- LSP Advisory Committee identifies appropriate review committee members
- Applications reviewed & scored by at least 2 reviewers
- Nominee is provided institutional approval
LSP Review Process (Pt. 1)

- Institutional Approval
- Full Review (Committee)
  - Pre-Application Packet
    - 2 pages plus administrative material
  - Review Process
    - Reviewers only provide scores & categorical feedback
    - LSP continuously makes efforts to improve the experience of faculty and now provides limited feedback to all applicants.

<table>
<thead>
<tr>
<th>Strength of Proposal</th>
<th>Weakness of Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong application overall</td>
<td>Strong application overall</td>
</tr>
<tr>
<td>High risk/high reward - feasibility</td>
<td>High risk/high reward - feasibility</td>
</tr>
<tr>
<td>Fit with the sponsor</td>
<td>Fit with the sponsor</td>
</tr>
<tr>
<td>Fit with the scope of mechanism</td>
<td>Fit with the scope of mechanism</td>
</tr>
<tr>
<td>Scientific approach</td>
<td>Scientific approach</td>
</tr>
<tr>
<td>Grant writing</td>
<td>Grant writing</td>
</tr>
</tbody>
</table>
LSP Review Process (Pt.2)

• Average time commitment is 30-45 min. max. total for initial reviews & scoring for 2-5 applications (typical workload)
  – Committee discusses / determines nominee (mostly via email)
    ▪ Confirm decision with LSP via email
• LSP notifies nominee & all other applicants of outcomes
  – LSP also notifies other relevant staff, such as UDAR and RMS
Calendar of Annually Recurring LSOs

- Calendar contains ‘traditional’ annually recurring foundation LSOs with eligibility
  - Private foundations
  - Traditional extramural funding
  - Invitations or open call for applications are expected every year

- Not on the calendar: opportunities that may not be limited, but require special centralized coordination
  - Exp.: Hellman Fellows Program
<table>
<thead>
<tr>
<th>MONTH ESP TO ANNOUNCE</th>
<th>MONTH APPS DUE TO FNDN.</th>
<th>FOUNDATION</th>
<th>PROGRAM NAME</th>
<th>AWARD ANNOUNCED</th>
<th>RESEARCH CATEGORY</th>
<th>KEY WORDS</th>
<th>SCHOOL</th>
<th>ELIGIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Foundation's general eligibility requirements</td>
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<td></td>
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<td></td>
<td></td>
<td>Post-Doctoral Fellow</td>
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<tr>
<td>FALL QUARTER</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>October</td>
<td>November</td>
<td>Rita Allen</td>
<td>Scholars Program</td>
<td>May</td>
<td>Basic</td>
<td>Analgesics, cancer, Immunology and neurocience</td>
<td>All</td>
<td>Young Investigators</td>
</tr>
<tr>
<td>October</td>
<td>February</td>
<td>Cancer Banyan</td>
<td>Clinical Investigator Award</td>
<td>Translational Clinical</td>
<td>Patient-oriented research, Epidemiologic</td>
<td>All</td>
<td>Young Investigators</td>
<td>x</td>
</tr>
<tr>
<td>October</td>
<td>January (LOI, only)</td>
<td>Brain Research Foundation</td>
<td>Seed Grant Program</td>
<td>Basic</td>
<td>Neurocience</td>
<td>All</td>
<td>Tenured/tenure-track asst. or assoc</td>
<td>x</td>
</tr>
<tr>
<td>November</td>
<td>February</td>
<td>Mayo Clinic</td>
<td>Cancer Research Grant Program</td>
<td>Translational</td>
<td>Ovarian, uterine, breast, cervical</td>
<td>SOM, only</td>
<td>Young and established investigators</td>
<td>x</td>
</tr>
<tr>
<td>November</td>
<td>December</td>
<td>American Association of Cancer Institutes</td>
<td>Translational Cancer Research Fellowship</td>
<td>May</td>
<td>Translational Clinical</td>
<td>Cancer</td>
<td>All but SON</td>
<td>Post-doctoral fellow (not yet appointed faculty)</td>
</tr>
<tr>
<td>December</td>
<td>January</td>
<td>St. Bartholomew's</td>
<td>Multiple Programs</td>
<td>June</td>
<td>Translational Clinical</td>
<td>Pediatric Cancer</td>
<td>All but SON</td>
<td>Post-doc to Faculty positions</td>
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<tr>
<td>December</td>
<td>February</td>
<td>Dana</td>
<td>David Mahoney Neuroimaging Ppm</td>
<td>September and December</td>
<td>Basic</td>
<td>Brain Research</td>
<td>SOM, only</td>
<td>Young Investigators</td>
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<tr>
<td>December</td>
<td>March</td>
<td>Macy</td>
<td>Faculty Scholars Program</td>
<td>Education</td>
<td>Medical/Nursing Education Innovators</td>
<td>Doctorally-prepared faculty member of 3+</td>
<td>x</td>
<td></td>
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<tr>
<td>December</td>
<td>July</td>
<td>Hyndel</td>
<td>Hope on Wheels</td>
<td>Translational Clinical</td>
<td>Pediatric Cancer</td>
<td>All</td>
<td>Open</td>
<td>x</td>
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<tr>
<td>WINTER QUARTER</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>January</td>
<td>April</td>
<td>Packard</td>
<td>Fellowships for Science and Engineering</td>
<td>October</td>
<td>Basic</td>
<td>Natural or physical sciences or engineering</td>
<td>All</td>
<td>w/ in 3 years of faculty appointment</td>
</tr>
<tr>
<td>January</td>
<td></td>
<td>National Comprehensive Cancer Network</td>
<td>Young Investigator Award</td>
<td>Clinical Translational Public Policy</td>
<td>Patient Care</td>
<td>All</td>
<td>First full-time appnt as Asst Prof, Instructor, or</td>
<td>x</td>
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<tr>
<td>February</td>
<td>May</td>
<td>American Association of Medical Colleges</td>
<td>Herbert W. Nickens Faculty Fellowship</td>
<td>Health Care Disparities</td>
<td>Medical Education, Healthcare</td>
<td>All</td>
<td>Asst Prof w/ in 3 years of appointment</td>
<td>x</td>
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<tr>
<td>February</td>
<td>July</td>
<td>William T. Grant</td>
<td>Scholars Program</td>
<td>Translational</td>
<td>One from each School</td>
<td>W/ in 7 years of terminal degree</td>
<td>x</td>
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<tr>
<td>Month</td>
<td>Year</td>
<td>Sponsor</td>
<td>Award Type</td>
<td>Field of Science</td>
<td>Type</td>
<td>Award Type</td>
<td>Requirements</td>
<td>Notes</td>
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<tr>
<td>February</td>
<td>August</td>
<td>J. Foundation</td>
<td>Scholar Award</td>
<td>Cancer</td>
<td>All</td>
<td>Ladder Rank w/In 5 years of aspt as post-doc</td>
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<td></td>
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<tr>
<td>March</td>
<td>June</td>
<td>J. Foundation</td>
<td>Translational Grant</td>
<td>Cancer</td>
<td>All</td>
<td>Pair with Basic and Clinical expertise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>July</td>
<td>American Diabetes</td>
<td>Pathway to Stop</td>
<td>Basic Translational</td>
<td>Diabetes</td>
<td>Depends on Award Type</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Foundation</td>
<td>Diabetes</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>April</td>
<td>November</td>
<td>Keck</td>
<td>Medical Research</td>
<td>Basic Translational</td>
<td>High-risk medicine, science, and engineering</td>
<td>All</td>
<td>Open</td>
<td>x</td>
</tr>
<tr>
<td>April</td>
<td>October</td>
<td>Brain Research</td>
<td>Scientific</td>
<td>Basic Clinical</td>
<td>Neuroscience</td>
<td>All</td>
<td>Established Investigators</td>
<td>x</td>
</tr>
<tr>
<td>May</td>
<td>July</td>
<td>St. Baldrick's</td>
<td>Infrastructure</td>
<td>Clinical</td>
<td>Pediatric Cancer</td>
<td>All</td>
<td>Open</td>
<td>x</td>
</tr>
<tr>
<td>May</td>
<td>November</td>
<td>Pew</td>
<td>Pew Scholars</td>
<td>Basic</td>
<td>Human Health</td>
<td>All</td>
<td>Young Investigators</td>
<td>x</td>
</tr>
<tr>
<td>May/June</td>
<td>August</td>
<td>Melindrof</td>
<td>Grants Program</td>
<td>October</td>
<td>Biomedical, disease oriented research</td>
<td>All</td>
<td>No more than 4 years in a tenure-track position</td>
<td>x</td>
</tr>
<tr>
<td>June</td>
<td>July</td>
<td>Pew-Stewart</td>
<td>Scholars in Cancer Research</td>
<td>Basic Translational</td>
<td>Cancer</td>
<td>All</td>
<td>Assistant Professor</td>
<td>x</td>
</tr>
<tr>
<td>June</td>
<td>September</td>
<td>Gaddis's Angel</td>
<td>Integrative Medicine Research</td>
<td>Translational</td>
<td>Complementary therapeutics, botanical agents</td>
<td>All</td>
<td>Assistant Professor</td>
<td>x</td>
</tr>
<tr>
<td>June</td>
<td>October</td>
<td>Burroughs Wellcome</td>
<td>Career Awards for Medical Scientists (CAMS)</td>
<td>Basic Translational</td>
<td>Biomedical, disease oriented research</td>
<td>SQO, SQM, only</td>
<td>More than 2 years postdoc experience</td>
<td>x</td>
</tr>
<tr>
<td>June</td>
<td>September</td>
<td>Searle</td>
<td>Scholars Program</td>
<td>Basic</td>
<td>Medicine, chemistry, biological science</td>
<td>All</td>
<td>With one year of post-doc, prof. appt.</td>
<td>x</td>
</tr>
<tr>
<td>July</td>
<td>November</td>
<td>Burroughs Wellcome</td>
<td>Investigators in the Pathogenesis of Infectious Disease</td>
<td>Basic Clinical</td>
<td>Pathogenesis</td>
<td>All</td>
<td>Assistant Professor</td>
<td>x</td>
</tr>
<tr>
<td>August</td>
<td>November</td>
<td>Greenwall</td>
<td>Faculty Scholars Program in Biotech</td>
<td>Bioethics</td>
<td>Bioethics</td>
<td>All</td>
<td>More than 60% in, Tenured Fac Appl</td>
<td>x</td>
</tr>
<tr>
<td>August</td>
<td>September</td>
<td>Paul G. Allen</td>
<td>Science and Technology Program</td>
<td>Open</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>September</td>
<td>Oct/Nov</td>
<td>Keck</td>
<td>Program in Science &amp; Engineering</td>
<td>Basic</td>
<td>All</td>
<td>Open</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Summary of LSP Statistics

- Average # of LSOs announced annually: 83.5
- Average number of applicants per opportunity in 2014-2015 (3.10) is in an upward trend from the previous year (2.59)
- Number of opportunities requiring full committee review has nearly doubled since last year
  - LSP is receiving more responses to LSOs in general. The number of committees required and the number of non-review institutional approval provided, have both increased significantly in the past year
- Applicant progression averages
  - Applicant to Nominee: 35%
  - Nominee to Awardee: 34%
  - 2014-2015: 41% of applicants were nominated (awardees unknown until next year)
- Average RFA budgets made available annually through LSOs: $227,067,928
Takeaways

- The LSP has proven to be a valuable program, putting forward more successful candidates on behalf of UCSF for LSOs
- Continuous improvements to program procedures and activities
- Spread the word and learn more about Limited Submission Opportunities
  - Sign-up for the LSP Listserv
University of California
San Francisco
Number of Opportunities Announced by LSP

<table>
<thead>
<tr>
<th>Year</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>89</td>
</tr>
<tr>
<td>2012-2013</td>
<td>85</td>
</tr>
<tr>
<td>2013-2014</td>
<td>81</td>
</tr>
<tr>
<td>2014-2015</td>
<td>79</td>
</tr>
</tbody>
</table>
Average Number of Applicants per Opportunity

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>3.41</td>
</tr>
<tr>
<td>2012-2013</td>
<td>2.79</td>
</tr>
<tr>
<td>2013-2014</td>
<td>2.59</td>
</tr>
<tr>
<td>2014-2015</td>
<td>3.1</td>
</tr>
</tbody>
</table>
% of LSOs Requiring Committee Formation

- 2011-2012: 39%
- 2012-2013: 32%
- 2013-2014: 26%
- 2014-2015: 41%
Number of LSOs by Review Type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>18</td>
<td>20</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>In-Person Meeting</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Phone</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Institutional Approval</td>
<td>21</td>
<td>18</td>
<td>19</td>
<td>31</td>
</tr>
</tbody>
</table>
Applicant Progression

![Bar chart showing applicant progression from applicant to nominee and nominee to awardee. The chart includes data for the years 2011-2012 to 2014-2015*.

- Applicant to Nominee:
  - Average/Year: 35%
  - 2011-2012: 34%
  - 2012-2013: 35%
  - 2013-2014: 36%
  - 2014-2015*: n/a

- Nominee to Awardee:
  - Average/Year: 35%
  - 2011-2012: 34%
  - 2012-2013: 35%
  - 2013-2014: 36%
  - 2014-2015*: 46%]
FireEye Briefing / Research Advisory Board

Patrick Phelan, Information Security Officer
April 5, 2016
Selecting a SOC provider

- UCSF identified need to establish a security operations center (SOC)
  - As the security program matures, we receive more security event information, and it’s difficult to prioritize events
- SOC was included in the larger IT sourcing initiative
- Other UC Health locations were interested in pursuing managed security services as well, and participated in the RFP
- Narrowed from ~20 vendors to 3 between April 2015 and September 2015
- FireEye as a Service selected in January
- Contract negotiations and legal review in process
- Implementation to begin Fall 2016
FireEye technical overview

- FireEye is a "threat analytics platform" that provides protection against modern cyber attacks
  - The platform consists of hardware/software on our network, a "security operations center" (SOC) staffed with people monitoring our network, and threat intelligence database
- Technology identifies bad behavior, alerts the SOC, humans at the SOC validate and handle routine alerts, escalate critical alerts to UCSF
- FireEye is unique in its ability to detect sophisticated attacks ("zero-days" and "advanced persistent threats") that circumvent traditional defenses like firewalls, intrusion prevention systems, antivirus, etc.
- Identifies bad behavior in web traffic, email, and files rather than trying to match signatures (malware sandboxing)
FireEye technical overview

- FireEye as a Service correlates events observed on FireEye appliances, firewalls, intrusion prevention systems, and other data sources
- Generates high-confidence, specific, and detailed alerts to the UCSF incident response team
- Aids in reconstruction of the “Cyber Attack Kill Chain” and remediation
  - How did the attackers get in, where did they go, what did they do, what did they steal
- Major incident response services
- Components of the system:
  - NX and PX appliances on the UCSF network
  - HX agent software on UCSF managed devices
  - FireEye 24/7 security operations center
  - UCSF incident response team in conjunction with the system owner
* Denotes a detection technology. While not all types of detection appliances are required, at least one type must be present in the environment to facilitate FireEye as a Service.
FireEye Remote Components

FireEye SOC:
FireEye as a Service

Cloud DC:
TAP - Log Aggregation

FireEye On-Premise Components

Perimeter:
NX - Web Detection
Cloud Collector (Virtual) - Network Event Generation

Internal Security Stack:
CM - Alert Aggregation/Management

Customer Network Components

Perimeter Firewall
Network Tap
Core Routing
File Storage
Host Population
E-Mail Gateway

Internet
Next steps

- UCOP mandating use of FireEye system-wide
- Funding requested for FY17 / partial funding from UCOP
- UCD Health and UCI Health intend to implement as soon as possible
- UCSF sharing details of the system with the technical community over the next few months, including hosting a town hall
- Network team preparing for installation of FireEye appliances
- Security incident response team is expanding technical capabilities (new forensic software tools)
- Implementation expected to take 3-6 months