National Institutes of Health
National Research Service Award
(Kirschstein Fellowship: F30, F31, F32)

Information Session
October 18, 2017

Presenters:
Dr. Jim Slauch - Professor of Microbiology and Director of the Medical Scholars Program
Dr. Lori Raetzman – Associate Professor of Molecular & Integrative Physiology
Matt Biehl - Kirschstein Fellow and MD/PhD candidate in Molecular & Integrative Physiology
NIH/Kirschstein
F30, F31, F32 Pre- and Postdoctoral Fellowships
-Nuts and Bolts-

James M. Slauch
Dept of Microbiology
Medical Scholars Program

October 18, 2017
What are we talking about?

- Individual fellowships from the National Institutes of Health
- Who’s eligible?
  - Must be a US citizen or permanent resident (at the time of the award)
- Predocs: 5 Years
- MD/PhDs: 6 years including some Med school after PhD.
  - Must apply within 48 mnths of joining the program
- Postdocs: 3 years
  - Years funded by other NIH training grants are subtracted
How to Start

• Give yourself plenty of time ~6 weeks
  – More if your project involves animals or humans

<table>
<thead>
<tr>
<th>Submission</th>
<th>April 8</th>
<th>August 8</th>
<th>December 8</th>
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<tbody>
<tr>
<td>F30 F31 F32</td>
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<tr>
<th>Scientific Merit Review</th>
<th>June - July</th>
<th>Oct - Nov</th>
<th>Feb - March</th>
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<tr>
<th>Advisory Council Review</th>
<th>Aug or Oct</th>
<th>Jan</th>
<th>May</th>
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<table>
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<tr>
<th>Earliest Project Start Date</th>
<th>Sept or Dec</th>
<th>April</th>
<th>July</th>
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Program Announcements

http://grants.nih.gov/grants/guide/search_results.htm?scope=pa

• Can be confusing

• F31s
  – PA-16-309 Individual PhD Fellowships
  – PA-16-308 PhD or MD/PhD Fellowships for under-represented minority or disabled students

• F30s
  – PA-16-306 MD/PhD Fellowships (for institutions w/o MSTPs)

• F32s
  – PA-16-307 Postdoctoral Fellowships
  – PA-12-261 AHRQ – Healthcare research and quality
How to Start

• Read the Program Announcement CAREFULLY

• Why different PAs?
  – Not all Institutes participate in each PA
  – Institute-specific rules

• Download the Application Instructions
  – Fellowship (F) Instructions
  – Read it carefully – you don’t need to read it all

• Note NEW FORMS as of Jan 2018 (E vs D)

• The PA trumps the general instructions
How to Start

• Other useful documents – on the Grad College Web site
  – Power points from today
  – Guidance for Preparing and Submitting NIH Kirschstein Fellowship Applications through Grants.gov – prepared by OSPRA
  – NRSA Fellowship Application Checklist – prepared by Slauch
  – Might not be up-to-date. Always follow the NIH instructions.
How to Start

• Contact your “Grants Administrator” in your Dept
  – Talk to your thesis advisor – who do they go to when filling out an NIH grant?
• The Grants Administrator should download the application package and fill out all the detailed stuff
Register in the ERA Commons

• All PIs (that’s you) need to interact with the NIH via the “Commons”

• Go to the OSP website
  http://sponsoredprograms.illinois.edu/
  – Click on “Contact Us”
  – Click on “Submit to OSP”
  – Click on “Request NIH Commons access”

  • You will need:
    – UIN
    – First & Last Name
    – Date of birth
    – Email
The Application

- The application is a fancy PDF file
The Application

• The application is a fancy PDF file

1. Type of Submission
   Check one of the Type of Submission boxes. If this submission is to change or correct a previously submitted “New” application, check the Changed/Corrected Application box and enter the Grants.gov tracking number in the Federal Identifier field. If this submission is to change or correct a “resubmission,” “renewal” or “continuation” application, leave the Federal Identifier field as previously filled with the existing identifier (e.g., Award number). Do NOT insert the Grants.gov tracking number in these cases.
   Unless requested by the agency, applicants may not use this to submit changes after the closing date. This field is required.
   Pre-Application. Unless specifically noted in a program announcement, the Pre-application option is not used by NIH and AHRQ.
   Changed/Corrected Application: This box must be used if you need to submit the same application again because of corrections for system validation errors or if a portion of the application was lost or distorted during the submission process. This option is for correcting system validation errors only and may not be used to include last minute changes to any of the PDF attachments. When submitting a Changed/Corrected Application:
   - If submitting after the submission date, include an explanation in the Cover Letter Component. Note that if you are submitting additional grant application materials after the submission date some special guidelines may apply. See NIH Guide Notice NOT-OD-08-082 (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-082.html) for the NIH Policy on Submission of Additional Grant Application Materials.
   - When you check the Changed/Corrected Application box, Item 4. Federal Identifier becomes a required field.
   - When submitting a Changed/Corrected Application for a “New” Type of Application (Item 8 = New), in the Federal Identifier field (Item 4) enter the Grants.gov tracking number for the previous application that you are correcting. If you are unable to recall the Grants.gov tracking number, enter “N/A.”
   - When submitting a Changed/Corrected Application for a “Resubmission” or “Renewal” Type of Application (Item 8 = Resubmission or Renewal), in the Federal Identifier field (Item 4) enter the IC and serial number of the previously assigned application/award number (e.g., CA987064).
   - Do not use the Changed/Corrected Application box to denote a submission of a resubmission or amended application. That will be indicated in item 8. Type of Application.

There are lots of directions for each item
The Application

• Some info is entered directly – the important stuff is uploaded
The Application

• Some info is entered directly – the important stuff is uploaded

Do NOT put page numbers on the PDFs you create, but do put titles

Note that even boxes that are not yellow may be “required”
Letters of Recommendation

• Ask for your letters at least three weeks in advance (a month’s notice is better).

• Provide your letter writers with a resume as well as a summary of your research interests. They don’t need to see the proposal per se.

• The LORs are submitted electronically. Follow the instruction in section 5.4 of the “Application Guide”.

• You are allowed 3-5 LORs – NOT your advisor or co-advisor.

• You must list the referees BOTH in Item 12 AND in the cover letter. - check this
Letters of Recommendation

• Send an email to each letter writer.
• Thank you for agreeing to write me a letter of recommendation for my NRSA application. The due date for my application is [August 8]. The letter must be submitted via the eRA Commons at: https://commons.era.nih.gov/commons/reference/submitRefereeInformation.jsp

• The additional information you need is:
  – PI Commons User ID: [Your Commons ID]
  – PI First and Last Name: [Your first and last name]
  – Funding Opportunity Announcement Number: [The appropriate PA number, eg, PA-16-306]

• Provide instructions:
  – https://grants.nih.gov/sites/default/files/instructions-for-fellowship-referees.docx
Stipend and Tuition Projection

• Your grant administrator will provide a projection of tuition and fees for the next five to six years. This will differ depending on your graduate program.

• You will also need to show this table to the Graduate College Fellowship Office. Note that this projection is your best estimate and you are not limited by what you say here. The Univ actually bills the NIH later based on real costs.

D. Budget

All Fellowship Applicants:

1. *Tuition and Fees:
   - [ ] None Requested
   - [ ] Funds Requested:

   Year 1
   Year 2
   Year 3
   Year 4
   Year 5
   Year 6 (when applicable)

   Total Funds Requested:
Choose a Study Section

- [http://public.csr.nih.gov/StudySections/Fellowship/Pages/default.aspx](http://public.csr.nih.gov/StudySections/Fellowship/Pages/default.aspx)

<table>
<thead>
<tr>
<th>Study Section</th>
<th>Description</th>
<th>Scientific Review Officer (SRO)</th>
</tr>
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<tbody>
<tr>
<td>F01A</td>
<td>Fellowships: Brain Disorders and Related Neurosciences</td>
<td>Movsesyan, Vilen</td>
</tr>
<tr>
<td>F01B</td>
<td>Fellowships: Learning and Memory, Language, Communication and Related Neurosciences</td>
<td>Gillmor, Susan</td>
</tr>
<tr>
<td>F02A</td>
<td>Fellowships: Behavioral Neuroscience</td>
<td>Qin, Mei</td>
</tr>
<tr>
<td>F02B</td>
<td>Fellowships: Sensory and Motor Neurosciences, Cognition and Perception</td>
<td>Low, Sharon</td>
</tr>
<tr>
<td>Etc...........</td>
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</tbody>
</table>
Get Feedback

• Your advisor!
• Others: Fellow students, post-docs, committee members...
• After your advisor has signed off on it:
  – Ken Vickery & Karen Ruhleder in the Grad College
Application Sign-Off

• Several university officials must sign off on your application.
• You must allow sufficient time for each of these entities to act.
• These individuals are not competent to judge the actual proposal. So although you need a “complete” application to get signatures, you can continue to make minor edits to the proposal and upload new PDF files into the master PDF UNTIL it is time to send it to OSPRA.
• The Grants Administrator should fill out a “Transmittal Form”
• For fellowship applications, the Grad College Fellowship Office also needs to sign off. This is not explicitly listed on the transmittal form; rather this is an “other signature if required.”
• Submit completed application that has been reviewed by the appropriate offices (with help from your Grants Administrator) to OSPRA (at least 48 hours in advance).
COVER LETTER

Application title:

Really cool stuff that you should fund

Funding Opportunity:

PA-16-309  Ruth L. Kirschstein National Research Service Award (NRSA)  
Individual Predoctoral Fellows (Parent F31)

Please assign this application to the following:

Institutes/Centers

National Institute on Alcohol Abuse and Alcoholism – NIAAA  
National Institute on Drug Abuse - NIDA

Scientific Review Groups

Behavioral Neuroscience - F02A-J (20)

Explain why you asked for this Institute and study section. This could include a statement that you spoke to the Program Officer or SRO and agreed that this was the best fit. Simple example “The proposal is focused on the bacterial pathogen Salmonella, specifically related to the genetic and biochemical mechanisms of virulence regulation.”

Letters of recommendation will be sent from:

Lori Raetzman  
Dept of Molecular and Integrative Physiology  
University of Illinois

Albert Einstein  
Institute for Advanced Study  
Princeton University

Thank you,

Jane Doe, PI

Also fill out the “Assignment Request Form”
Other Important Points

• This is a “training grant”. The NIH training record of your thesis advisor matters.

• Ideally, your advisor is:
  – Tenured
  – NIH Funded
  – Has successful PhDs out in the world doing good

• If not, fear not
  – Seek out a “co-advisor” that meets the above criteria
Good Luck!
CONTENT FOR F30/F31 NRSA APPLICATIONS

Lori Raetzman and Matt Biehl

Department of Molecular & Integrative Physiology

October 18, 2017
MSP website: https://www.med.illinois.edu/MSP/Students/Fellowships/

Participating Institutes:
- National Cancer Institute (NCI)
- National Eye Institute (NEI)
- National Heart, Lung, and Blood Institute (NHLBI)
- National Human Genome Research Institute (NHGRI)
- National Institute on Aging (NIA)
- National Institute on Alcohol Abuse and Alcoholism (NIAAA)
- National Institute of Allergy and Infectious Diseases (NIAID)
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
- Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
- National Institute on Deafness and Other Communication Disorders (NIDCD)
- National Institute on Dental and Craniofacial Research (NIDCR)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- National Institute on Drug Abuse (NIDA)
- National Institute of Environmental Health Sciences (NIEHS)
- National Institute of Mental Health (NIMH)
- National Institute of Neurological Disorders and Stroke (NINDS)
- National Institute on Minority Health and Health Disparities (NIMHD)
- National Library of Medicine (NLM)
- National Center for Complementary and Integrative Health (NCCIH)
MAKE SURE THE PROJECT FITS THE MISSION OF THE NIH INSTITUTE YOU ARE APPLYING TO

- Preparing an application is a very significant investment of time by you AND your advisor. Need to be aware of this in determining probability of success.
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- Sponsors and Collaborators
- Research Project
- Training Plan and Potential
- Institutional Environment (necessary, but usually less critical as a distinguishing factor)
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- Sponsors and Collaborators
- Research Project
- Training Plan and Potential
- Institutional Environment
APPLICANT IS EVALUATED BY:

- **Academic credentials**: grades, productivity, and quality of undergraduate institution - candidates from same school (i.e. UI) may be at disadvantage
- **Demonstrated scientific accomplishment**: publications, presentations; authorship on peer-reviewed paper is useful but not essential
- **Past funding**: e.g. graduate fellowship, or slot on NIH training grant
- **Letters of reference** (should try to make sure they are excellent): previous mentors/research advisors; try to obtain from both undergrad and grad
<table>
<thead>
<tr>
<th></th>
<th>Fellowship Applicant Biographical Sketch Format Page – Forms Version C (use only for individual pre- and post-doctoral fellowships) (5 page max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Personal Statement</td>
</tr>
<tr>
<td>B.</td>
<td>Positions and Honors</td>
</tr>
<tr>
<td>C.</td>
<td>Contributions to Science</td>
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<tr>
<td></td>
<td>- make sure to list abstract from meetings attended in addition to papers and review articles</td>
</tr>
<tr>
<td>D.</td>
<td>Scholastic Performance</td>
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</tbody>
</table>
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- **Sponsors and Collaborators**
- Research Project
- Training Plan and Potential
- Institutional Environment
KEY SPONSOR CRITERIA

- Research support available: grants and funding sources to your sponsor/advisor
- Productivity: publications
- Mentoring record: previous and current fellows and trainees
- If your primary sponsor is not strong in all areas, seek out a co-sponsor. Make sure there is a good research fit.
A STRONG COLLABORATOR OF YOUR SPONSOR CAN ALSO BE HELPFUL

- Could provide evidence of additional methodology that they are experts in and that you will benefit from
- They could provide additional mentoring opportunities, e.g. if they are an MD
- They could provide evidence of opportunity for additional training in a more clinical setting
- Need Letter of Support and Biosketch from a collaborator – your advisor/sponsor should draft such a letter for them
COLLABORATORS

Reviewers want to know EXACT details about collaboration

Matthew will also be trained in the lab of Dr. Jongsook Kim Kemper in techniques relevant to Aim 3 of this proposal. The abilities of Sunmi Seok, a postdoctoral fellow in the Kemper lab, to conduct molecular techniques including chromatin immunoprecipitation have been highly touted by Dr. Kemper and to date, she already has four publications utilizing previously mentioned techniques in the Kemper lab. Her expertise has been offered by Dr. Kemper, and Matthew and Sunmi have already been in contact to establish a strong rapport vital to the successful completion of the proposed Aim 3. Although Dr. Kemper predicts that Dr. Seok will be in her lab for the duration of Matthew’s project, she will ensure that a senior person is available to train Matthew and offer assistance. Dr. Kemper will also meet with Matthew to discuss progress as a member of his thesis committee and individually as necessary. Matthew will also attend Dr. Kemper’s relevant lab meetings.
SPONSOR and COLLABORATOR’s BIOSKETCHES

NIH biosketch format including:

- **A. Personal statement:** research interests, past research accomplishments (papers, grants), number of students mentored, student publications, student placements
- **B. Positions and Honors**
- **C. Contribution to Science**
- **D. Research Support**

- 5 pages maximum
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- Sponsors and Collaborators
- Research Project
- Training Plan and Potential
- Institutional Environment
APPLICANTS BACKGROUND AND GOALS FOR FELLOWSHIP TRAINING

Three Sections:
- Doctoral Dissertation and Research Experience
- Training Goals and Objectives
- Activities Planned Under This Award

Length: Six pages
DOCTORAL DISSERTATION AND OTHER RESEARCH EXPERIENCE

- Outline previous research experience
  - Not just techniques learned but questions hypothesized and answered
  - Summarize meetings attended, published papers
TRAINING GOALS AND OBJECTIVES

• Define applicant career goals
  - Relate to research proposed

• How will training plan assist and guide applicant career goals
  - Use specifics: techniques used, unique university or program environment that will foster applicant goals; opportunities for exposure to clinical mentors
It is my goal as a researcher to further develop my abilities to become a more rigorous scientist. This will involve mastering bench techniques I have previously acquired, as well as learning novel approaches to conducting research. Aside from bench work, it will also be important to further develop myself in the art of formulating and testing hypotheses, communicating scientific research in both oral and written form, and also integrating my work into the broader scientific field. I also wish to attend a number of international conferences which will not only expose me to exciting advancements in my own field of study, but also the interesting research that is related to, but lies just outside of my field. Ultimately, my goal is to establish myself as an independent, NIH funded investigator researching developmental neuroendocrine diseases directly related to human health, like obesity. Receiving this fellowship would undoubtedly strengthen each of these aspects of my career and afford me the best opportunities to establish my career early on and ensure success for the future.
ACTIVITIES PLANNED UNDER THIS AWARD

- Detailed plan for each year and timeline for entire award
  - Include when each Aim will be accomplished and all courses, professional development and training activities
- Name specific research techniques you will learn and how you will learn them
  - Look for training courses, establish collaborations
- List specific professional development opportunities
  - Should include meetings, workshops, seminars
  - Find unique things tailored to your career trajectory
F30 APPLICANTS:

- Explanation of MSP program (most reviewers familiar with MSTP programs)
- Outline exactly when you will take M1 courses and how you will split up your time (make sure it is reasonable)

<table>
<thead>
<tr>
<th>Year</th>
<th>Research</th>
<th>Courses</th>
<th>Clinical</th>
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<tbody>
<tr>
<td>First</td>
<td>80%</td>
<td>20% (M1)</td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>80%</td>
<td>15% (M1)</td>
<td>5% (CPP)</td>
</tr>
<tr>
<td>Third</td>
<td>20%</td>
<td>80% (M2 &amp; STEP1)</td>
<td></td>
</tr>
<tr>
<td>Fourth</td>
<td>20%</td>
<td>80% (M3)</td>
<td></td>
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</table>
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- Sponsors and Collaborators
- Research Project
- Training Plan and Potential
- Institutional Environment
SPONSOR AND CO-SPONSOR STATEMENT

- **Research support**: table form
- **Previous trainees**: describe 5
- **Training Plan, environment, research facilities**: next slide
- **Number of trainees to be supervised**: PI will have time for you
- **Applicant’s qualifications and potential for a research career**: next slide

- Length: Six pages
TRAINING PLAN AND ENVIRONMENT

- **Seminars and courses**: taken and planned
- **Mentoring**: how often will you meet with your sponsor and collaborators, what you will glean from these meetings
- **Scientific meetings**: attended and planned
- **Department/program info**: prestige of faculty/department, seminars available to attend; when will you present in addition to group meetings (e.g. annual departmental presentations), student support activities
- **Medical Scholars Program (F30 applicants)**: history and success of the program; annual symposia; meetings
- **Environment, facilities and equipment**: lab equipment (everything needed for proposed studies), core facilities, facts about UIUC strengths
- **Research and professional development skills to be learned**: relate to career goals
The MSP at UIUC offers a number of opportunities while receiving the Ph.D. to facilitate current clinical interests, as well as develop new ones. Through the number of interest groups and clinical conferences students are invited to, they are exposed to varying fields of medicine. Matthew’s current interests lie in neurology and a number of practicing neurologists at the Carle Foundation Hospital associated with the medical school accept students for the school’s Clinical Practice Preceptorship. One of these physicians, Dr. Daniel Llano, is an active M.D./Ph.D. who Matthew would benefit greatly from interacting with should his interests continue to lie in the field. Before Matthew makes the full transition to his clinical years of training, he will also gain experience from helping with the previously mentioned Hermes clinic.
APPLICANT’S QUALIFICATIONS AND POTENTIAL FOR A RESEARCH CAREER

• each sponsor should write a short “letter of recommendation” – pull together how their training and expertise will guide applicant training
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- Sponsors and Collaborators
- Research Project
- Training Plan and Potential
- Institutional Environment
RESEARCH PROJECT

Specific Aims page:

- **Disease your research addresses and its impact on human health:** prevalence, cost, morbidity
- **What is NOT known:** e.g. mechanisms of biological processes that impact the disease; how to design targeted therapeutic
- **Your research question/hypothesis**
- **Brief summary of preliminary data:** how it fits into question and what is known
- **Specific Aims:** experimental design to test hypothesis

- Length: One page
SPECIFIC AIMS

EXAMPLE

Specific Aim 1. Determine the birthdate and lineage of feeding circuit and reproductive neurons of the ARC.

Specific Aim 2. Determine the role of $Rbpj$-κ dependent Notch signaling on the development of Kisspeptin neurons in the ARC.

Specific Aim 3. Determine the mechanism by which Notch signaling directs differentiation of ventral HVZ progenitors.
RESEARCH PROJECT

○ Background and significance
  • What is the major question
  • Relevance to human health
  • What will be accomplished if aims are achieved
  • How will these studies change the field
  • How is this approach innovative

○ Preliminary studies
  • Detailed explanation of figures and results: how they fit into research question and lead to hypothesis

○ Research approach: expand on aims
  • Overview, rationale and design of each aim
  • Anticipated results, potential pitfalls and alternative approaches

○ Length: Six pages
RESEARCH PROJECT

NIDDK Mission Statement:
“The mission of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is to conduct and support medical research and research training and to disseminate science-based information on diabetes and other endocrine and metabolic diseases; digestive diseases, nutritional disorders, and obesity; and kidney, urologic, and hematologic diseases, to improve people’s health and quality of life.”

Research Training Plan:
These studies are significant because a better understanding of ARC development, especially feeding circuit neurons, will give us further insight into possible factors that have contributed to the perpetuation of the obesity epidemic. Studies have shown that maternal obesity and environment, including hyperinsulinemia and elevated levels of leptin, leads to obesity in offspring (13). The underlying molecular mechanism linking maternal environment to alterations in offspring neuroendocrine development is currently unknown.
RESEARCH TRAINING PLAN TIPS

- Break up sections with headings
  - Use bold, italics, underlining to emphasize points

- Don’t fill up all the available space
  - Leave blank lines between sections if you can

- A picture is worth a thousand words

- Your advisor/sponsor should provide advice and examples of previous grants
PROJECT SUMMARY

- Significance of project and relevance with to human health
- Brief description of what is known about the question you are addressing
- How your proposal will address unknown aspects and connect to human health
- This is published on a public NIH database

- Length: 30 lines
PROJECT NARRATIVE

- Very brief description of question you are addressing
- What results from your proposal will add to knowledge about particular disease or question
- Lay person should be able to understand

- Length: Three sentences
CORE REVIEW CRITERIA

Major criteria:
- Fellowship Applicant
- Sponsors and Collaborators
- Research Project
- Training Plan and Potential
- Institutional Environment
SELECTION OF SPONSOR AND INSTITUTION

- Prestige and reputation of university and applicant’s affiliated program
- How selection of university/program fits into applicant research interest and training plan for future career
- How sponsor’s research program and field of expertise fits exactly your goals

Length: One page
DESCRIPTION OF INSTITUTIONAL ENVIRONMENT AND COMMITMENT TO TRAINING

- Describe the facilities and resources available for research
- Document a strong research program
- List intellectual interactions available (seminars, presentations, lab meetings, courses, journal clubs)
- Facilities and resources for career enhancement
- For F30/F31, describe the program (structure, milestones, courses, teaching, average time to degree, how students are monitored)
- For F30, describe clinical activities during graduate years and research activities during clinical years
EQUIPMENT

- List (in outline form) the equipment available to you during your training and where it is located
  - **Common lab facilities**: list all *common* equipment including microscopes and data processing equipment
  - **Core facilities**: histology, sequencing, flow cytometry
  - Your advisor probably has “boiler plate” documents for these

FACILITIES AND OTHER RESOURCES

- Describe the scientific environment, especially what is unique
  - **Institutional support**: animal care and use, trainee travel grants
  - **Physical resources**
  - **Personnel resources**: collaborators, collegiality (MCBees)
Resource sharing plan

- Ex. Any regents or animals should used in studies proposed should be shared if unique to your study— a couple of sentences (get this from your sponsor)
STUDY SUBJECTS

- **VETEBRATE ANIMALS SECTION** (if applicable it is mandatory)

- **HUMAN SUBJECTS SECTION** (if applicable it is mandatory)

- Get this information from your sponsor. You *should* be covered under their protocols. Tailor to your grant.
RESPONSIBLE CONDUCT OF RESEARCH

- Training plan for NIH ethics requirement
  - Ex.: If plan to take or have taken MCB ethics course requirement, outline topics covered and how they were covered (texts read, exercises etc.)

- List any other possible ethics courses, workshops or ethics discussions or mentorship with sponsors

  - Length: One page
RESPECTIVE CONTRIBUTIONS

- Delineate applicant role in obtaining preliminary data generated for proposal vs. others

- Applicant role in preparing grant application

- Length: One page