

Fall
2017

F-Troop

HANDBOOK
MCMANUS, LINDA M

F-Troop

A hands-on writing workshop targeted to pre- and postdoctoral trainees

F-GRANTS: FIVE COMPONENTS



Wednesdays 5 PM – 7 PM

Pathology Conference Room – MED 3.331.5B

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PLANNING FOR NIH FELLOWSHIP APPLICATION (DECEMBER 8 DEADLINE)

Wednesday	Discussion/Goal to Achieve									
Sept 20	INTRODUCTIONS / F-grant and schedule of events NIH Institutes / Scope & Mission eRA									
Sept 27	NIH Funding Opportunities/Program Announcements Biosketch (5 pages)									
Oct 4	NIH CSR / Study Sections / Review Process Specific Aims (1 page)									
Oct 11		A. Doctoral Dissertation/Research Experience (~ 2 pages)								
Oct 18		B. Training Goals and Objectives (~ 1-2 pages)								
Oct 25		C. Activities Planned Under Award (~ 1-2 pages with table)								
Nov 1	Institutional Environment and Commitment to Training (2 pages) This must include Additional Educational Information if F30 or F31 Application									
Nov 8	<p>Selection of Sponsor and Institution (1 page) COP (Internal document...stays here!) Formally request Letters of Reference (LORs). Provide invitees with:</p> <table border="1" data-bbox="358 1104 1487 1272"> <tr> <td data-bbox="358 1104 646 1150">❖ Application Title</td> <td data-bbox="646 1104 1487 1150">• Your eRA commons name and FOA number</td> </tr> <tr> <td data-bbox="358 1150 646 1197">❖ Your Biosketch</td> <td data-bbox="646 1150 1487 1197"></td> </tr> <tr> <td data-bbox="358 1197 646 1243">❖ Specific Aims</td> <td data-bbox="646 1197 1487 1243"></td> </tr> <tr> <td colspan="2" data-bbox="358 1243 1487 1272">•DUE DATE•DUE DATE•DUE DATE•DUE DATE•DUE DATE•</td> </tr> </table>		❖ Application Title	• Your eRA commons name and FOA number	❖ Your Biosketch		❖ Specific Aims		•DUE DATE•DUE DATE•DUE DATE•DUE DATE•DUE DATE•	
❖ Application Title	• Your eRA commons name and FOA number									
❖ Your Biosketch										
❖ Specific Aims										
•DUE DATE•DUE DATE•DUE DATE•DUE DATE•DUE DATE•										
Nov 15	Responsible Conduct of Research (RCR) (1 page) Mentor/Co-mentor Biosketch (modified to include training) Consultants (with biosketch & letter detailing their willingness & activities; max = 6 pages for letters)									
Nov 22	Respective Contributions (1 page) Mentor/Co-mentor Sponsor's Statement (6 pages) COP and Budget • & • Introduction (if revised application) PHS Assignment Request (grant page in Cayuse)									
Nov 29	Narrative (a few sentences , in lay language) Project Summary/Abstract (30 lines) Resources/Equipment (unlimited pages)									
December 6	Sharing Plan & Animal or Human Subjects (if applicable) Cover Letter (Provide list of individuals who will serve as references)									
December 8	!!!DEADLINE!!!									

ABBREVIATIONS (LEARN THE LINGO)

For a complete list of NIH abbreviations, see <https://grants.nih.gov/grants/glossary.htm>

MOST COMMONLY USED	
eRA	Electronic Research Administration (NIH)
Cayuse	Electronic Submission Software for applications to NIH
COP	Certificate of Proposal (UT Health San Antonio)
CSR	Center for Scientific Review at NIH
FOA	Funding Opportunity Announcement
I/C	Institute/Center(s) at NIH
NCI	National Cancer Institute
NHLBI	National Heart, Lung, Blood Institute
NIA	National Institute of Aging
NIDCR	National Institute of Dental and Craniofacial Research
NIH	National Institutes of Health
OER	Office of Extramural Research
OPA	Office of Postdoctoral Affairs (UT Health San Antonio)
OSP	Office of Sponsored Programs (UT Health San Antonio)
PA	Program Announcement
PID	Project Identification Number (UT Health San Antonio)
RCR	Responsible Conduct of Research
RFA	Request for Applications
SF424	NIH <i>Universal</i> Grant Application Instructions
SRO/SRA	Scientific Review Officer (NIS Study Section Administrator)

FORMS VERSION D SERIES
UPDATED MARCH 24, 2017



GENERAL INSTRUCTIONS FOR NIH AND OTHER PHS AGENCIES

SF424 (R&R) Application Packages

Guidance developed and maintained by NIH for preparing and submitting applications via Grants.gov to NIH and other PHS Agencies using the SF424 (R&R)

Download full instructions:
<http://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/general-forms-d.pdf>

FORMS VERSION D SERIES
UPDATED MARCH 24, 2017



FELLOWSHIP INSTRUCTIONS FOR NIH AND OTHER PHS AGENCIES

SF424 (R&R) APPLICATION PACKAGES

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Download Full Instructions:

<https://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/fellowship-forms-d.pdf>

MAJOR SECTIONS OF INDIVIDUAL NIH FELLOWSHIP (F) PROPOSALS

[See SF424 for additional details]

(numbers below reference sections from the NIH instructions)

- ❖ Project Summary/Abstract (30 lines)
- ❖ Biosketches (trainee, mentor and co-mentor, consultants, advisory committee); form; 5 pages)
- ❖ Research Training Plan
 1. Introduction, only if revision/resubmission (1 page)
 3. Specific Aims (1 page)
 4. Research Strategy (6 pages)
 - A. Significance
 - B. Innovation
 - C. Approach
 - Bibliography (no page limit)
- ❖ Facilities and Other Resources (no page limit)
- ❖ Resource Sharing Plan (if applicable)
- ❖ Application for Concurrent Support (if applicable)

Special Additional Parts:

2. Applicant's Background and Goals (6 pages)
 - A. Doctoral Dissertation and Research Experience
 - B. Training Goals and Objectives
 - C. Activities Planned Under This Award
5. Respective Contributions (1 page)
6. Selection of Sponsor & Institution (1 page)
8. Training in the Responsible Conduct of Research (1 page)
9. Sponsor & Co-Sponsor Statements (6 pages)
 - A. Research support available
 - B. Sponsor/Co-Sponsor's Previous fellows/trainees
 - C. Training Plan, Environment, Research Facilities
 - D. Number of Fellows/trainees during fellowship
 - E. Applicant's qualifications & potential for a research career
10. Letters of Support from Collaborators, Contributors, and Consultants (6 pages maximum)
11. Description of Institutional Environment and Commitment to Training (2 pages). For F30 and F31 applications, Additional Educational Information provided only is required and is not prepared by applicant. For F32 applications, section is prepared by the applicant.

Appendix items:

- ❖ Not generally allowed (see [NOT-OD-16-129](#))

Other 'stuff':

- ❖ Cover letter (from applicant) to indicate the individuals (in a list) who will provide letters of recommendation
- ❖ Institutional letter if application requests consideration as a diversity application

APPLICANT BIOGRAPHICAL SKETCH

Use only for individual pre-doctoral and postdoctoral fellowships, dissertation research grants (R36), and Research Supplements to Promote Diversity in Health-Related Research (Admin Suppl). DO NOT EXCEED FIVE PAGES.

NAME:

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE:

EDUCATION/TRAINING *(Most applicants will begin with baccalaureate or other initial professional education, such as nursing. Include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	START DATE MM/YYYY	END DATE <i>(or expected end date)</i> MM/YYYY	FIELD OF STUDY

NOTE: The Biographical Sketch may not exceed five pages. Follow the formats and instructions below.

A. PERSONAL STATEMENT

Briefly describe why you are well-suited for your role(s) in this project. Relevant factors may include: aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific environment; and/or your past performance in this or related fields.

You may cite up to four publications or research products that highlight your experience and qualifications for this project. Research products can include, but are not limited to, audio or video products; conference proceedings such as meeting abstracts, posters, or other presentations; patents; data and research materials; databases; educational aids or curricula; instruments or equipment; models; protocols; and software or netware.

Note the following additional instructions for ALL applicants/candidates:

- If you wish to explain factors that affected your past productivity, such as family care responsibilities, illness, disability, or military service, you may address them in this "A. Personal Statement" section.
- Indicate whether you have published or created research products under another name.
- You may mention specific contributions to science that are not included in Section C. Do not present or expand on materials that should be described in other sections of this Biosketch or application.

R36 Applicants (PD/PI) Only:

In addition to the information outlined above, include a description of your career goals and intended career trajectory, as well as your interest in the specific areas of research designated in the FOA.

Diversity Supplement Candidates Only:

In addition to the information outlined above, include a description of your general scientific achievements and/or interests, as well as your specific research objectives and career goals. Indicate any source(s) of current funding.

This form is available at: <http://grants.nih.gov/grants/forms/biosketch.htm>

B. POSITIONS AND HONORS

List in **chronological order** the positions you've held that are relevant to this application, concluding with your present position. For individuals who are not currently located at the applicant organization, include the expected position at the applicant organization and the expected start date.

List any relevant academic and professional achievements and honors. In particular:

- Students, postdoctorates, and junior faculty should include scholarships, traineeships, fellowships, and development awards, as applicable.
- Clinicians should include information on any clinical licensures and specialty board certifications that they have achieved.

Positions and Employment

Other Experience and Professional Memberships

Academic and Professional Honors

List any academic and professional honors that would reflect upon your potential for a research career and qualifications. Include all scholarships, traineeships, fellowships, and development awards. Indicate sources of awards, dates, and grant or award numbers.

C. CONTRIBUTIONS TO SCIENCE

Format:

Briefly describe up to five of your most significant contributions to science. The description of each contribution should be no longer than one half page, including citations.

While all applicants may describe up to five contributions, graduate students and postdoctorates may wish to consider highlighting two or three they consider most significant.

Content:

For each contribution, indicate the following:

- the historical background that frames the scientific problem;
- the central finding(s);
- the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology;
- your specific role in the described work.

For each contribution, you may cite up to four publications or research products that are relevant to the contribution. If you are not the author of the product, indicate what your role or contribution was. Note that while you may mention manuscripts that have not yet been accepted for publication as part of your contribution, you may cite only published papers to support each contribution. Research products can include audio or video products (see the NIH Guide Notice on [Guidance for Videos Submitted as NIH Application Materials](#)); conference proceedings such as meeting abstracts, posters, or other presentations; patents; data and research materials; databases; educational aids or curricula; instruments or equipment; models; protocols; and software or network.

You may provide a URL to a full list of your published work. This URL must be to a Federal Government website (a .gov suffix). NIH recommends using [My Bibliography](#). **Providing a URL to a list of published work is not required.**

Descriptions of contributions may include a mention of research products under development, such as manuscripts that have not yet been accepted for publication. These contributions do not have to be related to the project proposed in this application.

D. ADDITIONAL INFORMATION: RESEARCH SUPPORT AND/OR SCHOLASTIC PERFORMANCE

Pre-doctoral applicants: Using the chart provided, list by institution and year **all** undergraduate and graduate courses with grades. In addition, in the space following the chart, explain any marking system if other than 1-100, A, B, C, D, F, or 0-4.0 if applicable. Also indicate the levels required for a passing grade.

Postdoctoral applicants: Using the chart provided, list by institution and year all undergraduate courses and graduate scientific and/or professional courses relevant to the training sought under this award with grades. In the space following the chart, explain any marking system if other than 1-100, A, B, C, D, F, or 0-4.0 if applicable. Also indicate levels required for a passing grade.

YEAR	SCIENCE COURSE TITLE	GRADE	YEAR	OTHER COURSE TITLE	GRADE

This form is available at: <http://grants.nih.gov/grants/forms/biosketch.htm>

OVERVIEW / CONSTRUCTION OF TYPICAL PROJECT SUMMARY/ABSTRACT

SELF-CONTAINED, CONCISE, AND POWERFUL SUMMARY; must fit within the space limitations (30 lines)

Introduction - ~2-3 sentences to set the stage about the area of research and the nature of the problem to be studied, i.e., why do we care about the problem? <<<<<<<THESE FEW SENTENCES MUST ADDRESS THE IMPORTANCE OF THE AREA TO BE EXAMINED IN THE PROPOSED STUDIES>>>>>>>

Statement of the problem / gap in knowledge that will be filled in the planned studies, *i.e.*, what do you want to learn?

Overall hypothesis

The following aims will address this hypothesis:

Specific Aim #1

Specific Aim #2

Specific Aim #3.

<<<<Methods/approaches to be used to address the Specific Aims are usually BRIEF (or not mentioned) and are summarized at the end of the aims, e.g., molecular and genetic studies will be accomplished using an *in vitro* cell culture system, *i.e.*, primary cultures of human umbilical vein endothelial cells >>>>

Implications of the results to be obtained: **Significance/Innovation/Impact**, *e.g.*, a statement of how will the results of the planned studies add to the body of knowledge to potentially change our understanding. For instance, 'these studies are significant because...' or 'these studies are innovative because ...' or 'these studies will have impact because...'

In addition, brief concluding comment regarding how this training will prepare you for the next step in your career development, *e.g.*, faculty or postdoc, towards your ultimate goal to become an independent investigator

Be careful to limit abbreviations and be sure to *define all abbreviations* when first used.

OVERVIEW / CONSTRUCTION OF TYPICAL SPECIFIC AIMS PAGE

Specific Aims

40,000 ft
view

Succinct statement regarding the overall research area in relation to human health and disease. For example: Cardiovascular disease is the leading cause of death and disability in developed countries and is highly associated with numerous risk factors. These factors include genetics, diet, obesity, cigarette smoking, hypertension...

What's known (this section should include references!)

Gap in knowledge (*i.e.*, what's missing). For example: Despite advances in the diagnosis and treatment of occlusive cardiovascular disease, the mechanisms involved in _____ remain to be established.

~3/8
page

The proposed studies will address this gap by _____. The combined results of these investigations will _____.

The long-term goal of these research efforts will examine the hypothesis that _____. The following Specific Aims will address this hypothesis as follows:

Specific Aim #1: To verb (define, establish, elucidate; avoid examine, characterize, explore.)

Hypothesis:

Rationale and/or Approach:

Specific Aim #2: To verb (define, establish, elucidate etc.)

Hypothesis:

Rationale and/or Approach:

Specific Aim #3: To verb (define, establish, elucidate etc.)

Hypothesis:

Rationale and/or Approach:

~3/8
page

Summary paragraph with restatement of the problem to be addressed and the area/approach of study. For example: In summary, the proposed studies will _____. The proposed studies are *significant* because _____. The planned approach is *innovative* because _____. As a result, these studies will have a significant *impact* on our understanding/approach to _____ and will lead to improved treatments for _____ to reduce the death and disability associated with these devastating disorders. Completion of the proposed studies will also insure the comprehensive research training of the applicant and contribute to the development of a successful career as an independent (clinician) investigator.

~1/4
page

OVERVIEW / CONSTRUCTION OF TYPICAL SPONSOR'S STATEMENT (6 PAGES TOTAL)

Section II - SPONSOR (AND CO-SPONSOR if included) INFORMATION

A. Research Support Available

Include a separate table for Sponsor and Co-Sponsor.

PI	Funding Source	Grant #	Title	Status	Dates	Annual Direct Cost

B. Sponsor's/Co-Sponsor's Previous Fellows/Trainees

Select Trainees for Dr. _____

Trainee	Year of Entry	Prior Institution and Degree	Research Topic	Current Position

Select Trainees for Dr. _____

Trainee	Year of Entry	Prior Institution and Degree	Research Topic	Current Position

Total Previous Trainees

	Pre-doctoral	Postdoctoral
_____ (Sponsor)		
_____ (Co-Sponsor)		

C. Training Plan, Environment, Research Facilities

Training Plan.

Details of elements of the proposed training (planned specific research activities, graduate track/program description, course work, writing/presentation skills, RCR, mentoring). This section ABSOLUTELY must match the plan described by the applicant in other sections of the application. Below is a list of possible/*highly recommended* topics for inclusion.

Lab meetings. How often? Who is present? Who presents? Critique/feedback? Experimental planning?

One-on-one meetings with Sponsor/Co-Sponsor (Mentor/Co-Mentor). If predoctoral, also a good idea to include mention of dissertation committee and planned meetings. If postdoctoral, it is a good idea to have an advisory committee for science and career development.

Professional meetings/conferences.

Coursework.

Medical (or Dental) School, if appropriate in the training plan.

Graduate School.

Required and elective courses are as follows:

	2018	2019	2020	2021	2022	2023
Course name/number						
Course name/number						
Course name/number						

Seminars and Journal Clubs.

Required Seminars/Journal Club
Name (meeting frequency)
Name (meeting frequency)

Networking opportunities for interaction with other groups and scientists, both local and beyond.

Environment.

Research Facilities.

D. Number of Fellows/Trainees to be Supervised during the Fellowship

Describe the rank/status of each, *e.g.*, two graduate students (1 PhD and 1 MS), 1 postdoctoral fellow, 1 rotation student each two months, 1 visiting faculty, etc.

E. Applicant’s Qualifications and Potential for a Research Career

This is where the sponsor/co-sponsor provides glowing comments about the awesome applicant.

APPLICANT'S BACKGROUND AND GOALS

A. Doctoral Dissertation/Research Expertise

Undergraduate Research University of Anywhere Joe Schmoe, PhD, mentor 2001-2002

As an undergraduate student majoring in microbiology, I was selected for a NIH-sponsored summer undergraduate research fellowship (SURF), my first experience in the conduct of basic biomedical research. The laboratory of Dr. Schmoe was focused on _____. The hypothesis for my project was _____ and included activities in tissue culture, PCR, and immunohistochemistry. I observed that _____ cells treated with _____ expressed _____ as demonstrated by both PCR and immunohistochemistry. Others in the laboratory confirmed protein expression by gel electrophoresis/Western blot. Collectively, these findings indicated that _____ and suggest that _____. In addition to specific research techniques, I learned fundamental skills in research including documentation and maintenance of laboratory records, variability and reproducibility of research findings, and presentation of science. I participated in the poster presentations by SURF students at University of Anywhere and received a first place award. My contributions to this research project were recognized, as I was included as a co-author of a publication describing these research findings.

Or

Graduate Research Rotations University of Anywhere Joe Schmoe, PhD, mentor 2003-2004

Or

Dissertation Research University of Anywhere Joe Schmoe, PhD, mentor 2008-2013

Or

Postdoctoral Fellowship University of Anywhere Joe Schmoe, PhD, mentor 2014-present

For each research experience, use the entry format above and:

- Describe experience, analytical skills, and productivity
 - Describe research question asked
 - Your role
 - Results
 - Conclusions drawn
 - Published? Presentations? Awards received?
- Predocs: Start with high school / undergrad
- Postdocs: Start with Grad School (unless you were a superstar undergrad)

Pointers:

- This is not a resume
 - Use complete sentences and transition statements
 - Include conclusions / interpretation
- Describe how this experience
 - Makes you a better candidate
 - Demonstrated productivity
 - Training potential
 - Dedication to my field, yada yada yada
 - Relates to, or prepares you for your current project

SAMPLE TIMELINE FOR F30 APPLICATION (ADJUST ACCORDINGLY FOR F31/F32)

ACTIVITIES PLANNED UNDER THIS AWARD							
		%					
		2018	2019	2020	2021	2022	2023
	Biology of Aging CSBL 6048	2	-	-	-	-	-
	Graduate Colloquium CSBL 5089	1	-	-	-	-	-
	Scientific Writing CSBL 5077	1	-	-	-	-	-
	Practicum in IACUC Procedures TSCI 6100	-	1	-	-	-	-
	Responsible Conduct of Patient Oriented Clinical Research TSCI 5070	-	-	1	-	-	-
	Research CSBL 6097	84	77	-	-	-	-
	Dissertation CSBL 7099	-	-	85	81	-	-
	Cellular and Structural Biology Departmental Seminar Series (weekly)	1	1	1	1	-	-
	Biology of Aging Seminar Series (weekly)	1	1	1	1	-	-
	Biology of Aging Journal Club (weekly)	1	1	1	1	-	-
	MD/PhD Bench to Bedside Seminar (monthly)	0.5	0.5	0.5	0.5	0.5	0.5
	Medicine Grand Rounds (weekly)	1	1	1	1	-	-
	Spotlight on Research Integrity (monthly)	0.5	0.5	0.5	0.5	-	-
	Lab (bi-weekly)	0.5	0.5	0.5	0.5	-	-
	Mentors (weekly)	2	2	2	2	-	-
	Dissertation Committee [#]	-	0.5	0.5	0.5	-	-
	Experimental Biology	2	2	2	2	-	-
	MicroRNAs & Human Disease Keystone Symposia	2	-	-	-	-	-
	International Society for Stem Cell Research	-	2	-	-	-	-
	Tissue Repair & Regeneration Gordon Conference	-	-	2	-	-	-
	Myogenesis Gordon Research Conference	-	-	-	2	-	-
	Qualifying Exam ⁺	-	5	-	-	-	-
	Dissertation Proposal [@]	-	5	-	-	-	-
	Dissertation Defense [*]	-	-	-	5	-	-
	Manuscript Preparation	-	-	2	2	2	-
	Clinical Clerkships					93.5	99.5
Totals		100	100	100	100	100	100

- Dissertation committee consists of five persons chosen by the student and mentor and approved by the Committee on Graduate Studies (COGS). Two members of the dissertation committee will be from the biology of aging discipline, one from another department, and one expert in the area of the dissertation research who has no appointment at UT Health San Antonio. Additionally, one member of the MD/PhD advisory committee must serve as an *ex officio* member of the dissertation committee.

+ - Consists of (1) research proposal following the format for an NIH postdoctoral application (Specific Aims, Hypothesis, Background & Significance, Experimental Design, Methods, and Expected Results) on a topic different from the dissertation project, and (2) presentation of research proposal and oral examination by the qualification

examination committee to assess student working knowledge of the biology of aging. The qualification examination committee consists of five members; a chair from the graduate program, two members chosen by the graduate faculty in the biology of aging, and two members chosen by the student in consultation with the chair. The student will pass the qualifying examination if no more than two members of the qualification examination committee vote for failure.

@ - Student must prepare a dissertation proposal in the format of an NIH postdoctoral grant application (Specific Aims, Hypothesis, Background & Significance, Experimental Design, Methods, and Expected Results) and present the proposal to the faculty of the biology of aging discipline in a seminar. The discipline faculty will then discuss and vote on the approval or disapproval of the dissertation proposal. If a majority vote for approval, the student will advance to candidacy.

* - Consists of preparation of bound dissertation, seminar-type presentation, and oral examination. Less than two negative votes by dissertation committee will result in passing.

NOTE: In the 6 page section on Research Strategy, a separate timeline should describe the anticipated plan for the completion of each Specific Aim.

INDIVIDUAL DEVELOPMENT PLAN (IDP)

An Individual Development Plan (IDP) is a tool that outlines career goals and is an 'actionable' plan to move individuals from where they are to where they would like to be. An IDP helps to support, plan, and track professional career development and learning. Used regularly, the IDP insures systematic assessment of strengths and areas for growth that will aid individuals to improve performance, acquire knowledge and skills, and advance towards clearly defined goals. Ideally, an IDP for research trainees is developed with input from the primary research mentor.



Effective October 1, 2014, annual progress reports (RPPR) to the NIH must include a section that describes how an IDP is used to identify and promote the career goals of graduate students and postdoctoral researchers. The NIH strongly encourages all NIH-supported trainees to have an IDP. Inclusion of plans for an IDP in fellowship applications is expected. For further details, see the August notice (NOT) from the NIH at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-113.html>

To aid in IDP efforts for research trainees, the American Association for the Advance of Science (AAAS) hosts a free, online tool to assist trainees as they explore career possibilities and set goals towards the career path that best fits the individual. Details are available at <http://myidp.sciencecareers.org/>



RESPONSIBLE CONDUCT OF RESEARCH (RCR)

- Document prior instruction in RCR (details are important)
- Proposed plan in RCR
 - **MUST** address 5 instructional components
 - Format, *e.g.*, electronic, didactic, duration/frequency, instructor, etc.
 - Subject matter
 - conflict of interest – personal, professional, and financial
 - policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
 - mentor/mentee responsibilities and relationships
 - collaborative research including collaborations with industry
 - peer review
 - data acquisition and laboratory tools; management, sharing and ownership
 - research misconduct and policies for handling misconduct
 - responsible authorship and publication
 - the scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research
 - Faculty participation
 - Duration of instruction
 - Frequency of instruction
 - **ROLE** of mentor in RCR instruction must be described

UT HEALTH SAN ANTONIO COURSES / ACTIVITIES FOR CONSIDERATION IN AN RCR PLAN

Formal Courses in the GSBS

Semester	Fall	Spring
Responsible Conduct of Research (INTD 5082) <i>(Fall Semester, Kim Summers, PharmD, Director, Research Protection Programs)</i>	2 hr.	
Practicum in IACUC Procedures (TSCI 6100) <i>(Every semester)</i>	1 hr.	1 hr.
Practicum in IRB Procedures (TSCI 6102) <i>(Every semester)</i>	1 hr.	1 hr.
Selected Topics in Advanced Research Ethics (TSCI 6103) <i>(Every semester, Center for Medical Humanities and Ethics)</i>	1 hr.	1 hr.
Fundamentals of Neuroethics (PHAR 6027) <i>(Spring Semester, Andrea Giuffrida, PhD, Professor, Department of Pharmacology)</i>		2 hrs.

Regular Seminars/Conferences:

- **Spotlight on Research Integrity**, monthly workshop on selected RCR topics led by UT Health San Antonio faculty and invited guests. Series organized by an Advisory Committee comprised of the Program Directors of institutional training grants. Sponsored by the UT Health San Antonio Office of Postdoctoral Affairs, Linda McManus, PhD, Director. <http://opa.UTHSCSA.edu/content/spotlight>
- **Conversations about Ethics**, semi-annual presentations designed to help medical centers meet the duty to disclose adverse events to patients and/or their personal representatives. The program is a high-intensity, all-day workshop that is both didactic and experiential and promotes interactive dialogue among participants. Participants acquire information and tools to create robust disclosure programs within their institutions. The UT Health San Antonio sponsors this series of lectures and discussions for Medical Humanities and Ethics in the School of Medicine and the Methodist Healthcare Ministries Ecumenical Center for Religion and Health. Directed by Ruth E. Berggren, MD. https://texashumanities.org/conversations_about_ethics

Regular informal Activities:

- Routine laboratory meetings include the discussion of RCR topics
- One-on-one meetings with your mentor include the discussion of RCR topics
- Journal club and seminars routinely include RCR topics

ADDITIONAL RESEARCH TRAINING CAREER DEVELOPMENT ACTIVITIES:

(These type of research and career development educational activities always look good in a research-training plan if space in the application...and in your schedule...permits; in any case, **ALL components in your research training plan MUST align!**)

Formal Courses in the GSBS

Semester	Fall	Spring
Grantsmanship and Peer Review (TSCI 6064) <i>(Spring semester, Linda McManus, PhD, Professor, Department of Pathology)</i>	1 hr.	1 hr.
Introduction to Translational Science (TSCI 6001) <i>(Fall semester, Phil LoVerde, PhD, Professor, Department of Biochemistry/Pathology)</i>	1 hr.	
Topics in Translational Medical Product Development (INTD 7074) <i>(Fall semester, Andrea Giuffrida, PhD, Professor, Department of Pharmacology)</i>	1 hr.	
Introduction to Intellectual Property, Technology Transfer, and Commercialization (TSCI 5078) <i>(Fall semester, Leon Bunegin, Associate Professor, Department of Anesthesiology)</i>	1 hr.	

Certificate in Translational Science (CTS):

The Graduate Certificate in Translational Science (CTS) is designed to provide graduate students, postdoctoral fellows, faculty, and other health care professionals with a formal introduction to the essential components involved in the advancement of scientific discoveries in basic biomedical research into clinical applications and improvements in human health.

This 12 semester-credit-hour (SCH) graduate-level program is operated in the UT Health Science Center’s Graduate School of Biomedical Sciences (GSBS) and offers formal coursework in topics relevant to translational science including biostatistics, epidemiology, and clinical trials design and analysis. http://iims.UTHSCSA.edu/ed_certificate_in_ts.html

Informal Institutional Seminars/Workshops/Symposium:

- **Fellowship (F) grant writing workshop**; on-going, weekly sessions to facilitate the development of fellowship grant applications with oversight provided by Linda M. McManus, PhD, Distinguished Teaching Professor of Pathology

F-Troop!

http://iims.UTHSCSA.edu/f_grants.html

- **K-paseo or The Way to the K**; video presentations focused on various aspects of K (career development) grant applications provided by Michael Lichtenstein, MD, F. Carter Pannill Professor in Internal Medicine

K-Paseo

http://iims.UTHSCSA.edu/ed_kpaseo_workshop.html

- **Grant Writing with New Investigators (GWNl)**; bi-weekly institutional workshop to support promising, new investigators who are in the process of preparing a research grant application, including fellowship and career development awards provided by Linda McManus, PhD, Distinguished Teaching Professor of Pathology



http://iims.UTHSCSA.edu/ed_writing_workshop.html

- **Entering Mentoring**. A workshop to introduce effective strategies for successful mentoring of diverse trainees. On a quarterly basis, four consecutive weekly sessions explore successful mentoring strategies to clarify individual perspectives on mentoring relationships. This workshop series is available to postdoctoral scholars, advanced graduate students, and faculty.



<http://opa.UTHSCSA.edu/entering-mentoring>

- **University Teaching Excellence Course (UTEC)**; this 12 week, interactive course provides an opportunity to learn the fundamentals of effective teaching. Course content and direction are provided by a group of distinguished and highly experienced educators.

<http://opa.uthscsa.edu/saber/act>

- **Successful Starts**; interactive 3 day workshop to prepare early career scientists for entry into professional life as teacher-scholars at a predominantly undergraduate institution. A primary goal is to facilitate success as members of a faculty community. This is accomplished through a combination of mini-presentations, guided activities, panel discussions, and participant contributions.



- **Pathways to Careers in Science (PCS);** annual 2 hour workshop at UT Health San Antonio that provides trainees an opportunity to discuss the variety of career paths that are available to early career scientists, *i.e.*, postdoctoral research fellows and graduate students. A distinguished group of scientists who have had interesting and in some cases non-traditional career paths answer questions and lead small group discussions. <http://UTHSCSA.edu/artt/bbc/Pathways.asp>



- **Mikiten Graduate Research Forum and Distinguished Lecture;** a forum organized by the Graduate Student Association to promote excellence in graduate student research through mentorship, collaboration, and student interaction. Activities include poster sessions, career workshops, networking, three minute thesis (3MT) presentations, and multiple awards. An invited speaker provides a keynote presentation. http://gsbs.uthscsa.edu/current_students/career-day



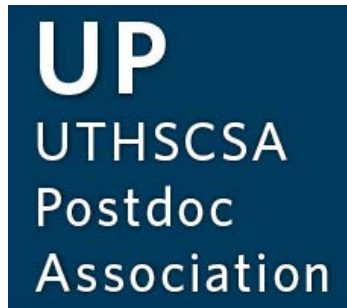
- **Annual Postdoc Research Day and Symposium.** In recognition of National Postdoc Appreciation Week, UT Health San Antonio hosts, a full day event where San Antonio-area postdocs present their research, compete for awards, and engage in networking. Trainees are included from all nearby research institutions, *i.e.*, Texas Biomedical Research Institute (TBRI), the United States Army Institute for Surgical Research (USAISR), the University of Texas at San Antonio (UTSA), and the Naval Medical Research Unit (NAMRU). Festivities conclude with a presentation by a keynote speaker. <https://opa.UTHSCSA.edu/SAPRF>



- **Frontiers in Translational Science Research Day.** The Institute for Integration of Medicine & Science (IIMS) at the University of Texas Health San Antonio in partnership with UT San Antonio's (UTSA's) Research Centers in Minority Institutions and the Department of Biomedical Engineering, hosts the Annual Frontiers of Translational Science Research Day. This event showcases poster presentations to illustrate on-going research projects in translational science. Abstracts are invited from students, clinical fellows, and postdoctoral fellow from among all IIMS/CTSA partnering institutions. An extramural speaker provides a keynote lecture. <https://iims.uthscsa.edu/2017ResearchDay>

Graduate Student Association (GSA). A student-led organization with the sole purpose of providing assistance for career development, organizing social events for the graduate student body, and addressing key issues that can have a direct effect on the lives of graduate students. <https://uthscsagsa.wordpress.com/>

Postdoctoral Association. *UT Health SA Postdocs (UP)*, a self-assembled institutional organization directed by postdocs for postdocs. Committee activities focus on communication/information, networking/professional development, and international trainees. Activities include:



- Workshops related to career development (*Quest for Scientific Careers*)
- Social activities to enhance networking among postdocs
- Annual events associated with National Postdoc Appreciation Week (in September)

Mentored Teaching Award (MTA). This award provides a unique opportunity to advance the quality and scope of postdoctoral research training experiences received at UT Health San Antonio. This will be accomplished *via* training in teaching undergraduate science classes at local colleges and universities. Awardees will be paired with an experienced faculty and spend the equivalent of one day per week observing, assisting, and learning essential skills in effective teaching. Trainees will simultaneously maintain a primary focus on science career development. The outcome of this focused effort in mentored teaching will advance excellence in teaching and further the balanced career development of UT Health San Antonio postdoctoral researchers. <https://opa.UTHSCSA.edu/mta-description>

Office of Workforce and Career Development (OWCD)
(http://gsbs.UTHSCSA.edu/gsbs_owcd/owcd-about)

The OWCD at UT Health San Antonio accelerates trainee career and professional development through diverse events and activities that promote networking, build skills in communications and leadership, stimulate outreach, and enhance career planning and development. Directed by Teresa M. Evans, PhD, the OWCD operates within the Office of the Dean of the UT Health San Antonio Graduate School of Biomedical Sciences. Activities include:

- **Career Development Workshop Series;** a monthly workshop that includes participation by a Career Advisory Council (CAC). The goals of this series are to:
 - Inform trainees about and network trainees with the CAC and its members
 - Expose trainees to available career paths
 - Guide trainees in planning their career paths
- **Career Planning Resources**
- **Science Communication and Outreach Career Symposium**
- **Networking**
- **Outreach Opportunities**



Office of Postdoctoral Affairs (OPA) (<http://opa.UTHSCSA.edu>)

OPA facilitates trainee research career development through diverse workshops, seminars, and networking programs. The OPA maintains institutional membership in the *National Postdoctoral Association* (<http://www.nationalpostdoc.org/>) and assists in the preparation of an Individual Development Plan (IDP) between postdoctoral trainees and their mentors. This institutional office operates within the Office of the Vice President for Research at UT Health San Antonio. Programs are routinely available to assist postdoctoral scholars in the acquisition of knowledge and skills for a successful career in science. Topics include:

- **Postdoctoral Career Development.** A monthly workshop
 - Strategic career planning
 - Individual Development Plan (IDP)
 - Curriculum vitae design and development
 - Job interview/negotiations
 - Establishing a laboratory
 - Assembling a team
 - Alternative careers in science
 - Managing conflict
 - Leadership challenges
 - Mentoring relationships
 - Effective scientific collaboration
 - Productive partnerships
 - Professional networking

BUDGET PLANNING

NRSA Stipends for FY2017 (see details at <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-003.html> and <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-062.html>)

Pre-doctoral: for individual fellowships (F30, F31): One stipend level is used for all pre-doctoral candidates, regardless of the level of experience.

Career Level	Years of Experience	Stipend for FY 2016	Monthly Stipend
Pre-doctoral	All	\$23,376	\$1,948

Postdoctoral: for individual fellowships (F32): The stipend level for the entire first year of support is determined by the number of full years of relevant postdoctoral experience **when the award is issued**. Relevant experience may include research experience (including industrial), teaching assistantship, internship, residency, clinical duties, or other time spent in a health-related field beyond that of the qualifying doctoral degree. Once the appropriate stipend level has been determined, the fellow must be paid at that level for the entire grant year. The stipend for each additional year of Kirschstein-NRSA support is the next level in the stipend structure and does not change mid-year.

Career Level	Years of Experience	Stipend for FY 2017	Monthly Stipend
Postdoctoral	0	\$ 47,484	\$ 3,957
	1	\$ 47,844	\$ 3,987
	2	\$ 48,216	\$ 4,018
	3	\$ 50,316	\$ 4,193
	4	\$ 52,140	\$ 4,345
	5	\$ 54,228	\$ 4,519
	6	\$ 56,400	\$ 4,700
	7 or More	\$ 58,560	\$ 4,880

Tuition and Fees

- **Pre-doctoral Fellows:** For individual fellowships (F30, F31), an amount per pre-doctoral trainee equal to 60% of the level requested by the applicant institution, up to \$16,000 per year, will be provided. If the trainee or fellow is enrolled in a program that supports formally combined, dual-degree training (e.g., MD/PhD, DO/PhD, DDS/PhD, AuD/PhD, DVM/PhD), the amount provided per trainee or fellow will be 60% of the level requested, up to \$21,000 per year.
- **Postdoctoral Fellows:** For individual fellowships (F32), an amount per postdoctoral trainee or fellow equal to 60% of the level requested by the applicant institution, up to \$4,500 per year, will be provided. If the trainee or fellow is enrolled in a program that supports postdoctoral individuals in formal degree-granting training, an amount per postdoctoral trainee or fellow equal to 60% of the level requested by the applicant institution, up to \$16,000 per year, will be provided.

Institutional Allowance for Individual Fellows

The allowance for pre-doctoral and postdoctoral fellows will be paid at the amounts shown below. *Institutional Allowance* for individual fellows (F30, F31, and F32) (including health insurance):

- **Pre-doctoral Fellows:** \$4,200
- **Postdoctoral Fellows:** \$8,850

SAMPLE BUDGET FOR F30 APPLICATION

	Year 01	Year 02	Year 03	Year 04	Year 05	Year 06
	GS1	GS2	GS3	GS4	MS3	MS4
Stipend	\$23,376	\$23,376	\$23,376	\$23,376	\$23,376	\$23,376
Tuition and Fees	\$5,500	\$5,775	\$6,064	\$6,367	\$18,400	\$19,320
Institutional Allowance	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200	\$4,200
Total - Direct Costs	\$33,076	\$33,351	\$33,640	\$33,943	\$45,976	\$46,896
**Indirect costs	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COSTS	\$33,076	\$32,351	\$33,640	\$33,943	\$45,976	\$46,896

Note: Tuition & Fees are included at the **full amount in the budget** of the submitted application; NIH will only fund 60% of ACTUAL (if awarded). Expenses for tuition & fees are increased by 5% per year.

**Note: Indirect Costs (F&A) are not allowed on NIH Fellowship Awards.

Certificate of Proposal (COP)

The University of Texas Health Science Center at San Antonio

Office of Sponsored Programs (OSP)

210-567-2340 / grants@uthscsa.edu

This form is required by OSP with all externally sponsored proposals and agreements.

Instructions and definitions of terms can be found online at <http://research.uthscsa.edu/osp/forms/copinstructions.doc>.

Project Title: _____

Sponsor: _____ Due Date: _____

Prime Sponsor (if flow-through): _____ Deadline Type: Postmark Receipt

FOA or RFP # or title: _____

Activity Type: Research Clinical Study Training Services Testing Other: _____

Project Status: New Resubmission Competitive Renewal Non-Competing Grant Progress Report

Supplement

If renewal or continuation: Grant#: _____ Current HSC PGID #: _____

Investigator(s) Information

INVESTIGATOR(S) CERTIFICATION: My signature below certifies that (1) I am not delinquent on any federal debt; (2) I am not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from current transactions by any federal department or agency; (3) I have not and will not lobby any federal agency on behalf of this award; (4) The information submitted within the application is true, complete, and accurate to the best of my knowledge; (5) I understand that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties; (6) I agree to accept responsibility for the scientific conduct of the project; and (7) I will be responsible for meeting the requirements of the award, including, but not limited to providing the proper stewardship of sponsored funds, submitting all required technical progress reports on a timely basis, properly disclosing all inventions to the Office of Technology Commercialization, and adhering to all federal compliance requirements.

Principal Investigator/Project Director: _____		Employee ID#	
Department: _____		School	**Choose one**
Phone#: _____		Annual Committed Effort on Project:	_____ %
Center/institute Affiliation(s):		VA Appointment with compensation:	<input type="checkbox"/>
<input type="checkbox"/> Barshop	<input type="checkbox"/> CTRC	<input type="checkbox"/> CHA	
<input type="checkbox"/> GCCRI	<input type="checkbox"/> IIMS	<input type="checkbox"/> RII	
			_____ (signature)

Principal Investigator/Project Director: _____		Employee ID#	
Department: _____		School	**Choose one**
Phone#: _____		Annual Committed Effort on Project:	_____ %
Center/institute Affiliation(s):		VA Appointment with compensation:	<input type="checkbox"/>
<input type="checkbox"/> Barshop	<input type="checkbox"/> CTRC	<input type="checkbox"/> CHA	
<input type="checkbox"/> GCCRI	<input type="checkbox"/> IIMS	<input type="checkbox"/> RII	
			_____ (signature)

Principal Investigator/Project Director: _____		Employee ID#	
Department: _____		School	**Choose one**
Phone#: _____		Annual Committed Effort on Project:	_____ %
Center/institute Affiliation(s):		VA Appointment with compensation:	<input type="checkbox"/>
<input type="checkbox"/> Barshop	<input type="checkbox"/> CTRC	<input type="checkbox"/> CHA	
<input type="checkbox"/> GCCRI	<input type="checkbox"/> IIMS	<input type="checkbox"/> RII	
			_____ (signature)

(If additional participating investigators are involved, attach additional sheets as necessary – continuation page available at http://research.uthscsa.edu/osp/forms/cop_cont.pdf)

Proposed Project Dates (mm/dd/yyyy):		Budget Requested:		
Initial Period: _____ to _____		Direct \$ _____	F&A \$ _____	Total \$ _____
Entire Period: _____ to _____		Direct \$ _____	F&A \$ _____	Total \$ _____

FOR CLINICAL TRIALS ONLY: number of patients anticipated for enrollment: _____

Contact for proposal questions/pickup: _____
name phone number

Location of Project: on campus off campus, identify: _____ (room and/or building)

F&A (Indirect Cost) Rate Applied: _____ % Project Key Words (at least one required):

Project Key Words (at least one required):

Choose one	Choose one	Choose one	Choose one
------------	------------	------------	------------

Will project involve the use of:

Vertebrate animals or animal tissues/fluids? IACUC Approval Date: _____	<input type="radio"/> Yes	<input type="radio"/> No	If yes, IACUC is:	<input type="checkbox"/> Pending	<input type="checkbox"/> Approved
			Protocol # _____		

Human subjects? IRB Approval Date: _____	<input type="radio"/> Yes	<input type="radio"/> No	If yes, IACUC is:	<input type="checkbox"/> Pending	<input type="checkbox"/> Approved
			Protocol # _____		

Check all that apply:					
<input type="checkbox"/> Recombinant DNA	<input type="checkbox"/> Infectious agents	<input type="checkbox"/> Chemical carcinogens	<input type="checkbox"/> Radioisotopes	<input type="checkbox"/> Select agents or toxins	
List: _____					

Check all applicable Institutional Core Facilities that were used to develop proposal data and/or will be used to complete the project:

<input type="checkbox"/> Bioanalytics & Single-Cell (BASiC)	<input type="checkbox"/> Biomolecular NMR	<input type="checkbox"/> Center for Macromolecular Interactions
<input type="checkbox"/> Biobanking & Genomic Analysis	<input type="checkbox"/> Flow Cytometry	<input type="checkbox"/> Micro CT (RAYO)
<input type="checkbox"/> Optical Imaging Facility	<input type="checkbox"/> X-ray Crystallography	<input type="checkbox"/> Mass Spectrometry Laboratory
<input type="checkbox"/> Bioinformatics & Computational Genomics (BCG)	<input type="checkbox"/> No Core Facilities used	

Will the project include a subaward/consortium to any other institution(s)? YES NO
 If yes, list institution(s): _____

Have you and all of the key project personnel completed the annual Report of Financial Interests (COI) as required by Health Science Center policy?
If disclosure has not been submitted, or if there have been any changes of circumstances related to the disclosure, complete or modify online at <http://vpr.uthscsa.edu/iDisclose/> YES NO

Have you and all of the key project personnel completed the Conflict of Interest training as required by Health Science Center policy?
If no, complete online at <http://kc.uthscsa.edu/kc/login.asp> YES NO

Do you or any of the key project personnel have consulting arrangements, hold board membership, serve as an officer or key employee, have line management responsibilities, or own substantial equity holdings with the sponsor, subcontractor or potential vendor? YES NO

Do you believe that the proposal contains ideas, processes, or principles that could be commercialized or that may be of interest to industry? YES NO

Will the project involve collaboration with a foreign entity or government or travel outside of the U.S.? YES NO

Does the project involve research in controlled areas and/or controlled technology as defined by the Department of Commerce (EAR) or Department of State (ITAR)? YES NO

Will the project require new space? YES NO

Will the project require renovations to existing space? YES NO

UPON AWARD	
In what department/center/institute/other unit should the primary project ID be established?	
_____ (Department name)	_____ (Department ID#)
Who will be authorized signatories on the primary project ID?	
Name: _____	Employee ID# _____
_____	_____
_____	_____
_____	_____

NOTES: Please use this space to provide any additional information that may be helpful in reviewing this proposal.

Empty box for notes.

Health Science Center Endorsements

DEPARTMENT CHAIR SIGNATURE(S): By signing below, the Department Chair(s) certify that this project corresponds with the goals and objectives of the department, and that agreement has been reached regarding the type and amount of departmental resources that will be required to assist the PI(s) in completing the project.

Primary PI's Department Chair _____ (date) _____

Department Chair Signatures for Participating Investigators (as necessary):

Dept _____ Chair _____ (date) _____

Dept _____ Chair _____ (date) _____

Dept _____ Chair _____ (date) _____

(If more signatures are required, attach additional signature sheets as necessary)

CENTER/INSTITUTE DIRECTOR SIGNATURE: required when resources or space of a Center or Institute will be utilized in the conduct of the project. By signing below, the Director(s) certify that this project is consistent with the goals and objectives of the Center/Institute, and that agreement has been reached regarding the type and amount of Center/Institute resources that will be required to assist the PI(s) in completing the project.

Center/Institute [**Choose one**] Director _____ (date) _____

Center/Institute [**Choose one**] Director _____ (date) _____

(If more signatures are required, attach additional signature sheets as necessary)

DEAN'S SIGNATURE: OSP is responsible for obtaining Dean signatures when necessary. By signing below, the Dean certifies that this project conforms to the Rules and Regulations of the Board of Regents, supports the teaching and research objectives of the school, that resources necessary to conduct the project are available or have been approved, and that all exceptions noted are satisfactory.

Dean _____ (date) _____

OSP Reviewer/Date

revised 1/16/vh

NIH SCORING SYSTEM

Impact	Score	Descriptor	Strengths/Weaknesses
High Impact	1	Exceptional	
	2	Outstanding	
	3	Excellent	
Moderate Impact	4	Very Good	
	5	Good	
	6	Satisfactory	
Low Impact	7	Fair	
	8	Marginal	
	9	Poor	

Non-numeric score options: NR = Not Recommended for Further Consideration, DF = Deferred, AB = Abstention, CF = Conflict, NP = Not Present, ND=Not Discussed

Impact	Score	Descriptor	Additional Guidance on Strengths/Weaknesses
	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses
<p>Minor Weakness: An easily addressable weakness that does not substantially lessen impact</p> <p>Moderate Weakness: A weakness that lessens impact</p> <p>Major Weakness: A weakness that severely limits impact</p>			

FELLOWSHIP APPLICATION REVIEW (CRITIQUE) TEMPLATE

F30/F31/F32/F33 Review

If you cannot access the hyperlinks below,

Visit: <http://grants.nih.gov/grants/peer/critiques/f.htm>.

Application #:

Applicant:

OVERALL IMPACT

Reviewers will provide an overall impact score to reflect their assessment of the likelihood that the fellowship will enhance the candidate’s potential for, and commitment to, a productive independent scientific research career in a health-related field, in consideration of the following scored and additional review criteria. An application does not need to be strong in all categories to be judged likely to have a major impact.

Overall Impact/Merit Write a paragraph summarizing the factors that informed your Overall Impact score.

SCORED REVIEW CRITERIA

Reviewers will consider each of the five review criteria below in the determination of scientific and technical merit, and give a separate score for each.

1. Fellowship Applicant
Strengths <ul style="list-style-type: none">•
Weaknesses <ul style="list-style-type: none">•

2. Sponsors, Collaborators, and Consultants
Strengths <ul style="list-style-type: none">•
Weaknesses <ul style="list-style-type: none">•

3. Research Training Plan
Strengths <ul style="list-style-type: none">•
Weaknesses <ul style="list-style-type: none">•

4. Training Potential
Strengths <ul style="list-style-type: none">•

Weaknesses

-

5. [Institutional Environment & Commitment to Training](#)

Strengths

-

Weaknesses

-

ADDITIONAL REVIEW CRITERIA

As applicable for the project proposed, reviewers will consider the following additional items in the determination of scientific and technical merit, but will not give separate scores for these items.

— A response for Protections for Human Subjects, Vertebrate Animals, and Biohazards is required for all applications.

— A response for Inclusion of Women, Minorities and Children is required for Human Subjects Research Applications.

[Protections for Human Subjects](#)

Comments (Required Unless Not Applicable):

-

Data and Safety Monitoring Plan (Applicable for Clinical Trials Only):

Comments (Required Unless Not Applicable):

-

[Inclusion of Women, Minorities and Children](#) **Applicable Only for Human Subjects research and not IRB**

Exemption #4.

- Sex/Gender:
- Race/Ethnicity:
- Inclusion/Exclusion of Children under 21:

Comments (Required Unless Not Applicable):

-

[Vertebrate Animals](#)

Is the proposed research involving vertebrate animals scientifically appropriate, including the justification for animal usage and protections for research animals described in the Vertebrate Animal section?

Comments (Required Unless Not Applicable):

-

ADDITIONAL REVIEW CONSIDERATIONS

As applicable for the project proposed, reviewers will address each of the following items, but will not give scores for these items and should not consider them in providing an overall impact score.

[Training in the Responsible Conduct of Research](#)

Click Here to Select

Comments on Format (Required):

-

Comments on Subject Matter (Required):

-

Comments on Faculty Participation (Required):

-

Comments on Duration (Required):

-

Comments on Frequency (Required):

-

[Select Agents](#)

Comments (Required Unless Not Applicable):

-

[Resource Sharing Plans](#)

Comments (Required):

-

[Budget and Period of Support](#)

Recommended budget modifications or possible overlap identified:

-

ADDITIONAL COMMENTS TO APPLICANT

Reviewers may provide guidance to the applicant or recommend against resubmission without fundamental revision.

[Additional Comments to Applicant](#) (Optional)

-

USUAL NIH CALENDAR FOR SUBMISSION / REVIEW / FUNDING OF FELLOWSHIP (F) GRANT APPLICATIONS

Submission	Review (Study Section)	Council (funding decision)	Earliest Starting Date (\$)
April 8	June/July	September – October	December
August 8	October/November	January – February	April
December 8	February/March	May – June	July

RED FLAGS IN F APPLICATIONS

BIOSKETCH/CANDIDATE'S STATEMENT

- Unexplained gap in publication or academic/training history
- Unexplained lack of publication(s) during research training experiences
- Unexplained poor academic performance
- Unexplained lack of letter of reference from Dissertation professor (for postdoctoral applicants)



CAREER DEVELOPMENT PLAN

- Lack of alignment between individual components of plan, *e.g.*, coursework, technical training, professional meetings, career development, etc.
- Lack of alignment between candidate and mentor plans for the research training plan
- Lack of an *individualized* plan for the trainee by the mentor
- Failure to include description for the annual preparation of an Individual Development Plan (IDP)
- Failure to **INCLUDE ALL REQUIRED COMPONENTS**

MENTOR

- Lack of NIH (or other national) funding
- Lack of successful mentoring experience (record of outcomes)
- Lack of demonstrated expertise to oversee the proposed research training plan

SCIENTIFIC PLAN

- Lack of preliminary data...by the postdoctoral candidate
- Too ambitious
- Disorganized, disjointed approach
 - Did the mentor review? If so, this is not encouraging. **And**, if not, this is discouraging.

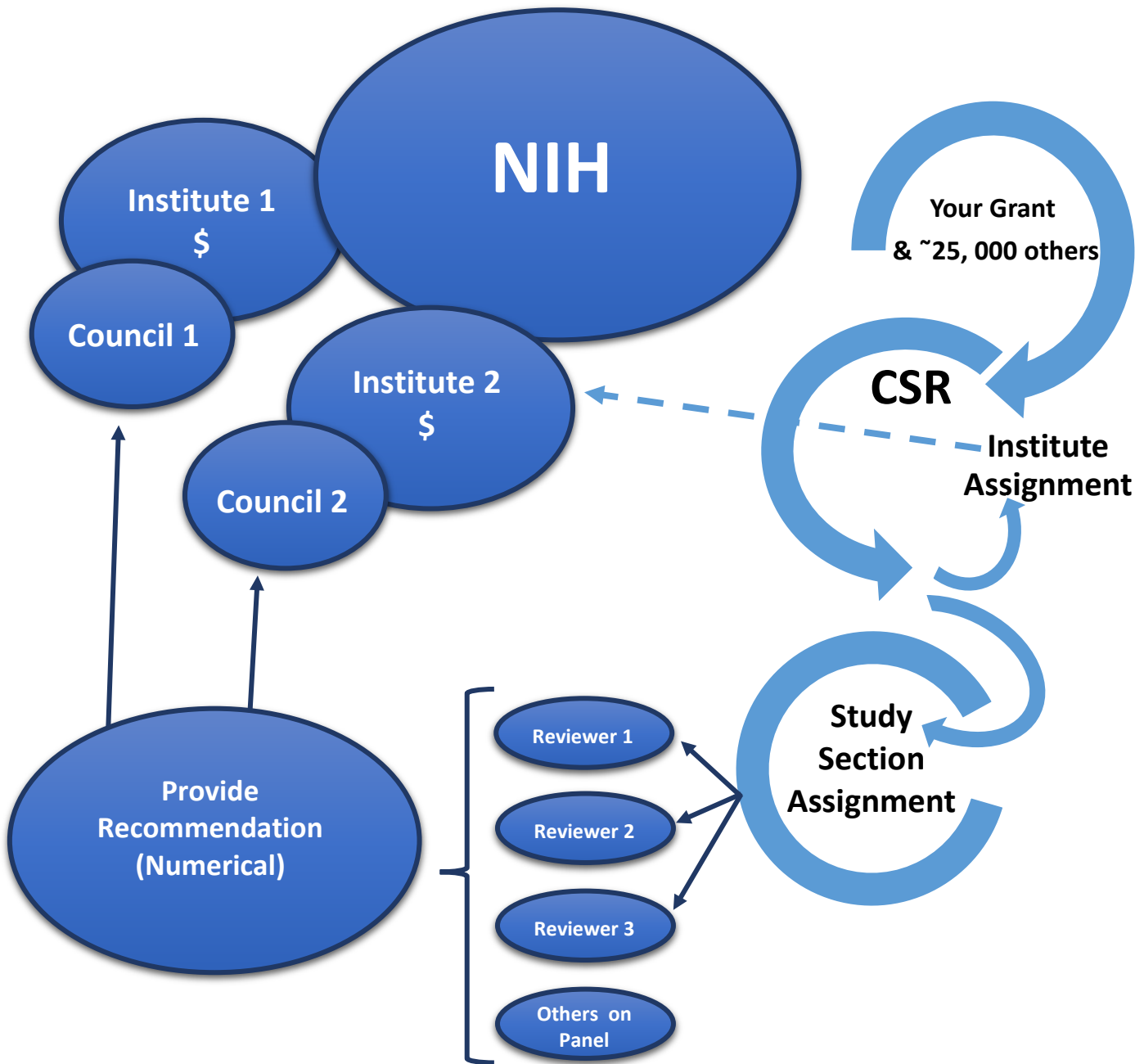
INSTITUTIONAL ENVIRONMENT / COMMITMENT TO TRAINEES

- Soft, mushy, not concrete
- Absence of details

GENERAL

- Lack of agreement between application components, *e.g.*, candidate planned activities and mentor's description of the entire research training plan
- Failure to *FOLLOW THE INSTRUCTIONS*, *e.g.*, chronological order vs reverse chronological order

LINDA'S SIMPLIFIED VERSION OF NIH GRANT SUBMISSION/REVIEW/FUNDING



LINDA'S FUN WORD LIST (ORIGINATED BY TRISTA, CIRCA 2011)

amazing	astounding, surprising
bad	Deplorable, ominous, inauspicious, adverse, calamitous, lamentable, wretched, conflicting, contrary, detrimental, inimical, repugnant, pernicious, catastrophic, dismal, dire, tragic
beautiful	aesthetic, elegant, dazzling, enticing, exquisite, erudite, enlightened
begin	activate, actualize, impel, induce, motivate, originate, emanate, emerge, establish, trigger, generate, initiate
big	ample, comprehensive, copious, voluminous, grandiose, monumental, bountiful, lavish, immense
clear	evident, explicit, incontrovertible, intelligible, transparent, precise, unambiguous, definitive, unequivocal
common	widespread, frequent, universal, familiar, regular, ordinary, normal, conventional, unexceptional, prevalent, ubiquitous, established, prevailing, wide-ranging
complex	(but not bad): ornate, labyrinthine, intricate, heterogeneous, multifarious, abstruse, elaborate, prodigious
controversial	divisive, debatable, contentious, colorful, questionable, disputable, undetermined, arguable, touchy, hot
decrease	reduce, abate, contract, dwindle, ebb, wane, curb, quell, slash, slack, ease
dynamic	vibrant, vigorous, energetic, enthusiastic
effective	cogent, able, efficacious, emphatic, potent, telling
exciting	thrilling, grand, remarkable, amazing, outstanding, exceptional
focused	concentrated, intense, concerted
good	amazing, innovative, harmonious, euphonic, benign, auspicious, worthy, fortunate, favorable, salubrious, beneficial, felicitous, propitious, astonishing, incredible, wonderful, astounding, surprising, creative, marvelous, winning

increase	growth, burgeoning, escalate, increment, intensify, maximize, surge, wax, amplify, augment, enhance, extend, prolong, sharpen, redouble, multiply
iterate	Repeat something, to do the same thing again. THIS IS A NECESSARY PART OF THE WRITING PROCESS IN ORDER TO PRODUCE A CLEAR AND SUCCINCT GRANT APPLICATION!!! EACH ITERATION SHOULD BE AN IMPROVEMENT FROM A PRIOR VERSION. ITERATION IS NECESSARY FOR <u>ALL</u> COMPONENTS OF A GRANT APPLICATION. DO NOT CREATE A DRAFT AND CONSIDER IT DONE...GET AS MANY EYES AS POSSIBLE ONTO THE DOCUMENTS FOR FEEDBACK. AND, DO NOT BE DISCOURAGED WHEN YOU RECEIVE CONFLICTING SUGGESTIONS. YOUR WRITING IS YOUR ONLY INTERACTION WITH THE REVIEWER. MAKE AN <u>EXCEPTIONAL IMPRESSION!</u>
little	diminutive, infinitesimal, meager, petite, imperceptible, rudimentary
novel	original, distinctive, innovative, unique, remarkable, spectacular, pioneering
passionate	ardent, fervent, enthusiastic
reiterate	repeat, do again, go over; see 'iterate' above
rigorous	arduous, demanding
robust	strong, vigorous, forceful
simple	facile, lucid, intelligible
substantial	extensive, significant**, considerable, widespread

**when describing data as significant, (appropriate) statistical analysis is required; don't describe a result as significant unless analyses are done and *p* value provided

VERB perspectives:

Action	define, determine, elucidate, establish, construct
Mushy (fishing)	characterize, examine, explore, evaluate

AVOID 'ing'...too passive, *i.e.*, "I was beginning to examine..." vs "I began to examine..."

VOCABULARY LIST

Biosketch	<p>The biographical sketch is a required component of all NIH applications. This document must be included for each individual who considered key personnel for the proposed studies and includes educational information, a personal statement (which should be unique for each application), list of positions, awards/honors, publications, and research support (current and prior funding). For F applicants, an additional section provides details of performance on all coursework. This form and a sample biosketch is available at:</p> <p>http://grants.nih.gov/grants/forms/biosketch.htm</p>
Cayuse	<p>A UT Health San Antonio interface to facilitate the submission of NIH (and other federal) grant applications. The UT Health San Antonio Office of Sponsored Programs (OSP) provides training in the use of Cayuse and can answer questions about Cayuse and the submission of grant applications. Details are available at</p> <p>http://research.uthscsa.edu/osp/Cayuse/FAQ.shtml</p>
CSR	<p>Center for Scientific Review at the NIH. This center is responsible for assignment of grant applications to study sections (for review) as well as to institutes/centers (for funding). See: https://public.csr.nih.gov/Pages/default.aspx</p>
COP	<p>Certification of Proposal - This internal UT Health San Antonio document is used to certify that all components in a given grant application have been appropriately described and reviewed. This includes the UT Health San Antonio department/institute/center affiliation approval (with signatures), safety declarations, intellectual property declarations, budget (initial year and all years), direct, indirect, and total cost estimates (for initial and all years). Find at:</p> <p>http://research.UTHSCSA.edu/osp/forms_ut.shtml</p>
Direct Costs (DC)	<p>The actual cost to complete the proposed studies in a grant application. This may include personnel, fringe benefits, equipment, supplies, and travel. For some grant applications, the amount allowed for direct costs may be limited, or, in the case of fellowship (F) applications, may be set by the funding agency (<i>e.g.</i>, stipend levels, trainee-related expenses, and travel; actual estimates of tuition and fees should be provided in all F applications although the NIH only provides 60% of this amount if the grant is awarded).</p>
eRA Commons	<p>The electronic Research Administration of the NIH. eRA is the internet location of all communications with grant applicants. At this location, information will be provided regarding grant receipt, study section assignment, summary statement, and notice of award. The UT Health San Antonio Office of Sponsored Programs (OSP) provides permission to establish eRA accounts with the NIH. Once registered, access is provided at https://commons.era.nih.gov/commons/. In fellowship (F) applications, you must also provide an eRA Commons Username (ID) for the research mentor. For more info, see:</p> <p>https://grants.nih.gov/grants/guide/notice-files/NOT-OD-14-129.html</p>
F&A	<p>Facilities and Administrative - See Indirect Costs</p>

FOA	Funding Opportunity Announcement - A public announcement by a Federal agency of an intention to provide support for (research) activity usually achieved through a competitive process involving grants or contracts.
FY	'Federal Year' - For the US Federal Government, the year begins on October 1 and ends on September 30. FY is often used in accounting to indicate a 'fiscal year', however the start and end of a given fiscal year varies by agency; for instance, the UT Health San Antonio fiscal year begins on September 1 and ends on August 31. For many entities, the fiscal year corresponds to the calendar year.
IDP	Individual Development Plan - A planning process that identifies professional development and career objectives. An effective and easy to use free, on-line IDP is available at: http://myidp.sciencecareers.org/
Impact Factor (IF)	The average score assigned to individual NIH grant applications which are scored on a 1-9 scale (1 is best and 9 is worst). After scores are collected from each voting member at a Study Section meeting (each member provides a single whole number), the scores of the group are then averaged and multiplied by 10 to obtain the impact factor for the application; therefore, 10 is best possible and 90 is worst.
Indirect Costs (IDC)	The extra , institutional costs associated with the conduct of research. IDC are usually calculated, as a percentage of the direct costs, i.e., those amounts required for the conduct of the research study. IDC include estimates of items such as the operations of the library, purchasing, human resources, OSP, IRB, and IACUC, as well as physical facilities such as housekeeping, lights, and water. IDC are more appropriately/officially designated as Facilities and Administrative (F&A) costs. The institutional IDC rate with the NIH is recalculated regularly and varies for every institution. For some funding agencies, IDC is fixed, irrespective of the institution's estimates. Of note, for fellowship (F) grant applications at the NIH, IDC is not allowed .
NIH Acronyms	The NIH uses so many abbreviations that they publish a list to explain many. http://grants.nih.gov/grants/acronym_list.htm
NIH Guide	The NIH Guide for Grants and Contracts - A publication of NIH research grant policies, guidelines and funding opportunities. This site is maintained by the Office of Extramural Research (OER) at the NIH; you can sign up to electronically receive this weekly publication. http://grants.nih.gov/grants/guide/index.html
NOA/NOGA	Notice of Award or Notice of Grant Award - The 'official' notice that a research grant (award) will be made to a given institution. The NIH provides the NOGA <i>via eRA commons</i> . Other agencies employ diverse notices including email, snail mail, or website.
NOT	Notice - Public announcements published by the NIH to describe plans (including funding opportunities), adjust programs (<i>e.g.</i> , requirements, due dates, eligibility), or clarify rules and policy.

Office of Extramural Research (OER)	The NIH office that serves as a portal for information about NIH grant applications. Here you will find electronic links to many important components involved in the NIH grant submission and review processes as well as links to available programs, NIH policies, and other NIH-wide announcements. http://grants.nih.gov/grants/oer.htm
Office of Sponsored Programs (OSP)	Office at UT Health San Antonio that is responsible for processing all grant and/or research study funding; this office must be included in the submission and receipt of research funding. Once funding is received, OSP establishes accounts and project identification (PID) numbers that are required for expenditures. OSP is also involved with official communications with funding agencies and is responsible for preparing and submitting all financial reports to funding agencies. Usually, for all official communications with a funding agency that include a \$ sign, contact OSP! http://research.UTHSCSA.edu/osp/
PA	Program Announcement; a published public announcement by the NIH and other federal funding agencies to describe an area of focused interest and intent to support research in this area. For example, there is a "parent announcement" for the various fellowship applications (F30, F31, and F32) at the NIH. Some NIH institutes publish their own program announcement (PA) for a given type of fellowship (F) application. For all NIH grant applications, a PA or RFA (see below) number is required for submission. Current PAs are available at: http://tinyurl.com/NIHGrantPAs
RCR	Responsible Conduct of Research - The NIH (as well as other federal funding agencies) has strict requirements that RCR must be comprehensively addressed by any application that includes training, e.g., fellowship (F), career development (K), or training (T) grant applications. The NIH specifies individual components that must be addressed in RCR. A single didactic course and/or online instruction is inadequate for a RCR plan; RCR must recur throughout training. http://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html
RePORTER	The electronic site for query of funded NIH grants. From this site, information can be obtained on current and prior funded grant applications; grant type, institution, Principal Investigator, NIH institute/center, year, or key word can perform searches. http://projectreporter.nih.gov/reporter.cfm
RFA	Request for Applications - A funding mechanism used by NIH institutes and Centers to set aside money for a focused topic that they want to see addressed in grant applications. For all NIH grant applications, a PA (see above) or RFA number is required for submission. All available RFAs are described by the NIH Office of Extramural Research (OER) at: http://tinyurl.com/NIGGrantsRFAs
SRO	Scientific Review Officer - An NIH official (employee) who provides oversight to insure a fair and unbiased review of grant applications. Note that this title originally was Scientific Review Administrator (SRA)...unfortunately, the terms SRO and SRA are still used interchangeably at the NIH and beyond, however, only SRO is correct.

Study Section

The group that provides a fair and unbiased review of grant applications. The membership of established study sections at the NIH is available online. These individuals are experts in their fields and experienced in the preparation and review of NIH grant applications. Fellowship (F) applications are usually reviewed in unique study sections:

<http://public.csr.nih.gov/StudySections/Fellowship/Pages/default.aspx>

Total Cost

A combination of direct and indirect costs for a research proposal. That is: **Total cost = direct cost + indirect cost**

HELPFUL LINKS

NIH		HTTP://WWW.NIH.GOV
Office of Extramural Research (OER) (links to MANY grant-related items)		http://grants.nih.gov/grants/oer.htm
Center for Scientific Review (CSR) (here you'll find links to standing Study Sections as well as other helpful information regarding grant reviews)		http://public.csr.nih.gov/aboutcsr/Pages/default.aspx
eRA Commons		https://commons.era.nih.gov/commons/
NIH RePORT (search funded NIH grants)		http://projectreporter.nih.gov/reporter.cfm
NIH Reviewer Guidelines and Forms		http://grants.nih.gov/grants/peer/reviewer_guidelines.htm https://grants.nih.gov/grants/policy/review_templates.htm
INSTRUCTIONS & FORMS		
SF424 Instruction Guide This guide includes instructions for Fellowship applications		http://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/general-forms-d.pdf
SF424 FELLOWSHIP Supplemental Instructions		http://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/fellowship-forms-d.pdf
Fellowship Biosketch Form		http://grants.nih.gov/grants/forms/biosketch.htm
Page Limits for Applications		https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/page-limits.htm
Program Announcement (PA) for Fellowship Applications		
F30 Parent Announcement for institutions <i>without</i> NIH-funded institutional pre-doctoral dual degree training program (dual degree)		http://grants.nih.gov/grants/guide/pa-files/PA-16-306.html
F30 Parent Announcement for institutions <i>with</i> NIH-funded institutional pre-doctoral dual degree training program (dual degree)		http://grants.nih.gov/grants/guide/pa-files/PA-16-305.html
F31 Parent Announcement (pre-doctoral fellowship)		http://grants.nih.gov/grants/guide/pa-files/PA-16-309.html

F31 Parent Diversity Announcement (pre-doctoral fellowship)	http://grants.nih.gov/grants/guide/pa-files/PA-16-308.html
F32 Parent Announcement (postdoctoral fellowship)	http://grants.nih.gov/grants/guide/pa-files/PA-16-307.html
F32 Agency for Healthcare Research and Quality (AHRQ)-sponsored Postdoctoral Fellowship	https://grants.nih.gov/grants/guide/pa-files/PA-17-481.html
F32 NINDS Postdoctoral Fellowship	https://grants.nih.gov/grants/guide/pa-files/PAR-16-458.html
K01 NINDS Postdoctoral Mentored Career Development Award	https://grants.nih.gov/grants/guide/pa-files/PAR-17-145.html
K01 NIDCR Mentored Career Development Award to Promote Diversity (postdoctoral or faculty)	https://grants.nih.gov/grants/guide/pa-files/PAR-16-321.html
K22 NINDS Advanced Postdoctoral Career Transition Award to Promote Diversity in Neuroscience	https://grants.nih.gov/grants/guide/pa-files/PAR-16-220.html
K99/R00 Parent Announcement Pathway to Independence Award	https://grants.nih.gov/grants/guide/pa-files/PA-16-193.html
K99/R00 NIDCR Dual Degree Dentist Scientist Pathway to Independence Award	https://grants.nih.gov/grants/guide/pa-files/PAR-16-156.html
K99/R00 NIAID Physician-Scientist Pathway to Independence Award	https://grants.nih.gov/grants/guide/pa-files/PAR-17-329.html
Other Important NIH Sites Regarding Fellowships	
FY2016 Predoctoral Stipend Levels	http://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-047.html
FY2017 Postdoctoral Stipend Levels	https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-003.html
F31 Diversity / NIH Contacts	http://grants.nih.gov/grants/guide/contacts/parent_F31_diversity.html
Fellowship Study Sections	http://public.csr.nih.gov/StudySections/Fellowship/Pages/default.aspx

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Office of Sponsored Programs (OSP)	http://research.UTHSCSA.edu/osp/
Cayuse	http://research.UTHSCSA.edu/osp/
Conflict of Interest (COI) (iDisclose)	https://vpr.UTHSCSA.edu/iDisclose/
Certificate of Proposal (COP)	http://www.biochem.uthscsa.edu/forms/cop.pdf
COP Instructions	http://research.uthscsa.edu/osp/forms_ut.shtml