Letters & Institutional Templates

"templates" for personalization

Institutional Commitment

Responsible Conduct of Research

Training in rigor/repro

Sample Budget

Diversity Eligibility

BMSC April 5

The Qualifier and the Fellowship

Fellowship Biosketch

Project Summary/Abstract

Project Narrative

Applicant Background & Goals

Specific Aims

Research Strategy

Respective Contribution

Selection Sponsor & Institution

Responsible Conduct of Research

Sponsor/Co-Sponsor Statements

LOS from collaborators

Inst Environment, Commit Training

Letters of recommendation

Budget

(Diversity Eligibility)

5 page mak

30 lines of text

3 sentences

6 pages

1 page

6 pages

1 page

1 page

6 page

6 page

2 page

3 recc's

Institutional Environment and Commitment

Review Criteria:

Institutional Environment & Commitment to Training

- Are the research facilities, resources (e.g., equipment, laboratory space, computer time, subject populations, clinical training settings) and training opportunities (e.g. seminars, workshops, professional development opportunities) adequate and appropriate?
- Is the institutional environment for the applicant's scientific development of high quality?
- Is there appropriate institutional commitment to fostering the applicant's mentored training?.

Inst Envir Commitment-from Dr. Hall

—Adapt Template & address review criteria

The Applicant, XX is in her/his 4th year of graduate school at GW School of Medicine and Health Sciences. S/he successfully completed the Ph.D. qualifying exam on date and is a student in good standing in the XX Ph.D. program. His research project is on XX, and led by mentors XX.

GW has strong, well-established research programs that support trainees. GW is a private, midsized research university with a main campus in the highly urban center of Washington DC. The Foggy Bottom Campus includes the GW Hospital, the medical school laboratories in Ross Hall, the Milken Institute School of Public Health, and the adjacent Science and Engineering Hall; our partner institution, the Children's National Health System is located about 3 miles away and connected by shuttle. GW has embarked upon an ambitious plan to increase research and researchers, adding over 40 researchers in 3 years (indexed in a searchable database), and is currently ranked #58 Best Medical Schools in Research (US News & World Report, 2021 rankings). GW SMHS generously supports faculty and students engaged in biomedical research and has numerous facilities that enhance the research environment.

Several fee-for-service research core facilities support this research project (choose several, describe how you will use). The Research Pathology Core Laboratory located in Ross Hall provides research services for both human and animal tissues, including tissue processing, embedding, sectioning, routine H&E and special stains, frozen sections, optimization and performance of immunohistochemistry, and electron microscopy. The Nanofabrication and Imaging center features state-of-the-art microscopy instrumentation and a newly-constructed Class 100 cleanroom. The Flow Cytometry core facility measures light scattering and fluorescence, and is used to identify subsets of cell populations. A Biostatistics Center is available for consultation on research projects. The Biorepository Center supports tissue storage and sampling. The Animal Research Facility provides space, equipment, and care for laboratory animals used for research. ARF is AALAC certified and

Inst Envir Commitment—examples, show me final for approval!

Career enhancement. SMHS recently invested in an office of research workforce of velopment that provides advising for researchers at all career levels, a database for all training records as the science and professional careers monthly series designed to address student and perfect the science and planned workshops focus on fellowship-writing, IDP, wellness planning in the qualification for the individual investigator.

The <u>GW COMPASS</u>, a student organization specifically for grad students at State etc. provides a community of professional support to facilitate the advancement of students by hosting networking engagements, fostering mentee and mentor relationships, and highlighting career opportunities for post-graduate life. The <u>GW Center for Career Services</u> provides extensive programming and services to graduate students, including the Handshake program to find a job. All trainees and faculty have access to resources in the <u>Clinical Sciences Training Institute-Children's National</u>, a research center designed to develop and transform clinical and translational research. One important CTSI-CN resource is free biostatistics consulting, which is emphasized early in the experimental design process.

GW Facilities and Other Resources. As described in the Facilities and Other Resources section, GW provides the necessary facilities and other resources to support the research in this proposal. **DESCRIBE**. Career enhancement resources are available longitudinally throughout the PhD student curriculum as noted above, from required core courses to career center resources, to alumni interactions. The Applicant, {STUDENT NAME HERE}}, is in his/her Nth year of graduate school at CW S Medicine and Health Sciences. He/She successfully completed their Ph.D. qualifying extended is a student in good standing in the XX Ph.D. program.

Name of the individual providing this information:

RCR -Address Review Criteria

Training in the Responsible Conduct of Research

All applications for support under this FOA must include a plan to fulfill requirements for Instruction in the Responsible Conduct of Research (RCR). Taking into account the level of experience of the applicant, including any prior instruction or participation in RCR as appropriate for the applicant's career stage, the reviewers will evaluate the adequacy of the proposed RCR training in relation to the following five required components: 1) Format - the required format of instruction, i.e., face-to-face lectures, coursework, and/or real-time discussion groups (a plan with only on-line instruction is not acceptable); 2) Subject Matter - the breadth of subject matter, e.g., conflict of interest, authorship, data management, human subjects and animal use, laboratory safety, research misconduct, research ethics; 3) Faculty **Participation** - the role of the sponsor(s) and other faculty involvement in the fellow's instruction; 4) **Duration of Instruction -** the number of contact hours of instruction (at least eight contact hours are required); and 5) Frequency of **Instruction** – instruction must occur during each career stage and at least once every four years. Plans and past record will be rated as ACCEPTABLE or UNACCEPTABLE, and the summary statement will provide the consensus of the review committee.

https://grants.nih.gov/grants/guide/pa-files/PA-19-195.html

RCR Adapt template with headings & names

Plan for Instruction in the Responsible Conduct of Research (2020)

GW is committed to promoting the highest standards of ethical research and scholarly conduct while pursuing its research mission. The university believes that responsible conduct of research (RCR) training is an essential component and includes instruction on professional ethical behavior tailored to subject matter career stage context and other participant needs.

All lab-based researchers complete both General Laboratory Safety Training and Biosafety/Bloodborne Pathogen Training before they are allowed access to SMHS laboratories, with additional specific tool safety training available from the Office of Laboratory Safety (OLS). All employees or individuals associated with the university have a responsibility to read and understand GW's Policy and Procedures Regarding Allegations of Research Misconduct. Completion of these training activities is documented by OLS.

RCR training is part of the educational and outreach activities supported by the GW Office of Research Integrity led by Sheila Garrity JD MPH, Associate Vice President for Research Integrity and Research Integrity Officer, and additional Research Integrity Leadership within the Office of the Vice President of Research.

Formal Instruction in the Responsible Conduct of Research. All biomedical science PhD students are required to complete BMSC 8217 Scientific Ethics & Grant writing, generally in the first year (2 credits; course director Dr. L. Caldovic).

- 1)Format: 11 face to face lectures and discussion and student projects. This course uses texts and cases from Steneck, NIH Office of Research Integrity website, Macrina Scientific Integrity 4th edition and Bulger, Bioethics. 2)Subject matter: the ethics of biomedical investigation and principles behind the use of animals in research, research misconduct, human/clinical experimentation, data acquisition and management, stem cell research, responsible authorship and publication, peer review, mentoring, conflicts of interest and commitment, collaborative relationship.
- 3) Faculty participation: NIH funded and training faculty facilitate lectures and small group discussion, with administrator subject matter experts as appropriate. In 2019, faculty facilitators included P. Marvar, R. Cruz, J. Triplett, D. Mendelowitz, of which R. Cruz is the training faculty of this T32.
- 4) Duration of instruction: The graduate course occurs with 11 hours over a semester
- 5) Frequency: Instruction occurs once during each educational stage, and is augmented with refresher lectures.
- 6) compliance. Participation is confirmed by class registrations with Institute of Biomedical Sciences, and is documented in all lectures by a sign-in sheet and head-count. If students are >10 minutes late, they are considered absent.

RCR--add your refresher activities

Continuing Education in Responsible Conduct of Research occurs after the first year, and involves a combination of ongoing lectures and refreshers: Investigators and trainees are encouraged to participate in lathratory interactions and university workshops as part of their training, and to document attendance in tion form. In addition, PIs are encouraged to use best ≺their research groups (Antes PLOS One 2019). GW ost ongoing workshops in related issues, such as dat try, cloud computing, data wrangling and processing. Add le cures are listed in the OVPR Research Updates, and are workshops reiteshers. Recent lectures included "RCR workshow you did management, data sharing and data in research March Spring regulatory updated and hot topics in clinical research oc consortium April 29 20-19; Data ownership during career transition May 9 2019.

The RCR template can be "copied"—it's institutional infrastructure and won't be plagiarism, but do personalize to your application!

Plan for Instruction in Rigor and Reproducibility

Update template with workshops at Gelman, professional societies, etc.

PLAN FOR INSTRUCTION IN METHODS FOR ENHANCING REPRODUCIBILITY

Closely mentored research projects form the center of the IBS PhD program. A key goal for all trainees is to learn to design and conduct research on significant biomedical problems. All trainees engage in a primary research project with regular interactions with the research mentor and advisory committees including basic/clinical mentors. The research project forms the main venue for trainees to think through research problems with increasing independence. Progress of trainees is ensured through regular advisory committee meetings and twice-annual evaluations by the IBS.

In June 2014, NIH leadership convened a working group including the *Nature Publishing Group* and *Science* to broadly examine the issue of promoting reproducibility and rigor in the conduct of research. Briefly, the NIH summarizes these in four domains:

- Rigor of the prior research: careful, systematic, and unbiased evaluation of the work of oneself and others to fully justify the direction of further investigation
- Scientific rigor of design: the unbiased application of transparent methodology, analyses, interpretation and reporting of results
- Rigorous assessment of biological variables: consistent accounting for of the differences within
 populations including age, gender, race, ethnicity, genetics, environment, and socioeconomic status
- Authentication of tools: rigorous identification and validation of resources including reagents for laboratory, cell lines, animal models, and biologic therapeutics.

Experimental design, sample size and rigor and reproducibility form essential parts of research and are interwoven in all research training activities. All IBS PhD students receive an introduction to these principles in core courses including Scientific Writing and Speaking, Ethics and Grantsmanship, the rotation report written and oral presentations, and elective Writing the qualifier and fellowship formal courses. IBS

Budget

PA-21-051 Parent F31

"Award budgets are composed of stipends, tuition and fees, and institutional allowance"

NOT-OD-21-049 Notice Budgetary Levels FY 2015

Career Level	Years of Experience	Stipend for FY 2021	than upend IBS
Predoctoral	All	\$25,836	\$2,153

Postdoctoral Trainees and Fellows: For institutional training grants, (T32, T90, TL1) and individual fello by the number of full years of relevant postdoctoral experience when the award is issued. Relevant experience assistantship, internship, residency, clinical duties, or other time spent in a health-related field beyond the been determined, the trainee or fellow must be paid at that level for the entire grant year. The stipend structure and does not change mid-year.

Career Level	Years of Experience	Stipend for FY 2021	Total DS-wend
Postdoctoral	0	\$53,760	₽ 9 ,480
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F31 Budget (one year)

Stipend

\$25,836

IBS

makes

up diff

Tuition

60% up to \$16,000 cap

CCAS, student accounts,

\$1765 per credit

year 3: 6+6 (\$21,180)

\$16,000

Institutional Allowance

(incl health insurance, 8%)

Predoc \$4,200

Postdoc \$ 11,850

\$4,200

Consider Diversity Supplement

to mentor's NIH Grant

Typically grant has 2 years remaining to request a supplement for grad student or fellow. Salary, tuition, research up to a cap (NRSA postdoc year 1) full IDC

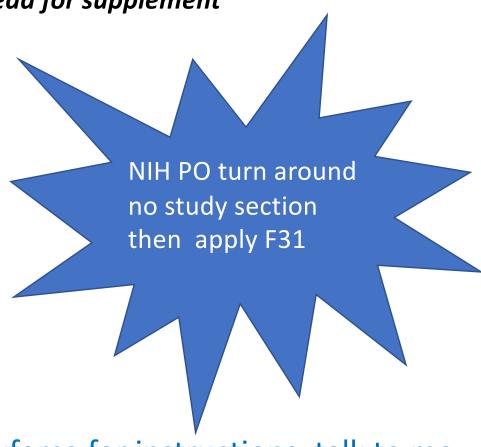
A candidate cannot be supported by a supplement if s/he is already paid on the grant! Students and mentors must plan ahead for supplement

From the candidate:

- Biosketch
- Candidate statement/Career goals

From faculty:

- Biosketch
- Research Plan in scope Pl aims
- Training Plan
- Research environment
- Budget and Justification
- IRB/IACUC
- Eligibility Statement



See SMHS Research—Research Workforce for instructions, talk to me