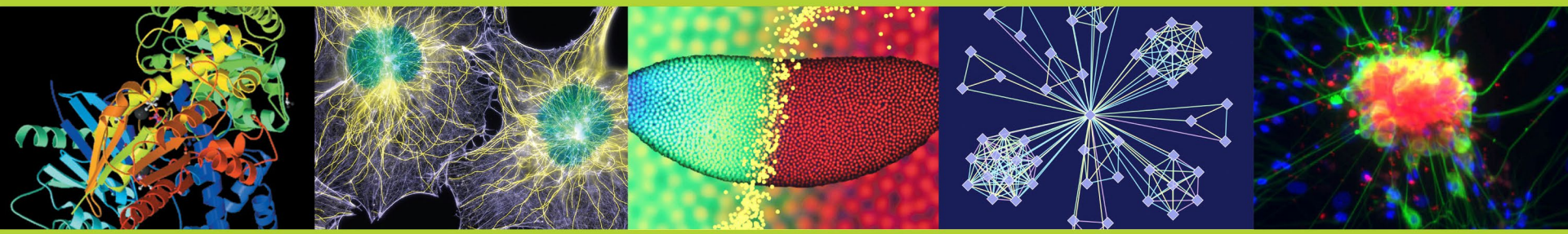
National Institute of General Medical Sciences

Institutional Research and Academic Career Development Awards (IRACDA) (K12)

Prospective Applicant Webinar

August 17, 2022



Before We Start

- **This webinar is being recorded** and will be available online. The slides will also be posted online.
- Type your questions in the “Q&A” chat box.
- There will be a Q&A period at the end of the webinar.

Webinar Participants

Program

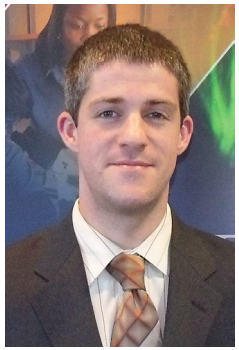
- Edgardo Falcon-Morales, Ph.D.
- Shakira Nelson, Ph.D.

Review

- Tracy Koretsky, Ph.D.

Grants Management

- Justin Rosenzweig, Grants Management Team Leader



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Follow us @NIGMSTraining

Disclaimer

This webinar and accompanying slides are for informational purposes only. They serve as an overview of the NIGMS IRACDA Program and are not meant to be comprehensive in coverage of all required components of an application.

Applicants are responsible for following the instructions detailed in the FOAs and any Related Notices (included in the FOA's Overview Information section), and the SF424 Application Guide.

For Example

Department of Health and Human Services

Part 1. Overview Information

Participating Organization(s)	National Institutes of Health (NIH)
Components of Participating Organizations	National Institute of General Medical Sciences (NIGMS)
Funding Opportunity Title	Institutional Research and Academic Career Development Awards (IRACDA) (K12 - Independent Clinical Trial Not Allowed)
Activity Code	K12 Physician Scientist Award Program (PSA)
Announcement Type	Reissue of PAR-19-366
Related Notices	• **August 2, 2022** - Notice of Information Webinar for PAR-22-212 "Institutional Research and Academic Career Development Award (IRACDA) (K12)". See Notice NOT-GM-22-042

Webinar Outline

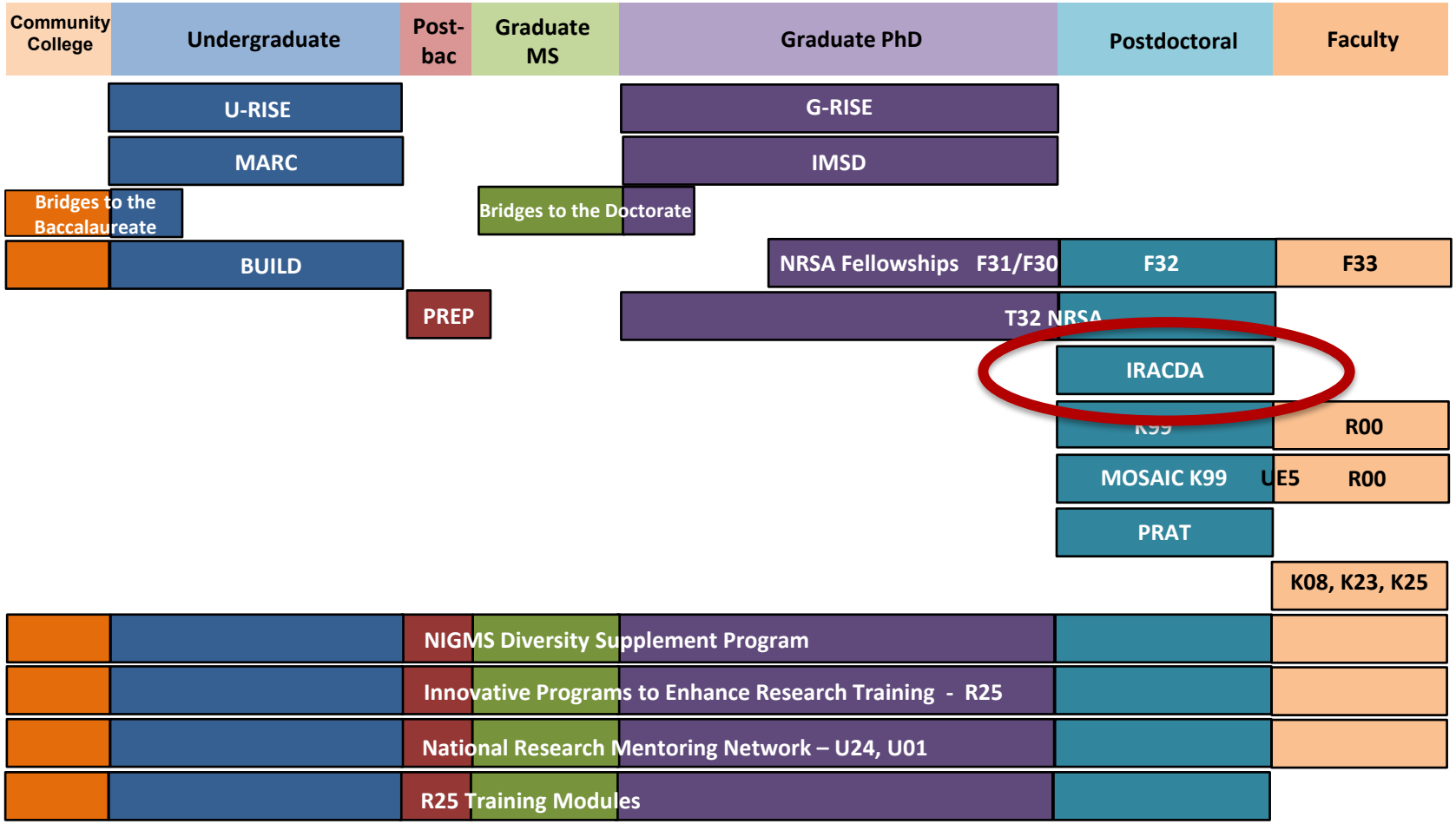
I. Program Overview

II. Application Overview

III. Peer Review Overview

IV. Budget Overview

NIGMS Training Programs



NIGMS TWD Programs

NIGMS Training Programs Are Expected To

- Focus on technical, operational and professional **skills development**
- Promote **rigor and reproducibility** in research
- Teach the **responsible and safe conduct** of research
- Promote **diversity, equity and inclusion**
- Encourage **inclusive, safe, and supportive** research environments
- Use **evidence-informed** educational and mentoring practices
- Employ **cohort-building activities** that enhance the trainees' science identity and self-efficacy
- Provide **individualized mentoring** and oversight throughout
- Introduce trainees to a **variety of scientific careers** and research areas
- Make **career outcomes** publicly available

https://www.nigms.nih.gov/research-areas/areas-of-research/training-workforce-development-and-diversity

Program Background

- The IRACDA Program provides support for a mentored postdoctoral research experience at a research-intensive institution combined with an opportunity to develop critical teaching and mentoring skills at a teaching-intensive partner institution with a diverse student population.

- Accordingly, the IRACDA program requires effective partnerships between a research-intensive institution and a teaching-intensive partner institution that has a historical mission or a demonstrated commitment to educating students from groups underrepresented in the biomedical research workforce.

Program Goals

- To develop a diverse pool of well-trained biomedical scientists who have the necessary knowledge and skills to pursue independent academic teaching and research careers.

- To benefit the teaching-intensive partner institutions, e.g., by providing research-oriented, early career teachers, mentors, and role models for the students; enhancing science educational offerings; providing research opportunities for the faculty and students; and/or bringing expertise with state-of-the-art research methods and technologies.

IRACDA Program Website:
https://nigms.nih.gov/training/careerdev/Pages/TWDInstRes.aspx

Program Considerations

- Funded IRACDA programs must have a strong research base comprised of established scientists who will provide expertise, resources, and mentoring to the IRACDA scholars.
- All partners should be involved in the planning and execution of the various elements of the career development program.
- Applicant institutions have latitude in the design of the program; however, career development activities, should last 2-4 years.
- The scholars are expected to be supported full-time using IRACDA funding for up to three years provided their progress toward an independent academic career is on track and satisfactory. Applicants may, and are indeed encouraged to, propose the use of non-IRACDA funds to provide a four-year career development program, with the first or last three years of support from IRACDA and the remaining one year's support from the mentor or other source(s).

Program Considerations

- Applicants must justify the proposed program size based on the research environment as well as the pool of research mentors and potential IRACDA scholars at the research-intensive institution, and the pool of teaching mentors available at the partner institution(s). NIGMS anticipates that most programs will have 3-4 scholars per cohort for an average size of 9-12 active scholars supported by the IRACDA funding at any one time.
- Awardees are expected to attend the annual IRACDA Conference. The conference is organized by the grantee institutions on a rotating basis.
- The proposed institutional research career development program may complement other, ongoing mentored research and career development programs at the applicant institution, but the proposed career development experiences must be distinct from those career development programs currently receiving Federal support.

Eligibility Overview

Eligibility	Research Intensive	Teaching Intensive
Institution	• Average ≥ $7.5M NIH Research Project Grant (RPG) funding per year over the past three fiscal years • Serve as primary site of mentored postdoctoral research experiences • Possess the requisite facilities and partnerships to conduct the proposed career development program • Have research mentors within the scope of the NIGMS mission	• Be public/state or private controlled institutions of higher education • Offer associate and/or baccalaureate degrees in STEM fields • Have strong commitment to undergraduate teaching • Have a historical mission or a demonstrated commitment to educating students from diverse backgrounds
Principal Investigator (s)	• Contact PI is expected to have full time appointment • Multiple PIs are encouraged • At least one PI should be an established investigator in the biomedical sciences and capable of providing both administrative and scientific leadership	

Eligibility Overview

Eligibility	Research Intensive	Teaching Intensive
Mentors (Participating Faculty)	• Must have active, externally funded research projects relevant to the NIGMS mission. • Committed to training, mentoring, and providing supportive, safe, and inclusive research environments. • Committed to their involvement throughout the total period of the award.	• Must have strong record of teaching and mentoring • Expected to facilitate the scholars' adjustment to the academic environment of the partner institution • Provide guidance and mentoring on teaching skills, as well as teaching-related challenges and opportunities
Scholars	• US Citizen or Permanent Resident • Expected to devote **9-person months (75% of full-time professional effort) to the mentored research** and the remaining **3-person months (25% of full-time professional effort) to the mentored teaching** and other mentored and/or didactic experiences, during their appointment on the K12 award.	

Webinar Outline

I. Program Overview

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IV. Budget Overview

First Step in Preparing an Application

Read the FOAs, Related Notices and

SF424 (R&R) Application Guide thoroughly.

Although this is a K12 mechanism, you must use the Training (T) Instructions in the SF424 Application Guide, except when instructed otherwise (in this FOA or in a Notice)

IRACDA: PAR-22-212

SF424: Training Instructions Guidelines

Updates relevant to Forms-G

- Applications due after January 25, 2022, will use Forms-G application forms and instructions. This includes:
  - NOT-OD-21-073 and NOT-OD-21-110: Changes to **biosketch format**
  - NOT-OD-21-109: Expanding Requirement for **eRA Commons IDs** to All Senior/Key Personnel
  - NOT-OD-21-170: Change in Federal-wide **Unique Entity Identifier (UEI)** Requirements

Application Title Format

Use the format:

"IRACDA at _____"

name of institution

For example:

IRACDA at Fantastic College

The Application - Page Limits

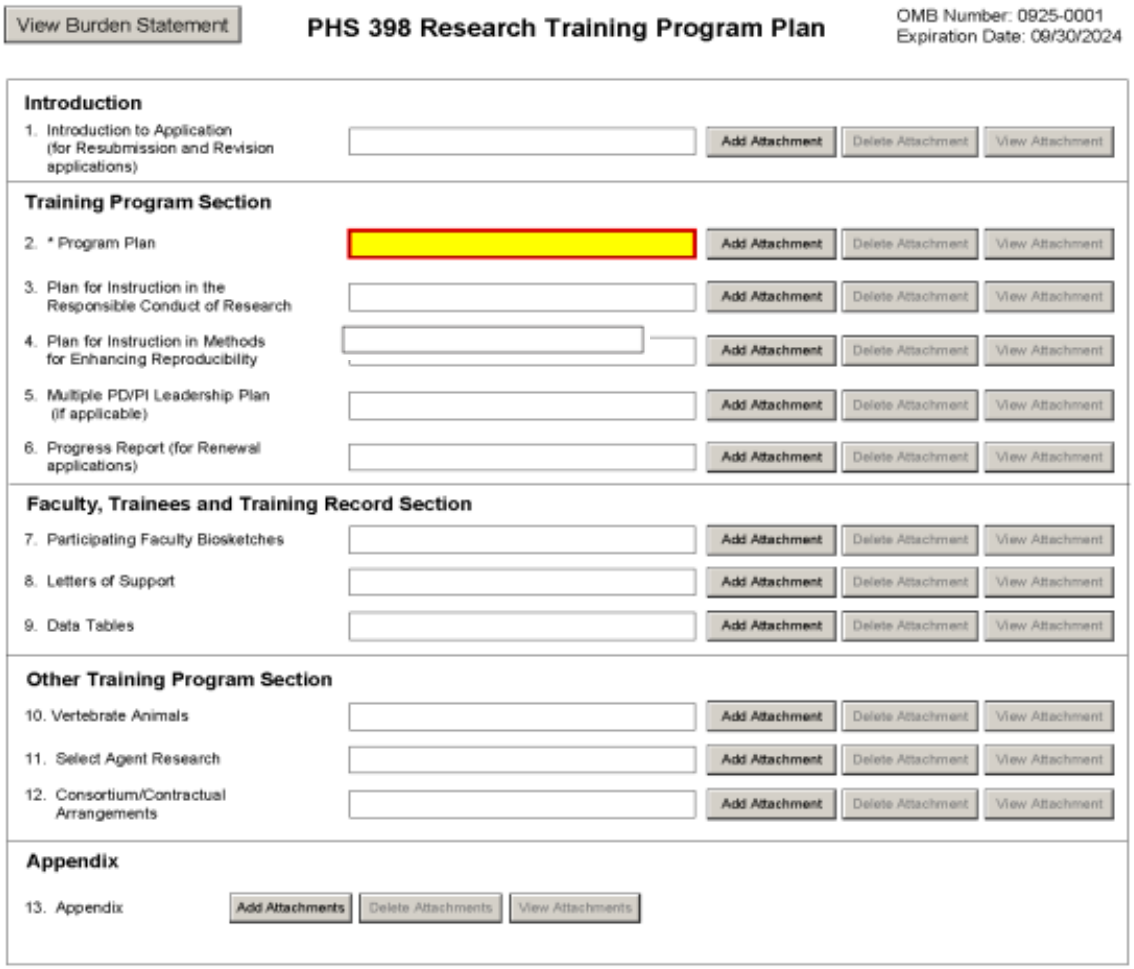
Section of Application	Select Page Limits *
Project Summary/Abstract	30 lines of text
Program Plan	25
Advisory Committee (optional)	1
Recruitment Plan to Enhance Diversity	3
Outcomes Data Collection and Storage Plan	2
Dissemination Plan	1
Plan for Instruction in Methods for Enhancing Reproducibility	3
Plan for Instruction in the Responsible Conduct of Research	3
Each Biographical Sketch	5
Institutional Support Letter	10
Conflict Resolution Protocols (optional)	3

*If page limits are exceeded, the application may be withdrawn prior to review

Updated Appendix Page Limits

- Two materials are **required** in the appendix:
  - Required Training Activities **(2 pages maximum per activity)**
  - Responsible Conduct of Research Syllabi **(2 pages maximum)**
- Three additional materials are **allowable** in the appendix:
  - Elective Activities **(2 pages maximum per activity)**
  - Evaluation and Assessment Instruments (Blank rubrics and forms)
  - Conflict Resolution Protocols (3 pages maximum)
- Applications that violate appendix page limits or exceed the number of allowed appendices, will be withdrawn prior to review
- Read through the FOA for additional information

Research Training Program Plan Form



View Burden Statement

PHS 398 Research Training Program Plan

OMB Number: 0925-0001
Expiration Date: 09/30/2024

Introduction

1. Introduction to Application (for Resubmission and Revision applications) — Add Attachment | Delete Attachment | View Attachment

Training Program Section

2. * Program Plan — Add Attachment | Delete Attachment | View Attachment
3. Plan for Instruction in the Responsible Conduct of Research — Add Attachment | Delete Attachment | View Attachment
4. Plan for Instruction in Methods for Enhancing Reproducibility — Add Attachment | Delete Attachment | View Attachment
5. Multiple PD/PI Leadership Plan (if applicable) — Add Attachment | Delete Attachment | View Attachment
6. Progress Report (for Renewal applications) — Add Attachment | Delete Attachment | View Attachment

Faculty, Trainees and Training Record Section

7. Participating Faculty Biosketches — Add Attachment | Delete Attachment | View Attachment
8. Letters of Support — Add Attachment | Delete Attachment | View Attachment
9. Data Tables — Add Attachment | Delete Attachment | View Attachment

Other Training Program Section

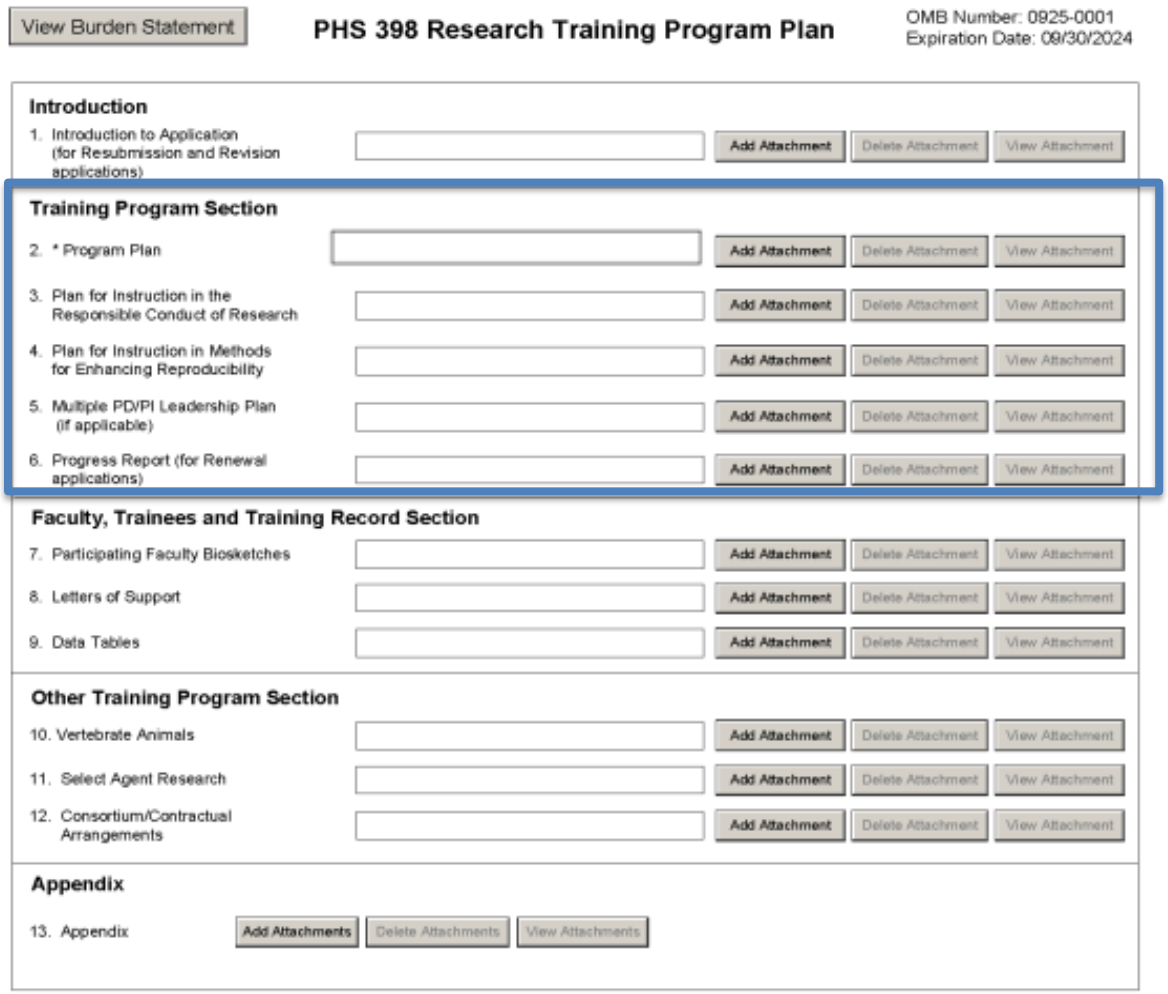
10. Vertebrate Animals — Add Attachment | Delete Attachment | View Attachment
11. Select Agent Research — Add Attachment | Delete Attachment | View Attachment
12. Consortium/Contractual Arrangements — Add Attachment | Delete Attachment | View Attachment

Appendix

13. Appendix — Add Attachments | Delete Attachments | View Attachments

- Training Program Section
- Faculty, Trainees, and Training Record Section
- Appendix
- *Other Attachments (R&R Other Project Information Form)*

Training Program Section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Training Program Section

2. Program Plan (25 pages)
3. Plan for Instruction in RCR (3 pages)
4. Plan for Instruction in Methods for Enhancing Reproducibility (3 pages)
5. Multiple PD/PI Leadership Plan (if applicable)
6. *Progress Report for renewals* ***only****

Please contact Program Officer to confirm renewal status

2. Program Plan (*Page limit: 25 pages)*

- Background
- Program Administration
- Mentors (Participating Faculty): Teaching-Intensive Participating Faculty
- Mentors (Participating Faculty): Research-Intensive Participating Faculty
- Proposed Training
- Program Evaluation
- Scholar Candidates
- Institutional Environment and Commitment to the Program
- Qualifications of Scholar Candidates and Admissions and Completion Records

Background

- Applicants should describe the rational for the partnership, including the geographic location of the participating institutions. How will the program overcome logistical challenges? If there is significant geographic distance, the program must provide a well justified plan for overcoming the challenges.
- For the research-intensive institutions, applications should provide:
  - Summaries of the key data from the Training Data Tables (table 1, table 2, table 3)
  - Justification for the program by demonstrating pool of faculty, potential scholars, and robust research resources
- For the teaching-intensive partner(s), applications should provide:
  - Student demographics, including number of students from well-represented and underrepresented groups at partner institution(s) that major in STEM fields
  - STEM faculty and workloads
  - Academic environment (e.g., courses offered, opportunities for developing new courses, student and faculty support services)

Program Administration

- Applications should describe how the PD(s)/PI(s) will promote the success of the scholars and achieve program goals
- Expand on the information in the biosketch(es) to address how Program leadership has
  - Administrative and career development experience
  - Time to commit sufficient effort to ensure programs success
  - A demonstrated commitment to developing the next generation of biomedical research workforce, leading recruitment efforts to enhance diversity
- The application must describe the administrative structure, distribution of responsibilities, leadership succession plan, etc.
- If program administrators at the research-intensive institutions are proposed, provide a description of the qualifications

Mentors: Research-Intensive Participating Faculty

- How participating faculty will promote the success of the scholars and the career development program
- Describe how the program has or will build a diverse team of participating faculty to help scholars gain access to potential role models
- The application should address how the participating faculty:
  - Conduct research within the NIGMS mission
  - Employ the highest standards of scientific rigor
  - Promote the use of the highest standards of practice to ensure the safety of all individuals in the research environment
  - Have received training on how to effectively mentor individuals for all backgrounds

Mentors: Teaching-Intensive Participating Faculty

- Describe how the program will ensure the participating faculty serving as teaching mentors have the following characteristics:
- A record of excellence in teaching in a STEM field
- He time to serve as effective teaching mentors given their other professional obligations
- Knowledge and experience with evidence-informed approaches to teaching and learning
- Expertise in developing safe and inclusive teaching and mentoring environments

Proposed Training

- Applications should describe specific, obtainable, and measurable short-term and long-term objectives of the proposed career development plan
- Objectives should align with the overarching goals of the IRACDA program
- Mentored research component should include information about planned courses, seminars, workshops, as well as scientific rigor and responsible conduct of research training activities
- What mechanisms will be used to match scholars with appropriate participating faculty
- How will the teaching mentors be assigned, what potential courses are accessible to the scholars to teach at the partner institution(s)

Proposed Training (continued)

- What mechanisms will be used to monitor mentoring, including oversight of the effectiveness of the scholar/participating faculty at the teaching-intensive institution
- What will be the programmatic oversight to ensure that the scholars gain the career development skills and are on track to transition into independent academic career
- Explain how courses, structured activities, and research experiences are designed to develop the technical, operational, and professional skills of the scholars.
- **Required appendix materials**: Required Training Activities must be included, to provide materials for required activities.
  - Applicants may use the Elective Activities in the appendix for up to four additional activities

Program Evaluation

The evaluation plan should describe:

- The evaluation process to determine whether the program is effective in meeting its objectives with respect to scholars career development
- The comparator group
- Metrics and methods to determine whether the partner institution(s) benefit from participation in the IRACDA program
- Plans for being responsive to internal and external outcomes, analyses, critiques, surveys, and evaluations
- How the program will effectively track scholar and career outcomes, provide information to prospective and current scholars about outcomes, and ensure data collection and storage methods will be safeguarded and preserved
  - Would briefly expand upon the Outcomes Data Collection and Storage Plan attachment
- How the PD(s)/PI(s) will share outcomes with the broader community
  - Would briefly expand upon the Dissemination Plan attachment

Scholar Candidates

Through the narrative and summaries of the information presented in the required Training Data Tables and the attachments, the application should:

- Provide a strong justification for the number of requested scholar positions in the context of other NIGMS-funded training or career development grants at the institution
- Expand upon the Recruitment Plan to Enhance Diversity, and explain how it will identify and recruit a diverse pool of potential candidates
- Describe the plans for a comprehensive candidate review process. We want to see processes that consider metrics beyond the graduate institution, GPA, and standardized test scores
- Define and justify the selection and appointment for scholars

Institutional Environment and Commitment to the Program

- Applicants should use this section to expand upon the “Facilities & Other Resources” section and the “Letters of Support” section, as necessary, to provide information regarding the Environment and Commitment to the program.

- The applicant must provide evidence of support for the proposed program including, but not limited to, assurance that sufficient time will be allowed for the PD(s)/PI(s) and other Participating Faculty to contribute to the proposed program, and that there will be protected time for scholars to participate in the mentored research (9-person months) and teaching activities (3-person months).

Qualifications of Scholar Candidates and Admissions and Completion Records

- This section is intended to provide outcomes for the program described in the application
  - For new applications, proposed programs should describe outcomes for postdoctoral researchers at the research-intensive institution to provide baseline data

- The application should include information about outcomes through narrative descriptions and a summary of the data presented in the training data tables

- Applications should describe:
  - Aggregate data on the diversity of the scholars
  - Evidence that alumni conducted rigorous research that advanced scientific knowledge and/or technologies
  - Academic career enhancing skills gained during the postdoctoral experience
  - The rate of transitioning into independent academic careers that support the biomedical research enterprise
  - The application must include detailed outcome data regarding the number of scholars (or postdoctoral fellows for new programs) who completed the program and transitioned into independent academic positions (obtained goal) or other careers in the biomedical research workforce, remain in the program (in training), or withdrew from the program (attrition) in the body of the text.

Recruitment Plan to Enhance Diversity (3-page limit)

- The application must provide a recruitment plan to enhance diversity
- The plan should include outreach strategies and activities designed to recruit potential candidates who are from diverse backgrounds (see NIH's Interest in Diversity)
- Plan should describe the specific efforts to be undertaken by the program and how these might coordinate with recruitment efforts of the institution(s)

Plan for Instruction in the Responsible Conduct of Research (RCR) (3-page limit)

- Be sure to comply with instructions provided in the SF424 Application Guide (Training section), along with these additional instructions
- Explain how teaching of RCR components are well integrated into the overall career development plan
- Describe how all participating faculty will reiterate and augment key elements when trainees are performing research in their labs

RCR Policy: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html

Resources: https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-122.html

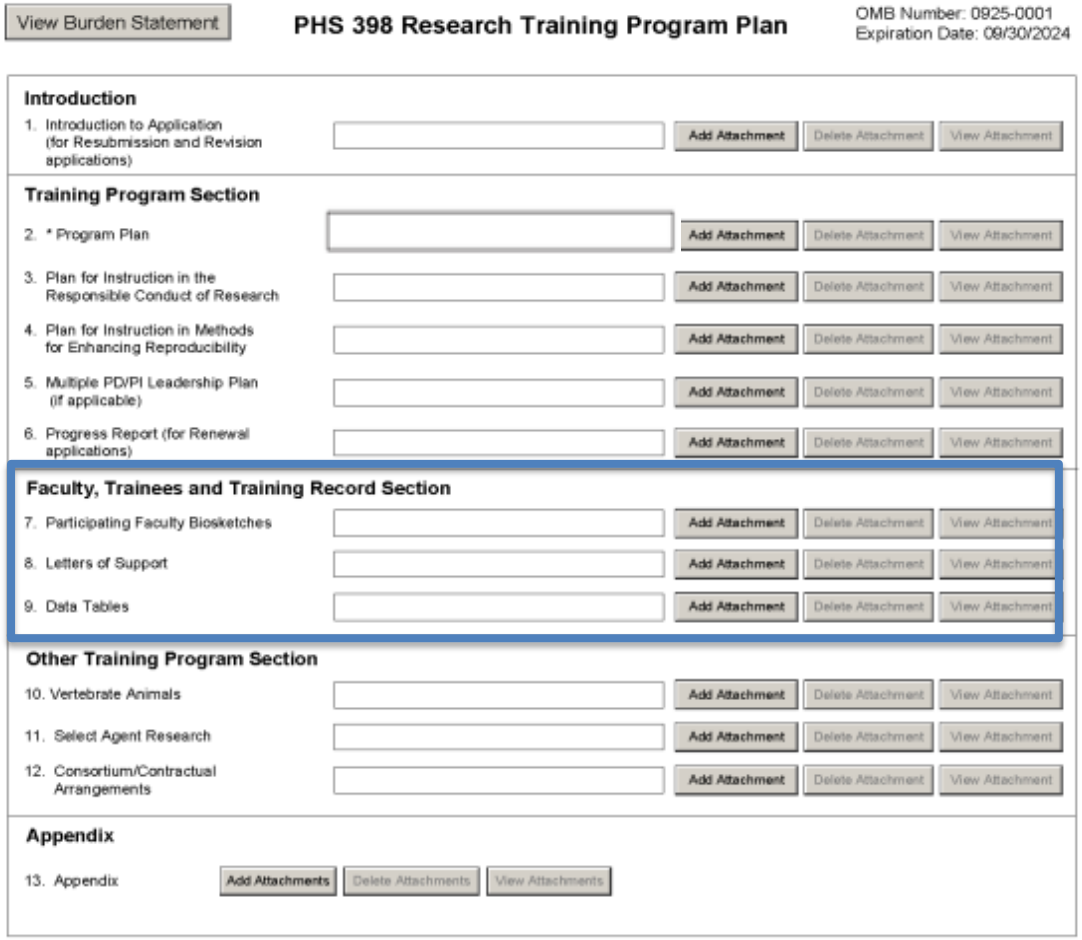
Plan for Instruction in Methods for Enhancing Reproducibility (3-page limit)

- Plan must describe how scholars will be instructed in principles important for enhancing research reproducibility including:
  - critical evaluation of foundational research underlying a project
  - Rigorous experimental design and data interpretation
  - Record keeping
- Applicants are encouraged to consult the NIGMS clearinghouse for training modules to enhance data reproducibility and other resources
- Describe how instruction strategies are sufficiently well integrated into the overall career development program, that is, how they are taught at multiple stages of the scholar's development and in a variety of formats and contexts
- See additional instructions in the SF424 Application Guide for details

Resources

- NIH Website on Rigor & Reproducibility
- NIGMS Clearinghouse for Data Reproducibility Training Modules
- NIGMS Funded Projects on Rigor & Reproducibility

Faculty, Trainees, and Training Record Section


View Burden Statement

PHS 398 Research Training Program Plan

OMB Number: 0925-0001
Expiration Date: 09/30/2024

Introduction

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8. Letters of Support
9. Data Tables

Other Training Program Section

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13. Appendix

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Required

7. Participating Faculty Biosketch(es)

8. Letters of Support

9. Data Tables

7. Participating Faculty

- Create a **diverse team** (e.g., underrepresented backgrounds, women, different career stages)
- Participating faculty should provide a personal statement within their biosketch that describes the appropriateness of their research and training backgrounds, and their commitment to:
  - Training, mentoring, and promoting inclusive, safe, and supportive research environments;
  - Maintaining a record of, and providing training in, rigorous and unbiased experimental design, methodology, analysis, interpretation and reporting of results;
  - Supporting scholars' participation in activities required to identify and transition into independent academic careers in the biomedical research workforce; and
  - Supporting the timely transition of the scholars into independent academic careers in the biomedical research workforce.

New biosketch format: https://grants.nih.gov/grants/forms/biosketch.htm

8. Letters of Support

- **Institutional Support Letter** (10 page maximum) – letter must describe the activities and resources provided by the institutions that will ensure the success of the planned program
  - The letter must outline each institution's respective role in administering the program, and these roles must be consistent with the goals and objectives of the proposed IRACDA program.
- As applicable, the letter should also address how the institution(s) are:
  - Developing and promoting a culture in which the highest standards of safety, scientific rigor, reproducibility, and responsible conduct are advanced;
  - Supporting core facilities and technology resources, and describing how they can be used to enhance training;
  - Providing adequate staff, facilities, and educational resources to the planned program;
  - Supporting the PDs/PIs and other key staff associated with the planned program;
  - Fostering and rewarding excellence in training (e.g., through institutional polices such as tenure and promotion);
  - Providing trainees access to student support services, such as healthcare, counseling services, and housing;
  - Ensuring that trainees will continue to be supported when they transition from the training grant to other sources of support;
- Be sure to read through the full FOA for all details

8. Letters of Support

- **Research-Intensive Institutional Eligibility Letter(s)-** Provost or similar official with institution-wide responsibility must certify that all the components of the institution under the respective UEI number(s) meet eligibility.
  - RPG average annual funding
- **Teaching-Intensive Institutional Eligibility Letter(s)**–Provost or similar official with institution-wide responsibility must certify that the institution is a (a) public/state or private controlled institution of higher education, (b) offers associate and/or baccalaureate degrees in STEM fields, (c) has a strong commitment to teaching undergraduates, and (d) has a historical mission or a demonstrated commitment to educating students from diverse backgrounds.

If these letters are **not included**, the application will be considered incomplete and will **not** be **reviewed.**

9. Data Tables

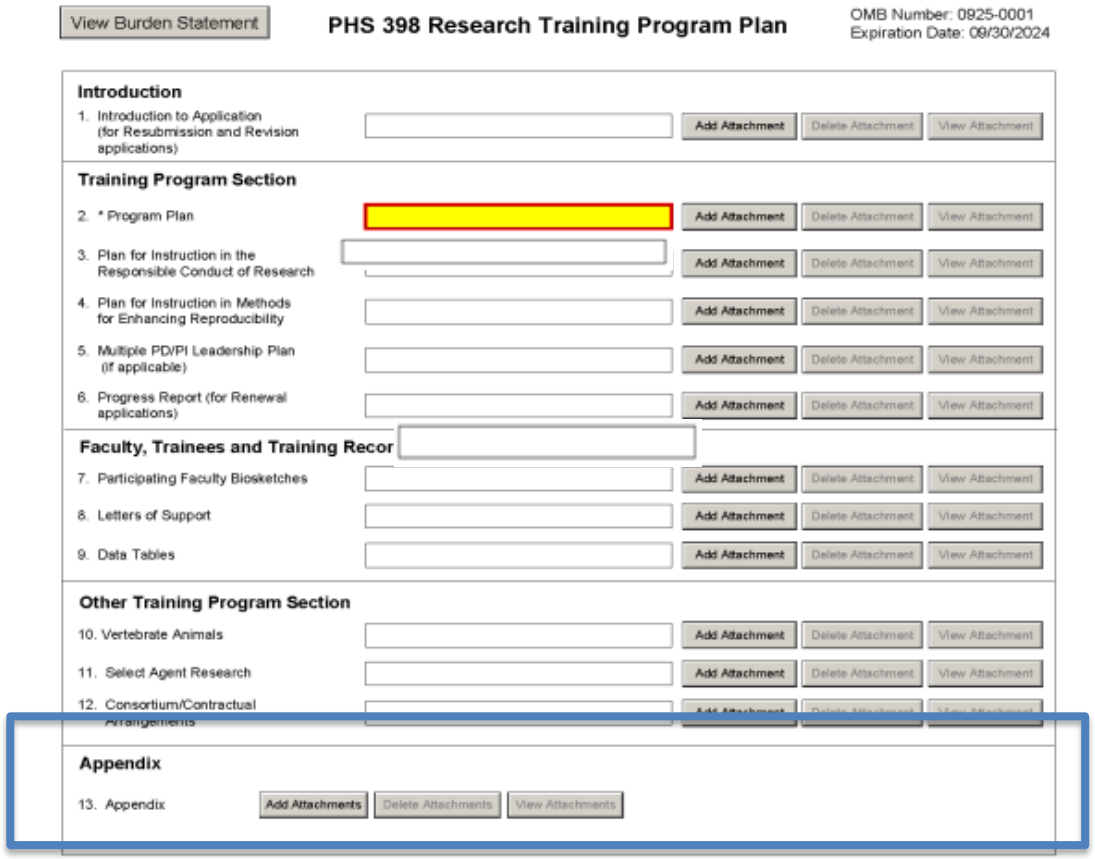
https://grants.nih.gov/grants/forms-f/data-tables.htm

The application must include the required Training Data Tables.

Data Tables	Date Posted	*Blank* Data Tables File Link/Format/Size	*Instructions* and *Sample* Data Tables File Link/Format/Size
New Applications			
New Postdoctoral Training Submit tables: 1, 2, 3, 4, 5B, 6B, 8C	3/25/2020	MS Word (49 KB)	MS Word (51 KB) PDF (360 KB)
Renewal Applications			
Renewal Postdoctoral Training Submit tables 1, 2, 3, 4, 5B, 6B, 7, 8C	3/25/2020	MS Word (49 KB)	MS Word (51 KB) PDF (360 KB)

Applications that **do not contain** the required tables, or that submit any additional tables in this attachment, will be considered noncompliant and will **not** be **reviewed**.

Appendix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Required

- Required Training Activities (**2-page max, per activity**)
- Responsible Conduct of Research Syllabi (**2-page max**)

Allowable

- Elective Activities (**2-page max, per activity**)
- Evaluation and Assessment Instruments
- Conflict Resolution Protocols (**3-page max**)

Applications will not be reviewed that

- **Lack required appendices**
- **Include unallowed appendices**
- **Exceed page limit of any materials**

Required Appendix Items

- **Required Training Activities (2 pages maximum per activity)** -To adequately assess the content of the didactic portion of the training program, the application must include brief descriptions of all required **courses, workshops, and training activities (e.g., streamlined syllabi with topics, timelines, activities, credits, etc.).**

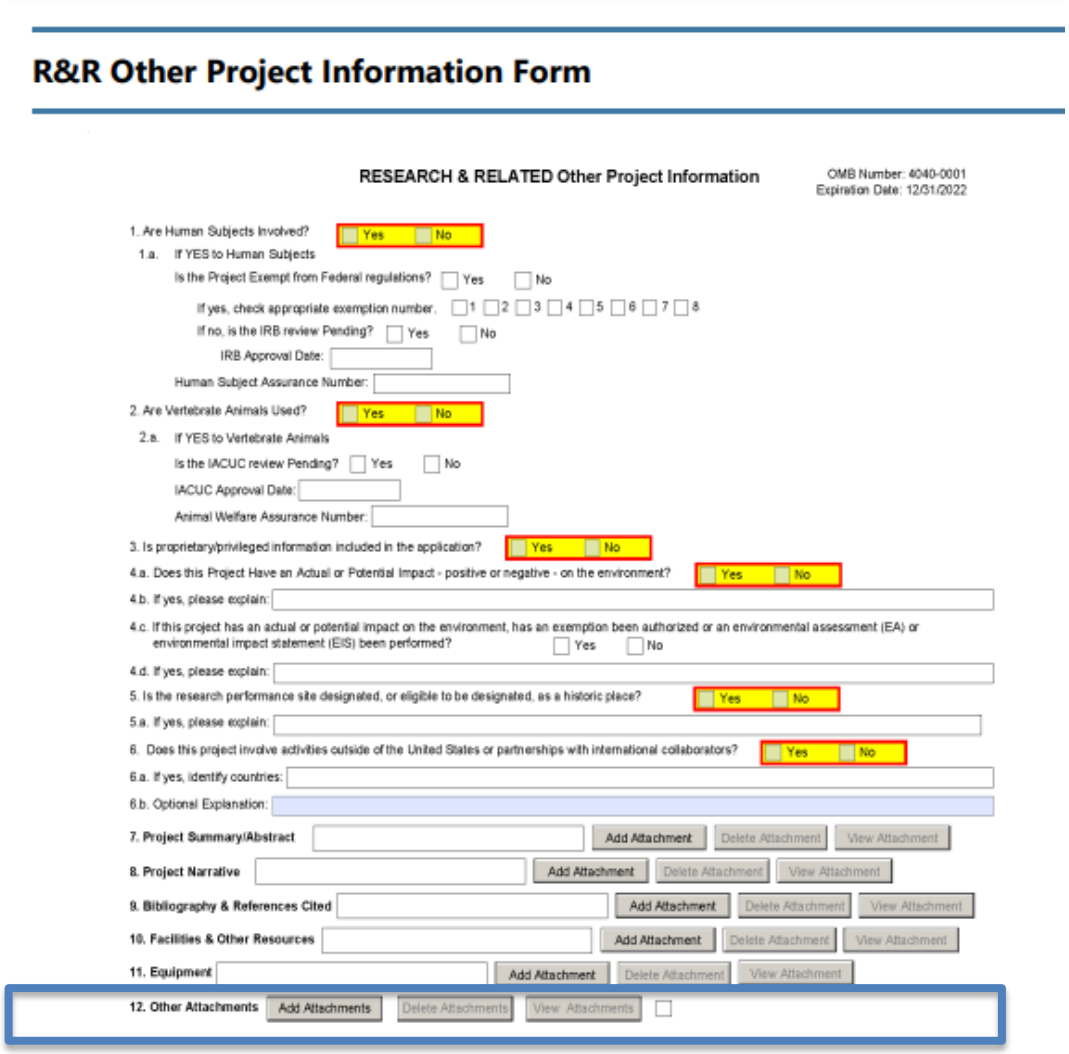
- **Responsible Conduct of Research Syllabi** ***(2 pages maximum)*** - Syllabi/Outlines to describe RCR training and when the trainees receive it.

If these are not included or exceed page limits, the application will be considered incomplete and will not be reviewed.

Optional/Allowable Appendix Items

- **Elective Activities**
  - 2 pages maximum per activity
- **Evaluation and Assessment Instruments**
  - Blank rubrics and forms
- **Conflict Resolution Protocols**
  - 3 pages maximum

Other Attachments



R&R Other Project Information Form

RESEARCH & RELATED Other Project Information OMB Number: 4040-0001 Expiration Date: 12/31/2022

1. Are Human Subjects Involved? Yes No
1.a. If YES to Human Subjects
Is the Project Exempt from Federal regulations? Yes No
If yes, check appropriate exemption number. 1 2 3 4 5 6 7 8
If no, is the IRB review Pending? Yes No
IRB Approval Date:
Human Subject Assurance Number:
2. Are Vertebrate Animals Used? Yes No
2.a. If YES to Vertebrate Animals
Is the IACUC review Pending? Yes No
IACUC Approval Date:
Animal Welfare Assurance Number:
3. Is proprietary/privileged information included in the application? Yes No
4.a. Does this Project Have an Actual or Potential Impact - positive or negative - on the environment? Yes No
4.b. If yes, please explain:
4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed? Yes No
4.d. If yes, please explain:
5. Is the research performance site designated, or eligible to be designated, as a historic place? Yes No
5.a. If yes, please explain:
6. Does this project involve activities outside of the United States or partnerships with international collaborators? Yes No
6.a. If yes, identify countries:
6.b. Optional Explanation:
7. Project Summary/Abstract Add Attachment Delete Attachment View Attachment
8. Project Narrative Add Attachment Delete Attachment View Attachment
9. Bibliography & References Cited Add Attachment Delete Attachment View Attachment
10. Facilities & Other Resources Add Attachment Delete Attachment View Attachment
11. Equipment Add Attachment Delete Attachment View Attachment
12. Other Attachments Add Attachments Delete Attachments View Attachments

Required

- Sustainability Plan (1-page limit)
- Outcomes Data Collection and Storage Plan (2-page limit)
- Dissemination Plan (1-page limit)

Optional

- Advisory Committee (1-page limit)

Applications will not be reviewed that:

- **Lack required attachments**
- **Include unallowed attachments**
- **Exceed page limit of any materials**

Sustainability Plan (1 page)

- The application must provide a plan for supporting scholars whose appointments will be on-going at the end of the project period
- Plan must also include situations in which a renewal application is deemed to be non-competitive during peer review

If this plan is not included, the application will be considered incomplete and will not be reviewed.

Outcomes Data Collection and Storage Plan (2 pages)

- A plan to track the outcomes for all supported scholars for a minimum of **15 years beyond** the scholars participation in the program.
- You are encouraged to make the aggregate outcome data available on your institution's website.
- A strategy to ensure the secure storage and preservation of program data and outcomes (i.e., centralized, safeguarded, and retrievable during leadership changes).

If this plan is not included, the application will be considered incomplete and will not be reviewed.

Dissemination Plan (1 page)

- A specific plan to nationally disseminate any findings resulting from or materials developed under the auspices of the program.
- Examples include data or materials from successful training or mentoring interventions via web postings, presentations at scientific meetings, and/or workshops.

If this plan is not included, the application will be considered incomplete and will not be reviewed.

Advisory Committee (1 page) *Optional*

- Not a required component of a career development program.
- Describe how the Advisory Committee will assess the overall effectiveness of the program.
- Include the roles, responsibilities, and desired expertise of committee members, frequency of committee meetings, and other relevant information.
- Only pre-existing Advisory Committee members should be named in the application.

Webinar Outline

I. Program Overview

II. Application Overview

III. Peer Review Overview

IV. Budget Overview

Review of Applications

- IRACDA applications reviewed by standing NIGMS review committees: TWD-C and TWD-D.
  https://www.nigms.nih.gov/Research/application/Pages/studysection.aspx

- Committees are equivalent: applications assigned to one of two committees to balance conflicts and workload.

- Receipt letter from scientific review officer (SRO) will provide information about meeting dates, instructions for providing updates, link for committee roster, and people to contact during the review and post-review process.

- Scores and summary statements accessed through PI's eRA Commons account.

Review of Applications

- Please read the review criteria while preparing your application to make sure all the required information is included.

- Review panel will assess your application against the review criteria.

Review Criteria – Section V of FOA

Scored Review Criteria

- Career Development Program and Environment
  - Rationale, Mission, and Objectives
  - Curriculum and Overall Career Program Plan
  - Career Development
  - Program Oversight, Participating Faculty Selection, and Mentor Training
  - Institutional and Departmental Commitment to the Program
- Director(s)/Principal Investigator(s) (PD(s)/PI(s))
- Mentors (Participating Faculty)
  - Research-Intensive Participating Faculty
  - Teaching-Intensive Participating Faculty
- Scholars
- Training Record

Data Training Tables

- New Applications: Tables 1, 2, 3, 4, 5B, 6B, 8C
- Renewals Tables 1, 2, 3, 4, 5B, 6B, 7, 8C
- Upload only the required Training Tables in the Training Tables attachment. Including additional Tables is not allowed.

- Do not alter Training Tables.
- Do not put headers on the Training Tables.
- Highlighting or summarizing Training Table data is allowed and encouraged, although it must be within the 25-page Research Training Plan.

Review Criteria – Section V of FOA

Additional Review Criteria (part of Overall Impact score but no separate scores given)

- Training in Methods for Enhancing Reproducibility [plan] – Acceptable Y/N?
- Recruitment Plan to Enhance Diversity [plan] – Acceptable Y/N?
- Training in the Responsible Conduct of Research [plan] – Acceptable Y/N?
- Renewals

Additional Review Considerations (no separate scores given and not considered in Overall Impact score)

- Budget and Period of Support (# of scholars)

Application Preparation - Reminders

- Read the FOA thoroughly and make sure that your application addresses all the elements and that all requested materials are included.
- Make sure that materials are supplied in the correct locations, per FOA instructions.
- Allow enough time to carefully check your application after submission. We cannot accept any missing items after the receipt deadline.

Applications will be *withdrawn* if anything is missing *or* unallowed materials are included!

Application Preparation - Tips

- Don’t bury important information; don’t expect reviewers to “read between the lines” to figure out what you are proposing.
- Include clear, measurable and attainable program goals
- Make sure faculty biosketches are up-to-date and relevant for program (personal statement).
- Data in tables and text should match; also across tables.
- Present outcomes data in a straightforward manner.
  - Don’t exaggerate.
  - Don’t hide data (reviewers will “do the math”).
- Avoid non-compliance and withdrawal
  - Feedback Loop Post

Review Process: Usual Timeline

Timeframe	Activity
(From submission date)	
1 - 2 months (November 2023)	Referral
2 - 6 months (March 2023)	Review Panel
6 - 7 months (April 2023)	Summary Statement Available
7 - 8 months (May 2023)	Advisory Council
8 - 9 months (June 2023)	Funding Decisions
9 - 10 months (July 2023)	Award Start Date

Webinar Outline

I. Program Overview

II. Application Overview

III. Peer Review Overview

IV. Budget Overview

Scholar Costs

- Support is allowed for **scholars** in the form of **salary/wages and fringe benefits**. Total salary requested for each scholar must be based on a full-time, 12-month staff appointment.
- Scholars may be supported on IRACDA funding for up to **three years.**
- Clearly indicate the number of IRACDA appointments proposed for each year.
- Scholars may not concurrently hold another federally sponsored award that duplicates IRACDA support.

Personnel Costs

- Individuals designing, directing, and implementing the career development program may request **salary and fringe benefits** appropriate for the person months devoted to the program.
- Limited program-related administrative and clerical salary costs associated distinctly with the program that are not normally provided by the applicant organization may be direct charged to the grant only when they are in accordance with applicable cost principles. When specifically identified and justified, these expenses must be itemized in **Sections A and B**, as appropriate, of the R&R Budget.
- **Total PD/PI salary support** for MPI applications or combinations of multiple PDs/PIs/co-Investigators is limited to 2.0 person months (i.e., 17% on a 12-month basis). No individual PD, PI, or co-Investigator may exceed 1.2 person months of salary support (10% effort on a 12-month basis) for either single or MPI format applications.

Personnel Costs

- Salary support for other administrative personnel (e.g., program administrator/program coordinator and/or program assistant) at the research-intensive institution is limited to 6.0 person months.
- Salary support for administrative personnel at the teaching-intensive institution(s) is allowed; this support is limited to 0.6 person months (i.e., 5% effort on a 12-month basis) per partner institution.
- Salary support for the teaching mentor(s) at the partner institution is limited to 2.4 person months (i.e., 20% effort on a 12-month basis) per partner institution.

Other Program-Related Expenses

- Consultant costs, equipment, supplies, travel for key persons, and other program-related expenses may be included in the proposed budget. *These must be justified as specifically required by the proposed program.
- The program-related expenses must be itemized in **Sections C, D, and F**, as appropriate.
- Up to **$10,000** per year are allowed for academic skill development workshops.
- Up to **$2,000/scholar/year** in **teaching supplies** and up to **$2,000/scholar/year** in **scholar's travel** to one career development or national scientific meeting per year. [These travel funds are separate from funds requested to attend the annual IRACDA Conference (typically **$1,500-2,000/scholar/year**)]

Other Program-Related Expenses

- Travel expenses (up to **$5,000 total/year**) are also allowed for the program staff [PDs/PIs, program administrator(s), and program coordinators(s) at the research-intensive and partner institution(s)] to attend the annual IRACDA Conference and should be included in the budget.
- Program assessment costs will be limited to up to **$3,000** for the 5-year grant period.
- NIGMS will consider administrative supplement requests from award recipients to defray the costs of hosting the annual IRACDA Conference, provided the request is reasonable and well justified.
- IRACDA funds cannot be used to recruit scholars (e.g., travel for interviews or recruitment events) or to cover research internships or summer research experiences for undergraduates.

xTrain for Scholar Appointments

- All IRACDA scholars must have an appointment form submitted through the eRA Commons to xTrain.
- If participants cannot continue in the grant program for the full appointment period, an amended appointment must be submitted to xTrain with the correct appointment period.
- An appointment may begin any time during the budget period, but not before the budget period start date of the grant year.

xTrain Web Page - application guide, quick reference sheets, FAQs, training materials:
https://era.nih.gov/services_for_applicants/other/xTrain.cfm

For Additional Information

- PAR-22-212: Funding Opportunity Announcement
- IRACDA: NIGMS IRACDA Home page
- Frequently Asked Questions – Application Guide, Electronic Submission of Grant Applications
- IRACDA Participating Institutions
- 2016 IRACDA Outcomes Report

Critical Deadlines

- Letter of Intent Due Date(s)
  - Not Applicable
- Application Due Date(s)
  - **October 3, 2022** (2023 & 2024)
- Earliest Start Date
  - July 1, 2023

Questions?

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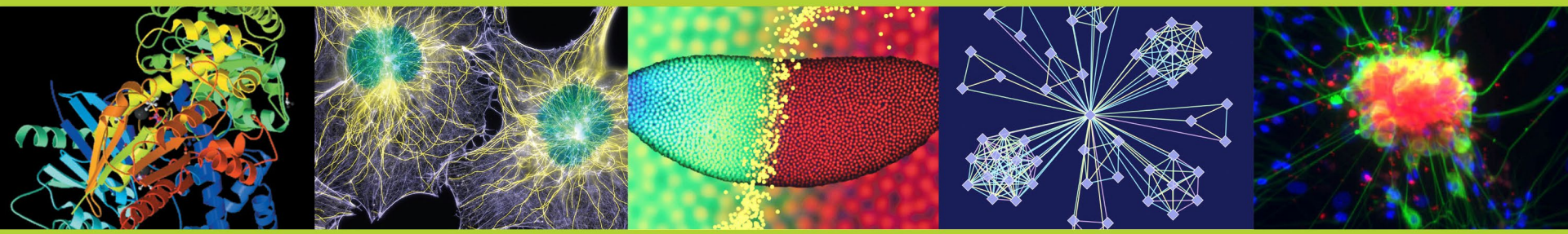

Required Training Data Table 1

Sample Table 1. Census of Participating Departments or Interdepartmental Programs

Part I. Predoctorates

Participating Department or Program	Total Faculty	Participating Faculty	Total Predoctorates	Total Predoctorates Supported by any HHS Training Award	Total Predoctorates with Participating Faculty	Eligible Predoctorates with Participating Faculty	TGE Predoctorates Supported by this Training Grant (Renewals/ Revisions)	Predoctorates Supported by this Training Grant (R90 Only Renewals/ Revisions)
Department of Biochemistry	45	14	38	15	12	6	2	0
Neuroscience Program	32	20	31	20	14	7	4	1
Department of Pharmacology	25	5	30	10	5	3	3	0
Total	**102**	**39**	**99**	**45**	**31**	**16**	**9**	**1**

Rationale: This table provides insight into the environment in which the proposed training will take place. It allows reviewers to assess whether the program has the "critical mass" of trainees and faculty and, in the case of interdepartmental programs, representation/distribution of scientific disciplines, to be effective. (Detailed data on program applicants, entrants, and appointees for participating departments and interdepartmental programs are collected in a parallel fashion on Table 6.)

Required Training Data Table 1

Part II. Postdoctorates

Participating Department or Program	Total Faculty	Participating Faculty	Total Postdoctorates	Total Postdoctorates Supported by any HHS Training Award	Total Postdoctorates with Participating Faculty	Eligible Postdoctorates with Participating Faculty	TGE Postdoctorates Supported by this Training Grant (Renewals/ Revisions)	Postdoctorates Supported by this Training Grant (R90 Only Renewals/ Revisions)
Department of Biochemistry	45	14	24	10	9	5	2	0
Neuroscience Program	32	20	27	20	12	5	3	1
Department of Pharmacology	25	5	15	8	5	3	2	0
Total	**102**	**39**	**66**	**38**	**26**	**13**	**7**	**1**

Rationale: This table provides insight into the environment in which the proposed training will take place. It allows reviewers to assess whether the program has the "critical mass" of trainees and faculty and, in the case of interdepartmental programs, representation/distribution of scientific disciplines, to be effective. (Detailed data on program applicants, entrants, and appointees for participating departments and interdepartmental programs are collected in a parallel fashion on Table 6.)

Required Training Data Table 2

Sample Table 2. Participating Faculty Members

Name	Degree(s)	Rank	Primary Department or Program	Research Interest	Training Role	Pre-doctorates In Training	Pre-doctorates Graduated	Predoctorates Continued in Research or Related Careers	Post-doctorates In Training	Post-doctorates Completed Training	Postdoctorates Continued in Research or Related Careers
Abrams-Johnson, Jane	PhD	Asst. Prof.	Pharmacology	Regulation of Synthesis of Biogenic Amines	Preceptor Other Comm	1	2	2	1	0	0
Jones, Lisa S.	PhD	Res. Asst. Prof.	Biochemistry	Protein Structure, Folding, and Immunogenicity	Preceptor Exec Comm	3	3	3	4	2	2
Sandoz, Miguel J.	MD, PhD	Assoc. Prof.	Neuroscience	Developmental Genetics in Drosophila	Preceptor	4	6	5	4	8	6
Thomas, James C.	PhD	Prof.	Biochemistry	Molecular and Genetic Analysis of RNA Viruses	PD/PI	7	10	9	8	15	14

Rationale: This information allows reviewers to assess the distribution of participating faculty by rank (junior vs. senior), by research interests, and by department or interdepartmental program. In addition, data on the mentoring records of faculty permit an evaluation of the experience of participating faculty in facilitating the progression of predoctorates and postdoctorates in their careers. The data concisely summarize information about the training faculty.

Required Training Data Table 3

Sample Table 3. Federal Institutional Research Training Grants and Related Support Available to Participating Faculty Members

Grant Title	Award Number	Project Period	PD/PI	Number of Predoctoral Positions	Number of Postdoctoral Positions	Number of Short-Term Positions	Number of Participating Faculty (Number Overlapping)	Names of Overlapping Faculty
Bioimmunotherapy Training Grant	T32 CA05964-11	07/2011-06/2016	Thomas, James C.	12	0	0	25 (6)	Abelson Brown Fields Johnson Sung Watson
Genetic Basis of Mental Illness	T32 MH02708-07	07/2010-06/2015	Johnson, Albert P.	4	4	2	7 (2)	Johnson Watson
Research Education Program for Residents in Psychiatry	R25 MH09876-06	07/2013-06/2018	Mendez, V. Roberto	0	6	0	33 (3)	Mendez Rivers Truesdale
Career Development in Pediatric Mental Health	K12 HD01234-09	07/2012-06/2017	Sterman, Patricia S.	0	4	0	19 (1)	Rubin
Total				**16**	**14**	**2**		

Rationale: This table will permit an evaluation of the current level of support for related research training and the extent to which the proposed training grant has overlap in participating faculty. This information is useful in assessing the institutional environment and determining the number of training positions to be awarded.

Required Training Data Table 4

Sample Table 4. Research Support of Participating Faculty Members

Faculty Member	Funding Source	Grant Number	Role on Project	Grant Title	Project Period	Current Year Direct Costs
Jones, Janine L.	NIH	1 R01 GM76259-01	PD/PI	Structure and Function of Acetylcholine Receptors	06/2014-05/2018	$190,000
Jones, Janine L.	NIH	5 K08 AI00091-03	PD/PI	Purification & Identification of Receptors	11/2012-11/2017	$140,000
Ehlers, Roger G.	Univ		PD/PI	University start-up funds	08/2014-07/2017	$350,000
Mack, Thomas R.	Fdn		PD/PI	Control of Angiogenesis	03/2011-02/2015	$185,000
Mack, Thomas R.	NSF	PCM 80-12935	PD/PI	Cell Culture Center	12/2012-11/2015	$180,000
Mack, Thomas R.	NIH	1 P01 HL71802-05	Project PI	Subproject 4: Oncogenic Kit Receptor Signaling in vivo	10/2011-09/2015	$165,000
Smith, James P.	None					
Zachary, Andrew	NIH	1 U01 AI28507-02	PD/PI	Human Monoclonal Antibodies as a Therapy for Staphylococcal Enterotoxin	07/2013-06/2018	$200,000
Average Grant Support per Participating Faculty Member						**$282,000**

Rationale: This table provides evidence of the strength of the research environment, the availability of funds to support research conducted by the trainees, and the appropriateness of the participating faculty in terms of their active research support.

Required Training Data Table 5B

Sample Table 5B. Publications of Those in Training: Postdoctoral

Faculty Member	Trainee Name	Past or Current Trainee	Training Period	Publication (Authors, Year, Title, Journal, Volume, Inclusive Pages)
Berg, Lawrence P.	Thomas, Patrick D.	Past	2003-2006	Miter, M.H., Owens, R., **Thomas, P.**, and Berg, L., 2006, Insulin Deficiency in Diabetic Rats, J. Nutrition, 373:350-378.
Chew, Jason B.	Greenstuff, Marisa P.	Current	2012-Present	**Greenstuff, M.**, and Chew, J., 2014, Non-digestible fibre influences bioavailability of vitamins, J. Pharm Sci. (In press).
Easygai, Franchesca	Taylor, Doris W.	Past	2010-2013	No Publications: Change of Research Supervisor
Newpeeye, Pamela W.	Fall, Winfred	Past	2012-2014	No Publications: Leave of Absence

Rationale: This information provides an indicator of the ability of each faculty member to foster trainee productivity through generation of publishable results and allows assessment of the research quality and authorship priority of trainees

Required Training Data Tables: 6B

Part I. Counts

Most Recently Completed Year: 2013-2014	Total Applicant Pool	Applicants Eligible for Support	New Entrants to the Program	New Entrants Eligible for Support	New Appointees to this Grant (Renewal/Revision Applications Only)
PhDs	25	15	6	5	4
MDs	4	1	0	0	0
Dual-Degree Holders	3	3	2	2	2
Other Degree Holders	0	0	0	0	0
Total	**32**	**19**	**8**	**7**	**6**

Rationale: These data permit the evaluation of the ability of participating departments, divisions, or interdepartmental programs to recruit trainees. These data are useful in assessing the selectivity of the admissions process, the competitiveness of the training program, and the appropriate number of training positions to be awarded.

Required Training Data Tables: 6B

Part II. Characteristics

Most Recently Completed Year: 2013-2014	Total Applicant Pool	Applicants Eligible for Support	New Entrants to the Program	New Entrants Eligible for Support	New Appointees to this Grant (Renewal/Revision Applications Only)
Mean Number of Publications (range)	3.5 (1-9)	4.0 (1-9)	4.0 (1-9)	4.0 (1-7)	4.0 (3-7)
Mean Number of First-Author Publications (range)	2.0 (1-3)	2.4 (2-3)	2.5 (2-3)	2.5 (2-3)	2.0 (2-3)
Prior Institutions			New York Univ. Boston Univ. (4) Univ. of Iowa (3)	Boston Univ. (4) Univ. of Iowa (3)	Boston Univ. (3) Univ. of Iowa (3)
Percent from Underrepresented Groups			33%	50%	50%

Rationale: These data permit the evaluation of the ability of participating departments, divisions, or interdepartmental programs to recruit trainees. These data are useful in assessing the selectivity of the admissions process, the competitiveness of the training program, and the appropriate number of training positions to be awarded.

Required Training Data Tables: 8C

Part I. Those Appointed to the Training Grant

Trainee	Doctoral Degree(s) and Year(s)	Faculty Member	Start Date	Summary of Support During Training	Degree(s) Resulting from Postdoctoral Training and Year(s)	Topic of Research Project	Initial Position	Current Position	Subsequent Grant(s)/Role/ Year Awarded
Sanchez, Gregory B.	PhD 2007	Brown, James	07/2007	TY 1: **HL T32** TY 2: **HL T32** TY 3: CA R01 TY 4: CA R01	None	Uterine cancer and developmental biology	Staff Scientist Radiology MGH Academia Primarily Research	Assistant Professor Radiology University of Arizona Academia Primarily Research	CA K99/PI/2011 CA R00/PI/2013
Cox, Jennifer H.	MD 2003 PhD 2003	Doe, John	08/2008	TY 1: **HL T32** TY 2: **HL T32**	MPH 2009	Molecular and functional dissection of hematopoietic stem cell niche	Instructor Internal Medicine Columbia Academia Primarily Research	Associate Professor Hematology Rutgers Academia Primarily Research	DK K08/PI/2011 DK R01/ Faculty Collaborator/2013

Rationale: For new applications, this table provides information on the effectiveness of the proposed training program. For renewal applications, this table provides detailed information about how postdoctoral training positions are used (i.e., distribution by year in program, distribution by faculty member, years of support per trainee). The data also permit an evaluation of the effectiveness of the supported training program in achieving the training objectives of the prior award period(s) for up to 15 years.

Required Training Data Tables: 8C

Part II. Those Clearly Associated with the Training Grant

Trainee	Doctoral Degree(s) and Year(s)	Faculty Member	Start Date	Summary of Support During Training	Degree(s) Resulting from Postdoctoral Training and Year(s)	Topic of Research Project	Initial Position	Current Position	Subsequent Grant(s)/Role/ Year Awarded
McInnes, Julie	MD 2004	Welte, Duncan	07/2009	TY 1: **HD K12** TY 2: **HD K12**	MPH 2011	Maternal Depression related to hospitalization in a Neonatal Intensive Care Unit	Assistant Professor Pediatrics Yale Academia Primarily Research	Associate Professor Pediatrics Yale Academia Primarily Research	HS R01/PI/2013

Rationale: For new applications, this table provides information on the effectiveness of the proposed training program. For renewal applications, this table provides detailed information about how postdoctoral training positions are used (i.e., distribution by year in program, distribution by faculty member, years of support per trainee). The data also permit an evaluation of the effectiveness of the supported training program in achieving the training objectives of the prior award period(s) for up to 15 years.

Required Training Data Tables: 8C

Part III. Recent Graduates (Only For New Applications and Predoctoral Renewal/Revision Applications Requesting Postdoctoral Support)

Trainee	Doctoral Degree(s) and Year(s)	Faculty Member	Start Date	Summary of Support During Training	Degree(s) Resulting from Postdoctoral Training and Year(s)	Topic of Research Project	Initial Position	Current Position	Subsequent Grant(s)/Role/ Year Awarded
Roosevelt, Albert S.	PhD 2006	McIver, Rosalie	01/2007		None	Estrogen receptors and ovarian cancer	Assistant Professor Biology University of Colorado Academia Primarily Research	Assistant Professor Biology University of Colorado Academia Primarily Research	CA R21/PI/2013
Taylor, Susanna G.	PhD 2005 MD 2007	Welte, Duncan	07/2008		None	New inhibitors for cancer imaging	Staff Scientist Radiology Massachusetts General Hospital Academia Primarily Research	Staff Scientist Radiology Massachusetts General Hospital Academia Primarily Research	NSF/PI/2014

Rationale: For new applications, this table provides information on the effectiveness of the proposed training program. For renewal applications, this table provides detailed information about how postdoctoral training positions are used (i.e., distribution by year in program, distribution by faculty member, years of support per trainee). The data also permit an evaluation of the effectiveness of the supported training program in achieving the training objectives of the prior award period(s) for up to 15 years.