

# Maximizing Access to Research Careers Undergraduate-Science Training in Academic Research (MARC U-STAR) Program

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# **\*\*DISCLAIMER\*\***

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*This webinar and accompanying slides are for informational purposes only. They serve as an overview of the T34 MARC U-STAR program and are not meant to be comprehensive in coverage of all required components of an application.*

**For any submission, applicants are responsible for following the instructions detailed in the FOA and any Related Notices included in the FOA's Overview Information section.**

# Presenters

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- Luis Cubano, Program Officer
- Sailaja Koduri, Program Officer
- Lori Burge, Grants Management Specialist
- Lee Slice, Scientific Review Officer

# Outline

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I. Program Overview

II. Application Overview

III. Budget Overview

IV. Peer Review Overview

# MARC U-STAR Program

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The MARC U-STAR program is an INSTITUTIONAL undergraduate research training program that is designed to provide structured training to high-achieving, **underrepresented (UR)** students to prepare them for doctoral programs in biomedical research fields.

Utilizes the T34 Ruth L. Kirschstein National Research Service Award (NRSA) funding mechanism.

**NIGMS Funding opportunity announcement (FOA):**

<https://grants.nih.gov/grants/guide/pa-files/PAR-17-068.html>

# Underrepresented Populations in the U.S. Biomedical Research Enterprise ([NOT-OD-18-129](#))

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- Individuals from racial and ethnic groups that have been shown by the National Science Foundation to be underrepresented in biomedical research
  - In addition, it is recognized that underrepresentation can vary from setting to setting; individuals from racial or ethnic groups that can be demonstrated convincingly to be underrepresented by the grantee institution should be encouraged to participate in this program.
- Individuals with disabilities
- Individuals from disadvantaged backgrounds

# MARC U-STAR Program

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- Two-year training program for research-oriented junior and senior honors students (two consecutive 12-month appointments)
  - Academic enhancement, professional skills
  - Research training and guided discovery
- MARC trainees receive stipend, fees, and tuition remission; trainee related expenses are paid to the institution
- Requires one summer (preferably between junior and senior year) research training experience at an external Research-Intensive Institution

# General Tips

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- **Read the FOA; read it carefully**
- Review the application instructions at:  
<https://grants.nih.gov/grants/how-to-apply-application-guide/forms-e/training-forms-e.pdf>
- Develop the application in conjunction with the review criteria
- Make sure information in tables and narrative are consistent
- Strictly adhere to Page Limits (overall & individual sections)



# Application

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- Only one application per institution (normally identified by having a unique DUNS number or NIH IPF number) is allowed for the MARC U-STAR Program.
- Please contact your institution's business office to check if there is a MARC program already in place.
- Foreign Institutions or foreign components are not allowed.

# ELIGIBILITY

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## MARC Program Directors/Principal Investigators

- The PD/PI **must have a regular full-time appointment** (i.e., not adjunct, part-time, retired, or emeritus) at the applicant institution
- The PD/PI should be an **established investigator** and capable of providing both administrative and scientific leadership to the development and implementation of the proposed program

# ELIGIBILITY (cont.)

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## MARC Mentors

- Strong records as researchers in the area of the proposed research training program
- Strong record of mentoring students in research and career planning
- Researchers from diverse backgrounds, including racial and ethnic minorities, persons with disabilities, and women are encouraged to participate as mentors

# ELIGIBILITY (cont.)

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## **MARC Trainees:**

- Full-time honors students from UR groups at the applicant institution in science majors relevant to biomedicine.
- 12-month appointments during the final two years of undergraduate training, typically called the junior and senior years.
- Must be a citizen or a noncitizen national of the United States or have been lawfully admitted for permanent residence at the time of appointment.

# Page Limits

Section of Application	Page Limits *(if different from FOA, FOA supersedes)
<b>Project Summary/Abstract</b>	30 lines of text
<b>Introduction to Resubmission Application</b> (when applicable)	3
<b>Program Plan</b> (Attachment 2 on PHS 398 Research Training Program Plan form)	25
<b>Plan for Instruction in the Responsible Conduct of Research</b>	3
<b>Biographical Sketch</b>	5

# TRAINING PROGRAM: Program Plan (25 page limit)

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## Include information on:

- Background
- Program Administration
- Program Faculty
- Proposed Training
- Training Program Evaluation
- Trainee Candidates
- Institutional Environment and Commitment to the Program
- Recruitment Plan to Enhance Diversity

# PROGRAM PLAN

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## Background

- Describe the need for the proposed academic and research training program
- Include the information on enrollment of UR students as well as the unique environment and strengths of the institution. Institution type according to the [Carnegie Basic Classification system](#) and describe their distinctive educational research environment.
- Complete the institutional self-assessment to include:
  - Baseline data regarding the student population
  - Graduation rates (subsequent completion of Ph.D. or combined M.D.-Ph.D. degrees for all students and for underrepresented student)
  - Use NIGMS suggested [Tables A-C](#) to provide the data to support the institutional self-assessment narrative
- Include the design of the MARC U-STAR program by showing the institutional baseline data as a starting metric.

# PROGRAM PLAN (cont.)

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## Program Administration:

- Describe the administrative skills, training experience, scientific expertise, and active research of the PD/PI
- Describe the administrative structure to be used to oversee and monitor the program. If there are multiple PDs/PIs, include a “Multiple PD/PI Leadership Plan”.
- Applicants must also describe the **administrative structure and leadership succession plan** for critical positions (e.g. PD/PI) in the administrative structure



# PROGRAM PLAN (cont.)

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## Program Faculty:

- Include information about the program faculty who will serve as mentors to MARC trainees
- Provide information on their experience in research and training
- **Upload biosketches under “Participating Faculty Biosketches”**

# PROGRAM PLAN (cont.)

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## Proposed training:

Programmatic activities should include:

- Research Training
- Academic Enrichment and Skills Development
- Mentoring and advising activities

# PROGRAM PLAN (cont.)

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## Program evaluation plan:

- Plan for self assessment of the stated goals in context of the baseline data
- Plan to measure outcome metrics
- Plan to obtain feedback on program from current and former trainees

**The measurable goals and specific objectives are set by the applicant institution**

# PROGRAM PLAN (cont.)

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## **Trainee candidates:**

- Include student selection criteria
- Description of the size and qualifications of the potential pool of trainees
- Specific plans for selecting the trainees

# PROGRAM PLAN (cont.)

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## Institutional Environment and Commitment to the Program

- Explain what distinguishes the proposed MARC U-STAR program from the related programs at your institution and how the programs will synergize with one another
- A signed letter, on institutional letterhead, that describes the applicant institution's commitment to support PD(s)/PI(s), other faculty, staff and participating students in the planned program is required.

# PROGRAM PLAN (cont.)

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## Recruitment Plan to Enhance Diversity

- Describe steps to be taken during the proposed award period regarding the identification and recruitment of research-oriented honors students from **UR** groups.
- Include specific plans to recruit students with disabilities and from disadvantaged backgrounds.
- Describe the specific efforts to be undertaken by the training program and how these might relate to the recruitment efforts of the institution.

# Progress Report (upload under progress report)

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- **For renewal applications, a detailed Progress Report must be included.**
- Applicants must provide information describing the past trainee outcomes and list the data using [Table 8D](#). Part 1.
- **State the original goals and specific aims, anticipated milestones and outcomes, as well as a summary of the specific accomplishments of the MARC program in the context of the previous application's baseline.**
- Applicants should describe the effectiveness of the supported training program in achieving the training objectives of the prior award periods.
- Applicants may use the suggested sample format tables found at the NIGMS TWD/MARC website ([Tables D.1, D.2 or D.3 and Table E](#)).

# Advisory Committee Plan (Upload under Other Attachments)

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- A plan must be provided for the appointment of an Advisory Committee to monitor program and trainee progress.
- Composition, member expertise, responsibilities, frequency of meetings, and other relevant information should be included.
- Describe how the Advisory Committee will function in providing oversight of the development, implementation, and evaluation of recruitment strategies, the recruitment and retention of participants, and the evaluation of the overall effectiveness of the program.



# Plan for Instruction in the Responsible conduct of Research (Upload under Responsible Conduct of Research)

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- Describe in detail the plans for teaching responsible conduct of research (RCR)
- The instruction in RCR is mandatory for all trainees
- Please refer to NIH policy

<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html> for more information

# Data Tables Summary

Table	Title of Table	New Applications	Renewals	Comments
A	Current Institutional Setting	Yes	Yes	Suggested format, include data in Program Plan
B	Institutional Biomedical Ph.D. Completion Data	Yes	Yes	Suggested format, include data in Program Plan
C	Current Science Diversity-Focused Student Programs	Yes	Yes	Suggested format, include data in Program Plan
D1-D3	Past MARC Trainee Record (D1: 5 years, D2: 10 years, and D3: 15 years)	N/A*	Yes	Suggested format, include data in Progress Report
E	Institutional and MARC U-STAR underrepresented Ph.D. Rates	N/A*	Yes	Suggested format, include data in Progress Report
2	Participating Faculty Members	Yes	Yes	Required, upload in Data Tables Section
4	Research Support of Participating Faculty Members	Yes	Yes	Required, upload in Data Tables Section
8D	Program Outcomes: Undergraduate (up to 15 years)	N/A*	Yes, Part I	Required, upload in Data Tables Section

\* Not Applicable

Tables 3 and 5C are not required for MARC U-STAR applications.

# Table A: Current Institutional Setting

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- Allows reviewers to assess the current student population which includes total number of students and percentage of UR students in proposed MARC departments and their graduation rates.
- Summarize and include the analysis in the Background section.
- Include the data for Table A in the **Background Section** of the Program Plan. **(Do not upload under Data Tables).**

# Table A: Current Institutional Setting (Sample)

Institution Name: XXX University					
<u>Carnegie Classification</u> : Research Intensive					
Most recent full academic year: 2017					
					Subtotal (#)
Name the Proposed MARC Departments <sup>†</sup>	Biology	Chemistry	Chemical engineering	Psychology	
Current number UR <sup>‡</sup> students in proposed MARC departments <sup>¥</sup>	120	110	90	60	380
Current number of honors <sup>§</sup> UR <sup>‡</sup> students in proposed MARC departments	80	70	50	30	230
Total number of students in proposed MARC departments	1000	Percentage UR <sup>‡</sup> students in proposed MARC departments			38%
Student graduation rate in proposed MARC departments <sup>††</sup>	80%	UR <sup>‡</sup> students graduation rate in proposed MARC departments <sup>††</sup>			50%

\* The most recent full academic year with reliable data; all data on Table A pertains to that year

<sup>†</sup> MARC departments should prepare students to be competitive for entering a Ph.D. in a biomedically relevant area, e.g., biology, chemistry, physics, math, certain engineering fields, etc.

<sup>‡</sup> UR, underrepresented, as defined by the NIH

<sup>§</sup> Honors, as defined by the applicant institution

<sup>¥</sup> Non-UR, students who are not from underrepresented Groups

<sup>††</sup>If unable to identify institutional graduation rates for the science fields, overall graduate rate data may be provided through [NCES](#) or the [Chronicle of Higher Education](#).

## Table B. Institutional Biomedical Ph.D. Completion Data

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- Allows the reviewers to assess total number of UR students who entered or completed B.S./B.A. in biomedically-related science fields in comparison to total number of students entered or completed B.S./B.A for the past 5 years.
- Summarize and include the analysis in the Background section.
- Include the data for [Table B](#) in the [Background Section](#) of the Program Plan. **(Do not upload under Data Tables).**

## Table B: Institutional Biomedical Ph.D. Completion Data (Sample)

ITEM	Year 1 2014	Year 2 2015	Year 3 2016	Year 4 2017	Year 5 (Current*) 2018	Ph.D. Baseline Average
Number of UR <sup>‡</sup> students earning B.S./B.A. in biomedical science fields	250	280	300	350	380	
Number UR <sup>‡</sup> B.S./B.A. alumni COMPLETED Ph.D. programs <sup>†</sup>	15	12	19	20	25	6-7%
Total number of students earning B.S./B.A. in biomedical science fields	750	760	780	800	1000	
Total number of B.S./B.A. alumni COMPLETED Ph.D. programs <sup>†</sup>	150	160	200	250	280	28%

\* The most recent full academic year

<sup>‡</sup>UR, [underrepresented](#), as defined by the NIH

<sup>†</sup> includes Ph.D. as well as M.D./Ph.D programs in areas such as biology, chemistry, physics, math, and certain biomedical engineering fields. Data are available through [WebCasper](#) and the [National Student Clearinghouse](#) databases. Additional information may be obtained from records kept at the applicant institution through resources such as the Office of the Registrar, Office of Institutional Planning and/or Research, Alumni Office, Office of Institutional Development, Office of Sponsored Programs, etc.

## Table C: Current Science Diversity-Focused Student Programs

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- Allows the reviewers to assess the existing Diversity-focused program(s) directed towards increasing the number of UR individuals in science fields at the institution.
- Summarize and include the analysis in the Background section.
- Include the date for Table C in the **Background Section** of the Program Plan. **(Do not upload under Data Tables).**

## Table C: Current\* Science Diversity-Focused‡ Student Programs (Sample)

ITEM	Program 1	Program 2	Program 3	Program 4	Program 5	Program 6
STEM Diversity‡ Program Name	Dow STEM Scholars Program	IMSD	RISE	PREP	NA	NA
Program Duration (in years) since inception	20	15	10	9	NA	NA
Current* Project Period Start and End Dates	No planned end date	2014-2019	2015-2020	2013-2018	NA	NA
Funding Source (Entity)	MSU	NIH	NIH	NIH	NA	NA
Participant Number	240	10	20	12	NA	NA
Student Population Targeted (academic level)	High school to Undergrad	Undergrad	Ph.D.	Undergrad	NA	NA

\*The most recent full academic year; all data on Table C pertains to that year

‡Diversity-focused program directed towards increasing the number of [underrepresented](#) individuals in science fields



## Tables D1- D3: Past MARC Trainee Period (Renewals)

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- Allows the reviewers to assess the effectiveness of the supported training program in achieving the training objectives of the prior award period(s) for 5, 10, or 15 years as applicable.
- Summarize and include the analysis in the Program Evaluation Section.
- Include the data for the table ([D1: 5 years](#), [D2: 10 years](#), [or D3: 15 years](#)) in the [Progress Report](#) section.

## Table D.1.: Past 5 Year MARC Trainee Record (Sample)

**Table D.1 Past 5 Year MARC Trainee Record**

Program Outcomes Number of:	5 Years (e.g. 2013 – 2018)
Trainee slots awarded per Notice of Award	20
Number of unfilled slots	0
Trainees appointed (unique individuals)	10
Trainees who participated in a summer research experience	10
Trainees who withdrew from the program	0
Trainees who completed B.S. or B.A.	9
Trainees who entered biomedical M.S. programs	1
Trainees who completed biomedical M.S. programs	1
Trainees who entered biomedical Ph.D. programs	4
Trainees who completed biomedical Ph.D. programs	0
Trainees who entered M.D. or D.O. programs	0
Trainees who completed M.D. or D.O. programs	0
Trainees who entered M.D./Ph.D. programs	0
Trainees who completed M.D./Ph.D. programs	0
Trainees who entered other professional degree programs	0
Trainees who completed other professional degree programs	0
Trainees who are in a post-bac program supported by PREP	2
Trainees who completed PREP program	2
Trainees in other post-bac programs	0
Trainees who completed other post-bac programs	0
Trainees who entered biomedical workforce after graduation (B.S./B.A.)	2

## Table E. Institutional and MARC U-STAR UR Ph.D. Rates (Renewals)

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- Allows the reviewers to assess the effectiveness of the supported training program in achieving the training objectives of MARC U-STAR award for prior award of 5,10, or 15 years as applicable.
- Summarize and include the analysis in the Program Evaluation Section.
- Include the data for [Table E](#) in the **Progress Report** section of the application.

## Table E. Institutional and MARC U-STAR UR Ph.D. Rates (Sample)

Table E. Institutional and MARC U-STAR Underrepresented Ph.D. Rates

<b>MARC U-STAR Ph.D. Numbers</b>	
Total Number MARC Individuals Appointed in the last 5, 10, or 15 years*	40
Total Number MARC alumni who <b>ENROLLED</b> in biomedically-related <sup>†</sup> Ph.D. or M.D./Ph.D. programs in the last 5, 10, or 15 years	30
Total Number MARC alumni who <b>COMPLETED</b> biomedically-related <sup>†</sup> Ph.D. or M.D./Ph.D. programs in the last 5, 10, or 15 years	10
<b>Institutional UR<sup>‡</sup> Ph.D. Numbers</b>	
Total Number UR <sup>‡</sup> B.S./B.A. alumni in biomedically-related <sup>†</sup> fields in the last 5, 10, or 15 years	230
Total Number UR <sup>‡</sup> B.S./B.A. alumni who <b>ENROLLED</b> in biomedically-related Ph.D. or M.D./Ph.D. programs in the last 5, 10, or 15 years	20
Number UR <sup>‡</sup> B.S./B.A. alumni who <b>COMPLETED</b> biomedically-related <sup>†</sup> Ph.D. or M.D./Ph.D. programs in the last 5, 10, or 15 years	1

\* Provide numbers for individuals over the past 5, 10, or 15 years

† Biomedically-related areas include, biology, chemistry, physics, math, certain engineering fields, etc.

‡ UR, [underrepresented](#), as defined by the NIH

## Table 2. Participating Faculty Members

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- Allows reviewers to assess the distribution of participating faculty by rank, research interests, and department or interdepartmental program.
- Summarize and analyze these data in the Background section and the program faculty section of the program plan.
- **Do not modify the table.**
- **Upload it under Data Tables.**

## Table 2. Participating Faculty Members (Sample)

Name	Degree(s)	Rank	Primary Department or Program	Research Interest	Training Role	Undergraduates In Training	Undergraduates Graduated	Under-graduates 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
Jones, Lisa S.	PhD	Res. Asst. Prof.	Biochemistry	Protein Structure, Folding, and Immunogenicity	Preceptor Exec Comm	3	3	3
Sandoz, Miguel J.	MD, PhD	Assoc. Prof.	Neuroscience	Developmental Genetics in Drosophila	Preceptor	4	6	5
Thomas, James C.	PhD	Prof.	Biochemistry	Molecular and Genetic Analysis of RNA Viruses	PD/PI	7	10	9

### Mentoring Information for the last 10 years

## Table 4. Research Support of Participating Faculty Members

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- 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.
- Analyze and summarize these data in the Program Plan.
- **Do not modify the table.**
- **Upload it under Data Tables.**

## Table 4. Research Support of Participating Faculty Members (Sample)

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 AI28507-01	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



## Table 8D. Program outcomes: Undergraduate (Part I)

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- Table 8D is required only for renewal applications.
- Past 15-year data is required if applicable.
- This table provides information about the use of undergraduate training positions and outcomes
- Summarizes the data in the Program Plan Section or the Progress Report Section, as appropriate.
- **Do not modify the table.**
- **Upload it under Data Tables.**

# Table 8D. Program outcomes: Undergraduate (Sample)

## Part I. Those Appointed to the Training Grant (up to 15 years as applicable)

Undergraduate Student Participant	Faculty Member	Start Date	Summary of Support During Training	Degree(s) Received and Year(s)	Topic of Research Project	Initial Position Department Institution Activity	Current Position Department Institution Activity	Subsequent Grant(s)/ Role/Year Awarded
Cox, Charles C.	Lewis, John Smith, Jerry	09/1995	TY 3: <b>GM T34</b> TY 4: <b>GM T34</b>	BS 1997 PhD 2001 MD 2003	The role of Notch in blood vessel maturation	MSTP Student/Dept of Cell Biology/ UTHSC Dallas	Assistant Professor Hematology Rutgers University Research-Related	HL K23/PI/2006 HL P01/Co-I/2011
Johnson, Gina R.	Lewis, John	09/1998	TY 3: GM T34 TY 4: GM T34	BS 2000 PhD 2005	Interactions between circadian rhythms, sleep & metabolism	Grad student Molecular Biology UC San Francisco	Assistant Prof Molecular Biology UC San Francisco Research-Intensive	HL F32 2006 GM R01/PI/2011
Phelps, Ryan	Vasquez, Richard	09/1999	TY 3: GML T34 TY 4: GM T34	BS 2001 MS 2004	Viral infections	Grad Student/Dept. of Microbiology/ Temple University	Laboratory Manager Pfizer Research-Related	

# Appendix Policy

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**New Policy Eliminates Most Appendix Material for NIH/AHRQ/NIOSH Applications Submitted for Due Dates On or After January 25, 2017.**

**<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-129.html>**

**Suggestion:**

**DO NOT INCLUDE ANY MATERIALS UNDER APPENDIX**

# Application submission

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There are several options available to submit your application

- Use the NIH ASSIST system to prepare, submit and track your application online.
- Use an institutional system-to-system (S2S) solution to prepare and submit your application to Grants.gov and eRA Commons to track your application. Check with your institutional officials regarding availability.
- [Go to Grants.gov](#) create a Workspace to complete the forms online; submit your application to Grants.gov; and track your application in eRA Commons.

Learn more about the various [submission options](#).

# Important dates

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- **Application Due date(s):** May 24, 2018 by 5:00 PM local time of applicant organization
- Plan to submit early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date
- **Peer Review:** October - November 2018
- **Advisory Council Review:** January 2019
- **Earliest Start Date:** June 1, 2019

# BUDGET

# MARC U-STAR: Allowable costs

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- **STIPEND:** \$12,588/yr. for students in junior/senior year.
- **TUITION AND FEES:** Equal to 60% of the level requested by the applicant institution, up to \$16,000 per year, will be provided. Please put the entire per student tuition on the application. We will apply the 60% formula.  
<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-084.html#>
- **SUMMER RESEARCH EXPERIENCE:** NIGMS provides funds for the summer research training experience for up to 50% of the appointed number of MARC U-STAR trainees at the time a competing award is made. Applicants should request summer research experience travel for 50% of their requested trainees in Section B (Other Direct Cost). For additional guidance on MARC U-STAR summer research requirement, see [MARC USTAR Summer Research Experience Policy](#)
- **TRAVEL:** Trainee/faculty travel including attendance at scientific meetings.

# MARC U-STAR: Allowable costs (continued)

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- **TRAINING RELATED EXPENSES:** A maximum cap of \$350,000/year for the TRE portion of a proposed MARC U-STAR budget. **PD/PI/Co-I support: 3.0 person months/yr. or 25% on a 12-month basis (total)**
  - **Program Coordinator:** 6.0 person months (i.e., 50% on a 12-month basis) depending on the size and scope of the program.
  - Seminar speakers; equipment and research supplies for a research classroom course(s), if proposed; program website design and maintenance; faculty/staff travel directly related to the program; faculty training in pedagogical skills development; student academic skills development workshops (e.g., problem-solving, critical thinking, effective communication and time management).
- **PROGRAM EVALUATION:** \$3,000/ 5 year grant period
- **FACILITIES AND ADMINISTRATION COSTS:** Indirect costs are reimbursed at 8% of modified total direct costs (exclusive of tuition and fees, consortium costs in excess of \$25,000, and expenditures for equipment), rather than on the basis of a negotiated rate agreement.



# Summer Research Experience (SRE)

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- Preferred sites are research intensive graduate institutions such as those with NIH T32 training programs
- NIGMS provides funds for the summer research training experience for up to 50% of the appointed number of MARC U-STAR trainees
- \$3,000 per MARC U-STAR trainee, to be used in accordance with institutional policies as a per diem for a period of ten weeks; an additional \$500 for travel to and from the host research training site (for MARC U-STAR -supported institutions in Hawaii, Guam, Puerto Rico or the Virgin Islands \$750 for travel per trainee will be provided)

# Training Related Expenses (TRE): New Guidance

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All Applications New (T1) and Competing Renewal (T2)

- Research Intensive Institutions
  - Up to \$8,400 per trainee/year
- Non-Research Intensive Institutions
  - Up to \$12,600 per trainee/year

<https://grants.nih.gov/grants/guide/notice-files/NOT-GM-17-011.html>

# Responsibilities

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- MARC T34 Training Grants are required to submit an NIH Federal Financial Report (FFR) annually
- Delinquent FFRs will delay the funding of the next non-competing grant award
- Carry over of unobligated balances from one budget year to the next is unallowable
- Trainees appointed for a consecutive 24 month period no later than September 30 of each year

# X-Train for Student Appointments

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- All MARC T34 trainees must have an appointment form submitted through the eRA Commons to X-Train before they may receive their stipend
- If trainees cannot continue in the grant program for the full appointment period an amended appointment must be submitted to X-Train with the correct appointment period end date

xTrain Web Page - application guide, quick reference sheets, FAQs, training materials:

[https://era.nih.gov/services\\_for\\_applicants/other/xTrain.cfm](https://era.nih.gov/services_for_applicants/other/xTrain.cfm)

# Final Research Performance Progress Reports (Final RPPR)

- Effective January 1, 2017 the new F-RPPR has replaced the Final Progress Report (FRP) for closeout of all project periods of a grant award
- At the end of the fifth year of all MARC T34 grants the grantee must submit through the eRA Commons the F-RPPR.
- This F-RPPR must be submitted no later than 120 calendar days from the period of performance end date for the grant award

# Links to F-RPPR announcements

- <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-022.html>
- <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-17-037.html>

# PEER REVIEW

# Peer Review

All from FOA Section V under [Application Review Information](#)

## Scored Criteria:

- Training Program and Environment
- Training Program Director(s)/ PI(s)
- Mentors
- Trainees
- Training Record

## Additional Review Criteria:

- Resubmissions (responses to previous reviews/changes)
- Renewals (progress from last funding period)

## Additional Review Considerations: Acceptable/Unacceptable

- Recruitment Plan to Enhance Diversity
- Training in the Responsible Conduct of Research



# Tips about Format

## Page Limits

- Supply all requested materials within page limits
- Do not “overstuff” sections that don’t have page limits or use appendices to get around the limits

## Appendices

- New notice NOT-OD-16-129 eliminates most appendix material for applications submitted after 1/25/2017.
- Still allowed:
  - Blank informed consent/assent forms
  - Blank surveys, questionnaires, data collection instruments
  - FOA-specified items

# Application Preparation Tips

## Content

- Read the program announcement and ensure that your application contains the necessary elements
- Successful submission through Grants.gov and eRA Commons does not mean appropriate responsiveness to the program announcement

## Context

- Present the institutional framework and environment of your program
- Be realistic in your program's goals

# Application Preparation Tips (cont.)

## Comprehensive

- Address all of the requirements of the program announcement
  - For example:
    - If you haven't fully formed your evaluation plan, at least acknowledge that you are working on it
- Describe how your program “works”
  - For example:
    - How are students recruited and selected? By whom?
    - What does the advisory committee do? How often do they meet?
    - How have you used evaluation information in designing/improving your program?

# Application Preparation Tips (cont.)

## Clear

- Don't bury important information
- Don't expect reviewers to “read between the lines” to figure out what you are proposing
- Present outcomes data in a straightforward manner:
  - Don't exaggerate
  - Don't hide data (reviewers will “do the math”)
  - It is far better to present results as they are and address how the program aims to improve

# Application Preparation Tips (cont.)

## Current

- Make sure faculty biosketches are up-to-date, in correct format, and relevant for training program
- Provide data on current and prior students
- Use the most recent institutional data

## Consistent

- Data in tables and text should match
- Data should be consistent across tables
- Match justification to budget items
- Refer to the correct program in text and tables

# Review Process: Usual Timeline

## Timeframe

(From submission date)

## Activity

1 - 2 months

Referral

2 - 6 months

Review Panel

6 - 7 months

Summary Statement Available

7 - 8 months

Advisory Council

8 - 9 months

Funding Decisions

9 - 10 months

Award Start Date

# Overview

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- MARC U-STAR FOA:  
<https://grants.nih.gov/grants/guide/pa-files/PAR-17-068.html>
- Font changes: <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-009.html>
- FAQs about MARC U-STAR FOA:  
<https://www.nigms.nih.gov/Training/MARC/Pages/FAQs.aspx>

# Overview, cont.

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- Biosketch Requirements:

<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-085.html>

- Biosketch FAQs:

[http://grants.nih.gov/grants/policy/faq\\_biosketches.htm](http://grants.nih.gov/grants/policy/faq_biosketches.htm)

- New Biosketch Formats:

<https://loop.nigms.nih.gov/2015/04/new-biosketch-formats-for-applications-due-may-25-and-later/>



# Questions?

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