NIH Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Program

Applicant Webinar – August 18, 2020
Webinar Participants

Program

• Kenneth Gibbs, Ph.D., Program Director
• Michael Sesma, Ph.D., Chief, Postdoctoral Training Branch
• Alison Gammie, Ph.D., Director, Division of Training, Workforce Development and Diversity

Review

• Stephanie Constant, Ph.D., Chief, NIGMS Scientific Review Branch

Grants Management

• Robert Altieri, Grants Management Specialist
Webinar Ground Rules

• Please mute yourself and keep your video off
  ○ Send questions via chat to Kenneth Gibbs, Alison Gammie or Michael Sesma

• “NIH Interpreter” is available for those who need sign language interpretation

• Webinar slides and video will be made available on the MOSAIC Website in the coming weeks: https://www.nigms.nih.gov/training/careerdev/Pages/MOSAIC.aspx
Tweet us!

Follow us @NIGMSTraining

Use #NIHmosaic
Webinar Agenda

• Background & Overall Program Description

• MOSAIC Program Components (Description, Review, Grants Management, Questions)
  - Postdoctoral Career Transition Award to Promote Diversity (K99/R00; PAR-19-343)
  - MOSAIC Institutionally-Focused Research Education Award (UE5; PAR-19-342)

• Final Questions
DISCLAIMER

This webinar and accompanying slides are for informational purposes only. They serve as an overview of the NIH MOSAIC 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 Overview Information section.
For example

Department of Health and Human Services

Part 1. Overview Information

<table>
<thead>
<tr>
<th>Participating Organization(s)</th>
<th>National Institutes of Health (NIH)</th>
</tr>
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<tbody>
<tr>
<td>Components of Participating Organizations</td>
<td>National Institute of General Medical Sciences (NIGMS)</td>
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<td></td>
<td>National Institute of Biomedical Imaging and Bioengineering (NIBIB)</td>
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<td>National Institute of Nursing Research (NINR)</td>
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<td>National Institute on Minority Health and Health Disparities (NIMHD)</td>
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<td>National Human Genome Research Institute (NHGRI)</td>
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<td>National Institute on Aging (NIA)</td>
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<td>National Library of Medicine (NLM)</td>
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<td>National Institute on Drug Abuse (NIDA)</td>
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<td>National Heart, Lung and Blood Institute (NHLBI)</td>
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<td>National Institute of Environmental Health Sciences (NIEHS)</td>
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<td>National Institute on Disability and Rehabilitation Research (NIDRR)</td>
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<td></td>
<td>National Institute of Dental and Craniofacial Research (NIDCR)</td>
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<td>National Institute for Complementary and Integrative Health (NCCIH)</td>
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Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) Postdoctoral Career Transition Award to Promote Diversity (K99/R00 - Independent Clinical Trial Not Allowed)

<table>
<thead>
<tr>
<th>Activity Code</th>
<th>K99/R00 Career Transition Award/Research Transition Award</th>
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<tbody>
<tr>
<td>Announcement Type</td>
<td>New</td>
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Background and Program Structure
Scientific Excellence Demands Diversity

Maximizing the return on taxpayers’ investments in fundamental biomedical research

A core principle of both financial investment and biology is that diversity leads to strength. **Diversity at all levels**—from the kinds of science to the regions in which it is conducted to the backgrounds of the people conducting it—**strengthens the institute’s research portfolio** and should lead to the best returns on the taxpayers’ investments. Lorsch, *Molecular Biology of the Cell*, 2015

National Institutes of Health addresses the science of diversity

Lack of diversity “is limiting the promise of our biomedical enterprise for building knowledge and improving the nation’s health...recruiting and retaining a diverse set of minds and approaches is vital to harnessing the complete intellectual capital of the nation.” Valantine & Collins, *PNAS*, 2015

Notice of NIH’s Interest in Diversity (NOT-OD-20-031)
Scientific Excellence Demands Diversity

What Can We Do to Combat Anti-Black Racism in the Biomedical Research Enterprise?

We at NIGMS are committed to using every strategy we can to enable and incentivize institutions to develop structures, policies, and cultures that are inclusive, safe, and supportive of all community members, including those from groups that have historically been and continue to be subject to racial discrimination, such as African Americans. For example, we recently launched the Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC) program to enhance diversity within the academic biomedical research workforce. We hope the program will help address the significant underrepresentation of Black (as well as Latinx and Indigenous) faculty in the professoriate...

Lorsch, Gibbs, and Gammie, NIGMS Feedback Loop, 2020

Research: Decoupling of the minority PhD talent pool and assistant professor hiring in medical school basic science departments in the US

Kenneth D Gibbs Jr, Jacob Basson, Imam M Xierali, David A Broniatowski

National Institute of General Medical Sciences, United States; Association of American Medical Colleges, United States; The George Washington University, United States

Trends among scientists from historically underrepresented racial/ethnic groups

https://elifesciences.org/articles/21393
Biomedical Workforce: Career Stage & Demographics

<table>
<thead>
<tr>
<th>Training</th>
<th>Doctoral</th>
<th>57%</th>
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<tbody>
<tr>
<td>Early Career</td>
<td>Lecturer/Instructor</td>
<td></td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Tenured Faculty</td>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Full Professor</td>
<td>23%</td>
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</tr>
</tbody>
</table>

UR, underrepresented: Hispanic/Latinx, African American/Black, Native American/Alaska Native
WR, well represented: White, Asian

Valantine, Lund & Gammie; CBE Life Sciences Education (2016)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5008902/
MOSAIC Program Goal

• The overarching goal of the NIH MOSAIC program is to enhance the diversity of independent investigators conducting research within the NIH mission. Program priority is to address documented underrepresentation at the faculty level (e.g., see NIH’s Notice of Interest in Diversity).

• MOSAIC is designed to facilitate the transition of promising postdoctoral researchers from diverse backgrounds, for example individuals from groups underrepresented in the biomedical research workforce at the faculty level, into independent faculty careers in research-intensive institutions

https://www.nigms.nih.gov/training/careerdev/Pages/MOSAIC.aspx
Maximizing Opportunities for Scientific and Academic Independent Careers (MOSAIC)

Postdoctoral Career Transition Award to Promote Diversity (K99/R00) – PAR-19-343
Institutionally Focused Research Education Cooperative Agreement to Promote Diversity (UE5) – PAR-19-342

MOSAIC K99/R00 Applicants

MOSAIC K99/R00 Scholars Participate in Cohorts Organized by UE5

Other ICs Participating in MOSAIC K99/R00: NIBIB, NINR, NIMHD, NHGRI, NIA, NLM, NIMH, NIDA, NHLBI, NIAAA, NIEHS, NIDCD, NIDCR, NCCIH

https://www.nigms.nih.gov/training/careerdev/Pages/MOSAIC.aspx
MOSAIC K99/R00 - Features

• Supports postdoctoral scientists from diverse backgrounds conducting research in areas within the missions of participating ICs by providing up to 5 years of support in two phases:
  o The initial (K99) phase provides support for up to 2 years of mentored postdoctoral research training and career development.
  o The second (R00) phase provides up to 3 years of independent research support, which is contingent on satisfactory progress during the K99 phase and an approved, independent, tenure-track (or equivalent) faculty position.

• Scholars will be part of organized scientific cohorts and will participate in mentoring, networking, and professional development activities coordinated by MOSAIC Institutionally-Focused Research Education Award to Promote Diversity (UE5) grantees

• Participating ICs: NIBIB, NINR, NIMHD, NHGRI, NIA, NLM, NIMH, NIDA, NHLBI, NIAAA, NIEHS, NIDCD, NIDCR, NCCIH (consult NIH Guide as additional ICs may sign on)
MOSAIC UE5 – Common Elements

• Skills Development
  o Faculty search, lab management
  o Grant writing
  o Communication & scientific publishing

• Mentoring and Networking

• Career Visibility & Enhancement

• Institutional Engagement
• Mentoring and Networking
  o Additional scientific and professional mentors
  o Annual retreat

• Career Visibility & Enhancement
  o “Matchmaking” sight visits for scholars in their K99 phase and institutions of interest to present their, meet with host department faculty and department chair

• Institutional Engagement
  o Inclusivity summits (Years 2-5)

https://www.ascb.org/career-development/ascb-mosaic-program-amp/
• Mentoring and Networking
  o Annual meeting – MAC and Annual Retreat
  o Cohort based “community of practice”

• Career Visibility & Enhancement
  o Oral spotlight presentation at annual meeting (Year 2)
  o Join JBC editorial board as early career reviewer (Year 5)

• Institutional Engagement
  o Forum for institutional leaders (Years 2 and 4)
  o Diversity Symposium (Year 5)
  o ASBMB Today

https://www.asbmb.org/diversity/mosaic
• Mentoring and Networking
  o Annual 1.5 Day Networking and Learning Event at Host Institutions for all Cohorts
  o Access to AAMC Network of Faculty and Leadership

• Career Visibility & Enhancement
  o Scholars attend AAMC Minority Faculty Development Leadership Seminar or AAMC Early Career Women Faculty Leadership Development Seminar

• Institutional Engagement
  o Annual virtual learning for mentors and leaders at MOSAIC Scholars’ Institutions
  o Mentors attend networking and learning event (Year 2)

https://www.aamc.org/mosaic
MOSAIC Postdoctoral Career Transition Award to Promote Diversity (K99/R00 - Independent Clinical Trial Not Allowed); PAR-19-343
MOSAIC K99/R00 - Goal

• The MOSAIC K99/R00 program is designed to facilitate a timely transition of promising postdoctoral researchers from diverse backgrounds from their mentored, postdoctoral research positions to independent, tenure-track or equivalent faculty positions at research-intensive institutions.

• The overarching goal of this program is to enhance the diversity of independent investigators conducting research within the NIH mission. For the purpose of this announcement, institutions are strongly encouraged to identify candidates who will enhance diversity on a national basis (e.g., see the Notice of NIH's of Interest in Diversity).
MOSAIC K99/R00 – Eligibility

• Must have a clinical or research doctorate (e.g., PhD, MD).
• By the time of the award, **must be a US citizen or permanent resident.**
• Individuals must be in mentored, postdoctoral training positions to be eligible to apply to the K99/R00 program.
• Must have no more than **4 years** of postdoctoral research experience as of the relevant application due date regardless of whether it is a New or Resubmission application.
COVID-Related Eligibility Extension

NIH will provide up to a two-receipt date cycle extension of eligibility (~8 additional months) for prospective K99/R00 applicants meeting the requirements for submission between the June/July 2020 and February/March 2021 due dates.

<table>
<thead>
<tr>
<th>Example</th>
<th>Typical Eligibility End Date</th>
<th>New Eligibility End Date</th>
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<tbody>
<tr>
<td>Example 1</td>
<td>June/July 2020</td>
<td>February/March 2021</td>
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<tr>
<td>Example 2</td>
<td>October/November 2020</td>
<td>June/July 2021</td>
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<tr>
<td>Example 3</td>
<td>February/March 2021</td>
<td>October/November 2021</td>
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</table>

*If you are already planning to apply for the October 2020 deadline, there’s no need to wait!*

MOSAIC K99/R00 – Eligibility

• Only time dedicated to research activities counts toward the 4-year limit.
  ○ Parental, medical, or other well-justified leave for personal or family situations is not included in the 4-year eligibility limit, nor is clinical training with no research involvement (e.g., full-time clinical residency training).
  ○ Part-time postdoctoral research training, related to personal or family situations or occurring during a research residency or fellowship, will be pro-rated accordingly.

• One-year extension for childbirth within the eligibility window (NOT-OD-20-011).

• Applicants seeking an extension of the 4-year eligibility window (for non-COVID related reasons) must contact the relevant Scientific/Research Contact at least 8 weeks before submitting the application.

MOSAIC K99/R00 - Considerations

- Candidates are strongly encouraged to apply **no later than the third year of their postdoctoral training** to ensure awardees receive maximum benefit from both the K99 phase of the award, and to facilitate a timely transition to independence.

- An individual who cannot provide a **compelling rationale** for at least one year of additional mentored research training at the time of award is not a strong candidate for this award (e.g., individuals who are actively applying or interviewing for independent positions at research-intensive institutions).

- If an applicant achieves independence (any faculty or non-mentored research position) before a K99 award is made, neither the K99, nor the R00 award, will be made.
MOSAIC K99/R00 – General Advice

Applicants are strongly encouraged to consult with NIH scientific/research staff when planning an application. Early contact provides an opportunity for NIH scientific/research staff to provide guidance on program scope and appropriateness of the proposed research and training for potential funding in response to this FOA. Applicants should contact NIH scientific/research staff as early as possible before the due date.

Consult the MOSAIC Answers to FAQs
MOSAIC K99/R00 – Notable differences from the Parent K99/R00
MOSAIC K99/R00 – Candidate Section

• “If the candidate is applying for the first time in her/his fourth year, explain why support at this stage is appropriate and why support was not sought earlier.”

• “Describe how the activities provided by the MOSAIC Institutionally-Focused Research Education Award (UE5) will be integrated into career development activities available at the candidate's home institution to create synergies.”

  o The American Society for Biochemistry and Molecular Biology (ASBMB)
  o The American Society for Cell Biology (ASCB)
  o The Association of American Medical Colleges (AAMC)
MOSAIC K99/R00 - Mentor

• Additional instructions for biosketch personal statement
  
  o Address record of maintaining a record of training in rigorous and unbiased experimental design;
  
  o Efforts taken to enhance diversity in the biomedical research workforce, and to ensure the research environment is inclusive, safe, and supportive for trainees from all backgrounds;
  
  o Commitment to fulfilling the need of the trainees to complete their training in a timely fashion with the skills, credentials and experiences to transition into independent careers in the biomedical research workforce.

• “The mentor must describe their willingness to participate in conferences organized by the MOSAIC Institutionally-Focused Research Education Award to Promote Diversity (UE5) to exchange ideas and employ evidence-based approaches to enhance diversity and improve mentoring relationships.”
MOSAIC K99/R00 – Institutional Environment

Description of Institutional Environment section must specifically address:

• Institutional career development resources and activities that will be available to contribute to the candidate’s career development (e.g., an office of postdoctoral affairs, a seminar series for future faculty, etc.).

• Any institutional policies and practices that are expected to contribute to the candidate’s research and career development success, such as policies and procedures to (a) promote diversity and inclusion in the research training environment, (b) ensure that the institution’s facilities are accessible to those with disabilities, (c) foster a positive, supportive, and safe research and training environment, and (d) prevent discriminatory harassment and other discriminatory practices and to appropriately respond to allegations of such discriminatory practices, including providing any required notifications to NIH (e.g., requesting a change of PD/PI status; see NOT-OD-15-152 and NOT-OD-18-172)

• **Two-page limit** (longer than standard one page)
MOSAIC K99/R00 – Required Attachments

• **Diversity statement (1-page maximum).** The application must include a diversity statement from the candidate applying for the K99/R00 award (i.e., the postdoctoral fellow). Should include:

  o A description of the individual’s commitment to diversity in the biomedical sciences.

  o Any past or present leadership, mentoring and outreach activities to enhance diversity – especially involving groups underrepresented in the biomedical research enterprise (e.g., certain racial/ethnic groups, persons with disabilities, students from disadvantaged backgrounds, women, and other groups as described in the NIH Notice of Interest in Diversity).

  o Describe planned activities during the career award to develop or enhance skills in working effectively with talented scientists from a wide variety of backgrounds and to promote inclusive and equitable scientific biomedical research environments.

• **Description of Candidate’s Contribution to Program Goals**

  o The sponsoring institution must provide a document on institutional letterhead that explains how the candidate’s participation will further the goals of the career development program to promote diversity in health-related research.

• Applications lacking either attachment will not be reviewed

• “Candidate Eligibility Statement” is no longer required

# MOSAIC K99 Notices

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<th>Notice Type</th>
<th>Notice Numbers</th>
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<tr>
<td>Application Specific FOA Instruction Change</td>
<td>Temporary COVID - related Eligibility Extension (NOT-GM-20-051)</td>
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<td>Candidate Eligibility Statement (NOT-GM-20-038; NOT-GM-19-059)</td>
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<td>Foreign Components (NOT-GM-20-049)</td>
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<td>NIH wide policy</td>
<td>Use for Forms-F for applications due on/after May 25, 2020 (NOT-OD-20-077)</td>
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<td>Notice of Interest in Diversity (NOT-OD-20-031)</td>
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<td>Extension of Eligibility for Childbirth (NOT-OD-20-011)</td>
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<td></td>
<td>Human fetal tissue (NOT-OD-19-137; NOT-OD-19-128)</td>
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<td>Single IRB for multi-site research (NOT-OD-20-058)</td>
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# MOSAIC K99/R00 Notices

<table>
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<tr>
<th>Notice Type</th>
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<tr>
<td>IC Participation</td>
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<td>NINR (NOT-NR-19-011)</td>
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<td>NIMHD (NOT-MD-20-003)</td>
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<td>NCCIH (NOT-AT-20-019)</td>
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<tr>
<td>Webinar Announcements</td>
<td>NOT-GM-20-048; NOT-GM-19-058</td>
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MOSAIC K99/R00 - Review

- **REMININDER:** be sure to comply with all FOA instructions
- Reviews managed by a standalone SEP managed by NIGMS Scientific Review Branch, or review groups managed by participating ICs
- **Scored Review Criteria** (each item gets a score)
  - Candidate
  - Career Development Plan/Career Goals and Objectives
  - Research Plan
  - Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)
  - Environment & Institutional Commitment to the Candidate

- **Additional Review Criteria** (can impact final score)
  - Protections for Human Subjects, Inclusions, Vertebrate Animals, Biohazards

- **Additional Review Considerations** (not part of final score)
  - Resource Sharing Plans, Training in RCR, Select Agents, Authentications, Budget

Some differences vs. other K99s
Insights from First Round of Reviews

• Candidate
  o Track record and training potential
  o Compelling commitment to diversity (e.g., demonstrated leadership in activities such as mentoring and service to promote diversity)

• Career Development Plan/Career Goals and Objectives
  o Clear career development needs, and specific plans to address those needs; must be shown in both mentor and PI training plans
  o Integration of the UE5 into career development plans

• Mentor(s), Co-Mentor(s), Consultant(s), Collaborator(s)
  o Tailored plan for candidate’s career development and progression to independence; clear separation / ownership of project going forward
  o Participation in UE5 component of the program
Insights from First Round of Reviews

• Research Plan
  - Feasible research plan with clear hypotheses, expected results, and alternative approaches
  - Aims should be related but not interdependent
  - Statistical analysis (e.g., sample size, power analysis) and attention to relevant biological variables
  - Easily understood by scientists in and outside of your specific area of research

*The entire application is reviewed — a rigorous research proposal is necessary but not sufficient*
## MOSAIC K99/R00 – Award Information

<table>
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<th>K99 (Mentored Phase)</th>
<th>R00 (Independent Phase)</th>
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<tbody>
<tr>
<td>Total Costs</td>
<td>Varies by IC</td>
<td>Up to $249,000 per year</td>
</tr>
<tr>
<td>Salary</td>
<td>Varies by IC</td>
<td><em>The independent phase institution will submit an application to be administratively reviewed on behalf of the candidate for the R00 award with detailed budget information</em></td>
</tr>
<tr>
<td>Research Support</td>
<td>Varies by IC</td>
<td></td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>8% of modified total direct costs</td>
<td>Consistent with extramural sponsoring institution's indirect cost rate</td>
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The FOA [Award Information Section](#), IC specific notices, and [MOSAIC FAQs](#)
**MOSAIC K99/R00 – Timeline**

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<tr>
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<th>Cycle I</th>
<th>Cycle II</th>
<th>Cycle III</th>
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<tr>
<td><strong>Application Due Date</strong></td>
<td>February</td>
<td>June</td>
<td>October</td>
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<tr>
<td><strong>Scientific Merit Review</strong></td>
<td>June/July</td>
<td>October/November</td>
<td>February/March</td>
</tr>
<tr>
<td><strong>Advisory Council</strong></td>
<td>September</td>
<td>January</td>
<td>May</td>
</tr>
<tr>
<td><strong>Earliest Start Date</strong></td>
<td>December</td>
<td>April</td>
<td>July</td>
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*Cohorts of scholars begin with UE5 societies each spring/summer*
MOSAIC K99/R00 – Questions

Reminder - consult the MOSAIC Answers to FAQs
MOSAIC Institutionally-Focused Research Education Award to Promote Diversity (UE5 - Clinical Trial Not Allowed); PAR-19-342
MOSAIC UE5 - Goal

• The MOSAIC UE5 program is designed to equip MOSAIC K99/R00 scholars with professional skills and provide them with the appropriate mentoring and professional networks to allow them to transition into, advance, and succeed in independent academic research careers at research-intensive institutions.

• The initial MOSAIC UE5 Awardees are:
  o The American Society for Cell Biology (ASCB),
  o The American Society for Biochemistry and Molecular Biology (ASBMB), and
  o The Association of American Medical Colleges (AAMC).
MOSAIC UE5 - Approach

- Develop **cohorts** of MOSAIC K99/R00 scholars based on scientific areas;
- Provide opportunities for MOSAIC scholars to engage in **career development activities** that will foster their progression to and success in independent academic research careers (e.g. courses for skills development);
- Enhance the **scientific and professional networks** of MOSAIC scholars beyond their local institutions;
- Identify and connect scholars with **additional mentors** who can facilitate appropriate career advancement;
- **Organize regular meetings** that provide appropriate leaders at the institutions where MOSAIC scholars conduct research (e.g., postdoctoral research advisors or postdoctoral affairs deans during the mentored research phase; department chairs, deans, or provosts during the independent phase) a forum to **exchange ideas, and share evidence-based approaches to enhance diversity and improve mentoring**;
- Enhance **institutional accountability** for the scholars' career advancement; and
- Track and publicize **outcomes** (e.g., publicly available websites).
MOSAIC UE5 - Goal

• **Courses for Skills Development:** Support for short courses designed to enhance skills of cohorts of MOSAIC K99/R00 scholars to transition into and advance within independent academic research careers, e.g.,
  - Academic job search strategies
  - Communication skills and scientific publishing
  - Grant proposal preparation
  - Laboratory management, budgeting, hiring, mentoring
  - Managing career challenges and expectations
  - Academic advancement, and balancing teaching, research, and service
  - Life-work balance
MOSAIC UE5 - Goal

• **Mentoring Activities**
  - Formation of **cohesive and mutually supportive cohorts** of MOSAIC K99/R00 scholars that span the K99 to R00 award phases.
  - **One-on-one and group mentoring** in scientific, professional and career development skills and strategies for the cohorts of MOSAIC K99/R00 scholars.
  - Activities to **enhance the mentoring networks of MOSAIC scholars** that prepare them to successfully navigate the challenges and opportunities associated with a faculty career in academic research-intensive institutions.
  - Activities to **enhance the caliber of mentoring and institutional support of MOSAIC K99/R00 scholars**, including convening regular meetings with appropriate leaders at the institutions where MOSAIC scholars conduct research to exchange ideas, and employ evidence-based approaches to enhance diversity and improve mentoring relationships.
MOSAIC UE5 - Considerations

- Applicants are expected to identify objectives (i.e., specific, measurable, and obtainable outcomes the program intends to achieve) and to develop plans to implement evidence-based skills development and mentoring activities that are grounded in the literature and from evaluations of existing relevant programs.

- Clearly describe expected time commitment of MOSAIC K99 scholars.

- Funded UE5 organizations are expected to provide professional development and enhance the professional networks of cohorts of MOSAIC K99/R00 scholars conducting research in areas specific to the mission(s) of participating NIH institute(s) and center(s).

**Participating ICs for the upcoming due date:** NHLBI, NIMH, NLM, and NCCIH.

**NIGMS does not intend to fund additional MOSAIC UE5 awards**
# UE5 Participating IC Interests

<table>
<thead>
<tr>
<th>IC</th>
<th>Interests</th>
<th>Contact</th>
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<tbody>
<tr>
<td>National Heart, Lung, and Blood Institute (NHBLI)</td>
<td>Cardiovascular, lung, blood and sleep research, implementation science, precision medicine</td>
<td>Wayne Wang, Ph.D. <a href="mailto:wayne.wang2@nih.gov">wayne.wang2@nih.gov</a></td>
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<tr>
<td>National Institute of Mental Health (NIMH)</td>
<td>Mental heath, neuroscience, brain disorders, translational research, services and intervention science, and AIDS-related research</td>
<td>James Churchill, Ph.D. <a href="mailto:churchillj@mail.nih.gov">churchillj@mail.nih.gov</a></td>
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<tr>
<td>National Library of Medicine (NLM)</td>
<td>Clinical/public health informatics, translational bioinformatics, data science and consumer informatics.</td>
<td>Hua-Chuan Sim, M.D. <a href="mailto:simh@mail.nih.gov">simh@mail.nih.gov</a></td>
</tr>
<tr>
<td>National Center for Complementary and Integrative Health (NCCIH)</td>
<td>Basic and translational research as well as observational studies and clinical investigations underlying complementary health approaches.</td>
<td>Lanay Mudd, Ph.D. <a href="mailto:lanay.mudd@nih.gov">lanay.mudd@nih.gov</a></td>
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</table>
MOSAIC UE5 - Considerations

• Funded MOSAIC research education activities should address the career needs of scholars in both the mentored postdoctoral research phase (K99), and independent research phase (R00).

• Program activities should build upon the strengths and assets of MOSAIC K99/R00 scholars and should not reflect deficit-models (i.e., those that focus primarily on remediation of perceived weaknesses) of career development.
MOSAIC UE5 – Eligibility (Organization)

- Eligible Organizations:
  - Nonprofits other than institutions of higher education
  - For-profit organizations
  - Multiple organizations can partner for a MOSAIC UE5 application, with one organization serving as Primary Performance Site Location. If multiple organizations partner for an UE5 application, follow all instructions for Consortium/Contractual Arrangements in the SF424 (R&R) Application Guide.

Institutions of higher education are not eligible for the MOSAIC UE5 award

MOSAIC UE5 – Eligibility (Organization)

- Applications are encouraged from organizations composed of biomedical researchers (e.g., scientific societies) with a membership of scientists conducting research within the mission(s) of one or more of the participating NIH institutes or centers, including members with active research project grants from these ICs with:
  - Experience serving as a centralized entity to enhance scientific communication and networking among scientists conducting research;
  - An established record of providing professional development and networking activities for the next generation of biomedical researchers;
  - A demonstrated commitment to enhancing the diversity of the biomedical research workforce, for example, individuals from underrepresented groups; and
  - The resources to support the proposed program, e.g., the provision of adequate staff, facilities, and educational capacity.

MOSAIC UE5 – Eligibility (PI)

• PD(s)/PI(s) are expected to be full-time employees of the applicant organization. The PD(s)/PI(s) should have appropriate professional experience in the scientific area in which the application is targeted and be capable of providing both administrative and training leadership to the development and implementation of the proposed program.

• While a faculty member who is a full-time employee of an academic institution cannot serve as a PD/PI, this individual can serve as a member of key personnel (e.g., co-investigator or collaborator, but not an multi-PI).
MOSAIC UE5 – Participants

- NIH MOSAIC K99/R00 scholars are the primary participants for MOSAIC UE5 programs supported through this FOA.

- NIH will select the MOSAIC K99/R00 scholars and will assign to UE5 awardees on a yearly basis.

- UE5 awardees may, with strong justification, recruit other individuals who will enhance the ability of the grantee to achieve the overarching goal of the MOSAIC program. The participation of postdoctoral researchers or early-career faculty other than MOSAIC K99/R00 scholars in the research education activities supported by MOSAIC UE5 awards requires prior approval from NIH staff.
MOSAIC UE5 – Research Strategy

• Consult the FOA for details
  ○ Proposed Research Education Program should cite relevant data/report resources in preparing application.
  ○ Describe the short-, medium-, and long-term goals for participants that the activities are designed to address, and how these outcomes will be measured.
  ○ Should include description of organizational setting and current efforts to enhance workforce diversity; cohort formation and activities; courses for skills development; activities for addressing psychosocial and environmental factors associated with persistence; mentorship; and conferences.

MOSAIC UE5 – Research Strategy

• “Describe plans to ensure activities will synergize with, but not duplicate the institutional career development plans developed by the MOSAIC scholars.”
  - NIH anticipates that many of the activities proposed by UE5 will be distinct from career development at institution.
  - Clearly describe how you will identify any potentially duplicated activities and adjust offerings for MOSAIC scholar.

• Applications lacking the following components of Research Education Program Plan will not be reviewed: recruitment plan to enhance diversity; plan for instruction in methods for enhancing reproducibility; plan for instruction in the responsible conduct of research; evaluation plan; dissemination plan.

MOSAIC UE5 – **Required Attachments**

- **Advisory Committee.** An Advisory Committee is a **required** component of this Research Education program. Applicants must provide a plan for the appointment of an Advisory Committee to monitor progress and relevance of the research education program. The composition, roles, responsibilities, and desired expertise of committee members, frequency of committee meetings, and other relevant information should be included. Describe how the Advisory Committee will evaluate the overall effectiveness of the program. **Proposed Advisory Committee members** should be named in the application if they have been invited to participate at the time the application is submitted.

- **Applications lacking an advisory committee attachment will not be reviewed.**

MOSAIC UE5 – Required Letter of Support

• Organizational Commitment. (Three page maximum) Applications must include a letter from a Senior Administration Official at the applicant organization. This letter should be a signed letter on organizational letterhead, and it should describe the applicant organization’s commitment to the planned program. The letter should provide evidence of commitment to the research education program. Appropriate commitment should include the provision of adequate staff, facilities, and educational resources that can contribute to the planned research education program. The letter should describe how the organization ensures that proper policies, procedures, and oversight are in place to prevent discriminatory harassment and other practices; responds appropriately to allegations of discriminatory practices, including any required notifications to the Department of Health and Human Services Office of Civil Rights (see NOT-OD-15-152); and adopts and follows institutional procedure for requesting NIH prior approval of a change in the status of the Program Director/Principal Investigator (PD/PI) or other senior/key personnel if administrative or disciplinary action is taken that impacts the ability of the PD/PI or other key personnel to continue his/her role on the NIH award described in the research education program application (also see NOT-OD-18-172 regarding policy on change in PD/PI status).

• Applications lacking an organizational commitment letter will not be reviewed.
MOSAIC UE5 – Review

• REMINDER: be sure to comply with all FOA instructions
• NIGMS Scientific Review Branch will manage reviews
• Applications will *likely* be reviewed by standalone SEP
• Scored Review Criteria (each item gets a score)
  - Significance
  - Investigator(s)
  - Innovation
  - Approach
  - Environment
  Pay special attention to “Specific for this FOA” criteria

• Additional Review Criteria: Generally N/A for UE5
• Additional Review Considerations (not part of final score)
  - Recruitment Plan to Enhance Diversity, Training in Methods for Enhancing Reproducibility, Training in RCR, Resource Sharing Plans, Budget
# MOSAIC UE5 – Award Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget Information</th>
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<tr>
<td><strong>Award Budget</strong></td>
<td>Average award size is expected to be $250,000 in direct costs per year. Budgets should reflect the fact that the number of MOSAIC scholars is expected to grow through time (e.g., 5 scholars in year one and ~ 25 scholars in year five).</td>
</tr>
<tr>
<td><strong>Award Project Period</strong></td>
<td>Five years</td>
</tr>
<tr>
<td><strong>Personnel</strong></td>
<td>Individuals designing, directing, and implementing the research education program may request salary and fringe benefits appropriate for the person months devoted to the program.</td>
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</table>
| **Participant Costs**           | • NIH MOSAIC K99/R00 scholars receive educational experiences supported by an UE5 program but may not receive salary or stipend supplementation from the UE5 program.  
• Funds may be requested for the travel of MOSAIC scholars to UE5 activities. |
| **Other Program-Related Expenses** | May be included in budget. Limited program evaluation costs are allowed up to a maximum of 5% of direct costs per year for the 5-year project period. |
| **Indirect Costs**              | 8% of modified total direct costs                                                   |

[https://grants.nih.gov/grants/guide/pa-files/PAR-19-342.html#_Section_II._Award_1](https://grants.nih.gov/grants/guide/pa-files/PAR-19-342.html#_Section_II._Award_1)
MOSAIC UE5 – Cooperative Agreement

• Cooperative Agreement: A support mechanism used when there will be substantial Federal scientific or programmatic involvement.

• Substantial involvement means that, after award, NIH program staff will assist, guide, coordinate, or participate in project activities.

• Specifics of the substantial involvement are delineated in Section VI.2 of the FOA under “Cooperative Agreement Terms and Conditions of Award”

https://grants.nih.gov/grants/guide/pa-files/PAR-19-342.html#_Section_VI._Award
MOSAIC UE5 – Cooperative Agreement

• NIH’s purpose is to support and stimulate the recipients’ activities by involvement in and otherwise working jointly with the award recipients in a partnership role.

• NIH’s purpose is not to assume direction, prime responsibility, or a dominant role in the activities.

• The dominant role and prime responsibility resides with the awardees for the project as a whole, although specific tasks and activities may be shared among the awardees and the NIH.

• See Section VI.2 of the FOA for the specifies of the primary responsibilities of the PI(s), the substantial programmatic involvement of NIH staff, the areas of joint responsibility, and how any disputes will be resolved.

https://grants.nih.gov/grants/guide/pa-files/PAR-19-342.html#_Section_VI._Award
MOSAIC UE5 – Timeline

• Application Due Date: November 2, 2020
• Scientific Merit Review: February/March 2021
• Advisory Council: May 2021
• Earliest Project Start Date: July 2021
• MOSAIC Cohort Formation: Spring/Summer 2022
MOSAIC UE5 – Questions

Reminder - consult the MOSAIC Answers to FAQs
Extramural NIH Training Opportunities for Postdocs

NIGMS Division of Training Workforce Development and Diversity

• Parent K99/R00 FOA

• Research Supplements to Promote Diversity

NIH Extramural Research Training Website

NIH Extramural Diversity Website
For more information

FOAs

• UE5 (PAR-19-342) and K99/R00 (PAR-19-343)

MOSAIC Resources

• MOSAIC Website and FAQs

NIGMS Contacts

• Program: Kenneth Gibbs (kenneth.gibbs@nih.gov)
• Review: Stephanie Constant (stephanie.constant@nih.gov)
• Grants Management: Justin Rosenzweig (rosenzwj@nigms.nih.gov)
• Follow us on Twitter @NIGMSTraining
Thank you for listening
Best of luck on your applications!