



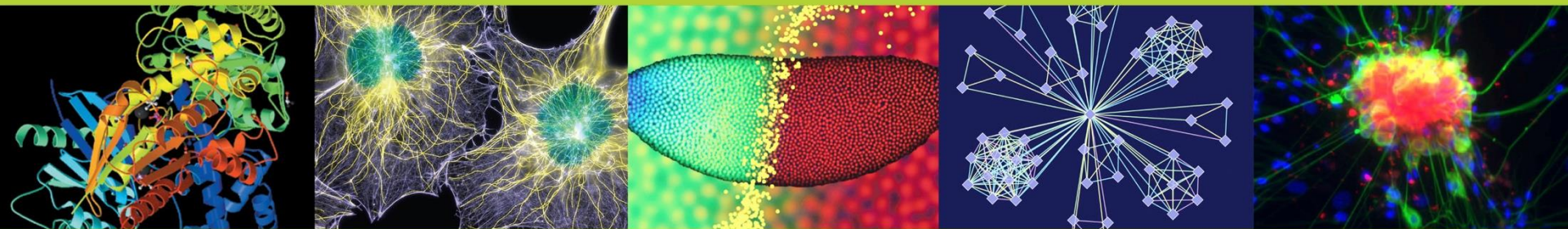
National Institute of
General Medical Sciences



National Advisory General Medical Sciences Council

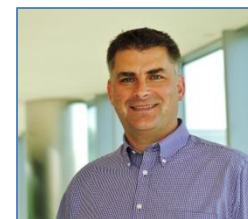
September 16, 2016

Jon R. Lorsch, Ph.D., Director
National Institute of General Medical Sciences



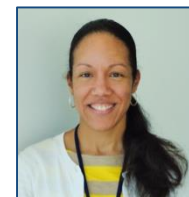
New Hires

- **Jacob Basson, Ph.D.**, Statistical Policy Analyst, Office of Program Planning, Analysis, and Evaluation
- **Patrick Brown, Ph.D.**, Program Director, Division of Training, Workforce Development, and Diversity
- **Sailaja Koduri, Ph.D.**, Program Director, Division of Training, Workforce Development, and Diversity
- **Tracy Koretsky, Ph.D.**, Scientific Review Officer, Office of Scientific Review



New Hires (cont.)

- **Nathan Moore, Ph.D.**, Program Analyst, Office of Program Planning, Analysis, and Evaluation (AAAS Fellow)
- **Haluk Resat, Ph.D.**, Program Director, Division of Biomedical Technology, Bioinformatics, and Computational Biology
- **Courtney Tardd-Wright**, Grants Management Specialist, Grants Administration Branch



Departures

- **Ann Dieffenbach**, Chief, Office of Communications and Public Liaison (retirement)
- **Paul Sheehy, Ph.D.**, Division of Extramural Activities
- **Mona Trempe, Ph.D.**, Office of Scientific Review (retirement)

NIH Institute Director Selection

Joshua A. Gordon, M.D., Ph.D.

- Selected as Director, National Institute of Mental Health
- Comes to NIH from Columbia University Medical Center and the New York State Psychiatric Institute
- Studies mouse models of psychiatric diseases
- Scheduled to start in September



NIH Institute Director Selection

Diana W. Bianchi, M.D.

- Selected as Director, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development
- Comes to NIH from the Floating Hospital for Children and Tufts Medical Center in Boston
- Research focuses on prenatal genetics
- Scheduled to start in October

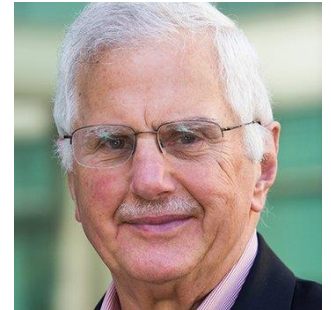


Lasker Award to Former NIGMS Grantee

Bruce M. Alberts, Ph.D.

University of California, San Francisco

- 2016 Lasker~Koshland Special Achievement Award in Medical Science
- For discoveries in DNA replication, and leadership in science and education



Former NIGMS Director Named Editor-In-Chief of *Science* Magazine

Jeremy M. Berg, Ph.D.
University of Pittsburgh



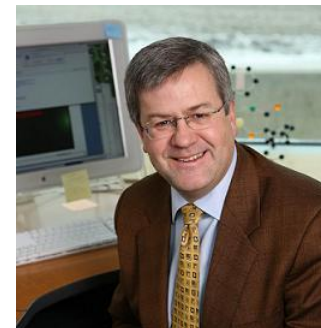
- Passionate about science communication
 - Founded NIGMS *Feedback Loop* blog
- Plans to maintain *Science* Magazine's focus on rigor and reproducibility in research
 - Problem is “far from settled.”

Upcoming NIGMS Event

Stetten Lecture

- “Elements of Health and Disease: Inorganic Fluxes and Metal Receptors That Control Cell Fate Decisions”
- October 19, 3:00 – 4:00 p.m., EDT
Masur Auditorium, Clinical Center, NIH
- Thomas V. O’Halloran, Ph.D.
Professor, Departments of Chemistry and
Molecular Biosciences
Northwestern University

Watch remotely (live or later) at
<http://videocast.nih.gov>



An NIH Director's Wednesday Afternoon Lecture Series Event
Sponsored by the National Institute of General Medical Sciences

The
DeWitt Stetten Jr.
Lecture


Elements of Health and Disease:
Inorganic Fluxes and Metal Receptors
That Control Cell Fate Decisions

Thomas V. O'Halloran, Ph.D.
Charles E. and Emma H. Morrison Professor
Departments of Chemistry and Molecular Biosciences
Director, Chemistry of Life Processes Institute
Northwestern University

Wednesday
October 19, 2016
3:00 – 4:00 p.m.

Masur Auditorium
Clinical Center (Building 10)
National Institutes of Health

Sign language interpreters can be provided. Individuals with disabilities who need reasonable accommodations to participate in this event should contact Jacqueline Roberts, Jacqueline.Roberts@nih.gov, 301-594-6742, or the Federal Relay, 800-877-8339.



Upcoming NIGMS Event

Cell Day

- Interactive, free web chat for middle and high school students about cell biology, biochemistry and research careers



To join the live event, read the transcript afterward or learn more, see <https://www.nigms.nih.gov/cellday>

NIH Needs Your Input!

Metrics to Assess the Value of Biomedical Digital Repositories (NOT-OD-16-133)



- Led by NIH; Susan Gregurick, NIGMS contact
- Responses due September 30

Learn more on the *Feedback Loop* Blog
<https://loop.nigms.nih.gov/>

NIGMS Congressional Interactions

July 2016

- Senator Jerry Moran (R-KS)
- Senator Thad Cochran's (R-MS) staff
- Senator Shelley Moore Capito (R-WV) and Congressman David B. McKinley, P.E. (R-WV)



Planned for October 2016

- Visit to Kansas with Senator Jerry Moran (R-KS)

Results of First ESI/NI MIRA Reviews

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	Maximizing Investigators' Research Award for New and Early Stage Investigators (R35)
Activity Code	R35 Outstanding Investigator Award
Announcement Type	New
Related Notices	<ul style="list-style-type: none">• August 19, 2016 - This RFA has been reissued as RFA-GM-17-004.• July 12, 2016 - Notice of Intent to Publish a Funding Opportunity Announcement. See Notice NOT-GM-16-111
Funding Opportunity Announcement (FOA) Number	RFA-GM-16-003
Companion Funding Opportunity	None
Number of Applications	See Section III, 3. Additional Information on Eligibility .
Catalog of Federal Domestic Assistance (CFDA) Number(s)	93.859
Funding Opportunity Purpose	<p>The Maximizing Investigators' Research Award (MIRA) is a grant to provide support for all of the research in an investigator's laboratory that falls within the mission of NIGMS. The goal of MIRA is to increase the efficiency and efficacy of NIGMS funding. It is anticipated that the new mechanism will:</p> <ul style="list-style-type: none">• Increase the stability of funding for NIGMS-supported investigators, which could enhance their ability to take on ambitious scientific projects and approach problems more creatively.• Increase flexibility for investigators to follow important new research directions as opportunities arise, rather than being bound to specific aims proposed in advance of the studies.• More widely distribute funding among the nation's highly talented and promising investigators to increase overall scientific productivity and the chances for important breakthroughs.• Reduce the time spent by researchers writing and reviewing grant applications, allowing them to spend more time conducting research.• Enable investigators to devote more time and energy to mentoring junior scientists in a more stable research environment. <p>The purpose of this FOA is to test the feasibility of this grant mechanism for New and Early Stage Investigators through a pilot program with restricted eligibility.</p>

- Eligibility limited to New Investigators (NIs) at the assistant professor or equivalent level and Early Stage Investigators (ESIs)
- Applications due in November, 2015
- Reviewed in March, 2015

Results of the First ESI/NI MIRA Reviews

- 320 applications reviewed, 94 awards made or to be made (29.4% success rate)

RFA-GM-16-003 – Success Rate

RFA-GM-16-003

- ESI/NI directed
- 320 Applicants
- 94 Awards
- 29.4% Success Rate
- Comparable to success rates for NIs/ESIs (see Tables at right)

New Investigator Awards in FY 2015 on R01 and DP2 Applications

Institute	New Investigators		
	Applicants	Awardees	Approximate Success Rate
NIGMS	863	221	25.6%
NIH	8,709	1,366	15.7%

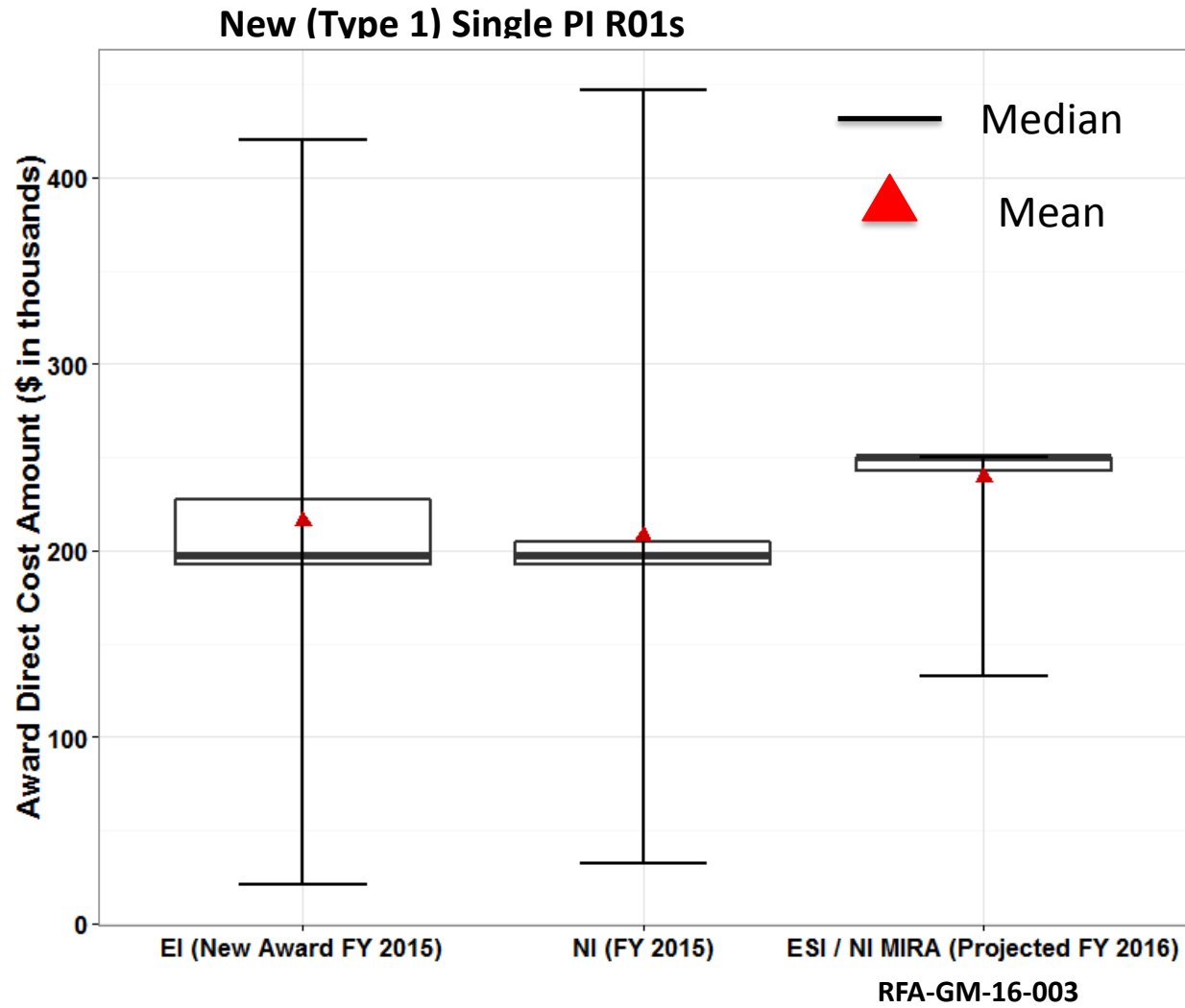
Institute	Early Stage Investigators		
	Applicants	Awardees	Approximate Success Rate
NIGMS	422	127	30.1%
NIH	4,252	833	19.6%

Results of the First ESI/NI MIRA Reviews

- 320 applications reviewed, 94 awards made or to be made (29.4% success rate)
- Median award D.C. of \$250K, mean of \$239K
 - Compared to median of \$198K for NIGMS R01s for ESIs in FY 2015

Distribution of Award Size

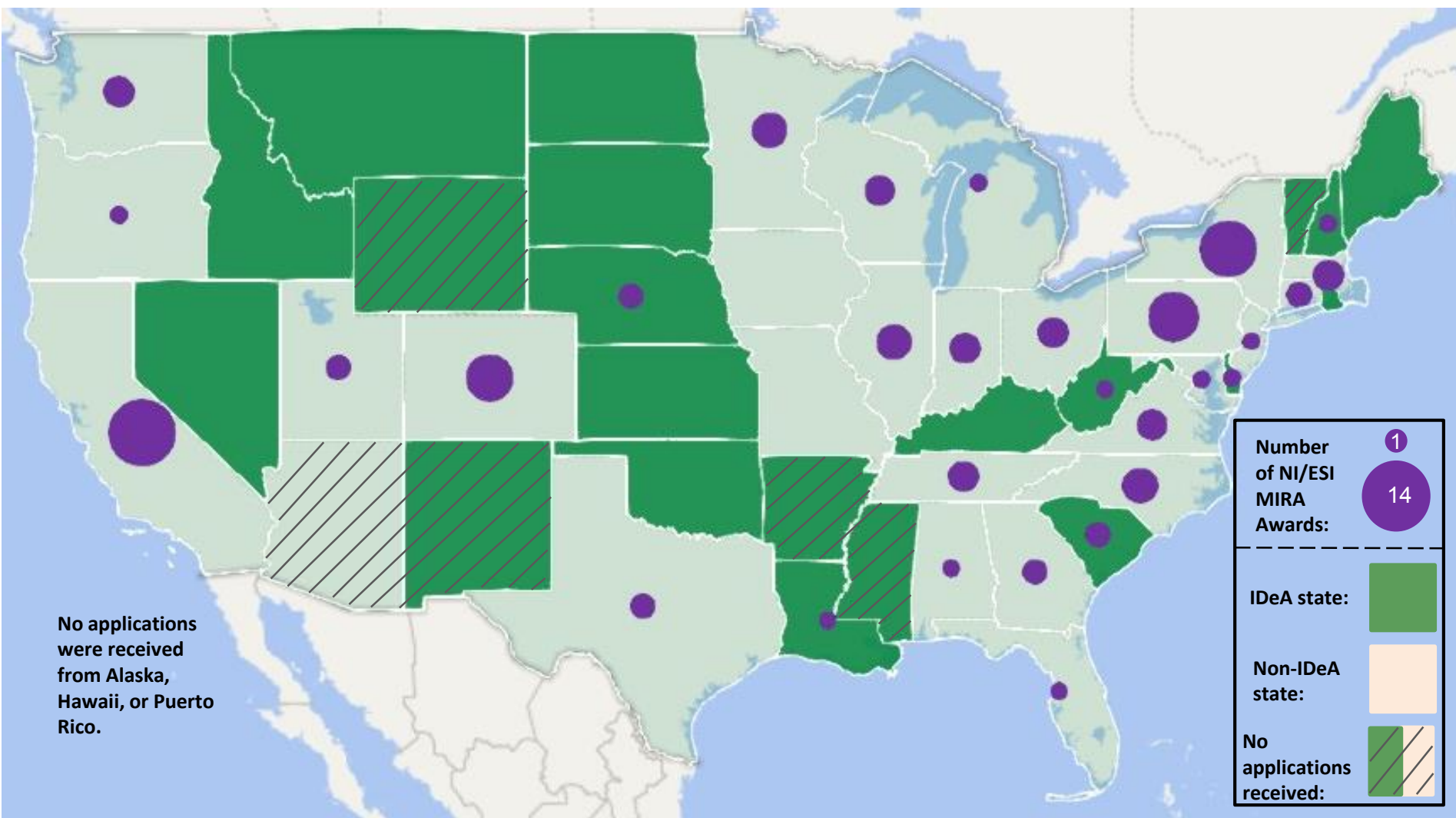
Most ESI/NI MIRA awards will be for \$250,000 in annual direct costs, which is greater than for the average or median 2015 new R01 (single PI) awards for either new (NI) or established (EI) investigators.



Results of the First ESI/NI MIRA Reviews

- 320 applications reviewed, 94 awards made or to be made (29.4% success rate)
- Median award D.C. of \$250K, mean of \$239K
 - Compared to median of \$198K for NIGMS R01s for ESIs in FY 2015
- No significant differences in gender, race or ethnicity between applicants and awardees
- Awardee pool is 1.5 years younger on average than unsuccessful applicant pool (37.2 vs. 38.7 years) and 2 years younger than FY 2015 R01 ESI pool (37.2 vs. 39.1 years); $p = 0.02$ and < 0.001 , respectively

Geographical Distribution of ESI/NI MIRA Grantees



Next Steps for MIRA

- Reissued Established Investigator MIRA FOA: RFA-GM-17-002
 - Applications are in and awaiting review
 - We received nearly as many applications for this FOA as for the first one (~80%)
- Reissued ESI MIRA FOA: RFA-GM-17-004
 - Limited to ESIs
 - Webinar September 27, 3:00-4:00 PM EDT
 - Applications due November 4
- Working on an FOA to allow anyone with an NIGMS R01 to apply for a MIRA instead when their R01 is up for renewal

Proposed Common Fund Cryo-EM Initiative

- 3 shared, national facilities
- Analogous to synchrotron beamline model
- Access to data collection, technical support and training
- Parallel technology development effort for single particle EM and tomography

Next Step for Catalyzing the Modernization of Biomedical Graduate Education

Create a **T32 Funding Opportunity Announcement that is tailored to promote the development and iterative improvement of outstanding pre-doctoral training programs in fundamental biomedical research that meet the needs of a continually evolving scientific enterprise.**

- Promote experimentation, innovation and dissemination of results
- Support curricula that focus on skills development
- Use of evidence-based approaches to education and mentoring
- Rigor, reproducibility and responsibility in research
- Enhanced career development
- Support the creation of a diverse research workforce
- Sustainably scaled programs, balanced incentives, faculty commitment

Overview of Today's Meeting

- Rick Horwitz, The Allen Institute for Cell Science: A Next Step in the Post Genomic Era
- Michael Lauer, OER, NIH: Evidence-Based Funding: Thoughts about Extramural Research
- Concept Clearances:
 - COBRE phase III; INBRE; IDeA-CTR
 - NSF-NIGMS MathBio Program
 - Clinical Trials Planning Grants
 - Biomedical Technology Research Resources
- Public Comment Period
- Council-Initiated Discussion

Questions & Comments

