



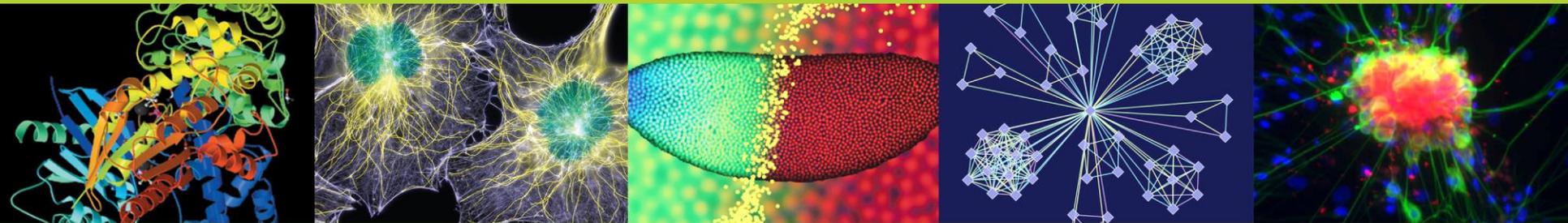
National Institute of  
General Medical Sciences



# National Advisory General Medical Sciences Council

January 29, 2016

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



# NIGMS Division Director Appointment

## Division of Genetics and Developmental Biology

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### Dorit Zuk, Ph.D.

- Molecular biologist whose research has focused on muscle development and RNA metabolism
- Also has a strong background in science policy and communications
- Comes to NIGMS from NIH's National Center for Advancing Translational Sciences
- Previously served as science policy advisor to the NIH Deputy Director for Extramural Research, as deputy editor of *Cell* and as editor of *Molecular Cell*



# NIGMS Division Director Appointment Continued

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Special thanks to:

- **Susan Gregurick**, who chaired the search committee
- **Susan Haynes**, who has twice served very ably as acting division director and has prepared it to take on important new challenges

# Other New Hires

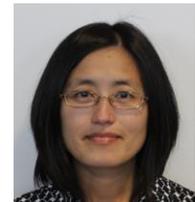
- **Kenneth Gibbs**, Ph.D., Program Analyst, Office of Program Planning, Analysis, and Evaluation
- **Claudia Gonzalez**, Management Analyst, Office of Administrative Management
- **Tara Ritchey**, Management Analyst, Office of Administrative Management



# Other New Hires, Continued

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- **Arina Kramer**, Grants Management Specialist, Grants Administration Branch
- **Connie Murphy**, Grants Management Specialist, Grants Administration Branch
- **Emily Tran**, Grants Management Specialist, Grants Administration Branch



# Departures

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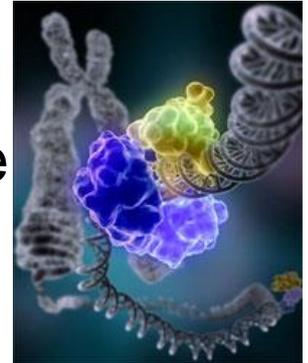
- **Karen Chandler**, Financial Management Branch (retirement)
- **Susy Correa-Salazar**, Information Resources Management Branch
- **Shawn Gaillard**, Ph.D., Division of Training, Workforce Development, and Diversity
- **Amy Swain**, Ph.D., Division of Biomedical Technology, Bioinformatics, and Computational Biology
- **Christina Walker**, Financial Management Branch

# Nobel Prize to NIGMS Grantees

**Paul Modrich**, Ph.D., Duke Medical School

**Aziz Sancar**, M.D., Ph.D., UNC School of Medicine

- 2015 prize in chemistry "for mechanistic studies of DNA repair"
- NIGMS has supported Modrich's work since 1975 and Sancar's work since 1982
- NIGMS has funded the research of 83 Nobel Prize winners, 43 in chemistry and 40 in physiology or medicine



# NIH Appointment

## Michael S. Lauer, M.D.

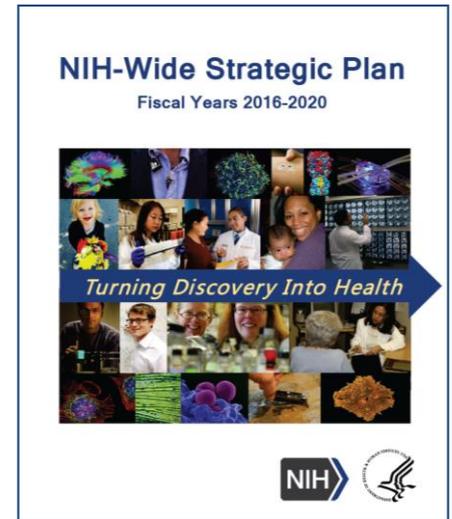
- Deputy Director for Extramural Research
- Previously served as Director, Division of Cardiovascular Sciences, National Heart, Lung, and Blood Institute
- Interests include data-driven decision making and enhancing the efficiency of research
- Communicates via “Open Mike” blog, which has already referenced several NIGMS *Feedback Loop* posts



# NIH Update

## NIH-Wide Strategic Plan

- Presented to Advisory Committee to the Director, NIH, on December 10
- Submitted to Congress on December 16
- Posted at <http://www.nih.gov/sites/default/files/about-nih/strategic-plan-fy2016-2020-508.pdf>



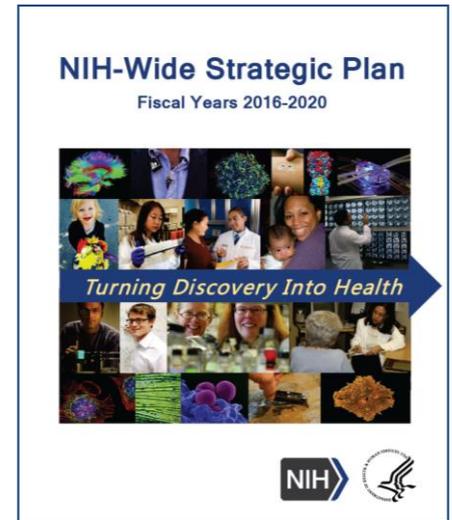
# NIH Update

## NIH-Wide Strategic Plan

### *Press Release: Congressman Andy Harris Applauds NIH for Release of Strategic Plan*

“Dr. Collins deserves credit for listening to the will of Congress and preparing a strategic plan....As we look for ways to fund more biomedical research, Congress needs to know NIH is wisely spending the money it currently receives.”

“This groundbreaking NIH-wide strategic plan is an important first step toward increasing accountability and resource prioritization at NIH... **The commitment to young investigators, basic scientists, and innovative new funding models is particularly encouraging.**”



# NIH Update

## Congressional Hearing

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October 7, 2015

- Senate Appropriations Subcommittee on Labor, HHS, Education
- “Investing in a Healthier Future”
- NIH participants: Francis Collins (NIH), Walter Koroshetz (NINDS), Jon Lorsch (NIGMS), Douglas Lowy (NCI), Griffin Rodgers (NIDDK), Nora Volkow (NIDA)
- Watch at <http://www.appropriations.senate.gov/hearings/labor-hhs-subcommittee-hearing-national-institutes-of-health-investing-in-a-healthier-future>

# NIH Update

## House GOP Doctors Caucus Visit

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November 16, 2015

- Group of 18 physicians
- Caucus attendees: Reps. Larry Bucshon (IN), Diane Black and Phil Roe (TN), Andy Harris (MD), Ralph Abraham (LA)
- NIH attendees: Francis Collins and Larry Tabak (NIH), Jon Lorsch (NIGMS), Roderic Pettigrew (NIBIB), Nora Volkow (NIDA)



# Fiscal Year 2016 Budget

	FY 2015 (\$1000s)	FY 2016 (\$1000s)	Increase (\$1000s)	Increase (%)
NIGMS Total (excluding IDeA)	2,098,151	2,191,233	93,082	4.4
IDeA Program	273,325	320,840	47,515	17.4
<b>NIGMS Total</b>	<b>2,371,476</b>	<b>2,512,073</b>	<b>140,597</b>	<b>5.9</b>

# Fiscal Year 2016 Budget

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- Although we do not yet know the FY 2017 budget, discretion dictates that we must assume it will be flat for planning purposes.
- For FY 2016 and beyond, we want to maintain RPG success rates at >25%.
- We do not want to create a peak in success rate this year followed by a dip in subsequent years by committing all the funds from this year's increase to multi-year awards.
- We are developing impactful short-term uses for some of the funds (e.g., equipment supplements, 1-2 year grants) so that money is available to keep success rates healthy in FY 17-19.

# Congressional Support for Basic Research

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*From Statement of Managers in FY 2016 Omnibus Appropriations Act:*

**Basic Biomedical Research.**-The agreement urges the NIH Director to **continue the traditional focus on basic biomedical research**. The purpose of NIH basic research is to discover the nature and mechanics of disease, and identify potential therapeutic avenues likely to lead to its prevention and treatment. **Without this early scientific investigation, future development of treatments and cures would be impossible. Basic biomedical research must remain a key component of both the intramural and extramural research portfolio at the NIH.** The agreement requests NIH provide an update in the fiscal year 2017 budget request on **steps NIH plans to take to ensure the traditional focus on basic science is preserved.**

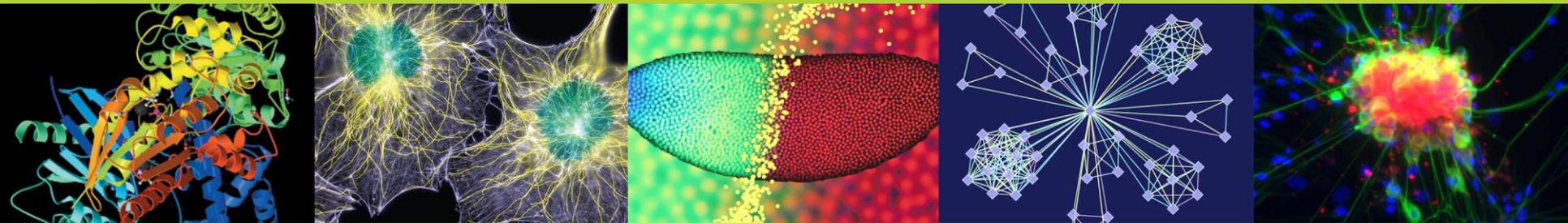


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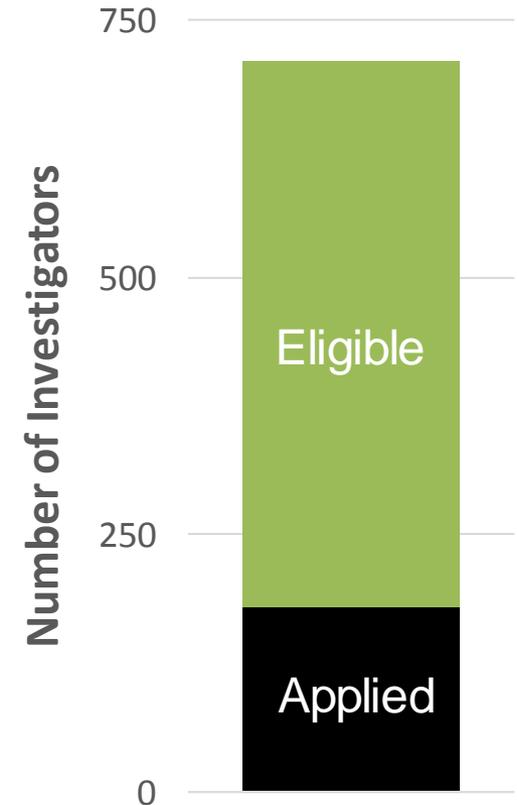
# Maximizing Investigator Research Award (MIRA)

## Updates



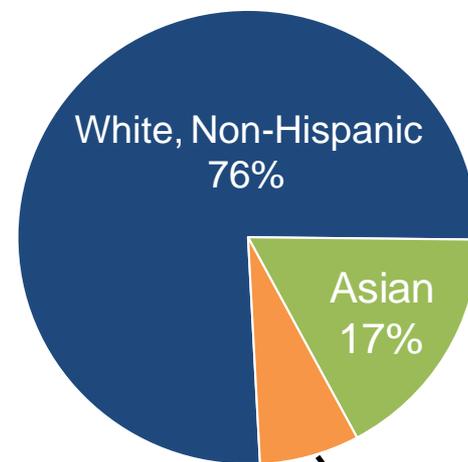
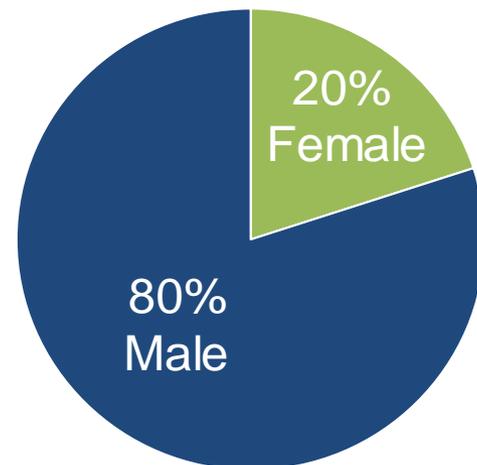
# RFA-GM-16-002 – Applicant Pool

- 25% of all eligible NIGMS investigators applied for the MIRA pilot.
  - 179 applications received from a possible pool of 710.
- Concurrent review policy and R35s
  - Applicants were ineligible to submit any NIGMS R01 while R35 was still under consideration and review (~3 grant cycles).



# RFA-GM-16-002 – Applicant Pool

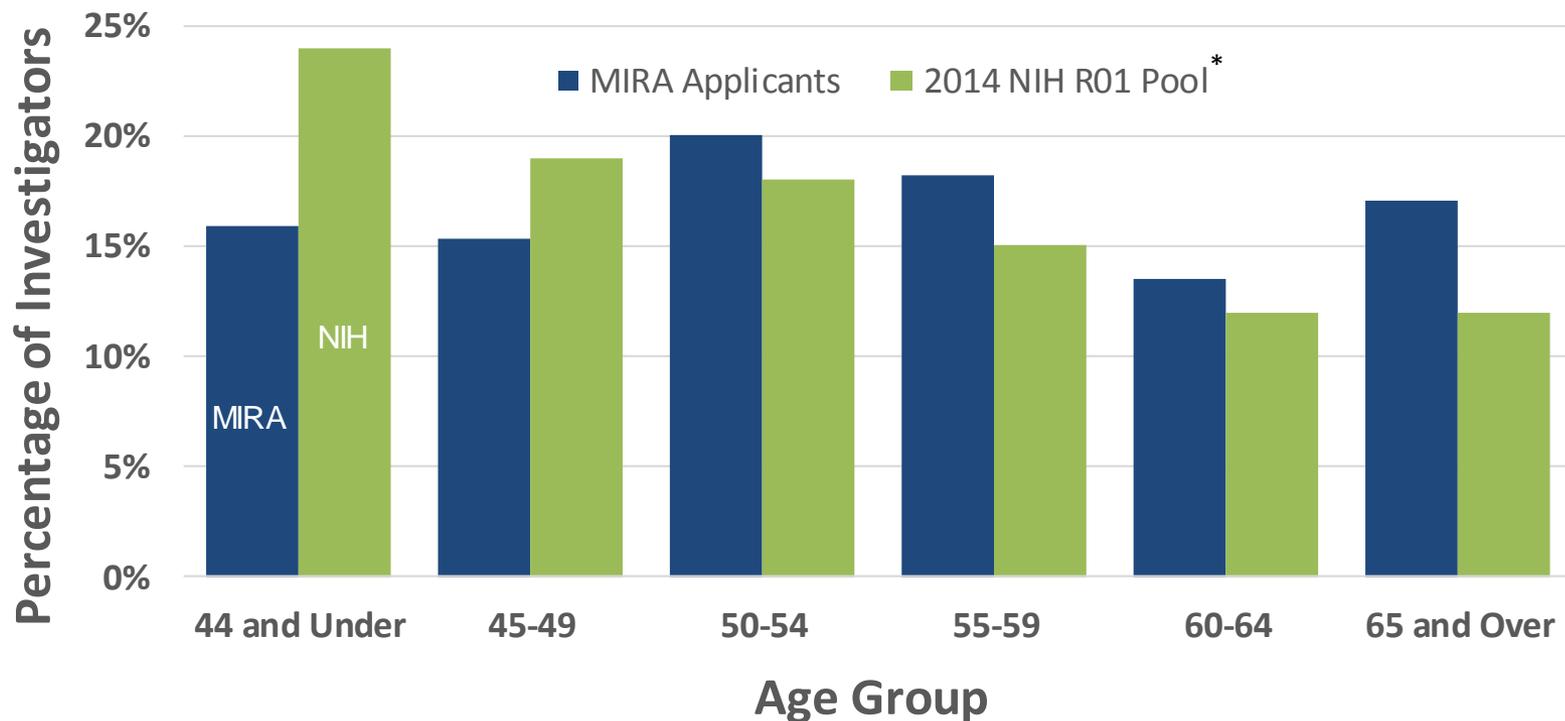
- MIRA-eligible (N = 710)
  - 80% male; 20% female
  - 75% white non-Hispanic
  - 15% Asian
  - 10% all other categories
- MIRA applicants (N = 179)
  - 80% male; 20% female
  - 76% white non-Hispanic
  - 17% Asian
  - 7% all other categories
- No notable demographic differences between eligible investigators and actual applicants.



All Other Categories, 7%

# RFA-GM-16-002 – Applicant Demographics

- Age distribution of applicants relative to general R01 recipient pool:



\* Values estimated from OER Blog Post - [“Age Distribution of NIH Principal Investigators and Medical School Faculty”](#)

# RFA-GM-16-002 – Review

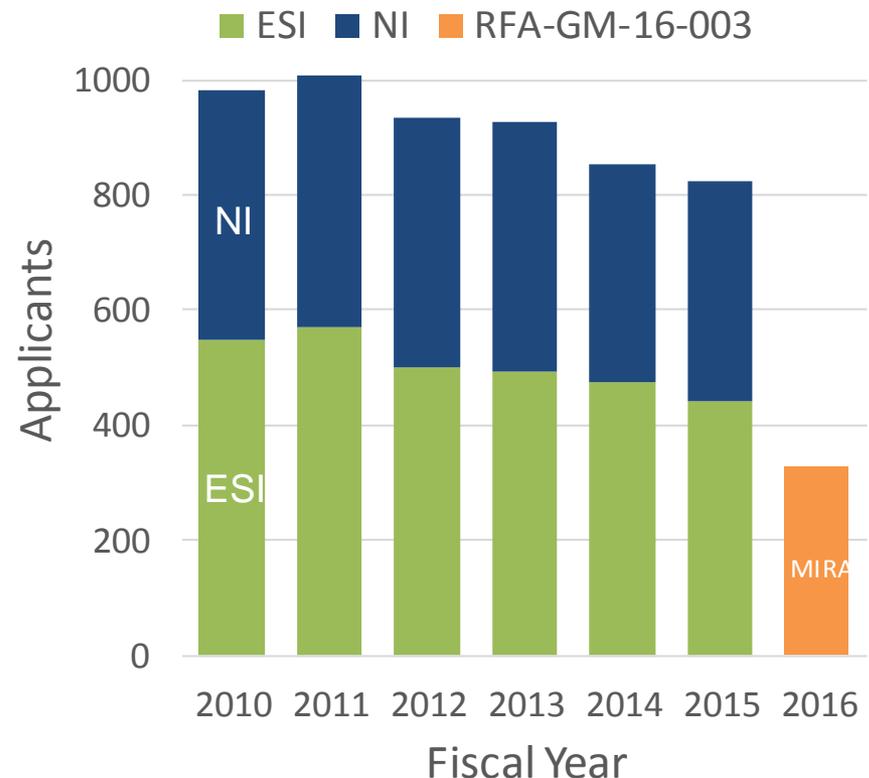
- Four review panels covering multiple NIGMS research areas:

Review Panel	Number of Applications
1	45
2	41
3	47
4	46

- Reviewer gender distribution:
  - 35% female reviewers (Range: 20-50%, depending on panel)
- No statistically significant differences in mean priority scores by gender, age, or race/ethnicity (well- vs. under-represented).

# RFA-GM-16-003 – Applicant Pool

- 326 Applicants
  - Closest baseline – NIGMS R01 Early Stage Investigator (ESI) and New Investigator (NI) applicant pool
- Approximately 1/3 - 1/2 of historical NI R01 applicant numbers.
  - RFA eligibility excludes some NIs
  - Concurrent review policy still applies



# Next Steps

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- Reissue a revised version of established investigator pilot FOA
  - 2 NIGMS R01s or 1 NIGMS R01  $\geq$ \$400K direct costs
  - Eligibility window 1-2 years before R01 renewal due
  - Tweaks to language and review criteria for clarity and focus
- Analyze initial results of NI/ESI MIRA pilot
- Expand the program by allowing anyone with an NIGMS R01 to apply for MIRA the review cycle their R01 renewal would be due

# Catalyzing Reform of Graduate Education in the Life Sciences

- Strategies for educating graduate students have not appreciably changed in several decades, despite huge changes in science and society
- Problems related to reproducibility and strength of conclusions indicate a need to refocus training on the development of the skills required to be an outstanding scientist
- NIGMS wants to enable the community to do innovative experiments in graduate education to identify the most effective training strategies



**NIGMS Feedback Loop Blog**

*A catalyst for interaction with the scientific community*

## Catalyzing the Modernization of Graduate Education



Posted by Dr. Shiva Singh, Dr. Allison Gammie and Dr. Jon Lorsch on November 30, 2015  
[Post a Comment](#) | [View Comments \(7\)](#) ↓

## Clearinghouse for Training Modules to Enhance Data Reproducibility



Posted by Dr. Kristine Willis on March 31, 2015  
[Post a Comment](#) | [View Comments \(2\)](#) ↓

Administrative Supplements to  
NIGMS Predoctoral T32s

PA-15-136, PA-16-060

**NIGMS symposium:**  
***Catalyzing the Modernization  
of Graduate Education***  
**April 11, 2016 at NIH**

***With more activity to come...***

# Overview of Today's Meeting

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- **Report:** Cell Culture Workshop – Jean Schwarzbauer
- **Report:** Systems Biology Evaluation – Rick Horwitz and Andrew Miklos
- **Report:** P01 Analysis – Travis Dorsey
- **Report:** MERIT Analysis – Jake Basson
- **Concept Clearance:** Technology and Resources Implementation Group (TRIG) – Doug Sheeley
- **Public Comment Period**
- **Council-Initiated Discussion**

# Questions & Comments

