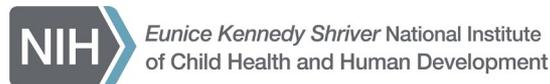


# NIH Grant Mechanisms for Early Stage Investigators (ESIs)

Lisa M. Halvorson, M.D.

Chief, Gynecologic Health and Disease Branch

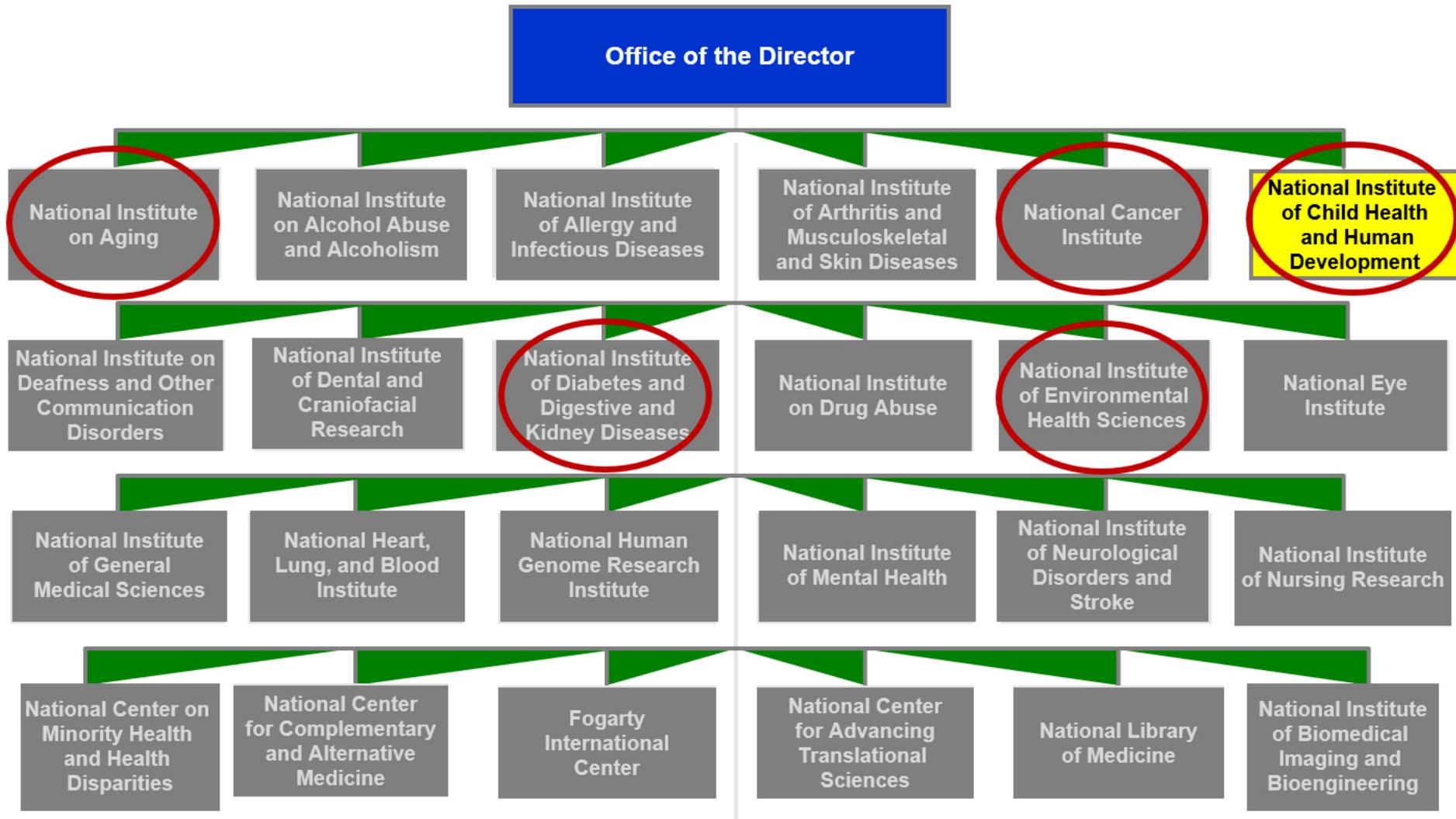


# Outline

- Overview of Grant Mechanisms
- Career Development Awards ('K')
- 'R' Awards
- Loan Repayment Program
- Application Pointers



# National Institutes of Health



# Early Stage Investigator (ESI)/New Investigator (NI)

- A Program Director / Principal Investigator (PD/PI) who has completed their terminal research degree or end of post-graduate clinical training, whichever date is later, within the past 10 years and who has not previously competed successfully as PD/PI for a substantial NIH independent research award.

*NICHD will include ESI investigator status as one of the program priorities when considering funding of eligible applicants.*



# Extension of ESI Status

- Some researchers may have lapses in their research or research training or have experienced periods of less than full-time effort.
- NIH will consider requests to extend the ESI status period for reasons that can include:
  - medical concerns
  - disability
  - family care responsibilities
  - extended periods of clinical training
  - natural disaster
  - active duty military service
- **Determined on a case by case basis at the discretion of NIH**

Video available at: <https://www.youtube.com/watch?v=2Fr9gN7cymQ&feature=youtu.be>



# Overview of NIH Award Mechanisms

Pre-doctoral

Post-doctoral

Faculty

## Training

- F30/F31 Individual
- T32 Institutional

## Transition

- F32 Individual
- T32 Institutional
- K01 Research Scientist
- K08 Clinical Scientist
- K23 Patient Oriented
- K24 Mid-Career
- K12 Institutional

## Independent

- R03 Small
- R21 Exploratory
- R01 Research
- P01 Program Project
- U Cooperative



# K Awards: Common Features

- Eligibility:
  - US citizen or non-citizen national
  - Doctoral degree
  - Requires Mentor
  - Cannot have had prior R01, 'P' Award
- Expectation:
  - 75% protected time
  - 3-5 years; NICHD allows total of 6 yrs of training support
  - \$100,000 salary + fringe
  - \$25,000 research support
  - Encouraged to apply for independent (R) funding during award



# Training and Career Development NICHD Scientific Program Contact

Dennis A. Twombly, Ph.D.

- Phone: 301-451-3371
- Email: [dtwombly@mail.nih.gov](mailto:dtwombly@mail.nih.gov)



# Career Development Awards: Independent

- **K01: Mentored Research Scientist Development Award**
  - Research or health profession doctorate
  - NICHD: Rehabilitation Research, Child Abuse and Neglect, and Population Research
- **K08: Mentored Clinical Scientist Development Award**
  - Clinical doctoral degree (MD, OD, DDS, DVM, PharmD, PhD in clinical disciplines)
  - Biomedical/behavioral research including translational studies

<https://researchtraining.nih.gov/programs/career-development>



# Career Development Awards: Independent (continued)

- **K23:** Mentored Patient-Oriented Research Career Development Award
  - Health profession doctoral degree
  - Patient Oriented Research
- **K25:** Mentored Quantitative Research Career Development
  - Quantitative (e.g., statistics, economics, computer science, physics, chemistry) and engineering backgrounds
  - NIH-relevant biomedical research



# K99/R00 Pathway to Independence Award

- Eligibility:
  - No US citizenship requirement
  - No more than 4 years of postdoctoral research experience at the time of application receipt date
- Expectation:
  - 75% effort to research project (50% for surgical subspecialties)
  - Award recipients are expected to compete successfully for independent R01 support during the R00 phase
  - NICHD \$75,000 + fringe +\$25,000 research support (K99)
  - R00 <\$250,000/yr
- Two phases:
  - 1-2 years of mentored support
  - Up to 3 years of independent support contingent on an independent tenure-track research position



# Institutional K Awards (K12)

- Single site awarded with investigators at multiple sites
  - RSDP
  - PSDP
  - PCCTSDP
- Multiple sites awarded
  - WRHR
  - BIRCWH
  - CHRCDA

**Trainees apply directly to the program site, not to NIH**



# Reproductive Scientist Development Program (RSDP)

- Junior OB/GYN faculty or last year of subspecialty fellowship
- Basic/translational projects
- Two phases:
  - Phase 1 (2 years): 100% research time
  - Phase 2 (2 years): 75% research time
- \$125K salary and fringe/yr with \$25K research support/yr
- Program based at University of Missouri (Danny Schust, MD)
- Louis DePaolo, PhD  
[depaolol@exchange.nih.gov](mailto:depaolol@exchange.nih.gov)



# Women's Reproductive Health Research Program (WRHR)

- Junior OB/GYN faculty or last year of subspecialty fellowship
- 75% protected time for 2 to 5 yrs
- Basic, translational, or clinical projects in array of OB/GYN research topics
- 15 WRHR sites/30 Scholars
- Lisa Halvorson, MD  
[lisa.Halvorson@nih.gov](mailto:lisa.Halvorson@nih.gov)



# Building Interdisciplinary Research Careers in Women's Health (BIRCWH)

**ORWH, NICHD, NCI, NIAID, NIDCR, NIDA, IAAA, NIA, NIAMS**

- Clinical PhD, MD, MD-PhD, DVM, other
- 75% protected time for 2 to 5 yrs (50% for surgical subspecialties)
- Junior faculty with plan to conduct interdisciplinary basic, translational, behavior, clinical or health services relevant to women's health (emphasis on sex differences)
  - reproductive biology
  - cancer
  - depression, addiction, adverse childhood experiences
  - neuro-immune interactions
  - HIV-related
  - cardiometabolic risk burden
  - urinary microbiome in health & disease
- Office of Research on Women's Health Contact: Lisa Begg, DrPH, RN  
[begg1@od.nih.gov](mailto:begg1@od.nih.gov)



# Pediatric Scientist Development Program (PSDP)

- Clinical fellows and junior faculty in Pediatrics
- Basic biomedical, clinical sciences, population sciences, or health services research
- 2 - 3 years
- 75% research time
- \$100K salary and fringe/yr with \$25K research support/yr
- Program based at Duke University
- Karen Winer, MD  
[winerk@mail.nih.gov](mailto:winerk@mail.nih.gov)



# Child Health Research Career Development Award (CHRCDA)

- Junior faculty within 4 years of completing subspecialty training
- Research with mentor outside of their pediatric department
- 12 sites nationally
- 2 – 4 years
- 75% research time
- \$100K salary and fringe/yr with \$25K research support/yr
- Andrew Bremer, MD, PhD  
[andrew.bremer@nih.gov](mailto:andrew.bremer@nih.gov)



# Pediatric Critical Care and Trauma Scientist Development Program (PCCTSDP)



- Physician-scientists (MD or DO)
- Anyone whose research interests aim at improving long-term outcomes and QoL for children who sustain critical illness or traumatic injury
- Two-phase national model
  - Phase 1: Years 1 – 2: Research supported by K12 Program
  - Phase 2: Years 3 – 5: Research supported by institution or individual K
- University of Utah
- Robert Tamburro, MD, MSc; [robert.tamburro@nih.gov](mailto:robert.tamburro@nih.gov)
- Tammara Jenkins, MSN, RN; [tjenkins@mail.nih.gov](mailto:tjenkins@mail.nih.gov)



# Rehabilitation Research Career Development Programs

- General Information
  - Four national networks
  - 2-3 yrs of salary followed by another 2-3 yrs of broader support
- Physical/occupational therapists and allied health professionals
  - Comprehensive Opportunities in Rehabilitation Research Training(CORRT)
  - Rehabilitation Research and Career Development (RRCD) Program for Physical & Occupational Therapists
- Bioengineers
  - Rehabilitation Engineering Career Development Program
- Clinicians involved in Neurological Rehabilitation
  - Neurorehabilitation and Restorative Neuroscience Training Network (NRNTN)
- Ralph Nitkin, PhD  
[nitkinr@exchange.nih.gov](mailto:nitkinr@exchange.nih.gov)



# Comparison of R03, R21, and R01

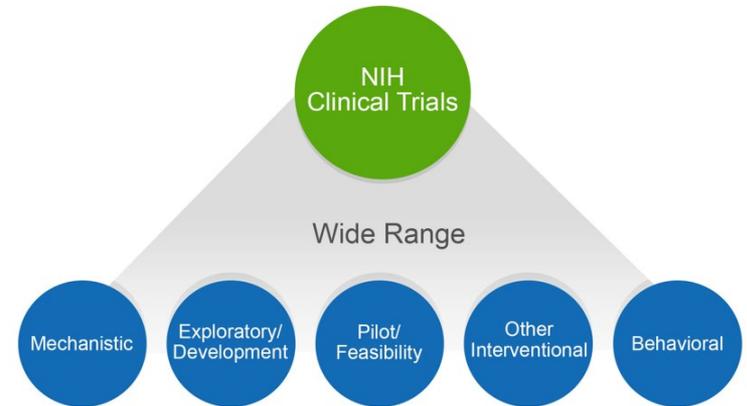
Award Mechanism	R03*	R21*	R01
Title	NIH Small Grant Program	NIH Exploratory/Development Grant Award	Research Project Grant
Scope	Pilot or feasibility; small self-contained; secondary analysis	Exploratory; novel techniques, agents, methods or models; may require risk	Discrete, circumscribed project in area of expertise
Length	Up to 2 yrs	Up to 2 yrs	Up to 5 yrs
Allowable Costs	Up to \$50,000/yr	Not to exceed \$275,000 for entire period	Up to \$250,000/yr (unlimited)

**\* R03/R21 not accepted by all Institutes; some have IC-specific announcements**



# Am I doing a Clinical Trial??

- Does your study:
  - Involve one or more human subjects?
  - Involve one or more interventions?
  - Prospectively assign human subject(s) to intervention(s)?
  - Have a health-related biomedical or behavioral outcome?
- If “yes” to ALL these questions, your study is considered a clinical trial and you **MUST** apply to a FOA that accepts CTs



<https://grants.nih.gov/policy/clinical-trials.htm>



# Extramural LRP Data

- Website: <https://www.lrp.nih.gov>
- Phone: 866-849-4047
- Email Inquiries: [lrp@nih.gov](mailto:lrp@nih.gov)
- Extramural
  - Contraception and Disability
  - Clinical
  - Clinical Disadvantaged Backgrounds
  - Health Disparities
  - Pediatric



# Extramural Loan Repayment Program

- Doctoral Health Professions: MD, PhD, OD, DDS, DVM, etc.
- Citizenship: U.S. citizen, U.S national, or permanent resident
- Debt: educational debt > 20 percent of salary
- 1st year: amount awarded is equal to one-fourth of the total eligible debt up to \$50,000
- Perform research > 20 hrs/week
- Renewal for 1-2 years
- Research not prohibited by federal law or NIH/HHS policy
- Deadline: September 1 - Nov 15, 2019 (future dates not yet released)
- Dr. Steve Kaufman  
[kaufmans@mail.nih.gov](mailto:kaufmans@mail.nih.gov)



# Pointers for submitting *any* application?

- Start the writing process early
- Be sure you are applying to the right LRP/award mechanism
- Know the funding priorities of the NIH Institute that will review your application
- Form an advisory team: include your mentor(s) and other trusted investigators who know your field
- Talk to your Program Officer/LRP Liaison – specific aims
- Identify people for strong letters of recommendation/support
- Contact your lender for loan information (LRP)
- Submit the application before deadline to allow time to correct any errors in grants.gov



# NIH Regional Seminars

- Fundamentals of the NIH
- Compliance
- Peer Review
- Grant Writing for Success
- Pre-Award and Post-Award Issues
- Animal and Human Subject Research
- Electronic Interactions with NIH
- New Investigators' Track: Mapping your Career
- Meeting Schedule
  - <https://grants.nih.gov/news/contact-in-person/seminars.htm#upcoming>
- Presentation Archive
  - <https://regionalseminars.od.nih.gov/philadelphia2019/presentations/>



# Questions?

Lisa Halvorson, MD  
Chief, GHDB

- Phone: 301-480-1646
- Email: [lisa.halvorson@nih.gov](mailto:lisa.halvorson@nih.gov)

