NIH and Birth Defects Research:
Current Funding and Future Opportunities

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National Institute of Child Health & Human Development
NIH has no “home” for birth defects research

• There is the Office of the Director (OD) along with 27 Institutes and Centers

• Of these, 11 Institutes and 2 OD Offices have an interest in birth defects research

NHLBI
NIAMS
NINDS
NIDCD
NIDCR
NIDDK
NEI

NICHDI
NHGRI
NIEHS
NCI
Office of Rare Disease Research
Office of Dietary Supplements
Women suffer no harmful effects from reproduction

Every baby is born healthy and achieves their full potential

People lead healthy, productive, independent lives through rehabilitation
• Child Development and Behavior
• Contraception and Reproductive Health
• Demographic and Behavioral Sciences
• Developmental Biology, Genetics, and Teratology
• Endocrinology, Nutrition, and Growth
• Intellectual and Developmental Disabilities
• Obstetrics and Pediatric Pharmacology
• Pediatric, Adolescent, and Maternal AIDS
• Pregnancy and Perinatology
• Reproductive Sciences
Developmental Biology, Genetics & Teratology Branch

Supports basic and clinical research on normal and abnormal development that relates to the causes and prevention of congenital structural birth defects
Intellectual & Developmental Disabilities Branch

Supports biomedical, biobehavioral, behavioral, and translational research in etiology, pathophysiology, screening, prevention, treatment, and epidemiology of intellectual and related developmental disabilities.
Pregnancy and Perinatology Branch

Supports research on maternal health, pregnancy, fetal well being, labor and delivery, and the developing child
Samples of Funded Efforts Across NIH

NHLBI’s Bench to Bassinet Program
Pediatric Cardiac Genomic Consortium
CardioVascular Development Consortium
Pediatric Heart Network

NICHD’s Structural Birth Defects Working Group

NIDCR’s FaceBase Consortium
Brief Overview: NIH Granting Process

Types of Research Grant Mechanisms
Funding Opportunity Announcements
Solicited versus Investigator-Initiated
Submission Process
Assignment of Applications
Review
Funding
Types of Research Grants Mechanisms

Small grants for 2 years
   R03 small projects $100K/2yrs
   R21 high risk/high impact $275K/2yrs

Basic R01 up to 5 years
   Modular $25K up to $250K Direct Cost
   Non-Modular <$500K Direct Costs
   Large >$500K Direct Costs

Program Project Grant (P01)
Funding Opportunity Announcement

NIH Guide
Electronic Submission
“Parent” Announcements
Investigator-Initiated
Targeted Solicitations
RFA: Request for Applications
PA: Program Announcement
PAR: Program Announcement with Special Review
Submission Process
Grants.gov ↔ NIH eRA Commons

Register early!

Carefully follow the requirements in the FOA

Check your application for common errors

Correct any errors before the submission deadline
Complete the Submission Process!

Verify that your application is viewable in the NIH eRA Commons!

Submit early to reduce stress and ensure a successful submission.
Assignment of Applications

Study Section for review
Center for Scientific Review
or Institute Review
Scientific Review Officer (SRO)

Institute for funding purposes
Program Officer (PO)
Review

Center for Scientific Review
Individual Institute
Standing Study Sections
Special Emphasis Panels

Methods of review
in person
on phone
by videoconference
via internet

SRO Convenes
PO listens
Funding

Institutes and Centers
Primary Assignment
Secondary Assignment
(what does this really mean?)

Co-funding from Offices
How do you get started?

Think of ideas

Talk to colleagues

Register (Grants.gov and NIH Commons) both you and your institution

Look at NIH Institute web sites – where's the best fit for your research?

Talk to the relevant Program Officer – are there targeted FOAs?
Learn how reviews are conducted - watch the CSR video

Write the application and get feedback (mentoring) well before the submission deadline

Rewrite the application because it’s well before the submission deadline

Or, consider the “feed-forward” approach

Talk to a Scientific Review Officer – which study section is best?
R03 grant mechanism supports
($50K/year for 2 yrs nonrenewable)

- Pilot and feasibility studies
- Secondary analysis of existing data
- Small, self-contained research projects
- Development of research methodology
- Development of new research technology
## Department of Health and Human Services

### Part 1. Overview Information

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<th>Participating Organization(s)</th>
<th>National Institutes of Health (NIH)</th>
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| **Components of Participating Organizations** | National Human Genome Research Institute (NHGRI)  
National Institute on Aging (NIA)  
National Institute on Alcohol Abuse and Alcoholism (NIAAA)  
National Institute of Allergy and Infectious Diseases (NIAID)  
National Institute of Biomedical Imaging and Bioengineering (NIBIB)  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD)  
National Institute on Drug Abuse (NIDA)  
National Institute of Environmental Health Sciences (NIEHS)  
National Institute of Mental Health (NIMH)  
National Institute of Neurological Disorders and Stroke (NINDS)  
National Institute of Nursing Research (NINR) |

### Funding Opportunity Title

**NIH Small Research Grant Program (Parent R03)**

### Activity Code

R03 Small Grant Program

### Announcement Type

Reissue of PA-10-064

### Related Notices

- **September 14, 2011** - See Notice NOT-DA-11-022. The National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) are issuing this Notice to encourage individuals interested in submitting applications for research on the economics of treatment and prevention services for drug and alcohol abuse to submit their applications using using the Parent R01, Parent R21 and Parent R03 Funding Opportunity Announcements.
- **August 12, 2011** – The Open Date has been changed from September 16, 2011 to August 12, 2011 to allow for immediate submission of applications.
- **July 13, 2011** – See Notice NOT-OD-11-095 NIH, AHRQ, CDC, FDA and NIOSH to Release Updated Electronic Application Forms – ADOBE-FORMS-B2. In addition, NIH will reissue R01, R03, and R21 parent announcements with the new forms on July 22 and expire the current parent R01, R03, and R21 FOAs on January 8, 2012.

### Funding Opportunity Announcement (FOA) Number

PA-11-262
Developmental Biology, Genetics & Teratology FOAs

Birth Defects Initiative: foster synergy between basic scientists and clinicians

PAR-12-034 Developmental Mechanisms of Human Structural Birth Defects (P01)

PA-11-085 Genetic Susceptibility & Variability of Human Structural Birth Defects (R01)
Systems Biology: regulatory logic and causal relationships driving development

PAR-11-257 Systems Developmental Biology for Understanding Embryonic Development & the Ontogeny of Structural Birth Defects
Biophysical & Biomechanical Aspects: the role of physical forces during development

PAR-10-221 Biophysical and Biomechanical Aspects of Embryonic Development (R01)

Studies aimed at understanding how disruptions in biophysical and biomechanical processes might lead to known developmental disorders
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