Disclosures

• No conflicts of interest

• Funding:
  - Doris Duke Foundation
  - John Gray Research Fellowship
  - Robert Wood Johnson Foundation
  - Osher Foundation
  - Crohn’s and Colitis Foundation
  - AHRQ
  - NIH
  - FDA
  - Emory Univ/CHOA
  - Northwestern Univ/LCH
Applying for grants

Make big plans

Make no little plans; they have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone be a living thing, asserting itself with ever-growing insistency.
Applying for grants

Set Goals – Be Flexible – Be Creative – Don’t throw ideas away (back-pocket)
Applying for grants
Prepare to fail

“Success is moving from one failure to another with no loss of enthusiasm.”
- Winston Churchill

Failure is simply the opportunity to begin again, this time more intelligently.
- Henry Ford
Applying for grants
4 reasons to do it...

1. Research is **not free** (data, supplies, time, personnel, etc.)
   - True for basic, translational, clinical/outcomes research, QI, HSR, Econ, etc.

2. Clinical margins are **no longer financing research**
   - Margins are becoming narrow, (mal)alignment of missions

3. Funded research is valuable to institutions, mostly because **prestige** but in large part to **indirects**
   - For every $ in research funds the institution gets and additional 25-75 cents (NU 57 cents)

4. Funded research (at most academic institutions) is a **criterion for promotion**, **bonuses**, etc.
Research funding hits record $893 million
Support for Northwestern’s high-impact work continued growing despite COVID-19
September 09, 2021 | By Matt Golowinski

Trending
Rebecca M. Blank named next president of Northwestern
October 11, 2021 | University

One coronavirus vaccine may protect against other coronaviruses
October 15, 2021 | Coronavirus

‘Kids thrive on consistency.’ Get your kids ages 5–11 vaccinated once approved, experts say
October 19, 2021 | Coronavirus

I am honored and delighted to accept the job as Northwestern’s next president. Northwestern is a school that I have known and admired for years. Its reputation as a top-rated educational and research institution has grown each decade. It will be my mission to make sure the institution’s reputation and quality continues to accelerate.”
Rebecca M. Blank
President-elect

Consolidated Financial Summary
For the periods ending August 31, ($ in millions)

<table>
<thead>
<tr>
<th>Statement of Operations</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care Revenues, Net</td>
<td>$1,090.3</td>
<td>$1,103.2</td>
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<tr>
<td>Grants, Gifts and Endowment Income</td>
<td>$171.3</td>
<td>$111.5</td>
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<tr>
<td>Other Revenues</td>
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<td>$68.0</td>
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<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>$1,329.5</td>
<td>$1,322.7</td>
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<tr>
<td>Salaries and Benefits</td>
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<td>Supplies, Services, Other</td>
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<td>$398.0</td>
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<tr>
<td>Depreciation</td>
<td>$68.2</td>
<td>$76.7</td>
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<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>$1,312.2</td>
<td>$1,329.1</td>
</tr>
</tbody>
</table>
Where do I even start?

Seems so daunting...

- Trainees
  - Internal
  - Extramural
- Faculty
  - Internal
  - External
    - Societies
    - Foundations
    - NIH/AHRQ/CDC/FDA/etc
Funding Opportunities

Trainees

• Internal
  - Individual P.I. funds (Centers, Division Heads, Dept Chairs, etc.)
  - Northwestern-based training grants
    • open to folks outside of NU but (I think) preference is given to NU/Lurie trainees
    • Dept of Surgery

<table>
<thead>
<tr>
<th>Division</th>
<th>Training Grant Title</th>
<th>Program Director</th>
<th>Sponsoring NIH Institute</th>
</tr>
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<tbody>
<tr>
<td>Vascular Surgery</td>
<td>Vascular Surgery Scientist Training Program</td>
<td>Mark Eskandari, MD</td>
<td>National Heart, Lung, and Blood Institute (NHLBI)</td>
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<tr>
<td>Transplant Surgery</td>
<td>Transplant Surgery Scientist Training Program</td>
<td>Richard Green, MD and Daniela Ladner, MD</td>
<td>National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)</td>
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<tr>
<td>Surgical Oncology</td>
<td>Collaborative Northwestern Surgical Oncology Research Training (CONSORT)</td>
<td>Karl Billimoria, MD and Seema Khan, MD</td>
<td>National Cancer Institute (NCI)</td>
</tr>
<tr>
<td>Robert H. Lurie</td>
<td>Northwestern University Training Programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive Cancer Center</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Funding Opportunities

Trainees

• Internal
  • Outside of Dept of Surgery
    • T37 Northwestern University Minority Health and Health Disparities Research Training Program (NU-MHRT)
    • Multidisciplinary Training Program in Child and Adolescent Health (TL1) is an NCATS-funded training program that seeks to promote interactions among both mentors and trainees in pediatrics and engineering to encourage creative thinking and new approaches in child-health research.
    • The Chicago KUH Forward (Chicago Kidney Urology Hematology network FOR city-Wide research training and career Development) is a unique NIDDK-funded interdisciplinary training program for pre- and post- doctoral trainees interested in interdisciplinary research training in nephrology, benign urology and benign hematology, spread across 6 academic institutions in Chicago (including NU)
Funding Opportunities

- External
  - Societies
    - AAS
    - ACS
    - SUS
    - Others
  - NIH
    - F32

AAS/AASF Basic Science/Translational Award

Purpose: This award provides up to two years of postgraduate training in a research setting to pursue a full-time research position with an AAS member. The award may be used for salary support. The funding period for this award begins July 1, 2022.

AAS/AASF Clinical Outcomes/Health Services Research Award

Purpose: This award provides an eligible resident or fellow who has completed at least 2 years of postgraduate training in a surgical discipline the opportunity to spend a year as a full-time investigators in a subspecialty under the mentorship of an AAS member. The award may be used for salary support or for the direct costs of the research is sponsored. The funding period for this award begins July 1, 2022.

Resident Research Scholar Award

SUS Resident Research Scholar Awards

Sponsored by an unrestricted educational grant from the SUS Foundation

ACS Resident Research Scholarships

ACS Resident Research Scholarships

July 1, 2021-June 30, 2022

The American College of Surgeons is offering its first resident research scholarships. Eligibility for these scholarships is limited to the research projects of residents in surgery or a surgical specialty. These scholarships are supported by the generosity of Fellows, Chapters, and friends of the College. To encourage residents to pursue careers in academic surgery.
What is an F32?

Ruth L. Kirschstein Postdoctoral Individual National Research Service Award

• Program Purpose:
  - The purpose of the Kirschstein-NRSA postdoctoral fellowship is to enhance the research training of promising postdoctoral candidates who have the potential to become productive, independent investigators in scientific health-related research fields relevant to the missions of the participating NIH Institutes and Centers.
What is an F32?

• National Research Service Awards (NRSA) Individual Postdoctoral Fellowship
  - Awarded by the National Institutes of Health (NIH)
  - Provide up to 3 y of support for postdoctoral researchers who have the potential to become productive, independent investigators
• Supports research training experiences in new settings in order to maximize the acquisition of new skills and knowledge
  - Must have received a MD, PhD, DVM, etc.
  - Must be a citizen or non-citizen national of the USA
What is an F32?

* Faculty may also be eligible for K01, K08, and K23.
^ NIAID K01 awardees may also be eligible for the Limited Competition: Small Research Grant Program for NIAID K01/K08/K23 Recipients (R03).
What is an F32?
Essential first steps

- Mentor/Lab
- Funded
- Projects in mind
- 2-year commitment
- Ability to cover “gaps”
- Read the Program Announcement (PA)
When to start working on your F32 application

Start early!!!

“THE JOURNEY OF A THOUSAND MILES BEGINS WITH A SINGLE STEP.”
~LAO TZU~

"You can't drink all day if you don't start in the morning."

THE SECRET OF GETTING AHEAD IS GETTING STARTED.
MARK TWAIN
When to start working on your F32 application

Start early!!! – THIS MIGHT BE THE MOST IMPORTANT SLIDE

• Plan to spend about 6 months working on an F32
• There are multiple application cycles
  - April* - gives you shot at resubmission
  - August – might give you shot at resubmission
  - December*** (last chance - notice of award (NOA) comes in Spring just prior to your July start date)

• Even if you don’t have a project or a mentor you can start some things early...
When to start working on your F32 application

Start early!!!

- Even if you don’t have a project or a mentor you can start some things early...
Make an eRA commons account

• You will need an eRA Commons account to apply for an F32
• This has to be done through Northwestern – fill out the form online
  - [https://osr.northwestern.edu/helpcentral/](https://osr.northwestern.edu/helpcentral/)
Research Administrator (RA)

Your new best friend

• Once you have decided to apply for an F32 ➔ you will be assigned a RA
  - This is someone from OSR (office for sponsored research)
• RA will send you a checklist early on of all the documents you will need to submit and their due date
  - Email them your documents as you complete them
  - They will put all the documents into the system for submission
  - They will send you a final, fully compiled PDF prior to submitting your grant for you
Mentor and Mentor Team

• Finding a mentor
  - Asking senior residents / meeting with faculty
• Mentor team
  - Diverse perspectives / backgrounds
  - Feedback
Expectations you should have of your Mentor

- Regularly scheduled meetings (weekly?)
- Checklist/Agenda for meeting
- Twice annual formal feedback sessions
  - Publications, presentations, productivity
  - Skills obtained or to be obtained
  - Career advisement
  - Global review
- Networking
- Transparency/accountability
- NIH

https://hr.nih.gov/working-nih/mentoring/mentee

A periodic review of a fellow’s progress in the laboratory is helpful for both the trainee and the mentor to ensure that training goals will be achieved. The following list provides topics that should be discussed in annual progress reviews with the trainee. Several annual progress evaluations used by different Institutes are provided as possible template:

1. Productivity
2. Effort
3. Creativity
4. Reliability
5. Cooperation/Team effort within the lab
6. Research presentations, including attendance at local/national/international meetings
7. Goals for the upcoming year
8. Long term research and career goals

Guidelines for Annual Review of Trainees
The Importance of Mentorship

SEPTEMBER 3, 2019 BY JENNIFER RICKARD, MD

Finding Your Primary Mentor

NOVEMBER 2, 2015 BY LUKE FUNK, MD MPH

The development of a successful mentor/mentee relationship in the general surgery research years

OCTOBER 3, 2017 BY EVIE CARCHMAN, MD AND BROOKS RADEMACHER, MD

Fall Courses Archive

2019 Fall Courses
October 26, 2019 in San Francisco, CA

2019 Agendas
30th Fundamentals of Surgical Research Course
15th Early Career Development Course

The Resident Research Experience: Perspectives From a Mentee and Mentor

APRIL 9, 2020 BY NATALIE LIU, MD AND LUKE FUNK, MD MPH
Mentor Resources

Mentoring Toolbox
The Center for Education and Career Development’s (CECD) Mentoring Toolbox provides resources to aid both mentors and mentees in reflection, setting expectations and assessment. These tools can be used individually or in tandem with one another.

NU websites
https://www.nucats.northwestern.edu/education-and-career-development/investigator-development/mentoring/toolbox.html

Compact Between Postdoctoral Appointees and Their Mentors
December 2006
• Have an up-to-date CV
  - This is good for life in general, but you will need this to send to mentors
  - Makes it easier to write your NIH Biosketch
• Recommend you use the Northwestern faculty format
• Pro tip: update your CV in real-time
  - As you receive awards
  - When you have new publications
  - If you accept new leadership positions
NIH Biosketch

- This is based on your CV and prior experience as an investigator
- Compile your undergrad and med school transcripts in order to enter your grades
- Update your biosketch like you would update your CV
- You must use the official biosketch format found on the NIH website
  - [https://grants.nih.gov/grants/forms/biosketch.htm](https://grants.nih.gov/grants/forms/biosketch.htm)
Personal Statement

• Can be started now
• Address why you want to do research and how it will help you reach your ultimate professional goals
  - Note pertinent background
  - Focus on the future – how will training grant help you get there
• Will be part of your Biosketch but you can use it for multiple grant applications
Personal Statement

Tips to Write an Outstanding Personal Statement
Recommended by Experienced Professional Academic Writers

01. Reveal your potential strengths in the introduction
02. Take your time to prepare a draft
03. Use words and expressions that look elegant
04. Be mindful in choosing an appropriate tone to convey
05. Make your first impression good by writing a perfect opening sentence
06. Be honest, never create a false image of yours
07. Allow someone to proofread your statement and seek feedback.
Research Experience/Plan

- Start thinking about your own goals now
- Think about the educational experience you want over your two years
- It’s best to divide your research plan into goals/objective and demonstrate how you will achieve those through your research and educational experiences
  - You can also outline who from your mentor panel will help you achieve each of your goals and why they are qualified to help with that
Letters

2 kinds!

• **Letters of support**
  - These are from the people on your mentor panel
  - Every person on your panel has to write a letter (usually around 3-5 people on your panel)

• **Letters of reference**
  - Minimum 3, no more than 5
  - These are from people who are not directly involved in the application
  - Need to be familiar with your qualifications, training, and interests
  - Submitted directly through eRA commons, you don’t send these to your research administrator (RA)
Letters

• Provide your letter writers with ammunition
  - Pers Statement
  - CV/NIH Bio
  - High level description of the scope of work/research project

• You will likely have to write some of your own letters of support/reference
  - Try to make each one different
  - Convey things you would like highlighted about yourself in your letters
  - Go back later and add information about the letter writer
Deadlines

• Your RA will not always be as on top of things as you’d like
• Put all deadlines on your calendar as soon as you get your checklist
• There is an internal deadline for the OSR that is slightly earlier than the final deadline for the NIH
• Your science portion is due later than the rest of the application
  - This gives you more time to work on your specific aims, methods, references etc.
Pivot to Faculty
Junior Faculty, Mid-career, and Senior Faculty

- Far left:
  - Dell, Zuckerberg, Jobs
- Far right:
  - Walton – WalMart
  - Wells – WellsFargo
  - Este Lauder
  - Flint – IBM

Too Late to Start?

quarter-life crisis  mid-life crisis

years of life

at 19
Mark Zuckerberg started Facebook
launching the website at his dorm room in Harvard

It’s never too late.
Funding Opportunities

Faculty

• Average time to a R01
  - It takes an average of 7-10 years for dedicated Surgical Investigators to get 1st R01 (success rates and timeline to R01 improved with K to R)
  - ~6-year difference in the mean age of PIs on top-scoring R21s versus top-scoring R01s. Six years is a long time to gather some more data and publish it

• Changing patterns
  - Surgery funding has decreased (recent increase)
  - TEAMS WIN: By 2015, the “average” top-scoring R01 at NIH had more than four faculty listed as participating on it

Funding Opportunities

Faculty

• Surgery Societies:
  - American College of Surgeons
  - Association for Academic Surgery
  - Society of University Surgeons
  - Society for Vascular Surgery
  - American Society of Transplant Surgeons
  - Society of Surgical Oncology
  - American Pediatric Surgical Association

• American Cancer Society, American Geriatrics Society, American Heart Association, American Society of Nephrology, American Association for the Study of Liver Diseases, etc.
Funding Opportunities

Faculty

• Foundations:
  - AcademyHealth
  - Burroughs Wellcome Fund
  - Doris Duke
  - Robert Wood Johnson Foundation
  - March of Dimes
  - National Kidney Foundation
  - Bill & Melinda Gates Foundation
  - Rockefeller Foundation
  - Etc.
NIH

By the numbers

• FY2019
  - 55,012 extramural grants to 2,738 institutions → $29.5 billion

  - Think of non-NIH but federal, extramural awards
    • Dept of Defense
    • CDC
    • AHRQ
    • PCORI
Where do I start?

- grants.nih.gov
### Funding Opportunities

#### Nomenclature

<table>
<thead>
<tr>
<th>Application Type</th>
<th>Activity Code</th>
<th>Institute Code (IC)</th>
<th>Serial Number</th>
<th>Support Year</th>
<th>Other Suffixes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R01</td>
<td>CA</td>
<td>654321</td>
<td>01</td>
<td>A1</td>
</tr>
</tbody>
</table>

**Application Types**

- **1**: New
  - Request for support of a project that has not yet been funded.
- **2**: Renewal
  - Request for additional funding for a period subsequent to that provided by a current award.
- **3**: Revision
  - Request for (or the award of) additional funds during a current project period to support new or additional activities that are not identified in the current award. This request reflects an expansion of the scope of the grant-approved activities. Competitive revisions require peer review.
  - An administrative supplement is a request for (or the award of) additional funds during a current project period to provide for an increase in costs due to unforeseen circumstances. All additional costs must be within the scope of the peer-reviewed and approved project.
- **4**: Extension
  - Request for additional years of support beyond the years previously awarded. (Used only for select programs.)
- **5**: Non-competing Continuation
  - Request or award for a subsequent budget period within a previously approved project for which a recipient does not have to compete with other applications.
- **6**: Change of Organization Status (Successor-In-Interest)
  - Process whereby the rights to and obligations under an NIH grant is acquired incident to the transfer of all of the assets of the grantee or the transfer of that part of the assets involved in the performance of the grant. May result from legislative or other legal action, such as a merger or other corporate change.
- **7**: Change of Grantee or Training Institution
  - Transfer of the legal and administrative responsibility for a grant-supported project or activity from one legal entity to another before the completion date of the approved project period (competitive segment).
- **8**: Change of Institute or Center
  - Change of awarding NIH Institute or center for the renewal (Type 2).
- **9**: Change of Institute or Center
  - Change of awarding NIH Institute or center for the renewal (Type 1).

**Activity Codes**: [http://grants.nih.gov/grants/funding/funding_program.htm](http://grants.nih.gov/grants/funding/funding_program.htm)

**NIH Funding Institutes**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
<th>Code</th>
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<tbody>
<tr>
<td>NICHD</td>
<td>Eunice Kennedy Shriver National Institute of Child Health and Human Development</td>
<td>HD</td>
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<tr>
<td>NINDS</td>
<td>National Institute of Neurological Disorders and Stroke</td>
<td>NS</td>
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<tr>
<td>NIMH</td>
<td>National Institute of Mental Health</td>
<td>MH</td>
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<tr>
<td>NIAID</td>
<td>National Institute of Allergy and Infectious Diseases</td>
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<tr>
<td>NIAA</td>
<td>National Institute on Alcohol Abuse and Alcoholism</td>
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<tr>
<td>NIAID</td>
<td>National Institutes of Health</td>
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<td>National Institute on Aging</td>
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<tr>
<td>NICHD</td>
<td>Eunice Kennedy Shriver National Institute of Child Health and Human Development</td>
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<tr>
<td>NIBIB</td>
<td>National Institute of Biomedical Imaging and Bioengineering</td>
<td>EB</td>
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<td>NIGMS</td>
<td>National Institute of General Medical Sciences</td>
<td>GM</td>
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<td>National Institute on Minority Health and Health Disparities</td>
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<td>NINDS</td>
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<td>NCATS</td>
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<td>National Institute of Neurological Disorders and Stroke</td>
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</tr>
<tr>
<td>NLM</td>
<td>National Library of Medicine</td>
<td>LM</td>
</tr>
</tbody>
</table>

**Serial Number**: Six-digit number assigned within an Institute/Center

**Support Year**: Two-digit number indicating segment or budget period of a project.

**Other Suffixes**: ‘A’ and related number identifies the amendment number (e.g. A1), resubmission; ‘S’ and related number identifies the revision record and follows the grant year or the amendment designation to which additional funds have been awarded.
Funding Opportunities

K grants

• Career awards – mentored research training
• K funding lines are better (higher percent funded)
  - Increases chances of transition to successful R01
• Typically target instructors and assistant professors
  - K01 for PhD investigators
  - K08 for MD investigators – basic sci
  - K23 for MD investigators – patient oriented research
  - KL2 – NCATS-sponsored career development faculty at Northwestern
Funding Opportunities

R grants

• R stands for research – typically independent research awards
• Small Rs
  - R03
  - R21
• R01
  - Holy grail
    • Biggest funding ~$500k/yr x 5 yrs
    • Competitive renewal
    • Scope – any topic
Funding Opportunities

Other grants

• K25 – mentored quantitative research career development
• K99R00 – pathway to independence
• R13 – small conf grant
• U01 – cooperation with NIH institute directly
• P01 – program project – multiple R01s bundled together
• Many others...
Funding Opportunities

Strategy
1. Look at different institutes:
   - NCI, NHLBI, NIDDK, NICHD
   - Each have areas of focus
2. Look at FOAs (Funding Opportunity Announcements), RFAs (requests for applications), PA/PAR (Program Announcements)
3. Consider study sections (scientific review)
4. Put together an Aims page
   - Shop it around locally
   - Send it to the scientific program officer for fit/feedback
5. Start working on your application
   - Due dates
   - Local OSR/OSP contacts
Funding Opportunities

Strategy

Research and Funding

NIDDK conducts and supports research on many of the most common, costly, and chronic conditions to improve health.

Health Topics
- Diabetes
- Digestive Diseases
- Kidney Disease
- Weight Management
- Liver Disease
- Urologic Diseases
- Endocrine Diseases

Current Funding Opportunities
Open Funding Opportunity Announcement (RFAs) including RFAs and PAs with NIDDK contacts.

Research Programs & Contacts
Learn about research goals and speak to someone about opportunities in your research area. NIDDK research funding programs and centers are organized by disease area.

Human Subjects Research
NIDDK provides funding for pivotal clinical research, from preliminary clinical feasibility to large multi-center studies.

Funding Process
- Apply
- Award Funding Policy

Research at NIDDK
- Laboratories & Branches
- Training & Employment
- Faculty
- Intramural Research

Research Training Career Development
- Eligibility by Career Level
- Training Program Staff
- Other Training Opportunities
### Funding Opportunities

#### Strategy

**Part 1. Overview Information**

<table>
<thead>
<tr>
<th>Participating Organizations</th>
<th>National Institutes of Health (NIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Eye Institute (NEI)</td>
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<tr>
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<tr>
<td>National Human Genome Research Institute (NHGRI)</td>
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<td>National Institute on Alcohol Abuse and Alcoholism (NIAAA)</td>
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<tr>
<td>National Institute of Mental Health (NIMH)</td>
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<tr>
<td>National Institute of Neurological Disorders and Stroke (NINDS)</td>
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<tr>
<td>National Institute of Nursing Research (NINR)</td>
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<tr>
<td>National Institute of Minority Health and Health Disparities (NIMHD)</td>
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<td>National Library of Medicine (NLM)</td>
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<tr>
<td>National Center for Complementary and Integrative Health (NCCIH)</td>
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<tr>
<td>Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP)</td>
<td></td>
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<tr>
<td>National Cancer Institute (NCI)</td>
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</tr>
</tbody>
</table>

Note: Not all NIH Institutes and Centers (ICs) participate in Parent Announcements. Applicants should carefully note which ICs participate in this announcement and their respective areas of research interest at the R01 IC-Specific Scientific Interests and Contact website. ICs that do not participate in this announcement will not consider applications for funding.

**Funding Opportunity Title**

NIH Research Project Grant (Parent R01 Clinical Trial Not Allowed)

**Activity Code**

R01 Research Project Grant

**Announcement Type**

Reissue of PA-19-695

**Related Notices**

- See Notices of Special Interest associated with this funding opportunity
- See Notices of Special Interest associated with this funding opportunity

Funding Opportunities

Strategy

Regular Standing Study Sections and Continuing SEPs

<table>
<thead>
<tr>
<th>Study Section</th>
<th>Study Section Description</th>
<th>Scientific Review Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTS</td>
<td>Arthritis, Connective Tissue and Skin Study Section</td>
<td>Dr. Robert Gersch</td>
</tr>
<tr>
<td>ANIE</td>
<td>Acute Neural Injury and Epilepsy Study Section</td>
<td>Dr. Eliese Schauwecker</td>
</tr>
<tr>
<td>APDA</td>
<td>Adult Psychopathology and Disorders of Aging Study Section</td>
<td>Dr. Benjamin Shapero</td>
</tr>
<tr>
<td>ARB</td>
<td>Addiction Risks and Mechanisms Study Section</td>
<td>Dr. Kristen Prentice</td>
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<tr>
<td>ASG</td>
<td>Aging Systems and Geriatrics Study Section</td>
<td>Dr. Inoue Berlins</td>
</tr>
<tr>
<td>AUD</td>
<td>Auditory System Study Section</td>
<td>Dr.Ellen Scott</td>
</tr>
<tr>
<td>AVI</td>
<td>Atherosclerosis and Vascular Inflammation</td>
<td>Dr. Natalia Komissarov</td>
</tr>
<tr>
<td>BACP</td>
<td>Bacterial Pathogenesis Study Section</td>
<td>Dr. Marcie Schilder</td>
</tr>
<tr>
<td>BBHV</td>
<td>Basic Biology of Blood, Heart and Vascularization</td>
<td>Dr. Ashok Lane</td>
</tr>
<tr>
<td>BBM</td>
<td>Biochemistry and Biophysics of Membranes Study Section</td>
<td>Dr. Nurala Assa-Munt</td>
</tr>
<tr>
<td>BNE</td>
<td>Biophysics and Development of the Eye</td>
<td>Dr. Thomas Rees</td>
</tr>
</tbody>
</table>

Arthritis, Connective Tissue and Skin Study Section – ACTS

The Arthritis, Connective Tissue and Skin Sciences (ACTS) Study Section reviews basic and clinical research applications dealing with the biology and diseases of joints, connective tissue, and skin.

The List of Reviewers reflects all present, whether standing members or temporary, to provide the full scope of expertise present on this date. Lists are posted 30 days before the meeting and are tentative, pending any last minute changes.

Review Dates
- List of Reviewers on 10/26/2021
- List of Reviewers on 06/22/2021
- List of Reviewers on 03/22/2021

Membership Panel

The membership panel is a list of charted members only.

- View Membership Panel

Topics
- Biology of the joints and connective tissue, including synovium, capsule, extracellular matrix, microvasculature, innervation.
- Disorders of skin and its appendages, including gout, inflammatory, autoimmune, allergic, hypertrophic, preinvasive, blisters, benign, and fibrotic disorders: systemic immunology with minor cutaneous involvement, including psoriasis, dermatitis, lichenoid, lichenoid, fibrotic, pseudoaneurysms, uncharacterized connective tissue diseases, pemphigus, and bullous diseases.
- Stem cell-based therapies for skin diseases.
Funding Opportunities

**Strategy**

- Stay organized - checklists
- Start early - timelines
Funding Opportunities

Expect failure

- Top 50% of grants will be discussed by a scientific study section
- Score (lower = better)
- Expect resubmission
- Even if scored well – not guaranteed funding
- NOA (Notice of Award)
  - Preparing response and resubmission

### Overall Impact

The likelihood for a project to exert a sustained, powerful influence on research field(s) involved

<table>
<thead>
<tr>
<th>Score</th>
<th>Overall Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Medium</td>
</tr>
<tr>
<td>4, 5, 6</td>
<td>Low</td>
</tr>
<tr>
<td>7, 8, 9</td>
<td></td>
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</tbody>
</table>

### Evaluating Overall Impact

Consider the 5 criteria:
- significance
- investigator
- innovation
- approach
- environment (weighted based on reviewer’s judgment) and other score influences, e.g. human subjects, animal welfare, inclusion plans, and biohazards

- e.g. Applications are addressing a problem of high importance/interest in the field. May have some or no weaknesses.
- e.g. Applications may be addressing a problem of moderate importance in the field, with some or no weaknesses.
- e.g. Applications may be addressing a problem of low or no importance in the field, with some or no weaknesses.

5 is a good medium-impact application, and the entire scale (1-9) should always be considered.
More details

Resources

• [https://grants.nih.gov/grants/grants_process.htm](https://grants.nih.gov/grants/grants_process.htm)
Get examples of grants
Both funded and non-funded

- Talk to peers/mentors/Division Heads/etc.
- You can re-use a lot of their documents
- Most folks are willing to share
Questions

Subtitle

?’$
Thank You

Email: mraval@luriechildrens.org
Twitter: @mehulvraval