UTHealth Houston

NEW INVESTIGATOR DEVELOPMENT PROGRAM

GRANTS 101

JANUARY 13-14, 2025

Introduction and Strategic Planning

Jake Chen, PhD

Director, New Investigator Development Program
Professor, Biochemistry and Molecular Biology

Academic medicine: $$ is the bottom line

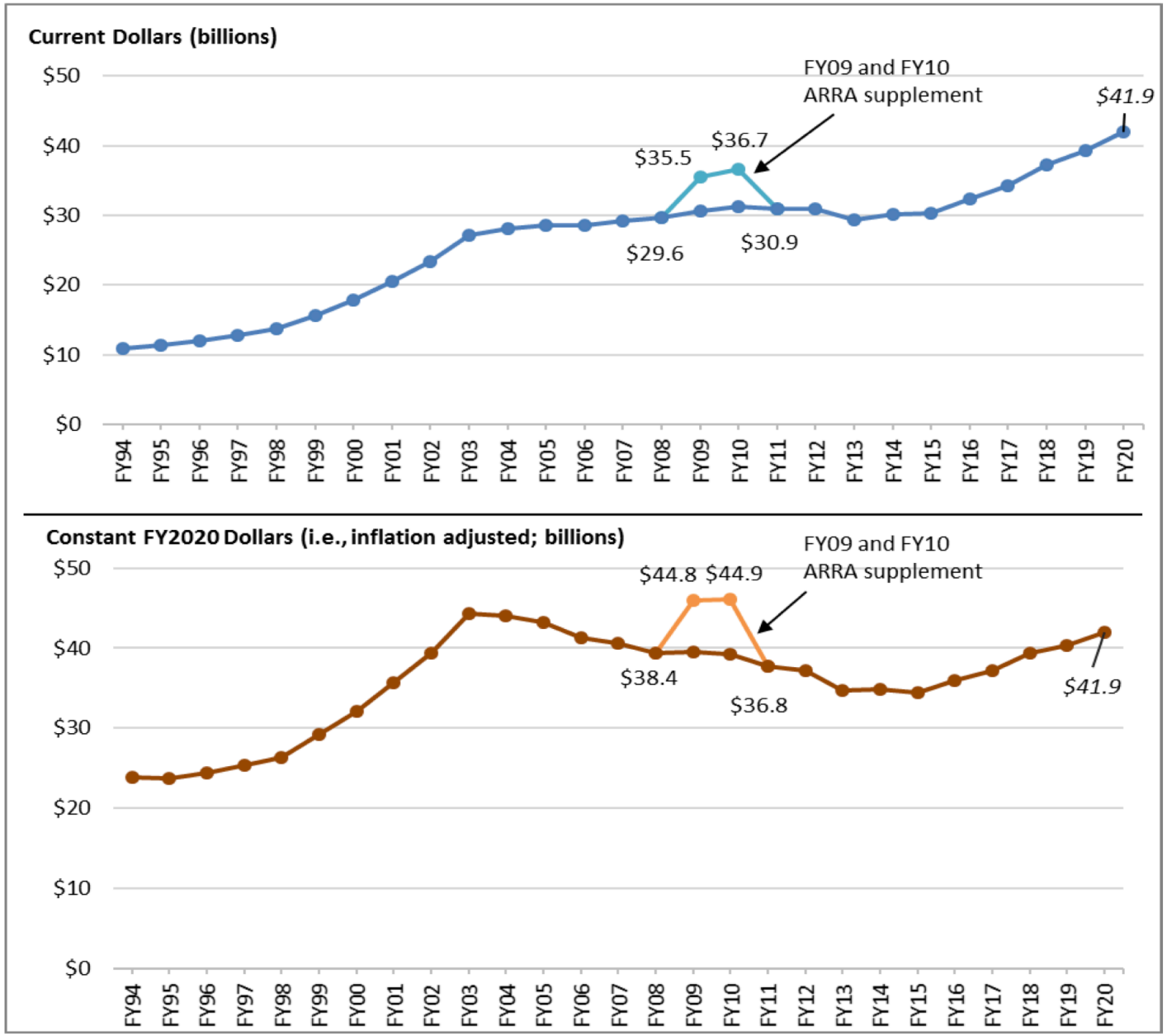
Publish or perish

Funded or else

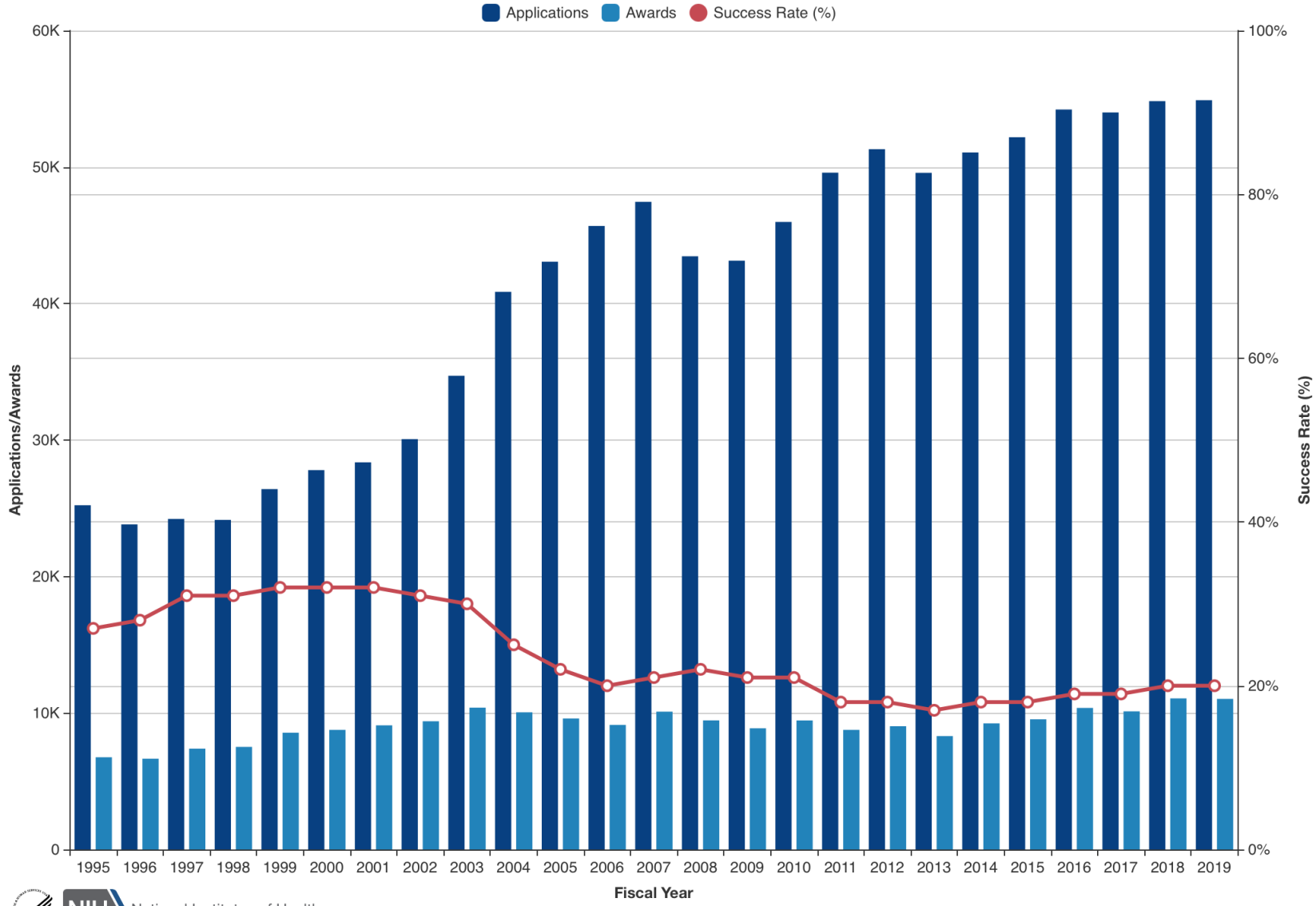
"Our research is solidified, but our funding has vaporized."

Figure 1. National Institutes of Health (NIH) Funding, FY1994-FY2020

Program Level Funding in Current and Projected Constant (FY2020) Dollars.



Research Project Grants: Competing Applications, Awards, and Success Rates



National Institutes of Health
Office of Extramural Research

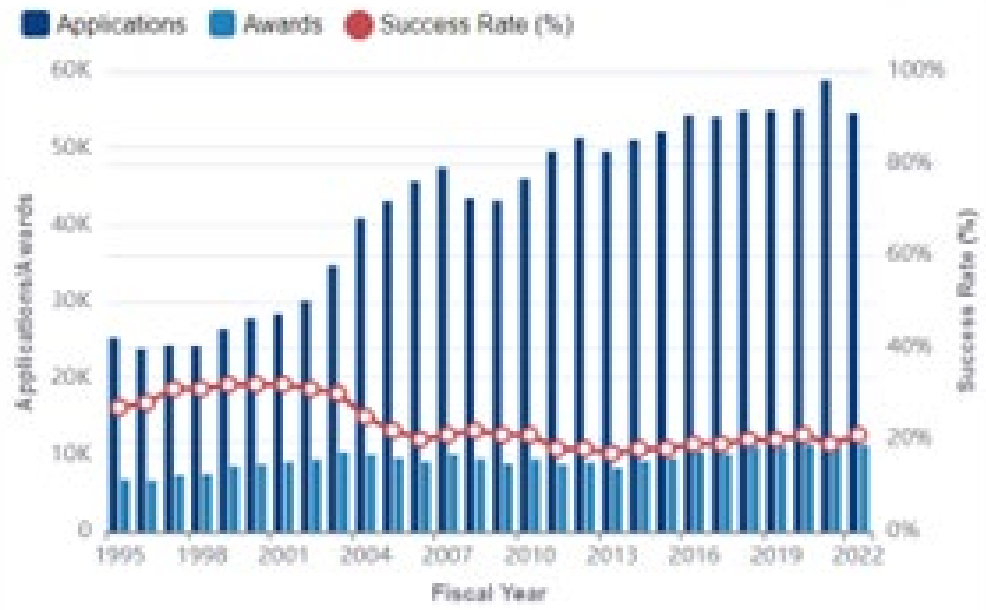
Data for this report are available at NIH Data Book - https://report.nih.gov/nihdatabook/report/20

Success Rates: R01-Equivalent and Research Project Grants

Research Project Grants: Competing Applications, Awards, and Success Rates

NIH Data Book Report ID: 20 Share

Data Export



FY 2009 and 2010 exclude awards made under the American Recovery and Reinvestment Act of 2009 (ARRA) and all ARRA selected applications and awards.

Research Project Grants: Success Rates of New (Type 1) Competing Applications for Targeted and Untargeted Research by Institute or Center (IC)

NIH Data Book Report ID: 157 Share

All NIH

Data Export

New Investigator Development Program: NIDP

Founded in 2004 and directed by Dr. Kevin Morano until 2022

- Develop and refine grant-writing skills
- Succeed in securing external funds

www.uth.edu/nidp

Kevin Morano, PhD
Senior Vice President and Chief Academic Officer *ad interim*, UTHealth Houston

UTHealth
The University of Texas Health Science Center at Houston

NIDP Courses

Grants 101: Overview of UTHealth policies/procedures

Grants 102: In-depth 6-month grant-writing workshop with mentored review process. Goal to submit grant application must be met!

- How to formulate a competitive grant application
- Monthly seminar/discussion sessions
- Grant writing broken down stepwise
- Mentored experience

Workbook: Grant Writers' Seminars and Workshops, LLC (GWSW)

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Grants 102

- Mentored preparation of a research grant
- Step-by-step advice from experienced and FUNDED faculty
- Assembly, editing, streamlining
- Responding to critiques
- >380 participants
- ~$400M in total funding, including $335M federal

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Planning to write a grant

- Why: obvious
- What: grant types, central ideas
- When: readiness, your professional objective
- Who: your role and who else (PI, co-I, lab, LOSs)
- Where: agency, performance site
- How: this is why we are here

Planning to write a grant

- What:

  Grant types: funding agencies (federal, foundation, industry);

  grant mechanisms (pilot/R03, R21, R01 etc);

  RFAs - be open-minded and opportunistic.

  Central ideas: in the form of hypothesis or specific objective

  - What are the factors that determine if an idea is exciting?

  - Aims: the basic unit of grant application

Planning to write a grant

- When:

  Deadlines!

  Ready and timely: not premature, not too ripe either

  Other considerations within your professional and operational objective:

  It may take months or years for the grant to get funded.

Planning to write a grant

- Who:

  How uniquely qualified are you as PI?

  MPI, Co-Is, collaborators: choose wisely.

  Associates.

  Colleagues who can provide input on your grants.

  Reviewers, competitors etc

  SRO vs PO: for study section and I/C respectively

Planning to write a grant

- Where:

  Funding agencies: e.g., which NIH I/C?

  Review panel (e.g., study sections);

  Performance sites: local, domestic, international

Planning to write a grant

- How: this is why we are here

  SIMPLE AND CLEAR!

  Manuscript vs grant?

Know what you need:

Institutional resources, file checklist, preliminary data, LOS, etc;

Your grants specialist – be nice to him/her!

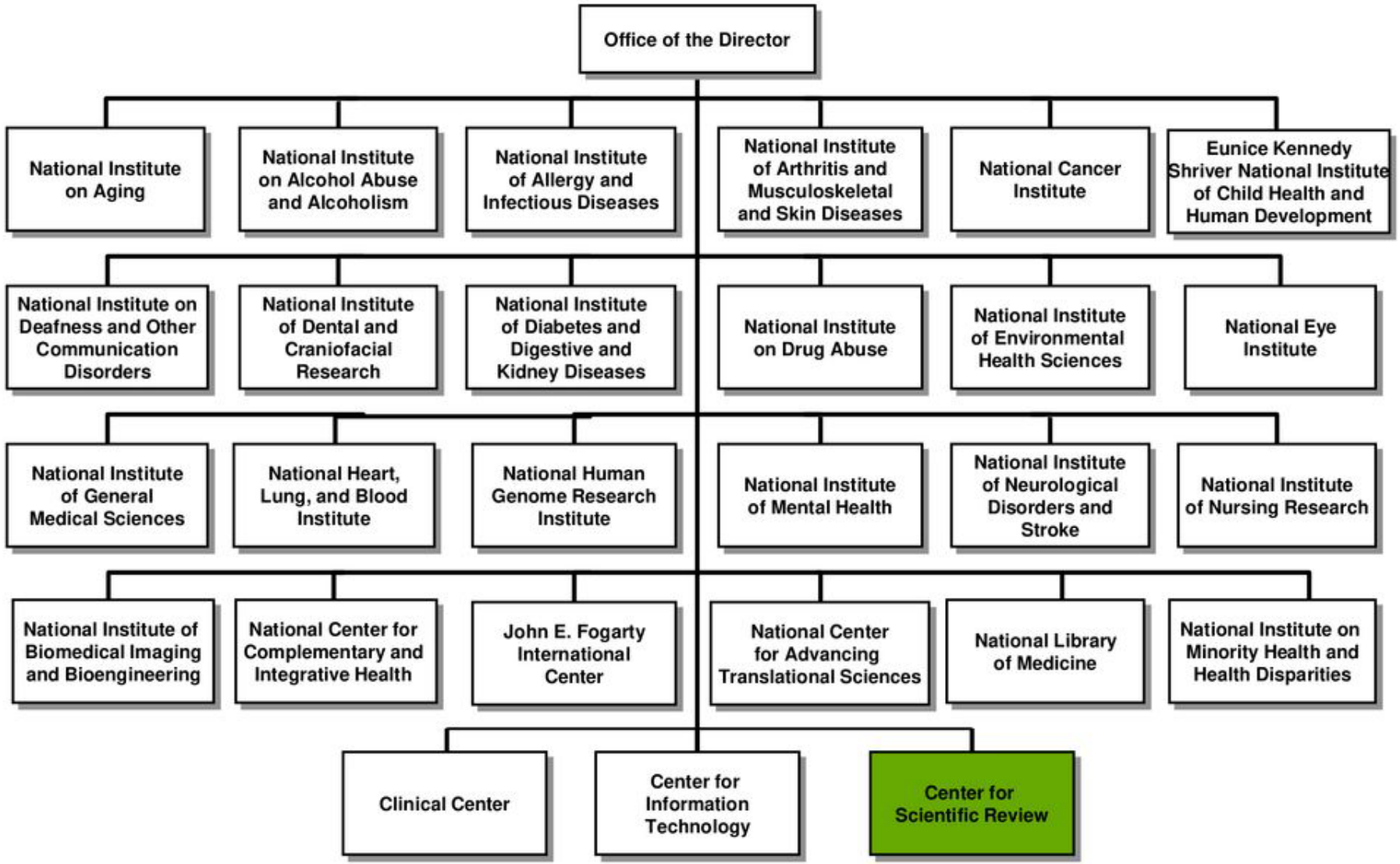
NIH Organization

- Director's Office – sets policies, represents NIH to Congress, public, has modest discretionary $, etc.

- Institutes and Centers (I/C's) – (**Congress puts grant $$$ Here**)
  - Each has focus, e.g., NCI, NIGMS, NEI, NHBLI, etc.
  - Develop Specific Programs and Priorities
  - *Award Grants*

- Center for Scientific Review (CSR) – special function to review grants via *study sections* (sometimes call Scientific Review Groups or SRG's; Initial Review Groups or IRG's). **No grant $$ to distribute**

NIH Institutes and Centers

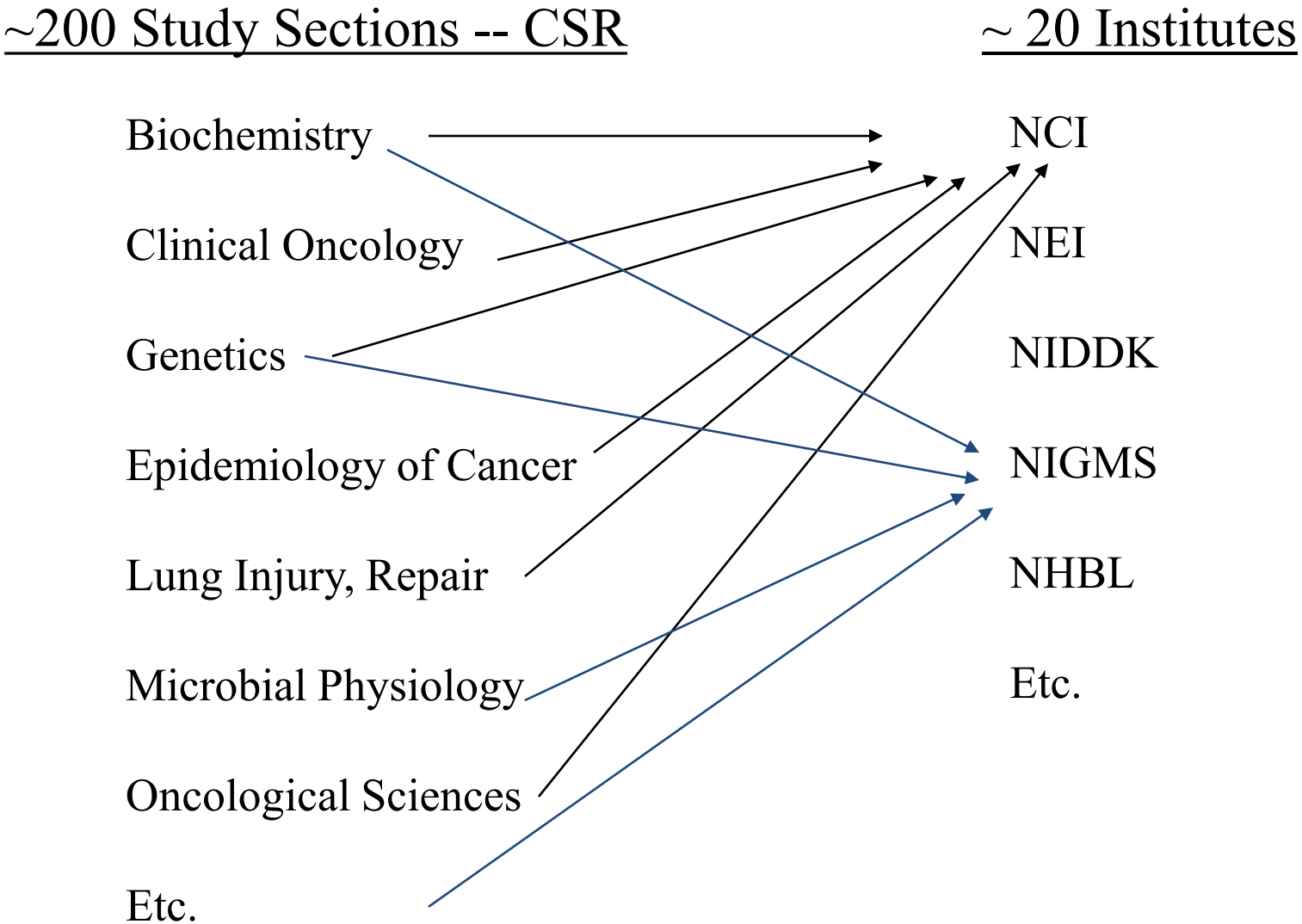


NIH National Institutes of Health
Office of Extramural Research

CSR has hundreds of Study Sections, e.g.

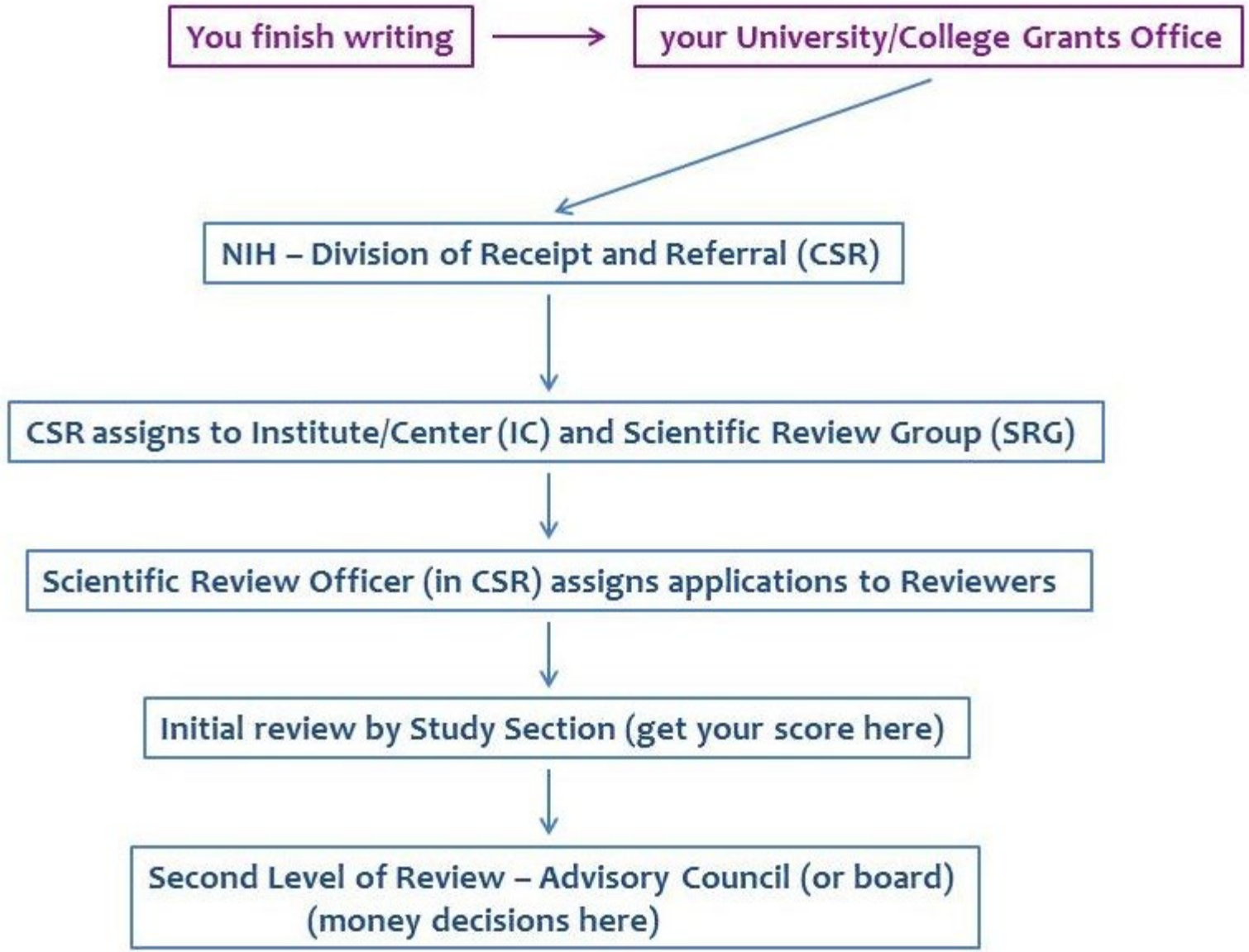
- Molecular genetics
- Aging
- Arthritis, Connective Tissue, and Skin
- Auditory System
- Membrane Biochem. & Biophysics
- Biomaterials
- Cancer Genetics
- Cellular Signaling & Regulatory Systems

Relationship of Study Sections (Scientific Review) to Institutes ($$)



1) Scientific Review is Done by Study Sections

2) Funding Decisions made by Institutes


You finish writing
your University/College Grants Office
NIH – Division of Receipt and Referral (CSR)
CSR assigns to Institute/Center (IC) and Scientific Review Group (SRG)
Scientific Review Officer (in CSR) assigns applications to Reviewers
Initial review by Study Section (get your score here)
Second Level of Review – Advisory Council (or board)
(money decisions here)

Remember to register for Grants 102!

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NIDP Administrative Team

- Shwetha Pazhoor
- Latundra “Nikki” Hill

- Sujatha Sridhar

- Elizabeth Massey Gendel
- Jessica Martinez