Outside of the lab but close to the science

From Staff Scientist to Program Officer
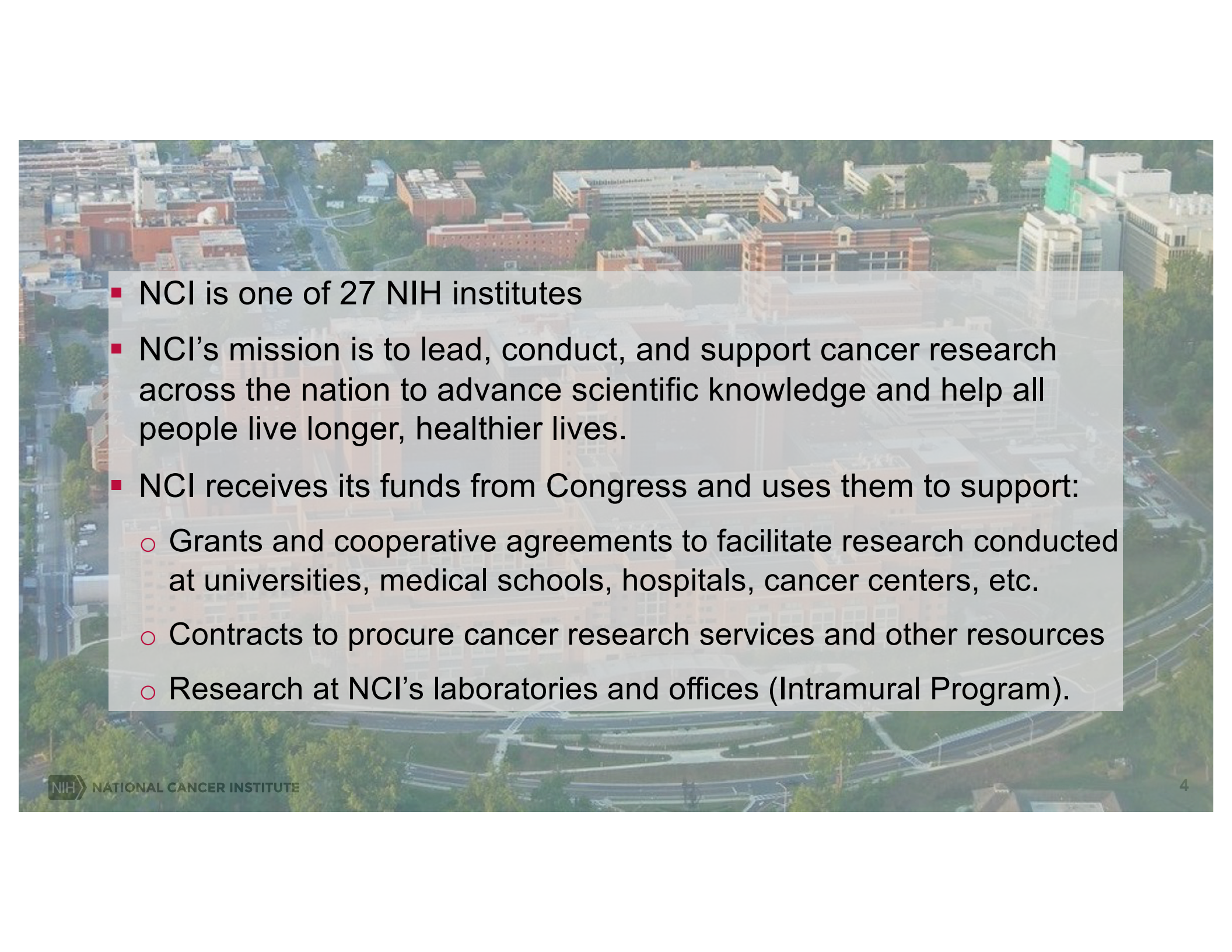
NATIONAL CANCER INSTITUTE

Who is a Staff Scientist?

Word cloud generated from https://oir.nih.gov/sourcebook/personnel/ipds-appointment-mechanisms/staff-scientist

Who is a Program Officer?

Word cloud generated from https://hr.nih.gov/jobs/announcement-links/health-scientist-administrator
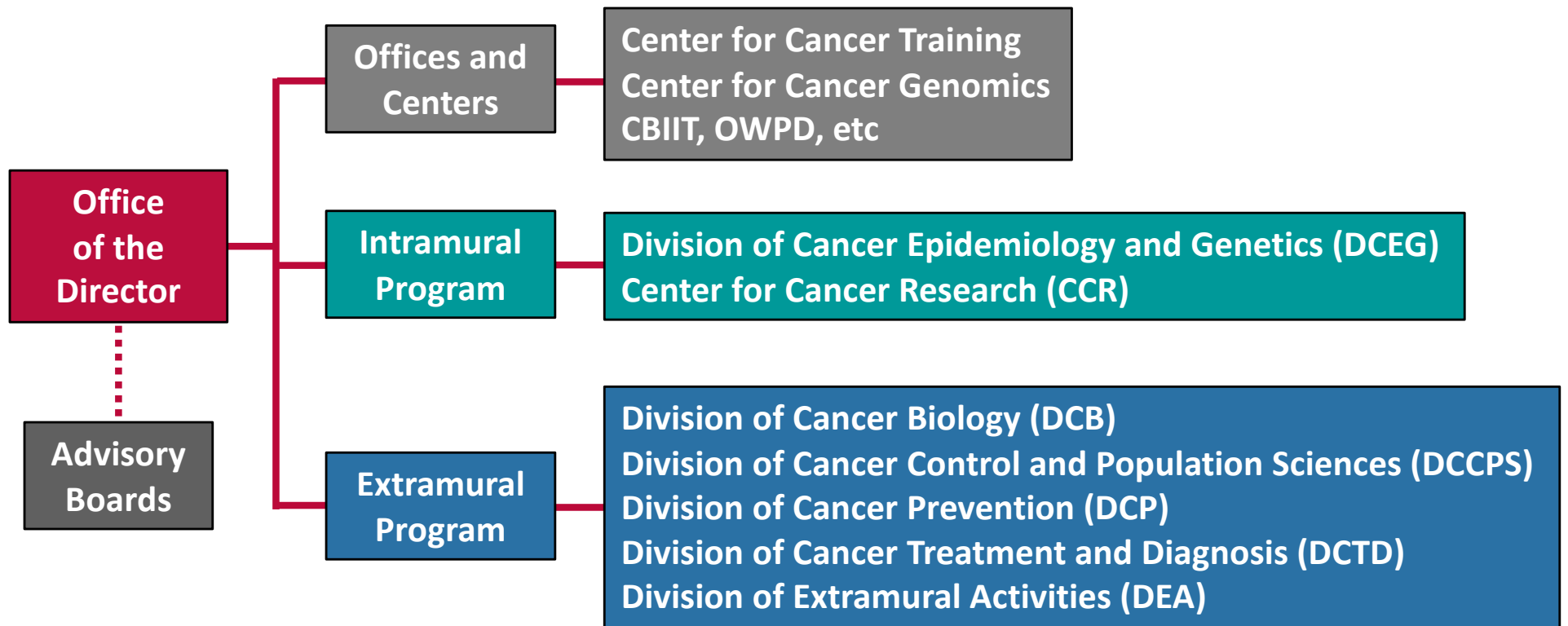
- NCI is one of 27 NIH institutes

- NCI's mission is to lead, conduct, and support cancer research across the nation to advance scientific knowledge and help all people live longer, healthier lives.

- NCI receives its funds from Congress and uses them to support:
  - Grants and cooperative agreements to facilitate research conducted at universities, medical schools, hospitals, cancer centers, etc.
  - Contracts to procure cancer research services and other resources
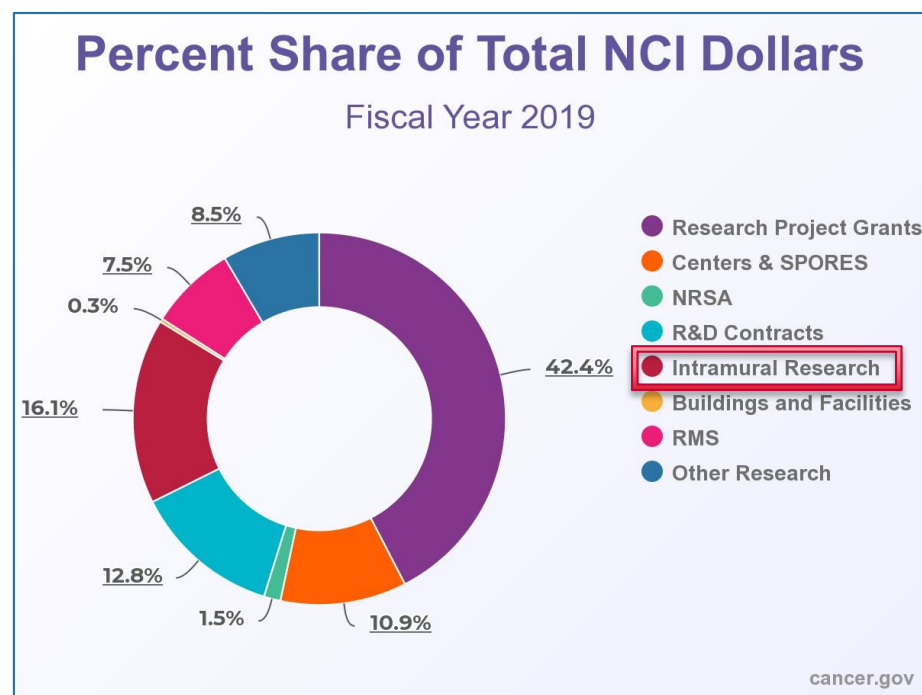 - Research at NCI's laboratories and offices (Intramural Program).

NCI Organizational Structure

Office of the Director

Advisory Boards

Offices and Centers
- Center for Cancer Training
- Center for Cancer Genomics
- CBIIT, OWPD, etc

Intramural Program
- Division of Cancer Epidemiology and Genetics (DCEG)
- Center for Cancer Research (CCR)

Extramural Program
- Division of Cancer Biology (DCB)
- Division of Cancer Control and Population Sciences (DCCPS)
- Division of Cancer Prevention (DCP)
- Division of Cancer Treatment and Diagnosis (DCTD)
- Division of Extramural Activities (DEA)

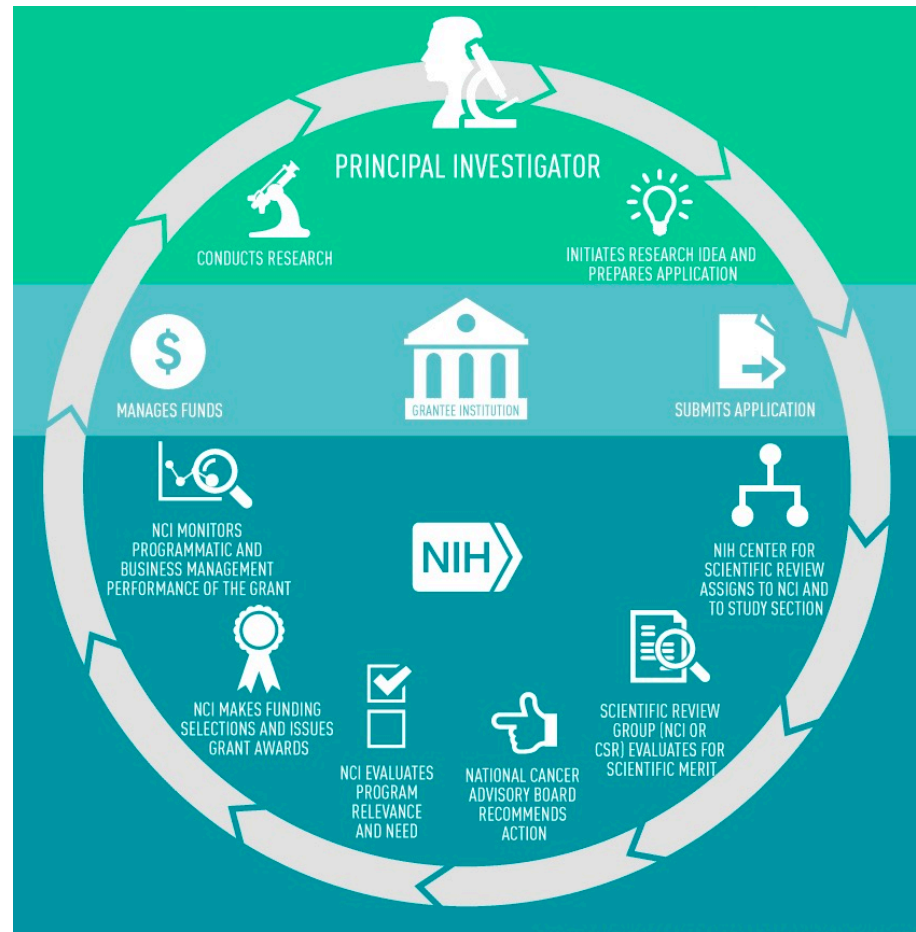# Extramural Research Support Mechanisms
(~84% NCI Budget)

- **Grant:** to support projects proposed by a Principal Investigator (i.e., R01, R21)

- **Training grant:** to build the Scientific Workforce (i.e., K99)

- **Cooperative Agreement:** special type of grant that supports resource-related research projects (i.e., TCGA, CPTAC) with substantial program involvement

- **Contract:** to acquire a specific service or an end-product (i.e., sequencing)

Percent Share of Total NCI Dollars

Fiscal Year 2019

8.5%
7.5%
0.3%
16.1%
42.4%
12.8%
1.5%
10.9%

Legend:
- Research Project Grants
- Centers & SPORES
- NRSA
- R&D Contracts
- Intramural Research
- Buildings and Facilities
- RMS
- Other Research

cancer.gov

https://www.cancer.gov/about-nci/budget/fact-book/data/obligations

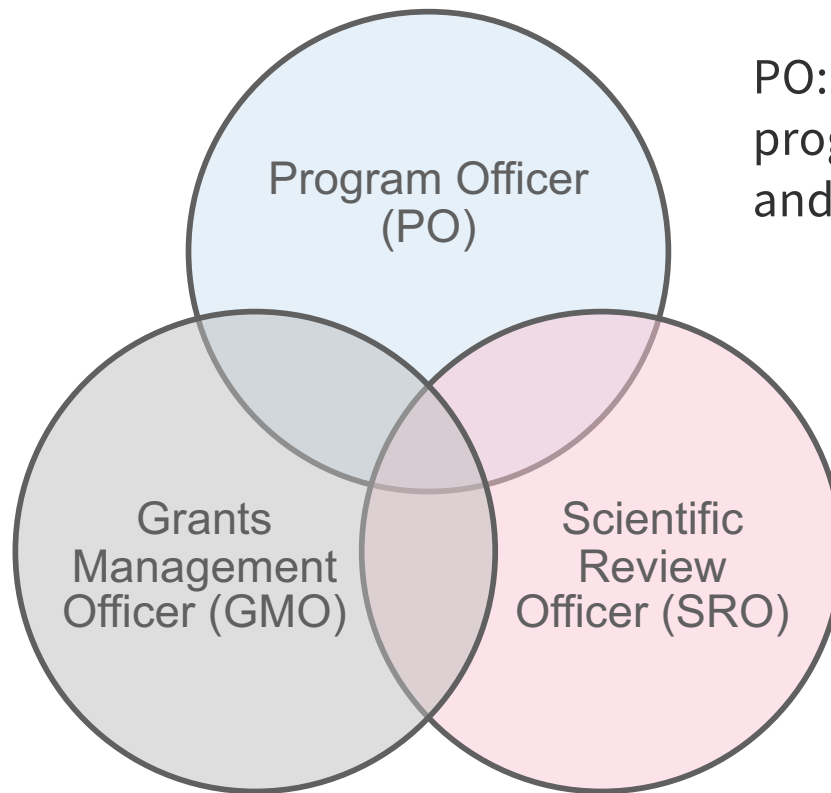# The NIH Grant Process

Program Planning

Program Management

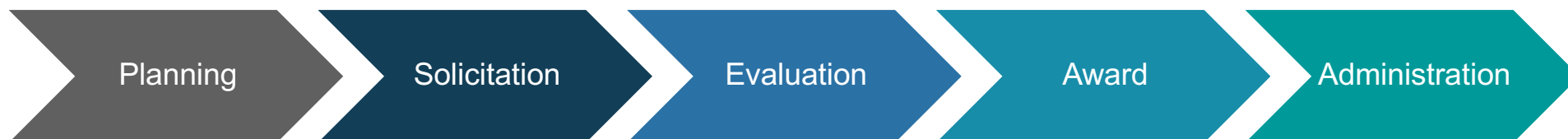Scientific Review

The Grant Stewardship Team

PO: Responsible for programmatic, scientific, and/or technical oversight

GMO: Responsible for business oversight

SRO: Responsible for coordinating and reporting the review

Program Officer (PO)

Grants Management Officer (GMO)

Scientific Review Officer (SRO)

The Contract Award Process

Planning	Solicitation	Evaluation	Award	Administration

- Contracting officer (CO): the Government's legal agent with authority to enter into, administer, and terminate contracts and make related determinations and findings.

- Contracting officer's representative (COR): the Government's principal program representative who provides technical input during the contracting process.

The Program Officer Role

The Program Officer Role at NCI

- The Program Officers (POs) at NCI play a major role in the funding, scientific coordination, and management processes.

- POs function in broad areas of science, administration, and responsibility.

- POs not only manage grant portfolios but also are available as a resource both internally and to extramural investigators.
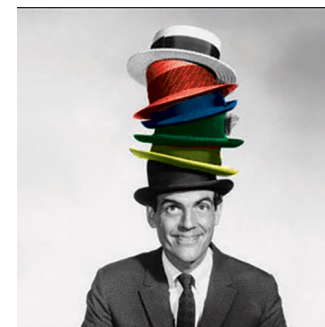
CAREER FEATURE │ 05 July 2021

'We're problem solvers': research administrators offer guidance to working scientists

Helping with grant applications, ensuring compliance and coordinating with funders is all part of the job.

"Even if [junior scientists] have to change their career from research to something else, that's good. They will get a chance to dance on another stage of their life."

Program Director/Program Officer Primary Job:

- Provide scientific and administrative stewardship of grants and contracts
    - Grants – annual progress reports, intermittent contact pre, post-award
    - Cooperative agreements – more interactions, working groups, consortia
    - Contracts – all stages, progress monitoring and interactions depend on SOW
- Serve as a resource and advocate for investigators
    - Attend reviews and discuss official summary statements with applicants
- Make funding recommendations
    - NCI Director makes final funding decisions in consultation with advisors and leadership

A view from the NIH bridge: perspectives of a program officer

Marion Zatz

Douglas R. Kellogg, Monitoring Editor

"…a PO's responsibility for oversight goes well beyond the individual grantees in a program portfolio. We have both the obligation and the pleasure of staying abreast of the latest advances in our area of science by attending conferences, meeting with our grantees, and reading relevant journals. These activities in turn enable us to perform a crucial part of a PO's job, which is **to identify emerging needs and opportunities**."

Program Director/Program Officer additional duties:

- Serve as scientific liaison with other NIH ICs, other government agencies, professional societies, etc.
    - Program area may overlap with other ICs
    - Opportunities to synergize efforts
- Identify scientific opportunities and future directions for your program area
    - Recognize scientific gaps in portfolio and propose concept, initiative, or agenda
- Foster excellent science and promote effective communication
    - Maintain own area of expertise
    - Organize meetings and workshops, develop reports

Summary of PD/PO Job description

- At its most basic, the job requires:
  - understanding and interpreting NIH/NCI grant policy and process, and provide guidance to applicants.
  - participating in peer-review & funding selection, and monitoring and evaluating ongoing scientific programs.
  - Maintaining scientific expertise.
- Depending on the specific assignment:
  - Identify new scientific opportunities, determine future areas of investigation.
  - More directly guide and influence research (i.e., Cooperative Agreements).

So, what is my role?

- Program Director, Office of Cancer Clinical Proteomics Research, DCTD, NCI.

- OCCPR supports several multi-OMICS programs at NCI, including the Clinical Clinical Proteomic Tumor Analysis Consortium (CPTAC), which applies proteomics + genomics to the characterization of tumors and generate public resources of proteogenomic data, assays and tools.

- CPTAC activities are funded through Cooperative Agreements and Contracts

- Cooperative Agreements fund research centers that generate proteomic data and others that analyze and integrate proteomics + genomics

- Contracts support biospecimen acquisition and processing, genomic characterization, data storage and exchange, public data dissemination

Proteogenomic Analysis Pipeline
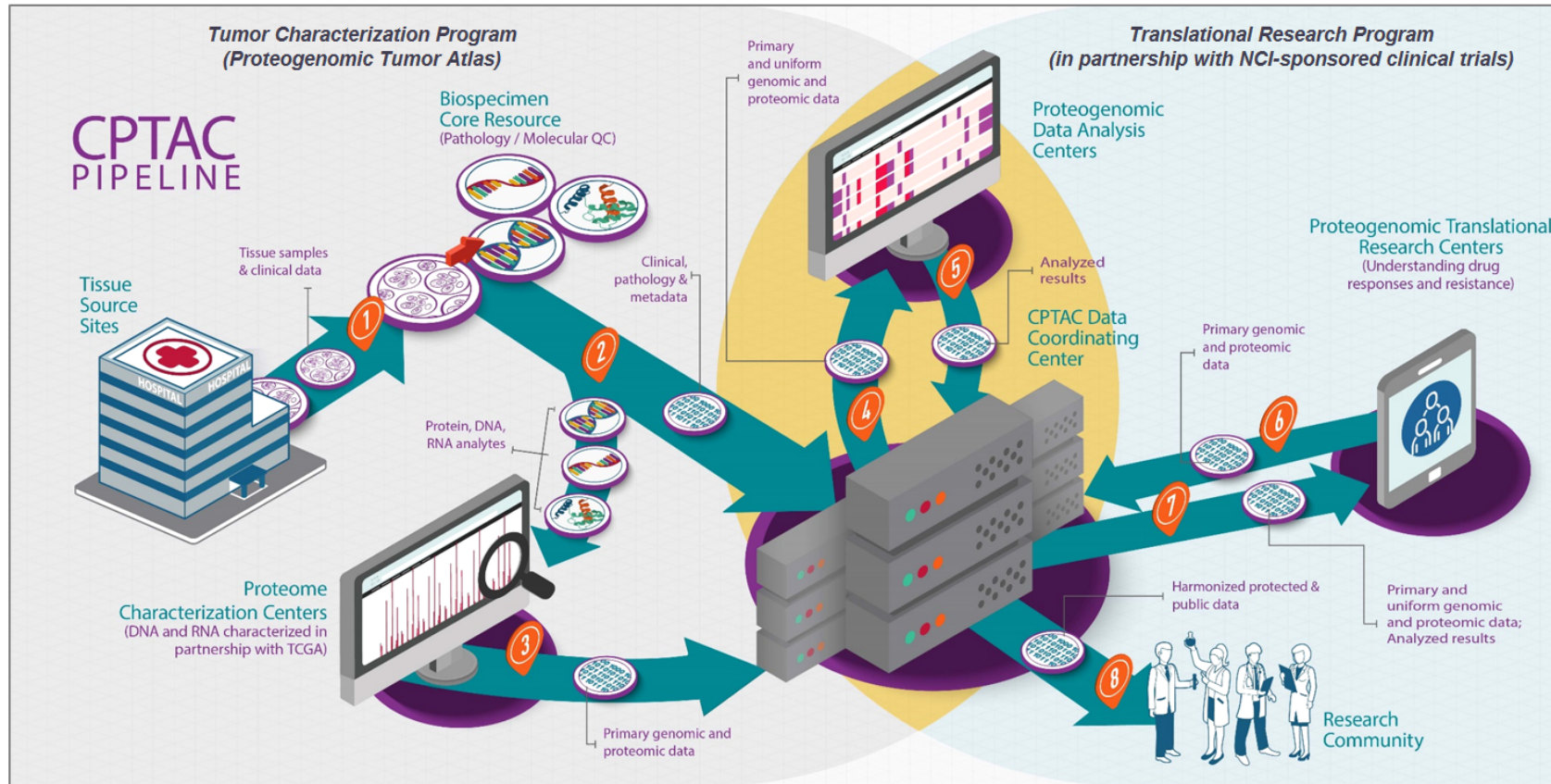
So, what *exactly* is my role?

- Co-develop Funding Opportunity Announcements for CPTAC Cooperative Agreements, pre-application webinar, funding plan, etc.

- Conduct site visits, monitor grantee performance related to three cooperative agreements (U01, U24).

- Coordinate genomic analysis for the tissues acquired by the program (COR).

- Communicate with analysis working groups about genomic data.

- Organize, run, participate of analysis working groups.

- Write/edit manuscripts and communications.

- Coordinate public release of data.

- Participate in Trans-NIH scientific committees.

CPTAC Tumor Characterization Program

Colon
Cell 2019
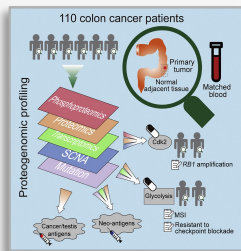
Kidney
Cell 2019
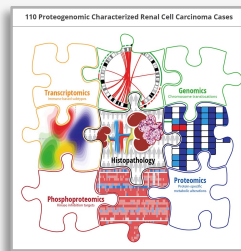
Endometrial
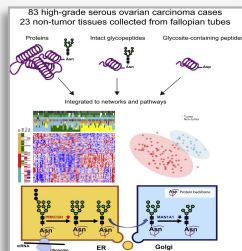*Cell 2020*
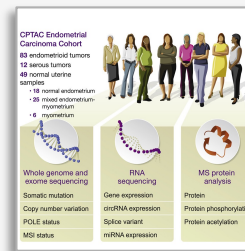
Ovarian
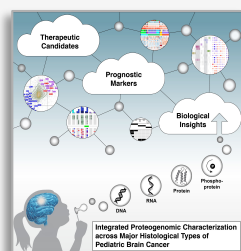*Cell Rep Med 2020*
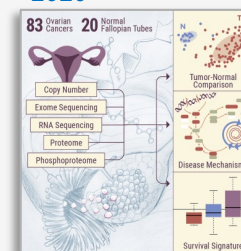
Lung adeno
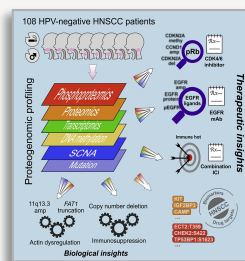*Cell 2020*
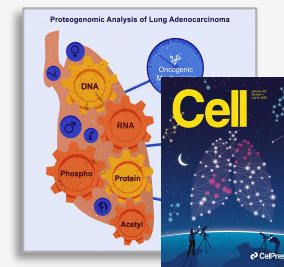
Breast
Cell 2020
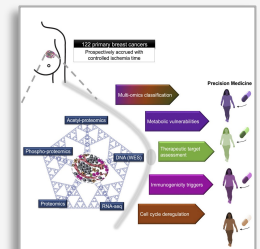
Ovarian
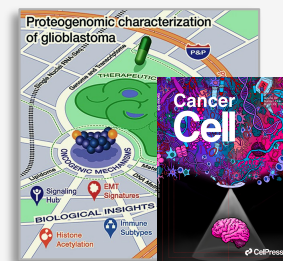*Cell Reports 2020*

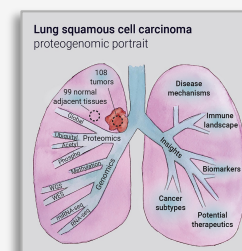**GBM (pediatric)**
Cell 2020

Head & Neck
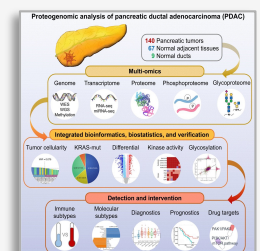*Cancer Cell 2021*

GBM (adult)
Cancer Cell 2021

Lung squamous
Cell 2021

Pancreas
Cell 2021

Tips on how going from SS to PO

Moving from Lab to PO requires a two-pronged strategy

1) Apply through USAJobs

   o Create an alert for GS 13/14 or GS 12-14 health scientist administrator (PO and/or SRO)

   o Global announcements about twice a year (test your ability to be referred)

   o SS will *likely* qualify as GS-13 but position has promotion potential to GS-14

https://www.usajobs.gov/

Open to the public

Global (~2x per year)

GS 12-14

Moving from Lab to PO requires a two-pronged strategy

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   o Create an alert for GS 13/14 or GS 12-14 health scientist administrator (PO and/or SRO)

   o Global announcements about twice a year (test your ability to be referred)

   o SS will *likely* qualify as GS-13 but position has promotion potential to GS-14

2) Network and directly contact offices of interest

   o Many times hires are made for positions not specifically announced by themselves but using the global announcements (generic for many institutes).

   o It is important to have conversations with people in the different divisions/branches so you get to know them and they know you are looking (and have been referred)

What does it take to be referred?

- Being referred means that your application was forwarded to the hiring manager for review and possible interview. It's the first step in hiring. It places your name in the pool of qualified candidates.

- Requires being ranked among highest in the rating questions of the online questionnaire.

- **However**, it is not sufficient to answer that one is an expert on every question. The level of expertise for each category **should be** reflected in your CV.

- Building a CV for PO position requires some creativity on the part of SS

  - The collective expertise associated with grants and funding is low.

  - Requires a re-definition of "expert".

- Spend time reformatting and customizing the CV to the application.

- Find information and resources at **https://hr.nih.gov/jobs**

Additional thoughts

- As SS, I took many OWPD trainings (SEED, CMAP, NCI-wide, not SS-specific). It's a chance to meet scientists doing jobs outside the lab. Also at some point realized I used them as an excuse to leave the lab… *hint*.

- Once I decided to leave the SS position, I explored the options (SRO, PO, Policy).

- Held informational interviews with program officers in multiple positions.

- Polished the CV and kept applying to global announcements, until I got referred.

- Used SS alumni as contacts and for insight into the PO role.

- One key contact came from the OWPD SEED training, a career PO.

FAQs from SSSC on Transitioning to PO

About leaving the lab

- What motivated you to leave the lab?

- Is leaving the lab just for the people who don't like their SS job?

- How do/should I notify my PI that I want to leave?

About things that OWPD trainings can help with

- How did you build contacts?

- How do you find a mentor?

- How do you find a coach?

- How do you initiate informational interviews?

- ## About looking for a job

- How did you find the time to look for a job?

- When/how do you tell your boss?

- Are informational interviews helpful?

- What is the GS level to apply to coming as a SS?

About being a Program Officer

- What do you do as a Program Officer?

- What does your typical day look like?

- Did you get training in the new position or were you expected to already have the necessary skills?

- How do you prioritize tasks?