

Summer Research Opportunities

Information Session at the Town Hall

Skip Brass, MD PhD

Professor of Medicine and Pharmacology

Associate Dean, Combined Degree and Physician Scholar Programs

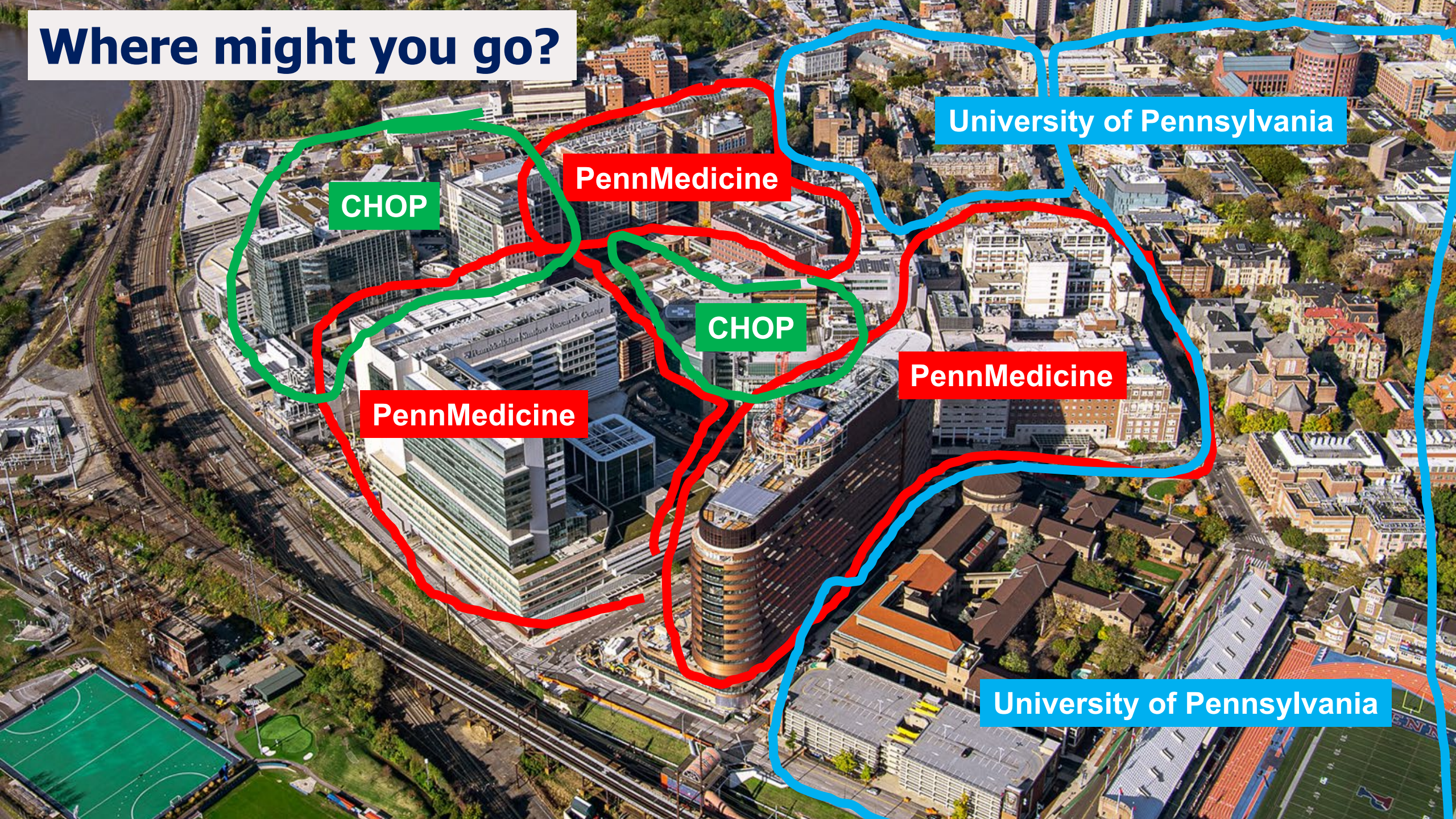
Director, Penn MSTP

November 30, 2020

Research Opportunities

- Summer Research (next summer)
 - Not limited to the summer (keep going)
- Scholarly Pursuit (MS3/4)
- Year Out (following MS3) 12/7/20
- MD/Master programs
 - MBE, MPH, MSHP, MSCE, MSME, MTR
 - MBA (Wharton), ML (Penn Law)
- MD/PhD program

Where might you go?



University of Pennsylvania

PennMedicine

CHOP

CHOP

PennMedicine

PennMedicine

University of Pennsylvania

Topics for today

- Lessons learned - Neil Menon (MS3)
- Step(ping) Up during COVID - Cindy Christian, MD
- Website resources - Francia Portacio, MPH
- APSA opportunities
 - Kaitlyn Shen, Nina Kuprasertkul, Kevin Zhang
- Lessons learned - MS2 student panel Q&A
 - Rishi Goel, Faith Arimoro, Rohan Palanki
 - Maggie Tamburro, Audrey Luo, Ethan Fein

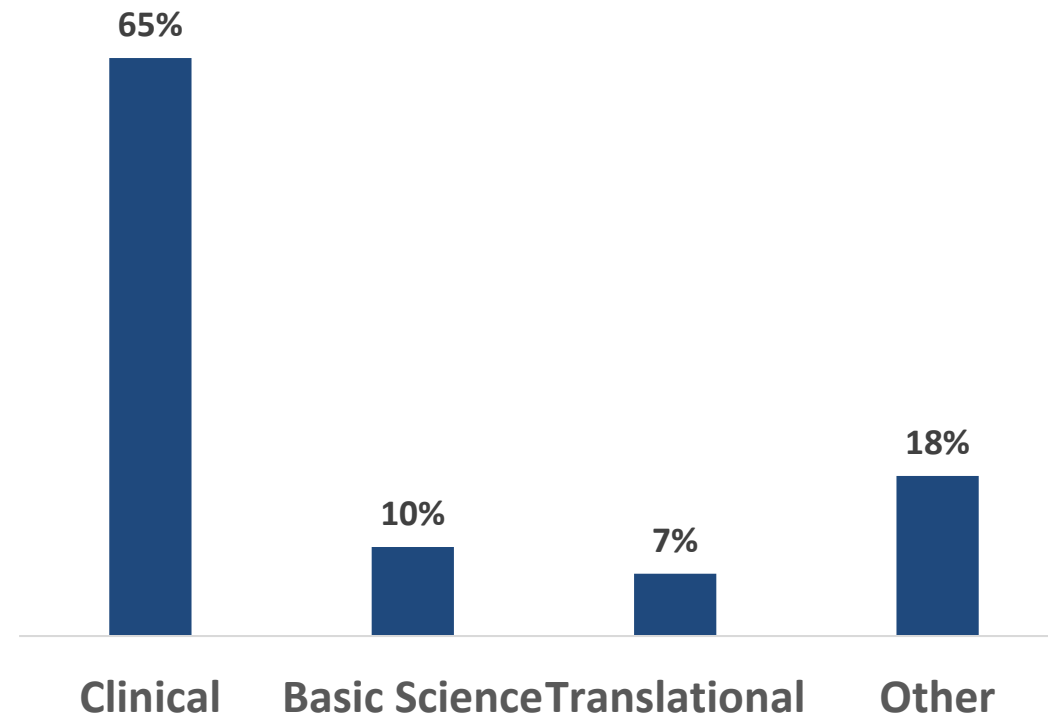
Lessons learned - Neil Menon



- PSOM S3
- PI of the PSOM Research Opportunity Surveys 2019-2020

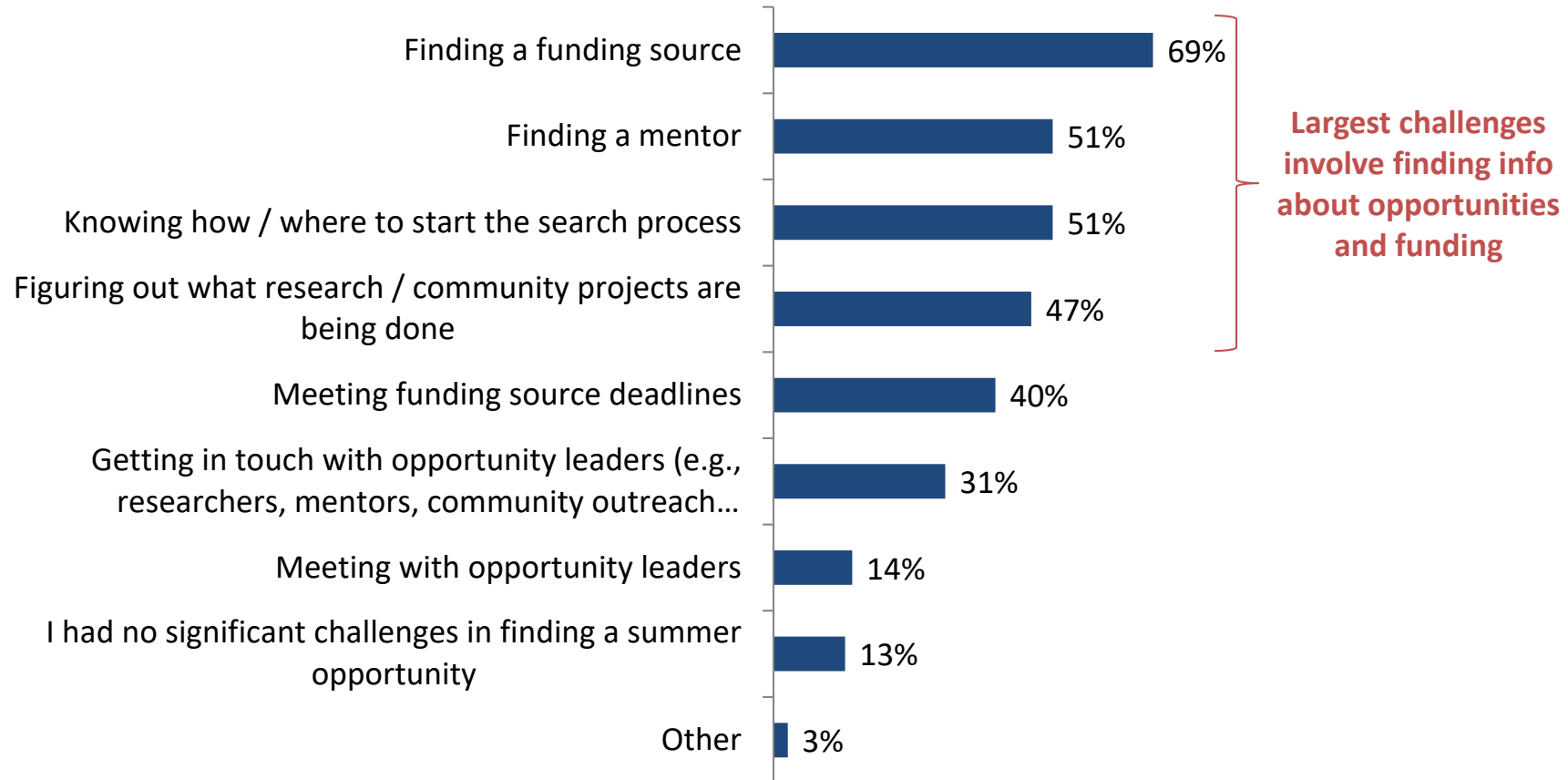
During the MS1 summer, most MD candidates pursuing research conduct clinical research; Fewer conduct basic / translational

Type of Research Conducted During the MS1 Summer
(MD/MD-Masters Candidates, n=100)



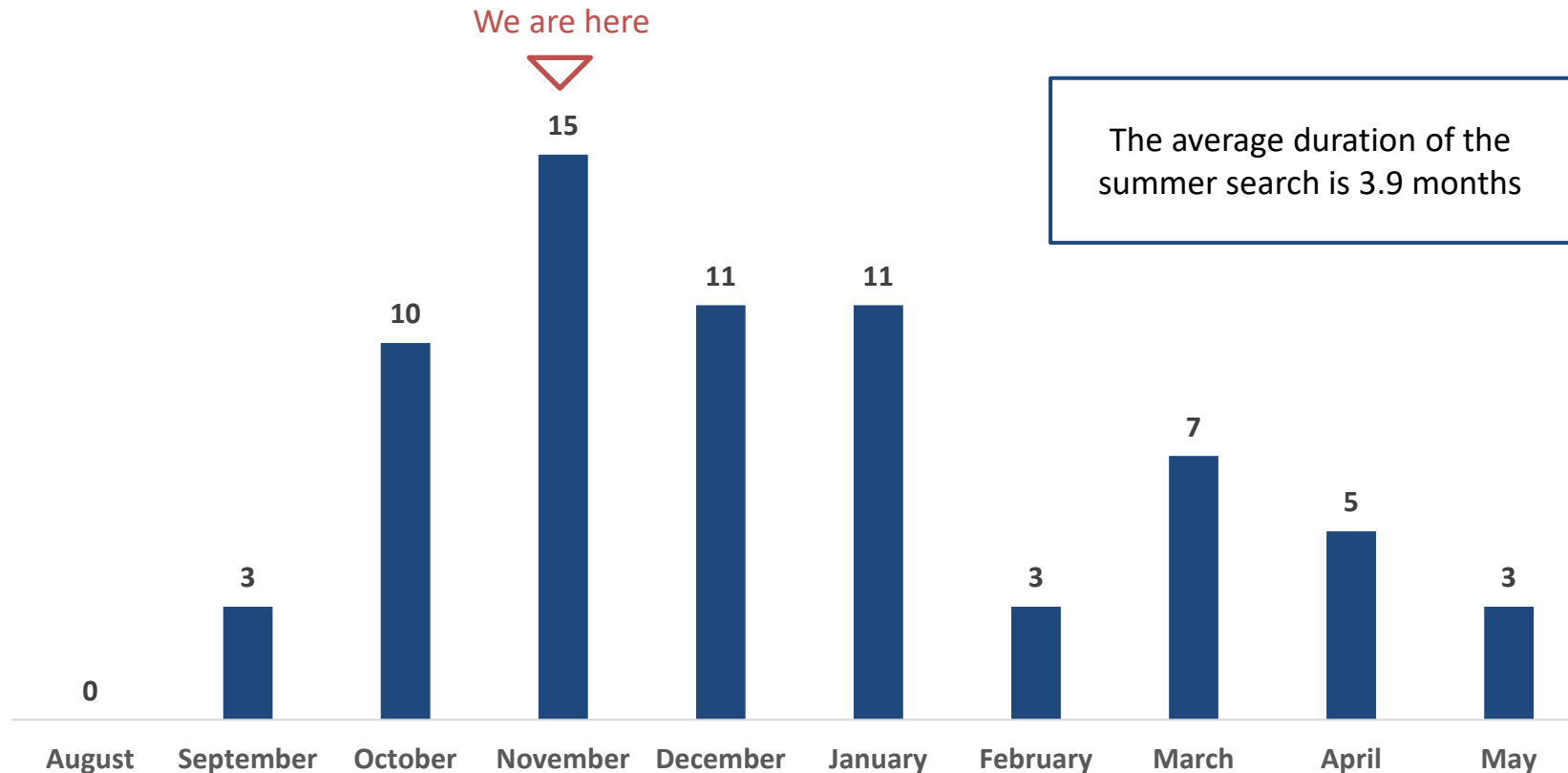
The process of finding a research opportunity can be challenging, and requires student initiative

Challenges Experienced by MD Candidates in Summer Search (% of respondents, n=77)



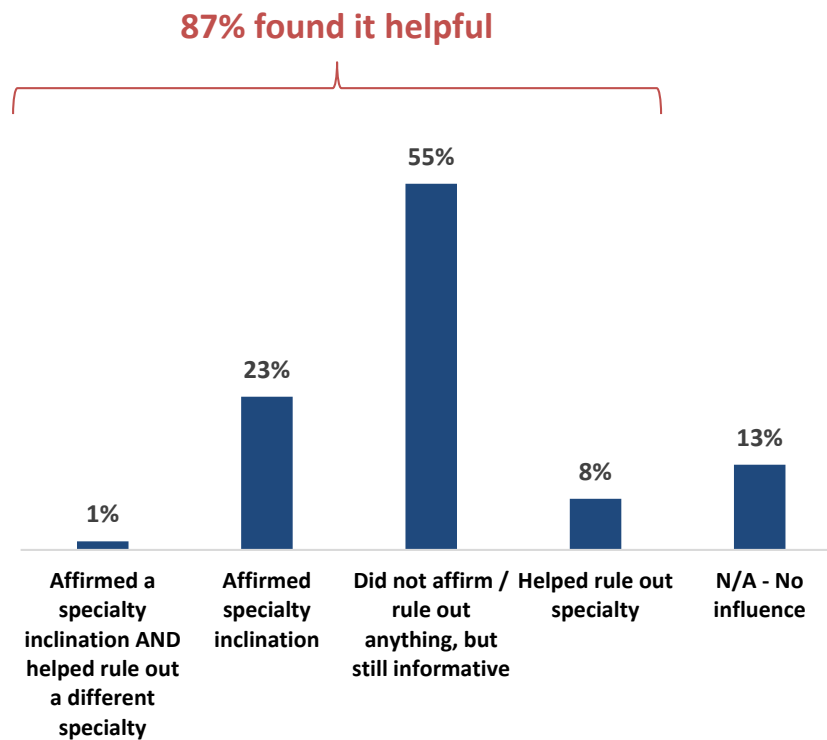
The summer opportunity search process often takes several months, and it helps to start early

When do MS1s Start the Summer Search? (number of students, n=68)

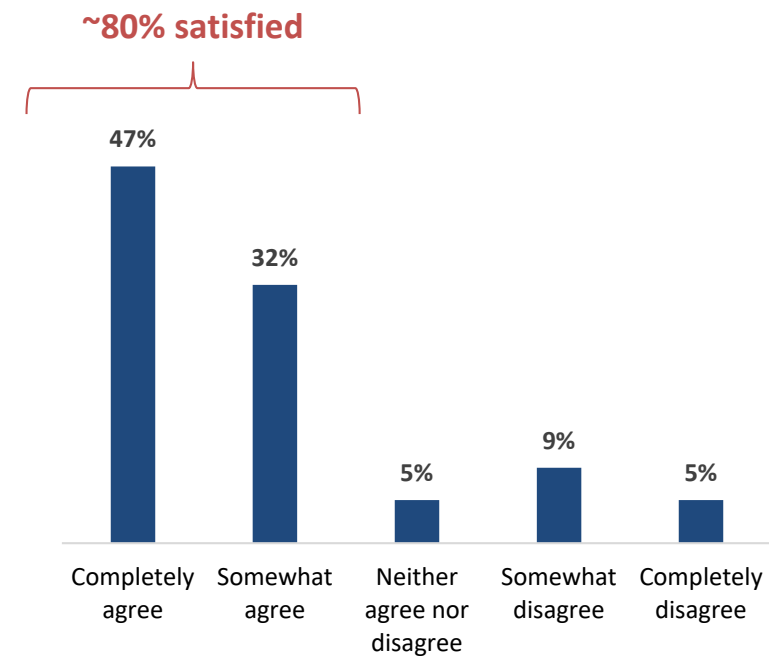


MS4s who did research reflect on their MS1 summer as a helpful experience, and are largely satisfied with their choice

How did MS1 Summer Research Affect Specialty Inclination? (% of respondents, n=78)



“I am Satisfied with my Choice of MS1 Summer Opportunity” (% of respondents, n=74)



Stepping Up During COVID

Cindy Christian, MD



- Professor of Pediatrics
- Anthony Latini Endowed Chair in the Prevention of Child Abuse and Neglect
- Assistant Dean for Community Engagement

Step Up a community bulletin board



Matching projects at Penn Medicine
with people who can help

Login with PennKey

I'm looking for help

Create a project listing to recruit helpers. Search for available helpers with the skills and time you need and reach out to them directly.



I'm eager to help

Sign up as a helper to be discovered by project leaders and be notified of new projects. Search for projects that you want to help with and reach out directly to project leaders.



stepup.uphs.upenn.edu



Create a new project



Type a keyword to filter...



67 of 67 projects visible.

URGENT STAFFING NEEDED

COSERCA (COVID-19 SERoprevalence in CAncer patients)

Posted on 6/30/20 at 10:20am · KaraN Maxwell

CATEGORY

CONTACT

kara.maxwell@pennmedicine.upenn.edu

PROJECT DESCRIPTION

URGENT STAFFING NEEDED

Penn Med With You - UX/UI help needed

Posted on 5/28/20 at 9:25am · LaurenE Southwick

CATEGORY

CONTACT

Quality improvement

lauren.southwick@pennmedicine.upenn.edu

PROJECT DESCRIPTION

To build, test, and refine a digital, remote tool for Penn Medicine patients



HELP NEEDED



Health Care Disparities in Breast Imaging -- Screening Mammography

Posted on 7/24/20 at 1:35pm · BrianS Englander

CATEGORY

CONTACT

brian.englisher@penncmedicine.upenn.edu

PROJECT DESCRIPTION

Looking at health care inequities and disparities for screening mammography in Philadelphia (based at Pennsylvania Hospital). Have data based on race and religion for the past five years, with concerted efforts to recruit under-resourced and under-served patients to seek out hospital based screening mammography. Looking to pull together the data and present and publish this very timely study.

HELP NEEDED



Breast cancer genetics - Check out CHEK2!

Posted on 7/7/20 at 2:12pm · KaraN Maxwell

CATEGORY

CONTACT

kara.maxwell@penncmedicine.upenn.edu

PROJECT DESCRIPTION

The goal of this research project is to understand the pathogenesis of breast cancers that develop in women with inherited mutations in a gene called CHEK2. Unlike high risk germline cancer susceptibility genes like BRCA1/2, the risk of breast cancer is lower in women with CHEK2 mutations, and it is unclear if and how the mutation leads to breast cancer development. This project will involve:...





[< Back to all projects](#)

HELP NEEDED

Breast cancer genetics - Check out CHEK2!

Posted on 7/7/20 at 2:12pm by Maxwell, Kara N

PROJECT DESCRIPTION

The goal of this research project is to understand the pathogenesis of breast cancer germline cancer susceptibility genes like BRCA1/2, the risk of breast cancer is low cancer development. This project will involve:

- 1) Writing a review article on CHEK2 and other intermediate risk variants in breast
- 2) Working with the Maxwell Lab bioinformaticians to analyze whole exome sequencing patients without genetic mutations.

HELPER RESPONSIBILITY

Writing a review, analyzing data and writing a manuscript

PREFERRED BACKGROUND

Graduate student, Medical student pre-clinical, Medical student clinical

PREFERRED SKILLS

Clinical

ESTIMATED WEEKLY TIME INVOLVEMENT

11-20 hours

HEADCOUNT

1

CONTACT NAME

Kara Maxwell

TITLE

Assistant Professor

AFFILIATION

Perelman School of Medicine

EMAIL

kara.maxwell@pennmedicine.upenn.edu

HAS CAPACITY TO HELP



Cindy Christian (!)

ABOUT

MS3 at Penn, likely applying pediatrics vs. anesthesia.

Interests include medical education, ne...

AFFILIATION

Medical student clinical

INTERESTED IN

Medical education, , Technology

SKILLS

Clinical, Design, Software engineering, Other engineering

ESTIMATED WEEKLY AVAILABILITY

11-20 hours

HAS CAPACITY TO HELP



Rishi Goel

ABOUT

Current MS1 with experience in immunology research. Also some background in statistics.

AFFILIATION

Medical student pre-clinical

INTERESTED IN

, Quality improvement, ,

ESTIMATED WEEKLY AVAILABILITY

1-5 hours

CONTACT

rishi.goel@pennteam.upenn.edu





stepup.uphs.upenn.edu

Resources

Francia Portacio, MPH



- Associate Director,
Combined Degree and
Physician Scholars Program

Research Opportunities

Web Resources

Combined Degree and Physician Scholar Programs:

www.med.upenn.edu/educ_combdeg/

- MD/PhD, MD/Masters, events . . .

Research and Fellowship Opportunities for Penn Med Students

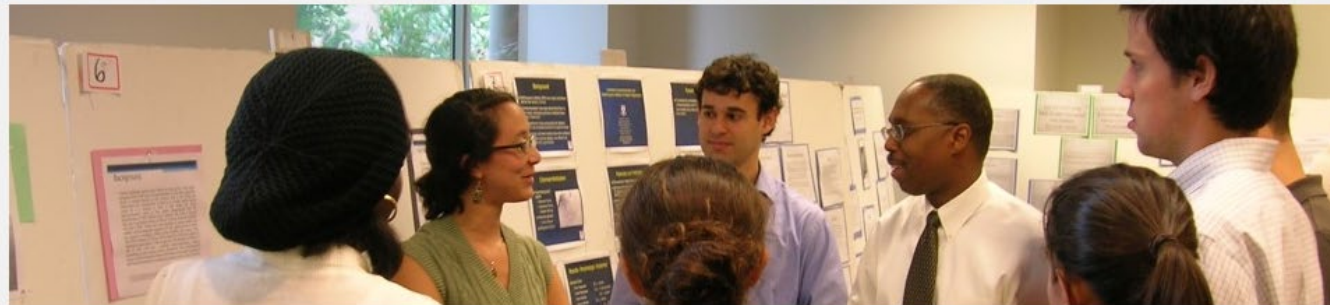
www.med.upenn.edu/mdresearchopps/

- Starting the process info, Funding opps, Research tips, Student advice . . .

www.med.upenn.edu/educ_combdeg/



Combined Degree and Physician Scholar Programs



Research Symposiums

[Home](#)

[MD/PhD](#)

[MD/Masters](#) ▾

[MD/JD](#)

[Research Opportunities](#)

[Events/Activities](#)

[Contact Us](#)

Overview

The Combined Degree and Physician Scholar Programs Office serves as home base for Penn's large and vibrant MD/PhD (MSTP) program. In addition, we provide information and resources to prospective and current Perelman medical students who are interested in our MD/Masters programs, MD/JD program, and elective year out & short term research opportunities.

Combined Degree Programs

[MD/PhD Program \(MSTP\)](#)

[MD/Master Programs:](#)

[www. med.upenn.edu/mdresearchopp/](http://www.med.upenn.edu/mdresearchopp/)



Research & Fellowship Opportunities for Penn Med Students



Scientific presentations

Home

Starting the Process

Guidance ▾

Opportunities ▾

Research Resources ▾

Events

Welcome Penn Med Students!

If you are thinking about an academic career and interested in conducting research during medical school as a step in that direction, you've come to the right place! This website has been designed to help Penn medical students navigate the many research options available. The most frequent scenarios are:

SUMMER RESEARCH

Medical students typically choose to do research between the first and second year of Medical School, though this does not count as credit toward graduation.

SCHOLARLY PURSUIT

Medical students, not enrolled in a Combined Degree program, will engage in some form of research for a minimum of three months to fulfill their **Scholarly Pursuit requirement** in Module 5. Some students will choose to do a full year of research.

[www. med.upenn.edu/mdresearchopps/](http://www.med.upenn.edu/mdresearchopps/)

The screenshot displays the website for the Perelman School of Medicine at the University of Pennsylvania. The page is titled "Research & Fellowship Opportunities for Penn Med Students". On the left, a navigation menu lists various options, with "Short Term Opps" circled in red. The main content area shows a breadcrumb trail: "Home > Opportunities > Short Term Opportunities". The heading is "Short Term Research Opportunities". A welcome message states: "Welcome to the Short Term Research Opportunities funding website. We review fellowship information periodically and update the website, but some funding sources are quicker than others to roll out information for the upcoming year. We leave the prior year's deadline posted as a reference until one of our reviews reveals updated information. If you see an opportunity of interest, click on the link to learn more. If you discover a more updated deadline, please reach out and let us know by contacting [Francia Portacio](#), Associate Director." Below this is a filter section with two columns: "Research Location" (At Penn, Elsewhere) and "Opportunity Type" (Clinical, Basic Science, Translational, Other). A "Clear Filters" button is also present. The first listing is "Agnew Society - First Year Fellowship Program", which is partially visible. The description for this program reads: "The Agnew Society offers a funded six-week summer fellowship for first-year medical students interested in surgery. Students will identify a mentor in the Penn Surgery department and will work with them to develop a research project to work on over the course of the summer. For more information and to apply, visit the [Medical Students First Year Fellowship Program](#). If you have general questions about the Fellowship Program, contact [Dr. Ari Brooks](#). To learn more

APSA: The American Physician-Scientists Association



Kaitlyn Shen
MS2 in the MSTP
CAMB



Nina Kuprasertkul
MS2 in the MSTP
CAMB



Penn APSA (American Physician- Scientists Association)

November 30th, 2020

What is APSA?



Mission: APSA aims to help physician-scientist trainees realize their educational and professional goals in an organization free from harassment or discrimination based on gender, orientation, race, ethnicity, or religion.

- Advancing opportunities for mentorship, community building of physician-scientists
- Career development information for student physician-scientists
- Most representative voice and influential advocate to policymakers regarding the need for supporting physician-scientist training

Four Yearly Meetings bringing together physician-scientists and trainees internationally.

- Annual Meeting held in conjunction with ASCI/AAP Meeting
- Regional Meetings held in Northeast, Midwest and Southeast



APSA Northeast Regional Meeting

“DYNAMICS OF DIVERSITY IN PHYSICIAN SCIENTIST TRAINING”

Saturday January 9th - Sunday January 10th

- Virtual, estimates ~200+ people attendance
- For current MSTP students, medical students, undergraduates, post-bacs, and high school students





Saturday, January 9, 2021

- 1:00 ● Introductory Comments
- 1:10 ● Keynote: Dr. Sunil Singhal
- 1:50 ● Keynote: Dr. Patricia Conrad
- 2:30 ● Break
- 2:45 ● Keynote: Dr. Vanessa Northington Gamble
- 3:30 ● Student Lightning Talks
- 4:00 ● Breakout Sessions
 - 1. MD-PhD & VMD/DVM-Phd Admissions
 - 2. Research-Track Residency Admissions

Sunday, January 10, 2021

- 1:00 ● Introductory Comments
- 1:05 ● Keynote: Dr. Katherine High
- 1:45 ● Breakout Sessions (2 rotations)
 - 1. Physician Scientists in Industry
 - 2. Physician Scientists in Humanities & Social Sciences
 - 3. Physician Scientists in Academia
 - 4. Work-Life Balance
- 3:00 ● Break
- 3:15 ● Student Lightning Talks
- 3:45 ● Keynote: Dr. Xilma Ortiz Gonzalez
- 4:25 ● Ending Remarks and Poster/Lightning Talk Prizes

APSA NE Regional Meeting Schedule



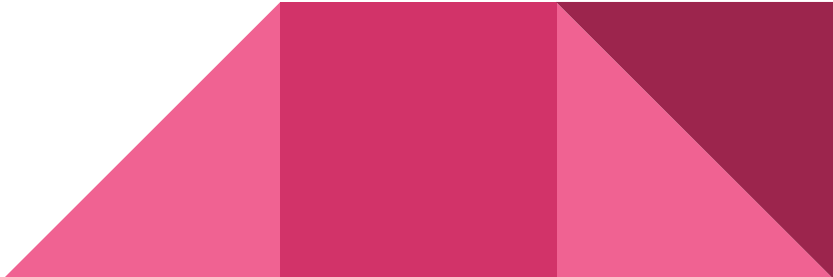
Opportunities for Outreach/Advocacy



- Sign up to be an APSA mentor!
- Be paired with a high school student, undergraduate, or post-bac interested in medicine/science.
- Contact Kaitlyn/Nina if interested.



Subcommittees

- Outreach (MD/PhD, VMD/PhD, Undergrad/Post-Bac, High School)
 - Reaching out to schools/programs in the NE region
 - Connect high school and undergraduate students with current MSTP students
 - Poster Session Crew
 - Collect abstracts and organize lightning talks
 - Technology/Logistics
 - Zoom logistics
 - Website/registration
 - Design/Social Media
 - Make advertisements/announcements
 - Advertise speakers and conference on social media
- 

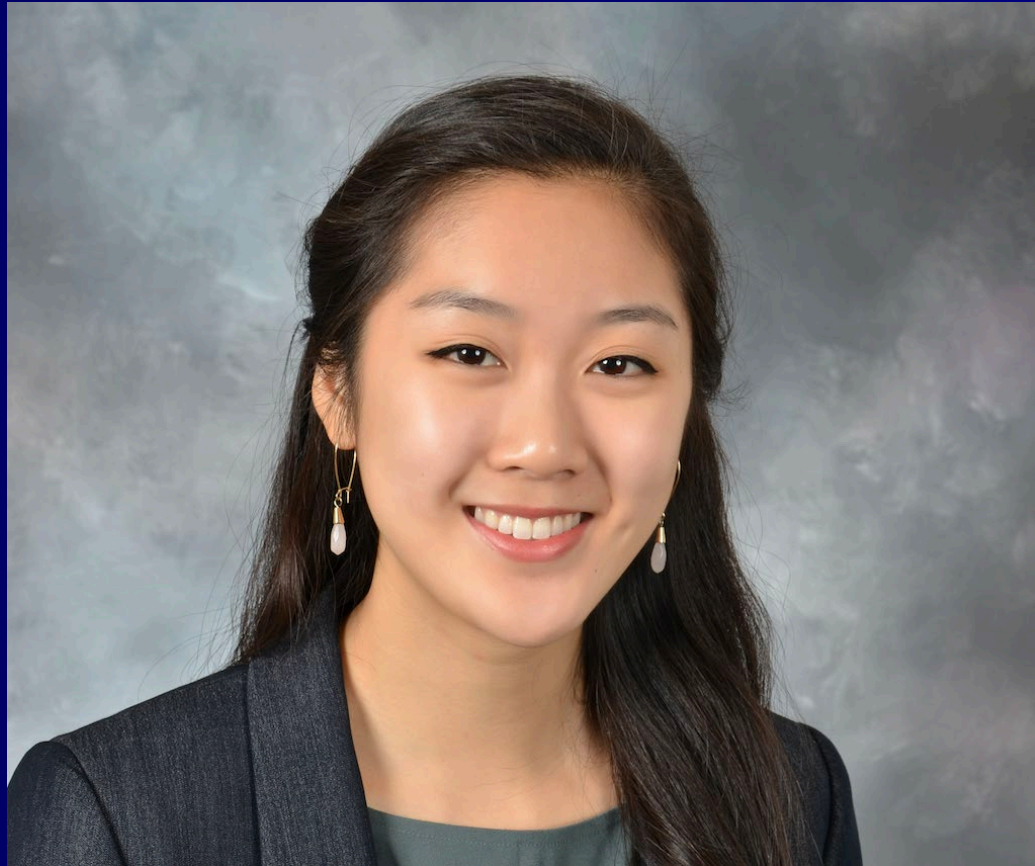
Thank you!

Contact Kaitlyn/Nina if interested in mentoring or volunteering for a NERC subcommittee!

kaitlyn.shen@penmedicine.upenn.edu

napasorn.kuprasertkul@penmedicine.upenn.edu

Lessons learned - Audrey Luo



- MS2 in MSTP
- Neurosciences
- Worked with Ted Satterthwaite to examine whether increased irritability is associated with decreased fiber density in white matter tracts.

Lessons learned - Ethan Fein



- MS2 in MSTP
- CAMB
- Worked with Patrick Seale on a transcriptional mechanism that promotes adipocyte identity.

Lessons learned - Faith Arimoro



- MS2
- Worked with Genevieve Kanter, an economist, on the correlation between physician-owned pharmacies and the over prescribing of expensive drugs.

Lessons learned - Maggie Tamburro



- MS2 in MSTP
- Bioengineering
- Worked with Lou Soslowsky to study molecular and morphological changes in tendons that occur after exercise.

Lessons learned - Rishi Goel



- MS2
- Worked with Atheendar Venkataramani on the effects of socioeconomic and political characteristics on social distancing during COVID-19.
- Worked with Sarah Henrickson and John Wherry on immune dysregulation and thrombosis in COVID-19 patients.

Lessons learned - Rohan Palanki



- MS2 in MSTP
- Bioengineering
- Worked with Mike Mitchell on engineering novel lipid nanoparticles for in utero gene therapy applications.

Research Opportunities

Skip Brass, MD, PhD

brass@pennmedicine.upenn.edu

Francia Portacio, MPH

francia.portacio@pennmedicine.upenn.edu

Combined Degree and Physician Scholar Programs

The virtual 6th Floor of JMEC

The End