Shapiro Summer Research Program and Path of Distinction in Research (POD-R)

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Shapiro Summer Research Program

• 130-140 M1s participate in the Shapiro program each summer
  • 8-10 weeks full-time mentored summer research
  • $400 per week stipend paid in one lump sum in early June

• Any research area is accepted
• Prior research experience not required
• Can combine with other summer opportunities
• Counts towards Path of Distinction in Research requirements
  • Check with POD-Med Ed and POD-Public Health to make sure project meets their requirements.

• Student responsible for finding a mentor and project
• Eligibility: not having to remediate more than 1 exam as an M1
Best ways to find a mentor and project

- Shapiro website
- Departmental websites
- Previously worked with mentor
- Recommendation from another student or faculty/staff
2024 Shapiro Summer Research Program Timeline

**November 20, noon-5pm**
- Medical Student Research Forum
  - M1s attend and network;
  - M2s present their summer research projects

**December - January**
- Faculty submit summer projects;
- M1s attend workshops;
- Faculty and M1s meet and match;
- M1s write proposals

**February**
- M1s finish proposals and submit by deadline: 3/3/2024

**March**
- Proposals are reviewed by Student Research Committee

**April**
- Decisions are announced on April 15

**May - August**
- Shapiro Summer Research Program
Why Do Summer Research?

- As a first year med student:
  - With research, you can go in-depth on a topic of your choosing and combine it with targeted shadowing opportunity
  - Research provides an opportunity to do something innovative

- Research is an integral part of evidence-based medicine and medical advancement
  - Helps you navigate the ever expanding lanes of the information highway
  - Informs and improves your clinical practice
### Identifying Your Research Interests

<table>
<thead>
<tr>
<th>Student-generated Idea</th>
<th>Mentor-generated Idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Takes more time, work, and coordination between now and start of project due to IRBs and other protocols</td>
<td>• Easier to start and you can still carve out your own piece of the project</td>
</tr>
<tr>
<td>• Can be very rewarding</td>
<td>• Might not be exactly what you envisioned</td>
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</tbody>
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Best scenario: pick something you like and something your mentor likes
How Did You Find Your Mentor? (in %)

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worked with mentor previously</td>
<td>9%</td>
</tr>
<tr>
<td>Web search</td>
<td>2%</td>
</tr>
<tr>
<td>Student research portal</td>
<td>53%</td>
</tr>
<tr>
<td>Recommendation from a student</td>
<td>6%</td>
</tr>
<tr>
<td>Recommendation from faculty...</td>
<td>14%</td>
</tr>
<tr>
<td>Through a class or lecture</td>
<td>7%</td>
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<tr>
<td>Research forum</td>
<td>9%</td>
</tr>
<tr>
<td>Dept.</td>
<td>Non-Shapiro Opportunities</td>
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<td>-------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>Research Electives for credit</td>
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Role - Coordinating the IT export of data, then guidance/statistical planning for study design for necessary outcome measures, then literature search and writing up of the effort. For multi-center effort, this will involve preparation of lectures/powerpoints and writeups, including potential local-grant funding requests.; IRB Status - Submitting, expected approval by end of 2022.; Skills - Medical students have more than enough skill for this
Contacting Potential Mentors

- Tailor your initial email
  - Introduce yourself and emphasize any relevant experience
  - Show familiarity with mentor’s work
  - Attach an updated resume/CV
  - Add availability

- Pursue 2 or 3 opportunities at the same time

- Be persistent

- Respond promptly

- If a new mentor, cc me
Interviewing Potential Mentors

UNIVERSITY of WISCONSIN-MADISON

Student Research at SMPH

Projects

Projects with open slots are available to Shapiro applicants. “Non-Shapiro Opportunities” are interested in a shorter term (non-summer) projects and yearlong projects.

March 2023

Instructions for Students
Information for Faculty
Projects
How to Find a Mentor (Slides)
How to Write a Shapiro Proposal
Questions for Shapiro Mentors
Resources
Questions for Mentors

The Project:
- **Is IRB needed and approved? Will it be approved by summer?**
- Is the project ongoing or new?
- Does it have a clear hypothesis or is it explorative?
- Is the scope appropriate for a summer project?
- What are the expected outcomes?
- What is the potential for continuation past summer?

Your Role:
- What is expected of you?
- Remote or in-person work?
- Independent or team effort?
- Time commitment?
- Likelihood of publication or presentation?

The Mentor:
- Availability and communication style
- Experience mentoring students
After your interview

• Send a thank-you email
• Follow up on mentor’s suggestions:
  • If they give you papers, read them
  • If they ask you to reach out to others in the lab, do it
• If you decide to pursue a topic of greater interest, tell them promptly!
The Application is Due March 3

Submit via https://medwisc.smapply.io/prog/ShapiroSummer

1. Facesheet
2. Research proposal outline (3 pages):
   1. Background and Significance
   2. Research Questions
   3. Research Design and Methods
   4. Student Role and Responsibilities
   5. Statement of Motivation
   6. Learning Objectives
   7. Mentoring Plan
3. Student Resume or CV
4. Mentor Statement of Support (request ASAP to avoid delays)
5. Mentor biosketch or CV
6. Copies of IRB Approvals
7. Program participation agreement
Shapiro graduates give advice to M1s:

• “Meet with your mentor before beginning your summer research to coordinate all the administrative items that need to be lined up before beginning your project.”
• “Plan ahead. Tell your mentors during the initial interview what kind of experience you want AND what you want out of it, then see how they respond and if they have a proven track record of producing success with past students.”
• “Make clear expectations with your mentor about what you would like to get out of the project and whether there will be publications”
• “Learn about the resources available to you and take advantage of them to advance your research and polish your skills, read relevant articles before you start.”
• “Take advantage of all the opportunities provided, and don't be afraid to try research in an area that you aren't sure you want to do a residency in.”
• “Find mentors who are great and research that you are actually interested in, otherwise it could be a long summer.”
• “Don't focus too much on what type of research it is - having an accessible and enthusiastic teaching mentor is invaluable.”
• “Pursue a project in something you haven’t done before. It will give you the opportunity to learn about a different field of medicine and rule in/out career opportunities.”
Shapiro graduates give advice to M1s:

• “Have a clear idea of the steps you need to take and the people who can help you at each step. When things don’t go as planned, try another direction. Take advantage of those around you who are interested in teaching you what they do and what opportunities and options exist for you as a learner and in a future career. Remember people’s names and send them thank yous for their time meeting with you.”

• “I would recommend trying to set up a day of the week that you plan to check in with your mentor. This helps keep you both on schedule.”

• “Find a topic or area that you are truly interested in and passionate about. When you really care about what you’re learning and the impact it will have the medical community, it makes the experience seem less like a "job" and much more beneficial and rewarding. Also, finding a mentor with similar interests, passions, and drive as you makes it a much more relaxing, beneficial experience.”

• “Seek a mentor out early, before winter break if possible! I waited until during winter break to contact mentors and that felt a bit too late. Look into your mentor’s previous work, read up on the project they are proposing, and set up a meeting. View this meeting as an interview - be professional and have questions prepared to show your interest. Show an interest in their field.”

• “If a publication is the end goal, start writing earlier in the summer. Without data, you can still work on the introduction and methods sections. It will save you a lot of time down the road.”

• “Go for it! Research is a great experience, and you will become a stronger student and better learner by undertaking a research project, exploring the literature, and testing a hypothesis.”
What did you gain from summer research?

• “A valuable insight into surgical research that will help guide me in my future career”
• “A broader understanding of what a career in medicine and research could look like in my future”
• “The knowledge that I am less interested in pursuing research long term”
• “Experience with qualitative research”
• “Global health experience”
• “Statistical techniques for processing large amounts of clinical data”
• “Shadowing experience”
• “Ability to work independently and formulate research questions”

• “Making sufficient progress to present at a national meeting and possibly publishing a paper or two”
• “The potential for future publications”
• “Learning to write a research paper and abstract”
• “I gained valuable insight into the world of research from a clinical perspective and gained a deeper appreciation for my colleagues in healthcare”
• “An appreciation for how data collection should be conducted to adequately and completely answer research questions”
What did you gain from summer research?

- “It really helped me approach how I can look at a public health problem in my community in the future and I feel empowered to look for other avenues to advance public health issues.”
- “I gained the ability to adapt to changing environmental circumstances. Communication is key in moving forward on a research project that may need to be adjusted due to the circumstances.”
- “Strong partnership with my mentor.”
- “Skills in literature review.”
- “Appreciation for basic science research.”

“I was able to understand that most medical papers are not that great due to small population sizes. I was able to learn how to properly interpret statistics, study design, and results from literature review.”

“The most valuable part of my clinical experience was the opportunity to shadow telehealth visits. I got to see what gender affirming health care looks like, and all the wonderful ways in which the PATH clinic helps young transgender and gender non-conforming kids.”

“Gaining a mentor who allowed me to grow as an independent researcher.”
Final Thoughts on Shapiro

• Family Medicine Summer Research and Clinical Assistantship is another great opportunity
• Global Health (start early, talk to Jim Conway!)
• Let me know if a dept is asking for a pre-application or has a different deadline
• If more than 1 student on a project, contact me
  • you absolutely have to write separate applications
  • you absolutely have to present separately at the Research Forum in November
• If you are pursuing a “competing” opportunity, I am still happy to help!

Main link with all Shapiro-related content (projects, application, etc)
https://summerresearch.med.wisc.edu/

Email me with any questions
Tsenkova@wisc.edu
What is the Path of Distinction in Research?

- **The Path of Distinction in Research** is designed to recognize students who go beyond the required curriculum to gain research skills and build a research portfolio that contributes to the advancement of science and the practice of medicine.
- PODR confers distinction in research upon graduation to students in the MD curriculum who conduct mentored research during medical school and meet program standards for achievement in research scholarship.
- Oversight is provided by the Student Research Committee.
- The vast majority of POD-R recipients have done a Shapiro.
POD-R Timeline

- Familiarize yourself with all PODR requirements.
- Start planning your research experiences that will help you meet all PODR requirements.
- Identify a research mentor and project.
- Create an application in Survey Monkey Apply and start logging your progress towards completing the requirements.
- You do not need to officially submit your application yet.

Two opportunities to officially apply for PODR:
- **Early Review (7/1):** We will review your application early if you have met all requirements and submit a complete application by July 1 of the summer between M3 and M4.
  - If approved, you can list PODR acceptance on your residency applications.
  - If not approved, you will be deferred to regular review.
- **Regular Review (9/1):** Fall of M4 is the last opportunity to submit your PODR application. By March 1 of M4, your application needs to show completion of all requirements in order to graduate with PODR.
POD-R Requirements

1. Apply by the appropriate deadline (July 1 for Early Review or Sept 1 for Regular Review)

2. Minimum of 16 weeks of research conducted under mentorship of UW faculty member or approved external mentor during medical school
   - Summer (Shapiro, etc.) + for-credit research elective in Phase 2 or 3;
   - Year-long fellowship;
   - Documented research time outside of formal experiences;
   - Work does not have to be paid to qualify;
   - Different projects with different mentors are acceptable.
3. Author one or more manuscripts
   • At least one manuscript that is published, in preparation, submitted, under review, or submission of a scholarly thesis. First author manuscripts are encouraged but not required.
   • Manuscripts should:
     • test hypothesis or examine research question (case studies, review articles generally not accepted as primary product);
     • reflect substantial independent effort of student;
     • ideally, demonstrate range of involvement in all stages of the research process
4. Present research at local forum or professional meeting AND regional or national meeting
   • Use SurveyMonkey to apply for travel support funds ($500 limit)
POD-R Requirements (continued)

5. Completion of at least 7 one-hour learning activities to enhance research skills

- Research Methods/Study Design
- Sampling and Biostatistics
- Human Subjects
- Bioethics/ Responsible Conduct of Research
- Scientific Writing- Abstracts, Scientific Writing- Manuscripts
- Presentation Skills
- Optional: Research Career Development and Grant Writing

Attendance at Surgery, Shapiro, or SSRCA seminars meet some requirements. Many online options meet the requirements (e.g., NIH, SMPH Video Library archived lectures). Examples are included in the application portal.
6. Engage in at least six additional research activities:
   • Leadership of a journal club discussion;
   • Presentation of work to department or division;
   • Attendance at Grand Rounds

7. Good student standing

8. Satisfactory evaluation and letter of recommendation by the research mentor.

9. Satisfactory evaluation of student’s ethical and professional behavior by the Dean of Students Office.

10. Approval of the student’s PODR work by the Student Research Committee, with recommendation to award PODR at graduation.
Next Steps

- Create an application at the online application portal: [https://medwisc.smapply.io/prog/PODR/](https://medwisc.smapply.io/prog/PODR/)
  - Application is open, portfolio style, during Phase 1 and Phase 2. Keep updating it with new information!
  - Document your research activities

- Plan ahead for summer M1-M2, research elective time in Phases 2 and 3

- Plan to present at a national conference
Frequently Asked Questions

• When will I get accepted?
  • Early Review applications are reviewed and notified in July of the summer between M3 and M4
  • Regular Review applications are reviewed in Fall, notifications in March

• What kinds of research topics are acceptable?
  • PODR projects can be in any area of basic science, clinical, translational, health services, global health, ethics, or population health research.

• Can I use research from 2 different labs?
  • Yes

• What if my paper isn’t published yet?
  • The Student Research Committee evaluates manuscripts on a case-by-case basis.

• I am missing one requirement
  • Reach out to Dr. Tsenkova

• Where can I find PODR info?
  • https://medwisc.smapply.io/program/PODR/

• Is there an academic standing requirement?
  • No