2020 Shapiro Summer Research Program: How to Find a Mentor and Project

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Mallory Jasicki, Rebecca Luoh, Emily Hoyer, Madilyn Sass (M2s) and Shapiro scholars in Summer 2020
Learning Objectives

1. Become familiar with the Shapiro Summer Research Program
2. Identify key resources for finding projects and mentors
3. Learn strategies for contacting and interviewing mentors
4. Know timeline and application process
5. M2s advice, experiences, and Q&A
Shapiro Summer Research Program

- 150 M1s participated in the 2020 Shapiro Summer Research Program
  - $400 per week stipend ($3200-$4000 total, in one payment in June)
  - 8-10 weeks full-time mentored summer research
- Can combine with other summer opportunities
  - Shorter term global health, clinical opportunities, vacations
- Curriculum sessions
- Counts towards Path of Distinction in Research requirements
- Can set you up for yearlong research experiences
- Student responsible for finding a mentor and project
All research areas are accepted!
<table>
<thead>
<tr>
<th>Research Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION</td>
<td>2%</td>
</tr>
<tr>
<td>PUBLIC OR COMMUNITY HEALTH</td>
<td>21%</td>
</tr>
<tr>
<td>HEALTH SERVICES/QI</td>
<td>29%</td>
</tr>
<tr>
<td>GLOBAL HEALTH</td>
<td>3%</td>
</tr>
<tr>
<td>TRANSLATIONAL</td>
<td>9%</td>
</tr>
<tr>
<td>CLINICAL</td>
<td>52%</td>
</tr>
<tr>
<td>BASIC SCIENCE</td>
<td>15%</td>
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</tbody>
</table>
For examples of 2020 projects, visit https://summerresearch.med.wisc.edu/research-forum-2020/
All projects presented at Research Forum were Shapiro projects, with the exception of the 11 projects listed below. It’s OK to contact those mentors and students if you are interested in working on their project, but to be accurate, do not call it a Shapiro project.

<table>
<thead>
<tr>
<th>Non-Shapiro Projects at the Research Forum</th>
<th>LastName</th>
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<tbody>
<tr>
<td>Room 13: Surgery - Presenter 6</td>
<td>Stoeckl</td>
</tr>
<tr>
<td>Room 9: Medicine and Psych - Presenter 4</td>
<td>Shana</td>
</tr>
<tr>
<td>Room 7: Neuro/Anesthesia - Presenter 14</td>
<td>Shogren</td>
</tr>
<tr>
<td>Room 9: Medicine and Psych - Presenter 14</td>
<td>Paulson</td>
</tr>
<tr>
<td>Room 8: Cancer - Presenter 3</td>
<td>McKay</td>
</tr>
<tr>
<td>Room 12: Surgery/Urology - Presenter 1</td>
<td>Jain</td>
</tr>
<tr>
<td>Room 12: Surgery/Urology - Presenter 2</td>
<td>Gunderson</td>
</tr>
<tr>
<td>Room 9: Medicine and Psych - Presenter 1</td>
<td>Ellenbecker</td>
</tr>
<tr>
<td>Room 13: Surgery - Presenter 1</td>
<td>Bond</td>
</tr>
<tr>
<td>Room 3: Ortho and Emergency Medicine - Presenter 5</td>
<td>Beck</td>
</tr>
<tr>
<td>Room 8: Cancer - Presenter 5</td>
<td>Backhaus</td>
</tr>
</tbody>
</table>
Prior research experience not required!
Level of Research Experience Before 2020
Shapiro Summer Research Project (in %)

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>ADVANCED</td>
<td>9</td>
</tr>
<tr>
<td>INTERMEDIATE</td>
<td>63</td>
</tr>
<tr>
<td>BEGINNING</td>
<td>23</td>
</tr>
</tbody>
</table>
There is no single “right way” to find a mentor and project.
How Did You Find Your Mentor? (in %)

- WORKED WITH MENTOR PREVIOUSLY: 9%
- WEB SEARCH: 1%
- STUDENT RESEARCH PORTAL: 53%
- RECOMMENDATION FROM A STUDENT: 6%
- RECOMMENDATION FROM FACULTY...: 14%
- THROUGH A CLASS OR LECTURE: 7%
- RESEARCH FORUM: 9%
Student Research Portal

https://summerresearch.med.wisc.edu/
Why Do Summer Research?

- 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
- 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
## Identifying Your Research Interests

<table>
<thead>
<tr>
<th>Student-generated Idea</th>
<th>Mentor-generated Idea</th>
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<tbody>
<tr>
<td>• Might take 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>
</tr>
</tbody>
</table>

Best scenario: pick something you like and something your mentor likes
...But don’t overthink it
Do you envision applying for residency in the department/area in which you worked (in %)?
Contacting Potential Mentors

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

- Be persistent

- Pursue 2 or 3 opportunities at the same time
Interviewing Potential Mentors
Be on time and prepared with thoughtful questions on project, role, mentor

The Project:
• Is IRB needed? Will it be approved by summer?
• Given the potential for research restrictions in summer 2021 due to COVID, how flexible is the project?
• Is it 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?
• What are your skills and training needs?
• Independent or team effort?
• Time commitment?
• Likelihood of publication or presentation?

The Mentor:
• Availability and communication style
• Experience mentoring students

Look at the list of questions on the portal under Resources
After your interview

• Send a thank-you email
• Follow up on mentor’s suggestions:
  • If they give you papers, read them
  • If they tell you to see others in the lab, see them
• If you decide to pursue a topic of greater interest, tell them promptly!
Shapiro Summer Research Program
Key Dates and Timeline

Medical Student Research Forum
- M1s attend and network;
- M2s present their research projects

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

M1s finish proposals and submit by deadline: March 3, 2021

Proposals are reviewed

Decisions are announced by April 15

Shapiro Summer Research Program
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
5. Mentor biosketch or CV
6. Copies of IRB Approvals

Shapiro 2020: How to Write a Shapiro Proposal
Jan 12 at noon

Drop in Sessions in February
SURGERY SUMMER RESEARCH PROGRAM
OVERVIEW

• Surgery historically accepts 20-30 UW Medical Students for summer research to the following:
  • Shapiro Program
  • Surgery Summer Research Experience Medical Students – T35
  • University of Wisconsin Voice Research Training Program
  • Research Programs at all career phases so opportunities available after medical school for qualified applicants

• All programs offer mentored research, targeted curriculum, and lab meetings specific to area of study
  • Students encouraged to submit abstracts and present their work at meetings
  • Curriculum provides a varied overview of research in surgery

• Opportunities for professional development
COURSEWORK AND SEMINARS

• Open to all Shapiro students – Required for Surgery Students
• Seminars
• Professional Development
UNKNOWNNS

• Research Space – Do not know if we can provide touchdown space in summer 2021
• HealthLink – Remote access to HealthLink is not allowable at present.
• Travel – Travel is not currently allowed for UW
• Global Health Projects – These cannot involve external travel at present
SUMMER RESEARCH T35

• Summer research experience for medical students
• Funded by NIH NIDDK

Projects should be in the following Research areas:
  • Diabetes
  • Obesity
  • Endocrine disorders
  • Nutritional disorders
  • Digestive disease
  • Liver disease
  • Kidney disease and/or urologic disease

Eligibility: Must be a medical student at an accredited institution and a US Citizen/permanent Resident. Project must fit NIDDK research areas
VOICE RESEARCH T32

• Funded by NIDCD
• Research focuses on the field of Voice Research
• **Eligibility:**
  • Students should show initiative and the ability to follow through in order to complete short-term project
  • Must be a medical student at an accredited institution (i.e. UW Madison)
  • Must be US Citizen or Permanent Resident
# 2021 OPPORTUNITIES

<table>
<thead>
<tr>
<th>Health Services Research in Surgical Oncology</th>
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<tbody>
<tr>
<td>Patient treatment adherence</td>
</tr>
<tr>
<td>Basic Science: Voice and Swallow</td>
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<tr>
<td>Basic Science: Co-stimulation blockade may improve engraftment of stem cells in an effort towards reaching tolerance for transplant recipients</td>
</tr>
<tr>
<td>Global Health</td>
</tr>
<tr>
<td>Clinical Research in Surgical Oncology</td>
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</table>
TO APPLY

• Please apply through the Shapiro program as normal.
  • Surgery opportunities posted on Portal
• All surgery applications are automatically considered for the T35 or T32
• If you have a specific interest in Voice or NIDDK T35, please contact Sarah for more information

FOR MORE INFORMATION

• Website: https://www.surgery.wisc.edu/education-training/
• Or contact: Sarah Pavao 608-262-0744 or pavao@surgery.wisc.edu
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”
Sometimes, even if I stand in the middle of the room, no one acknowledges me.
Last Thoughts

• Check the portal frequently
  • Main route to finding a mentor, but also feel free to approach faculty and students
  • Do your part to keep portal up to date
    • Email me and cc mentor if more students are not needed
• Don’t wait until last moment to ask me for help
  • But do get in touch even last minute
M2s and Q & A