# Mentor Directory: Roswell Park Summer Research Experience Program in Oncology for PA Students

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# Internship Directory: Roswell Park Summer Research Experience Program in Oncology (Medical Students)

| Mentor | Research Areas | Project description |
|---|---|---|
| **Elizabeth Bouchard**<br><br>*Dept. of* ***Cancer Prevention and Control***<br><br>**www.roswellpark.org/Elizabeth-Bouchard**<br><br>**Mentoring style-** *Eager to involve trainees in all aspects of the research process, including interacting with research participants. Excited to expose trainees to social science research, and how it applies to medicine.*<br><br>**Expectations of summer student-** *Comfortable interacting with cancer patients and their caregivers. Interested in learning more about sociology and health disparities research. Interested in learning about social science research methods.* | **Scientific Research**<br><br>Sociology; Pediatrics | **Examining Experiences of Cancer Caregivers**<br>The goal of the research in our lab is to understand experiences of informal cancer caregivers (non-professional caretakers, often family members). Our research is social science oriented, mostly based in sociology. There are three main research studies we are currently working on: (1) understanding how social network experiences shape caregiver stress among parents of pediatric cancer patients, (2) testing an intervention to improve parents' abilities to administer medication to young children, and (3) understanding "stress contagion" among patients and their caregivers (e.g. does caregiver stress shape patient cancer outcomes?). types of work involved include management of survey data, helping collect survey data, interacting with study participants, attending lab meetings, and helping analyze data. Sociology;#Pediatrics<br><br>**Project phase:** Elements of all three (Design, Discovery, Validation) |
| **Gal Shafirstein**<br><br>*Dept. of* ***Cell Stress Biology***<br><br>**www.roswellpark.org/Gal-Shafirstein**<br><br>**Mentoring style-** *A teamwork that includes students, faculty and outside collaborators. Use weekly lab meetings for reporting results, presentation of new ideas. I have an open-door policy for research discussions as needed.*<br><br>**Expectations of summer student-** *Conduct experiments with supervision from graduate students in the lab. Document the work done. Record results. Present results and plans in our weekly lab meetings.* | **Scientific Research**<br><br>Photodynamic Therapy; Cancer biophysics | **Treatment Planning and Light Dosimetry in Photodynamic Therapy (PDT)**<br>My research team is focused on the development and implementation of treatment planning and light dosimetry in PDT. My group includes, 2 engineers, 2 research scholars and 3 pre-doctoral student. We do preclinical and clinical studies, and investigate combination therapies.<br><br>**Project phase:** Elements of all three (Design, Discovery, Validation) |

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| **Amanda Quisenberry**<br><br>*Dept. of* ***Health Behavior***<br><br>**www.roswellpark.org/Amanda-Quisenberry**<br><br>**Mentoring style-** *I am an interactive, involved mentor with a desire to share my work and motivate young investigators.*<br><br>**Expectations of summer student-** *The summer intern will be trained in using behavioral economic and eye tracking methodologies, how to collect quality data from human participants, and how to clean and organize data for analysis. The opportunity for data analysis and manuscript preparation exists based on interest and skill level.* | **Scientific Research**<br><br>Cancer prevention and epidemiology | **Tobacco Product Consumption under Hypothetical Flavor Policy Environments Using Behavioral Economic and Eye Tracking Methods**<br>The goal of this project is to identify the behaviors of menthol smokers when various hypothetical tobacco flavor policies are enacted using the Experimental Tobacco Marketplace. Eye tracking methodology is enacted simultaneously, measuring objective attention to product components while purchasing under these conditions. Research tasks will include collecting and analyzing data with opportunity for manuscript preparation. Involvement in other ongoing studies of the behavioral economics of tobacco products is also possible.<br><br>**Project phase:** Elements of all three (Design, Discovery, Validation) |

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| **Ethan Abel**<br><br>*Dept. of* ***Molecular and Cellular Biology***<br><br>**www.roswellpark.org/Ethan-Abel**<br><br>**Mentoring style-** *As a new investigator, my mentoring approach is very hands-on. I typically go into great detail with trainees as to what the hypothesizes we are trying to answer are, what techniques we will use to answer it and why, and the actual principles behind the techniques. I typically demonstrate techniques first, followed allowing students to do techniques in supervised manner until they are proficient, but remain regularly within reach for experimental guidance, technical support, or anything else a student has questions regarding.*<br><br>**Expectations of summer student-** *By the end of their time in the lab a summer student should be able to become proficient in a small number of routinely used techniques/approaches and with guidance/supervision carry out a set of pre-designed experiments in a reproducible manner so that some conclusions regarding the questions behind the experiments can be confidently made. Students should gain a general/basic understanding of field the lab is in and the lab's overall research interests/goals and a solid understanding of why the experiments they are conducting are being done. I expect all trainees to be excited, hardworking, careful, honest, and mutually respectful so as to promote and maintain a collaborative work environment that conducts high-quality science at all times.* | **Scientific Research**<br><br>Cancer molecular and cellular biology; Cancer pharmacology and therapeutics | **Epigenetic targeting of pancreatic cancer stem cells**<br>Students will test the effects of drugs called BET-inhibitors on pancreatic cancer stem cells (PCSCs), which are a subtype of cancer cell that fuels the tumor, as well as the interplay between BET-inhibitors and proteins that drive PCSCs. Students will use human cancer cells as models, and utilize protein, RNA, and DNA analyses in their studies.<br><br>**Project phase:** Elements of all three (Design, Discovery, Validation) |

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| **Dimiter Kunnev**<br><br>*Dept. of* ***Molecular and Cellular Biology***<br><br>**www.roswellpark.org/Dimiter-Kunnev**<br><br>**Mentoring style-** *Formulating the scientific goals, let the student read and study, I like provocative scientific thinking, demonstrate how the experimental procedure works and allow student to perform the experiments. I like early development of presentations and figures.*<br><br>**Expectations of summer student-** *Student should be: eager to learn, responsible to execute experiments, asking lots of questions.* | **Scientific Research**<br><br>Cancer molecular and cellular biology; Cancer pharmacology and therapeutics; Cancer genetics | **DNA replication as cell cycle regulation in cancer cells**<br>We are seeking to define the mechanisms which determinate the proper DNA replication machinery assembly. This study would be investigated from different angles in normal and cancer cells. Major goal of our research is to utilize this knowledge for specific treatment of cancer.<br><br>**Project phase:** Discovery- initial probing of scientific problem using established methods with a concentration on techniques, data analysis |
| **Andrew Fabiano**<br><br>*Dept. of* ***Neuro Oncology***<br><br>**www.roswellpark.org/Andrew-Fabiano**<br><br>**Mentoring style-** *Clinical Exposure*<br><br>**Expectations of summer student-** *Clinical Exposure* | **Clinical Research**<br><br>Neurosurgery | **Neurosurgery Clinical Research Experience**<br>The purpose of this internship is to provide a PA student with a clinical research experience and clinical exposure to inpatient and outpatient medicine. Exposure will include ambulatory clinic, inpatient rounds, radiosurgical procedures, and operative procedures.<br>A project will be agreed upon by Dr. Fabiano and the summer student. Past project topics have included:<br>*The Clinical Management of Glioblastoma Multiforme*<br>*Stereotactic Guidance in Neurosurgery*<br><br>**Project phase:** Elements of all three (Design, Discovery, Validation) |

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| **Khurshid Guru**<br><br>*Dept. of* ***Urology***<br><br>**www.roswellpark.org/Khurshid-Guru**<br><br>**Mentoring style-** *Dr. Guru will meet with you formally twice over the course of the summer to discuss your projects and career goals. You will meet informally with Dr. Guru when he comes to the ATLAS offices throughout the summer. The ATLAS Assistant Director will manage your time, attendance, and program access while at Roswell Park and you will report directly to them. You will work closely on a daily basis with the Clinical Fellow and Project Coordinators to develop your project and they will be your clinical resources. All members of ATLAS will be available for career advice.*<br><br>**Expectations of summer student-** *We expect all summer students to truly become part of the ATLAS team! The most successful students show a keen interest in the research we are doing and go on to write their own manuscripts and submit abstracts that can then be presented at the conference of their choice. We eat lunch as a team every day and look for students who are willing to socialize and get to know our team.* | **Scientific Research**<br>**Clinical Research**<br><br>Urology; Medical Oncology; Surgical Oncology; Surgical training, human factors engineering, etc. | **ATLAS Internship**<br>Specialties: 1) Medicine 2) Engineering 3) Medical Illustration 4) Data Managing Past Intern Accomplishments: 1. Published as co-authors of manuscripts, posters, and presentations in prestigious journals and conferences such as the Journal of Urology, BJUI, IJU, AUA, ERUS, EAU, etc. 2. Develop medical technologies and apply and achieve patents for their inventions 3. Invited to attended and present projects at national conferences 4. Develop patient education tools (Android application) 5. Become a co-consenter in clinical trials where they are able to interact with patients in Roswell clinic 6. Become wet-lab certified to bed-side assist in robotic surgery labs 7. Log hours of OR observation and video classification of real cases 8. Complete the Introduction to Robotic Surgery and Introduction to Laparoscopic Surgery Curriculum (Certification) 9. Learn how to navigate patient records on multiple web-based platforms 10. Learn how to maintain, develop, and manipulate databases for research purposes<br><br>**Project phase:** Elements of all three (Design, Discovery, Validation) |