Q9. 
Mentor Research Application for Summer 2020 (June 1 - August 7)

Welcome to the UTHealth - Cancer Prevention & Research Institute of Texas (CPRIT) Fellowship in Innovation for Cancer Prevention Research - UTHealth’s training program for undergraduates, pre- and post-doctoral fellowships in cancer prevention.

This program goes beyond being a quality cancer education and career development program to focus on helping those seeking a career in cancer prevention and control research to learn to ask the important research questions, apply cutting-edge methods, and move the field of cancer forward.

We appreciate your willingness to take on the mentorship of one of our undergraduate trainees. This application will help orient you with the goals and expectations of our summer mentors and trainees.

All applications must be submitted by 11:59 PM on Friday, January 17, 2020.

Q10. Faculty Mentor Information

Q1. First name
Daniel

Q2. Last name
Harrington

Q11. Phone number
713-486-4487

Q12. E-mail address
daniel.harrington@uth.tmc.edu

Q4. School/Campus Affiliation
    UTHealth School of Public Health- Houston
    UTHealth School of Biomedical Informatics
    UTHealth School of Dentistry
Q13. **Research Projects**

Each fellow is expected to spend an average of 40 hours/week on his/her research project, organized seminars and innovation generation course.

Applicants will click on the titles of projects they are interested in to see the description. Give your project an inviting name! Acceptable projects do not need to be externally funded.

Q15. Project title

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High-Throughput, High-Content Drug Screening on a Microfluidics Perfusion Plate
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Q14. Lay summary of the project (100 words maximum). Examples of project descriptions can be found [here](#).

If pasting or deleting text into this field, please make sure to press the space bar after the last word in order to see your accurate word count.

Our group collaborates with an industry partner (Mimetas), toward developing their novel microfluidics-based multiwell plate for the 3D culture of cancer cells in hydrogels. We contribute background in 3D culture, hydrogel synthesis/design, and in vitro culture of these particular patient-derived xenografts (PDXs), which are considered one of the best models for retaining native tumor behavior. Our team also uses Imaris software for 3D/4D quantification of tumoroid viability, morphology, and phenotype. A CPRIT summer trainee would tackle some associated aspect of the project. Our 2019 CPRIT trainee won Best Poster and Best Elevator Pitch for her work; let's do it again!!
Q16. Project will require contact with:

- [ ] Public
- [ ] Patients
- [x] Biological samples
- [ ] Animals
- [ ] None of these

Q17. Does the project require IRB approval?

- [ ] Yes
- [ ] No

Q18. If yes, please provide the IRB number below.

HSC-DB-17-0924

Q19. Does the project have a Laboratory Safety Protocol?

- [ ] Yes
- [ ] No

Q20. If yes, please provide the Protocol Number below.

IBC-17-070

Q21. Will the summer fellow be added to the protocol?

- [ ] Yes
- [ ] No

Q22. End Products of Summer Fellowship

Q23. 

End products for all Fellows:
1. Complete a project explicitly using the tools of innovative thinking.
2. Prepare and present a research poster on their project, including how you applied tools for innovative thinking.
3. Participate in the 90-second elevator speech competition.

Q25. Project-specific end products (determined by Mentor):

Examples:
1. GIS map to track whether and other environmental conditions for day laborer “corners” throughout Houston
2. Design for a social network platform for follow-up with research participants, manuscript on xxx to be submitted for publication
3. Abstract on yyy to be submitted to a scientific meeting

Contribution to a paper or presentation; this would depend on the data that is generated, and the particular project that we co-develop. As proof of our support for Fellows: Our 2019 Fellow is First Author of a paper that we are submitting now. And, as mentioned, she won Best Poster and Best Elevator Pitch for 2019 for her work, and we hope that this at least partially reflects the time that we invested toward her success. We are eager to share our research with the community, and would always hope to do the same with a summer Fellow.

Q27. Fellows' Activities

Q28. Activities for all fellows:
1. Complete the Massive Open Online Course (MOOC) on Innovation Generation
2. Participate in weekly MOOC reviews and occasional cancer-related seminars in Houston and/or remotely via ITV
3. Apply the tools of innovative thinking in project discussions
4. Participate in two elevator speech workshops
5. Provide mid-course and final evaluation feedback
6. Meet with the preceptor or representative to discuss the training experience, progress, and challenges
7. Prepare and present a poster on the summer research
8. Present a 90-second elevator speech

Q29. Project-specific Trainee Activities (determined by Mentor):
Example: Fellow will commit to the design and analysis of a mini project YYY as part of a larger project

1. Co-develop an activities list, involving elements of 3D cell culture or analysis (imaging or quantification of image stacks).
2. Participate in weekly videoconference meetings with our collaborators
3. Process and quantify images

Q31. Learning Objectives:
By the end of the summer experience, the following objectives should be achieved.

Q32. Objectives for all fellows:
1. Describe and apply the tools of innovative thinking to increase creativity
2. Develop communication and presentation skills

Q33. Project-specific Learning Objectives (determined by Mentor):
Examples:
1. Fellow will be able to write instructions for low literacy audiences
2. Fellow will design a mini project with supervision
1. Fellow will co-develop a project associated with our industry partner. 2. Fellow will develop one or more research outputs.

Q34. Are there any special fellow characteristics that would be desirable? Examples: major, interests, language, or culture

Mammalian cell culture experience could help, but is not absolutely necessary.

Q35. Mentor Responsibilities
1. Attend the closing ceremony (elevator speech competition and poster presentation) on August 7, 2020.
2. Provide feedback on the program experience to the program coordinator.
3. Meet with the fellow weekly to discuss training experience, progress, and challenges.
4. Encourage the use of the tools for innovative thinking.
5. Notify Dr. Mullen if the intern is not meeting the agreed upon responsibilities as early as possible to allow problem-solving.
6. Complete an evaluation of the fellow at mid-course and end of the program.

Q36. If you plan to delegate some of the supervision to another lab member, please list their name and contact information so that we can copy them on all correspondence.

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<tr>
<th>Full name</th>
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<tr>
<td>Highest degree held</td>
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Q37. Will you be out of lab for more than 2 weeks during the training period (June 1, 2020 - August 7, 2020)?

- Yes
- No
Location: 29.70596923828, -95.402000427246
Source: GeoIP Estimation