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Q1 Faculty Information:

Last name:	Zarella
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Faculty Position:	Research Assistant Professor
Department:	Pathology & Laboratory Medicine
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Q2 Type of Research? **Translational Research**

Q3 Please describe your research interests:

Medical informatics, tissue imaging, and computer vision.

Medical Student Research Opportunities

Q4 Please provide a brief description of research opportunity/project(s):

1) Title of project(s):

OCT imaging for tumor detection and characterization

Brief Description:

Optical coherence tomography (OCT) is a high resolution imaging modality that enables tissue imaging in depth (similar to MRI/CT, but with nearly cellular resolution). We use OCT to image excised tissue for tumor assessment and grading.

Duration:

Minimum 3 months

Time commitment:

Minimum 10 hours per week in the lab

Specific Requirements:

Interest in imaging and/or pathology

Funded or unfunded (yes or no):

No

2) Title of project(s):

Pathology informatics for data archival and analysis

Brief Description:

Large database systems serve as the backbone for medical informatics. In the pathology department, we have a vast amount of imaging data and clinical data that, with proper organization, can be utilized for informatics research including biomarkers, modeling, and prediction of disease recurrence based on clinicopathologic features

Duration:

Minimum 3 months

Time commitment:

Minimum 10 hours per week in the lab

Specific Requirements:

Some background in computing

Funded or unfunded (yes or no);

No

Q5 Please indicate the specific level of experience required, if applicable:

Open to all medical students
