As an Intensity Frontier Fellow, I will be working on R&D for light collection systems in liquid argon time projection chambers (LArTPCs). While the techniques for collecting charge signals in these detectors are well--established, the techniques for extracting and utilizing the scintillation light is less so. However, successfully using the information will be important for neutrino experiments that use these types of detectors to accomplish many of their physics goals. This makes R&D in these systems particularly interesting due to the many possibilities for improvement and innovation. While at Fermilab, I will be pursuing few directions. One will be to study and develop TPB-coating light guide bars in both pure and xenon--doped liquid argon. Another will be participate in the commissioning and operation of the photon detection system on MicroBooNE.  I am also interested in applying GPGPUs to accelerate simulations of how argon scintillation light propagates in LArTPCs, in particular for MicroBooNE and LAr1ND.