



Massachusetts General Hospital Cancer Center Building 149, Thirteenth Street, Rm 6-618B Charlestown, Massachusetts 02129

Email: dting1@mgh.harvard.edu Tel: 617-724-4948 Fax: 617 724-3676 **David T Ting, MD** Associate Clinical Director for Innovation Massachusetts General Hospital Cancer Center Assistant Physician Tucker Gosnell Center for Gastrointestinal Malignancies

Assistant Professor of Medicine Harvard Medical School

March 29, 2021

The Ting Laboratory at the Massachusetts General Hospital (MGH) Cancer Center and Harvard Medical School is looking for research technician applicants.

The laboratory focuses primarily on translational research projects in gastrointestinal malignancies with a particular focus on pancreatic cancer.

There are two major projects being pursued by the laboratory.

The first is the study of single cell heterogeneity and plasticity in pancreatic cancer. Using a combination of single cell RNA-seq, quantitative digital image analysis, digital spatial transcriptomics, and circulating tumor cell microfluidics, the lab is studying the cellular and microenvironmental factors in the development of heterogeneity and cancer cell plasticity. (Yu M\*, Ting DT\*, et al. Nature 2012; Ting DT et al. Cell Reports 2014; Bhan I et al. Gastroenterology 2018; Ligorio M et al. Cell 2019; Porter RL et al. PNAS 2019; Franses JW et al. Nature Communications 2020).

The second is the study of a novel class of non-coding RNAs called satellites, which were found to be highly and specifically expressed in cancers compared to normal tissues (Ting DT\*, Lipson D\*, et al. Science 2011; Bersani et al. PNAS 2015; Desai et al. JCI Insight 2017; Solovyov et al. Cell Reports 2018). This work has implications as a clinical cancer biomarker, as well as an interesting area of research to elucidate the role of these satellite RNAs in cancer biology.

These projects have led to the formation of 3 biotech start-up companies from the lab: PanTher Therapeutics, Rome Therapeutics, and TellBio, Inc.

Given the integration of science and engineering in these projects, we are looking for interested researchers with a BS/BA in chemical engineering, bioengineering, chemistry, biochemistry, or biology with a background/training in quantitative science.

The applicant will be expected to become proficient in molecular biology techniques (next generation sequencing, qPCR, western blot, cell culture) and be involved with processing of human blood samples on CTC microfluidic devices. The applicant will maintain all data generated in a digital laboratory notebook, analyze data through a variety of computer programs (Excel, R based applications, Matlab), and participate in weekly lab meetings. It is the expectation that the applicant will assist in preparing and editing manuscripts from data generated in research projects. There will also be an option to shadow physicians at the MGH if a clinical experience is desired by the applicant. Dedicated mentorship and preparation for medical or graduate school will be provided.

The laboratory is currently composed of 1 hepatologist junior faculty, 2 oncology junior faculty, 4 postdoctoral researchers, 1 microscopy staff scientist, 7 research technicians, and a laboratory manager. The laboratory is located at the MGH Cancer Center, Bldg. 149, Charlestown, MA, 02129. We are looking for a 1-2 year commitment for this position. Inquires for summer positions will also be accepted.

If you are interested in this position, please email David T. Ting, MD at <u>dting1@mgh.harvard.edu</u> with your CV and a brief description of your goals from this research experience.

Sincerely,

toth

David T. Ting, MD