



## Postdoctoral Position in Cancer Immunology

We are seeking a postdoctoral candidate for a high-impact project on Cell Metabolism in Cancer Immunotherapy Research Program at University of Central Florida (UCF). The position will be mentored by Dr. Hung Nguyen, an Assistant Professor of Medicine in College of Medicine at UCF.

**Scope of project:** This project will focus on understanding how **Cell metabolism** and **ER stress** regulate T-cell immunity **after hematopoietic stem cell transplantation** (HCT) and **adoptive T-cell transfer** (ATC) therapy. The goals of the project will be: 1) to determine how ER stress and metabolic changes impact on the T-cell fate and function after transplantation; 2) to investigate the impact of ER stress and metabolism targeting on epigenetic regulation of T-cells; 3) to study how ER stress or metabolism targeting synergize with checkpoint blockade therapy in solid/ liquid cancer treatment. In addition, the project will pursue the translation of therapeutic approaches of targeting cell metabolism and ER stress into the clinic.

**The Nguyen Lab:** The Nguyen Lab is devoted to two missions: 1) **Research** and 2) **Education**. First, the **research mission** is to generate novel approaches to enhance therapeutic application of current cancer immunotherapies including HCT and ATC. We will utilize state-of-the-art technologies, including multiple mouse- and patient-derived xenograft models of HCT and ATC, primary cell culture, wide range of different biological and molecular techniques including RT-PCR, western blot, RNA sequencing, Chip-seq, confocal microscopy, Seahorse, metabolic flux assays, etc. Second, an **educational mission** is to educate and mentor junior scientists in cancer immunotherapy. UCF is an interactive and collaborative environment sufficient to perform high quality science. We offer a combination of training opportunities including a weekly seminar, journal clubs, and career development activities (writing protocols and manuscripts, developing new research project, participating in scientific events, providing the supervisor to other lab members) during postdoctoral training.

**Preferred and required skills and expertise:** Candidates should possess PhD or MD/PhD degrees (preferably recently graduated), be fluent in verbal and written English, and have an extensive background and record of accomplishment of publication in **immunology, cancer biology and hematology**, and a commitment to team science in a multidisciplinary setting. Research experience in tissue culture, **flow cytometry**, biological and molecular biologic methodologies, and **mouse research techniques** is essential. Training or interest in -omics technologies (**metabolism/metabolomics**, lipidomic, epigenomics, transcriptomic, or proteomics) and data analysis is preferred. Prior experience in the use of **stable isotope labeling**, interpretation of **SIRM** data, *in vivo* metabolism studies, **RNA-seq**, CRISPR/Cas9, and/or genetically engineered mouse tumor models of ATC or HCT is ideal.

**Contact Information:** Please send a statement of current and future research interests (1-2 pages), curriculum vitae (please include the statement indicating your role in writing each paper), draft of any manuscripts in preparation that you wish to be considered, a short summary of their dissertation research, and provide name and contact information of up to three referees to:

### **Hung D. Nguyen, Assistant Professor of Medicine**

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