

HERBERT IRVING COMPREHENSIVE CANCER CENTER
A NATIONAL CANCER INSTITUTE COMPREHENSIVE CANCER CENTER

**Postdoctoral position in pancreatic cancer translational research:
Immuno-oncology**

We are seeking a leader for a high-impact project in immuno-oncology within the pancreatic cancer research program at Columbia University Irving Medical Center. The position will be co-mentored by Dr. Gulam Manji (a physician scientist and Director of Pancreas Oncology at Columbia Presbyterian Hospital) and Dr. Kenneth Olive, an Assistant Professor of Medicine who leads a multidisciplinary translational therapeutics research program in pancreatic cancer.

Scope of planned research project:

The scientist will lead an Immuno-oncology project within the group of Dr. Gulam Manji, a GI medical oncologist and physician scientist who leads multiple investigator-initiated clinical trials and is focused on immunotherapy research in pancreatic cancer. Dr. Manji's research aims to target key pathways within the tumor microenvironment to identify superior treatment options for pancreatic cancer patients and to elucidate the underlying mechanism(s) of immunotherapy resistance. Pre-clinical mouse models and human tissue samples from early phase clinical trials are used to address these questions. The project will involve analyzing the immune tumor microenvironment within human tissue from pancreas cancer patients treated with distinct immunotherapy combinations. Techniques utilized will include multiplex immunofluorescence and RNA-seq on laser capture microdissected epithelial and stromal cells, among others. The scientist will be co-mentored by Dr. Olive and have full access to the resources of the Olive Laboratory.

The Olive Laboratory: The Olive Lab is devoted to two overarching missions: first, a **research mission** to identify critical tumor-specific dependencies of pancreatic cancer and facilitate the development and translation of related therapeutic approaches; second, an **educational mission** to educate and mentor junior scientists in translational oncology research. We utilize multiple pancreatic cancer model systems including genetically engineered mouse models, patient-derived xenografts, primary human tissue samples, and tumor explant cultures. The Olive Lab is organized around our "Mouse Hospital", a translational therapeutics infrastructure designed to leverage mouse models for translational applications. The Mouse Hospital incorporates multidisciplinary expertise in small animal imaging, surgery, pathology, pharmacology, *ex vivo* molecular biology, and information management. Individual projects in the lab span the range of biological sub-disciplines, with particular emphases on Systems Biology, Cancer Metabolism, Stroma/Immune interactions, DNA damage response, Small Animal Imaging, and Translational Therapeutics. Our lab also makes extensive use of the clinical research-oriented resources of the Columbia Pancreas Center, a high volume clinical multidisciplinary team focused on the care and treatment of pancreatic cancer patients, including access to a large-scale biorepository of frozen pancreatic tumor samples. The ultimate goal of our work is to translate key findings into clinical practice, with multiple clinical trials and protocols, both at Columbia University and beyond, already having emerged from our research.

Preferred and required skills and expertise: The successful candidate for this position will have significant experience in the area of cancer immunology during their graduate studies. The position requires an individual who is highly motivated and who possesses excellent organizational skills. Experience in mouse models, multiplex immunofluorescence, laser capture micro dissection, and/or an understanding of computational techniques are desirable. Strong cross-disciplinary communication

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skills are required to effectively coordinate with members of our clinical trials team, immunology and pathology cores, and computational biology collaborators. The candidate will also exhibit superior skills in written and oral communication, personal leadership, and a commitment to team science in a diverse, multidisciplinary setting. While prior experience using *in vivo* model systems is not a requirement, at least basic familiarity with mouse handling is desirable; experience with *in vivo* metabolism studies and/or genetically engineered mouse models of cancer is ideal.

Contact information: For questions or inquiries about this position, please contact Isabel Goncalves: ig2384@cumc.columbia.edu. For applications, please provide a cover letter, a copy of your CV, and drafts of any “manuscripts in preparation” that you wish to be considered. In your CV, please include a statement indicating your role in writing each listed paper. Please also provide the names and contact information of up to 3 referees.