Yale SCHOOL OF MEDICINE

Postdoctoral Associate in Cancer Biology (Samir Zaidi's Lab)
Yale School of Medicine and Yale Cancer Center
Center of Molecular and Cellular Oncology (CMCO)
Start Date: 3/1/2025–
Email: samir.zaidi@yale.edu

Description: We are seeking highly motivated individuals to join the laboratory of Dr. Samir Zaidi opening 3/1/2025. Our laboratory is based within the Center of Molecular and Cellular Oncology (CMCO) in the Yale School of Medicine and Yale Cancer Center. We focus on principles of cancer plasticity, metastases and the tumor microenvironment, and how these processes mediate treatment resistance. We have recently discovered key pathways that are associated with cellular plasticity and regulate therapeutic response (*Science 2022* [PMID 35981096] and *PNAS* 2024 [PMID: 38968122]). Our laboratory builds upon these studies to uncover how tumor cells interact and communicate with their microenvironment, the determinants of metastatic niches, and the mediators of critical cell–cell interactions. Our science will be rooted in basic biology and have a strong translational perspective towards developing novel therapeutics for cancer patients.

Principal Investigator Background/Research: Dr. Zaidi (MD/PhD) is a physician–scientist who has been committed to understanding the mechanisms underpinning oncologic and developmental disorders (publications). Dr. Zaidi first worked in the laboratory of Dr. Rudolf Jaenisch at MIT, where he studied stem cell reprogramming, and thereafter, in the laboratory of Dr. Richard Lifton at Yale during his MD/PhD, where he focused on the genetics of complex human diseases and cancer (*Nature* 2013 [PMID 2366595], *Science* 2015 [PMID 26785492], *Nature Genetics* 2017 [PMID 28991257]). Dr. Zaidi then completed his internal medicine residency in the Stanbury Physician–Scientist Program at the Massachusetts General Hospital (Harvard Medical School), his medical oncology fellowship at Memorial Sloan Kettering Cancer Center (MSKCC), and post–doctoral training in the laboratory of Charles Sawyers. Dr. Zaidi joined the MSKCC faculty as an Assistant Attending and the Louis V. Gerstner Jr. Scholar and will be joining Yale in March of 2025 as the Stephen Sherwin MD Investigator and Assistant Professor. Dr. Zaidi has been the recipient of awards from the Department of Defense (DoD), American Society of Clinical Oncology (ASCO), the Prostate Cancer Foundation (PCF), NIH NCI K08, and Burroughs Wellcome Fund.

Training: The postdoctoral associate will be directly trained and supervised by Dr. Zaidi with respect to scientific knowledge, project development and laboratory techniques. This training will be further supported by the staff, colleagues, and peers within his lab, the CMCO, and broader Yale scientific community. These techniques include organoid culture, co–culture assays, rapid genomic editing tools, multi–allelic mouse models, mouse live imaging, establishment of new transplant models, drug treatments, collection of tissues and fluids, pathology, immunoprobing, high dimensional flow cytometry, spatial and single cell transcription and accessibility profiles, along with an array of molecular biology tools (DNA, RNA and protein analyses, cloning and lentiviral production). The postdoctoral associate may also be involved in mouse colony maintenance, general upkeep of the laboratory equipment, stocks, and ordering and maintaining inventory.

Mentoring: Given that mentoring is one of the most complex and developmentally important aspects of scientific life, Dr. Zaidi is committed to providing the best mentorship to all his incoming trainees, students, mid–career, and senior scientists. Dr. Zaidi will meet with each postdoctoral associate weekly to discuss scientific results, experiments, and career goals. The team will work together to create a plan that would allow the postdoctoral associate to have learn critical science principles, experimentation tools, and scientific interpretation, in order to bridge to a competitive career in science, medicine, or industry. Of note, Dr. Zaidi has been a recipient of some of the best mentorship,

and has a strong track record of mentoring postgraduates, PhD, MD/PhD, and MD students. Additional mentoring avenues can be set up through collaborations and connections with other labs, clinical colleagues, and peers/faculty members at Yale School of Medicine and Yale Cancer Center.

Philosophy: We are strongly committed in creating a dynamic, open and inclusive scientific team. We focus on rigorous science conducted within an environment of collegiality, support, and respect. Dr. Zaidi's group will focus on developing robust experimental systems that serve as pertuable systems that may drive critical bench–to–beside translation. Overall, we strive for building ideas and concepts that can be freely shared within the group to create an ecosystem of scientific excellence.

Environment: Dr. Zaidi's team will be composed of 4–6 members and will grow as new research discoveries and advances are made. The lab is located in Downtown New Haven at 300 George Street, 6th floor, which is where the CMCO resides and integrally embedded within the Yale School of Medicine. Dr. Zaidi's group shares the floor with other laboratory ranging from early, mid–career and well–established investigators. The CMCO often hosts seminars, scientific meetings, work in progresses, and provides a rich and vibrant community and environment for scientists. Of note, the new mouse facility and flow core facility are located on the 2nd floor of the building. There will opportunities to participate in multi–lab meetings, journal clubs, departmental research-in-progress seminars, and scientific retreats. Additionally, trainees will be integrated into the thriving research, education, and health–care communities as well as training and well–being programs across Yale University. New Haven is a lively and culture-oriented city with buzzing restaurants and arts, and is located on the East Coast, which is a short train ride to New York City and Boston.

Qualifications: Applicants must have a recently obtained/upcoming PhD or MD/PhD degree in a relevant field and one first-author publication in a peer-reviewed journal. Applicants should have experience in cancer biology, molecular biology, genetics/genomics or related fields. Experience with mouse work is encouraged but not required if the candidate wants to learn. Most important qualifications are high self–motivation, curiosity, and rigor, along with excellent written and oral communication skills. Candidates should also be organized, honest and reliable, have good attention to detail, be able to multi–task and perform independently as well as in a team environment.

Responsibilities include:

A. Conceptualization, designing and progressive independent execution of experiments to streamline the project's aims
B. Active participation in lab meetings, journal clubs, improving the team's knowledge
C. Providing input and guidance to more junior lab members
D. Active fostering of cooperative projects with lab members and external collaborators
E. Submitting fellowship applications and contributing to the lab grant proposals
F. Helping with lab organization and upkeep, including mouse colony maintenance

Compensation starts at $68,000 plus benefits. Start date is flexible. Additional information regarding being a Postdoctoral Associate at Yale is available on the Office for Postdoctoral Affairs website.

Equal Employment Opportunity Statement: Yale University is an affirmative action/equal opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or protected veteran status. We strongly encourage individuals from underrepresented and/or marginalized identities to apply. Yale is an internationally renowned institution that has long been recognized as an outstanding environment for nurturing young scientists. Our collaborative community embraces diverse perspectives and unique life experiences, fostering innovation, and a sense of belonging. Together, we strive to improve the wellbeing of humanity through groundbreaking research.

How to apply. Candidates should send an email to samir.zaidi@yale.edu with "postdoctoral position, candidate's full name" in the subject line and the following:

1. *Curriculum Vitae*
2. Cover letter: brief statement of research experience, interests, motivation to join and career goals
3. Representative publications
4. Contact information for 3 references

Interested individuals are also welcome to reach out with any questions. We will review applications on a rolling basis.