Faculty Positions in Engineering and Cancer Research

The College of Engineering at The Ohio State University in partnership with the NCI-designated Ohio State University Comprehensive Cancer Center (OSUCCC) is currently recruiting for multiple faculty positions in the area of Engineering and Cancer Research. These positions are part of a cluster hiring plan in the College of Engineering that seeks to hire faculty members over the next two years with primary appointments in appropriate engineering departments (e.g., Biomedical, Electrical, Mechanical and Chemical/Biomolecular). The goal of hiring a cluster of faculty is to create a synergistic group of faculty members who use engineering technologies to develop cancer therapeutics based on targeted detection, imaging and drug delivery. All appointments will be for tenure-track or tenured faculty positions at a level commensurate with the qualifications of the candidate and we seek a mix of senior and junior faculty in these cluster hires. Although the precise area of research and appointment to a specific department is flexible, the initial vision for these four positions is listed below:

1. **Biomedical Engineering.** In addition to providing leadership to activities in this cluster hire, we seek a candidate with broad expertise in using engineering technologies (e.g. nanotechnology, tissue engineering, biomedical imaging, mathematical modeling and multi-scale measurement) to both understand tumor biology and develop novel therapeutics for cancer. The successful candidate will have a record of leading a successful research team and have demonstrated the ability to establish and secure multimillion-dollar financial support from the NIH/NCI and lead multi-PI program projects.

2. **Mechanical and Aerospace Engineering.** In this already advertised position ([http://www.mecheng.osu.edu/faculty_positions](http://www.mecheng.osu.edu/faculty_positions)), we seek a candidate with expertise in the development of advanced technologies for the analysis of biological tissues with specific application to cancer. Investigators conducting fundamental studies to examine and characterize the mechanical, chemical, and electromagnetic properties of tumor-bearing and normal tissue are desired. Candidates with expertise in computational modeling or theory related to these areas will be considered.

3. **Electrical and Computer Engineering.** We seek outstanding junior-level candidates in the areas of peri-operative and intra-operative sensing, detection and imaging of cancer. In addition, candidates with expertise in developing new imaging technologies as it relates to cancer treatment are desired.

4. **Chemical and Biomolecular Engineering:** We seek outstanding junior-level candidates in the area of biomolecular transport phenomena in physiological and pathophysiological processes to elucidate the role intercellular interactions play in developing novel immuno-therapeutics to treat cancer.

Candidates for all positions are expected to interact strongly with each other, with current engineering and science faculty, as well as with clinicians at OSU’s Comprehensive Cancer Center / James Cancer Hospital. To facilitate this interaction, courtesy appointments in clinical departments at the OSU Wexner Medical Center are available and desired.

OSU offers a unique combination of highly ranked Colleges of Engineering, Medicine and Veterinarian Medicine on one campus. In addition the OSUCCC has over 300 investigators from 12 Colleges at OSU and is one of the Top 15 cancer centers in the US in terms of NCI funding. To support the translational efforts of these investigators, the OSUCCC provides access to more than 19 state-of-the-art core facilities, a Cancer Drug Development Institute, an early phase clinical research infrastructure and the James Cancer Hospital/Solove Research Institute, one of the nations’ 11 free standing “cancer-only” hospitals. Additional resources on campus include an NSF supported Mathematical Biosciences Institute, the Nanotech West facility (a state of the art micro- and nanofabrication facility), the Davis Heart and Lung Research Institute, and the Ohio Supercomputer Center. In addition, OSU State has an NIH Clinical and Translational Science Award (CTSA) grant with exciting opportunities to strengthen and expand engineering applications into translational cancer research. As a result, the candidate will have access to a comprehensive set of resources for biomedical engineering / cancer research that will facilitate the vision of integrating engineering and medicine to develop new targeted therapies for cancer.

In addition to maintaining a strong extramurally funded research program, candidates will also be expected to teach core undergraduate and/or graduate courses and will have the opportunity to develop new graduate courses related to their research expertise. Candidates should have an earned a doctoral degree in an engineering discipline and demonstrated accomplishment in teaching. We plan to invite selected applicants for interviews as early as December 2013; however, the search will continue until the position is filled. Rank and salary are commensurate with the candidate’s qualifications. Applicants are asked to send PDF versions of their CV, a brief description of research and teaching interests and plans, and names and addresses of three references to COE_Cancer@osu.edu.

More information about the College of Engineering can be found at: [http://engineering.osu.edu](http://engineering.osu.edu)

*The Ohio State University is an Equal Opportunity, Affirmative Action employer. Women, minorities, veterans and individuals with disabilities are encouraged to apply. Ohio State is an NSF ADVANCE Institution.*