VILLANOVA UNIVERSITY
College of Engineering

THE OPPORTUNITY

Nance Dicciani Endowed Chair in Chemical Engineering

Villanova University's Department of Chemical Engineering values dynamic and diverse faculty members who are committed to teaching, scholarship and service—and who can contribute to the University's conversation regarding truth, community, values and social justice. Further information about the department can be found at www.engineering.villanova.edu/che.

The College of Engineering invites nominations and expressions of interest for the Nance K. Dicciani Endowed Professorship to be a part of NovaCell, the Center for Cellular Engineering. The position is housed within the College's Department of Chemical Engineering.

The ideal candidate for this Endowed Professorship will have demonstrated leadership in her/his field of research, as well as a willingness to work collaboratively, both within the department and across disciplines. The candidate will be an individual who can bring vision, leadership and enthusiasm to the department and infuse NovaCell with vibrant creativity.

Within the field of cellular engineering, the team is looking for someone with interest in immune engineering or biomaterial—cell interface, tissue engineering, or metabolic engineering. The ideal candidate will demonstrate expertise in experimentally-based study of mammalian cells and pre-clinical experimentation. The candidate should be willing to collaborate with established groups of faculty to expand upon current research, build relationships with local industry/medical schools, and help to facilitate the development of the research consortium/Center.

An exceptional level of research activity is expected. Experience should reflect external fundraising, including for patents and technology transfer; research publication in high level journals; research presentations at regional, national and international conferences; and advising graduate students. Teaching experience shall reflect 3-6 contact hours per semester, in courses related to the candidate's research, as well as chemical engineering core curricula as needed.

Diversity and inclusion have been and will continue to be an integral component of Villanova University's mission.

The Endowed Professorship is offered as a Full or Associate Professor position. A Ph.D. in Chemical Engineering or related field such as Engineering, Bio-Medical Engineering or Bio-Engineering is required.

Request a complete faculty view book with more information about the College and University, or forward nominations and expressions of interest to:

Dr. Noelle Comolli, Chair,
Department of Chemical Engineering
noelle.comolli@villanova.edu

Maria Natale
Employment Operations Specialist
maria.natale@villanova.edu

GENESIS OF THE CENTER FOR CELLULAR ENGINEERING

Over the past ten years, the Department of Chemical Engineering at Villanova University has increased the number of full-time Biochemical Engineering faculty from one to four. These four faculty members have worked together to create a graduate degree program in Biochemical Engineering and individually to build their respective research programs:

DR. NOELLE COMOLLI has expertise in polymeric biomaterials for tissue engineering and targeted drug delivery for cancer therapies.

DR. JACOB ELMER works on genetic engineering, especially creating non-viral vectors for gene therapy and in protein engineering/purification.

DR. ZUYI (JACKY) HUANG uses his systems biology background to develop mathematical models of biological systems, including pathways for pancreatic cancer.

DR. WILLIAM KELLY has expertise in scale up and bioprocessing of cell culture products, and has extensive experience working with pharmaceutical companies to improve manufacturing processes and practices.

The Biochemical Engineering faculty combine their individual strengths to create Nova-Cell, a unique Center for Cellular Engineering. Villanova is the ideal location for the Center given its proximity to major medical research hospitals, as well as pharmaceutical companies working on cell therapy products.

NovaCell builds off the National Science Foundation supported research of three of Villanova's Biochemical Engineering faculty. For "Biomanufacturing: Optimizing the Isolation, Transfection, and Expansion of CAR-T cells with Modified PES Membranes," Dr. Elmer is using novel nonviral methods to optimize T-cell transfection; Dr. Comolli is working on novel surface modified membranes for T-cell selection and activation; and Dr. Kelly is optimizing the expansion of the specific T-cell subsets.

Faculty are working with local hospitals and clinics, allowing for a constant focus on clinically relevant technologies.

Villanova has a strong alumni/ae network which has generously supported the Chemical Engineering department's efforts to improve and expand our research infrastructure. The department's new Endowed Professorship has been donated by our first female alumna, Nance K. Dicciani. Nance fully supports NovaCell and utilizing the Endowed Professor position to recruit a vibrant individual who will bring vision, leadership and enthusiasm to the department and join in the collaborative work of this new Center.

Dr. Noelle Comolli

Dr. Jacob Elmer

Dr. Zuyi Huang

Dr. William Kelly

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www.engineering.villanova.edu/CHE