TUESDAY
MARCH 1st, 2016

DR. JEFFREY CHALMERS
Professor, Department of Chemical and Biomolecular Engineering
Director, Analytical Cytometry Shared Resource
The Ohio State University Comprehensive Cancer Center

Separation/Isolation of Cells; From Fundamentals to Applications Including T Cells, Hematopoetic Stem Cells to Mature RBCs, and Rare Cells in Blood, including Circulating Tumor Cells

The Institute for Engineering in Medicine (IEM) is pleased to announce the IEM Seminar by Dr. Jeffrey Chalmers, “Separation/Isolation of cells; from fundamentals to applications including T cells, hematopoetic stem cells to mature RBCs, and rare cells in blood, including circulating tumor cells:"

In this presentation, I wish to describe my laboratories journey from taking more fundamental studies of magnetic cell separation (i.e. Navier-Stokes equation and magnetic body force) to our extensive involvement in the isolation and characterization of targeted cells, including cancer, and cancer associated cells, from the blood of cancer patients. Given the highly interdisciplinary nature of this work, in this presentation I wish to attempt to present aspects of this work which will appeal to traditional Engineering researchers through to clinical researchers interested in developing diagnostics not just for diagnosis and prognosis of cancer but also the effectiveness of experimental drugs/treatments and potential cell therapy applications.

Jeff Chalmers is a Professor in the Department of Chemical and Biomolecular at The Ohio State University and also Director of the Analytical Cytometry Shared Resource which is part of the Ohio State University Comprehensive Cancer Center and the Ohio State University Medical School. In his 24 years at Ohio State, he received a National Science Foundation Young Investigator Award, and was elected a Fellow of American Institute for Medical and Biological Engineering in 2001, and in 2014 was awarded the Cell Culture Engineering Award from the International Cell Culture Engineering Conference Series sponsored by Engineering Conferences International. He has published over 150 peer reviewed articles in bioengineering, and over 30 of these papers, 9 nine patents, and one book, are in the area of magnetic cell separation. Professor Chalmers received his Ph.D. from Cornell University in 1988 and his B.S. in Chemical Engineering from U.C. Berkeley and a B.A. from Westmont College in 1983.

FREE event, no registration required.

Pizza and drinks will be provided from 12:00pm.

12:15PM - 1:15PM
Nils Hasselmo Hall
Room 2-101

For additional information on Dr. Chalmers’ presentation, please contact: scot0353@umn.edu

For more information on IEM Seminar Series, visit www.iem.umn.edu/SeminarsLectures/Seminars_index.html