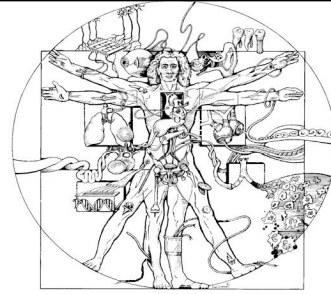


Biomedical Engineering Seminar

Monday, October 26, 2009

2:00 pm

Keating 103



Ron Lynch, Ph.D.

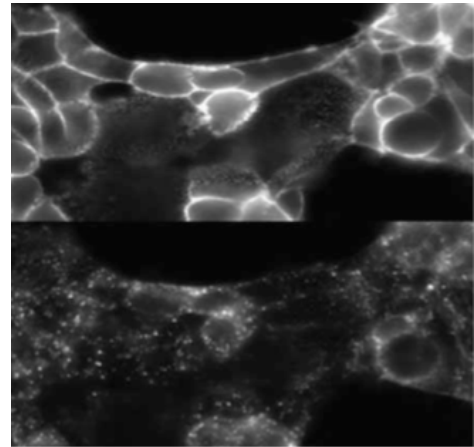
Professor, Physiology and Pharmacology
Chair, Physiological Sciences GIDP

“Finding Needles in a Haystack: Smart Contrast Agents for Evaluating the Development and Treatment of Diabetes”

Abstract

Many important cell types are embedded within complex tissues accounting for only a fraction of the total tissue cell mass making it difficult to analyze their genomic and functional characteristics. Our recent work has focused on developing cell-type specific targeting agents “multivalent” ligands (multiple ligands linked together) with the goal of analyzing pancreatic b-cell mass in relation to the diagnosis and treatment of Diabetes. We also have developed targeting approaches to identify and analyze these and other relatively rare nutrient sensing cells found in the brain and intestine from mouse models.

Development of cell specific multivalent ligands requires identification of a combination of cell surface targets to which the ligand is directed requiring an ability to analyze gene or protein expression patterns from these unique cells types. Approaches for target selection, ligand development and in vitro and in vivo testing will be described.



Additional information regarding Dr. Lynch's research program is available at
http://bio5.arizona.edu/biogate?cmd=fac&faculty_id=2646

Host: Marty Pagel, Ph.D. (404-7049)

Persons with a disability may request a reasonable accommodation by contacting the Disability Resource Center at 621-3268 (V/TTY). Requests should be made as early as possible to allow time to arrange the accommodation.