



MYKC Laboratory

Our Track Record

Baccalaureate Training

- ❖ Mentored >1500 undergraduates in 10 years teaching

Graduate Training

- ❖ Mentored 23 Master's & Ph.D students

Post-Graduate Training (T32 Funded)

- ❖ Successfully Mentored 7 Fellows

Publications

- ❖ 12 in last 18 months, top 1% journals in cardiopulmonary

Grant Funding

- ❖ Currently 100% independently funded lab of 6 scientists

Past Trainees

- ❖ Successful admission to medical & graduate school, residency, fellowship, internships, & employment

**Talk With Us About Your Research Interests in
Cardiopulmonary Blood Vessels & Lymphatics:**

<http://www.ucdenver.edu/academics/colleges/Engineering/Programs/bioengineering>

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Michael Yeager, Ph.D. (303) 724-4193 • michael.yeager@ucdenver.edu



**University of
Colorado Denver**



MYKC Laboratory

University of Colorado Denver

Baccalaureate Training

- ❖ B.S. & B.A. Programs, Dept. of Bioengineering

Graduate Training

- ❖ Master's & Ph.D Programs, Dept. of Bioengineering

Post-Graduate Training (T32 Funded)

- ❖ Post-Doctoral fellowship, Clinical Research fellowship

What You Will Learn

- ❖ Cardiopulmonary Science
- ❖ Immunology & Inflammation Biology
- ❖ Grant Writing, Scientific Ethics, Oral & Written Communication

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MYKC Laboratory

What We Offer

The Setting

- ❖ Departments of Pediatrics-Critical Care & Bioengineering
- ❖ World Renowned Cardiovascular Pulmonary Laboratories
- ❖ Linda Crnic Institute for Down Syndrome

The Focus

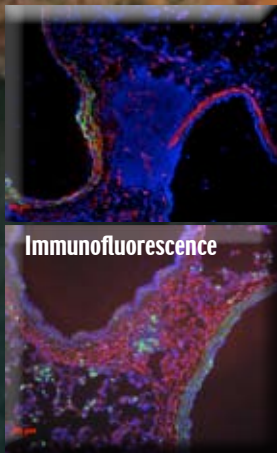
- ❖ Basic, Translational, and Clinical Sciences
- ❖ Cardiopulmonary Vasculature and Lymphatics

The Opportunities

- ❖ Baccalaureate, Master's, Ph.D., Post-doctoral/Clinical Fellows

Research Contract Services (Call for Pricing)

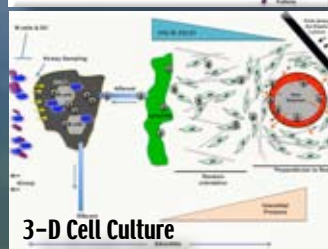
- ❖ In vitro & In vivo Research Assays & Technical Expertise
- ❖ In vivo Modeling, Tissue Processing, Hemodynamics, Echocardiography, Flow Cytometry, Pharmacokinetics



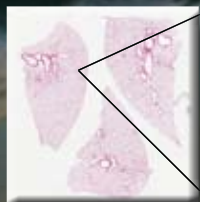
Immunofluorescence



Laser Capture
Microdissection



3-D Cell Culture



Fluorescent In situ
Hybridization



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Colorado Denver



MYKC Laboratory

Our Science

Basic Research

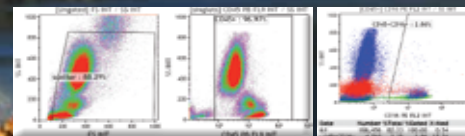
- ❖ 2D & 3D Heart, Lung, Immune Cell Co-Culture
- ❖ Interstitial Fluid Flow & Cell Morphology/Migration
- ❖ Flow Cytometry

Translational Research

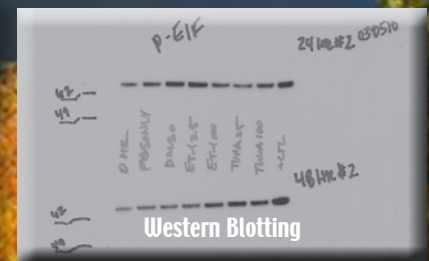
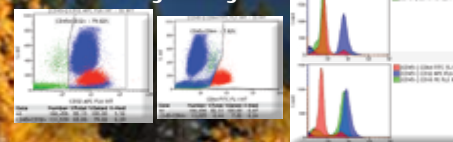
- ❖ In vivo Modeling of Cardiopulmonary Diseases
- ❖ Live Imaging, Cell Lineage Tracing, Cell Tracking
- ❖ Bone marrow transplantation
- ❖ T2 MR Imaging, Lymphatic Fluid Imaging

Clinical Science

- ❖ Immune/Autoimmune Phenomena
- ❖ Cardiopulmonary Disease, Down Syndrome



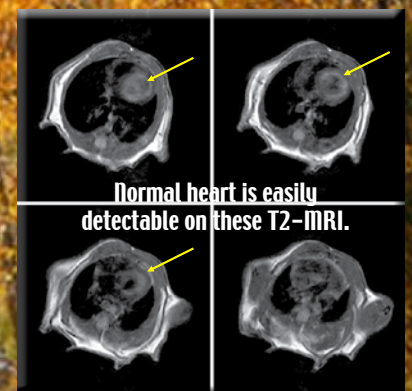
Flow Cytometry



Western Blotting



Echocardiography



Normal heart is easily
detectable on these T2-MRI.