

HOTEL ACCOMODATIONS:

Please check the website for the room block information and car rental information.
<http://radiologycme.stanford.edu>

Transportation to/from the Clark Center will be provided from the Palo Alto Westin Hotel each morning and afternoon.

Recreation, Activities and Attractions:

• www.stanford.edu <http://www.paloaltoonline.com> <http://www.sfvisitor.org>

ACCREDITATION:

NO CME offered.

REGISTRATION FEES:

Early Bird Tuition Postmarked by October 8, 2007

- Full Course - \$545: 4 Days of Lectures & Small Animal Demos (Breakfast/Lunch daily)
- Lectures only - \$250: 2 days (breakfast/lunch day one & two only) -

After October 8, 2007

- Full Course - \$595: 4 Days of Lectures and Small Animal Demos (Breakfast/Lunch daily)
- Lectures only - \$275: 2 days (breakfast/lunch day one and two only) -

There will be a limited number of "student" slots at reduced rate. Please contact our office for details.

Website: Please go to <http://radiologycme.stanford.edu> to register and sign up for the Small Animal Imaging Demonstrations.

Questions regarding the course and registration please call Stanford Radiology Continuing Medical Education Program at 888-556-2230 or email radiologycme@med.stanford.edu

Due to space limitations in the Small Animal Imaging Center, the imaging demonstration portion is limited to a maximum of 75 participants.

CANCELLATION POLICY:

Full refunds, less a \$75 administrative service charge, will be made to those providing written notification of withdrawal by October 8, 2007. After that date, no refunds will be given.

ACKNOWLEDGEMENTS:

We gratefully appreciate the generous support from...

Caliper	
Bioscan	Philips Medical Systems
CRI	Siemens Medical
Gamma Medica – Ideas, Inc.	Summit Anesthesia Solutions
GE Healthcare	Varian, Inc.
Kodak	VisEn Medical, Inc.
Olympus America	VisualSonics

For complete program, registration and accommodation details, go to: <http://radiologycme.stanford.edu>

SMALL ANIMAL IMAGING WORKSHOP

AT STANFORD

Clark Center, Stanford University,
Stanford, California
November 7-10, 2007



MIPS

Molecular Imaging
Program at Stanford

Who will benefit:

Physicians and scientists interested in pre-clinical molecular imaging research and applications in biomedicine.

Objectives:

- Learn how researchers use small animal imaging systems to study disease non-invasively and aid in the discovery, development, and monitoring of novel treatments.
- Participate in *in vivo* small animal imaging demonstrations using the latest modalities installed at Stanford's Clark Center Small Animal Imaging Facility.

Program:

- Day 1:** All Day: Lectures by Select Industry Representatives
Lectures will be held at the Clark Auditorium, Stanford, CA DAY 1&2
- Day 2:** All Day: Lectures by Stanford Faculty
- Day 3:** All Day: In Vivo/Small Animal Imaging
Day 4: Half Day: Demonstrations
Small animal demonstrations will be held at the Clark Imaging Center DAY 3&4
Located on Stanford campus

Location:

Clark Center, Stanford University

Key Topics:

- Small Animal Imaging Instrumentation
- Molecular Imaging Probes, Targets, Assays, and Applications
- Small Animal Handling

Imaging Systems:

- Optical Imaging
 - Bioluminescence and fluorescence imaging/tomography
- Radionuclide Imaging
 - PET
 - SPECT
- X-ray CT
- Magnetic Resonance
- Ultrasound



Stanford University
School of Medicine

For complete program, registration and accommodation details, go to: <http://radiologycme.stanford.edu>

Course Director:
Craig Levin, Ph.D.
Associate Professor of Radiology
Stanford University
Molecular Imaging Program at Stanford

Stanford Faculty:

Sandip Biswal, M.D.
Assistant Professor of Radiology
Molecular Imaging Program at Stanford (MIPS)

Francis G. Blankenberg M.D.
Associate Professor of Radiology and
by courtesy, of Pediatrics

Xiaoyuan "Shawn" Chen,, Ph.D.
Assistant Professor of Radiology

Christopher Contag, Ph.D.
Co-Director, MIPS
Associate Professor
Department of Pediatrics, Radiology,
Microbiology & Immunology

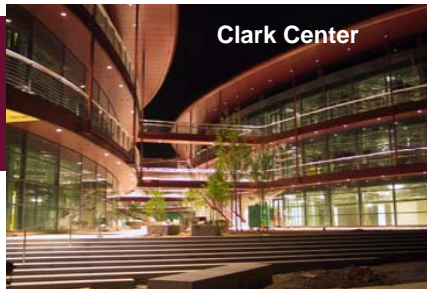
Timothy Doyle, Ph.D.
Scientific Director
Imaging Facility, MIPS

Rebecca Fahrig, PhD
Assistant Professor of Radiology

Dean Felsher
Associate Professor of Medicine (Oncology) & Pathology

Sanjiv Sam Gambhir, M.D., Ph.D.
Director, Molecular Imaging Program at Stanford (MIPS)
Professor, Department of Radiology and Bioengineering
Division Chief, Nuclear Medicine

Edward Graves, Ph.D.
Assistant Professor of Radiation Oncology



Clark Center

Sheril Green, DVM, PhD
Associate Professor of Small Animal
Comparative Medicine at the
Stanford University Medical Center

Michael Mosley, PhD
Professor of Radiology
(Diagnostic Radiology)

Michael V. McConnell, MD
Associate Professor of Medicine
(Cardiovascular)
Molecular and Cellular Physiology
and Electrical Engineering

Robert Negrin, MD
Professor of Medicine

Kim Butts Pauly, PhD
Associate Professor of Radiology
(Diagnostic Radiology)

Jianghong Rao, M.D.
Assistant Professor, MIPS

Joseph Wu, M.D., Ph.D.
Clinical Instructor, MIPS

Wednesday, November 7, 2007 — Clark Center Auditorium, Stanford, CA

8:00-8:30 am Breakfast/Registration/Equipment Demonstration Sign-up/Vendor Check-in

Section I. Introduction

8:30-8:40 am Introduction to the Small Animal Imaging Workshop at Stanford, Craig Levin, PhD

8:40-8:50 am Overview of Molecular Imaging Program at Stanford, Sanjiv Sam Gambhir, MD, PhD

Section II. Small Animal Imaging Instrumentation and Applications

OPTICAL IMAGING

8:50-9:10 am Optical Imaging Physics and Instrumentation: Brief overview, Craig Levin, Ph.D

9:10-9:35 am IVIS Spectrum: Advanced Small Animal Imaging of Fluorescent and Bioluminescent Probes, Brad Rice, Caliper

9:35-10:00 am The Maestro Imaging System: Advances in Multispectral Instrumentation & Software for Imaging Small Animals, James R. Mansfield CRI

10:00-10:20 am Coffee Break

10:20-10:45 am eXplore Optix Time Domain Fluorescence Imaging, GE Healthcare/ART

10:45-11:10 am VisEn Jeff Peterson, Ph.D

11:10-11:35 am Advances in Small Animal Imaging, William McLaughlin, Kodak

Program Day 1 - Wednesday, November 7 (continued)

X-RAY CT

11:35-11:55 am X-ray Computed Tomography Physics and Instrumentation:

Brief overview, Rebecca Fahrig Ph.D.

11:55-12:20 pm Speaker TBD, GE Healthcare

12:20-1:20 pm Lunch

RADIONUCLIDE IMAGING

1:20-1:40 pm Radionuclide Imaging Physics and Instrumentation: Brief overview, Craig Levin, Ph.D.

1:40-2:05 pm Multi-Modality preclinical Imaging, Michael Paulus, Siemens

2:05-2:30 pm TBD, Speaker TBD, GE Healthcare

2:30-2:55 pm Multi-Modality Imaging Instrumentation, David Lapointe, Gamma Medica Ideas

2:55-3:20 pm Innovative solutions for Preclinical Imaging & translational Research from Philips, Raffi Kayayan, Philips

3:20-3:40 pm Coffee Break

ULTRASOUND IMAGING

3:40-4:00 am Ultrasound Imaging Physics & Instrumentation: Brief Overview, Kim Butts Pauly, Ph.D.

4:00-4:25 pm Molecular Targeting of Biomarkers and Applications Using Micro-Ultrasound, Catherine Theodoropoulos, Visual Sonics

MAGNETIC RESONANCE IMAGING

4:25-4:45pm Magnetic Resonance Imaging Physics & Instrumentation: Brief Overview, Michael Moseley, Ph.D.

4:45-5:05pm MRI for Small Animal Imaging, Alan Rath, Ph.D., Varian, Inc., NMR and MRI Systems

5:05 pm Day 1 ends

Thursday, November 8, 2007 — Clark Center Auditorium, Stanford, CA

Section III. Small Animal Imaging Probes, Targets, Assays, and Applications

8:00-8:30 am Breakfast

8:30-9:00 am New Strategies for Imaging Small Animals Using Raman Spectroscopy,

Sanjiv Sam Gambhir, M.D., Ph.D.

9:00-9:30 am Why Image a Mouse? What Molecular Imaging Can Teach Us about Biology, Christopher Contag, Ph.D.

9:30-10:00 am Imaging of Embryonic Stem Cell Fate, Joseph Wu, M.D., Ph.D.

10:00-10:30 am Multi-Modality Imaging of Vascular Disease, Michael V. McConnell, Ph.D.

10:30-10:50 am Coffee Break

10:50-11:20 am Multi-Modality Imaging of Angiogenesis, Xiaoyuan "Shawn" Chen, Ph.D.

11:20-11:50 am The use of sc-VEGF as a radiotherapeutic agent, Francis Blankenberg, M.D.

11:50 am-12:20 pm Proteolytic Detection and Imaging of Cancer, Jianghong Rao, M.D.

12:20-1:20 pm Lunch

1:20-1:50 pm Image-Guided Conformal Radiotherapy of Mice Using a MicroCT Scanner, Edward Graves, Ph.D.

1:50-2:20 pm Imaging Cancer Regression Upon Oncogene Inactivation, Dean Felsher, Ph.D.

2:20-2:50 pm Lymphocyte Trafficking in Alloimmune Responses, Robert Negrin

2:50-3:10 pm Coffee Break

3:10-3:40 pm Musculoskeletal Molecular Imaging: No Bones About It, Sandip Biswal, M.D.

3:40-4:10 pm MR of Small Animal CNS, Michael Moseley, Ph.D.

Section IV. Practical Issues for Running a Small Animal Imaging Research Facility

4:10-4:40 pm Running a Small Animal Imaging Facility, Timothy Doyle, Ph.D.

4:40-5:10 pm Imaging Small Animals: Care & Anesthesia, Sherril Green, Ph.D.

5:10-5:30 pm Anesthesia—It's a Gas!, Jim Houts, Summit Anesthesia Solutions

5:30 pm Day 2 ends

November 9 and 10, 2007 — Small Animal Imaging Facility, Clark Center

Section V. Small Animal Imaging System Demonstrations

Visit our website for the detailed schedule. You will be asked to complete a sign-up form to indicate which instrumentation you would like to view. Each participant may sign-up for six demonstrations

There will also be an opportunity to tour the cyclotron/radiochemistry area in the Lucas building

8:30am – 5:00pm – November 9th, Four 90 minute demonstrations

8:30am – 12:30pm – November 10th, Two 90 minute demonstrations