

CURRICULUM VITAE
Christopher H. Contag

Mailing/Work Address (updated February 2009)

Neonatal and Developmental Medicine
Department of Pediatrics, 150 Clark Center
318 Campus Drive
Stanford University School of Medicine
Stanford, CA 94305-5439

Phone Numbers:

Office: (650) 725-8781
Laboratory: (650) 498-7247
Fax: (650) 498-7723
Home: (408) 253-4883

Academic Training:

Stanford University School of Medicine	Postdoctoral Fellow	1990 - 1995
University of Minnesota, Department of Microbiology	Postdoctoral Fellow	1988 - 1989
University of Minnesota, Department of Microbiology	Ph.D., Microbiology	1983 - 1988
University of Minnesota, College of Biological Sciences	B.S., Biology	1981 - 1982
Iowa State University		1978 - 1981

Academic Positions Held:

• Director	Stanford Infrared Optical Science and Photomedicine Center	2008-
• Director	Stanford Infrared Optical Science and FEL Center	2007-2008
• Associate Professor	Neonatal and Developmental Medicine, Department of Pediatrics, Stanford University School of Medicine.	2005-
• Associate Professor	Department of Microbiology and Immunology (joint appt.) Stanford University School of Medicine.	2005-
• Associate Professor	Department of Radiology (by courtesy) Stanford University School of Medicine.	2005-
• Director	Stanford Center for Innovation in <i>In Vivo</i> Imaging (SCI ³), Clark Center for Biomedical Engineering and the Bio-X Program, Stanford University	2000-
• Co-director	Molecular Imaging Program at Stanford (MIPS) Stanford University	2003-
• Faculty member	Program in Immunology, Stanford University	2001-
• Faculty member	Molecular Imaging Program Stanford (MIPS)	2003-
• Faculty member	BioX Program	2001-
• Assistant Professor	Department of Microbiology and Immunology (joint appt.) Stanford University School of Medicine.	2004
• Assistant Professor	Department of Radiology (by courtesy) Stanford University School of Medicine.	2001-2004
• Assistant Professor	Department of Microbiology and Immunology (by courtesy) Stanford University School of Medicine.	1999-2004
• Assistant Professor	Neonatal and Developmental Medicine, Department of Pediatrics, Stanford University School of Medicine.	1998-2004
• Acting Assistant Professor	Neonatal and Developmental Medicine, Department of Pediatrics, Stanford University School of Medicine.	1997
• Pediatrics fellow	Neonatal and Developmental Medicine, Department of Pediatrics, Stanford University School of Medicine.	1995-1996
• Postdoctoral fellow	Department of Microbiology and Immunology, Stanford University School of Medicine. In the laboratory of Dr. James I. Mullins.	1989 - 1994
• Investigator	Woods Hole Marine Biological Laboratory, Woods Hole, MA In collaboration with Dr. Harvey Fishman.	Summer 1991
• Pre- and Postdoctoral fellow	Department of Microbiology, University of Minnesota. In the laboratories of Dr. Peter G.W. Plagemann and Dr. Ashley T. Haase.	1983 - 1989

Other Positions Held:

• President	Society for Molecular Imaging	2002-2003
• President Elect	Society for Molecular Imaging	2001-2002
• Consultant & Chair of the Scientific Advisory Board	Xenogen Corporation, Alameda, CA	1997-
• Founder and President	Xenogen Corporation, Alameda, CA	1995-1997
• Founder	ConcentRx Corp.	2007

Honors and Awards:

• Invited Lecture , British Society of Immunology, Cambridge University "Visions of Immunology"	2008
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- **Distinguished Lecture**, UC Davis: In Vivo Applications of Bioluminescence 2008
- **Invited Lecture**, Nobel Symposium: Watching life through Molecular Imaging 2007
- **Invited Lecturer**, Wallenberg Neuroscience Center at Lund University 2007
- **Keynote Address**, Gordon Research Conference "Cancer Models and Mechanisms", 2007
- **Achievement Award**, Society for Molecular Imaging 2006
- Poster of Distinction during Digestive Disease Week
Hemin-Activated Mesothelial Cells Home To the Pancreas and Protect From Pancreatitis 2005
- Article entitled "Advances in *in vivo* bioluminescence imaging of gene expression" as published in the journal "Annual Rev. Biomed. Eng." is one of the most cited papers in the field of engineering--ISI 2003
- Imaging of Single Living Cells, Cold Spring Harbor, Award 1996
- American Federation for Clinical Research (AFCR). Upjohn Infectious Disease Prize 1995
- Scholar of the American Foundation for AIDS Research (AmFAR) 1991 -1994
- National Research Service Award, Postdoctoral, NIAID training grant: Molecular Basis of Host Parasite Interactions. Stanford University School of Medicine 1989 -1991
- National Research Service Award; NCI Cancer Biology Training Grant University of Minnesota School of Medicine 1988 -1989
- Viral Research Grant, ViroMed and Minnesota Chapter of the National Foundation for Infectious Diseases 1987 -1988
- Bacaner Research Award, Minnesota Medical Foundation and Basic Science Departments, University of Minnesota. 1988
- National Research Service Award, NCI cancer biology training grant. University of Minnesota School of Medicine. 1984 -1988

Teaching Experience:

- Course coordinator 2009-2010
Biomedical Engineering 222a, 222b: Multi-modality molecular imaging in living subjects
- Lecture on immune cell therapies in Cancer Center Course, Stanford University 2008
- Lectures on stem cell imaging 2008
Developmental Biology 202: Stem cell biology and regenerative medicine
- Lectures on i) metabolic enzymes as mediators of immune response, ii) the role of cell fusion in the immune response to infection, and iii) tumor immunology and the cancer stem cell. **Immunology 202:** Topics in Immunology 2006-2009
- Lecture on mini-microscopes and the emerging field of *in vivo* pathology 2008
Medicine 217: Technological Frontiers in Digestive Diseases
- Lectures on tissue regeneration and cell fusion 2007
Biomedical Engineering 390: Introduction to Bioengineering Research
- Lectures on tissue optics, and reporter gene construction and uses *in vivo* 2004-2009
Biomedical Engineering 222a: Multi-modality molecular imaging in living subjects
- Lectures on imaging stem cell biology, miniaturized microscopes and cell fusion 2007-2009
Biomedical Engineering 222b: Multi-modality molecular imaging in living subjects
- Lecture on novel methods of studying host pathogen interactions *in vivo* 2004
Microbiology and Immunology 210: Pathogenesis of Bacteria, Viruses and Eukaryotic Parasites
- Lecture on Optical Imaging in Medicine 2004
Medicine 459: Frontiers in Digestive Diseases
- Lecture on Advancing animal models of human disease 2003
Comparative Medicine 208: Animals Advancing Biomedical Technology
- Lecture on Molecular Imaging 2003
Radiology 220: Introduction to Imaging and Image-based Human Anatomy
- Lecturer, Small Animal Imaging Workshop at Stanford University 2006, 2007, 2008
- Organizer, Jackson Labs workshop on *in vivo* imaging 2002
- Instructor, Recent advances in cell-based and *in vivo* imaging, University of Bristol 2000
- Instructor, United Nations AIDS Course on Heteroduplex Analyses of HIV-1, Moscow, Russia 1996
- Instructor, WHO Course on Heteroduplex Analyses of HIV-1; Salvador, Brazil 1995
- Lectures on Toga-, Flavi- Reo- and Retroviruses in Animal Virology (graduate). 1990, 1993, 1996
Stanford University School of Medicine.
- Virology Section of Medical Microbiology (undergraduate), University of Minnesota. 1987
- Teaching Assistant for laboratory courses at the University of Minnesota:
Microbiology for Medical Students 1987
Molecular Biology (graduate laboratory course) 1986
Virology (undergraduate and graduate) 1985
General Microbiology (undergraduate) 1984

Service:

Stanford University

- Member, Administrative Panel on Biosafety (APB) 1999-2002
- Member, Molecular Imaging Faculty Search Committees – Dept. of Radiology 1999, 2003
- Member, Bone Marrow Transplant Faculty Search Committee – Dept. of Medicine 2000-2004
- Member, Graduate student admissions committee, Microbiology and Immunology 2000-2001
- Member, Medical Student Admissions Panel 1999-
- Member, Committee on Graduate Education and Research, Dept. of Biomedical Engineering 2002
- Member, Pediatric Cardiopulmonary Faculty Search Committee – Dept. of Pediatrics 2004
- Member, Administrative Committee for the Hansen Experimental Physics Laboratory 2004-
- Session Chair, Stanford Photonic Research Center Annual meeting 2005
- Member, Scientific advisory board, Children’s Health Research Program 2008
- Member, Pediatric Pulmonology Faculty Search Committee 2008

National and International

- Member, Editorial Board, **Molecular Imaging** 2001-
- Member, Editorial Board, **Cancer Biology and Therapy** 2006-
- Member, Editorial Board, **Disease Models and Mechanisms** 2007-
- Member, Editorial Board, **BMC Medical Physics** 2008-
- Co-Editor, **Current Opinion in Biotechnology**, 2008
Analytical Biotechnology section (vol. 20, issue 1)
- Reviewer for: **Nature Science** **Nature Medicine** **Gene Therapy** 1997-
Nature Biotechnology, **Molecular Imaging** **Neoplasia**
European Journal of Cancer **Cellular Microbiology** **PNAS**
Journal of Biomedical Optics, **Molecular Therapy** **Virology**
Journal of Virology **Genes and Development,** **Blood**
Nature Reviews Cancer **Human Gene Therapy** **Cancer Research**
International Immunology **Nature Methods** **Nature Protocols**
BMC Immunology **Molecular Imaging Biol.**
- NCI/Special Emphasis Study Section, Development and Application of Imaging in Therapeutic Studies. CA98-024; NIH-National Cancer Institute (NCI) 1999
- NCI/Special Emphasis Study Section, Diagnostic Imaging and Guided Therapy in Prostate Cancer. CA99-015; NIH-National Cancer Institute (NCI) 2000
- NCI/Special Emphasis Study Section, Diagnostic Imaging and Guided Therapy in Prostate Cancer. SBIR/STTR. PAR99-149; NIH-National Cancer Institute (NCI) 2000
- Founding Member of the Society for Molecular Imaging (SMI) 2000
President elect 2002, President 2003, Board member 1999-
- External Advisory Board, Vanderbilt University Imaging Program (VIVID) 2001-
- Member, NIH/DMG Study Section, Diagnostic Imaging 2002
- Member, Steering Committee, Annual Meeting of the Society for Molecular Imaging (SMI) 2002
- Member, Scientific Program Committee, Annual Meeting of the Society for Molecular Imaging (SMI) 2002
- MOLI Board - National Cancer Institute Molecular Imaging Database 2002 –
- Member, organizing committee, NIDDK/JDFI Workshop. Imaging the Pancreatic Beta Cell 2003
- AdHoc member, CSR/NIH Biodefense and emerging infectious diseases 2003
- AdHoc member, CSR/NIH Cancer Genetic Study Section 2003
Cancer Molecular Pathobiology (CAMP)
- AdHoc member, NIHM/NIH study section ZMH1 BRB-S 04 2003
- Reviewer, NIHM/NIH study section ZRG1 F05 50 R.1 2003
- External reviewer, The Netherlands Organization for Health Research and Development 2003
- Reviewer, European Commission Research Programme on Genomics 2003
- Reviewer, European Commission Research Programme on Molecular Imaging Centers 2003
- Chair, Steering Committee Annual Meeting of the Society for Molecular Imaging (SMI) 2003
- Member, Steering Committee Annual Meeting of the Society for Molecular Imaging (SMI) 2004
- NCI/Special Emphasis Study Section, Small Animal Imaging Resource Programs 2004
CA 04-011,; NIH-National Cancer Institute (NCI)
- Session Chair. Imaging host pathogen interactions 2004
Annual Meeting of the Society for Molecular Imaging (SMI)
- Co-Chair, Steering Committee, Network in Translational Research in Optical Imaging, NCI 2004
- Reviewer, Lymphoma Leukemia Society SCOR grants 2004
- Guest editor Journal Biomedical Optics Special Issue: Chemical and genetic biosensors for biomedical imaging 2005
- Member, Scientific Advisory Board Sandler Foundation for Asthma Research 2005-2007

- Program co-chair, Imaging in 2020, Jackson WY 2005
- Member, Advisory Board Washington University Molecular Imaging Program 2005-
- Chair, Steering Committee, Network in Translational Research in Optical Imaging, NCI 2006
- Member Program Committee, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues III part of SPIE's International Symposium on Biomedical Optics 2006
- Reviewer, NIH Biomedical Imaging and Bioengineering, Medical Imaging (MEDI) 2005, 2006
- Advisory Board Member, NanoSafety Inc 2006
- Organizing committee, OSA Special Topics Meeting 2006
- Member, Medical Imaging Study Section(MEDI), Center for Scientific Review, NIH 2006-2010
- Member, Scientific Advisory Committee 2006
- International Society of Bioluminescence and Chemiluminescence
- Member, Special Emphasis Panel, Digestive Disease Research Core Centers ZDK1 GRB-4 [J1] 2006
- NIH/NIDDK
- Member, Advisory Board University Pennsylvania, Network in Optical Imaging 2005-2010
- Member, Advisory Board University California, Irvine, Small Animal Imaging Program 2007-
- Chair, Steering Committee, Network in Translational Research in Optical Imaging, NCI 2007-2008
- Member Review Committee, Cancer Imaging Centers for the Cancer Research UK 2008
- (CR-UK) and the Engineering & Physical Sciences Research Council (EPSRC)
- Member Program Committee AACR National Meeting 2009
- Molecular Imaging Section
- Member, NCI Special Emphasis Panel: Mouse models of human cancer consortium 2009
- Member, Advisory Board for imaging cancer stem cells, NCI 2009

Extramural Funding

Current:

- Molecular Biophotonics, Air Force Office of Scientific Research F49620-00-1-0349 (Principal Investigator: **C. H. Contag**)
- Bone Marrow grafting for leukemia and lymphoma, NIAID/NIH PO1 CA49605-14 (Principal Investigator: R. Negrin)
- NSF Center for Biophotonics Science & Technology 002865-SU (Principal Investigator: D. Mathews, UC Davis)
- Dual Axes confocal microscope for detection of esophageal disease U54 CA105296-01 (Principal Investigator: **C.H. Contag**)
- Dual Axes confocal microscope for small animal imaging, NIH/NCI R33 EB001864 (Principal Investigator: T.D. Wang and **C. H. Contag**)
- Mechano-biologic Determinants of Experimental AAA, NIH/NHLBI 2 R01 HL064338 (Principal Investigator, Dalman)
- Hematopoietic Defect due to Heme Oxygenase 1 Deficiency; NIH/NIDDK 1KO1 DK071716-01; (Principle Investigator, Y-A Cao)
- Multi-modality Cellular Imaging of Vascular Inflammation RO1HL078678 (Principle Investigator, M. McConnell)
- In vivo and Molecular Imaging Center @ Stanford P50CA114747 (Principle Investigator, S.S. Gambhir)

Pending:

- In vivo gene screens to identify genes conferring immune tolerance to transplants, NIH/NIAID R21 (Principle Investigator, Contag)
- Extracellular replication of Listeria, NIH/NIAID R01 (Principal Investigator: **C. H. Contag**)
- Therapeutic Use of Heme Analogs: Absorption in Intestine; NHLBI /NIH 1R01 HL 68703-05, (Principal Investigator: D.K. Stevenson)
- Role of Heme Catabolism in Ischemic Brain Injury NIH/NICHHD 1R21 HD 050244-01, (Principal Investigator: D.K. Stevenson)

Past:

- Small Animal Imaging Core Resource. Stanford University Program in Biomedical Engineering and Child Health Initiative-Lucille Packard Foundation. (Principal Investigators: **C. H. Contag**)
- Mobilized dendritic cells for lung cancer, NIH PO1HL57443-06 (Principal Investigator: E. Engleman)
- Regulation of heme oxygenase in neonatal animals, NIH/NICHHD RO1 HL58013 (Principal Investigators: D.K. Stevenson and **C.H. Contag**)
- Monitoring tumor progression in living animals, NIH/NCI

- RO1 CA80006-01 (Principal Investigators: R.S. Negrin and **C.H. Contag**)
- Therapeutic Use of Heme Analogs: Absorption in Intestine, NHLB/NIH
RO1 HL 68703 (Principal Investigators: D.K. Stevenson and **C.H. Contag**)
- Spatiotemporal analysis of neoplastic disease. NCI/NIH
R24 CA 92862 (Principal Investigators: **C. H. Contag**, M. Bednarski, M. Moseley)
- Therapeutic Radionuclide Tumor-Targeting Strategy for Breast Cancer; DOE
95382 (Principal Investigator: B. Franc, UCSF)
- Visible Models of Neoplastic Disease, NIH/NCI
R33 CA88303 (Principal Investigators: **C.H. Contag** and R.S. Negrin)
- Visualizing tumor progression and therapy in living animals, Leukemia Society
6090-99 (Principal Investigators: R.S. Negrin and **C.H. Contag**)
- Oral immunization against HIV using attenuated salmonella strains as gene delivery vehicles
(Stanford, CHI-Packard Foundation; Principal Investigator: **C. H. Contag**)
- Molecular Biophotonics, ONR
N00014-91-C-1-0170 (Principal Investigator: **C. H. Contag**)
- Vertical transmission of HIV in Zimbabwe, NIH/NIAID
RO1 A139013 (Principal Investigator: D. Katzenstein)
- Imaging Spontaneous Breast Cancer in Mouse Models, NIH/NCI
R21 CA87386-01A1 (Principal Investigators: **C.H. Contag** and R.S. Negrin)
- *In vivo* multimodality Imaging of Neoplastic Disease, NCI/NIH
P20 CA86312-01 (Principal Investigators: **C. H. Contag**, M. Moseley, M Bednarski)
R24 HD37543 (Principal Investigators: **C.H. Contag** and D.K. Stevenson)
- Visualizing insulinitis: IDDM pathogenesis and therapy, NIH/NIDDK
RO1 DK58664 (Principal Investigators **C.H. Contag** and C.G. Fathman)
- Novel Cancer Targeting Mechanism for Imaging with PE; DOD
WH-05-1-0059 (Principal Investigator: B. Franc, UCSF)
- Gene therapy of IDDM and its complications, JDFI
4-2001-9, JDFI Center Grant (Principal Investigator: C. G. Fathman)
- Spatiotemporal analysis of neonatal host response, NIH/NICHHD-NIAID

Invited Seminars (Recent and Selected from over 300):

- **Keynote Speaker:** Regenerative Medicine, Advancing next generation therapies 2009
"Imaging as a window into stem cell biology"
- **Keynote Speaker:** Chicago Biomedical Consortium Sixth Annual Symposium. 2008
"Imaging as a window into mammalian biology"
- Lyme and other tick-borne Disease: solutions through cutting edge science, 2008
College of Physicians and Surgeons of Columbia University.
"Imaging of infection and the host response"
- **Keynote Speaker:** Bio-inspired Design Conference, Mississippi State University 2008
"Imaging as a window into mammalian biology"
- **Keynote Address:** International Society of Bioluminescence and Chemiluminescence 2008
Shanghi, China
- **Distinguished Lecture:** University of California at Davis 2008
- **Keynote Address:** Biophotonics Symposium, CREOL, University of South Florida 2008
- Third AACR International Conference on Molecular Diagnostics in Cancer Therapeutic 2008
Development: Fulfilling the Promise of Personalized Medicine.
- Imaging in 2020—Imaging Theragnostics, Jackson Hole WY 2007
Session Chair: Chemistries of Photoactive Proteins
- Nobel Conference, Stockholm Sweden; Watching Life through Molecular Imaging 2007
"Imaging Cell Fates and Function"
- **Keynote Address,** Gordon Research Conference "Cancer Models and Mechanisms", 2007
Les Diablerets, Switzerland
- University of Pennsylvania, Cancer Center Seminar 2007
Refining small models of cancer through Imaging
- Translation al Optical Molecular Imaging—Nano to Macro, Houston TX 2007
Bioluminescent markers for studying cell biology in living animals
- University of Pennsylvania, Cancer Center Seminar 2006
Optimizing cell-based therapies through Imaging
- Joslin Diabetes Center, Harvard University, Departmental Seminar 2006
Imaging stem cell fates and function
- Siteman Cancer Center of Washington University, programmatic Seminar 2006
The role of stem cell fusion in hematopoiesis

- Society for Molecular Imaging 2006
Opening Plenary Lecture: Visualizing stem cell fusion
Session Chair and State-of-the-art presentation: Visible animal models of neoplasia
- Autumn Immunology Conference (AIC), Imaging Cell Migration 2006
Enhancing immune cell therapies through imaging
- Sidney Kimmel Cancer Center Symposium 2006
Optimizing cell-based therapies through Imaging
- Association of American Cancer Institutes (AACI) and Cancer
Center Administrators Forum (CAF) Association of American Cancer Institutes (AACI) 2006
Optimizing cell-based therapies through Imaging: can we eliminate the last cancer cell?
- UCSF, Departmental Seminar Immunology 2006
Optimizing cell-based therapies through Imaging
- Memorial Sloan Kettering Cancer Center, Departmental Seminar 2006
Optimizing cell-based Therapies through Imaging
- International Society of Bioluminescence and Chemiluminescence 2006
In vivo bioluminescence imaging to optimize cell-based therapies
- NTROI, Workshop on Translational Optical Imaging 2005
- University of Oklahoma, Departmental Seminar, Microbiology 2005
Imaging biological processes in vivo
- UCSF, Departmental Seminar Radiology 2005
Imaging Stem Cell Fates and Function
- Symposium: Optical Probes For Molecular and Cellular Imaging 2005
Accelerating and Refining Animal Models through Bioluminescence Imaging
- AACR-NCI-EORTC International Conference Molecular Targets and Cancer 2005
Therapeutics: Discovery, Biology, and Clinical Applications
Plenary Lecture: Optimizing Immune Cell Therapies through Imaging
- BioOptical Symposium, Groningen, Netherlands 2005
From Stem Cells to Cancer, In vivo Imaging using Bioluminescence
- 3rd Workshop on Innovative Mouse Models in Leiden, Netherlands 2005
Plenary Lecture: Molecular imaging with bioluminescence: accelerating and refining preclinical studies
- CLEO **Keynote address:** In vivo Cell Biology Using Optics 2005
- FOCIS (Federation of Immunology Societies) 2005
Plenary address: Visualizing stem cell fates and function
- Keystone Symposium: Leukocyte Trafficking: Cellular and Molecular Mechanisms 2005
Session Chair: In situ Visualization of Lymphocyte Migration and Activation
Presentation: Whole Body Imaging of Lymphocyte Trafficking
- FOCIS (Federation of Immunology Societies), Montreal Canada 2004
Major Symposium: Stem cell tracking and Monitoring
- Society for Molecular Imaging, **Plenary session** on Cell Trafficking and Immunology 2004
Tracking stem cells in hematopoiesis
- NIAID Biodefense Workshop 2004
Bioluminescence Imaging for Accelerating Research in Infectious Diseases
- Hwasun Optical Imaging Workshop, Chonnam National University Medical School, Korea 2004
From Stem Cells to Cancer, In vivo Imaging using Bioluminescence
- *In vivo* Imaging Symposium, Tokyo, Japan 2004
From Stem Cells to Cancer, In vivo Imaging using Bioluminescence
- Tsukuba University Departmental Seminar 2004
From Stem Cells to Cancer, In vivo Imaging using Bioluminescence
- University of Texas Southwestern—Departmental Seminar, Dept. of Cell Biology 2004
Stem cells to cancer: Imaging using bioluminescence
- Pediatric Academic Societies Annual Meeting, **State-of-the-Art presentation** 2004
Watching hematopoietic stem cell engraftment and hematopoiesis in living animals
- University of Pennsylvania—Chance Laboratory 2004
Advances in in vivo bioluminescence imaging
- Gordon Conference: Lasers in Biology and Medicine 2004
Session Chair Molecular targets: from functional imaging to therapy
- International Society of Differentiation, Waikiki, Hawaii 2004
Shifting foci of hematopoiesis
- AACR Annual meeting 2004
Immune cell and stem cell trafficking in vivo
- Keystone Symposium: Mouse models of human cancer 2004
Luciferase-Based Imaging of Mouse Tumor Development

- FASEB Annual meeting; American Association of Anatomists, Whole Body Assessment of Cell and Molecular Therapies using *In Vivo* Bioluminescent Imaging 2004
- Levine Symposium on Diabetes *In vivo* Immune cell trafficking 2003
- Annual meeting of the American Association of Veterinary Pathologists 2003
- The 24th Congress of the International Association for Breast Cancer Research Imaging of cells fates and function using *in vivo* bioluminescent imaging 2003
- AACR Annual Meeting Bioluminescence Imaging for Cancer Research 2003
- 15th Annual Mahajani Symposium in Molecular Medicine. Salk Institute Stem cell fates and function 2003
- European Molecular Imaging Symposium. Roscoff, France; "New *in vivo* imaging modalities for Molecular Biology, Cell Biology and Physiology conference" **Keynote address:** The promise of molecular imaging 2003
- Stem Cell Symposium, Stem Cell Research Foundation Assessing Cell Fates and Function *In Vivo* 2003
- 14th Pezcoller Symposium: Molecular *in vivo* visualization of cancer cells Rovereto, Italy. 2003
- Engineering Conferences International, Advances in optics for biotechnology, medicine and surgery Revealing the molecular basis of disease and response to therapy using *in vivo* bioluminescent imaging 2003
- Duke University Revealing the molecular basis of disease and response to therapy using *in vivo* bioluminescent imaging 2003
- AAI: American Association of Immunology **Opening plenary:** *In Vivo* Bioluminescent Imaging of Immune Cell Trafficking Patterns. 2003
- Case Western Reserve Revealing the molecular basis of disease and response to therapy using *in vivo* bioluminescent imaging 2003
- Keystone symposia on optical imaging *In vivo* molecular and cellular analyses using internal light emitting probes 2003
- FOCIS: Federation of Clinical Immunology Societies In Vivo Bioluminescent Imaging of Immune Cell Trafficking Patterns. 2002
- Spanish National Cancer Center, CNIO Conference on Mechanisms of Invasion and Metastasis Revealing the molecular basis of malignancy and host response using *in vivo* Bioluminescent measurements 2002
- Jacques Monod Conference on Integrative approaches in pathogenesis Pasteur Institute, Paris, France **-Symposium organizer, session chair and speaker** **-Imaging of infection and host response *in vivo*** 2002
- Annual meeting of the Society for Molecular Imaging **- Member of the steering committee and program committee** **- Plenary session chair** **- Speaker in optical imaging session** Revealing the molecular basis of disease and response to therapy using *in vivo* bioluminescent imaging 2002
- Boston Children's Hospital, Leading Edge Seminar Series Revealing the molecular basis of disease and response to therapy using *in vivo* bioluminescent imaging 2002
- Gordon Conference: Immunobiology and Immunochemistry **Speaker and Session Chair,** Imaging immune cell function *in vivo* 2002
- UCLA Molecular Imaging Seminar Series Revealing the molecular basis of disease and host response using *in vivo* bioluminescent measurements 2002
- Molecular Imaging in Cancer: Linking Biology Function and Clinical Applications *In Vivo* *In vivo* imaging of tumor cells and cells of the immune system 2002
- NIH BECON Meeting on Biosensors 2002
- Pasteur Institute, Paris, France Imaging of infection *in vivo* 2001
- General Motors Cancer Research Foundation Awards Symposium Following tumor growth and the immune response *in vivo* 2001
- Imaging in 2020, Jackson Hole, WY Immune cell trafficking *in vivo* 2001

- DARPA Conference on Biophotonics, Arlington, VA 2001
- NCI Workshop on Molecular Imaging and Cancer Drug Development and Probe Discovery 2001
- International Congress on Neonatal Jaundice, Hong Kong 2001
In Vivo transcription patterns of heme oxygenase-1
- Imaging Life: from Cells to Whole Animals, Microscopy Society of America, Long Beach, CA 2001
Whole body imaging of gene expression and cell migration
- American Society of Gene Therapy Annual Meeting, May 30-June3, 2001
- Imaging 2020, Jackson Hole, WY Sept 30-Oct. 6, 2001
- Society of Pediatric Research National Meeting, Boston, MA 2000
Plenary Address: Monitoring gene expression during development
- International Society for Analytical Cytology, Montpieller, France 2000
Chair: Mini-symposium: Molecular and cellular analyses in living animals
- SPIE Annual Meeting, BiOS'99, San Jose, CA (**Conference Co-chair**) 1999
Conference Title: Molecular imaging: reporters, dyes and instrumentation
Bioluminescent reporters for molecular and cellular analyses in living mammals
- Wellman Laboratories of Photomedicine, Massachusetts General Hospital 1998
Photoproteins as labels for *in vivo* functional imaging
- National Heart and Lung Institute; Imperial College, London 1998
Photoproteins as labels for *in vivo* functional imaging
- International Society of Oxygen Transport, Keynote lecture, Budapest, Hungary 1998
The potential of bioluminescence for *in vivo* oxygen sensors
- Symposium on Biomedical Photonics, German Cancer Research Center, Heidelberg 1998
Bioluminescent reporters for molecular and cellular analyses in living mammals
- Commonwealth Club of California 1998
Discovery in the living organism
- Optical Society of America Meeting, **Symposium Chair** 1997
Genetic engineering optical reporters into living organisms
- Optical Society of America Meeting on Biomedical Optical Spectroscopy and Diagnostics 1996
Photonic monitoring of infectious disease and gene regulation

Membership in Academic Societies

American Association for the Advancement of Science (AAAS)	1986-
American Society of Microbiology (ASM)	1989-1999
American Society for Virology (ASV)	1989-1999
International Society for Analytical Cytology (ISAC)	2000-2002
Scientific Advisor for International Congress	
International Society of Bioluminescence and Chemiluminescence (ISBC)	1998-2000
Society for Molecular Imaging (SMI), Charter member	1999-
President elect	2000-2001
President	2002-2003
Member of advisory council	2003-2009

Trainees

Current

Michael Bachmann, MD, D.Sc.

Yu-An Cao, Ph.D.

Jonathan Hardy, Ph.D.

Tim Doyle, Ph.D.

Rajesh Shinde, Ph.D.

Jonathan Liu, Ph.D.

Mike Helms, Ph.D.

Mark Mackanos, Ph.D.

Patrick Eimerman

Tobi Lyn Schmidt

Mark Sellmyer

Jennifer Prescher, Ph.D.

Emilio Gonzalez, Ph.D.

Current Position

Research Associate

Research Associate—K01 Award NIH

Research Associate

Research Associate

Research Associate

Postdoctoral Fellow—ACS Canary Foundation Fellowship

Postdoctoral Fellow—Komen Fellowship

Postdoctoral Fellow

Graduate Student, Microbiology & Immunology—Pediatrics
Research Fellowship

Graduate Student, Microbiology & Immunology

MSTP Student (M.D. Ph.D. Program)

Postdoctoral Fellow, T25 MIPS Fellowship, Susan Komen
Fellowship

Postdoctoral Fellow, Pachynychia Congenita Project Fellowship

Past

Steve Thorne, Ph.D.

Asst. Prof. University of Pittsburgh

I. Nickolas Olomu, M.D.

Asst. Prof. Michigan State University

Thomas Wang, MD, PhD	Asst. Prof. University of Michigan
Ade Olomu, M.D.	Asst. Prof. Michigan State University
Weisheng Zhang, Ph.D.	Senior Scientist, Merck Pharmaceuticals.
Steffi Mandl, Ph.D.	Scientist, Exelixis—Komen Fellowship
Pei-Lin Hsiung, Ph.D.	Scientist, Pacific Biosciences
Stacy Burns, Ph.D.	Director of Microbiology, Cobalt Biofuels Inc.
Wibool Piyawattanametha, Ph.D.	Scientist, Federal Laboratory of Thailand
David Bundy, M.D.	Pediatrician Chapel Hill North Carolina
Maneesh Batra, M.D.	Pediatric Fellow, University of Washington
Derek Moore, M.D.	Surgery Resident, Stanford University
Wenchuen Liang, Ph.D.	Research Associate—Stanford University
Blythe Bartos	Medical Student Univ. Chicago
Kathy Fernando	Graduate Student, Cornell University
Brian Eames, Ph.D.	Postdoctoral Fellow UCSF
Anthony Basile	Business
Pamela Dietz	Medical Student, Univ. North Carolina
Patricia Kwon	Medical Student, Johns Hopkins School of Medicine
Wah-Ping Luk	Medical Student
Jon Mathy, M.D.	Surgery Fellow, Harvard University
Christopher Gruber	Medical Student, USC
Karine Gibbs, Ph.D.	Postdoctoral Fellow, Microbiol. & Immunol. Stanford Univ.
Monica Hadjna-Dawaon, MD	Staff Physician—Stanford University
Ryan McFarland	Graduate Student, Microbiol. & Immunol. Stanford University
Mary Brindle, M.D.	Surgery Resident, University British Columbia
Hamid Kazerouni, MD	Surgery Resident, Mayo Clinic
Masami Mizubuchi, MD	Staff Physician, Kobe University
Garrett Hefner	Graduate Student, Immunology at Stanford
Glenn DeSandre, M.D.	Staff Physician, Pacific Medical Center
Jennifer Duda, M.D.	Physician
Hui Zhao, Ph.D.	Research Associate, Stanford University, Dept of Pediatrics
Esther Lee, MS	Research Fellow, Stanford University, Dept. of Medicine.
Mainak Sakar	Graduate Student, Aerospace engineering
Amy Wu	Medical Student, Stanford University
Jayalakshmi Ravindran	Medical Student, UCSF
Jack Perrng	Graduate Student, Physics
Afaarz Irani	Medical Student, Stanford University
Caitlin O'Connel, Ph.D	Research Associate, Stanford University
Qian Wang, Ph.D.	Postdoctoral Fellow—Neonatal and Developmental Medicine Fellowship; Pediatrics Research Fellowship

Patents:

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