



XENOGEN

Discovery in the Living Organism®

Xenogen Corporation Technology Bibliography

The following list contains articles and studies about Xenogen's technology. Where available, electronic online links are indicated for downloadable full text or .pdf files.

Articles 1995 to 2004	Page
Angiogenesis	1
Endocrine Disruption	1
Gene Expression	2
Gene Therapy	3
Imaging	3
Infectious Diseases	4
Inflammation	7
Metabolism	7
Oncology	7
Xenogen Posters/Abstracts	9

Articles – 1995 to 2004

Angiogenesis

Tracking Angiogenesis Induced by Skin Wounding and Contact Hypersensitivity Using a Vegfr2-luciferase Transgenic Mouse
Zhang N, Fang Z, Contag PR, Purchio AF, West DB; Xenogen Corporation, 860 Atlantic Ave, Alameda, CA 94501.
Blood, Vol. 103 No.2, Jan. 15, 2004, p. 617-26.

Endocrine Disruption

Tissue- and Time-dependent Estrogen Receptor Activation in Estrogen Reporter Mice
Authors: Lemmen JG, Arends RJ, Van Boxtel AL, Van Der Saag PT, Van Der Burg B.
Hubrecht Laboratory, Netherlands Institute for Developmental Biology, Uppsalalaan 8, 3584 CT Utrecht, The Netherlands.
Journal of Molecular Endocrinology, June 2004,32(3) pp. 689-701.

Gene Expression

Optical Imaging of *Renilla* Luciferase, Synthetic *Renilla* Luciferase, and Firefly Luciferase Reporter Gene Expression in Living Mice
S. Bhaumik¹, X.Z. Lewis¹, and S.S. Gambhir²; ¹. The Crump Institute for Molecular Imaging, 700 Westwood Boulevard Los Angeles, California 90095-1700 and ². Molecular Imaging Program at Stanford (MIPS), Department of Radiology and Bio-X Program, The James H. Clark Center, 318 Campus Drive, Stanford, CA 94305-5427.
Journal of Biomedical Optics, Vol. 9, No. 3, May/June 2004, pp. 578-586.

Xenogen Corporation
860 Atlantic Avenue
Alameda, California 94501
Toll Free 877.936.6436
Phone 510.291.6100
Fax 510.291.6196
www.xenogen.com

As of: October 20, 2004

Gene Expression – Continued

Optical Imaging of *Renilla* Luciferase, Synthetic *Renilla* Luciferase, and Firefly Luciferase Reporter Gene Expression in Living Mice

S. Bhaumik¹, X.Z. Lewis¹, and S.S. Gambhir^{2, 1}. The Crump Institute for Molecular Imaging, 700 Westwood Boulevard Los Angeles, California 90095-1700 and ² Molecular Imaging Program at Stanford (MIPS), Department of Radiology and Bio-X Program, The James H. Clark Center, 318 Campus Drive, Stanford, CA 94305-5427.

Journal of Biomedical Optics, Vol. 9, No. 3, May/June 2004, pp. 578-586.

The Characterization and Hormonal Regulation of Kidney Androgen-Regulated Protein

(Kap)-Luciferase Transgenic Mice; S.E. Malstrom¹, O. Tornavaca², A. Meseguer², A.F. Purchio¹, and D.B. West¹; ¹ Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501, and ² Centre d'Investigacions en Bioquímica i Biologia Molecular (CIBBIM), Hospital Universitari Vall d'Hebron, Barcelona, Spain.

Toxicological Sciences, Vol. 79, No. 2, 2004, pp. 266-277. <http://toxsci.oupjournals.org>.

A Genetic Reporter of Thermal Stress Defines Physiologic Zones over a Defined Temperature Range

Caitlin E. O'Connell-Rodwell, David Shriver, Dmitri M. Simanovskii*, Cameron McClure, Yu-an Cao, Weisheng Zhang, Michael H. Bachmann, Joshua T. Beckham, E. Duco Jansen, Daniel Palanker*, H. Alan Schwettman* and Christopher H. Contag¹; ¹Department of Pediatrics, Microbiology & Immunology and Radiology, Stanford School of Medicine, Stanford, California, USA; * Picosecond Free Electron Laser Center, W. W. Hansen Experimental Physics Laboratory, Stanford University, Stanford, California, USA; Xenogen Corporation, Alameda, California, USA; and Department of Biomedical Engineering, Vanderbilt University, Nashville, Tennessee, USA.

The FASEB Journal, February 2004, Vol. 18, p.264-271.

Effects of Metalloporphyrins on Heme Oxygenase-1 Transcription: Correlative Cell Culture Assays Guide In Vivo Imaging

Monica A Hajdena-Dawson, Weisheng Zhang, Pamela Contag, Ronald Wong, Hendrik Vreman, David Stevenson and Christopher H Contag.

Molecular Imaging, Vol.2, No.3, July 2003, pp.138 –149.

In Vivo Imaging of Transcriptionally Active Estrogen Receptors

Paolo Ciana¹, Michele Raviscioni¹, Paola Mussi¹, Elisabetta Vegeto¹, Ivo Que², Malcolm G. Parker³, Clemens Lowik², & Adriana Maggi¹; ¹ Centre of Excellence on Neurodegenerative Diseases and Institute of Pharmacological Sciences, Milan University, Milan Italy, ² Department of Endocrinology, Leiden University Medical Center, Leiden, The Netherlands, and ³ Institute of Reproductive and Developmental Biology, Hammersmith Hospital, ICSM, London, UK.

Nature Medicine, Vol. 9, No. 1, Jan. 2003, p. 82-86.

Gene Expression: RNA Interference in Adult Mice

Anton P. McCaffrey*, Leonard Meuse*, Thu-Thao T. Pham*, Douglas S. Conklin+, Gregory J. Hannon+ & Mark A. Kay*; * Department of Pediatrics and Genetics, Stanford University School of Medicine, Stanford, California 94305-5208, USA and +Cold Spring Harbor Laboratory, 1 Bungtown Road, Cold Spring Harbor, New York 11724, USA.

Nature, July 2002, Vol. 418, pp. 38-39. Available online at: www.nature.com.

Selection of Potential Therapeutics Based on In Vivo Spatiotemporal Transcription Patterns of Heme Oxygenase-1

Authors: Weisheng Zhang, Pamela R. Contag, Jonathan Hardy, Hui Zhao, Hendrik J. Vreman, Monica Hajdena-Dawson, Ronald J. Wong, David K. Stevenson, Christopher H. Contag; Published in collaboration with the Division of Neonatal and Developmental Medicine, Departments of Pediatrics, Radiology, and Microbiology and Immunology, S230 Grant Building, Stanford University Medical Center, Stanford University, Stanford, CA 94305-5208, USA and Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501, USA.

Journal of Molecular Medicine, (2002) 80:655-664.

Optical Imaging of *Renilla* Luciferase Reporter Gene Expression in Living Mice

Authors: S. Bhaumik¹ and S.S. Gambhir^{1,2,3,4}; Published in collaboration with ¹Crump Institute for Molecular Imaging, ²Department of Molecular and Medical Pharmacology, ³UCLA Johnson Comprehensive Cancer Center, and ⁴Department of Biomathematics, University of California School of Medicine, Los Angeles, CA 90095.

PNAS, Vol. 99, No. 1, January 2002, pp. 377-382. Available online at: www.pnas.org

Gene Expression – Continued

Noninvasive Optical Imaging of Firefly Luciferase Reporter Gene Expression in Skeletal Muscles of Living Mice

Authors: Joseph C. Wu^{1,2,3}, Gobalakrishnan Sundaresan^{1,2}, Meera Iyer^{1,2}, and Sanjiv S. Gambhir^{1,2,4,5,6} Published in collaboration with ¹Crump Institute of Molecular Imaging, ²Department of Molecular and Medical Pharmacology, ³Department of Medicine, Division of Cardiology, ⁴UCLA/DOE Laboratory of Structural Biology and Molecular Medicine, ⁵Department of Biomathematics, and ⁶UCLA-Jonsson Comprehensive Cancer Center, UCLA School of Medicine, Los Angeles, CA 90095. *Molecular Therapy*, Vol. 4, No. 4, October 2001, pp. 297-306. www.idealibrary.com

Rapid in Vivo Functional Analysis of Transgenes in Mice Using Whole Body Imaging of Luciferase Expression

Authors: Weiseng Zhang¹, Jian Q. Feng², Stephen E. Harris³, Pamela R. Contag⁴, David K. Stevenson¹, & Christopher H. Contag¹. Published in collaboration with ¹Division of Neonatal and Developmental Medicine, Departments of Pediatrics, and Microbiology and Immunology, Stanford University Medical Center, Stanford University, Stanford, CA 94305-5208, ²Department of Oral Biology, University of Missouri-Kansas City, Kansas City, MO 64108, ³Department of Medicine, University of Texas Health Science Center at San Antonio, San Antonio, TX 78284, and ⁴Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501. *Transgenic Research*, 10, 2001, pp. 423-434.

Visualizing Gene Expression in Living Mammals Using a Bioluminescent Reporter

Authors: Christopher H. Contag, Stanley D. Spilman, Pamela R. Contag, Masafumi Oshiro, Brian Eames, Phyllis Dennerly, David K. Stevenson, and David A. Benaron; Published in collaboration with the Department of Pediatrics, Stanford University School of Medicine, Stanford University, Stanford, CA, Xenogen Corporation, Stanford, CA, Hamamatsu Corporation, Bridgewater, NJ, USA, and Hansen Experimental Physics Laboratory, Stanford University, Stanford, CA. *Photochemistry and Photobiology*, Vol. 66, No. 4, 1997, pp. 523-531.

Glowing Mice Illuminate Gene Expression Patterns

Author: Karen Hopkin.
The Journal of NIH Research, Vol. 9, June 1997.

Gene Therapy

Production of Human Clotting Factor IX Without Toxicity in Mice after Vascular Delivery of a Lentiviral Vector

Lisa V. Tsui^{1,2}, Michael Kelly^{1,2}, Nathalie Zayek¹, Virginia Rojas¹, Ken Ho¹, Ying Ge¹, Marina Moskalenko¹, Jean Mondesire¹, Jennifer Davis¹, Melinda Van Roey¹, Tom Dull¹ & James G. McArthur^{1,1}. Cell Genesys Inc., 342 Lakeside Drive, Foster City, CA 94404 and ²Each of these authors contributed equally to the work. *Nature Biotechnology*, January 2002, Vol. 20, No. 1, pp. 53-57. Available online at: www.nature.com.

In Utero Delivery of Adeno-Associated Viral Vectors: Intraperitoneal Gene Transfer Produces Long-Term Expression

Gerald S. Lipshutz,¹ Christopher A. Gruber,^{2,3} Yu-an Cao,^{2,3} Jonathan Hardy,^{2,3} Christopher H. Contag,^{2,3} and Karin M.L. Gaensler,^{4,5} Published in collaboration with ¹Department of Surgery and ⁴Department of Medicine, University of California, San Francisco, California 94143-0793, ²Department of Pediatrics, and ³Department of Microbiology & Immunology, Stanford University, Stanford, California 94305-5208. *Molecular Therapy* Vol. 3, No. 3, March 2001, pp. 284-292. www.idealibrary.com

Imaging

Quantitative Comparison of the Sensitivity of Detection of Fluorescent and Bioluminescent Reporters in Animal Models

Tamara Troy, Dragana Jekic McMullen, Lidia Sambucetti, and Brad Rice; Xenogen Corporation. *Molecular Imaging*, Vol. 3, No. 1, January 2004, p. 9-23.

Looking Into a Live Subject

R&D 2003 100 Awards Program article on life sciences companies that are 2003 winners for the most technologically significant products introduced into the marketplace.

Research and Development, Sept. 2003, p 46. Article is available online for viewing at: www.rdmag.com, under "R&D 100 Awards" page choose "2003 R&D Award Winners," then link to "R&D Awards Life Science" under September 2003 and scroll to article.

Imaging – Continued

Whole Animal Cellular and Molecular Imaging to Accelerate Drug Development

Author: Pamela R. Contag. Published by Elsevier Science Ltd., 84 Theobald's Road, London, UK WC1X 8RR.
Drug Discovery Today, May 2002, Vol. 7, No. 10. Available upon subscription at: www.drugdiscoverytoday.com

In Vivo Imaging of NF-kappa-B Activity

Authors: Carlsen H, Moskaug JO, Fromm SH, Blomhoff R.
Journal of Immunology, Feb. 2002; Vol. 68, No. 3, pp. 1441-6.

In Vivo Imaging of Light-Emitting Probes

Authors: B. W. Rice, M. D. Cable, M. B. Nelson, Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501, USA.
Journal of Biomedical Optics, Vol. 6, No. 4, October 2001, pp. 432-440. www.spie.org

Picture Perfect

Author: Corrie Lock.
Nature, Vol. 412, July 26, 2001, pp. 372-374.

Humane Science Finds Sharper and Kinder Tools

Author: Erik Stokstad.
Science, Volume 286, November 5, 1999, pp. 1068–1071. Abstract or full text version available at www.sciencemag.org

Illuminating Drug Discovery

Authors: Christopher H. Contag & Pamela R. Contag.
Chemistry & Industry, September 6, 1999, pp. 664–666.

Bioluminescence for Biological Sensing in Living Mammals

Authors: Weisheng Zhang, Pamela R. Contag, Ashima Madan, David K. Stevenson, and Christopher H. Contag.
Oxygen Transport to Tissue XXI, 1999 edited by Eke and Delpy, 89, Kluwer Academic/Plenum Publishers, New York, pp. 775–784.

Building a Better Mouse

Author: Brian E. Taptich.
The Red Herring, May, 1998, pp. 88–89.

Bioluminescent Indicators in Living Mammals

Authors: Pamela R. Contag, I. Nick Olomu, David K. Stevenson, and Christopher H. Contag; Published in collaboration with Xenogen Corporation and the Department of Pediatrics, Stanford University School of Medicine, Stanford, California.
Nature Medicine, Vol. 4, No. 2, February, 1998, pp. 245–247.

Firefly Gene Lights Up Lab Animals From Inside Out

Author: Gary Taubes.
Science, Vol. 276, June 27, 1997, pp. 1993. Full text downloadable file available at www.sciencemag.org

Viewing Disease Progression Through a Bioluminescent Window

Authors: Christopher H. Contag and Pamela R. Contag.
Optics and Photonics News, January, 1996, pp. 22–23.

Infectious Diseases

Organ Specificity, Colonization and Clearance Dynamics

In Vivo Following Oral Challenges with the Murine Pathogen *Citrobacter rodentium*

Authors: Siouxsie Wiles,† Simon Clare,† James Harker, Alan Huett, Douglas Young, Gordon Dougan and Gad Frankel*,
Centre for Molecular Microbiology and Infection, Department of Biological Sciences, Imperial College London, London SW7 2AZ, UK.
Cellular Microbiology (2004) 6(10), pp. 963-972.

Infectious Diseases – Continued

Noninvasive Optical Imaging Method to Evaluate Postantibiotic Effects on Biofilm Infection In Vivo

Jagath L. Kadurugamuwa, Lin V. Sin, Jun Yu, Kevin P. Francis, Tony F. Purchio, and Pamela R. Contag, Xenogen Corporation, Alameda, CA 94501.

Antimicrobial Agents and Chemotherapy, Vol. 48, No. 6, June 2004, pp. 2283-2287.

Extracellular Replication of *Listeria monocytogenes* in the Murine Gall Bladder

Jonathan Hardy¹, Kevin P. Francis⁴, Monica DeBoer⁴, Pauline Chu², Karine Gibbs³, Christopher H. Contag^{1,3}; ¹ Department of Pediatrics, ² Department of Comparative Medicine, ³ Department of Microbiology and Immunology, Stanford University School of Medicine, Stanford, CA 94305, USA, ⁴ Xenogen Corporation, Alameda, CA 94501, USA.

Science, Vol. 303, February 6, 2004, p. 851-853. Available online at: www.sciencemag.org.

Rapid Direct Method for Monitoring Antibiotics in a Mouse Model of Bacterial Biofilm Infection

Jagath L. Kadurugamuwa, Lin V. Sin, Jun Yu, Kevin P. Francis, Richard Kimura, Tony Purchio, and Pamela R. Contag, Xenogen Corporation, Alameda, CA 94501.

Antimicrobial Agents and Chemotherapy, Oct. 2003, Vol. 47, No. 10, p. 3130-3137.

Real-Time Monitoring of Bacterial Infection In Vivo: Development of Bioluminescent Staphylococcal Foreign-Body and Deep-Thigh-Wound Mouse Infection Models

Nelly A. Kuklin, Gregory D. Pancari, Timothy W. Tobery, Leslie Cope, Jesse Jackson, Charles Gill, Karen Overbye, Kevin P. Francis, Jun Yu, Donna Montgomery, Annaliesa S. Anderson, William McClements, and Kathrin U. Jansen.

Antimicrobial Agents and Chemotherapy, Sept. 2003, Vol. 47, No. 9, pp. 2740-2748.

Membranous Cells in Nasal-Associated Lymphoid Tissue: A Portal of Entry for the Respiratory Mucosal Pathogen Group A Streptococcus

Hae-Sun Park, Kevin P. Francis, Jun Yu, and P. Patrick Cleary.

The Journal of Immunology, Sept. 2003, No. 171, pp. 2532-2537.

Organ-specific Models of *Streptococcus pneumoniae* Disease

Authors: Carlos J. Orihuela¹, Geli Gao¹, Mackenzie McGee¹, Jun Yu², Kevin P. Francis², and Elaine Tuomanen¹; From the ¹Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, Tennessee, and ²Xenogen Corporation, Alameda, CA, USA

Scandinavian Journal of Infectious Diseases, Sept. 2003, Vol. 35, No. 9, pp. 647-652.

Article is available online for viewing with subscription registration at: <http://taylorandfrancis.metapress.com/link.asp?id=101950>

Collaboration Will Do Battle with Biofilms

BioVenture View, Vol. 17, No. 25, April 8, 2003, p. 14.

Direct Continuous Method for Monitoring Biofilm Infection in a Mouse Model

Jagath L. Kadurugamuwa, Lin Sin, Eddie Albert, Jun Yu, Kevin Francis, Monica DeBoer, Michael Rubin, Carole Bellinger-Kawahara, T.R. Parr, jr., and Pamela R. Contag; Xenogen Corp., Alameda, CA 94501.

Infection and immunity, Vol. 71, No. 2, Feb. 2003, p. 882-890.

Noninvasive Bioluminescence Imaging of Herpes Simplex Virus Type 1 Infection and Therapy in Living Mice

Gary D. Luker, ^{1,2} J. Patrick Bardill, ³ Julie L. Prior, ^{1,2} Christina M. Pica, ^{1,2} David Piwnica-Worms, ^{1,2} and David A. Leib^{3,4}; Molecular Imaging Center, Mallinckrodt Institute of Radiology ¹, and Departments of Molecular Biology and Pharmacology², Molecular Microbiology³, and Ophthalmology and Visual Sciences AACR NCI-EORTC Internati, Washington University School of Medicine, St. Louis, Missouri 63110.

Journal of Virology, Vol. 76, No. 23, Dec. 2002, p. 12149-12161.

Whole Body Bioluminescent Imaging for the Study of Animal Models of Human Bacterial Disease

Authors: Kevin P. Francis¹, Danny Joh¹, Stacy M. Burns², Christopher Gruber², Christopher H. Contag², and Pamela R. Contag^{*1,2} Published in collaboration with ¹Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501, USA

Infectious Diseases – Continued

and ²Division of Neonatal and Developmental Medicine, Department of Pediatrics, Stanford University Medical Center, Stanford, CA 94305, USA.

Luminescence Biotechnology, Instruments and Applications; Chapter 40, pp. 517-525, 2002.

Revealing the Spatiotemporal Patterns of Bacterial Infectious Diseases Using Bioluminescent Pathogens and Whole Body Imaging

Authors: Stacy M. Burns¹, Danny Joh², Kevin P. Francis², Linda D. Shortliffe³, Christopher A. Gruber¹, Pamela R. Contag^{1, 2}, Christopher H. Contag¹; Published in collaboration with Departments of ¹Pediatric and ³Urology, Stanford University Medical Center, Stanford University, Stanford, CA., and ²Xenogen Corp., Alameda, CA, USA.

Contributions To Microbiology, Vol. 9: Animal Testing in Infectiology, Ch. 7.

Visualizing Pneumococcal Infections in the Lungs of Live Mice Using Bioluminescent

Streptococcus pneumoniae Transformed with a Novel Gram-Positive lux Transposon

Authors: Kevin P. Francis¹, Jun Yu¹, Carolyn Bellinger-Kawahara¹, Danny Joh¹, Matthew J. Hawkinson¹, Grace Xiao¹, Tony F. Purchio¹, Michael G. Caparaon², Marc Lipsitch³, and Pamela R. Contag¹; Published in collaboration with ¹ Xenogen Corporation, Alameda, California 94501; ²Division of Infectious Diseases, Department of Medicine, Washington University School of Medicine, St. Louis, Missouri 63130, and ³Department of Epidemiology, Harvard School of Public Health, Boston, Massachusetts 02115.

Infection and Immunity, Vol. 69, No. 5, May 2001, p. 3350-3358. <http://iai.asm.org>

Validation of a Noninvasive, Real-Time Imaging Technology Using Bioluminescent *Escherichia coli* in the Neutropenic Mouse Thigh Model of Infection

Authors: H. L. Rocchetta¹, C. J. Boylan¹, J. W. Foley¹, P.W. Iversen¹, D. L. Letourneau¹, C. L. McMillan¹, P. R. Contag², D. E. Jenkins², and T. R. Parr, Jr.¹, Published in collaboration with ¹Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, Indiana, 46285 and ²Xenogen Corporation, Alameda, California 94501.

Antimicrobial Agents and Chemotherapy, Vol. 45, No. 1, Jan. 2001, pp. 129-137.

Monitoring Bioluminescent *Staphylococcus aureus* Infections in Living Mice Using a Novel luxABCDE Construct

Authors: Kevin P. Francis¹, Danny Joh¹, Carolyn Bellinger-Kawahara, Matthew J. Hawkinson¹, Tony F. Purchio¹, and Pamela R. Contag^{1, 2}; Published in collaboration with ¹Xenogen Corporation, Alameda, California 94501 and ²Division of Neonatal and Developmental Medicine, Department of Pediatrics, Stanford University Medical Center, Stanford University, Stanford, California 943052.

Infection and Immunity, Vol. 68, No. 6, June 2000, pp. 3594–3600.

Non-invasive Monitoring of Infection and Gene Expression in Living Animal Models

Authors: P.R. Contag, A.B. Olomu, and C.H. Contag.

Handbook of Animal Models of Infection, Chapter 7, 1999, pp. 61-68.

Imaging Brain Structure and Function, Infection and Gene Expression in the Body Using Light

Authors: David A. Benaron, Pamela R. Contag, and Christopher H. Contag. *Philosophical Transactions of the Royal Society of London*, Series B.

Biological Sciences Vol. 352, 1997, pp. 755-761.

Photonic Monitoring of Infectious Disease and Gene Regulation

Authors: Christopher H. Contag, Pamela R. Contag, Stanley D. Spilman, David K. Stevenson, and David A. Benaron; Published in collaboration with the Neonatal and Developmental Medicine Laboratory, Department of Pediatrics, Stanford University School of Medicine, Stanford, CA and the Biomedical Optics Group, the Stanford Picosecond Free-Electron Laser (FEL) Center, Hansen Experimental Physics Laboratory, Stanford University, Stanford, CA.

OSA TOPS on Biomedical Optical Spectroscopy and Diagnostics, Vol. 3, 1996, pp. 220–224.

Photonic Detection of Bacterial Pathogens in Living Hosts

Authors: Christopher H. Contag, Pamela R. Contag, James I. Mullins, Stanley D. Spilman, David K. Stevenson, and David R. Benaron; Published in collaboration with the Department of Microbiology and Immunology, Fairchild Building, Stanford University School of Medicine, Stanford, CA, the Neonatal and Developmental Medicine Laboratory, Department of Pediatrics,

Stanford University School of Medicine, Stanford, CA, the Biomedical Optics Group, The Stanford Picosecond Free-Electron Laser (FEL) Center, Hansen Experimental Physics Laboratory, Stanford University, Stanford, CA, and the Department of Microbiology, SC-42, University of Washington, Seattle, WA.
Molecular Microbiology, Vol. 18, No. 4, 1995, pp. 593–603.

Inflammation

An Inducible Nitric Oxide Synthase-Luciferase Reporter System for
In Vivo Testing of Anti-inflammatory Compounds in Transgenic Mice

Ning Zhang*, Aneil Weber*, Bonnie Li*, Richard Lyons+, Pamela R. Contag*, Anthony F. Purchio* and David B. West*, *Xenogen Corporation, Alameda, CA 94501 and + CRF 321, University of New Mexico, Health Science Center, Albuquerque, NM 87131.
The Journal of Immunology, 2003, Vol. 170, p. 6307-6319. Available online at: www.jimmunol.org.

In Vivo Imaging of NF-kappa B Activity

Authors: Carlsen H, Moskaug JO, Fromm SH, Blomhoff R..
J Immunol. 2002 Feb 1;168(3):1441-6.

Metabolism

A Cyp1a2-Luciferase Transgenic CD-1 Mouse Model: Responses to Aryl Hydrocarbons Similar to the Humanized AhR Mice.

Authors: Zhang W, Moorthy B, Chen M, Muthiah K, Coffee R, Purchio AF, West DB. 2004 *Toxicology Science* 82: 297-307.

Differential Regulation of the Human Cyp3a4 Promoter in Transgenic Mice and Rats.

Weisheng Zhang, Anthony F. Purchio, Richard Coffee, and David B. West; Xenogen Corporation, Alameda, California (W.Z., A.F.P., D.B.W.); and Xenogen Biosciences, Cranbury, New Jersey (R.C.).
Drug Metabolism and Disposition, Vol. 32, No. 2, February 2004, p. 163-167. dmd.aspetjournals.org.

A Transgenic Mouse Model with a Luciferase Reporter For Studying In Vivo Transcriptional Regulation of the Human CYP3A4 Gene

Weisheng Zhang, Anthony F. Purchio, Kevin Chen, Jianming Wu, Li Lu, Richard Coffee, Pamela R. Contag, and David B. West; Xenogen Corporation, Alameda, CA 94501.
Drug Metabolism and Disposition, 2003, Vol. 31, No. 8, p. 1054-1064. Available online at: <http://dmd.aspetjournals.org>.

In Vivo Activation of the Human CYP3A4 Promoter in Mouse Liver and Regulation by Pregnane X Receptors.

Weisheng Zhang ^a, Anthony Purchio ^a, Kevin Chen ^a, Stacy M. Burns ^b, Christopher H. Contag ^b, and Pamela R. Contag ^a;
^a Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501, USA and ^b Division of Neonatal and Developmental Medicine, Department of Pediatrics, and Department of Radiology and Microbiology & Immunology, Stanford University Medical Center, Stanford University, Stanford, CA 94305-5208, USA.
Biochemical Pharmacology, Vol. 65, No. 11, June 2003, p. 1889-1896. Available online at: www.sciencedirect.com.

Oncology

The Characterization and Hormonal Regulation of Kidney Androgen-Regulated Protein
(Kap)-Luciferase Transgenic Mice Animal Model for the Study of Metastatic Human Prostate Cancer

Scatene CD, Hepner MA, Oei YA, Dusich JM, Yu SF, Purchio T, Contag PR, Jenkins DE.
The Prostate 2004 May 15; 59(3):292-303.

The EZC-Prostate Model: Noninvasive Prostate Imaging in Living Mice

Xiaoming Xie, Zheng Luo, Kevin M. Slawin and David M. Spencer; Departments of Immunology (X.X., D.M.S.) and Urology (Z.L., K.M.S.), Baylor College of Medicine, Houston, Texas 77030.
Molecular Endocrinology, Vol. 18, No. 3, March 2004, pp. 722-732. <http://mend.endojournals.org>.

In Vivo Monitoring of Tumor Relapse and Metastasis Using Bioluminescent
PC-3M-luc-C6 Cells in Murine Models of Human Prostate Cancer

Jenkins, DE, Yu SF, Hornig YS, Purchio T, Contag PR.
Clinical Experimental Metastasis, 2003; 20(8): 745-56.

Oncology – Continued

Bioluminescent Imaging (BLI) to Improve and Refine Traditional Murine Models of Tumor Growth and Metastasis

Jenkins, DE, Oei Y, Hornig YS, Yu SF, Dusich J, Purchio T, Contag PR.

Clinical Experimental Metastasis. 2003; 20(8): 733-44.

Systemic Tumor Targeting and Killing by Sindbis Viral Vectors

Authors: Jen-Chieh Tseng¹, Brandi Levin¹, Alicia Hurtado¹, Herman Yee¹, Ignacio Perez de Castro¹, Maria Jimenez¹, Peter Shamamian², Ruzhong Jin³, Richard P Novick³, Angel Pellicer¹ & Daniel Meruelo¹; ¹New York University (NYU) Gene Therapy Center, NYU Cancer Institute and Department of Pathology, NYU School of Medicine, 550 First Avenue, New York, New York 10016, USA. ²Department of Surgery, NYU School of Medicine, 550 First Avenue, New York, New York 10016, USA. ³Molecular Pathogenesis Program, Skirball Institute, Department of Microbiology and Department of Medicine, NYU School of Medicine, 550 First Avenue, New York, New York 10016, USA.

Nature Biotechnology, Jan. 2004, Vol. 22, No. 1, pp. 70 – 77.

SU11248 Inhibits Tumor Growth and CSF-1R-Dependent Osteolysis in an Experimental Breast Cancer Bone Metastasis Model

Lesley J. Murray¹, Tinya J. Abrams¹, Kelly R. Long², Theresa J. Ngai¹, Lisa M. Olson², Weiru Hong¹, Paul K. Keas¹, Jacqueline A. Brassard², Anne Marie O'Farrell¹, Julie M. Cherrington¹, & Nancy K. Pryer¹; ¹ SUGEN, Inc., South San Francisco, CA, USA; ² Pharmacia, St. Louis, MO, USA.

Clinical and Experimental Metastasis 20 (8): 757-766, 2003. Available online at: www.kluweronline.com.

Imaging 26S Proteasome Activity and Inhibition in Living Mice

Gary D. Luker¹, Christina M. Pica¹, Jiling Song¹, Kathryn E Luker¹, & David Piwnica-Worms, ^{1,2}; ¹ Molecular Imaging Center, Mallinckrodt Institute of Radiology and ² Department of Molecular Biology and Pharmacology, Washington University School of Medicine, St. Louis, MO 63110.

Nature Medicine, Vol. 9, No. 7, July 2003, p. 969-973. Available online at: www.nature.com/naturemedicine.

Time Course of Bioluminescent Signal in Orthotopic and Heterotopic Brain Tumors in Nude Mice

Burgos JS, Rosol M, Moats RA, Khankaldyyan V, Kohn DB, Nelson MD Jr, Laug WE; Children's Hospital Los Angeles, University of Southern California Keck School of Medicine, Los Angeles, CA.

Biotechniques, June 2003, Vol. 34, No. 6, p. 1184-1188.

Bioluminescent Molecular Imaging of Endogenous and Exogenous p53-Mediated Transcription In Vitro and In Vivo Using HCT116 Human Colon Carcinoma Xenograft Model

Wang W, El-Deiry WS; Howard Hughes Medical Institute, Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, 19104.

Cancer Biology & Therapy, March-April 2003, Vol. 2, No. 2, p. 196-202.

Development of A Real-Time in Vivo Transcription Assay: Application Reveals Pregnane X Receptor-Mediated Induction of CYP3A4 by Cancer Chemotherapeutic Agents

Erin Schuetz, Lubin Lan, Kazuto Yasuda, Richard Kim, Thomas A. Kocarek, John Schuetz, and Stephen Strom; Department of Pharmaceutical Sciences, St. Jude Children's Research Hospital, Memphis, Tennessee (E.S., L.L., K.Y., J.S.); Department of Medicine and Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee (R.K.); Institute of Environmental Health Sciences, Wayne State University, Detroit, Michigan (T.A.K.); and Department of Pathology, University of Pittsburgh, Pittsburgh, Pennsylvania (S.S.).

Molecular Pharmacology, Vol. 62, No. 3, Sept. 2002, p. 439-445.

Visualization of Advanced Human Prostate Cancer Lesions in Living Mice by a Targeted Gene Transfer Vector and Optical Imaging

Jason Y. Adams,¹ Mai Johnson,¹ Makoto Sato,¹ Frank Berger,² Sanjiv S. Gambhir,² Michael Carey,³ M. Luisa Iruela-Arispe,⁴ Lily Wu¹; Departments of ¹Urology and ²Crump Institute for Molecular Imaging & Department of Molecular & Medical Pharmacology, ³Biological Chemistry, David Geffen School of Medicine at UCLA, and ⁴Department of Molecular Cell and Developmental Biology, College of Letters & Science, UCLA, Los Angeles California 90095, USA.

Nature Medicine, Vol. 8, No. 8, Aug. 2002, p. 891-896.

Oncology – Continued

Noninvasive Imaging of Spontaneous Retinoblastoma Pathway-dependent Tumors in Mice

Authors: Marc Voojjs, Jos Jonkers, Scott Lyons, and Anton Berns; Published by Division of Molecular Genetics and Centre for Biomedical Genetics, The Netherlands Cancer Institute, 1066 CX Amsterdam, the Netherlands.

Cancer Research, Vol. 62, March 15, 2002, pp.1862-1867. Available online at: [http://cancerres.aacrjournals.org/content/vol62/issue6/under "Tumor Biology"](http://cancerres.aacrjournals.org/content/vol62/issue6/under%20Tumor%20Biology)

Molecular Imaging of Gene Expression and Efficacy following Adenoviral-Mediated Brain Tumor Gene Therapy

Authors: Alnawaz Rehemtulla, Daniel E. Hall, Lauren D. Stegman, Uttara Prasad, Grace Chen, Mahaveer Swaroop Bhojani, Thomas L. Chenevert, and Brian D. Ross; University of Michigan School of Medicine.

Molecular Imaging, Vol. 1, No. 1, January 2002, pp. 43-55. www.molecularimaging.com

Rapid and Quantitative Assessment of Cancer Treatment Response Using In Vivo Bioluminescence Imaging

Alnawaz Rehemtulla¹, Lauren D. Stegman^{2, 3}, Shaun J. Cardozo², Sheila Gupta², Daniel E. Hall², Christopher H. Contag⁴, and Brian D. Ross^{2, 3}; Published in collaboration with The Center for Molecular Imaging and the Department of ¹Radiation Oncology, ²Radiology, ³Biological Chemistry, University of Michigan Medical School, 1150 West Medical Center Drive, Medical Sciences Research Building III, Room 9303, Ann Arbor, MI 48109-0648; ⁴Department of Pediatrics, Stanford University School of Medicine, Stanford, CA 94305-5208.

Neoplasia, Volume 2, No. 6, 2000, pp. 491-495. www.nature.com/neo

Use of Reporter Genes for Optical Measurements of Neoplastic Disease In Vivo

Authors: Christopher H. Contag¹, Darlene Jenkins², Pamela R. Contag², and Robert S. Negrin¹; Published in collaboration with the ¹Departments of Pediatrics and Medicine, Stanford University Medical Center, Stanford University, Stanford, CA and ²Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA.

Neoplasia, Volume 2, Nos. 1–2, January-April 2000, pp. 41–52. Available online upon registration at www.nature.com/neo

Visualizing the Kinetics of Tumor-cell Clearance in Living Animals

Authors: Thomas J. Sweeney, Volker Mailänder, Amanda A. Tucker, Adesuwa B. Olomu, Weisheng Zhang, Yu-an Cao, Robert S. Negrin, and Christopher H. Contag; Published by the Departments of Medicine and Pediatrics, Stanford University School of Medicine; Edited by Irving L. Weissman, Stanford University School of Medicine.

PNAS, October 12, 1999, Volume 96, Number 21, pp. 12044–12049.

Available online at: www.pnas.org/cgi/content/full/96/21/12044

Noninvasive Assessment of Tumor Cell Proliferation in Animal Models

Authors: Matthias Edinger, Thomas J. Sweeney, Amanda A. Tucker, Adesuwa B. Olomu, Robert S. Negrin, and Christopher H. Contag; Published by the Department of Medicine, Stanford University School of Medicine, Stanford, and the Department of Pediatrics, Stanford University School of Medicine, Stanford.

Neoplasia, Vol. 1, No. 4, October 1999, pp. 303–310. Available online upon registration at: www.neoplasia.org

Xenogen Posters/Abstract Presentations – 2004 to 1999

Portable document format (PDF) versions of the following presentations are available via e-mail request at: businessdev@xenogen.com

Society for Molecular Imaging, 3rd Annual Meeting, St. Louis, MO Sept. 9-12, 2004

1.) Abstract No. 159 — Analysis of Bioluminescence from Bacterial and Firefly Luciferase under Anaerobic Conditions

Authors: Jun Yu, Kevin P. Francis, Tony F. Purchio, and Jagath L. Kadurugamuwa, Xenogen Corporation, Alameda, CA, USA

2.) Abstract No. 180 — Diffuse Luminescence Tomography of In Vivo Bioluminescent Markers Using Multi-Spectral Data, C. Kuo, O. Coquoz, D.G. Stearns, and B.W. Rice, Xenogen Corporation, Alameda, CA, USA

3.) Abstract No. 214 — In Vivo Characterization of Quantum Dot Reporters

Tamara Troy¹, Steven Smith¹, Marcel Bruchez², David West¹ and Brad Rice¹, ¹Xenogen Corporation, 860 Atlantic Ave, Alameda, CA 94501, ²Quantum Dot Corporation, 26118 Research Road, Hayward, CA 94545

4.) Abstract No. 408 — In Vivo Monitoring of Glial Fibrillary Acidic Protein Expression in the Central Nervous System (CNS) of Transgenic Mice with Bacterial Meningitis. Authors: Jagath L. Kadurugamuwa, Steven J. Smith, Angel Ang, Anthony F. Purchio, David B. West, Xenogen Corporation, USA

Xenogen Posters/Abstracts – Continued

7th ISSX Meeting, Aug. 29- Sept. 2, 2004, Vancouver, Canada

Abstract No. 284 — A Cyp1a2- luc Transgenic CD-1 Mouse Model: Responses to Aryl Hydrocarbons Similar to the Humanized AhR Mice. Authors: W. Zhang¹, B. Moorthy², M. Chen¹, K. Muthiah², R. Coffee³, A. Purchio¹, D. West¹, ¹Xenogen Corporation, 860 Atlantic Ave., Alameda, CA, 94501, ²Department of Pediatrics, Baylor College of Medicine, 6621 Fannin, FC 530.01, Houston, Texas 77030, ³Xenogen Biosciences, 5 Cedar Brook Dr., Cranbury, NJ, 08512

12th International Congress of Immunology & 4th Annual Conference of FOCIS, July 18-23, 2004, Montreal, Canada:
Establishment of a Saa1-luciferase Transgenic Mouse Model for Monitoring In Vivo Serum Amyloid A1 Expression Under Inflammatory Conditions. Authors: Ning Zhang, Haroon Ahsan, Anthony F. Purchio, and David B. West
Xenogen Corporation, Alameda, CA, USA

Xenogen poster presentations for ASM 104th General Meeting, May 24-26, 2004, New Orleans, LA:

- 1.) Abstract 2626 – Rapid Method to Monitor Catheter-based Urinary Tract Infection in Mice Using Biophotonic Imaging. Authors: B. Lemos, L. Sin, J. Yu, K. P. Francis, J. L. Kadurugamuwa
- 2.) Abstract 2925 – A Direct Method for Real-Time Monitoring of Establishment and Progression of In Vivo Infections on Intravascular Catheters. Authors: L. Sin¹, B. Lemos¹, J. Yu¹, K.P. Francis¹, A.S. Bayer², Y. Xiong², J.L. Kadurugamuwa¹, ¹Xenogen Corporation, Alameda, CA, ²Research and Education Institute at Harbor-UCLA, Los Angeles, CA
- 3.) Abstract 3578 – Generation and Characterization of a Bioluminescent *Proteus mirabilis* Mutant That is Defective in Swarming. Authors: Jun Yu, Jenny Wu, Lin Sin, Kevin P. Francis, and Jagath Kadurugamuwa
- 4.) Abstract 3593 – Characterization of Rifampin-Resistant *Staphylococcus aureus* Mutants in an Experimental Biofilm Infection Model. Authors: Jun Yu, Jenny Wu, Li Zhang, Lin Sin, Kevin P. Francis, and Jagath Kadurugamuwa

Xenogen poster presentation for 2004 OSA Biomedical Topical Meeting, April 2004, Miami, FL:

Abstract 290 – Photon Source Localization and Intensity Quantification in Diffuse Luminescence Imaging Tomography, Authors: C. Kuo, D.G. Stearns, and B.W. Rice

Xenogen poster presentations for AACR 94th Annual Meeting, March 27-31 2004, Orlando, FL:

- 1.) Abstract 943 – Characterization of LL/2 (Lewis Lung Carcinoma) Luciferase-Expressing Cells In Vitro and In Vivo Using Bioluminescent Imaging Techniques. Authors: Anne O. Clermont, Scott K. Lyons, Joan M. Dusich, Caroline D. Scatena, Tony F. Purchio, and Darlene E. Jenkins
- 2.) Abstract 5114 – Luciferase-expressing MCF-7-luc-F5 Human Breast Cancer Cells Used to Monitor Mammary Fat Pad Tumor Growth and Metastasis In Vivo in Nude-beige Mice. Authors: Darlene E. Jenkins, Yvette S. Hornig, Yoko A. Oei, Shang-Fan Yu, Joan M. Dusich, and Tony Purchio

Xenogen poster presentations for SOT 43rd Annual Meeting, March 21-25 2004, Baltimore, MD:

Abstract No. 1378 – The Characterization and Hormonal Regulation of Kidney Androgen-regulated Protein (Kap)-luciferase Transgenic Mice. Authors: Scott E. Malstrom, Anthony F. Purchio and David B. West

Xenogen poster presentations for Keystone Symposia on Diabetes Mellitus (X1), March 4-10 2004, Banff, Alberta, Canada
Abstract No. 421– In Vivo Monitoring of Pancreatic Islet Mass and Function in a Transgenic Mouse Model.

Authors: S. Smith¹, W. Zhang¹, A. Powers^{2,3}, T. Purchio¹ and D. West¹; ¹Xenogen Corporation, Alameda, CA, USA; ²Division of Diabetes, Endocrinology, and Metabolism, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, USA; ³VA Tennessee Valley Healthcare System, Nashville, TN, USA

Xenogen poster presentations for 12th North American ISSX Meeting, October 12–16, 2003, Providence, RI

- 1.) Abstract 285 – Differential Regulation of the Human CYP3A4 Promoter in Transgenic Mice and Rats. Authors: Weisheng Zhang, Anthony F. Purchio, Richard Coffee, David B. West
- 2.) Abstract 289 – Development of In Vivo Animal Models for Studying Regulation of CYP Genes in Real Time. Authors: Weisheng Zhang, Anthony F. Purchio, Richard Coffee, David B. West

Xenogen poster presentation for 2003 NAASO Annual Scientific Meeting, October 11–15, 2003, Ft. Lauderdale, FL:

Abstract 627 – Biophotonic Imaging of Pancreatic Function in *Rip-luc* Transgenic Mice. Authors: Steven J. Smith, Anthony F. Purchio and David B. West

Xenogen Posters/Abstracts – Continued

Xenogen poster presentation for annual ASM ICAAC, September 14–17, 2003, Chicago, IL:

[F-1470 A Non-invasive Optical Imaging Method to Evaluate Post-Antibiotic Effects on Biofilm Infections in Mice](#),

Authors: Jagath L. Kadurugamuwa, Jun Yu, Lin V. Sin, Kevin P. Francis, Tony Purchio and Pamela R. Contag

Xenogen poster presentation for Imaging in 2020 Conference III, September 7 – 11, 2003, Jackson Hole, WY:

[Advances in 2D In Vivo Optical Imaging Instrumentation](#), Authors: B.W. Rice, O. Coquoz, C. Kuo, N. Nantel, D.N. Nilson, D.G.

Stearns, T.L. Troy, D. Zwarg, M.D. Cable, Xenogen Corporation

Xenogen Corporation poster presentations for the Society for Molecular Imaging 2nd Annual Meeting August 16–18, 2003, San Francisco, CA:

- 1.) [Abstract 174 – Quantification and Depth Localization of In Vivo Bioluminescent Signals in Small Animals Using Spectral Imaging Techniques](#). Authors: Olivier Coquoz, Tamara L. Troy, Bradley W. Rice
- 2.) [Abstract 180 – Imaging Three-Dimensional Luminescent Source Distributions](#). C. Kuo, B.W. Rice, D.G. Stearns, T.L. Troy, and M.D. Cable
- 3.) [Abstract 186 – Advances in 2D In Vivo Optical Imaging Instrumentation](#). Authors: B.W. Rice, O. Coquoz, C. Kuo, N. Nantel, D.N. Nilson, D.G. Stearns, T.L. Troy, D. Zwarg, M.D. Cable
- 4.) [Abstract 215 – In Vivo Comparison of Fluorescent and Bioluminescent Reporters](#). Authors: Tamara Troy, Dragana Jekic-McMullen, Lidia Sambucetti, and Brad Rice.
- 5.) [Abstract 232 – Differential Regulation of the Human CYP3A4 Promoter in Transgenic Mice and Rats](#). Authors: Weisheng Zhang*, Anthony F. Purchio, Richard Coffee, David B. West
- 6.) [Abstract 235 – Biophotonic Imaging and Transgenic Mice as Tools for Endocrine Disruption Assays](#). Authors: Scott E. Malstrom, Anthony F. Purchio and David B. West
- 7.) [Abstract 246 – Biophotonic Imaging of Pancreatic Function in *Rip-luc* Transgenic Mice](#). Authors: Steven J. Smith, Anthony F. Purchio and David B. West
- 8.) [Abstract 331 – Tracking Angiogenesis Induced by Skin Wounding and Hypersensitivity Using a *Vegfr2-luciferase* Transgenic Mouse](#). Authors: Ning Zhang, Zuxu Fang, Pamela R. Contag, Anthony F. Purchio, David B. West

Xenogen poster presentations for the AACR 94th Annual Meeting, July 12–14, 2003, Washington D.C.:

- 1.) [Abstract 3395 – In Vitro and In Vivo Bioluminescent Imaging of the Stable LNCaP-luc-M6 Prostate Carcinoma Cell Line](#). Authors: Caroline D. Scatena, Mischa A. Hepner, Yoko A. Oei, Tony P. Purchio, and Darlene E. Jenkins
- 2.) [Abstract 3402 – Investigation of Mechanisms of Tumor Progression In Vivo Using Non-invasive Bioluminescent Imaging](#). Authors: Paul Kwon, Dragana Jekic-McMullen, Lin Esposito, Saraswathi Naravula, Lidia Sambucetti
- 3.) [Abstract 3414 – In Vivo Bioluminescent Imaging \(BLI\) to Monitor Treatment Response and Relapse in Primary and Metastatic Mouse Models of PC-3M-luc-C6 Prostate Cancer Cells](#). Authors: Shang-Fan Yu, Yvette S. Hornig, Joan M. Dusich, Tony P. Purchio, Darlene E. Jenkins

Xenogen Biosciences poster presentation for the Tribbranch Symposium, Biotechnology in the 21st Century and Beyond, June 8–10, 2003, Philadelphia, PA:

[Tissue Adhesive as an Alternative Method of Wound Closure](#). Authors: Jeffrey Weidlick, Emily Browne, William Campbell, Caroline Giordano, and Arman Saparov

Xenogen poster presentation for the ASM 103rd General Meeting, May 18-22, 2003, Washington D.C.:

- 1.) [Abstract 1741 – Non-invasive Method for Monitoring Drug Efficacy in the Treatment of Bacterial Meningitis in an Experimental Murine Model](#). Authors: J.L. Kadurugamuwa¹, R. Kimura¹, J Yu¹, K. Francis¹, C. Orihuela², E. Tuomanen², A.F. Purchio¹ And P. R. Contag¹. ¹Xenogen Corp., Alameda, CA, USA. ²St. Jude Children's Research Hospital, Memphis, TN, USA.
- 2.) [Abstract 1744 – In Vivo Biophotonic Monitoring of Serum Amyloid A Response to Bacterial Challenge in Mice](#). Authors: J. L. Kadurugamuwa, L. Sin, N. Zhang, T. Doyle, P. R. Contag, A. F. Purchio
- 3.) [Abstract 4690 – Real Time Detection and Comparison of Different Bioluminescent Biofilm-Forming Bacteria in an Experimental Murine Model](#). Authors: Yu J., Kadurugamuwa J., Kimura R., Sin L., Tomkiel D., and Francis K. P.

Xenogen poster presentation for the SOT 42nd Annual Meeting, March 9–13, 2003, Salt Lake City, UT:

[Abstract 392 – Bioluminescent Measurement of Oxidative Stress](#). Authors: D. McMullen, S. Malstrom, D. West and L. Sambucetti.

Xenogen Posters/Abstracts – Continued

Xenogen poster presentation for the AACR Mouse Models of Cancer, February 19–23, 2003, Lake Buena Vista, FL:

[Non-invasive Imaging Of Dual-tagged Reporters for Monitoring Multiple Biological Pathways In Vivo](#). Author: P. Kwon, L. Esposito, D. McMullen, S. Denker, T. Troy, and L. Sambucetti

Xenogen poster presentation for the AACR-NCI-EORTC Meeting on Molecular Targets and Cancer Therapeutics, November 19–22, 2002, Frankfurt, Germany:

[Abstract 321 – Correlation Between NF- \$\kappa\$ B Activity and I \$\kappa\$ B Degradation in Tumor Cells Using Bioluminescent Reporters](#).

Authors: P. Kwon, C. Yu, S. Naravula, and L. Sambucetti, Xenogen Corporation

Xenogen poster presentations for the 11th North American ISSX Mtg. (International Society for the Study of Xenobiotics), October 26–31, 2002, Orlando, FL:

1.) [Abstract 235 – A Transgenic Mouse Model for In Vivo Regulation of the Human CYP3A4 Promoter](#). Authors: Weisheng Zhang, Anthony Purchio, Kevin Chen, Jianming Wu, Li Lu, David B. West

2.) [Abstract 236 – In Vivo Activation of the Human CYP3A4 Promoter in Mouse Liver and Regulation by Pregnane X Receptors](#).

Authors: Weisheng Zhang¹‡, Anthony Purchio¹, Kevin Chen¹, Stacy Burns², Christopher H. Contag², Pamela R. Contag¹.

¹Xenogen Corporation, ²Stanford University Medical Center

Xenogen poster presentation at the AACR Proteases, Extra-cellular Matrix, and Cancer Meeting, October 9–13, 2002, Hilton Head, SC:

[In Vitro and In Vivo Imaging of MMP14-Luc Reporter in Human Cancer Cells](#). Authors: Caroline D. Scatena, Mischa A. Hepner, Shang-Fan Yu, Tony Purchio, and Darlene E. Jenkins

Xenogen poster presentations for annual ASM ICAAC, September 27–30, 2002, San Diego, CA:

1.) [Abstract 2277 – Rapid Direct Method for Monitoring In Vivo Activities of Antibiotics on Bacterial Biofilms](#). Authors: J.

Kadurugamuwa, L. Sin, E. Albert, J. White & T. R. Parr, Jr.

2.) [Abstract 2390 – Rapid Direct Method to Monitor In Vivo Expression of Inducible Nitric Oxide During Inflammation](#). Authors:

J.Kadurugamuwa, N. Zhang, C. B. Kawahara, L. Sin, E. Albert, J. White, K. Steinmetz, D. B. West, T. R. Parr Jr.

Xenogen poster presentation for the Society for Molecular Imaging Annual Meeting, August 24–26, 2002, Boston, MA:

[Real-time Monitoring of Infections from Medical Devices](#). Authors: J. Kadurugamuwa, J. White, L. Sin, E. Albert, M. DeBoer, J. Yu, K. Francis, T. Purchio and P.R. Contag

Xenogen poster presentations for the ASM 102nd General Meeting, May 19–23, 2002, Salt Lake City, UT:

1.) [Bioluminescent Monitoring of Drug Efficacy in a Six-hour Murine Sepsis Model](#). Author: C. Bellinger-Kawahara, K.P. Francis, A. Larkin, P.D. Winterberg, and L.V. Sin

2.) [A Bioluminescent Model of Murine Pneumonia Caused by *Pseudomonas aeruginosa*](#). Authors: C.G. Bellinger-Kawahara, P.D. Winterberg, K.P. Francis, L.V. Sin, and A. Larkin

3.) [A Direct Continuous Method to Monitor Biofilms on Medical Devices](#). Authors: J. Kadurugamuwa, L. Sin, E. Albert, P. Winterberg, A. Larkin, C. Bellinger-Kawahara, M. DeBoer, M. Rubin, Jun Yu, K. Francis, and T. Parr, Jr.

4.) [Evidence of Early Spread and Invasion in a Bioluminescent Model of Pneumonia Caused by *Yersinia pseudotuberculosis*](#).

Authors: C.G. Bellinger-Kawahara, L.V. Sin, A. Larkin, D. Pardi, D. Tomkiel, and P.D. Winterberg

5.) [Disruption of *Staphylococcus aureus* RNAlII *agr* Locus Does Not Cause Virulence Attenuation in a Mouse Sepsis Mouse](#). Authors: J. Yu, C. Bellinger-Kawahara, P.D. Winterberg, and K.P. Francis

Xenogen poster presentation for the 5th German-American Frontiers of Engineering Symposium, May 16–18, 2002, Washington D.C.: [Xenogen Corporation's Biophotonic Imaging Technology](#). Author: Tamara Troy

Xenogen poster presentation for the Optical Society of America Topical Meeting on Biomedical Optics, April 7–10, 2002, Miami Beach, FL:

[Development of a 3D Optical Imaging System for In Vivo Detection of Bioluminescence](#). Authors: T.L. Troy, D.G. Stearns, D.N. Nilson, and B.W. Rice

Xenogen poster presentations for the AACR 93rd Annual Meeting, April 6–10, 2002, San Francisco, CA:

1.) [Inducible Nitric Oxide Synthase \(iNOS\) Expression Analyzed In Vivo During Inflammatory Responses](#).

Primary Author: N. Zhang, et al., Xenogen Corporation

2.) [Non-invasive Real-time Investigation of Angiogenic Mechanisms During In Vivo Tumor Progression](#).

Primary Author: P. Kwon, et al., Xenogen Corporation

Xenogen Posters/Abstracts – Continued

3.) [Early In Vivo Detection of Metastasis to Bone and Soft Tissues in Murine Models Using Bioluminescent Human Prostate and Breast Carcinoma Cell Lines](#). Primary Author: S. F. Yu, et al., Xenogen Corporation

4.) [In Vivo Detection of Lung Colonization and Metastasis Using Luciferase-expressing Human A549 Lung Cells](#). Primary Author: J. Dusich, et al., Xenogen Corporation

Xenogen poster presentation for the 12th International Society of Bioluminescence and Chemiluminescence, April 5–9, 2002, Cambridge, England:

[Murine Models of *Candida albicans* Infection Using Bioluminescent Cells](#). Authors: Timothy C. Doyle, K.A. Nawotka, C. Bellinger-Kawahara, K. Korde, V.C. Hamill, M.R. Suzuki, A.R. Akin, C.M. Yu, P.D. Winterberg, and K.P. Francis, Xenogen Corporation

Xenogen poster presentations for the Society of Toxicology's 41st Annual Meeting, March 18–21, 2002, Nashville, TN:

1.) [Expression of a Heme Oxygenase-luciferase \(HO-1-luc\) Construct in Transgenic Mice Following Treatment with Different Chemicals](#). Authors: S. Malstrom, D. McMullen, K.L. Steinmetz, W. Zhang, L. Sambucetti

2.) [Bioluminescent Detection of p53 In Vitro and In Vivo in Response to DNA-damaging Agents](#). Authors: L. Esposito, P. Kwon, C. Yu, D.J. McMullen, and L.C. Sambucetti

3.) [In Vivo Quantification of Sex-specific Heme Oxygenase-luciferase \(HO-luc\) Transgene Expression Following Chloroform-induced Toxicity in Mice](#). Authors: D. J. McMullen, K.L. Steinmetz, W. Zhang, S. Malstrom, and L. Sambucetti

Xenogen poster presentation for AACR Apoptosis and Cancer Meeting, February 2002:

[Bioluminescent Detection of p53 Activity in Response to Chemotherapeutic Agents](#). Authors: Paul O. Kwon, Lin A. Esposito, Christina Yu, Joan M. Dusich, Darlene E. Jenkins, Lidia C. Sambucetti, Xenogen Corporation

Xenogen poster presentation for Imaging in 2020 Conference, September 26 to October 4, 2001, Jackson Hole, WY:

[Multi-view Imaging System for In Vivo Detection of Bioluminescence](#). Authors: B.W. Rice, D.N. Nilson, T.L. Troy, D.G. Stearns, and M.D. Cable, Xenogen Corporation

AACR NCI-EORTC International Conference Oct. 29 to Nov. 2, 2001, Miami, FL:

[Investigation of Real-time Human Vascular Endothelial Growth Factor 1 Expression During Tumor Growth In Vivo](#). Authors: Paul Kwon, Lin Esposito, Mary Rose Madlansacay, Shang-Fan Yu, Darlene Jenkins, and Lidia Sambucetti, Xenogen Corporation

High Resolution Imaging in Small Animals Conference, Rockville, MD 2001, Sept. 9–11, 2001:

[Luciferase-based In Vivo Imaging System for Non-Invasive Monitoring of Tumor Growth and Metastasis in Mouse Models of Human Cancer](#). Authors: S.F. Yu, Y.A. Oei, J.M. Hornig, C.D. Scatena, and D.E. Jenkins, Xenogen Corporation

Association for Research in Vision and Ophthalmology Meeting, April 29–May 3, 2001, Ft. Lauderdale, FL:

[A Rabbit Corneal Infection Model Using a Bioluminescent Strain of *P. aeruginosa*](#). Authors: Danny Joh, Kevin P. Francis, Lin Sin, Christine Safiddine, Shari Starr, Eddie Albert, Carole Bellinger-Kawahara, Tony Purchio, and Pamela Contag, Xenogen Corporation

Xenogen abstract presentations for ASM 101st Annual General Meeting, May 2001, Orlando, FL:

1.) [Bioluminescent Monitoring of Disease Progression in a Mouse Model of Pneumonia](#). Authors: Carolyn Bellinger-Kawahara, Kevin P. Francis, Tony F. Purchio, and Pamela R. Contag

2.) [Generation of Bioluminescent Gram-positive Bacteria for Noninvasive Imaging in Living Animals](#). Authors: Kevin P. Francis, Jun Yu, Carolyn Bellinger-Kawahara, Danny Joh, Matthew J. Hawkinson, Grace Xiao, Tony F. Purchio, and Pamela R. Contag

3.) [A Vaginal Model of *Candida albicans* Infection Using Bioluminescent Cells](#). Authors: Kevin A. Nawotka, Timothy C. Doyle, Kevin P. Francis, Carolyn Bellinger-Kawahara, K. M. Korde, M. C. Yu, Pam D. Winterberg, Tony F. Purchio, and Pamela R. Contag

4.) [A Method of Noninvasive and Real-time Assessment of Corneal Infection Using a Bioluminescent Strain of *P. aeruginosa*](#). Authors: Danny Joh, Kevin P. Francis, Lin Sin, Christine Safiddine, Shari Starr, Eddie Albert, Carole Bellinger-Kawahara, Tony F. Purchio, and Pamela R. Contag

Xenogen abstract presentations for AACR 2001 (American Association for Cancer Research), March 2001, New Orleans, LA:

1.) [Noninvasive Bioluminescent In Vivo Imaging to Monitor Tumor Growth and Metastasis of Prostate, Breast, Melanoma and Colon Cancers in Mice](#). Authors: Darlene E. Jenkins, Yvette S. Hornig, Shang-Fan Yu, Yoko A. Oei, Joan M. Dusich, P. R. Contag, and Tony F. Purchio

2.) [p53 Activity as a Marker for Apoptosis in Tumor Cells In Vitro and In Vivo Using Bioluminescent Imaging](#). Authors: Lin Esposito, Paul Kwon, Karen Steinmetz, and Lidia Sambucetti

3.) [In Vivo Monitoring of VEGF Expression in Primary and Metastatic Tumors with the IVIS™ Imaging System](#). Authors: Ning Zhang, Bonnie H. Li, Aneil Weber, Lidia C. Sambucetti, and Tony F. Purchio

Xenogen Posters/Abstracts – Continued

Xenogen abstract presentations for Society of Toxicology, 40th Annual Meeting, March, 2001, San Francisco, CA:

1.) [Whole Body Imaging of Heme Oxygenase-1 Expression Patterns In Transgenic Mice May Predict Drug Toxicity.](#)

Authors: W. Zhang¹, S. Ma¹, A. F. Purchio¹, D. K. Stevenson², M. R. Madlansacay¹, P. R. Contag¹, K. L. Steinmetz¹, C. H. Contag¹; ¹Xenogen Corporation, Alameda, CA, and ²Stanford University, Stanford, CA

2.) [Whole Body Imaging of Inducible Nitric Oxide Synthase Expression Patterns in Transgenic Mice Treated with Lipopolysaccharide and Interferon-gamma.](#) Authors: B. Li, N. Zhang, A. Weber, R. Lyons, M. R. Madlansacay, K. L. Steinmetz, and A. F. Purchio

Xenogen abstract presentations for AACR Special Meeting—Mouse Models of Cancer, Nov. 2000, San Diego, CA:

1.) [Luciferase-expressing B16-F10 Mouse Melanoma Cells to Monitor Lung Colonization and Metastasis In Vivo by Non-invasive Bioluminescent Imaging.](#) Authors: Shang-Fan Yu, Yoko A. Oei, Joan M. Dusich, Pam R. Contag, Tony Purchio, and Darlene E. Jenkins

2.) [In Vivo Imaging of Experimental and Orthotopic Metastatic Models of MDA-MB-231-luc Breast Cancer Cells Expressing Luciferase.](#) Authors: Yvette S. Hornig, Yoko A. Oei, Joan M. Dusich, Pamela R. Contag, Tony Purchio, and Darlene E. Jenkins

Novartis Institute and Xenogen Corporation abstract presentation presented at the April 2000 AACR Conference, San Francisco, CA:
[Noninvasive Imaging of Luciferase-tagged Subcutaneous, Orthotopic, and Metastatic Human Tumors in Athymic Mice](#)

Authors: Wei Yang, Darlene Jenkins, Pamela Contag, Erik Sorensen, Diane Gunson, Alexander W. Wood and Peter Lassota Study conducted by Novartis Institute for Biomedical Research, Summit, NJ, and Xenogen Corporation, Alameda, CA; presented at the April 2000 AACR Conference in San Francisco, CA

Lilly Research Laboratory studies presented at the September, 1999 American Society for Microbiology 40th Interscience Conference on Antimicrobial Agents and Chemotherapy Conference in San Francisco, CA:

1.) [The Use of Luminescent *Escherichia coli* for In Vitro Antimicrobial Studies.](#) Authors: H. L. Rocchetta, C. J. Boylan, J. W. Foley, D. L.

LeTourneau, P. W. Iversen, and T. R. Parr, Jr. Study conducted by the Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN

2.) [In Vivo, Real-time, Imaging of Luminescent *Escherichia coli* in the Netropenic Mouse Thigh Model.](#) Authors: H. L. Rocchetta, J. W.

Foley, C. J. Boylan, P. W. Iversen, D. E. Jenkins, P.R. Contag, and T.R. Parr, Jr. Study conducted by the Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN and Xenogen Corporation, Alameda, CA
