

UNIVERSITY OF MINNESOTA



10<sup>th</sup>

Anniversary

Joint Degree Program  
in Law, Health & the Life Sciences

1999-2009

Consortium on Law and Values  
in Health, Environment & the Life Sciences

## 10TH ANNIVERSARY REPORT



Joint Degree Program  
in Law, Health & the Life Sciences"

Consortium on Law and Values  
in Health, Environment & the Life Sciences"



### ANNIVERSARY HIGHLIGHTS:

- 1998-99 University-wide committee plans and University Regents approve Joint Degree Program
- 2000 Consortium on Law and Values in Health, Environment & the Life Sciences founded
- 2000 NIH grant funds research on "Genetics & Disability Insurance: Ethics, Law & Policy"
- 2001 Consortium awards first 15 intramural grants; total awards now exceed \$670,000
- 2002 First Joint Degree Program students graduate
- 2003 President Robert Bruininks names the Consortium one of 8 Presidential Interdisciplinary Initiatives
- 2004 *Minnesota Journal of Law, Science & Technology (MJLST)* founded
- 2004 Deinard Memorial Lecture on Law & Medicine established
- 2005 NIH grant funds research on "Managing Incidental Findings in Human Subjects Research"
- 2006 Inaugural Visiting Consortium Professorship
- 2006 NSF grant funds research on "Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context"
- 2007 Greenwall Foundation grant to host the Oscar M. Ruebhausen Visiting Professorship, with the Center for Bioethics and Mayo Clinic
- 2008 Symposium funded by Greenwall Foundation on "Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience"
- 2009 10th Anniversary Conference on "What's Next in Law, Health & the Life Sciences? Debating Openness, Access & Accountability"





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**Anniversary**

**Joint Degree Program**  
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**Consortium on Law and Values**  
in Health, Environment & the Life Sciences

University of Minnesota Law School  
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The University's mission, carried out on multiple campuses and throughout the state, is threefold: research and discovery, teaching and learning, and outreach and public service.

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## Table of Contents

- 2 Message from the Director and Chair

### **Consortium on Law and Values in Health, Environment & the Life Sciences**

- 3 Update on the Consortium on Law and Values  
4 Consortium Members  
7 Presidential Interdisciplinary Initiative on Law and Values  
8 *Minnesota Journal of Law, Science & Technology*  
10 Visiting Consortium Professor  
11 Consortium Requests for Proposals (RFPs)  
13 Grants & Research

### **Joint Degree Program in Law, Health & the Life Sciences**

- 16 Update on the Joint Degree Program

#### **Timeline**

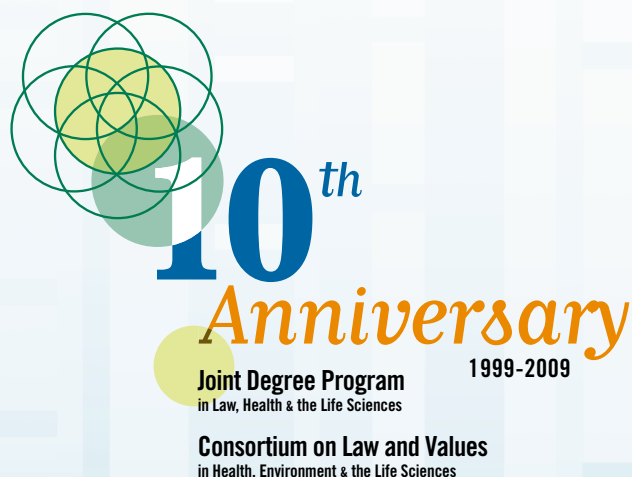
- 10 years of the Consortium and Joint Degree Program  
17 Joint Degree Program Faculty  
18 Concentration in Health Law & Bioethics  
20 Student Recruitment & Scholarships  
21 Student Honors & Achievements  
22 Graduates  
24 Joint Degree Program Proseminar  
26 Joint Degree Program Faculty & Governing Committee  
30 Joint Degree Program Advisory Board  
35 Deinard Memorial Lecture Series on Law & Medicine

#### **Co-sponsored Activities**

- 36 2007-08 Events  
37 Lecture Series on Law, Health & the Life Sciences  
39 Annual Conference  
41 Recent Publications  
44 Executive Committee  
45 Websites & Technology

#### **Staff & Support**

- 46 Staff  
47 Support & Acknowledgements  
48 Looking Forward: 2008-09 and Beyond



# Message from the Director and Chair



**PROFESSOR SUSAN M. WOLF, JD**

McKnight Presidential Professor of Law, Medicine  
& Public Policy

Faegre & Benson Professor of Law

Professor of Medicine

Director, Joint Degree Program in Law, Health &  
the Life Sciences

Chair, Consortium on Law and Values in Health,  
Environment & the Life Sciences

Dear Colleagues:

In 2008-09 the University of Minnesota's **Consortium on Law and Values in Health, Environment & the Life Sciences** and **Joint Degree Program in Law, Health & the Life Sciences** will reach a milestone—our 10<sup>th</sup> anniversary. I vividly remember our University-wide planning process in 1998-99, greatly aided by then-Provost Robert Bruininks and then-Dean Tom Sullivan. Colleagues from throughout the University and eminent members of our broader community met to dream up something that no other university had built—a genuinely cross-disciplinary program to tackle the most challenging problems looming in the 21<sup>st</sup> century, issues in health, the life sciences, and the environment. These are issues at the intersection of law, ethics, policy, science, and medicine; only a highly innovative and interdisciplinary effort can make genuine progress. In June of 1999 the Regents of this University approved our Joint Degree Program to recruit and train the next generation of thinkers and practitioners who will confront these problems. And in Summer 2000, we launched a University-wide Consortium of centers and programs to pool expertise and resources to work on these problems and catalyze needed national debate.

We have accomplished a huge amount in the last 10 years. Our research has been funded by the National Institutes of Health (NIH), the National Science Foundation (NSF), and The Greenwall Foundation, producing and publishing groundbreaking results. We have built a top journal, the *Minnesota Journal on Law, Science & Technology*. We have established the country's leading Joint Degree Program for students combining a law degree with one of 22 other professional and graduate degrees and have already graduated 16 students who are making their mark. We have awarded over \$670,000 in intramural funds to catalyze University-wide work on the societal implications of the life sciences. We have brought to campus the very top thinkers from around the country and beyond. We have established a national reputation for our programs and the University of Minnesota, as the place to turn for incisive, honest debate on these crucial issues and cutting-edge solutions.

The **Consortium** and **Joint Degree Program** are proud to present our 10<sup>th</sup> Anniversary Report. We summarize our accomplishments in 2007-08, but offer a broader view of all we have accomplished in the last 10 years. We give thanks to the many scholars, students, leaders, and funders who have enabled us to accomplish so much. We offer a glimpse of our plans for the next 10 years, starting with our 10<sup>th</sup> Anniversary Conference on March 6, 2009 on "What's Next in Law, Health & the Life Sciences? Debating Openness, Access & Accountability."

Under the leadership of President Robert Bruininks and Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan we have been able to forge new paths in interdisciplinary research and scholarship. We are pleased that the **Consortium** remains a **Presidential Interdisciplinary Academic Initiative** and delighted that Senior Vice President and Provost E. Thomas Sullivan continues to lead this Presidential Initiative.

The **Consortium** and the **Joint Degree Program** remain unique in the nation. They have grown into top national programs. We are proud of our research, scholarship, policy work, community engagement, and student training. Please accept our thanks for being part of this effort. We look forward to continuing our collaboration in the next 10 years!

Appreciatively,

Susan M. Wolf



# Update on the Consortium on Law and Values

As the Consortium on Law and Values in Health, Environment & the Life Sciences enters its 10th year, we are gratified by what we have achieved and look forward to new accomplishments.

## In 2007-08 the Consortium reached new levels of success:

The **Consortium on Law and Values in Health, Environment & the Life Sciences** completed work on the NIH-funded project, “**Managing Incidental Findings in Human Subjects Research**” resulting in a groundbreaking symposium in the *Journal of Law, Medicine & Ethics* in Summer 2008.

We are in the second year of work on our 4-year project funded by a National Science Foundation (NSF) grant, “**NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in Societal Context**” resulting in publications in the *Minnesota Journal of Law, Science & Technology (MJLST)* and elsewhere.

Thanks to a grant from **The Greenwall Foundation**, we joined with the Center for Bioethics and the Mayo Clinic to welcome Dr. Zach Hall, PhD (founding Director of the California Institute for Regenerative Medicine (CIRM)) as the 2007 Oscar M. Ruebhausen Visiting Professor in Bioethics, who spoke on “**Stem Cell Research: At the Intersection of Science, Politics, Law, and Culture.**”

Through our Request for Proposals (RFP) process, the **Consortium** competitively awarded 2 faculty grants, 8 student grants, and 2 grants to **Consortium** members and **Joint Degree Program** partner programs for a total of \$108,966 in intramural funding for 2007-08.

### In 2008-09, the Consortium and JDP are presenting 6 events:

- Lecture Series on Law, Health & the Life Sciences on “**Synthetic Biology: The Science, Ethics & Law of Creating New Life**” featuring: Prof. Arti K Rai, JD (Duke University School of Law); Robert Friedman, PhD (J. Craig Venter Institute); and Prof. Drew Endy, PhD (Stanford University)
- 10th anniversary conference on “**What’s Next in Law, Health & the Life Sciences? Debating Openness, Access & Accountability**”
- **Deinard Memorial Lecture on Law & Medicine** by Prof. M. Gregg Bloche, JD, MD (Georgetown University)
- 2008-09 **Visiting Consortium Professor** Ezekiel J. Emanuel, MD, PhD (National Institutes of Health)

The **Consortium** and **Joint Degree Program** sponsored 7 events in 2007-08: the Lecture Series on Law, Health & the Life Sciences focused on the “**Emerging Debates on Oversight and Policy in Biomedicine & the Life Sciences**” with Suzanne Hunt, MA (formerly of WorldWatch Institutes), Pres. Debora Spar, PhD (Barnard College), and Prof. Patricia King, JD (Georgetown University); the **Joint Degree Program** continued the **Deinard Memorial Lecture Series on Law & Medicine**, co-sponsored with the Center for Bioethics, and generously supported by the Deinard family in honor of Amos and Benedict Deinard, featuring Prof. George Annas, JD, MPH (Boston University) speaking on “**The Legacy of the Nazi Doctors’ Trial for American Bioethics and International Human Rights Law**”; our annual conference focused on “**Emerging Problems in Neurogenomics: Ethical & Policy Issues at the Intersection of Genomics & Neuroscience**,” supported in part by **The Greenwall Foundation** — selected articles from this conference to appear in volume 10 of *MJLST*; and Visiting Consortium Professor Stephen Pacala, PhD (Princeton University) spoke on “**Equitable Solutions to Greenhouse Warming: On the Distribution of Wealth, Emissions, and Responsibility Within and Between Nations.**”

The *Minnesota Journal of Law, Science & Technology (MJLST)* published volume 9 in 2007-08. *MJLST* was ranked number #1 in submissions in 2007 for Environmental Law journals by ExpressO; and beginning with volume 9 *MJLST* now publishes the full text of each article online.

*MJLST*, Volume 10, issue 1 will publish articles from: President Debora Spar, PhD (Barnard College), Professor George Annas, JD, MPH (Boston University), and Zach Hall, PhD (founding Director of the California Institute for Regenerative Medicine (CIRM)), and others.



Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan.

## 2007-08 Consortium & Joint Degree Program Highlights:

- NIH-funded grant on managing incidental findings in research produced groundbreaking symposium in the *Journal of Law, Medicine & Ethics*
- NSF-funded grant on oversight for nanobiotechnology yielded publications in the *Minnesota Journal of Law, Science & Technology* and elsewhere
- The Greenwall Foundation supported the 2007 Oscar M. Ruebhausen Visiting Professor Zach W. Hall, PhD
- Greenwall Foundation grant supported a conference on “Emerging Problems in Neurogenomics”
- Publication of articles and symposia in *Risk Analysis*, *Hastings Center Report*, *Journal of Law, Medicine & Ethics*, and others
- Joint Degree Program enrolled 7 new students for a total of 36 students
- Joint Degree Program graduated 4 students
- Prof. Susan M. Wolf, JD, reappointed Faegre & Benson Professor of Law, Consortium Chair, and Director of the Joint Degree Program
- Deinard Memorial Lecture on Law & Medicine presented by Prof. George Annas, JD, MPH (Boston University)
- Consortium Visiting Professor: Stephen Pacala, PhD (Princeton University)
- Lecture Series on “Emerging Debates on Oversight and Policy in Biomedicine & the Life Sciences”
- *MJLST* began simultaneous electronic and print publication
- 12 Consortium intramural grants awarded totaling \$108,966

# Consortium on Law and Values in Health, Environment & the Life Sciences

## Consortium Members

The Consortium on Law and Values in Health, Environment & the Life Sciences crosses all colleges at the University of Minnesota. The Consortium coordinates among and builds on the strengths of 17 University centers and programs, establishing a national identity for the University of Minnesota as a leading institution working on the societal implications of developments in health, environment, and the life sciences. The Consortium brings these programs together to address those interdisciplinary questions that are difficult for any one program to tackle alone. The 17 constituent programs are:



The **Joint Degree Program** is led by founding Director, Prof. Susan Wolf, JD, McKnight Presidential Professor of Law, Medicine & Public Policy, Faegre & Benson Professor of Law, and Professor of Medicine and Associate Director Prof. Colin Campbell, PhD, Associate Professor, Department of Pharmacology. The University of Minnesota's Joint Degree Program in Law, Health & the Life Sciences is training students to become experts in the legal, ethical, and policy problems posed by health, the sciences, and the environment in the 21st century. [www.jointdegree.umn.edu](http://www.jointdegree.umn.edu)



The **Center for Bioethics'** mission is to advance and disseminate knowledge concerning ethical issues in health care, biotechnology, and the life sciences. The Center conducts original interdisciplinary research, offers educational programs and courses, fosters public discussion and debate through community outreach activities, and assists in the formulation of public policy. The Center is directed by Prof. Jeffrey Kahn, PhD, MPH, Maas Family Chair in Bioethics and Professor, Department of Medicine, School of Public Health, and the Department of Philosophy. [www.bioethics.umn.edu](http://www.bioethics.umn.edu)



The **Biomedical Genomics Center** was created as a part of the University of Minnesota Genomics Initiative to advance genomics research as it applies to human and animal health and to foster intercollegiate programs. The Center is using the vast amounts of information provided by sequencing of human, animal, and microbial genomes to find new ways to treat and prevent disease. The Biomedical Genomics Center is led by Interim Director Prof. Brian Van Ness, PhD, Department of Genetics, Cell Biology and Development. [www.bmgc.umn.edu](http://www.bmgc.umn.edu)



The **Microbial and Plant Genomics Institute** was established in 2006 when the University's Center for Microbial and Plant Genomics and Plant Molecular Genetics Institute merged. The Microbial and Plant Genomics Institute includes faculty who are interested in the successful development and application of genomics and the resulting societal and environmental impact. The coordinators for MPGI are Profs. Neil Olszewski, PhD, Department of Plant Biology, and Michael Sadowsky, PhD, Department of Microbiology. [www.mpgi.umn.edu](http://www.mpgi.umn.edu)



The **Stem Cell Institute** works to further basic research in stem cell and developmental biology, translate basic research into novel therapies for genetic and degenerative disorders, apply new stem cell-based therapies in the clinic, advance and disseminate knowledge concerning stem cell biology, foster and increase public awareness of stem cells and their potential clinical applications, and address ethical issues in stem cell biology and therapeutics. The Institute is directed by Prof. Jonathan Slack, PhD, Tulloch Chair in Stem Cell Biology, Genetics and Genomics. It is represented in the Consortium by Prof. Slack and Associate Director, Prof. Dan Kaufman, MD, PhD. [www1.umn.edu/stemcell](http://www1.umn.edu/stemcell)



The **Institute of Human Genetics** is committed to educating and training students for opportunities in biomedical research and clinical practice. Research areas at the Institute include behavioral genetics, clinical genetics, gene therapy, genetic epidemiology, developmental biology, microchemical facility, and molecular genetics. The Institute is directed by Prof. Harry Orr, PhD, Professor of Laboratory Medicine and Pathology. Prof. Orr and Prof. Bonnie LeRoy, MS, CGC, Director of the Graduate Program in Genetic Counseling, represent the Institute at Consortium meetings and events. [www.med.umn.edu/ihg/](http://www.med.umn.edu/ihg/)

The **Center for Infectious Disease Research & Policy (CIDRAP)** is led by Director Prof. Michael Osterholm, PhD, MPH, Division of Environmental Health Sciences, School of Public Health, Adjunct Professor, Medical School, and Director, NIH-supported Center of Excellence for Influenza Research Surveillance within CIDRAP; Associate Director Jill DeBoer, MPH; and Director of Operations Elaine Collison, MPA. The Center's mission is to prevent illness and death from infectious diseases through epidemiologic research and the rapid translation of scientific information into real-world practical applications and solutions. The Center's work supports the development of public policy reflecting current biomedical knowledge and promotes sound practices among both health care professionals and the public. A primary focus of the Center in the last several years has been enhancing pandemic influenza preparedness in the United States and internationally through avian influenza virus research, providing critical information to businesses, and identifying and sharing promising practices among public health authorities. [www.cidrap.umn.edu](http://www.cidrap.umn.edu)



The **Center for Animal Health & Food Safety** is led by Co-Directors Profs. William Hueston, DVM, MS, Dipl. ACVPM, and Jeff Bender, DVM, MS, Dipl. ACVPM; Associate Director Linda Valeri, MBA; and Director of Education Prof. Scott Wells, DVM, PhD, Dipl. ACVPM. Profs. Hueston, Bender, and Wells have appointments in the School of Public Health and the College of Veterinary Medicine. Prof. Hueston also holds the title of Endowed Chair for Global Food System Leadership and directs the Global Initiative for Food System Leadership. The Center plays a leadership role in assuring food safety and security from the farm to the consumer. It does this regionally, nationally, and internationally through aggressive risk communication, applied research, integrated animal and public health surveillance, expanded educational programs, leadership development, and facilitation of creative prevention and quality assurance strategies involving producers, processors, distributors, retailers, food service, and consumers. The Center also directs the Veterinary Public Health Residency Program and provides services to government, industry, and non-governmental organizations through its Public Practice service unit. [www.cahfs.umn.edu](http://www.cahfs.umn.edu)



The **National Center for Food Protection and Defense** is a University-based research center supported by the U.S. Department of Homeland Security bringing together national academic, industry, and public-sector partners to develop ways of enhancing our nation's capability to protect the food supply from intentional contamination. The Center is led by Director Shaun Kennedy, BSE, College of Veterinary Medicine, and Director Emeritus Prof. Frank Busta, PhD, Senior Science Advisor. [www.ncfpd.umn.edu](http://www.ncfpd.umn.edu)



The **Center for Neurobehavioral Development** is directed by Prof. Michael Georgieff, MD, Department of Pediatrics, Division of Neonatology, and Institute of Child Development. The Center studies the developing human brain and its relationship to normal and abnormal development. The Center trains graduate students, funds research projects, and serves as a site for non-medical developmental clinics. [www1.umn.edu/cnbd/](http://www1.umn.edu/cnbd/)



The **Center for Environment & Health Policy** is directed by Prof. William Toscano, PhD, Head of the School of Public Health's Division of Environmental Health Sciences. The Center is funded by grants from the U.S. Environmental Protection Agency, Legislative Commission on Minnesota Resources, Minnesota Pollution Control Agency, Minnesota Offices of Environmental Assistance, and the University of Minnesota. The Center focuses on improving assessment, management, and communication of environmental health risks and fostering environmental policy decisions. <http://enhs.umn.edu/files/research>



The **Center for Plants and Human Health** is directed by Prof. Gary Gardner, PhD, Horticultural Science. The Center works to develop synergy between agriculture and the health sciences, primarily in research. The potential for plants and plant products to contribute to human health goes under a wide variety of labels – phytonutrients, nutraceuticals, functional foods – and encompasses plant science, natural products chemistry, pharmacology, nutrition, and laboratory and clinical medicine. The Center provides a forum for the development and exchange of information relevant to human health and serves as a stimulant for interdisciplinary collaboration leading to new research opportunities and funding in this vital area. <http://cphh.cfans.umn.edu/>





## INSTITUTE ON THE ENVIRONMENT



[environment.umn.edu](http://environment.umn.edu)

The **Institute on the Environment** (IonE) was led by Interim Director Prof. Deborah L. Swackhamer, PhD, Environmental Health Sciences from 2006-08. The Institute on the Environment welcomes Director Prof. Jonathan Foley, PhD, in August 2008. The Institute's research is organized around a set of overarching themes that will change over time as solutions to existing problems are found and new challenges arise. The current themes are: Climate Change Adaptation and Mitigation, Renewable Energy and the Environment, Landscapes and Watersheds, and Human and Ecosystem Health. The Institute on the Environment is a portal for environment-related teaching, research, and outreach at the University of Minnesota. It spans all campuses in the University system and all colleges and departments on each campus. [www.environment.umn.edu](http://www.environment.umn.edu)



The **Center for Science, Technology & Public Policy** is led by Senior Fellow Steve Kelley, JD, Humphrey Institute. The Center fosters understanding of the role of science and technology in our society, especially in relation to economic growth, health, the environment, education, and national security. The Center also supports research and teaching in the Humphrey Institute's MS degree in Science, Technology, and Environmental Policy. [www.hhh.umn.edu/centers/stpp](http://www.hhh.umn.edu/centers/stpp)



The **International Science & Technology Practice and Policy Center (InSTePP)** undertakes economic research on strategic science and technology policies. The Center analyzes private and governmental behavior affecting the conduct, performance, and economic consequences of R&D worldwide. Prof. Philip G. Pardey, PhD, Department of Applied Economics, directs this Center. [www.instepp.umn.edu](http://www.instepp.umn.edu)



The **Water Resources Center** conducts and funds research and outreach related to water resources in the state of Minnesota. The graduate program in Water Resources Science also is administered by the WRC. As the focal point for a broad range of research, education, and information exchange related to water resources, the WRC links faculty and student researchers with practicing professionals and citizens to address water resources issues. This facilitates effective delivery of research results to citizens and decision makers and opens new avenues for multidisciplinary and interagency partnerships. The Center is co-directed by Prof. Deborah L. Swackhamer, PhD, Environmental Health Sciences (on leave in 2007-08); Prof. James L. Anderson, PhD, Department of Soil, Water, and Climate; and Faye Sleeper, MA, College of Food, Agricultural and Natural Resource Sciences. [wrc.umn.edu/aboutwrc/index.html](http://wrc.umn.edu/aboutwrc/index.html)



CENTER FOR SPIRITUALITY AND HEALING  
Academic Health Center  
UNIVERSITY OF MINNESOTA

The **Center for Spirituality & Healing** established in 1995, is a nationally recognized leader in integrative medicine, bringing together biomedical, complementary, cross-cultural, and spiritual care. The Center provides interdisciplinary education, clinical care, and outreach integrating evidence-based research to establish a new model of health care in the 21st century. The Center is led by founding Director Prof. Mary Jo Kreitzer, PhD, RN, FAAN, School of Nursing. [www.csh.umn.edu](http://www.csh.umn.edu)

We congratulate all Consortium members for their considerable achievements over the last 10 years and thank them for collaborating to make the Consortium unique in the nation. For more information on Consortium members, visit [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).





## Presidential Interdisciplinary Initiative on Law and Values

University of Minnesota President Robert Bruininks named the **Consortium on Law and Values in Health, Environment & the Life Sciences** one of 8 Interdisciplinary Academic Initiatives in his October 2003 State of the University Address. In 2006 President Bruininks named Senior Vice President of Academic Affairs and Provost E. Thomas Sullivan as head of the Consortium's Initiative. We are delighted to have Provost Sullivan at the helm and benefit greatly from his guidance.

In 2007-08, Presidential Initiative funding allowed the Consortium to publish the *Minnesota Journal of Law, Science & Technology*; offer intramural grant funding to further work on the societal implications of the life sciences by Consortium member centers, plus programs and departments participating in the Joint Degree Program; host the Oscar M. Ruebhausen Visiting Professorship in Bioethics with the Center for Bioethics and the Mayo Clinic; offer successful public events including our Lecture Series on Law, Health & the Life Sciences; and host the Visiting Consortium Professor.

The Consortium responds to the most challenging legal and ethical questions of the 21st century: questions posed by biomedicine and the life sciences. These are questions that require a new kind of cross-disciplinary work fully marrying legal, ethical, and scientific expertise. The University's commitment to grappling with these emerging and complex questions is part of its land-grant legacy of serving the people of Minnesota, the country, and the world.

The Consortium links 17 of the University's leading programs and centers, leveraging the University's strengths in the life sciences, biomedicine, law, bioethics, and public policy to do cutting-edge work on the societal implications of the life sciences. The Consortium's training program, the **Joint Degree Program in Law, Health & the Life Sciences**, offers 22 degree combinations,

### Interdisciplinary Doctoral Fellowship

Kimberly Thomas-Pollei, PhD candidate in Technical Communications, Department of Writing, has been awarded a one-year Interdisciplinary Doctoral Fellowship funded by the Graduate School. In 2008-09 Ms. Thomas-Pollei will work with the Consortium as part of her research on "Interrogating Patent Law and Commodification of Genetic Risk: Myriad Genetics' BRCAAnalysis and the Production of Subjectivity."

Ms. Thomas-Pollei's project is an interdisciplinary research project examining ethical, legal, and social issues arising out of advances in genetics and analyzing the effects of patenting and commercialization of genetic sequences. She is investigating the relationships among science, technology, patenting, industry, and social identity using the ongoing controversy regarding BRCA1 & 2 gene patents as a case study.

This Fellowship is intended by the Graduate School to provide a unique study opportunity for top PhD students whose research and scholarly interests complement those of one of the University-wide, interdisciplinary research centers or institutes.

For more information on the Interdisciplinary Doctoral Fellowship, visit [www.grad.umn.edu/](http://www.grad.umn.edu/).

allowing exceptional students to combine a law degree with a wide range of graduate and professional degrees in the life sciences, biomedicine, and environmental studies.

Since 2003 the Presidential Initiative let the Consortium to launch the *Minnesota Journal of Law, Science & Technology*; increase our capacity to seek and manage externally funded grants; create a Visiting Consortium Professor position to bring to campus and the community each year a prominent scholar focusing on the societal implications of the life sciences; support work on the implications of the life sciences by Consortium members and Joint Degree Program partners; and continue extensive programming including a lecture series and an annual conference.

The Consortium is grateful to the Office of the President and the Office of the Senior Vice President for Academic Affairs and Provost for their support and confidence. More information on all of the Presidential Initiatives may be found at [www1.umn.edu/pres/01\\_initiatives.html](http://www1.umn.edu/pres/01_initiatives.html).

More information about the University's commitment to interdisciplinary research and studies can be found at [www.interdisciplinary.umn.edu/index](http://www.interdisciplinary.umn.edu/index).

# Minnesota Journal of Law, Science & Technology

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We also thank Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan and Interim Co-Deans Guy Charles and Fred Morrison of the Law School for their leadership and support we received for the *Minnesota Journal of Law, Science & Technology*.

The Consortium, together with the University of Minnesota Law School, inaugurated this unique journal in 2004-05. The *Minnesota Journal of Law, Science & Technology* (*MJLST*) is a multidisciplinary journal published twice annually, edited by faculty from across the University of Minnesota as well as by law students. *MJLST* addresses issues in intellectual property, technology policy and innovation, bioethics, and law and science, while maintaining a rigorous grounding in law, values, and policy. *MJLST* is based in the Law School and staffed by law students, but is overseen and managed by the Consortium. The journal is made possible by support received from the **Presidential Interdisciplinary Initiative on Law and Values**, ([www.interdisciplinary.umn.edu/background/law\\_values.html](http://www.interdisciplinary.umn.edu/background/law_values.html)), the Law School, Consortium, Advisory Board members, and subscriptions.

The journal features a dual masthead, one for faculty editors and one for student editors. *MJLST* is committed to serving as an educational opportunity for law students and a venue for their scholarly publications. The student staff and board are chosen competitively by the students. **Adjunct Prof. Jordan Paradise** is the Faculty Editor-in-Chief, **Prof. Susan Wolf** is the Faculty Executive Editor, and **Profs. Jeffrey Kahn, Ruth Okediji, and Daniel Philippon** are the Faculty Associate Editors. **Peter Thomas** was the 2007-08 Student Editor-in-Chief and **Kate Dyson** was the Student Executive Editor. **Caroline Crenshaw** is the 2008-09 Student Editor-in-Chief and **Jeffrey Cobia** is the Student Executive Editor. **Monica Wittstock** is the Executive

Administrator of *MJLST*. A Faculty Editorial Board reviews and edits faculty-written articles. The Faculty Editorial Advisory Board includes representatives from Consortium member centers and programs as well as University departments working on the societal implications of scientific advancements.

*MJLST* is pleased to announce that beginning with Volume 9, Issue 1 all issues will be available online at [www.mjlst.umn.edu](http://www.mjlst.umn.edu) in full text, simultaneously with hard-copy publication. We are also pleased that *MJLST* has been ranked #1 in submissions for 2007 among environmental law reviews by ExpressO, a manuscript submissions service of the Berkeley Electronic Press. For full rankings, please visit [www.law.bepress.com/expresso/2007/subject.html](http://www.law.bepress.com/expresso/2007/subject.html).

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Jordan Paradise, JD

Faculty Editor-in-Chief,  
*Minnesota Journal of Law,  
Science & Technology*

Associate Director of  
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## MJLST EDITORIAL CREDITS

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# Highlights from the *Minnesota Journal of Law, Science & Technology*

The *Minnesota Journal of Law, Science & Technology (MJLST)* reaches across disciplines in law and the life sciences and publishes articles from prominent authors including symposia on emerging cross-disciplinary topics in law and the life sciences. Highlights of symposia and colloquies published in *MJLST* include:

## *Volume 6, Issue 1*

**"Intellectual Property Rights for the Public Good:  
Obligations of U.S. Universities to Developing Countries"**

## *Volume 7, Issue 1*

**"To Recall or Not Recall, That Is the Question:  
The Current Controversy over Medical Device Recalls"**

## *Volume 8, Issue 1*

**"Terrorist Threats to our Food Supply:  
Food Protection and Defense—Science, Ethics and Law"**

## *Volume 8, Issue 2*

**"Toward a General Theory of Law and Technology"**

## *Volume 9, Issue 1*

**"Creating Stem Cells by Research Cloning:  
Scientific, Ethical, Legal & Policy Challenges"**

## *Volume 9, Issue 2*

**"Self and Other: Cognitive Perspectives on Trust, Empathy and the Self"**

All issues of *MJLST* are available at [www.mjlst.umn.edu](http://www.mjlst.umn.edu).



Distinguished Visiting Professor Ralph Hall, JD  
at the 2007 JDP Welcome Reception.



Peter Thomas, JD, Student Editor-in-Chief,  
Volume 9, *Minnesota Journal of Law, Science &  
Technology*.







Visiting Consortium Professor Stephen Pacala, PhD (Princeton University), lectures on *"Equitable Solutions to Greenhouse Warming: On the Distribution of Wealth, Emissions, and Responsibility Within and Between Nations."*



Professor Deborah Swackhamer, PhD, MS, University of Minnesota, moderates the lecture by Visiting Consortium Professor Stephen Pacala, PhD.

## Visiting Consortium Professor

Thanks to funding from the President's Interdisciplinary Academic Initiative in support of the Consortium, we are proud to offer a Visiting Consortium Professorship. **Prof. Stephen W. Pacala, PhD** (Princeton University), was the 2007-08 Visiting Consortium Professor, on campus March 10-14, 2008. Prof. Pacala delivered a public lecture on **"Equitable Solutions to Greenhouse Warming: On the Distribution of Wealth, Emissions, and Responsibility Within and Between Nations."** Prof. Pacala also participated in a roundtable discussion on **"Adaptation Strategies for Climate Change"** with the Founding Fellows of the Institute on the Environment (Ione).

In his talk, Prof. Pacala argued against a nationalistic rhetoric of fairness used by countries such as the United States, China, and India to postpone international action on global warming. He maintained that the United States claims that it is unfair to expect it to limit greenhouse emissions when big emitters like India and China have no intention of following suit. China, India and the developing nations counter that it is unfair to expect them to act when the developed nations have both created the problem and become rich on their past emissions. Prof. Pacala instead presented a new scheme based on an estimate of how much each person on the planet emits. Using data on income distribution and data on greenhouse emissions in over 190 countries for the last 40 years, he found a conservative relationship between how much money people make and how much they emit. The top 500 million emitters are also the 500 million richest people; two-thirds live in developed countries, but one-third live in developing countries. Prof. Pacala thus proposed a policy setting the emissions cap for each nation based on the individual emissions of its citizens. This new individual rhetoric of fairness would allow countries to raise their low-emitting poor above the poverty level with minimal impact on the climate problem, while putting responsibility for climate mitigation on the wealthy world-wide who are also the highest emitters. Commentators were **Prof. Stephen Polasky, PhD**, Department of Applied Economics and Institute on the Environment, and **Prof. Elizabeth Wilson, PhD**, Humphrey Institute of Public Affairs and Institute on the Environment, University of Minnesota. To view Prof. Pacala's lecture, visit [www.lifesci.consortium.umn.edu/conferences/stephen\\_pacala\\_2008.php](http://www.lifesci.consortium.umn.edu/conferences/stephen_pacala_2008.php).

Prof. Pacala is the Frederick D. Petrie Professor of Ecology and Evolutionary Biology and the Director of the Princeton Environmental Institute. He also holds an appointment as Professor in the Department of Ecology and Evolutionary Biology, and is Co-Director of The Carbon Mitigation Initiative at Princeton University. A full bio and list of publications may be found at [www.eeb.princeton.edu/FACULTY/Pacala/Pacala.html](http://www.eeb.princeton.edu/FACULTY/Pacala/Pacala.html).

### Inaugural Visiting Professor

Thanks to funding from the President's Interdisciplinary Academic Initiative in support of the Consortium, we inaugurated the Visiting Consortium Professorship in 2006-07. **Prof. Thomas (Tim) Greaney, JD**, St. Louis University School of Law, visited from October 30-November 2, 2006. Prof. Greaney delivered a public lecture on **"Medicare 'Modernization': Nation Building or Insurgency?"** He also participated in the Law School's Faculty Works-in-Progress series and met with Joint Degree Program students and faculty from across the campus.



The 2008-09 Visiting Consortium Professor will be Ezekiel J. Emanuel, PhD, MD, Chair, Center for Bioethics at the Clinical Center, National Institutes of Health. Professor Emanuel will deliver the keynote address at the Consortium's 10th Anniversary Conference, March 6, 2009. Watch our website for more information. [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu)



# Consortium Requests for Proposals (RFPs)

Since 2001 the Consortium has awarded over \$670,000 in grants to encourage campus-wide work on the societal implications of problems in health, environment, and the life sciences. In 2007-08 we issued 4 RFPs and made 12 awards totaling \$108,966. The 2008 subcommittee recommending the intramural awards to the full Consortium included Profs. Jeffrey Kahn, Shaun Kennedy, Harry Orr, Deborah Swackhamer, Betsy Wattenberg, and Susan Wolf. Committee members recused themselves from consideration of applications as appropriate. These grants are made possible by funds received through the Presidential Interdisciplinary Initiative.



2005-06 Consortium grant recipient  
Prof. Jennifer Kuzma, PhD (Humphrey Institute).

2006-07 Consortium grant recipient JDP student  
Laurel Kilgour, JD, MS candidate in Molecular,  
Cellular, Developmental Biology & Genetics.

## Consortium Members and JDP Partner RFPs

In November 2007, we issued a Request for Proposals to Consortium member centers plus graduate or professional programs and departments participating in the Joint Degree Program seeking funding for research, projects, or colloquia. The Consortium made 2 awards:

- **“Sustainability Science Forum”**—Prof. Deb Swackhamer, Prof. Anne Kapuscinski, Regents Prof. Peter Reich, Program Coordinator Kris Johnson, and Research Associate Laura Schmitt Olabisi, Institute on the Environment (\$20,210 awarded); and
- **“An Economic Evaluation of Intellectual Property Rights in the U.S. Horticultural Sector”**—Prof. Phil Pardey, International Science & Technology Practice and Policy Center (InSTePP) (\$18,000 awarded).

## Faculty RFP

In November 2007, we issued RFPs for University of Minnesota faculty.


The RFP for faculty invited proposals to fund research, projects, or curricular innovation on the societal implications of problems in health, environment, or the life sciences. The Consortium made 2 awards:

- **“Group Artist Book, Issue: The Environment”**—Prof. Jan Estep, Art (\$9,400 awarded); and
- **“Fostering ‘Connectedness to Nature’ through U.S. Fish and Wildlife Service Education and Outreach Programming: An Evaluation and Validity Assessment Study”**—Prof. Julie Ernst, Health, Physical Education and Recreation (\$16,548 awarded).

## Graduate and Professional Students RFPs

The RFP to graduate and professional students was intended to support research and writing in Summer 2008 or academic year 2008-09. We were delighted that the RFP stimulated 46 proposals from students in 33 programs around the University. Eight awards were made:

- **“The Role of Intergovernmental Organizations in the Production of Scientific Knowledge on Avian Influenza”**—Yu-Ju Chien, PhD candidate, Sociology (\$6,653 awarded);
- **“Agricultural Microfinance in Malawi: Investigating the Role of Financial Services in the Agricultural Sector of Developing Counties”**—Maria Dooner, JD candidate, Law (\$5,350 awarded);
- **“Integrating Social and Natural Science in Ecological Risk Analysis”**—Genya Dana, PhD candidate, Conservation Biology (\$2,000 awarded);
- **“Effect of Climate Change on Wildebeest-Human Relations”**—Margaret Kosmala, PhD candidate, Ecology, Evolution, and Behavior (\$7,000 awarded);
- **“Food Networks: Reconfiguring Political Action through Alimentary Practices”**—Michael Nordquist, PhD candidate, Political Science (\$6,927 awarded);
- **“Studying Biodiversity, Saving Biodiversity: Investigating Expert Constructions of Public Understanding of Conservation Science”**—Zoe Nyssa, PhD candidate, Writing Studies (\$5,954 awarded);



JDP student Stephanie Johnson, JD, MS candidate in Water Resources Science, uses GPS equipment.

- “**Conservation as Practice: An Ethnography of Community-Based Conservation in the Temperate Rainforest Region of Chile**”–Kathryn Pratt, PhD candidate, Geography (\$5,270 awarded); and
- “**Building Clean Water Communities: Understanding How Environmental Policies Can Promote and Coordinate Community Participation in the Long-Term Management of Local Freshwater Resources**”–Kaitlin Steiger-Meister, PhD candidate, Natural Resource Science & Management, Forest Resources (\$5,654 awarded).

All awards are contingent on getting IRB and all other necessary approvals. The Consortium is again issuing the RFP to Consortium members and JDP Partners as well as the other intramural RFPs in November 2008. RFPs and reports on the winning projects may be found at [www.lifesci.consortium.umn.edu/rfps](http://www.lifesci.consortium.umn.edu/rfps).

## Selected Publications Resulting From Consortium Grants

### Consortium member & JDP partner awards:

#### 2004-05 PI Susan Foote (Health Policy & Management)

Foote S. External Review of Health Plan Denials of Mental Health Services: Lessons from Minnesota. *Administration and Policy in Mental Health*. 2007;34(1):38-44.

#### 2005-06 PI Jennifer Kuzma (Humphrey Institute of Public Affairs)

Kuzma J, VerHage P. Nanotechnology in Agriculture and Food Production: Anticipated Applications. *Woodrow Wilson International Center for Scholars: Project on Emerging Nanotechnologies*. 2006;1-44.

#### 2006-07 PIs Susan Bartlett Foote and Robert J. Town (Health Policy & Management)

Foote SB, Town RJ. Implementing Evidence-Based Medicine Through Medicare Coverage Decisions. *Health Affairs*. 2007;26(5):1634-42.

### Faculty Awards:

#### 2001-02 Susan Craddock (Women's Studies)

Craddock S. Market Incentives, Human Lives, and AIDS Vaccines. *Social Science & Medicine*. 2007;64:1042-56.

#### 2002-03 Dan Phillipon (College of Food, Agricultural & Natural Resource Sciences)

Phillipon D. Thoreau's Notes on the Journey West: Nature Writing or Environmental History? *ATQ: 19th Century American Literature and Culture*. 2004;18(2):105-17.

#### 2003-04 Pat McCarthy Veach (College of Education & Human Development)

Veach PM, Bartels DM, LeRoy BS. Coming Full Circle: A Reciprocal-Engagement Model of Genetic Counseling Practice. *Journal of Genetic Counseling*. 2007;16:713-28.

### Student Awards:

#### 2001-02 Kris A. Johnson (College of Food, Agricultural & Natural Resource Sciences)

Johnson KA, Nelson KC. Common Property and Conservation: The Potential for Effective Communal Forest Management within a National Park in Mexico. *Human Ecology*. 2004;32(6): 703-33.

#### 2001-02 Gabriela Valdivia (Geography)

Valdivia G. On Indigeneity, Change, and Representation in the Northeastern Ecuadorian Amazon. *Environment and Planning*. 2005;37(2):285-303.

#### 2002-03 Helen Fisher Hazen (Geography)

Hazen HD, Anthamatten PJ. Representation of Ecoregions by Protected Areas at the Global Scale. *Physical Geography*. 2004;25(6):499-512.

#### 2004-05 Ryan Holifield (Geography)

Holifield R. Neoliberalism and Environmental Justice in the United States Environmental Protection Agency: Translating Policy into Managerial Practice in Hazardous Waste Remediation. *Geoforum*. 2004;35:285-97.

#### 2006-07 Laurel Kilgour (Law)

Kilgour L. Building Intellectual Property Management Capacity in Public Research Institutions in Vietnam: Current Needs and Future Directions. *Minnesota Journal of Law, Science & Technology*. 2008;9(1):317-68.



# Grants & Research

Since the Consortium was founded, one of our primary goals has been to compete for grants to produce original intellectual work on the societal implications of the life sciences. 2007-08 saw great growth in the Consortium's work in this area. Our research in 2007-08 has been funded by the National Science Foundation (NSF), the National Institutes of Health (NIH), and The Greenwall Foundation.

The Consortium completed a 2-year project funded by the National Human Genome Research Institute (NHGRI) at the National Institutes of Health (NIH) entitled **"Managing Incidental Findings in Human Subjects Research."** As a result of this innovative research the project published groundbreaking recommendations on how to anticipate and manage incidental findings in genetic, genomic, and imaging research, suggesting broader application to other research domains. The project has produced a 17-article symposium including the project's consensus paper, which appeared in the Summer 2008 issue of the *Journal of Law, Medicine & Ethics*.

Selected symposium articles include:

- Wolf SM, Paradise J, Nelson CA, Kahn JP, Lawrenz F, eds. Symposium: Incidental Findings In Human Subjects Research: From Imaging to Genomics. *Journal of Law, Medicine & Ethics*. 2008;36(2):2-383.
- Wolf SM. Introduction: The Challenge of Incidental Findings. *Journal of Law, Medicine & Ethics*. 2008;36(2):216-18.
- Wolf SM et al. Managing Incidental Findings in Human Subjects Research: Analysis and Recommendations. *Journal of Law, Medicine & Ethics*. 2008;36(2):219-48.
- Lawrenz F, Sobotka S. Empirical Analysis of Current Approaches to Incidental Findings. *Journal of Law, Medicine & Ethics*. 2008;36(2):249-55.
- Richardson HS. Incidental Findings and Ancillary-Care Obligations. *Journal of Law, Medicine & Ethics*. 2008;36(2):256-70.
- Cho MK. Understanding Incidental Findings in the Context of Genetics and Genomics. *Journal of Law, Medicine & Ethics*. 2008;36(2):280-85.
- Clayton EW. Incidental Findings in Genetics Research Using Archived DNA. *Journal of Law, Medicine & Ethics*. 2008;36(2):286-91.

**May 1, 2007**

UNIVERSITY OF MINNESOTA  
Cowles Auditorium  
Hubert H. Humphrey Center  
8:00 a.m. – 5:00 p.m.

## Managing Incidental Findings IN HUMAN SUBJECTS RESEARCH

### From Imaging to Genomics

SPACE IS LIMITED. ADVANCE REGISTRATION IS STRONGLY ENCOURAGED

Online registration, full agenda, maps, airfare discounts before 4/2/07 on Northwest Airlines, hotel discounts before 4/9/07 at the Radisson Hotel, and other information are available at <http://www.lifesci.consortium.umn.edu/conferences/if.php>  
Or register by: Phone 612-625-0055, Fax 612-624-9143, E-mail [lawvalue@umn.edu](mailto:lawvalue@umn.edu) REGISTRATION FEE: \$50 (\$10 for students)

register  
NOW

This conference is supported in part by a grant from the National Human Genome Research Institute, National Institutes of Health, grant # 1-R01-HG003178-01A1.

“An incidental finding (IF) is an unexpected finding concerning an individual research participant that has potential health or reproductive importance, is discovered in the course of conducting research, but is beyond the aims of the study. They are an increasingly common byproduct of research using powerful technologies that generate ‘extra’ data. Because IFs can potentially save lives but also cause alarm, the decision on whether or not to disclose them to research participants has been a major dilemma.”

Wolf SM et al. Managing Incidental Findings in Human Subjects Research: Analysis and Recommendations. *Journal of Law, Medicine & Ethics*. 2008;36(2):219-48.

## Consortium & JDP Grants:

### Project Dates: October 9-11, 2007

Consortium joined with the Center for Bioethics, the Mayo Clinic, and Mayo College of Biomedical Ethics Research Program for a joint grant to host the

#### Oscar M. Ruebhausen Visiting Professorship

Website: [www.bioethics.umn.edu/archived/zachhall/](http://www.bioethics.umn.edu/archived/zachhall/)  
Sponsor: The Greenwall Foundation  
Award Amount: \$25,000

### Project Dates: November 2007 to May 2008

#### Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience

Website: [www.lifesci.consortium.umn.edu/conferences/neuro.php](http://www.lifesci.consortium.umn.edu/conferences/neuro.php)  
Sponsor: The Greenwall Foundation  
Award: Presidential Grant  
Award Amount: \$25,000

### Project Dates: September 2006 to August 2010

#### NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context

Website: [www.lifesci.consortium.umn.edu/nirt](http://www.lifesci.consortium.umn.edu/nirt)  
Sponsor: National Science Foundation (NSF)  
Award: # SES-0608791  
Award Amount: \$1,220,765

### Project Dates: September 2005 to July 2007

#### Managing Incidental Findings in Human Subjects Research

Website: [www.lifesci.consortium.umn.edu/incidentalfindings/](http://www.lifesci.consortium.umn.edu/incidentalfindings/)  
Sponsor: National Human Genome Research Institute (NHGRI)/National Institutes of Health (NIH)  
Award: # 1 R01 HG003178-01A1  
Award Amount: \$587,559



R. Timothy Mulcahy  
Vice President for Research  
University of Minnesota

The Consortium completed its second year of work on a project funded by the National Science Foundation (NSF). This 4-year, \$1.22 million project is developing oversight models for nanobiotechnology. The project, entitled “**NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context**,” began September 1, 2006 and involves a national Working Group. Prof. Susan Wolf, JD (Law School) is the Principal Investigator. Co-Principal Investigators are Prof. Jennifer Kuzma, PhD (Humphrey Institute), Prof. Efrosini Kokkoli, PhD (Institute of Technology), Jordan Paradise, JD (Consortium), and Prof. Gurumurthy Ramachandran, PhD (School of Public Health). As a result of this innovative and original research we are publishing widely, including:

- Kuzma J. Nanotechnology Oversight: Just Do It. *Environmental Law Reporter*. 2006;12:10913-23.
- Kandlikar M, Ramachandran G, Maynard AD, Murdock B, & Toscano WA. Health Risk Assessment for Nanoparticles: A Case for Using Expert Judgment. *Journal of Nanoparticle Research*. 2007;9:137-56.
- Kuzma J. Moving Forward Responsibly: Oversight for the Nanotechnology-Biology Interface. 9 *Journal of Nanoparticle Research*. 2007;9:165-82.
- Paradise J, Wolf SM, Ramachandran G, Kokkoli E, Hall R, Kuzma J. Developing Oversight Frameworks for Nanobiotechnology. *Minnesota Journal of Law, Science & Technology*. 2008;9(1):187-203.
- Paradise J, Diliberto GM, Tisdale AW, Kokkoli E. Exploring Emerging Nanobiotechnology Drugs and Medical Devices. *Food and Drug Law Journal*. 2008;63(2):407-20.
- Kuzma J, Romanchek J, Kokotovitch A. Upstream Oversight Assessment for Agrifood Nanotechnology: A Case Studies Approach. *Risk Analysis*. 2008;28(4):1081-98.
- J. Kuzma J, Besley JC. Ethics of Risk Analysis and Regulatory Review: From Bio- to Nanotechnology. *Nanoethics*. (forthcoming 2008) (Published online May 13, 2008, DOI: 10.1007/s11569-008-0035-x).
- Kuzma J, Paradise J, Ramachandran G, Kim J, Kokotovich A, Wolf SM. An Integrated Approach to Oversight Assessment for Emerging Technologies. *Risk Analysis*. (forthcoming 2008) (Published online July 9, 2008, DOI: 10.1111/j.1539-6924.2008.01086.x).
- Wolf SM et al., eds., Developing Oversight Approaches to Nanobiotechnology: The Lessons of History. *Journal of Law, Medicine & Ethics*. (symposium forthcoming Winter 2009).

The Consortium and Center for Bioethics, together with the Biomedical Ethics Research Program at the Mayo Clinic, and Mayo College of Medicine, were awarded a grant by The Greenwall Foundation sponsoring the **2007 Oscar M. Ruebhausen Visiting Professorship**. Zach W. Hall, PhD, founding President of the California Institute for Regenerative Medicine (CIRM), visited the University of Minnesota and Mayo Clinic in October 2007 and delivered a major public lecture titled “**Stem Cell Research: At the Intersection of Science, Politics, Law & Culture**.”

The Consortium and the Institute for Translational Neuroscience (ITN) also received a Presidential Grant from The Greenwall Foundation to help support a day-long symposium on “**Emerging Problems in Neurogenomics: Ethical & Policy Issues at the Intersection of Genomics & Neuroscience**.” This symposium brought together leading national speakers with multidisciplinary researchers across the University to focus on 4 themes:

- the scope and emerging social implications of neurogenomics;
- ethical, legal, and social issues (ELSI) raised by work on the neurogenomics of childhood disorders such as autism;
- ELSI issues raised by the neurogenomics of adult disorders such as Alzheimer disease; and
- issues raised by collecting, banking, linking, and accessing neuroimaging, genomic, and other data (e.g., clinical records) acquired through neurogenomic research.

In addition to Greenwall funding, support for this symposium was provided from the Academic Health Center, ITN, and the Consortium. Prof. Susan Wolf, JD, is the Principal Investigator and Prof. Harry Orr, PhD, and Jordan Paradise, JD, are Co-Investigators on this project.



**Working Group for NIH-funded project on “Managing Incidental Findings on Human Subjects Research”:**

Prof. Mildred Cho, PhD, Stanford University  
Prof. Ellen Wright Clayton, JD, MD, Vanderbilt University

Prof. Joel (JG) Fletcher, MD, Mayo Clinic  
Prof. Michael Georgieff, MD, University of Minnesota

Prof. Dale Hammerschmidt, MD, University of Minnesota

Prof. Kathy Hudson, PhD, Johns Hopkins University  
Prof. Judy Illes, PhD, University of British Columbia  
Prof. Jeffrey P. Kahn, PhD, MPH, University of Minnesota

Prof. Vivek Kapur, PhD, Pennsylvania State University

Moira Keane, MA, CIP, University of Minnesota  
Prof. Barbara Koenig, PhD, Mayo College of Medicine

Prof. Frances Lawrenz, PhD, University of Minnesota

Prof. Bonnie LeRoy, MS, University of Minnesota  
Prof. Elizabeth McFarland, MD, Washington University in St. Louis

Prof. Charles Nelson, PhD, Harvard University  
Prof. Lisa Parker, PhD, University of Pittsburgh  
Adjunct Assoc. Prof. Jordan Paradise, JD, University of Minnesota

Sharon Terry, PhD, Executive Director, Genetic Alliance and PXE International

Prof. Brian Van Ness, PhD, University of Minnesota  
Prof. Benjamin Wilfond, MD, University of Washington

Prof. Susan M. Wolf, JD, University of Minnesota

**Working Group for NSF-funded project to develop oversight models for nanobiotechnology:**

Prof. Dan Burk, JD, MS, University of Minnesota  
Prof. Stephen Ekker, PhD, Mayo Clinic  
Prof. Susan Bartlett Foote, JD, University of Minnesota

Prof. Ralph Hall, JD, University of Minnesota  
Robert Hoerr, MD, PhD, President and CEO, Nanocopoeia, Inc.

Prof. Terrance Hurley, PhD, University of Minnesota  
Robbin Johnson, President, Cargill Foundation  
Prof. Bradley Karkkainen, JD, University of Minnesota

George Kimbrell, JD, The International Center for Technology Assessment & the Center for Food Safety

Prof. Efrosini Kokkoli, PhD, University of Minnesota

Prof. Jennifer Kuzma, PhD, University of Minnesota  
Andrew Maynard, PhD, Chief Science Advisor, Woodrow Wilson International Center for Scholars

Prof. Kristen Nelson, PhD, University of Minnesota  
Prof. David Norris, PhD, University of Minnesota  
Adjunct Assoc. Prof. Jordan Paradise, JD

Prof. David Y.H. Pui, PhD, University of Minnesota  
Prof. Gurumurthy Ramachandran, PhD, University of Minnesota

Prof. T. Andrew Taton PhD, University of Minnesota

Prof. Elizabeth J. Wilson, PhD, University of Minnesota

Prof. Susan M. Wolf, JD, University of Minnesota

**Participants in the conference on “Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience” funded in part by The Greenwall Foundation:**

Prof. David Amaral, PhD, University of California, Davis  
Senior Vice President Frank Cerra, MD, University of Minnesota

Prof. Mildred Cho, PhD, Stanford University  
Prof. Ellen Wright Clayton, MD, JD, Vanderbilt University  
Prof. Henry T. Greely, JD, Stanford University Law School  
Prof. Mark Ellisman, PhD, University of California, San Diego

Prof. Eric T. Juengst, PhD, Case Western Reserve University  
Prof. Judy Illes, PhD, University of British Columbia  
Prof. John Day, MD, PhD, University of Minnesota  
Prof. Ronald C. Petersen, MD, PhD, Mayo Medical School  
Andrew Singleton, PhD, National Institutes of Health  
Prof. Susan M. Wolf, JD, University of Minnesota

**Project Dates: July 2003 to July 2004**

**Colliding Categories: Haplotypes, Race & Ethnicity**

Sponsor: National Human Genome Research Institute (NHGRI)  
Award: # 1R01HG002818-01  
Award Amount: \$191,654

**Project Dates: July 2000 to December 2003**

**Genetics & Disability Insurance: Ethics, Law & Policy**

Sponsor: National Human Genome Research Institute (NHGRI)  
Award: # 1R01HG002089-01A1  
Award Amount: \$413,912

For more information on Consortium research, visit [www.lifesci.consortium.umn.edu/research.php](http://www.lifesci.consortium.umn.edu/research.php).



Prof. Zach Hall, PhD (former Director of the California Institute for Regenerative Medicine (CIRM)), 2007 Oscar M. Ruebhausen Visiting Professor in Bioethics.



# Update on the Joint Degree Program



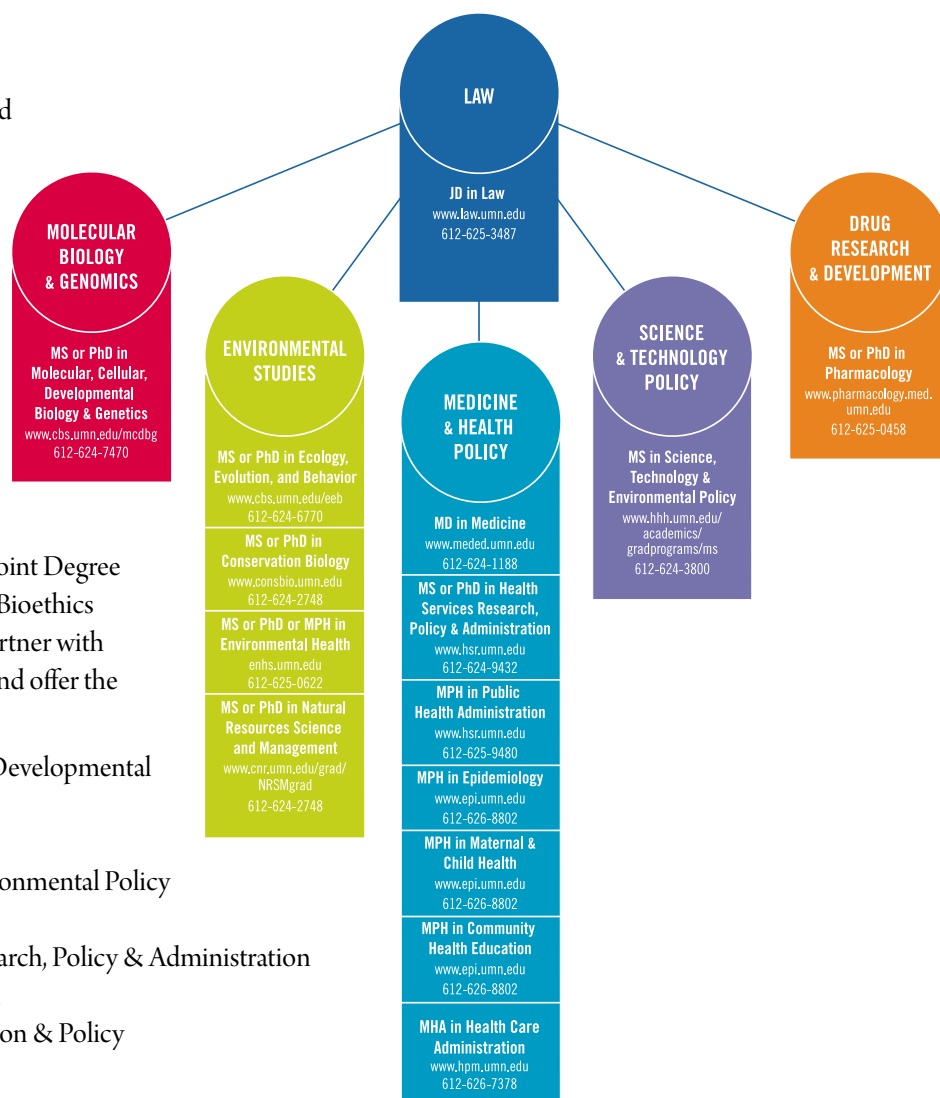
Joint Degree Program student Geeta Naidu, JD, MPH candidate in Public Health Administration & Policy, at the 2007 Advisory Board Reception.

In 2007-08 the Joint Degree Program:

- welcomed 7 new students for a total of 36 in 2007-08
- graduated 4 students: Kari Bomash, JD, MPH in Public Health Administration & Policy; Sharada Devarasetty, JD, MS in Molecular, Cellular, Developmental Biology & Genetics; Stephanie Johnson, JD, MS in Water Resource Sciences; Lisbeth Robinson, JD, PhD in Pharmacology, for a total of 16 alumni
- added 1 Advisory Board member: Brian Dorn, JD, PhD, Merchant & Gould, PC, for a total of 19 Advisory Board members
- ranked in the top 11 for health law programs by *U.S. News & World Report*
- welcomed new students completing the Concentration in Health Law & Bioethics
- co-sponsored the **Deinard Memorial Lecture Series on Law & Medicine** with the Center for Bioethics thanks to generous support from the Deinard family and the law firm of Leonard, Street and Deinard in memory of Amos and Benedict Deinard.

The Joint Degree Program is unique in the nation and enables students to combine a JD with a PhD, MS, MPH, MHA, or MD in less time, with more academic support, and with potentially more financial support than if the students were to pursue the two degrees separately. Students who show good cause may also create an *ad hoc* joint degree with a Graduate School program relating to health, environment, or the life sciences that is not formally part of the Joint Degree Program. Students pursuing Graduate School degrees have the option of completing graduate minors in Bioethics, Bioinformatics or Human Genetics. The Joint Degree Program spans 8 collegiate units plus the Center for Bioethics and involves more than 400 faculty members. We partner with 14 graduate and professional programs on campus and offer the following degree combinations:

- a JD with an MS or PhD in Molecular, Cellular, Developmental Biology & Genetics (MCDB&G)
- a JD with an MS or PhD in Pharmacology
- a JD with an MS in Science, Technology & Environmental Policy
- a JD with an MD in Medicine
- a JD with an MS or PhD in Health Services Research, Policy & Administration
- a JD with an MHA in Healthcare Administration
- a JD with an MPH in Public Health Administration & Policy
- a JD with an MPH in Epidemiology
- a JD with an MPH in Maternal and Child Health
- a JD with an MPH in Community Health Education
- a JD with an MS or PhD in Ecology, Evolution, and Behavior (EEB)
- a JD with an MS or PhD in Conservation Biology
- a JD with an MS, PhD, or MPH in Environmental Health
- a JD with an MS or PhD in Natural Resources Science and Management





# Joint Degree Program Faculty

## Joint Degree Program Scholarships Supporting Law School Studies

### Joint Degree Program Scholarship

- Established in 1999
- One full residential scholarship, which may be divided among 2-3 incoming JDP students

### Harold M. Fredrickson & Byron Memorial Scholarship

- Established in 2000
- Partial scholarship for an incoming JDP student

### Minnesota Intellectual Property Law Association (MIPLA) Scholarship

- Established in 2000
- Partial scholarship supporting a JDP student with an interest in intellectual property law

The Joint Degree Program's strength is in the exceptional quality of the individuals who teach and learn here. Over 400 professors from across the University comprise the faculty of the Joint Degree Program. Known for their cutting-edge scholarship and interdisciplinary thinking, our distinguished faculty members provide guidance to students in the Joint Degree Program. Discover more by visiting the websites listed below:

#### ■ Law

[www.law.umn.edu/faculty/index.html](http://www.law.umn.edu/faculty/index.html)

#### ■ Molecular, Cellular, Developmental Biology & Genetics (MCDB&G)

<http://mcdbg.umn.edu/faculty/faculty.html>

#### ■ Ecology, Evolution, and Behavior (EEB)

[www.cbs.umn.edu/eeb/graduateprogram/faculty/](http://www.cbs.umn.edu/eeb/graduateprogram/faculty/)

#### ■ Conservation Biology

[www.consbio.umn.edu/findfaculty.php](http://www.consbio.umn.edu/findfaculty.php)

#### ■ Environmental Health

[www.sph.umn.edu/faculty/home.html](http://www.sph.umn.edu/faculty/home.html)

#### ■ Natural Resources Science & Management

[www.nrsm.umn.edu/people/index.html](http://www.nrsm.umn.edu/people/index.html)

#### ■ Medicine

[www.catalogs.umn.edu/faculty.html](http://www.catalogs.umn.edu/faculty.html)

#### ■ Health Services Research, Policy & Administration

[www.sph.umn.edu/faculty/home.html](http://www.sph.umn.edu/faculty/home.html)

#### ■ Health Care Administration

[www.hpm.umn.edu/People/regular/faculty.htm](http://www.hpm.umn.edu/People/regular/faculty.htm)

#### ■ Public Health Administration & Policy

[www.sph.umn.edu/faculty/home.html](http://www.sph.umn.edu/faculty/home.html)

#### ■ Epidemiology, Maternal & Child Health, and Community Health Education

[www.sph.umn.edu/faculty/home.html](http://www.sph.umn.edu/faculty/home.html)

#### ■ Science, Technology & Environmental Policy

[www.hhh.umn.edu/people/faculty.html](http://www.hhh.umn.edu/people/faculty.html)

#### ■ Pharmacology

[www.pharmacology.med.umn.edu/faculty.html](http://www.pharmacology.med.umn.edu/faculty.html)

#### ■ Center for Bioethics

[www.ahc.umn.edu/bioethics/facstaff.html](http://www.ahc.umn.edu/bioethics/facstaff.html)



Professor Colin Campbell, PhD, confers with student Rahel Woldeyes in the lab.

# Concentration in Health Law & Bioethics

In 2007-08, the University of Minnesota Law School continued to offer Concentrations, enabling law students to specialize in fields such as **Health Law & Bioethics**, Human Rights Law, and Labor & Employment Law.

“The Concentration provides students with a broad range of substance, a unifying structure, and a focused credential enabling them to approach the legal, ethical, and policy issues posed by the intersection of law and the health sciences.”

—Lindsey Yock, JD (*magna cum laude*),  
MD candidate



JDP student Lindsey Yock, JD, MD candidate at the 2007 JDP Advisory Board Reception.

The **Concentration in Health Law & Bioethics** continues to grow. In Spring 2008, 5 Law students completed the requirements of the Concentration: Kari Bomash, Charlissee Caga-anan, Gail Diliberto-Matthey, Meaghan Moriarty, and Lindsey Yock. An additional 13 law students have declared and are completing the Concentration requirements.

The Health Law & Bioethics Concentration allows students to focus their studies on health care delivery, public health law and ethics, international health, or issues in bioethics. Concentrations are available to all JD and LLM students, including those pursuing dual degrees. Students who have successfully completed the Concentration will receive a certificate of completion upon graduation and a notation will be added to their transcript stating that the requirements of the Concentration have been fulfilled.

Concentrations build upon and complement the Law School's rigorous standard curriculum and give students access to the expertise of faculty throughout the University. Interested students confer early in their legal education with the Faculty Chair and the Concentration Coordinator to discuss their intended course of study and how a Concentration can enhance their career development.

Prof. Susan Wolf is the Faculty Chair of the Concentration in Health Law & Bioethics and Carol Rachac coordinates the program. The Health Law & Bioethics concentration requires 12 credits, including a combination of required and recommended courses in the Law School, Graduate School, School of Public Health, and Center for Bioethics.

## Health Law & Bioethics Concentration Faculty

Concentration faculty are drawn from across the University, including faculty from the Law School, School of Public Health, Medical School, and Center for Bioethics. As students immerse themselves in a wide range of interdisciplinary courses they address the legal implications of law, bioethics, health care delivery, health care reform, genetics and assisted reproduction, mental health issues, insurances, and food and drug law. The faculty includes nationally distinguished scholars who teach in health law and bioethics:

### Concentration Core Faculty—Law School:

- Prof. Stephen F. Befort, JD (Law)
- Prof. Brian Bix, DPhil, JD (Law; Philosophy)
- Prof. Dale Carpenter, JD (Law)
- Distinguished Visiting Prof. Ralph Hall, JD (Law)
- Prof. Jill Hasday, JD (Law)
- Prof. Michelle B. Goodwin, JD, LLM (Law; Bioethics)
- Prof. Ruth Okediji, LLB, LLM, SJD (Law)
- Adjunct Assoc. Prof. Jordan Paradise, JD (Law)
- Prof. Kathryn J. Sedo, JD (Law)
- Prof. David S. Weissbrodt, JD (Law)
- Prof. Susan M. Wolf, JD (Law; Medicine; Bioethics)
- Prof. Judith T. Younger, JD, LLD (Law)





#### Concentration Core Faculty—Outside the Law School:

- Prof. Dianne Bartels, RN, MA, PhD (Bioethics)
- Prof. Muriel Bebeau, PhD (Dentistry; Bioethics; Educational Psychology)
- Prof. Debra DeBruin, PhD (Bioethics; Medicine)
- Prof. Carl Elliott, MD, PhD (Bioethics; Pediatrics; Philosophy)
- Prof. John Eyler, PhD (History of Medicine)
- Prof. Susan Foote, JD, MA (Health Services Research and Policy)
- Prof. Jennifer L. Gunn, PhD (History of Medicine)
- Prof. Sarah Holtman, PhD, JD (Philosophy)
- Prof. William D. Hueston, DVM, PhD (Veterinary Population Medicine; Public Health)
- Prof. Susan D. Jones, PhD, DVM (Ecology, Evolution, and Behavior)
- Prof. Jeffrey P. Kahn, PhD, MPH (Bioethics; Medicine; Public Health; Philosophy)
- Prof. Rosalie Kane, DSW (Public Health; Social Work; Bioethics)
- Prof. Barbara Koenig, PhD (Mayo Clinic & University of Minnesota; Bioethics)
- Prof. Joan Liaschenko, RN, PhD (Bioethics; Nursing)
- Prof. Mary Faith Marshall, PhD (Bioethics; Medicine)
- Prof. Michelle Mason, PhD (Philosophy)
- Prof. Steven H. Miles, MD (Bioethics; Medicine)
- Prof. Michael T. Osterholm, PhD, MPH (Public Health)
- Prof. Ed Ratner, MD (Bioethics; Medicine)
- Prof. John Song, MD, MPH, MAT (Bioethics; Medicine)
- Prof. Valerie Tiberius, PhD (Philosophy)
- Prof. Maryam Valapour, MD (Medicine; Bioethics)
- Prof. Beth A. Virnig, PhD, MPH (Public Health; Bioethics)

For more on the Health Law & Bioethics Concentration, visit [www.jointdegree.umn.edu/degree\\_programs/concentrations.php](http://www.jointdegree.umn.edu/degree_programs/concentrations.php).

### Law School Student Organizations

The Consortium works with student organizations such as the Health Law & Bioethics Association (HLBA) and Student Intellectual Property Law Association (SIPLA) and helps them offer events such as the Fall 2007 panel on “Organ Transplantation/Donation/Sales: Ethics and Policy Panel” with Prof. Arthur Matas, MD, Director, Renal Transplant Program, Professor, Department of Surgery, University of Minnesota Medical School; Professor Michele Goodwin, JD, LLM, Everett Fraser Professor of Law, University of Minnesota Law School; and Professor Jeffrey Kahn, PhD, MPH, Director, Center of Bioethics, University of Minnesota.

### Health Law & Bioethics Association

The Health Law & Bioethics Association (HLBA) is a student organization dedicated to providing students with practical career guidance in the field of health law and fostering awareness, critical thought, and debate about topics in bioethics. HLBA embraces interdisciplinary discourse and collaborates with students and organizations from other colleges at the University of Minnesota.

### Student Intellectual Property Law Association

The Student Intellectual Property Law Association (SIPLA) strives to promote the study of and pursuit of careers in all aspects of intellectual property law for students with or without technical backgrounds, including careers in patent, copyright, and trademark law. SIPLA provides a forum for communication between students and intellectual property law practitioners and functions as a student network that encourages students to learn from the past experiences of others while formulating their personal career strategies.

For more information on student organizations, visit [www.law.umn.edu/prospective/studentorgs.html](http://www.law.umn.edu/prospective/studentorgs.html).



Prof. Michele B. Goodwin, JD, LLM, commenting on a Lecture Series presentation by Prof. Debora Spar, PhD.



JDP student Lisbeth Robinson, JD, PhD candidate in Pharmacology, at the Fall 2007 JDP Advisory Board Reception.



From Left to Right: Kristen Paulson, JD, MPH candidate in Public Health Administration & Policy; Christopher Walker, JD, MPH candidate in Epidemiology; Prof. Susan M. Wolf, JD; Lauren Beach, JD, PhD candidate in Molecular, Cellular, Developmental Biology & Genetics; and Amber Thomas, JD, MPH candidate in Public Health Administration & Policy, at the 2007 JDP Student Welcome Reception.

## Student Recruitment & Scholarships

The Joint Degree Program welcomed 6 new students in Fall 2007. In 2007-08, we had 36 students pursuing the following degree combinations:

- JD/MS in Molecular, Cellular, Developmental Biology & Genetics (MCDB&G) (Sharada Devarasetty, Lilly Ewing, Alex Galaitis, Laurel Kilgour, Susan Pribyl)
- JD/PhD in MCDB&G (Lauren Beach, Rachel Herder, Katherine Dick Krueger, Stephanie Westcot)
- JD/PhD in Conservation Biology (Collette Adkins Giese)
- JD/MPH in Environmental Health (Marie Quasius)
- JD/MD (Greg Long, Lindsey Yock)
- JD/MS in Health Services Research, Policy & Administration (Kelsey Brodsho, Michelle Dawson)
- JD/MPH in Public Health Administration & Policy (Kari Bomash, Ilina Chaudhuri, Crystal Liu, Alissa Lyon, Geeta Naidu, Britta Orr, Kristin Paulson, Taylor Pierce, Amber Thomas)
- JD/MPH in Epidemiology (Christopher Walker)
- JD/MPH in Community Health Education (Lindsey Hopper, Anne McNamara, Kathleen Starr)
- JD/MHA in Healthcare Administration (Jenny Cooner Patten)
- JD/MS in Science, Technology & Environmental Policy (Samantha Bohrman, Andrew Gibbons, Sarah Johnson Phillips)
- JD/PhD in Pharmacology (Jon Hareid, Lisbeth Robinson)
- JD/MS in Water Resources Science (Stephanie Johnson)
- JD/MS in Computer Science/Bioinformatics (Garret Olson)

Two students were awarded three-year partial **Joint Degree Program Scholarships** in Fall 2007; one JDP student was awarded the 2007-08 **Minnesota Intellectual Property Law Association Scholarship** in the Law School; one student received a one-year **Harold M. Fredrikson Memorial Scholarship**; and three JDP students were awarded partial **Law School Scholarships**.

Applications to the Joint Degree Program for Fall 2007 again showed impressive strength and geographic diversity. We received applications from students with undergraduate degrees from distinguished institutions across the country including Carleton College, Columbia University, Emory University, Georgetown University, Harvard University, University of Maryland, University of Washington, and University of Wisconsin-Madison.

In the Fall of 2008 we are welcoming 7 new students pursuing the following degree combinations:

JD/PhD in Molecular, Cellular, Developmental Biology & Genetics (2), JD/MD in Medicine, JD/MS in Pharmacology (2), JD/MPH in Public Health Administration & Policy, and JD/MS in Plant Biology. We have worked closely with the Joint Degree Program graduate programs to recruit these impressive applicants and arrange financial support. One incoming JDP student has been awarded a partial **Minnesota Intellectual Property Law Association Scholarship** in the Law School. Three students received partial **JDP Scholarships** and one received a partial **Law School Scholarship**.

**Joint Degree Program students are eligible for several targeted scholarships in addition to being eligible for the full range of Law School, Graduate School, School of Public Health, and Medical School scholarships and support otherwise offered.** We are working to expand the support available to our students.

Graduate School students are also eligible to apply for the **Mark and Judy Yudof Fellowship**. This award is for graduate students (Master's or PhD) pursuing interdisciplinary work whose content is focused in the areas of science policy and ethics. One award is made annually, granting full resident tuition plus a stipend of \$18,000 for the academic year. For more information, see [www.grad.umn.edu/fellowships/endowed/](http://www.grad.umn.edu/fellowships/endowed/).



JDP graduate Kari Bomash, JD, MPH with JDP student Alissa Lyon, JD, MPH candidate in Public Health Administration & Policy, at the law firm of Dorsey & Whitney.





From Left to Right:

JDP student Rachel Herder, JD, PhD candidate in Molecular, Cellular, Developmental Biology & Genetics, at the 2007 JDP Advisory Board Reception.

JDP student Greg Long, JD MD candidate with Advisory Board member Martin Stillman, JD, MD, at the Advisory Board Reception.

JDP student Lauren Beach, JD, PhD candidate in Molecular, Cellular, Developmental Biology & Genetics, in the lab.

## Student Honors & Achievements

Students in the Joint Degree Program are talented, innovative, and committed. They are pursuing cutting-edge fields of study. We are proud to list their selected accomplishments in 2007-08:

**Lauren Beach, JD, PhD** candidate in Molecular, Cellular, Developmental Biology & Genetics, received an Honorable Mention from the National Science Foundation's Graduate Research Fellowship Program. In Summer 2008, she worked on her PhD project in Prof. Louis Mansky's lab, investigating whether known host factors can contribute to HIV-1 drug resistance and screening candidate compounds for anti-HIV-1 activity. Lauren also helped to found and administer The Point Foundation Alumni Association's Regional Community Service Networks. The Point Foundation is America's only national LGBT Scholarship Foundation.

**Lilly Ewing, JD, MS** candidate in Molecular, Cellular, Developmental Biology & Genetics, served as a 2007-08 Articles Editor of the *Minnesota Journal of Law, Science & Technology*.

**Jon Hareid, JD, PhD** candidate in Pharmacology, spent Summer 2008 completing his thesis research on factors governing cell surface expression of opioid receptors, the class of receptors that mediate the effects of opiates such as morphine. This is important for understanding pain transmission and opiate addiction.

**Lindsey Hopper, JD, MPH** candidate in Community Health Education, served as a 2007-08 staff member for the *Minnesota Law Review*. She published a Note in the *Minnesota Law Review* on "Striking a Balance: An Open Courts Analysis of the Uniform Emergency Volunteer Health Practitioners Act."

**Laurel Kilgour, JD, MS** candidate in Molecular, Cellular, Developmental Biology & Genetics, published a Note in the *Minnesota Journal of Law, Science & Technology* on "Building Intellectual Property Management Capacity in Public Research Institutions in Vietnam: Current Needs and Future Directions." She also served as Chair of the Health Law & Bioethics Student Association (HLBA).

**Katherine Dick Krueger, JD, PhD** candidate in Molecular, Cellular, Developmental Biology & Genetics, received a Doctoral Dissertation Fellowship for Fall 2007 from the University of Minnesota's Graduate School.

**Alissa Lyon, JD, MPH** candidate in Public Health Administration & Policy, served as a staff member in 2007-08 for the *Minnesota Journal of Law, Science & Technology*.

**Anne McNamara, JD, MPH** candidate in Community Health Education, spent Summer 2008 in Washington, DC as a Summer Associate at Fulbright & Jaworski.

**Garrett Olson, JD, MS** candidate in Computer Science/Bioinformatics, served as an Articles Editor on the *Minnesota Journal of Law, Science & Technology* in 2007-08.

**Britta Orr, JD, MPH** candidate in Public Health Administration & Policy, spent Summer 2008 working in the Division of Health Services and Medical Management at the Minnesota Department of Human Services. She was also a summer law clerk at Larkin Hoffman Daly & Lindgren, Ltd.

**Kristin Paulson, JD, MPH** candidate in Public Health Administration & Policy, held a Summer 2008 internship with the Center for Infectious Disease Research & Policy (CIDRAP) and Prof. Michael Osterholm. She worked on legal and policy challenges posed by pandemic influenza preparedness for the business sector.

**Susan Perera, JD, MS** candidate in Molecular, Cellular, Developmental Biology & Genetics, served as Treasurer for the Student Intellectual Property Law Association in 2007-08. She also served as a 2007-08 staff member for the *Minnesota Journal of Law, Science & Technology*. Her article on "Following Minnesota's Renewable Energy Example: Will Federal Legislation Fly High or Flap in the Wind?" was published in Volume 9. Susan spent Summer 2008 as an Associate at Merchant and Gould, in the Minneapolis office.

**Sarah Johnson Phillips, JD, MS** candidate in Science, Technology & Environmental Policy, served as a staff member for the *Minnesota Journal of International Law* in 2007-08.

**Taylor Pierce, JD, MPH** candidate in Public Health Administration & Policy, worked as a law clerk for the Legal Aid Society of Minneapolis in their Housing division in Summer 2008.

**Marie Quasius, JD, MPH** candidate in Environmental Health, served as a staff member for the *Minnesota Law Review* in 2007-08. She also served on the Executive Board of the Health Law & Bioethics Student Association (HLBA).

**Amber Thomas, JD, MPH** candidate in Public Health Administration & Policy, spent Summer 2008 as an intern with the Judge Advocate General (JAG) where she worked on a high-profile capital case involving modern DNA analysis.

**Lindsey Yock, JD, MD** candidate, graduated from the law school, *magna cum laude* with a Health Law & Bioethics Concentration in May 2008. She completed her first year of Medical School and will be a second-year medical student beginning in Fall 2008. Lindsey also served as a Note & Comment Editor for the *Minnesota Law Review* in 2007-08.

# Graduates +

The Joint Degree Program graduated 4 students in 2007-08 for a total of 18 alumni to date:



**KARI BOMASH, JD, MPH**

Public Health Administration & Policy

**Kari Bomash** completed her JD/MPH in Public Health Administration & Policy in May 2008. She joined the Joint Degree Program in Fall 2005, beginning her studies in the Law School. In Summer 2007, she was a summer associate at Dorsey and Whitney, working with the health group. In Summer 2006, Kari worked as a legal intern in the Office of Counsel to the Inspector General (OCIG) at the Department of Health and Human Services in Washington, DC. She was a staff member of the *Minnesota Journal of Law, Science & Technology (MJLST)* in 2005-06 and was an Articles Editor for *MJLST* in 2006-07. Her research interests include examining the privacy rights of individuals in light of electronic medical records and the development of a medical records database. Beginning in Fall 2008, Ms. Bomash is an Associate in the Health Group at Dorsey & Whitney in Minneapolis.



**SHARADA DEVARASETTY, JD, MS**

Molecular, Cellular, Development Biology & Genetics

**Sharada Devarasetty** received her JD/MS in Molecular, Cellular, Developmental Biology & Genetics in December 2007. She joined the Joint Degree Program in Fall 2004. Prior to attending the University of Minnesota, she worked as a paralegal at Varnum, Riddering, Schmidt, and Howlett in Grand Rapids, MI. She studied international intellectual property law in Munich, Germany in Summer 2005. In Summer 2006 she was a Summer Associate at the law firm of Proskauer Rose in New York. In 2006-07, she was president of the University's Student Intellectual Property Law Association and a Director for the Intellectual Property Moot Court. During Summer 2007, she worked as a Summer Associate in the Intellectual Property Department at Goodwin Procter, LLP in Boston, MA. In Fall 2007, she participated in an exchange program with Bucerius Law School in Hamburg, Germany, taking classes in corporate law. She has now started her career in intellectual property law at Proskauer Rose LLP, in Boston, specializing in biotechnology and molecular biology.



**STEPHANIE JOHNSON, JD, MS**

Water Resources Science

**Stephanie Johnson** completed her JD/MS in Water Resources Science in July 2008. She joined the Joint Degree Program in Fall 2005, after completing her first year of Law School. She received a BS in Earth Systems from Stanford University. At the University of Minnesota, she served as an officer in the Environmental Law Students Association, Women Law Students Association, and the Water Resources Students In Action Group. In Summer 2005, she worked at the Office of the General Counsel at the University of Minnesota. In 2005-06, she worked as a Research Assistant in the Department of Biosystems and Agricultural Engineering, examining the restoration of wetlands in agricultural watersheds. In Summer 2006, she interned in the legal department of Pentair, a water technology company. Ms. Johnson was a 2007 Summer Associate in the Environmental and Natural Resources Group of Fennemore Craig in Phoenix, Arizona. In Fall 2007, she interned at the Centre for Environmental Economics at Central Queensland University in Australia, where she researched the economic and social impacts of invasive species. In Winter 2008, Ms. Johnson and her advisor Prof. Gary Sands published an article in the *CURA Reporter* entitled "Assessing the Barriers to and Potential for Wetland Restoration in Agricultural Watersheds." Ms. Johnson has accepted a position with Fennemore Craig as an Associate in its Environmental and Natural Resources Practice Group.

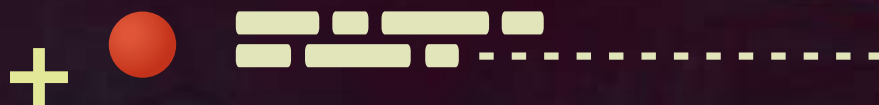


**LISBETH ROBINSON, JD, PHD**

Pharmacology

**Lisbeth Robinson** received her JD/PhD in Pharmacology in May 2008. She enrolled in the Joint Degree Program in 2001, after receiving a BS in Biochemistry *cum laude* from the University of Vermont. She won the 2004 Best Brief award in the University of Minnesota Law School's Maynard Pirsig Moot Court. Her article on "Improved 'Optical Highlighter' Probes Derived from Discosoma Red Fluorescent Protein" appeared in the *Biophysical Journal* in 2005. In July 2006, she published an article with Prof. Jonathan Marchant on "Calcium Influx: Beyond 'Current' Biology" in *Current Biology*. In 2008, they published another article, on "Enhanced Ca<sup>2+</sup> Leak from ER Ca<sup>2+</sup> Stores Induced by Hepatitis C NS5A Protein," in *Biochemical and Biophysical Research Communications*. Her dissertation focused on two topics: the effect of the Hepatitis C virus non-structural protein 5A on intracellular signaling, and the cell imaging technique of optical highlighting. Dr. Robinson is a registered patent agent and has joined Fish & Richardson, PC, as an Associate in the Biotechnology Patent Prosecution practice group (Twin Cities Office).





### Joint Degree Program Alumni

Robert Berlin, JD, MPH in Epidemiology (2006)

Kari Bomash, JD, MPH in Public Health Administration & Policy (2008)

Trevor K. Copeland, JD, MS in Molecular, Cellular, Developmental Biology & Genetics (2003)

Jill Dabrowski, JD, MPH in Public Health Administration & Policy (2005)

Sharada Devarasetty, JD, MS in Molecular, Cellular, Developmental Biology & Genetics (2007)

Erin Furlong, JD, MPH in Public Health Administration & Policy (2005)

Glenna Gilbert, JD, MS in Pharmacology (2005)

Robert Goetz, JD, MS in Molecular, Cellular, Developmental Biology & Genetics (2002)

Margaret Jacot, JD, MS in Science, Technology & Environmental Policy (2005)

Stephanie Johnson, JD in MS Water Resources Science (2008)

Rebekah Kent, JD, MS in Health Services Research, Policy & Administration (2005)

Ji Eun Kim, JD, MS in Pharmacology (2005)

Melanie E. Kleiss Boerger, JD, MS in Science, Technology & Environmental Policy (2004)

Lesli Rawles, JD, MS in Science, Technology & Environmental Policy (2006)

Lisbeth Robinson, JD, PhD in Pharmacology (2008)

Jeannine J. Thiele, JD, MS in Molecular, Cellular, Developmental Biology & Genetics (2002)

### Joint Degree students have found a wide range of summer and permanent positions including at:

American Medical Systems, Minnetonka (MN)  
 BioBusiness Alliance (MN)  
 Brinks Hofer Gilson & Lione (IL)  
 Clerk for Hon. Robert R. Beezer, 9th Circuit (WA)  
 Clerk for Hon. David S. Doty, United States District Court for the District of Minnesota  
 Dorsey & Whitney LLP (MN)  
 Fennemore Craig (AZ)  
 Fish & Richardson (MN)  
 Heller Ehrman (CA)  
 Hogan & Hartson (DC)  
 Institute for Public Representation (DC)  
 Law Offices of Michelle Rivero (MN)  
 Medica (MN)  
 Medlen & Carroll LLP (WI)  
 MN Attorney General, Dept. of Human Rights, Labor & Corrections (MN)  
 MN House of Representatives (MN)  
 Proskauer Rose LLP (MA)  
 Schiff Hardin LLP (IL)  
 Sterne, Kessler, Goldstein, & Fox LLC (DC)

Jeannine Thiele was the first student admitted to the Joint Degree Program in 1999.

The first two graduates were Robert Goetz and Jeannine Thiele in 2002.

The first JD/PhD recipient was Lisbeth Robinson in 2008.



# Joint Degree Program Proseminar

Since 2000 the Joint Degree Program has offered a Proseminar course required of all Joint Degree Program students each Fall. Entitled “**Law, Health & the Life Sciences: Joint Degree Program Proseminar,**” Law 6875 is a one-credit pass/fail seminar that meets Wednesdays over lunch and provides a supportive and collegial forum in which students can explore the interdisciplinary issues that our Joint Degree Program addresses with faculty from the cooperating programs and other experts.



*From Left to Right:* Joint Degree Program Director Prof. Susan M. Wolf, JD, Interim Co-Dean Guy-Uriel Charles, JD, JDP graduate Stephanie Johnson, JD, MS in Water Resources Science, and Interim Co-Dean Fred Morrison, JD, at the JDP Graduation Reception.

In recent years, the Proseminar has been divided into two sections. The first section, required for students in the first two years of the Joint Degree Program, invites guest speakers to present to the group on the legal, ethical, and policy implications of their work, followed by discussion led by students. The roster of speakers for this section changes every year and includes University of Minnesota faculty and researchers, as well as lawyers and other law or science professionals in the community. This section is open to non-Joint Degree Program students with advanced degrees in health or the life sciences by consent of the instructors if space permits. In Section 2, Joint Degree Program students with more than 2 years of experience make presentations to their peers. Each student is responsible for making one presentation per term. Students are given broad latitude in choosing topics to present. Presentation options include results from their own research (either lab- or literature-based), a published article, or an overview of a developing topic within their general field of study. This 2-section format was designed to meet the needs of all Joint Degree Program students and to prepare advanced students to meet the challenges ahead.

In Fall 2007, Section 1 of the Proseminar was led by **Prof. Susan Wolf, JD** and **Adjunct Prof. Jordan Paradise, JD**. The schedule included:

- **Steve Kelley, JD**, Senior Fellow and Director, Center for Science, Technology & Public Policy, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota on “**The Role of Sound Science in Developing Science & Technology Policy**”;
- **John Song, MD, MPH, MAT**, Assistant Professor, General Internal Medicine; Center for Bioethics, University of Minnesota; Founder and Medical Director, Phillips Neighborhood Clinic on “**End-of-Life Issues and the Homeless**”;
- **Timothy Mulcahy, PhD**, Vice President for Research, University of Minnesota on “**Research Policy and Dual Use Technologies**”;
- **Meri Firpo, PhD**, Assistant Professor, Stem Cell Institute and Department of Medicine, Division of Endocrinology, University of Minnesota on “**Ethical and Policy Implications of Stem Cell Research and Transplantation Therapies**”;
- **Judith Walker, JD**, Vice President of Regulatory Affairs, Chief Corporate Compliance and Ethics Officer, Blue Cross and Blue Shield of Minnesota on “**Health Plan Compliance: The Significance of Inspiring an Ethical Culture**”;



- **Jeffrey Kahn, PhD, MPH**, Maas Family Endowed Chair and Director, Center for Bioethics; Professor, Department of Medicine, School of Medicine; Division of Health Services Research and Policy, School of Public Health; and Department of Philosophy, University of Minnesota on “**Ethical Issues in Human Subjects Research**”;
- **Debra DeBruin, PhD**, Director of Education and Professor, Center for Bioethics; Professor, Department of Medicine, University of Minnesota Medical School on “**Pandemic Flu Planning**”; and
- **John Eyler, PhD**, Program Director and Director of Graduate Studies, History of Medicine, University of Minnesota on “**Compulsory Confinement for Infectious Disease: The Historical Case of Mary Mallon (‘Typhoid Mary’)**.”

Joint Degree Program student Andrew Gibbons, JD, MS candidate in Science, Technology & Environmental Policy, at the 2007 Advisory Board Reception.



Section 2 was led by **Prof. Colin Campbell, PhD**, Associate Director of the Joint Degree Program. Student presenters discussed a variety of topics including direct-to-consumer genetic testing, *Abigail Alliance* and the rights of individuals to access experimental drug treatment, costs and benefits of biofuels, long-term care financing and the ethics of Medicaid estate planning, and roles and responsibilities of Institutional Review Boards.

Because the Joint Degree Program has grown, in 2008-09 there will be three sections of the Proseminar. Section 1 will be led by **Prof. Susan Wolf, JD**; Section 2 will be led by **Adjunct Assoc. Prof. Jordan Paradise, JD**; and Section 3 will be led by **Prof. Colin Campbell, PhD**.

Section 1 speakers for Fall 2008 will include **Terrance L. Carlson, JD** (Senior Vice President, General Counsel, and Corporate Secretary, Medtronic) speaking on “Device Regulation and Federal Preemption”; **Prof. Martin Stillman, MD, JD** (Hennepin County Medical Center and University of Minnesota Medical School) on the topic of “Error Disclosure: Personal Effects and Medicolegal Implications for Provider/Patient Relations”; **Prof. Leigh Turner, PhD** (University of Minnesota, Center for Bioethics) on “Medical Tourism”; and **Prof. Michele Goodwin, JD, LLM** (University of Minnesota Law School; Center for Bioethics) on the topic of “Organ Transplantation and Financial Incentives.” In sections 2 & 3, JDP students will make presentations based on their own research, a recent article of interest, or a topic within their general field of study.

For a list of all Proseminar speakers, visit [www.jointdegree.umn.edu](http://www.jointdegree.umn.edu).



From Left to Right: JDP student Jon Hareid, JD PhD candidate in Pharmacology, Advisory Board member Byron Starnes, Esq., and Lisbeth Robinson, JD, PhD candidate in Pharmacology at the 2007 Advisory Board Reception.

# Joint Degree Program Faculty & Governing Committee

The Joint Degree Program is run by a faculty Director and Associate Director with the help of a Governing Committee comprised mainly of the Director of Graduate Studies (DGS) or equivalent in each cooperating program plus a Joint Degree Program student elected by his or her peers.

**Susan M. Wolf, JD**, is the McKnight Presidential Professor of Law, Medicine & Public Policy at the University of Minnesota; the Faegre & Benson Professor of Law at the University of Minnesota Law School; Professor of Medicine at the University of Minnesota Medical School; and a Faculty Member in the University's Center for Bioethics. She is also founding Director of the University's Joint Degree Program in Law, Health & the Life Sciences and founding Chair of the University's Consortium on Law and Values in Health, Environment & the Life Sciences. She received her AB *summa cum laude* from Princeton University and her JD from Yale Law School, with graduate work at Harvard University.

After clerking for a federal judge and practicing law for several years, in 1984 Professor Wolf became a National Endowment for the Humanities Fellow and then Associate for Law at The Hastings Center, a nonprofit research institute now in Garrison, NY, specializing in bioethics. She also taught law and medicine at New York University Law School for 6 years as an Adjunct Associate Professor. She was a Fellow in the Program in Ethics and the Professions at Harvard University in 1992-93, before joining the Minnesota faculty in the Fall of 1993.

Prof. Wolf's recent research has been funded principally by the National Institutes of Health (NIH), National Science Foundation (NSF), and The Greenwall Foundation. Prof. Wolf is also participating in a national project on law and neuroscience funded by the MacArthur Foundation and as a Senior Consultant to The Hastings Center on a project on end-of-life care, funded by the Donaghue Foundation and Sussman Trust. She is the author or coauthor of numerous articles and book chapters that have appeared in *Science*, *Nature Genetics*, *New England Journal of Medicine*, *Journal of the American Medical Association (JAMA)*, *American Journal of Public Health*, *Hastings Center Report*, *Kennedy Institute of Ethics Journal*, *American Journal of Law & Medicine*, *Journal of Law, Medicine & Ethics*, various law reviews, and other publications. She is editor of *Feminism & Bioethics: Beyond Reproduction* (Oxford University Press, 1996) and directed the Hastings Center project that produced *Guidelines on the Termination of Life-Sustaining Treatment and the Care of the Dying* (Indiana University Press, 1987). She has served on advisory bodies for the American Bar Association (ABA), American Medical Association (AMA), and the American Society for Reproductive Medicine (ASRM), among others. She is a Fellow of The Hastings Center, a past member of the Board of Directors of the American Society for Bioethics and Humanities (ASBH), and past-chair of the Association of American Law Schools' (AALS) Section on Law, Medicine, and Health Care. She writes frequently on genetics and genomics, assisted reproduction, death and dying, women's health care, human subjects research, and other topics in health law and bioethics. Prof. Wolf's biography and bibliography may be found at [www.law.umn.edu/facultyprofiles/wolfs.html](http://www.law.umn.edu/facultyprofiles/wolfs.html).





From Left to Right: Professor Colin Campbell, PhD, Professor Susan M. Wolf, JD, and Adjunct Associate Professor Jordan Paradise, JD, with the 2008 Proseminar students.



## Joint Degree Program Governing Committee

### 2006-07

Kenneth N. Brooks, PhD (Forest Resources)  
 Bryan E. Dowd, MS, PhD (Health Policy and Management, School of Public Health)  
 Lilly Ewing, JD, MS candidate in MCDB&G (Student representative)  
 Susan Galatowitsch, PhD (Horticultural Science)  
 Judith McKinnon Garrard, PhD (School of Public Health)  
 George D. Green, PhD (Graduate School)  
 Sarah H. Hobbie, PhD (Ecology, Evolution, and Behavior)  
 Helene Horwitz, PhD (Medical School)  
 Jeffrey P. Kahn, PhD, MPH (Center for Bioethics)  
 Erin Keyes, JD (Law School)  
 Meredith M. McQuaid, JD (Law School)  
 Thomas Neufeld, PhD (Genetics, Cell Biology & Development)  
 Jocelyn Shaw, PhD (Genetics, Cell Biology & Development)  
 Elizabeth V. Wattenberg, PhD (Environmental Health)  
 Elizabeth Wilson, MS, PhD (Hubert H. Humphrey Institute of Public Affairs)

### 2005-06

Robert Berlin, JD, MPH candidate in Epidemiology (Student representative)  
 Kenneth N. Brooks, PhD (Forest Resources)  
 Francesca J. Cuthbert, PhD (Fisheries, Wildlife & Conservation Biology)  
 Sharada Devarasetty, JD, MS candidate in MCDB&G (Student representative)  
 Bryan E. Dowd, MS, PhD (Health Policy and Management, School of Public Health)  
 Judith McKinnon Garrard, PhD (School of Public Health)  
 George D. Green, PhD (Graduate School)  
 Maria Hanratty, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Sarah H. Hobbie, PhD (Ecology, Evolution, and Behavior)  
 Helene Horwitz, PhD (Medical School)  
 Jeffrey P. Kahn, PhD, MPH (Center for Bioethics)  
 Kenneth H. Keller, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Erin Keyes, JD (Law School)  
 Meredith M. McQuaid, JD (Law School)  
 Thomas Neufeld, PhD (Genetics, Cell Biology & Development)  
 Jocelyn Shaw, PhD (Genetics, Cell Biology & Development)  
 Elizabeth V. Wattenberg, PhD (Environmental Health)

**Colin R. Campbell, PhD**, is Associate Professor in the Department of Pharmacology at the University of Minnesota Medical School. He is Associate Director of the Joint Degree Program. Prof. Campbell is also Co-Director of the University of Minnesota's Life Sciences Summer Undergraduate Research Program. He received his BS in Biology from Fairfield University and his PhD in Biochemistry from Boston University. He pursued post-doctoral studies in molecular genetics at the University of Illinois at Chicago and the Albert Einstein College of Medicine in New York, where he was also appointed an Instructor of Molecular Genetics. Prof. Campbell joined the University of Minnesota Pharmacology faculty as an Assistant Professor in 1992, and was promoted to his current rank in 1998.

Prof. Campbell's laboratory focuses on the relationship between nuclear and mitochondrial DNA instability and human pathologies including cancer and aging. Their research has been published in the *Journal of Biological Chemistry*, *Molecular and Cellular Biology*, *Nucleic Acids Research*, and other journals, and has been presented at numerous national and international scientific meetings. Prof. Campbell's research has most recently been funded by the National Institutes of Health, the American Heart Association, and the American Cancer Society. More information on his research and publications may be found at [www.pharmacology.med.umn.edu/staffcampbell.html](http://www.pharmacology.med.umn.edu/staffcampbell.html).

**Jordan Paradise, JD**, is the Associate Director of Research & Education for the Consortium and the Joint Degree Program. She is also an Adjunct Associate Professor of Law, a Research Associate in the Center for Bioethics, and the Faculty Editor-in-Chief of the *Minnesota Journal of Law, Science & Technology (MJLST)*. She received her BS from the University of Michigan and her JD from Chicago-Kent College of Law. She worked previously as a Research Fellow at the Illinois Institute of Technology's Institute for Science, Law and Technology in Chicago. Her current research focuses on the legal and policy implications of emerging technologies including genetics and nanotechnology. She is a Co-Principal Investigator on the Consortium's NSF grant on "Evaluating Oversight Models for Active Nanostructures and Nanosystems." She has authored numerous articles published in journals such as *Science*, *Nature Reviews Genetics*, *The Food and Drug Law Journal*, *Yale Journal of Health, Policy, Law & Ethics*, *Journal of Law, Medicine & Ethics*, and *Temple Law Review*. More information on her research and publications may be found at [www.lifesci.consortium.umn.edu/publications/paradise.php](http://www.lifesci.consortium.umn.edu/publications/paradise.php).

## 2004-05

Collette Adkins Giese, MS, JD, PhD  
candidate in Conservation Biology  
(Student representative)  
Kenneth N. Brooks, PhD (Forest  
Resources)  
Francesca J. Cuthbert, PhD (Fisheries,  
Wildlife & Conservation Biology)  
Bryan E. Dowd, MS, PhD (Health Policy  
and Management, School of Public  
Health)  
Nancy Eustis, MA, PhD (Hubert H.  
Humphrey Institute of Public Affairs)  
George D. Green, PhD (Graduate School)  
Helene Horwitz, PhD (Medical School)  
Jeffrey P. Kahn, PhD, MPH (Center for  
Bioethics)  
Kenneth H. Keller, PhD (Hubert H.  
Humphrey Institute of Public Affairs)  
Meredith M. McQuaid, JD (Law School)  
Claudia Neuhauser, PhD (Ecology,  
Evolution, and Behavior)  
Mary Story, PhD (Epidemiology and  
Community Health)  
Margaret A. Titus, PhD (Genetics, Cell  
Biology & Development)  
Elizabeth V. Wattenberg, PhD  
(Environmental Health)

## 2003-04

Francesca J. Cuthbert, PhD (Fisheries,  
Wildlife & Conservation Biology)  
Bryan E. Dowd, MS, PhD (Health Policy  
and Management, School of Public  
Health)  
Nancy Eustis, MA, PhD (Hubert H.  
Humphrey Institute of Public Affairs)  
John R. Finnegan, Jr. PhD (Epidemiology  
and Community Health)  
George D. Green, PhD (Graduate School)  
Helene Horwitz, PhD (Medical School)  
Jeffrey P. Kahn, PhD, MPH (Center for  
Bioethics)  
Kenneth H. Keller, PhD (Hubert H.  
Humphrey Institute of Public Affairs)  
Rebekah Kent, JD, MS candidate  
in Health Services Research,  
Policy & Administration (Student  
representative)  
Melanie Kleiss, JD, MS candidate in  
Science Technology & Environmental  
Policy (Student representative)  
Meredith M. McQuaid, JD (Law School)  
Claudia Neuhauser, PhD (Ecology,  
Evolution, and Behavior)  
Sharon L. Reich Paulsen, JD (Law School)  
Margaret A. Titus, PhD (Genetics, Cell  
Biology & Development)  
Elizabeth V. Wattenberg, PhD  
(Environmental Health)

## 2002-03

Trevor Copeland, JD, MS candidate in  
MCDB&G (Student representative)  
Francesca J. Cuthbert, PhD (Fisheries,  
Wildlife & Conservation Biology)  
Bryan E. Dowd, MS, PhD (Health Policy  
and Management, School of Public  
Health)  
Nancy Eustis, MA, PhD (Hubert H.  
Humphrey Institute of Public Affairs)

## GOVERNING COMMITTEE

**Dorothy H. Anderson, PhD**, is Professor in the Department of Forest Resources and Director of Graduate Studies in Natural Resources Science and Management. Her research projects include studies of the value that visitors and local constituents place on public resource land management and on the short- and long-term social and environmental benefits derived from recreational use of public lands. Prof. Anderson received her doctorate from Colorado State University.

**Kathleen Thiede Call, PhD**, is Associate Professor and Director of Graduate Programs in Health Services Research, Policy and Administration in the School of Public Health. She teaches Principles of Public Health Research, Sociology of Health and Illness, Health Disparities Research, and Community-Based Participatory Research. Her research interests include access to care and health status among vulnerable populations, including poor, young, elderly, uninsured, rural and chronically ill populations; sociology of health and illness; and research methods. Prof. Call received her doctorate from the University of Minnesota.

**Debra DeBruin, PhD**, is Director of Education and Professor in the Center for Bioethics, and Professor in the Department of Medicine. In addition to teaching philosophy and bioethics, Prof. DeBruin has served as a health policy fellow for Senator Edward Kennedy (D-MA) in the Democratic office of the Health, Education, Labor and Pensions Committee of the U.S. Senate. She has worked as a consultant to the National Academy of Science's Institute of Medicine and the National Bioethics Advisory Commission on issues relating to the ethics of research. She has also been a member of a number of state health policy working groups on issues including health records privacy, genetic information, and pandemic planning. Prof. DeBruin received her PhD from the University of Pittsburgh.

**Susan Galatowitsch, PhD**, is Professor of Horticulture Science in the Division of Plant Sciences in the College of Food, Agricultural and Natural Resource Sciences. Her research to date has focused primarily on smaller-scale wetland ecosystem restoration projects and methods for re-establishing native plant populations, controlling invasive plant species, and analyzing related wildlife habitat loss and recovery. Prof. Galatowitsch received her doctorate from Iowa State University in 1993. She was the 2007-08 Fesler-Lampert Chair in Urban and Regional Affairs.

**Judith McKinnon Garrard, PhD**, is the Senior Associate Dean of Academic Affairs and Research at the School of Public Health. She is an experienced health services researcher with publications on prescription drug use by elderly people in the community, nursing homes, and assisted living facilities. Her research specialty is pharmacoepidemiology and patient outcomes. She teaches graduate courses in research methods, program evaluation, and epidemiological applications to health services research. Dean Garrard received the Leonard M. Schuman Excellence in Teaching Award in 1989 and in 1991 a Career Research Award in social and behavioral geriatrics from the National Institute on Aging at NIH. She received her PhD from the University of Minnesota.

**George D. Green, PhD**, is the Morse-Alumni Distinguished Teaching Associate Professor of History and Associate Dean of the University of Minnesota's Graduate School. His scholarly specialty is American economic and business history. He earned his PhD in Economics and History at Stanford University.

**Maria Hanratty, PhD**, is Associate Professor and Director of Graduate Studies at the Hubert H. Humphrey Institute of Public Affairs. She teaches courses in social policy and distributive justice. She specializes in health economics, the economics of poverty, and comparative social welfare institutions. Her areas of expertise include health care, medical economics, economics of poverty, and comparative social welfare institutions. Prof. Hanratty received her PhD from Harvard University.



**Sarah H. Hobbie, PhD**, is Associate Professor and Director of Graduate Admissions in Ecology, Evolution, and Behavior. Her research interests include ecosystem ecology, carbon and nutrient cycling, decomposition, species effect on ecosystem processes, and plant-soil interactions. She received her doctorate at the University of California, Berkeley.

**Helene Horwitz, PhD**, is the Associate Dean for Student Affairs in the Medical School. Dean Horwitz oversees student services, student counseling including academic and career counseling, the residency application process, coordination of dual and joint degree programs, and related matters. She worked as an academic advisor and career counselor for several years before completing her PhD in Higher Education, with an emphasis on Academic Administration and Planning, at Southern Illinois University. Dean Horwitz has served as Chair of the Central Region Group on Student Affairs of the Association of American Medical Colleges (AAMC) and as a member of the national Committee on Student Affairs of the AAMC.

**Erin Keyes, JD**, is Assistant Dean of Students at the University of Minnesota Law School. She oversees student services for all of the 850 JD and LLM students and advises student groups on public service programs. She previously worked as an attorney for Central Minnesota Legal Services, handling family and housing law issues for low-income clients. She received her JD *cum laude* from the University of Minnesota and was awarded the Excellence in Public Service Award.

**Geeta Naidu, JD, MPH candidate** in Public Health Administration & Policy, served as the 2007-08 student representative to the Governing Committee. Ms. Naidu joined the Joint Degree Program in 2006, after receiving her BA in Biology with an Anthropology minor from Macalester College. She has worked for the Children's Dental Services in Minneapolis, serving as a Public Health Outreach Specialist. In 2007, she was a Minnesota AIDS Project policy intern and completed an internship with Prairie State Legal Services in Waukegan, IL. Ms. Naidu plans to pursue a career in health law and public interest law, working to improve the health status of minority and impoverished peoples.

**Thomas Neufeld, PhD**, is Associate Professor in the Department of Genetics, Cell Biology and Development and Co-Director of Graduate Studies in Molecular, Cellular, Developmental Biology & Genetics. His research focuses on the basic mechanisms of cell growth control using the fruit fly *Drosophila* as a model system to investigate signaling pathways and cellular functions that regulate growth. He received his doctorate from the University of California, Berkeley.

**Elizabeth V. Wattenberg, PhD**, is Associate Professor and Director of Graduate Studies in the Division of Environmental Health Sciences in the School of Public Health. Her laboratory investigates the molecular mechanisms by which carcinogenic agents interfere with the signaling pathways that control cell fate and function. Understanding this may help predict how environmental chemicals affect carcinogenesis and lead to methods for preventing and treating cancer. Prior to her appointment at the University of Minnesota, she worked at the Minnesota Department of Health on health risk assessment and environmental regulation. She received her doctorate from the Massachusetts Institute of Technology.

For more information about our Governing Committee members, visit:  
[www.jointdegree.umn.edu/faculty\\_and\\_staff/governing\\_committee.php](http://www.jointdegree.umn.edu/faculty_and_staff/governing_committee.php).

John R. Finnegan, Jr., PhD (Epidemiology and Community Health)  
 Helene Horwitz, PhD (Medical School)  
 Jeffrey P. Kahn, PhD, MPH (Center for Bioethics)  
 Kenneth H. Keller, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Meredith M. McQuaid, JD (Law School)  
 Claudia Neuhauser, PhD (Ecology, Evolution, and Behavior)  
 Sharon L. Reich Paulsen, JD (Law School)  
 Naomi B. Scheman, PhD (Philosophy)  
 Margaret A. Titus, PhD (Genetics, Cell Biology & Development)  
 Elizabeth V. Wattenberg, PhD (Environmental Health)

## 2001-02

Donald N. Alstad, PhD (Ecology, Evolution, and Behavior)  
 Francesca J. Cuthbert, PhD (Fisheries, Wildlife & Conservation Biology)  
 Bryan E. Dowd, MS, PhD (Health Policy and Management, School of Public Health)  
 John R. Finnegan, Jr. PhD (Epidemiology and Community Health)  
 Robert Goetz, JD, MS candidate in MCDB& G (Student representative)  
 Jeffrey P. Kahn, PhD, MPH (Center for Bioethics)  
 Kenneth H. Keller, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Meredith M. McQuaid, JD (Law School)  
 Sharon L. Reich Paulsen, JD (Law School)  
 Naomi B. Scheman, PhD (Philosophy)  
 J.L. David Smith, PhD (Fisheries, Wildlife & Conservation Biology)  
 Melissa M. Stone, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Margaret A. Titus, PhD (Genetics, Cell Biology & Development)  
 Elizabeth V. Wattenberg, PhD (Environmental Health)

## 2000-01

Donald N. Alstad, PhD (Ecology, Evolution, and Behavior)  
 Francesca J. Cuthbert, PhD (Fisheries, Wildlife & Conservation Biology)  
 Bryan E. Dowd, MS, PhD (Health Policy and Management, School of Public Health)  
 Nancy Eustis, MA, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Ross G. Johnson, PhD (Genetics, Cell Biology & Development)  
 Jeffrey P. Kahn, PhD, MPH (Center for Bioethics)  
 Kenneth H. Keller, PhD (Hubert H. Humphrey Institute of Public Affairs)  
 Meredith M. McQuaid, JD (Law School)  
 Sharon L. Reich, JD (Law School)  
 Naomi B. Scheman, PhD (Philosophy)  
 J.L. David Smith, PhD (Fisheries, Wildlife & Conservation Biology)  
 Jeannine J. Thiele JD, MS candidate in MCDB&G (Student representative)  
 Elizabeth V. Wattenberg, PhD (Environmental Health)



# Joint Degree Program Advisory Board

The Joint Degree Program is indebted to an active and growing Advisory Board. The Board consists of prominent community members whose own work is at the intersection of law, policy, science, and health. Board members meet twice annually to advise Program faculty and staff and serve as mentors to the Joint Degree Program students. Each Fall the Board hosts a reception for the students. The law firm of Leonard, Street and Deinard hosted the reception in 2007. The law firm of Faegre & Benson will host the reception in Fall 2008.

The 2007-08 Board includes:



Advisory Board member Mark Ellinger, JD, PhD, speaking at an Advisory Board meeting.



Advisory Board member Byron Starnes, JD, at the Fall 2007 JDP Advisory Board Reception.



Advisory Board member, Ruth Mickelsen, JD, MPH, at an Advisory Board meeting.



Advisory Board member Martha Brand, JD.

**Martha Brand, JD**, Executive Director of the Minnesota Center for Environmental Advocacy (MCEA), a nonprofit organization working to protect Minnesota's natural resources, wildlife, and the health of its people. Prior to being selected as Executive Director of the MCEA, she completed a Bush Foundation Leadership Fellowship and served as an environmental consultant, after having been a partner at the Minneapolis-based law firm of Leonard, Street and Deinard practicing environmental law from 1981 to 1998. She earned her JD at Boston University.



Advisory Board member Amos S. Deinard, Jr., MD, MPH.

**Amos S. Deinard, Jr., MD, MPH**, Associate Professor in the Department of Pediatrics, University of Minnesota Medical School. His long career has focused on aiding underserved communities in the Twin Cities. He worked for 15 years (1969-84) as the Pediatric Consultant to the Minneapolis Health Department's Maternal and Child Health program, followed by 15 years as Director of the Community-University Health Care Center (CUHCC). CUHCC serves uninsured and underinsured children in the Phillips neighborhood. That neighborhood is one of the poorest in the state and consists of a highly diverse community of Native American, Hispanic, Southeast Asian, Somali, and white residents. Prof. Deinard has received numerous awards, including the 2008 Distinguished Service Award of the Minnesota Chapter of the American Academy of Pediatrics, the University of Minnesota's Award for Outstanding Community Service, the Minneapolis Award for Contributions to the City of Minneapolis, and the Minnesota Department of Health Betty Hubbard Maternal and Child Health Leadership Certificate of Recognition. He received his MD and MPH from the University of Minnesota.

**Brian Dorn, JD, PhD**, Merchant & Gould, PC, practices general intellectual property law with an emphasis on patent prosecution and client counseling (U.S. and foreign). His practice is concentrated in biotechnology and pharmaceuticals. Dr. Dorn has prosecuted patents and worked on opinions regarding stem cells, humanized antibodies, siRNA, small-molecule pharmaceuticals and therapeutic uses, pharmaceutical delivery systems, antimicrobials, therapeutic peptides, diagnostic and immunoassays, phage display systems, microarrays, therapeutic medical device coatings, and transgenic animals. He has also authored multiple, peer-reviewed scientific publications relating to his research in microbiology, human and microbial genetics, and cell biology. He received his PhD in Biomedical Sciences with a concentration in Microbiology/Immunology and his JD *magna cum laude* from the University of Florida.



**Mark Ellinger, JD, PhD**, Managing Principal, Fish & Richardson, Twin Cities office. Fish & Richardson is one of the country's largest firms practicing intellectual property, litigation, and corporate law. His practice emphasizes patent prosecution, opinions, due diligence investigations, licensing, and counseling in the medical biotechnology, agricultural biotechnology, diagnostic, pharmaceutical, and medical science fields. Dr. Ellinger is a frequent speaker on intellectual property aspects of biotechnology and is a treatise co-author and lecturer for the Patent Resources Group's course, "Pharma and Biotech Strategies for Patent Prosecution, Hatch-Waxman, Litigation and Licensing." Dr. Ellinger received a PhD in developmental biology from the University of Minnesota and a JD from Harvard Law School. Prior to law school, Dr. Ellinger was a tenured Associate Professor at Southern Illinois University and a Visiting Scientist at Merck Sharp & Dohme Research Laboratories.

**Hubert (Skip) H. Humphrey, III, JD**, is a Senior Fellow in Public Health Policy and Law in the Division of Epidemiology at the University's School of Public Health, Senior Vice President at Tunheim Partners, and currently serves as President for AARP Minnesota. He is a former State Senator and Minnesota Attorney General. As a longtime advocate for non-smoking, Mr. Humphrey was the first attorney general in the nation to bring an antitrust and consumer fraud lawsuit against the tobacco industry, reaching a landmark settlement. In 1999, he was awarded the Tobacco-Free World Prize by the World Health Organization. Mr. Humphrey holds a JD from the University of Minnesota.

**Ryan Johnson, JD**, is a member of Fredrikson & Byron's Health Law, Medical Technology, Corporate, and Medicare Fraud and Abuse Groups. Among his clients are hospitals, physician groups, medical device companies, physician management companies, and other health care professionals and businesses. Mr. Johnson's experience includes representation of buyers and sellers in health care mergers and acquisitions; representation of health care providers in structuring joint ventures and strategic alliances; representation of physician groups and hospitals in civil and criminal investigations; analysis of physician self-referral (Stark), fraud and abuse, and other federal and state regulatory issues in operational matters affecting health care providers; and advising health care providers, health plans, and device manufacturers regarding patient privacy issues, including compliance with HIPAA. Mr. Johnson received his JD at the University of Minnesota.

**Rep. Phyllis Kahn, PhD, MPA**, is a member of the Minnesota legislature serving her 18th term. Her legislative interests include pension and investment policy, science and technology (most recently, DNA testing and the role of biotechnology in agriculture), information policy, natural resources, and women's rights. She has been the chief author of the Minnesota Clean Indoor Air Act (controlling smoking in public places), computer crime and computer virus laws, and legislation on nuclear safety, radioactive waste disposal, field tests of genetically modified crops, and infectious waste disposal. Rep. Kahn has also authored laws to require gender equity in athletics and laws prohibiting discrimination based on age or disability. She has been instrumental in obtaining funding for parks, trails, historic preservation, art-enhancement of state buildings, and the expansion of community and urban forests. She has served on many national committees, particularly in the field of science and public policy. She has been elected a Fellow of the American Association for the Advancement of Science (AAAS) and has served as Chair of the AAAS section on "General Interest in Science and Engineering." Rep. Kahn received a PhD in Biophysics from Yale and a MPA from the J.F.K. School of Government at Harvard University.

**Vanessa Laird, MA, JD**, is currently General Counsel, Enterprise Services, United HealthGroup. She was previously Vice President and Senior Counsel for Medtronic's Cardiac Rhythm Disease Management and Neuromodulation businesses, as well as Senior Legal Counsel (based in Tolochenaz, Switzerland) for Medtronic Europe, Middle East, and Africa. Prior to Medtronic, she practiced U.S. and international law in the Legal Adviser's Office at the U.S. Department of State. Earlier in her career, she taught law at the University of Sheffield in England and clerked for Judge Stephen S. Trott of the U.S. Court of Appeals for the 9th Circuit. Ms. Laird holds an MA in politics, philosophy, and economics from Oxford University (Worcester College) and a JD from Stanford University.



Advisory Board member Hubert (Skip) Humphrey, III, JD, at the Fall 2007 JDP Advisory Board Reception.



Advisory Board member Representative Phyllis Kahn, PhD, MPA, commenting in the Lecture Series on "Oversight of Biomedical Technologies: What Can We Learn from Past Efforts?"



Advisory Board member Donald Lewis, JD, at the 2007 Advisory Board reception.

**Donald Lewis, JD**, is a founding shareholder of the law firm of Halleland Lewis Nilan & Johnson. In July 2008, he became Dean of Hamline University School of Law and stepped down from the Advisory Board. His practice has included employment and commercial litigation. Prior to entering private practice, Mr. Lewis served for six years as an Assistant U.S. Attorney for the District of Minnesota, working as a federal criminal prosecutor focusing on economic and tax crimes. He was formerly employed as a trial attorney in the Civil Rights Division of the U.S. Department of Justice in Washington, DC. He has served on boards of directors of several non-profit organizations. He was a co-founder of the Minnesota Association of Black Lawyers and is a former member of the Board of Governors of the National Bar Association. He has been an Adjunct Law Professor at Hamline and a trustee, legal writing instructor, and tutor at the William Mitchell College of Law. He is a Fellow of the American College of Trial Lawyers, the American Bar Foundation, and the American Law Institute. Mr. Lewis received his undergraduate journalism degree with distinction from Northwestern University and is a graduate of Harvard Law School.



Advisory Board member Kenneth A. Liebman, JD.

**Kenneth A. Liebman, JD**, Faegre & Benson LLP, is Chair of Faegre & Benson's Intellectual Property Group. He served as lead counsel for the University of Minnesota in its patent licensing litigation with Glaxo Wellcome over the AIDS drug Ziagen. The case settled with the defendant recognizing the validity of the University's patents and agreeing to pay royalties estimated to be \$300 million over the life of the patents. The settlement is reported to be the largest ever obtained by any public university in patent license litigation. He has also been an Adjunct Professor at the University of Minnesota Law School and William Mitchell Law School. Mr. Liebman received his JD from Yale Law School.

**Ruth A. Mickelsen, JD, MPH**, is a former Vice President and Ethics Advisor for Allina Hospitals and Clinics, a non-profit hospital and clinic organization. She practiced health law in the public sector, in private practice, and as in-house counsel for over 20 years. Ms. Mickelsen has held several adjunct faculty appointments at the University of Minnesota Law School and William Mitchell College of Law, where she was also appointed a Distinguished Practitioner in Residence. She is currently an Adjunct Professor at William Mitchell College of Law, teaching Bioethics and the Law, while pursuing a Masters degree in Bioethics and Health Policy through Loyola University Chicago. Ms. Mickelsen was awarded a Bush Leadership Fellowship in 1985 and has been named a leading Health Law Lawyer by the *Minnesota Business Guidebook of Law and Leading Attorneys*. She received her MPH, from the Harvard School of Public Health and her JD *cum laude* from William Mitchell College of Law.



Advisory Board member Winthrop A. Rockwell, JD.

**Winthrop A. Rockwell, JD**, Faegre & Benson LLP, concentrates on commercial and product liability litigation. He is a member of Faegre & Benson's Management Committee, where his responsibilities include oversight of the firm's international operations, practice development, and strategy. Mr. Rockwell served for six months in 1979 as Associate General Counsel of President Carter's Commission on the Accident at Three Mile Island. He has served as a board member of various Minnesota nonprofit organizations and is a recent past member of the Board of Directors of the Minnesota Center for Book Arts. Mr. Rockwell is a Fellow of the British-American Project founded by the Royal Institute of International Affairs and the Johns Hopkins University School of Advanced International Studies. Before law school, he worked on the foreign desk of the *New York Times* and as an Assistant to the President of Dartmouth College. Mr. Rockwell received his JD from New York University.

**Mark B. Rotenberg, JD, MA, MPhil**, has served as the University of Minnesota's General Counsel since 1992. Previously he was a partner at Dorsey & Whitney, specializing in employment litigation and labor law. He served in the U.S. Department of Justice's Office of Legal Counsel, which provides legal counsel to the President, White House staff, and heads of the Executive Departments. Mr. Rotenberg also served as a law clerk to the Honorable Patricia M. Wald, U.S. Court of Appeals, District of Columbia Circuit. He earned his BA *magna cum laude*, from Brandeis University, and his MA, MPhil, and JD degrees from Columbia University, where he also served as an Editor of the *Columbia Law Review*. He is a member of the American Law Institute (ALI), and is an Adjunct Professor in both the Law School and the College of Liberal Arts at the University of Minnesota.



**Ann L. Russell, JD, MSW**, is a lawyer with 25 years of experience in advising health care entities. Currently an Associate Counsel for Catholic Health Initiatives, a national nonprofit organization with over 78 hospitals, clinics, and skilled nursing facilities, she has also represented the University of Minnesota Hospital and Clinic and Hennepin County's Medical Center and Community Health Department. Ms. Russell has extensive experience in advising health care providers on transactional, operational, regulatory, and patient care matters as well as ethical dilemmas. She is currently a member of the Ethics Committees of the University of Minnesota Medical Center, Fairview and Hennepin County Medical Center, and serves on the Ethics Advisory Committee to the Archbishop of St. Paul, MN. She served for ten years on the Advisory Board to the University of Minnesota Center for Bioethics. Ms. Russell has taught biomedical ethics at William Mitchell College of Law. Prior to practicing law, Ms. Russell was a psychiatric social worker in Hennepin County's Mental Health Center.



Advisory Board member Mark Skoog, JD, PhD.

**Paul Savereide, JD, PhD**, is a Senior Associate at Patterson, Thunette, Skaar, and Christensen, a Minneapolis law firm specializing in intellectual property law. Previously, he was a Senior Intellectual Property Attorney at Cargill, Inc. and Corporate Patent Counsel for Chiron Corporation in Emeryville, CA. He also worked as an Associate with the Minneapolis office of the Dorsey & Whitney law firm. Dr. Savereide earned his JD and PhD in Cell and Developmental Biology from the University of Minnesota. He is a member of the Minnesota Bar and is registered to practice before the U.S. Patent and Trademark Office as a Patent Attorney.



Advisory Board member Martin Stillman, JD, MD, University of Minnesota.

**Debra A. Shetka, JD**, is counsel to Fish & Richardson. She is a frequent speaker on biotechnology patent issues and has lectured on patent interference law at Stanford University, Santa Clara University School of Law, and the University of Washington. Her practice focuses on life science patent law with a special emphasis on patent interferences and appeals to the Court of Appeals for the Federal Circuit. Ms. Shetka was involved in two especially important Federal Circuit appeals addressing the patentability of DNA sequences, as principal author in an appeal on behalf of Chiron Corporation, and as *amicus curiae* on behalf of the Biotechnology Industry Organization and the Bay Area Bioscience Center. Ms. Shetka received her law degree at the University of Minnesota where she was Editor-in-Chief of the *Journal of Law & Inequality*. After law school, she clerked for the Honorable Daniel M. Friedman, U.S. Court of Appeals for the Federal Circuit.

**Mark T. Skoog, JD, PhD**, is a partner at Merchant & Gould PC. He practices general intellectual property law with an emphasis on client counseling and patent prosecution. He also has concentrated on infringement and validity analyses of patents in biotechnology, chemistry, and pharmaceuticals. He has drafted and prosecuted patents in the areas of chemistry, biotechnology, pharmaceuticals, medical devices, and power tools. Before becoming a patent attorney, Dr. Skoog spent a decade as a researcher and research manager in the pharmaceutical industry. His research experience includes design, discovery, and evaluation of enzyme inhibitors as therapies for inflammatory, autoimmune, and viral diseases. He received his PhD in Biochemistry at Indiana University and his JD at the University of Minnesota.

**Byron E. Starns, JD**, is a shareholder and partner at the firm of Leonard, Street and Deinard, practicing in the areas of environmental and public law, energy, and regulated industries. He chaired the firm's Litigation Division from 2002-08. Mr. Starns served as Minnesota Chief Deputy Attorney General (1974-79) and Deputy Attorney General for the Minnesota Pollution Control Agency (1973-74). He is admitted to practice in the State of Minnesota, the State of Illinois, before the U.S. District Court for the District of Minnesota, before the Eighth Circuit Court of Appeals, and before the U.S. Supreme Court. He earned his JD at the University of Chicago.

**Martin Stillman, JD, MD**, practices internal medicine at Hennepin County Medical Center and is Assistant Professor of Medicine at the University of Minnesota Medical School. He is both a Fellow and elected Board Member of the American College of Legal Medicine and is currently serving a second term as President of the Minnesota Medical Alumni Society. Dr. Stillman graduated from the University of Minnesota Law School in 1993 and the University of Minnesota Medical School in 1997. He completed his training in internal medicine at Hennepin County Medical Center in 2000 and then served one year as Chief Resident. During his residency, he was recognized as an outstanding teacher, winning a Minnesota Medical Foundation Distinguished Teaching Award.





From Left to Right: Advisory Board member, Margo S. Struthers, JD, Advisory Board member Ruth Mickelsen, JD, MPH, and JDP student Amber Thomas, JD, MPH candidate in Public Health Administration & Policy, at the Fall 2007 Advisory Board Reception.

**Margo S. Struthers, JD**, Oppenheimer Wolff & Donnelly LLP, is Chair of the firm's Health Law Practice Group. She represents a variety of health care clients, including hospitals and other health care providers, provider associations, managed care and other insurance companies, and medical manufacturers. Her practice involves organizational structure and other issues affecting nonprofit, professional, and business organizations in health care. She also has substantial experience related to health care contracts, institutional and professional licensure, HMO and insurance regulation, fraud and abuse and other compliance issues, director and officer liability, conflict of interest and tax exemption issues, medical staff bylaws and credentialing, bioethical issues, and health information and confidentiality issues. In addition to being an active member and past-Chair of the Minnesota State Bar Association Health Law Section, she is a member of the American Health Lawyers Association and is a past-President of the Minnesota chapter of the former American Academy of Healthcare Attorneys. Ms. Struthers has also written and lectured extensively on a variety of health care, third-party payment, tax exemption, and other nonprofit organization issues. She is currently an Adjunct Professor at the University of Minnesota Law School teaching a seminar on Health Care Fraud and Abuse. She received her JD at the University of Minnesota.

**Judith Walker, JD**, is Vice President of Regulatory Affairs and Chief Compliance and Ethics Officer for Blue Cross and Blue Shield of Minnesota. Ms. Walker is accountable for providing leadership on regulatory compliance issues and for maintaining the company's compliance and ethics program. She has held several positions at Blue Cross since joining the company in 1988, most recently serving as Deputy General Counsel. Prior to joining Blue Cross, Ms. Walker worked for the Minnesota Department of Health in HMO regulation and taught undergraduate students at the University of St. Thomas. Ms. Walker serves on the Advisory Board of the Health Law Institute of Hamline University School of Law and is a member of the Health Law Governing Council of the Minnesota State Bar Association. She has participated in the mentoring programs of the University of St. Thomas Law School and the University of Minnesota School of Public Health. She recently completed a term as Board Chair of the Minnesota Literacy Council, a state-wide nonprofit organization committed to improving lives by improving literacy. Ms. Walker received her law degree from Hamline University School of Law.

### Joint Degree Program Advisory Board

The Joint Degree Program has benefited greatly from the leadership of its distinguished Advisory Board. We are indebted to these Advisory Board members who have shaped the Joint Degree Program, who mentor Joint Degree Program students, and who offer invaluable guidance as our program continues to grow. The Joint Degree Program thanks all of its past Advisory Board members:

Peter Bachman, JD (Minnesota Center for Environmental Advocacy) 2001-03  
 Martha Brand, JD (Minnesota Center for Environmental Advocacy) 2004-present  
 Ronald A. Daignault, JD, PhD (Merchant & Gould PC) 2001-03  
 Amos Deinard, Jr. MD, MPH (Professor of Pediatrics, University of Minnesota) 2004-present  
 Brian Dorn, JD, PhD (Merchant & Gould PC) 2007-present  
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 \*Konrad J. Friedemann, JD (Fredrikson & Byron PA) 2001-03  
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 \*Denise M. Kettelberger, JD, MS (Merchant & Gould PC) 2001  
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 Paul Savereide, JD, PhD (Patterson, Thunete, Skaar, and Christensen) 2001-present  
 \*Debra A. Shetka, JD (Sole Practitioner) 2001-present  
 Mark T. Skoog, PhD, JD (Merchant & Gould PC) 2003-present  
 Byron E. Starns, JD (Leonard, Street and Deinard PA) 2004-present  
 Martin Stillman, JD, MD (Hennepin County Medical Center and Professor of Medicine, University of Minnesota) 2006-present  
 \*Margo S. Struthers, JD (Oppenheimer Wolff & Donnelly LLP) 2001-present  
 Judith Walker, JD (Blue Cross and Blue Shield of Minnesota) 2006-present  
 \* *Founding Advisory Board Member*



# Deinard Memorial Lecture Series on Law & Medicine

The **Joint Degree Program** and the **Center for Bioethics** launched the **Deinard Memorial Lecture Series on Law & Medicine** in the Spring of 2004. This annual lecture series is supported by generous donations from the family of Amos S. Deinard, Sr. (1898-1985) and the law firm of Leonard, Street & Deinard in honor of Amos Deinard, Sr. and his brother, Benedict S. Deinard (1899-1969). The Deinard brothers were founding partners of the Minneapolis-based law firm of Leonard, Street and Deinard. Both attended the University of Minnesota Law School and Harvard Law School. Amos Deinard was a distinguished attorney widely known for his persistent work to eliminate discrimination in hiring. Appointed to the Minneapolis Fair Employment Practices Commission in 1945 by Mayor Hubert H. Humphrey, he served on the Commission for 17 years, 15 of them as chairman. Benedict Deinard was a successful trial lawyer, an Adjunct Professor of Law at the University of Minnesota, a Deputy Attorney General in the U.S. Department of Justice during World War II, and one of 4 civilians asked to participate in the Nuremberg war crimes trials.



**Prof. George Annas, JD, MPH** (Boston University), presented the 2007-08 Deinard Memorial Lecture on **“The Legacy of the Nazi Doctors’ Trial for American Bioethics and International Human Rights Law.”**

In his talk, Prof. Annas argued that both American bioethics and international human rights law were born, historically and intellectually, at Nuremberg with the Doctor’s Trial by the International Military Tribunal following World War II. While the Trial is usually known for the court’s formulation of the Nuremberg Code, Prof. Annas instead contended that it was the Trial itself—in which doctors, lawyers, and judges worked together to hold individual physicians accountable—that is the lasting legacy of Nuremberg. Prof. Annas discussed the United States’ checkered history regarding both research and torture since the Trial. Prof. Annas concluded that, given recent events at Abu Ghraib and Guantanamo, the United States is now at a point at which it should learn from its own history. Doctors and lawyers should once again collaborate to hold the United States to the standards for bioethics and human rights it originally helped put in place at Nuremberg. Commentators were **Prof. Steven Miles, MD**, Center for Bioethics and Medical School, and **Prof. Kathryn Sikkink, MA, PhD**, Department of Political Science and Law School, University of Minnesota.

The Deinard Memorial Lecture provided 1.5 credits of continuing legal education (CLE) and 1.5 credits of continuing medical education (CME). Further information and video of all the Deinard Memorial Lectures is available on our websites at [www.jointdegree.umn.edu/conferences/deinard\\_series.php](http://www.jointdegree.umn.edu/conferences/deinard_series.php) and [www.lifesci.consortium.umn.edu/conferences/deinard\\_series.php](http://www.lifesci.consortium.umn.edu/conferences/deinard_series.php).

The 2008-09 Deinard Memorial Lecture in Law and Medicine will feature **Professor M. Gregg Bloche, JD, MD** (Georgetown University), speaking on **“The Emergent Logic of Health Reform”** on January 29, 2009. Professor Bloche will deliver a public lecture from 11:30 am to 1:00 pm in the Theater, Coffman Memorial Union. For more information visit our website at [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).



Prof. Kathryn Sikkink, MS, PhD, University of Minnesota, comments on the Deinard Memorial Lecture on Law & Medicine.

## Deinard Memorial Lectures 2004-08

2008 Prof. **George Annas, JD, MPH** (Boston University) Prof. Annas’s lecture on **“The Legacy of the Nazi Doctors’ Trial for American Bioethics and International Human Rights Law”** will be published in Volume 10, Issue 1 of the *Minnesota Journal of Law, Science & Technology (MJLST)*.

2007 Prof. **Stephen J. Morse, JD, PhD** (University of Pennsylvania) Prof. Morse published an article on **“New Neuroscience, Old Legal Problems: The Case of Juvenile Responsibility”** in Volume 9, Issue 1 of the *Minnesota Journal of Law, Science & Technology (MJLST)*.

2006 Prof. **David H. Kaye, JD, MA** (Arizona State University) Prof. Kaye published an article on **“The Science of DNA Identification: From the Laboratory to the Courtroom (and Beyond)”** in Volume 8, Issue 2 of the *Minnesota Journal of Law, Science & Technology*.

2005 Prof. **Ellen Wright Clayton, MD, JD** (Vanderbilt University) spoke on **“Over-Reading the Human Genome: The Threat to Privacy, Employment, Group Identity, and Responsibility.”**

2004 Prof. **Troyen A. Brennan, MD, JD, MPH** (Harvard Medical School) spoke on **“The Crisis in Patient Safety and Malpractice: Fixing Medicine and Law.”**



Left: Amos S. Deinard Sr. (1898-1985).  
Right: Benedict S. Deinard (1899-1969).





**Joint Degree Program**  
in Law, Health & the Life Sciences\*

**Consortium on Law and Values**  
in Health, Environment & the Life Sciences\*

**Co-Sponsored Activities**

# 2007-08 Events

The University of Minnesota's Consortium on Law and Values in Health, Environment & the Life Sciences and the Joint Degree Program in Law, Health & the Life Sciences sponsor numerous events each year to create a community of interdisciplinary thinkers on law and science. We welcome students, faculty, legislators, policymakers, attorneys, researchers, healthcare professionals, and community members. For video of past events, visit [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).



Joint Degree Program student Lauren Beach, JD, PhD candidate in Molecular, Cellular, Developmental Biology & Genetics.



# Lecture Series on Law, Health & the Life Sciences

The Lecture Series has sponsored 3 lectures per year since 2000. Each lecture brings to campus an eminent scholar examining the societal implications of the life sciences, features faculty and others providing interdisciplinary commentary, and is followed by an invitational lunch discussion involving selected faculty members, community members, and government leaders as well as Joint Degree Program students. The 2007-08 Lecture Series focused on **“Emerging Debates on Oversight and Policy in Biomedicine & the Life Sciences.”**



Suzanne Hunt, MA, formerly of  
Worldwatch Institutes.

**Wednesday, October 31, 2007**

**Suzanne Hunt, MA**, formerly of WorldWatch Institutes, presented **“The Global Biofuels Debate: Science, Policy & Ethics.”** Ms. Hunt is currently an independent consultant dividing her time among the Natural Resources Defense Council (NRDC), Global Bioenergy Partnership (GBEP), UN Food and Agriculture Organization (FAO), and Inter-American Development Bank (IDB). **Dean Robert Elde, PhD**, College of Biological Sciences, University of Minnesota, and **Professor Benjamin Senauer, PhD**, Applied Economics, University of Minnesota, provided commentary.

Ms. Hunt argued that biofuel markets around the world are policy-driven. Thus, understanding the key policy mechanisms and their aims and impacts is essential. Doing this on an international scale is challenging. In some countries, nascent biofuels industries are beginning to grow in the absence of regulatory frameworks. Biofuel trade flows are currently relatively small but expected to grow substantially. Ms. Hunt provided a brief overview of the biofuels industry including fuels, producers, production and trade trends, and the key opportunities and risks that this new industry presents.



President Debora Spar, PhD,  
Barnard College.

**Wednesday, December 12, 2007**

**President Debora Spar, PhD**, Barnard College, presented **“Building a Better Baby Business: What’s Wrong with the Market for Assisted Reproduction and How to Make it Better.”** Prof. Spar was the Spangler Family Professor of Business Administration, Senior Associate Dean, and Director of Research at Harvard Business School. She is now the President of Barnard College. Her research has focused on business-government relations and the political environment of international commerce. **Professor Michele Goodwin, JD, LLM**, Law School and Center for Bioethics, University of Minnesota, and **Professor Christopher DeJonge, PhD**, Department of Reproductive Endocrinology and Infertility, University of Minnesota, provided commentary.

Prof. Spar maintained that, in the United States alone, assisted reproduction generates annual revenues of over \$4 billion. Would-be parents have a tremendous array of options, including advanced techniques for in-vitro fertilization (IVF), use of sperm banks, and access to egg donors. They can aim for one child or several, blond hair or brown, a boy or a girl. In the process, they can expect to pay handsomely, anywhere from \$13,000 (the average price for a single cycle of IVF) to \$250,000 (the cost of repeated, failed cycles with high-end donor eggs and advanced techniques). She described the current status of the assisted reproduction business and outlined some of the major problems it poses—of equity, of contracting, and of child and maternal welfare. She also discussed avenues for appropriate public policy. Professor Spar will be publishing an article from this lecture in Volume 10, Issue 1 of the *Minnesota Journal of Law, Science & Technology*.

**Thursday, March 6, 2008**

**Professor Patricia A. King, JD**, Georgetown University, presented **“Oversight of Biomedical Technologies: What Can We Learn From Past Efforts?”** Prof. King is the Carmack Waterhouse Professor of Law, Medicine, Ethics, and Public Policy at Georgetown University. Commentators were **Minnesota State Representative Phyllis Kahn, PhD, MPA**, and **Professor R. Scott McIvor, PhD**, Department of Genetics, Cell Biology and Development, University of Minnesota.



Professor Patricia King, JD,  
Georgetown University Law School.

Prof. King discussed the tremendous controversy that surrounds the question of how to exercise effective oversight for cutting-edge biomedical technologies. At the federal level, past efforts have included presidentially appointed panels, NIH and FDA expert committees, and calls for legislation. Self-regulation by professional societies and litigation have also played a role. As a participant in a number of federal efforts, including the Human Embryo Research Panel, Prof. King reflected on what has worked, what has not, and what lessons can be learned for future oversight.

The 2008-09 Lecture Series will focus on “**Synthetic Biology: The Science, Ethics & Law of Creating New Life.**” The lecturers are **Robert Friedman, PhD** (J. Craig Venter Institute) on October 8, 2008; **Prof. Arti J. Rai, JD** (Duke University School of Law) on November 4, 2008; and **Prof. Drew Endy, PhD** (Stanford University) on April 16, 2009. All lectures begin at 11:30 a.m. and conclude at 1:00 p.m. These events are free and open to the public.

Videos from all of our lectures are available on our websites at [www.lifesci.consortium.umn.edu/conferences/lecture\\_series.php](http://www.lifesci.consortium.umn.edu/conferences/lecture_series.php) and [www.jointdegree.umn.edu/conferences/lecture\\_series.php](http://www.jointdegree.umn.edu/conferences/lecture_series.php).

## Lecture Series on Law, Health & the Life Sciences 2000-07

### 2006-07 Nutrigenomics, Nutraceuticals, and Direct-to-Consumer Marketing of Genomic Nutritional Profiling

*Nutraceuticals: Dietary Supplements, Botanical Drugs, and Nature Products: Science, Safety, and Efficacy*

Mark Blumenthal, (American Botanical Council)

*Genomic Nutritional Profiling: the Ethics of Nutrigenomics*

Prof. David Castle, PhD (University of Ottawa)

*Nutrigenomics: Science, Regulation, and Policy*  
Prof. Jose M. Ordovas, PhD (Tufts University)

### 2005-06 The Implications of Neuroscience

*The Ethical Brain*

Prof. Michael Gazzaniga, PhD (Dartmouth College)

*The Implications of Behavioral Biology for Law: Evolutionary Perspectives*

Prof. Owen D. Jones, JD (Vanderbilt University Law School)

*Developmental Neuroethics: Neuroscience, Childhood, and Society*

Prof. Martha Farah, PhD (University of Pennsylvania)

### 2004-05 Stem Cells in Science & Society

*Stem Cell Biology: Good Ethics Depend on Good Facts*

Prof. Evan Snyder, MD, PhD (Burnham Institute and University of California, San Diego)

*Stem Cell Therapy: Hype or Hope?*

Prof. Janet Rowley, MD (University of Chicago)

*From Stem Cells to Jail Cells*

Prof. Alta Charo, JD (University of Wisconsin-Madison)

### 2003-04 Cutting-Edge Issues in Biomedical Research

*Solutions to the Crisis in Human Subjects Research: From Pillar to Post?*

Prof. Jeremy Sugarman, MD, MPH, MA (Duke University)

*Medical Devices: A Different Twist on the Ethics and Law of Research Protections*

Prof. E. Haavi Morreim, PhD (University of Tennessee)

*Financial Conflicts of Interest in Biomedical Research*

David Korn, MD (Association of American Medical Colleges)

### 2002-03 Issues of Public Health and Personal Privacy

*Balancing Public Health and Patients' Rights: The Threat of Bioterrorism*

Prof. Wendy Mariner, JD, LLM, MPH (Boston University)

*The Litigation Revolution: Tobacco Liability and the Rise of the New Public Health*

Prof. Allan Brandt, PhD (Harvard University)

*Restrictions on Privacy, Autonomy & Liberty: Lessons from Infectious Disease Control*

Prof. Ronald Bayer, PhD (Columbia University)

### 2001-02 Reproductive Technology: Cloning, Stem Cells, and IVF

*Regulating Reproduction, Replication & Research: Governing IVF, Stem Cells, Cloning & Germline Genetics*

Prof. George Annas, JD, MPH (Boston University)

*Embryo Stem Cell Policy: The Intersection of Values, Science, and Law*

Prof. Lori Andrews, JD (Chicago-Kent College of Law)

*Cloning and Other Monkey Business*

Dr. Don Wolf, PhD (Oregon Health Sciences University, Oregon Regional Primate Research Center)

### 2000-01 Ecology and Biotechnology

*Normalizing Biotechnology: Science, Ethics, & Political Culture*

Prof. Sheila Jasanoff, JD, PhD (Harvard University)

*Nature's Birthmark: The Separate World of Ecology*  
Prof. Mark Sagoff, PhD (University of Maryland)

*The Ethics of Introduced Species*  
Prof. Kristin Shrader-Frechette, PhD

(University of Notre Dame)

## Lunch Series on the Societal Implications of the Life Sciences 2001-07

The Joint Degree Program and the Consortium held the Lunch Series on the Societal Implications of the Life Sciences from Fall 2001 to Spring 2007. Each lecture brought eminent scholars to campus who gave a public lecture and examined the societal implications of the life sciences.

### 2006-07 Science and Politics: Controversies in Regulation and National Security

*Science and Politics: Problems and Solutions*

Prof. Kurt Gottfried, PhD (Cornell University and Union of Concerned Scientists)

*Science and Politics in Environmental Policymaking: Can This Marriage Be Saved?*

Prof. Holly D. Doremus, JD, PhD (University of California, Davis)

*Dual Use & National Security*

Prof. David Relman, MD (Stanford University)

*Science and Politics: FDA Perspective*

Scott Gottlieb, MD (Food and Drug Administration)

### 2005-06 Energy and the Environment: Science, Ethics & Policy

*Changing Energy Policy to Benefit the Environment and Human Health*

Prof. Daniel M. Kammen, PhD (University of California, Berkeley)

*An Ethical Framework for Analyzing Global Warming*  
Donald A. Brown, Esq. (Pennsylvania Department of Environmental Protection)

*Climate Change and Intergenerational Fairness: Reconciling Ethics and Economics*

Prof. Richard B. Howarth, PhD (Dartmouth College)

*The Convergence of Environmental and Capital Markets*

Richard L. Sandor, PhD (Chicago Climate Exchange)

### 2004-05 Medicine and Biomedical Research

*Risk, Reason & Regulation of Medical Devices*

Prof. Michael Lysaght, PhD (Brown University)

*The Ethics of Innovative Surgery*

Prof. Jonathan Moreno, PhD (University of Virginia)

*Human Subjects Protection: A Plaintiff's Perspective*  
Alan Milstein, JD, MS (Sherman, Silverstein, Kohl, Rose & Podolsky)

### 2003-04 Food, Animal Protection, and the Land

*Science, Ethics, and the Animal Protection Movement*

Prof. Dale Jamieson, PhD (Carleton College)

*Globalization and Biodiversity*

Prof. David Ehrenfeld, MD, PhD (Rutgers University)

*Ecology, Ethics, and Private Land*

Prof. Eric Freyfogle, JD (University of Illinois College of Law)

*The Irony of Politics of Obesity*

Prof. Marion Nestle, PhD, MPH (New York University)

### 2002-03 Ethics in Genetics and Public Health

*The Meaning of Human Gene Therapy for Disability Rights: The Rise of a New Eugenics?*

Prof. Edward J. Larson, JD, PhD (University of Georgia)

*Toxicogenetics: Ethical Issues at the Intersection of Genetics and the Toxicological Sciences*

Prof. Richard R. Sharp, PhD (Baylor College of Medicine)

*Shifting Visions of Disability: Public Health, Law & Ethics*

Prof. Wendy E. Parmet, JD (Northeastern University School of Law)

*Poverty, Pollution & Public Health: Strategies for Building Just and Sustainable Communities*

Prof. Robert D. Bullard, PhD (Clark Atlanta University)

### 2001-02 Reproductive Technology: Genetic Testing, Stem Cells, & Cloning

*Is There a Genetic Test in Your Future? Would You Want One?*

Prof. Neil Holtzman, MD, MPH (Johns Hopkins University)

*Stem Cells, Cloning, and Genetic Choice in Reproduction*

Prof. John A. Robertson, JD (University of Texas School of Law)

*From Laboratory to Clinic: Issues in the Oversight of Innovative Reproductive Technologies*

Prof. Andrea Bonnicksen, PhD (Northern Illinois University)

*Human Molecular Genetics and the Subject of Race: Contrasting Theory and Rhetoric with Practical Applications in Law and Medicine*

Prof. Troy Duster, PhD (University of California, Berkeley & New York University)





# Annual Conference

On February 29, 2008, the University of Minnesota's Consortium on Law and Values in Health, Environment & the Life Sciences, the Joint Degree Program in Law, Health & the Life Sciences, the Academic Health Center, and the Institute for Translational Neuroscience co-sponsored a national conference on "**Emerging Problems in Neurogenomics: Ethical, Legal, and Policy Issues at the Intersection of Genomics & Neuroscience.**" This conference was funded in part by a grant from The Greenwall Foundation.

This conference explored the intersection of neuroscience, genetics, and genomics and the implications for law, ethics, and policy. National experts discussed questions posed by neurogenomics in clinical and research settings.

The conference opened with a session on "The Science and Emerging Social Implications of Neurogenomics: The Convergence of Brain, Genetics & Behavior." **Prof. Mildred Cho, PhD** (Stanford University) presented on the convergence of cognitive, genetic, and behavioral sciences, and on the social and ethical implications. **Prof. John Day MD, PhD** (University of Minnesota) gave an overview of genetically-based diseases and genome-wide studies of disease. He then offered cautions about genetic testing for neurological diseases.



Audience members at the conference on "Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience."

The second morning session was devoted to "Ethical, Legal & Societal Issues Raised by the Neurogenomics of Childhood Disorders." **Prof. David Amaral, PhD** (University of California, Davis) discussed his work as Director of Research for the Autism Phenome Project, a multidisciplinary biomedical approach to studying a complex behaviorally-defined disorder with an enormous amount of heterogeneity. The project gathers various types of information (e.g., imaging, genomic, immunological) to parse the different types of autism, with the goal of improving diagnosis and treatment. **Prof. Ellen Wright Clayton, MD, JD** (Vanderbilt University) discussed the ethical, legal, and social challenges raised by clinical testing of children for disorders such as autism, and by conducting research on children to study such disorders, particularly since children's data may be archived for future use.

**Prof. Henry T. Greely, JD** (Stanford University) gave a luncheon address on the collision of genomics and neuroscience. This combination exacerbates the ethical and legal problems already found within each discipline. He argued that only with great care can society benefit from the marriage of these two technologies.



Professor Mildred Cho, PhD, delivers a lecture at the conference on "Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience."

The afternoon began with a session on "Ethical, Legal & Societal Issues in the Neurogenomics of Adult Disorders." **Prof. Ronald C. Petersen, MD, PhD** (Mayo Medical School) discussed Alzheimer disease as a model for addressing the issues posed by using genetics to study aging and cognition. He presented his own research, which aims for earlier diagnosis of Alzheimer disease, as well as current research on how people evaluate Alzheimer disease risk information. **Prof. Eric Juengst, PhD** (Case Western Reserve University) then discussed the virtues and problems posed by "personalized prevention" using genomic medicine. On one hand, it may be cost-effective and enhance choice for individuals; on the other hand, genomic medicine may be seen as a "cure" for otherwise normal traits and a marketing opportunity for companies.

## Annual Conferences & Symposia 2000-08

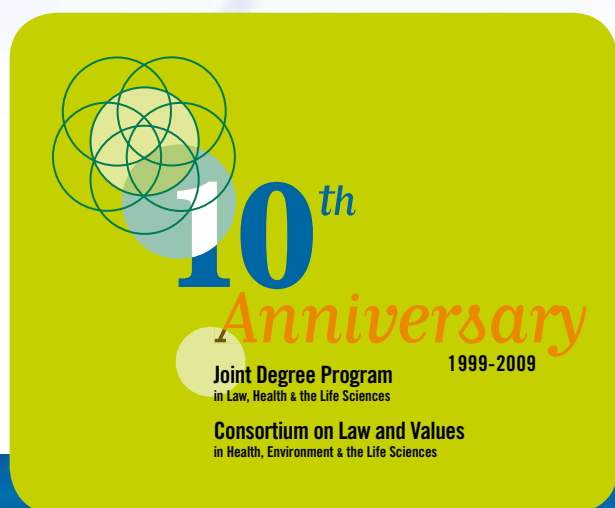
Past conferences and symposia include:

- 2008 Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience
- 2007 Managing Incidental Findings in Human Subjects Research: From Imaging to Genomics
- 2007 Creating Stem Cells by Research Cloning: Scientific, Ethical, Legal & Policy Challenges
- 2006 The Risks Posed by New Biomedical Technologies: How Do We Analyze, Communicate & Regulate Risk?
- 2006 Terrorist Threats to our Food Supply: Food Protection and Defense—Science, Ethics & Law
- 2005 Where are Law, Ethics & the Life Sciences Headed? Frontier Issues
- 2005 Proposals for the Responsible Use of Racial & Ethnic Categories in Biomedical Research: Where Do We Go From Here?
- 2004 Intellectual Property Rights for the Public Good: Obligations of U.S. Universities to Developing Countries
- 2004 Environmental Threats to Children's Health: Legal and Policy Challenges
- 2003 The Limits of Personal Privacy: Biomedical Information in Public Health, Population Genomics, and Mass Disasters
- 2003 Genetic Testing and the Future of Disability Insurance: Ethics, Law & Policy
- 2003 Revamping the Law on Assisted Reproduction: From IVF to Surrogate Motherhood
- 2002 Pharmacogenomics: The Legal, Ethical & Clinical Challenges
- 2002 The Law and Ethics of Public Health Responses to Bioterrorism
- 2001 Governing GMOs: Developing Policy in the Face of Scientific & Public Debate
- 2000 Patenting Life: Genes, Private Property & Public Policy



The final session covered “Collection, Banking, Linking, and Accessing Neuroimaging, Genomic & Other Data.” **Prof. Judy Illes, PhD** (University of British Columbia) examined the cultural and ethical challenges of banking, linking, and accessing neuroimaging, genomic, and other data. She discussed the rules and responsibilities of data-banking. **Dr. Andrew Singleton, PhD** (National Institute on Aging, NIH) discussed his work as Chief of the NIA Laboratory of Neurogenetics, Molecular Genetics Unit. He discussed genome-wide association studies and the new NCBI central database for sharing this data. **Prof. Mark Ellisman, PhD** (University of California, San Diego) discussed the convergence of information technology and biology, the challenge of integrating this information, and his work at the National Center for Microscopy and Imaging Research and the Biomedical Informatics Research Network.

This event provided 7.25 hours of continuing legal education credit (CLE) for attorneys and 7.25 hours of continuing medical education credit (CME) for physicians and health care professionals. This conference can be viewed at [www.lifesci.consortium.umn.edu/conferences/neuro.php?s=2](http://www.lifesci.consortium.umn.edu/conferences/neuro.php?s=2).



On March 6, 2009, we will present our 10<sup>th</sup> Anniversary Conference on “**What’s Next in Law, Health & the Life Sciences? Debating Openness, Access & Accountability.**” The 10<sup>th</sup> Anniversary Conference will convene top experts from around the country to debate what societal issues the next ten years of genomic, neuroscience, and environmental research will pose and how science oversight should develop. In addition to invited speakers, authors of the best papers submitted in response to our competitive call for papers will present. The Consortium is requesting CME and CLE credit for the conference. More information on the 10<sup>th</sup> Anniversary Conference will be available at [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).

## 2008-09 Events

- + ● Lecture Series on Law, Health & the Life Sciences
- + ● Deinard Memorial Lecture Series on Law & Medicine
- + ● 10th Anniversary Conference



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# Recent Publications

## In 2007-08, the Consortium published widely. Highlights include:

NIH-funded grant #1 R01 HG003178-01A1, on “**Managing Incidental Findings in Human Subjects Research**,” resulted in a major symposium issue in the *Journal of Law, Medicine & Ethics*. Principal Investigator: Prof. Susan M. Wolf. Co-Investigators: Adjunct Assoc. Prof. Jordan Paradise; Prof. Jeffrey Kahn, Center for Bioethics; Prof. Frances Lawrenz, Department of Educational Psychology; Prof. Charles Nelson, Children’s Hospital Boston, Harvard University:

- Wolf SM, Paradise J, Nelson CA, Kahn JP, Lawrenz F, eds. Symposium: Incidental Findings In Human Subjects Research: From Imaging to Genomics. *Journal of Law, Medicine & Ethics*. 2008;36(2):2-383.
- Wolf SM. Introduction: The Challenge of Incidental Findings. *Journal of Law, Medicine & Ethics*. 2008;36(2):216-18.
- Wolf SM et al. Managing Incidental Findings in Human Subjects Research: Analysis and Recommendations. *Journal of Law, Medicine & Ethics*. 2008;36(2):219-48.
- Lawrenz F, Sobotka S. Empirical Analysis of Current Approaches to Incidental Findings. *Journal of Law, Medicine & Ethics*. 2008;36(2):249-55.
- Richardson HS. Incidental Findings and Ancillary-Care Obligations. *Journal of Law, Medicine & Ethics*. 2008;36(2):256-70.
- Miller FG, Mello MM, Joffe S. Incidental Findings in Human Subjects Research: What Do Investigators Owe Research Participants? *Journal of Law, Medicine & Ethics*. 2008;36(2):271-79.
- Cho MK. Understanding Incidental Findings in the Context of Genetics and Genomics. *Journal of Law, Medicine & Ethics*. 2008;36(2):280-85.
- Clayton EW. Incidental Findings in Genetics Research Using Archived DNA. *Journal of Law, Medicine & Ethics*. 2008;36(2):286-91.
- Van Ness B. Genomic Research and Incidental Findings. *Journal of Law, Medicine & Ethics*. 2008;36(2):292-97.
- Illes J, Chin VN. Bridging Philosophical and Practical Implications of Incidental Findings in Brain Research. *Journal of Law, Medicine & Ethics*. 2008;36(2):298-304.
- Royal JM, Peterson BS. The Risks and Benefits of Searching for Incidental Findings in MRI Research Scans. *Journal of Law, Medicine & Ethics*. 2008;36(2):305-14.
- Nelson CA. Incidental Findings in Magnetic Resonance Imaging (MRI) Brain Research. *Journal of Law, Medicine & Ethics*. 2008;36(2):315-19.
- Siddiki H et al. Incidental Findings in CT Colonography: Literature Review and Survey of Current Research Practice. *Journal of Law, Medicine & Ethics*. 2008;36(2):320-31.
- Wilfond BS, Carpenter KJ. Incidental Findings in Pediatric Research. *Journal of Law, Medicine & Ethics*. 2008;36(2):332-40.
- Parker LS. The Future of Incidental Findings: Should They Be Viewed As Benefits? *Journal of Law, Medicine & Ethics*. 2008;36(2):341-51.
- Keane MA. Institutional Review Board Approaches to the Incidental Findings Problem. *Journal of Law, Medicine & Ethics*. 2008;36(2):352-55.
- Milstein AC. Research Malpractice and the Issue of Incidental Findings. *Journal of Law, Medicine & Ethics*. 2008;36(2):356-60.
- Wolf SM, Paradise J, Caga-anan C. The Law of Incidental Findings in Human Subjects Research: Establishing Researchers’ Duties. *Journal of Law, Medicine & Ethics*. 2008;36(2):361-83.

Investigators on our NSF-funded grant #SES-0608791 on “**NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context**” published several articles including:

- Kuzma J. Nanotechnology Oversight: Just Do It. *Environmental Law Reporter*. 2006;12:10913-23.
- Kandlikar M, Ramachandran G, Maynard AD, Murdock B, & Toscano WA. Health Risk Assessment for Nanoparticles: A Case for Using Expert Judgment. *Journal of Nanoparticle Research*. 2007;9:137-56.

The Consortium has published widely over the last 10 years. The following include highlights from 2005-07. For a complete list of Consortium publications, visit [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).

## 2006-07 publications:

Articles that resulted from an NIH, National Human Genome Research Institute-funded grant #5R01HG02089, on “**Genetics & Disability Insurance: Ethics, Law & Policy**,” Prof. Jeffrey Kahn, PI, Prof. Susan M. Wolf, Co-Investigator:

Kahn JP, Wolf SM, eds. Symposium: Genetic Testing and Disability Insurance. *Journal of Law, Medicine & Ethics*. 2007;35:5-89.

Kahn JP, Wolf SM. Understanding the Role of Genetics in Disability Insurance. *Journal of Law, Medicine & Ethics*. 2007;35:5.

Wolf SM, Kahn JP with input from the Working Group. Genetic Testing and the Future of Disability Insurance: Ethics, Law & Policy. *Journal of Law, Medicine & Ethics*. 2007;35:6-32.

An article from our 2006 conference on “**The Risks Posed by New Biomedical Technologies: How Do We Analyze, Communicate & Regulate Risk?**”:

Paradise J, Wolf SM, eds. The Risks Posed by New Biomedical Technologies: How Do We Analyze, Communicate & Regulate Risk? *Lahey Clinic Medical Ethics Journal*. 2006;13(3):5-8.

The *Minnesota Journal of Law, Science & Technology* [www.mjlst.umn.edu](http://www.mjlst.umn.edu) published articles from our conference on “**Terrorist Threats to our Food Supply: Food Protection and Defense—Science, Ethics & Law**”:

Ostrowsky J. Colloquy: Towards Progress in Food Protection and Defense. *MJLST*. 2007;8(1):175-85.

DeWaal C. Food Protection and Defense: Preparing for a Crisis? *MJLST*. 2007;8(1):187-98.

Roberts M. Role of Regulation in Minimizing Terrorist Threats Against the Food Supply: Information, Incentives, and Penalties. *MJLST*. 2007;8(1):199-224.

Schaffner D. Modeling the Public Health System Response to a Terrorist Event. *MJLST*. 2007;8(1):225-35.

George A. The Public Health Tesseract: Managing the Multiplicative Threat. *MJLST*. 2007;8(1):237-47.

The *Minnesota Journal of Law, Science & Technology* published a symposium on “**Toward a General Theory on of Law and Technology**” including:

Tranter K. Nomology, Ontology, and Phenomenology of Law and Technology. *MJLST*. 2007;8(2):449-74.

Cockfield A, Pridmore J. A Synthetic Theory of Law and Technology. *MJLST*. 2007;8(2):475-513.

Matwyshyn A. Technology, Commerce, Development, Identity. *MJLST*. 2007;8(2):515-49.

Gifford D. Law and Technology: Interactions and Relationships. *MJLST*. 2007;8(2):571-87.

Pasquale F. Technology, Competition, and Values. *MJLST*. 2007;8(2):607-21.

Bernstein G. The Role of Diffusion Characteristics in Formulating a General Theory of Law and Technology. *MJLST*. 2007;8(2):623-43.

#### 2005-06 publications:

Articles from the April 18, 2005 conference on **"Proposals for the Responsible Use of Racial & Ethnic Categories in Biomedical Research: Where Do We Go From Here?"** appeared in the *Journal of Law, Medicine & Ethics* and an overview of the conference appeared in *Nature Genetics*.

Wolf SM. Are We Making Progress in the Debate Over Racial and Ethnic Categories in Biomedical Research? *Nature Genetics*. 2005;37:789-90.

Wolf, SM, ed. Symposium on "The Responsible Use of Racial and Ethnic Categories in Biomedical Research: Where Do We Go from Here?" *Journal of Law, Medicine & Ethics*. 2006;34(3):483-558.

Wolf SM. Introduction: Debating the Use of Racial and Ethnic Categories in Research. *Journal of Law, Medicine & Ethics*. 2006;34(3):483-86.

Duster T. Lessons from History: Why Race and Ethnicity Have Played a Major Role in Biomedical Research. *Journal of Law, Medicine & Ethics*. 2006;34(3):487-96.

Cho MK. Racial and Ethnic Categories in Biomedical Research: There is No Baby in the Bathwater. *Journal of Law, Medicine & Ethics*. 2006;34(3): 497-99

Bhopal R. Race and Ethnicity: Responsible Use from Epidemiological and Public Health Perspectives. *Journal of Law, Medicine & Ethics*. 2006;34(3):500-07.

Foster MW. Analyzing the Use of Race and Ethnicity in Biomedical Research from a Local Community Perspective. *Journal of Law, Medicine & Ethics*. 2006;34(3):508-12.

Brewer R. Thinking Critically about Race and Genetics. *Journal of Law, Medicine & Ethics*. 2006;34(3):513-19.

Winker MA. Race and Ethnicity in Medical Research: Requirements Meet Reality. *Journal of Law, Medicine & Ethics*. 2006;34(3):520-25.

Roberts DE. Legal Constraints on the Use Race in Biomedical Research: Toward of Social Justice Framework. *Journal of Law, Medicine & Ethics*. 2006;34(3):526-34.

- Kuzma J. Moving Forward Responsibly: Oversight for the Nanotechnology-Biology Interface. 9 *Journal of Nanoparticle Research*. 2007;9:165-82.
- Paradise J, Wolf SM, Ramachandran G, Kokkoli, E, Hall R, Kuzma J. Developing Oversight Frameworks for Nanobiotechnology. *Minnesota Journal of Law, Science & Technology*. 2008;9(1):187-203.
- Paradise J, Diliberto GM, Tisdale AW, Kokkoli E. Exploring Emerging Nanobiotechnology Drugs and Medical Devices. *Food and Drug Law Journal*. 2008;63(2):407-20.
- Kuzma J, Romanchek J, Kokotovitch A. Upstream Oversight Assessment for Agrifood Nanotechnology: A Case Studies Approach. *Risk Analysis*. 2008;28(4):1081-98.
- J. Kuzma J, Besley JC. Ethics of Risk Analysis and Regulatory Review: From Bio-to Nanotechnology. *Nanoethics*. (forthcoming 2008)(Published online May 13, 2008, DOI: 10.1007/s11569-008-0035-x).
- Kuzma J, Paradise J, Ramachandran G, Kim J, Kokotovitch A, Wolf SM. An Integrated Approach to Oversight Assessment for Emerging Technologies. *Risk Analysis*. (forthcoming 2008) (Published online July 9, 2008, DOI: 10.1111/j.1539-6924.2008.01086.x).
- Wolf SM et al. Developing Oversight Approaches to Nanobiotechnology: The Lessons of History. *Journal of Law, Medicine & Ethics*. (forthcoming Winter 2009).

Volume 9, Issue 1 of the *Minnesota Journal of Law, Science & Technology* [www.mjlst.umn.edu](http://www.mjlst.umn.edu) published articles from our conference on **"Creating Stem Cells by Research Cloning: Scientific, Ethical, Legal & Policy Challenges"** including:

- Kahn J. Introduction. *MJLST*. 2008;9(1):125-30.
- Green R. Five Ethical Questions for SCNT Stem Cell Research. *MJLST*. 2008;9(1):131-43.
- Cameron C, Henderson AV. Brave New World at the General Assembly: The United Nations Declaration on Human Cloning? *MJLST*. 2008;9(1):187-98.
- Cerra FB. A University of Minnesota Perspective on SCNT Research: Past Challenges and Strategy for the Future. *MJLST*. 2008;9(1):239-42.
- Dowd B. Science, Morality, and Universities. *MJLST*. 2008;9(1):243-51.
- Kaufman D. The Role of the University in Promoting Human Embryonic Stem Cell Research and Stem Cell Therapies. *MJLST*. 2008;9(1):253-56.

Volume 9, Issue 2 of the *Minnesota Journal of Law, Science & Technology* published a symposium on **"Self & Other: Cognitive Perspectives on Trust, Empathy and the Self"**

Articles from the symposium are:

- Hill C. Introduction. *MJLST*. 2008;9(2):609-13.
- Ben-Ner A, Hill C. Negative Dimensions of Identity: A Research Agenda for Law and Public Policy. *MJLST*. 2008;9(2):615-23.
- Casebeer WD. Identity, Culture and Stories: Empathy and the War On Terrorism. *MJLST*. 2008;9(2):625-60.
- Hill C. The Rationality of Preference Construction (and the Irrationality of Rational Choice). *MJLST*. 2008;9(2):661-713.
- Hill C. The Myth of Discovery: Review Essay of Barry Schwartz's *The Paradox of Choice*. *MJLST*. 2008;9(2):715-26.
- Vohs K, Lasaleta J. Heterosexual Sexual Behavior, Social Exchange, and Basic Economic Principles: Sexual Economics Theory. *MJLST*. 2008;9(2):757-74.
- Huang P. Authentic Happiness, Self Knowledge & Legal Policy. *MJLST*. 2008;9(2):727-56.
- Carpenter D. Straight Acting. *MJLST*. 2008;8(2):775-84.
- Warner R. Empathy and Compassion. *MJLST*. 2008;9(2):785-98.
- Ramanathan S, McGill AL. Social Influences on Moment-to-Moment and Retrospective Evaluations of Experiences. *MJLST*. 2008;9(2):799-808.
- Carbonara E, Parisi F, von Wangenheim G. Legal Innovation and the Compliance Paradox. *MJLST*. 2007;9(2):809-32.
- Amegashie JA. Intentions, Guilt & Social Interactions. *MJLST*. 2008;9(2):785-98.
- Delgado M, Dilmore J. Social and Emotional Influences on Decision-Making and the Brain. *MJLST*. 2008;9(2):871-84.



In 2008-09, Volume 10 of the *Minnesota Journal of Law, Science & Technology* will feature articles from 2007-08 speakers including:

- **George J. Annas, JD, MPH** (Boston University), on “**The Legacy of the Nuremberg Doctors’ Trial to American Bioethics and Human Rights**”;
- **Debora Spar, PhD** (formerly of Harvard Business School, now President, Barnard College), on “**Building a Better Baby Business**”; and
- **Zach W. Hall, PhD** (formerly of the California Institute of Regenerative Medicine (CIRM)) on “**Stem Cell Research at the Intersection of Science, Politics, Culture & Law: The California Experience.**”

Publications in progress include a symposium on “**NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context**” in the *Journal of Law, Medicine & Ethics*, forthcoming in 2009.

The Consortium and Joint Degree Program also publish a range of program materials each year including a periodic electronic update, this report, program catalogs and brochures, and a variety of conference and promotional materials.



Lillquist E, Sullivan C. Legal Regulation on the Use of Race in Medical Research. *Journal of Law, Medicine & Technology*. 2006;34(3):535-51.

Cohn JN. The Use of Race and Ethnicity in Medicine: Lessons from the African-American Heart Failure Trial. *Journal of Law, Medicine & Ethics*. 2006;34(3):552-54.

Bloche MG. Race, Money and Medicines. *Journal of Law, Medicine & Ethics*. 2006;34(3):555-58.

The *Minnesota Journal of Law, Science & Technology* published articles from our April 2, 2004 conference on “**Environmental Threats to Children’s Health: Legal and Policy Challenges**”: Klass AB. Pesticides, Children’s Health Policy, and Common Law Tort Reforms. *MLST*. 2005;7(1):89-146.

Orfield M. Segregation and Environmental Justice. *MLST*. 2005;7(1):147-60.

The *Minnesota Journal of Law, Science & Technology* published articles from our May 20, 2005 symposium on “**Where are Law, Ethics & the Life Sciences Headed? Frontier Issues**”:

Collier D. Access to and Control over Plant Genetic Resources for Food and Agriculture in South and Southern Africa: How Many Wrongs Before a Right? *MLST*. 2006;7(2):529-64.

Foot SB. Frontiers of Medical Technology: Reflections on the Intersection of Innovation and the Health Care System. *MLST*. 2005;7(1):79-88.

Greely HT. Neuroethics and ELSI: Similarities and Differences. *MLST*. 2006;7(2):599-38.

Herring DJ. Foster Care Safety and the Kinship Cue of Attitude Similarity. *MLST*. 2006;7(2):355-92.

Holling CS. From Complex Regions to Complex Worlds. *MLST*. 2005;7(1):1-20.

Karkkainen BK. Panarchy and Adaptive Change: Around the Loop and Back Again. *MLST*. 2005;7(1):59-78.

Millen R, Burdett CL. Critical Habitat in the Balance: Science, Economics, and Other Relevant Factors. *MLST*. 2005;7(1):227-300.

Ruhl JB. Regulation by Adaptive Management: Is it Possible? *MLST*. 2005;7(1):21-58.

The July-August 2005 issue of the *Hastings Center Report* featured a report resulting from our May 5, 2005 meeting to discuss **the future of bioethics as an academic discipline**, co-sponsored by the Center for Bioethics:

Wolf SM, Kahn JP. Bioethics Matures: The Field Faces the Future. *Hastings Center Report*. 2005;35(4):22-24.



# Executive Committee



Professor Jeffrey Kahn, PhD, MPH,  
Center for Bioethics.



Professor Deborah Swackhamer, PhD, Water Resource Center,  
and Institute on the Environment.



Professor Elizabeth Wattenberg, PhD,  
Environmental Health Sciences.

## Executive Committee Members 2003-07

### 2006-07

- Prof. Jeffrey Kahn, PhD, MPH (Center for Bioethics)
- Prof. Dan Kaufman, MD, PhD (Stem Cell Institute)
- Shaun Kennedy, BSE (National Center for Food Protection and Defense)
- Prof. Bonnie LeRoy, MS, CGC (Genetics, Cell Biology and Development)
- Prof. Deborah Swackhamer, PhD (Water Resources Center)
- Prof. Elizabeth Wattenberg, PhD (Environmental Health Sciences)

### 2005-06

- Prof. Frank Busta, PhD (National Center for Food Protection and Defense)
- Prof. Michael Georgieff, MD (Pediatrics and Child Psychology)
- Prof. Jeffrey Kahn, PhD, MPH (Center for Bioethics)
- Prof. Kenneth Keller, PhD, MSE (Hubert H. Humphrey Institute of Public Affairs)
- Shaun Kennedy, BSE (National Center for Food Protection and Defense)
- Prof. Jennifer Kuzma, PhD (Hubert H. Humphrey Institute of Public Affairs)
- Prof. Julie Ostrowsky, MSc (Center for Infectious Disease Research & Policy)
- Prof. Dan Philippon, PhD, MA (Writing Studies)

### 2004-05

- Prof. Jim Chen, JD (Consortium)
- Prof. Jeffrey Kahn, PhD, MPH (Center for Bioethics)
- Prof. Deborah Swackhamer, PhD (Water Resources Center)
- Prof. Catherine Verfaillie, MD (Stem Cell Institute)

### 2003-04

- Prof. Jim Chen, JD (Consortium)
- Prof. Gary Gardner, PhD (Center for Plants and Human Health)
- Prof. Jeffrey Kahn, PhD, MPH (Center for Bioethics)
- Prof. Ronald Phillips, PhD (Center for Microbial & Plant Genomics)

The Consortium and Joint Degree Program created a joint Executive Committee in 2003. The Executive Committee was established to facilitate the work of the Consortium and Joint Degree Program by sharing intellectual responsibility for our programming in order to take full advantage of the extraordinary expertise in both programs.

The Executive Committee combines members elected for a 3-year term with members leading events for the year. Committee members were initially elected to 1-3 year terms to establish 3-year staggered terms. Additional committee members led event planning. Committee members in 2007-08 included the following:

**Prof. Jeffrey Kahn, PhD, MPH** (Center for Bioethics), elected to a 3-year term beginning 2006, collaborated with Prof. Wolf on the Deindard Memorial Lecture on Law & Medicine and the Oscar M. Ruebhausen Visiting Professorship in Bioethics funded by The Greenwall Foundation. Prof. Kahn, PhD, MPH, is Maas Family Chair in Bioethics and Professor, Center for Bioethics; Department of Medicine, University of Minnesota Medical School; School of Public Health; and Department of Philosophy, University of Minnesota.

**Prof. Harry Orr, PhD** (Institute of Human Genetics) served a 1-year term on the committee as co-leader of the annual conference on "Emerging Problems in Neurogenomics: Ethical and Policy Issues at the Intersection of Genomics & Neuroscience." Prof. Orr is the Tulloch Professor of Genetics in the Department of Laboratory Medicine and Pathology and the Director of the Institute of Human Genetics.

**Shaun Kennedy, BSE** (National Center for Food Protection and Defense) was elected to a 3-year term beginning 2007. He is the Director for the National Center for Food Protection and Defense, and Director of Partnerships and External Relations for the College of Veterinary Medicine.

**Prof. Deborah Swackhamer, PhD, MS** (Water Resources Center; Institute on the Environment), was elected to a 2-year term beginning 2006. Prof. Swackhamer is a Professor of Environmental Chemistry in the Division of Environmental Health Sciences in the School of Public Health, a Co-Director of the Water Resources Center, and from 2006-08 she was the Interim Director of the Institute on the Environment.

**Prof. Elizabeth Wattenberg, PhD** (Environmental Health Sciences), was elected to a 3-year term beginning 2006. She is Associate Professor and Director of Graduate Studies in the Division of Environmental Health Sciences in the School of Public Health.



## Websites & Technology

The Consortium's website [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu) serves as a gateway to the members of the Consortium and provides central access to information, news, and events relating to the University of Minnesota's work on the societal implications of problems in health, environment, and the life sciences. The site provides information about each of the member centers and programs, including their research and publications. The intramural grants (RFP) page includes grant winners from 2000 to the present and reports on their projects.



The Joint Degree Program's website [www.jointdegree.umn.edu](http://www.jointdegree.umn.edu) is the best resource for learning about the degree combinations offered by the program. Descriptions of each degree combination, application instructions, and links to our partner programs' websites are popular features, as is the "Careers" page, which profiles our alumni and others with joint degrees to show prospective students the myriad career options available to them.

Both the Consortium and Joint Degree Program sites utilize the Google news search feature, which allows users to search for current world news on law and science. Videos from all of the years' lectures, conferences, and symposia are available through portals on the "Conferences & Lectures" page. Videos from all of our events held in previous years may be found on the "Video Archives" pages. User comments are always welcome—e-mail us at [lawvalue@umn.edu](mailto:lawvalue@umn.edu) or [jointdgr@umn.edu](mailto:jointdgr@umn.edu) with your thoughts and suggestions.



The website for the *Minnesota Journal of Law, Science and Technology* [www.mjlst.umn.edu](http://www.mjlst.umn.edu) describes how *MJLST* evolved from the *Minnesota Intellectual Property Review* to become a premier journal on issues in law, science, and technology. The website also allows visitors to read abstracts and biographies of authors and provides instructions for submitting articles to *MJLST* for review. *MJLST* now provides instant online access to full-text articles simultaneously with the print publication.

The Consortium also created a website for its projects on “Managing Incidental Findings in Human Subjects Research” and “NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context.” These websites provide access to working bibliographies, drafts of papers, meeting agendas, and background information. The “Managing Incidental Findings in Human Subjects Research” project website [www.lifesci.consortium.umn.edu/conferences/incidentalfindings/](http://www.lifesci.consortium.umn.edu/conferences/incidentalfindings/) is now a public site offering the complete annotated bibliography, and information about the project’s process and publications.





# Staff



**AUDREY BOYLE**  
Project Manager



**SUE MINOR**  
Information Technology Professional



**KELLY PHILLIPS**  
Program Assistant



**CAROL RACHAC**  
Associate Program Director



**MONICA WITTSTOCK**  
Communications Specialist

The Joint Degree Program and Consortium share staff and offices. Our staff members include:

**Audrey Boyle** joined the Consortium and Joint Degree Program in 2005 as Project Manager. She is responsible for pre- and post-award grants administration, management of the Consortium's intramural grant program, coordination of lectures and conferences, and financial management of both programs. Audrey's previous work experience has primarily been in health care administration. She has degrees from Western Michigan University and the University of Arizona.

**Julie Johnson** joined the Consortium in December 2007 as the Program Assistant. She began working at the University's Morris campus in 1977. In 1994, she moved to the Twin Cities. She has worked in the Dean's Office in the College of Biological Sciences and the University Senate Office. Julie provided support for the Joint Degree Program's Advisory Board and Governing Committee for 2007-08. In July of 2008 Julie left the Consortium to become the Executive Assistant to Dean David Wippman in the Law School.

**Sue Minor** is the Consortium's Information Technological Professional. She began working with the Consortium in August 2007. Sue is also a sign language interpreter and holds a degree in Anthropology from New Mexico State University. Sue's primary duties are to update and support the websites for the Consortium, Joint Degree Program, and the *Minnesota Journal of Law, Science & Technology*.

**Kelly Phillips** joined the Consortium in August 2008 as Program Assistant. Kelly is an alumna of the University of Minnesota, graduating in 2004 with a Bachelor of Science in Urban Studies. Prior to accepting the position in the Consortium and Joint Degree Program Office, she worked as an Administrative Analyst for the City of Minneapolis and a policy aide intern for City Council Member Don Samuels.

**Carol Rachac, MA**, is the Associate Program Director for the Consortium and the Joint Degree Program. She has worked in academic administration at the University of Minnesota since 1988, including 8 years in the Department of Sociology and 10 years in the Carlson School of Management. Carol serves on the Disabilities Issues Senate Subcommittee and has been active with various task teams and process improvement initiatives. She earned a BA in Political Science and an MA in Higher Education Administration from the University of Minnesota. Her duties include management and administration, coordination of admissions, student advising, development, and grants management.

**Monica Wittstock** is the Program Associate and Communications Specialist for the Consortium and Joint Degree Program, and the Executive Administrator of the *Minnesota Journal of Law, Science & Technology*. Her duties include managing print publications and communications, e-communications, production of the *Minnesota Journal of Law, Science & Technology*, and overseeing the websites for the Consortium, Joint Degree Program and the *Minnesota Journal of Law, Science & Technology*.

The Joint Degree Program and Consortium are indebted to the following Research Assistants in 2007-08: **Charlisse Caga-anan** (Law), **Gail Matthey Diliberto** (Law), **Rishi Gupta** (Law), **Peter Kohlhepp** (Law), **Suzanne Sobotka** (Epidemiology; Health Journalism), and **Todd Winter** (Law).





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## **“Managing Incidental Findings in Human Subjects Research”**

1 R01 HG003178-01A1 (NHGRI, NIH)  
(9/26/05-7/31/07)

Susan M. Wolf, JD, Principal Investigator  
Jeffrey P. Kahn, PhD, MPH, Co-Investigator  
Frances Lawrenz, PhD, Co-Investigator  
Charles A. Nelson, PhD, Co-Investigator

## **“NIRT: Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context”**

SES 0608791 (NSF) (9/1/06-8/31/10)

Susan M. Wolf, JD, Principal Investigator  
Efrosini Kokkoli, PhD, Co-Principal Investigator  
Jennifer Kuzma, PhD, Co-Principal Investigator  
Jordan Paradise, JD, Co-Principal Investigator  
Gurumurthy Ramachandran, PhD, Co-Principal Investigator

**The Greenwall Foundation** awarded funds to the Consortium, together with the Center for Bioethics and Mayo Clinic, to host the **2007 Oscar M. Ruebhausen Visiting Professorship**.

A **Greenwall Foundation** Presidential Grant provided support for our 2008 Annual Conference on **“Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience.”**

Project Dates: (11/21/07-5/31/08)

Susan M. Wolf, JD, Principal Investigator  
Harry Orr, PhD, Co-Principal Investigator  
Jordan Paradise, JD, Co-Principal Investigator

The Consortium and Joint Degree Program are deeply gratified by the funding provided through the Presidential Interdisciplinary Academic Initiative on Law and Values. This Initiative is led by Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan. We are indebted to all involved in the Initiative, especially:

- President Robert Bruininks
- Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan
- H. Jeanie Taylor, Assistant Vice Provost for Interdisciplinarity

In addition, the Joint Degree Program and Consortium were indebted to the following for financial and program support in 2007-08:

- Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan
- Senior Vice President Frank Cerra, Academic Health Center
- Vice Provost and Dean Gail Dubrow, Graduate School
- Interim Co-Deans Guy Charles and Fred Morrison, Law School
- Dean Robert Elde, College of Biological Sciences
- Dean John R. Finnegan Jr., School of Public Health
- Dean Allen Levine, College of Food, Agricultural and Natural Resource Sciences

We gratefully acknowledge the following targeted financial support in 2007-08:

- Professor Amos Deinard, Jr., Miriam Kelen, and the law firm of Leonard, Street and Deinard for the Deinard Memorial Lecture Series on Law & Medicine
- The law firm of Fredrikson & Byron for the Harold M. Fredrikson Memorial Scholarship
- The Minnesota Intellectual Property Law Association (MIPLA) for the MIPLA Scholarship
- Senior Vice President for Health Sciences Frank B. Cerra and the Academic Health Center for support of our conference on “Emerging Problems in Neurogenomics: Ethical, Legal, and Policy Issues at the Intersection of Genomics & Neuroscience.”

The *Minnesota Journal of Law, Science & Technology* would like to thank the following 2007-08 donors:

- Blue Cross Blue Shield of Minnesota
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Senior Vice President for Health Sciences  
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From Left to Right: Prof. Susan M. Wolf, JD (University of Minnesota), Prof. George Annas, JD, MPH (Boston University), Prof. Amos Deinard, MD, MPH (University of Minnesota & Deinard family), Miriam Kelen (Deinard family), Prof. Steven Miles, MD (University of Minnesota), and Prof. Kathryn Sikkink, MS, PhD (University of Minnesota), at the Deinard Memorial Lecture on Law & Medicine.

# Looking Forward

## 2008-09 and Beyond

As we reach our 10th anniversary, we celebrate a decade of achievement and look forward to the next decade of cutting-edge work. In 2008-09 we will bring top experts in law and the life sciences to the University of Minnesota campus, provide new joint degree options, and continue to publish our original research.

### Upcoming in 2008-09 and Beyond:

2008-09 Lecture Series on Law, Health & the Life Sciences

#### **Synthetic Biology: The Science, Ethics & Law of Creating New Life**

##### **"Synthetic Genomics: Risks and Benefits for Science and Society"**

Robert Friedman, PhD (J. Craig Venter Institute)

Date: October 8, 2008

Time: 11:30 am-1:00 pm

Location: Theater, Coffman Memorial Union

##### **"The Paradigm Shift of Synthetic Biology: Tensions Between Innovation and Security"**

Prof. Arti K. Rai, JD (Duke University School of Law)

Date: November 4, 2008

Time: 11:30 am-1:00 pm

Location: Theater, Coffman Memorial Union

##### **"Dialogue and Notes on Synthetic Biology"**

Prof. Drew Endy, PhD (Stanford University)

Date: April 16, 2009

Time: 11:30 am-1:00 pm

Location: Theater, Coffman Memorial Union

2009 Deinard Memorial Lecture on Law & Medicine

##### **"The Emergent Logic of Health Law"**

Prof. M. Gregg Bloche, MD, JD (Georgetown University and Brookings Institute)

Date: January 29, 2009

Time: 11:30 am-1:00 pm

Location: Theater, Coffman Memorial Union

10th Anniversary Conference

#### **"What's Next in Law, Health & the Life Sciences? Debating Openness, Access & Accountability"**

Date: March 6, 2009

Time: 8:30 am-5:30 pm

Location: Cowles Auditorium, Hubert H. Humphrey Institute

Keynote speaker:

2008-09 Visiting Consortium Professor Ezekiel J. Emanuel, MD, PhD (National Institutes of Health)

Speakers will include:

Robert Bullard, PhD (Clark Atlanta University)

Arthur Caplan, PhD (University of Pennsylvania)

Frank Cerra, MD (University of Minnesota)

R. Alta Charo, JD (University of Wisconsin, Madison)

Ellen Clayton, MD, JD (Vanderbilt University)

Cary Coglianese, JD, PhD, MPP (University of Pennsylvania)

I. Glen Cohen, JD (Harvard Law School)

Holly Doremus, JD, PhD (University of California, Davis)

Michael K. Georgieff, MD (University of Minnesota)

Apostolos P. Georgopoulos, MD, PhD (University of Minnesota)

Larry Gostin, JD (Johns Hopkins University)

Judy Illes, PhD (University of British Columbia)

Jeffrey P. Kahn, PhD, MPH (University of Minnesota)

Isaac Kohane, MD, PhD (Harvard Medical School)

Daniel M. Kammen, PhD (University of California, Berkeley)

Jennifer Kuzma, PhD (University of Minnesota)

Gary Marchant, JD, MPP, PhD (Arizona State University)

Jonathan Moreno, PhD (University of Pennsylvania)

Stephen J. Morse, PhD, JD (University of Pennsylvania)

Harry Orr, PhD (University of Minnesota)

Jordan Paradise, JD (University of Minnesota)

E. Thomas Sullivan, JD (University of Minnesota)

Deborah Swackhamer, PhD (University of Minnesota)

William Toscano, PhD (University of Minnesota)

Susan M. Wolf, JD (University of Minnesota)





**ROBERT FRIEDMAN, PHD**  
J. Craig Venter Institute



**ARTI K. RAI, JD**  
Duke University School of Law



**DREW ENDY, PHD**  
Stanford University



**M. GREGG BLOCHE, MD, JD**  
Georgetown University



**EZEKIEL J. EMANUEL, MD, PHD**  
National Institutes of Health

### 2008-09 Visiting Consortium Professor

Ezekiel J. Emanuel, PhD, MD, Chair, Center for Bioethics at the Clinical Center, National Institutes of Health, who will deliver the keynote address at the Consortium's 10th Anniversary Conference, March 6, 2009. Please visit [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).

### Minnesota Journal of Law Science & Technology

*MJLST*, Volume 10, issue 1 will publish articles from: President Debora Spar, PhD (Barnard College), Professor George Annas, JD, MPH (Boston University), Professor Patricia King, JD (Georgetown University), and Zach Hall, PhD (founding Director of the California Institute for Regenerative Medicine (CIRM)). Please visit [www.mjlst.umn.edu](http://www.mjlst.umn.edu).

### Consortium Intramural Grants

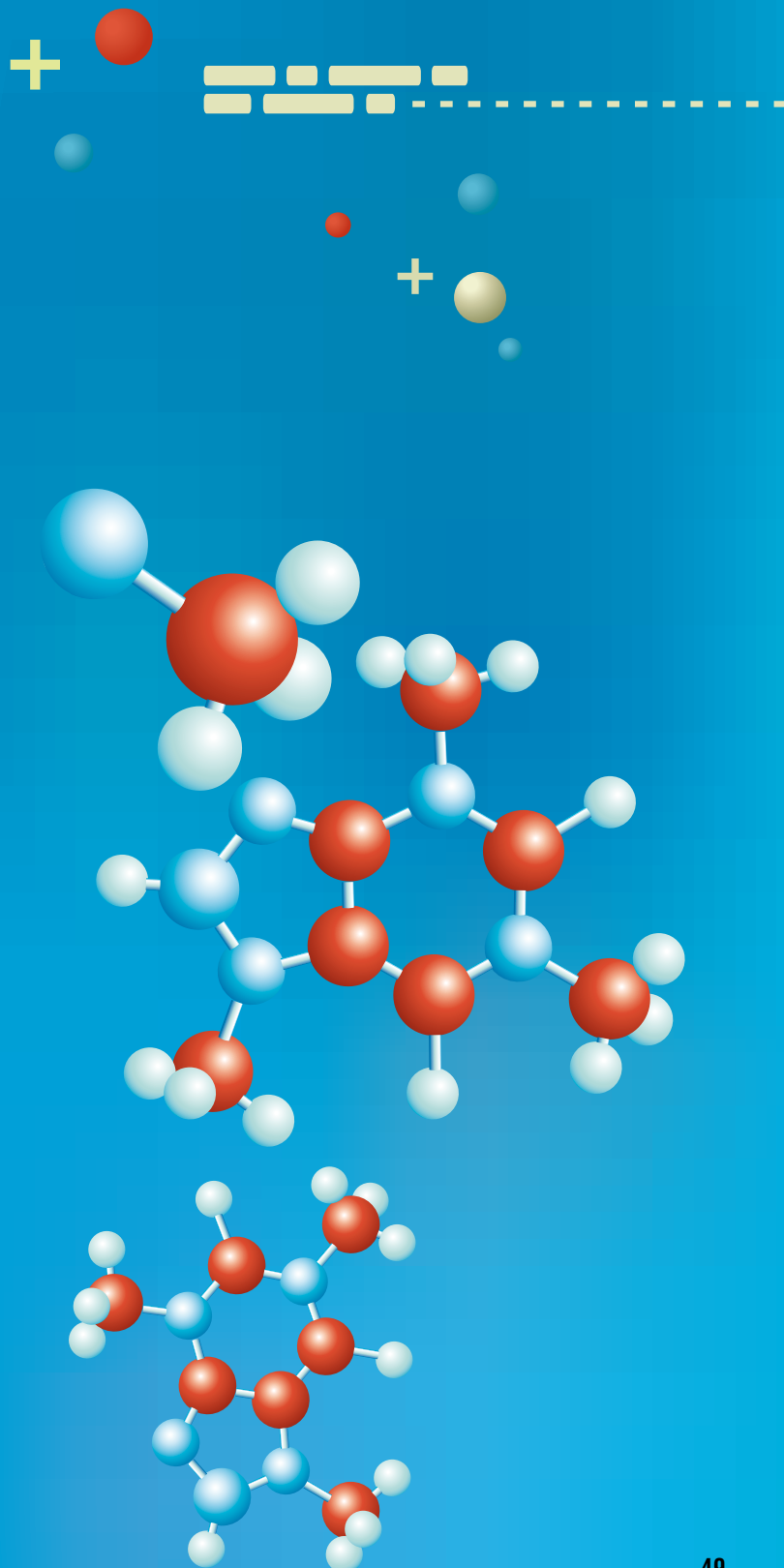
The Consortium is pleased to offer competitive intramural grants again in November 2008, with awards announced February and March 2009. Please visit <http://www.lifesci.consortium.umn.edu/rfps/>.

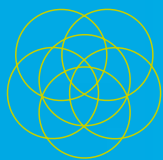
### December 2009

Symposium to be published in December 2009 in the *Journal of Law, Medicine & Ethics* on “**Developing Oversight Approaches to Nanobiotechnology: The Lessons of History.**” Guest Editors: Susan M. Wolf, JD; Efrosini Kokkoli, PhD; Jennifer Kuzma, PhD; Jordan K. Paradise, JD; and Gurumurthy Ramachandran, PhD.

### Spring 2010 Conference

This conference will be a result of our NSF-funded project on “**Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Societal Context.**” More information will be available on our website at [www.lifesci.consortium.umn.edu](http://www.lifesci.consortium.umn.edu).

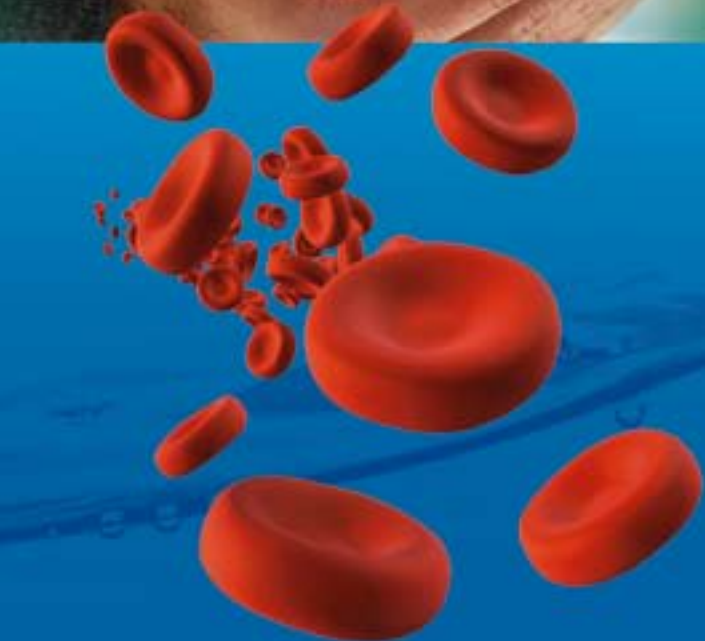




## Joint Degree Program in Law, Health & the Life Sciences\*

### Consortium on Law and Values in Health, Environment & the Life Sciences\*

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## 10TH ANNIVERSARY REPORT

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