

CURRICULUM VITAE

Kirstin Renee Watts Matthews

Fellow in Science and Technology Policy
James A. Baker III Institute for Public Policy
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(revised September 2011)

Education

- May 2003 Ph.D. in Molecular Biology
The University of Texas Health Science Center at Houston
“The Characterization of Mouse Carboxypeptidase N Small Subunit Gene
Structure and the Expression of Complement C3 and Carboxypeptidase N in
Mouse Development”
Supervising Professor Dr. Rick A. Wetsel
- May 1996 B.A. in Biochemistry
The University of Texas at Austin

Professional Appointments

- 2008-present Fellow in Science and Technology Policy
James A. Baker III Institute for Public Policy
Rice University
- 2011-present Lecturer
Wiess College of Natural Science
Rice University
- 2010-present Adjunct Lecturer
Department of Sociology
Rice University
- 2006-2008 Science and Technology Program Manager
James A. Baker III Institute for Public Policy
Rice University
- 2004-2006 Postdoctoral Research Associate
James A. Baker III Institute for Public Policy
Rice University
- 2004-2006 Project Director
Task Force “Access to Health Care in Texas: The Challenges of the Uninsured
and the Underinsured”
The University of Texas System
- 2003-2004 Postdoctoral Research Associate
Department of Physics and Astronomy
Rice University
- 2003-2004 Research Assistant
James A. Baker III Institute for Public Policy
Rice University

Professional Societies

2003-present	Member, American Association for the Advancement of Science (AAAS)
2007-present	Member, International Society for Stem Cell Research
2011	Invited Reviewer, <i>PLoS ONE (Public Library of Science ONE)</i> and <i>Nature Methods</i>
2010	Invited Reviewer, <i>Science and Engineering Ethics</i>
June 2007-Dec 2009	Community Advisory Board Member, Center for Clinical and Translation Sciences at the University of Texas Health Science Center at Houston

Policy Publications

Matthews, Kirstin R.W. "Stem Cell Research in the USA." *Regenerative Medicine*, in press.

Matthews, Kirstin R.W., Neal F. Lane, and Kenneth M. Evans. 2011. "U.S. Scientific Research and Development: A Critical Look at the US Federal Research and Development Funding System." *Science Progress*, July 21.

Djerejian, Edward P., Neal F. Lane, and Kirstin R.W. Matthews. 2011. "Science, Diplomacy, and International Collaboration." *Houston Chronicle*, March 20.

Luo, Jingyuan, Jesse M. Flynn, Rachel E. Solnick, Elaine Howard Ecklund, and Kirstin R.W. Matthews. 2011. "International Stem Cell Collaborations: How Disparate Policies between the United States and the United Kingdom Impact Research." *PLoS ONE* 6(3), e17684.

Matthews, Kirstin R.W. and Maude Rowland. 2011. "Stem cell policy in the Obama age: U.K. and U.S. perspectives." *Regenerative Medicine* 6(1): 125-132.

Matthews, Kirstin R.W. and Maude Rowland. 2011. *Stem Cells Policy and Biomedical Research in Texas*. Baker Institute Research Report (January).

Matthews, Kirstin R.W. and Maude Rowland. 2011. "Stem cell policy in the Obama age: U.K. and U.S. perspectives." *Regenerative Medicine* 6(1): 125-132.

Lo, Nathan, Kara Calhoun, Kenneth Evans, Kirstin R.W. Matthews, and Neal Lane. 2010. *C60—A Model for the Future*. Baker Institute, Civic Scientist Précis (October).

Matthews, Kirstin R.W. and Maxie Hollingsworth. 2010. "Making the Case for Civic Engagement in Schools." *Houston Chronicle*, April 8.

Flynn, Jesse M., and Kirstin R. W. Matthews. 2010. "Stem Cell Research in the Greater Middle East: The Importance of Establishing Policy and Ethics Interoperability to Foster International Collaborations." *Stem Cell Reviews and Reports*.

Matthews, Kirstin R.W., and Maude Rowland. 2010. *Stem Cell Policy in the Obama Age: Texas, U.S. and U.K Perspectives*. Baker Institute Conference Report (March).

Tambra, Sarah, and Kirstin R.W. Matthews. 2010. *U.K. Stem Cell Policy—A Civic Scientist's Journey Through Regulation*. Baker Institute, Civic Scientist Précis (March).

Flynn, Jesse M., and Kirstin R.W. Matthews. 2010. "Stimulus funds creating jobs for Houston scientists." *Houston Chronicle*, February 24.

- Lane, Neal, and Kirstin Matthews. 2009. "The President's Scientist." *Cell* 139 (5): 847-50.
- Matthews, Kirstin, Neal Lane, and Abdelali Haoudi. 2009. *Stem Cells: Saving Lives or Crossing Lines—Qatar Stem Cell Workshop*. Baker Institute Policy Report #44 (August).
- Matthews, Kirstin, and Neal Lane. 2009. *Science Collaborations Across Borders*. Baker Institute Policy Report #42 (August).
- Smulcer, Lauren,* Kirstin Matthews,* Amy Myers Jaffe, and Neal Lane. 2009. *Sustainable US Policy Options to Address Climate Change: Highlights of the Debate*. Baker Institute Policy Report #41 (June). (*First and second author contributed equally.)
- Matthews, Kirstin. 2009. "Wanted: Federal Stem Cell Research Oversight." *Houston Chronicle*, February 15.
- Matthews, Kirstin, and Neal Lane. 2008. *Human Embryonic Stem Cell Research: Recommendations for the Next Administration*. Baker Institute Transition Paper (December).
- Lane, Neal, and Kirstin Matthews. 2008. *Science and Technology: Recommendations for the Next Administration*. Baker Institute Transition Paper (December).
- Matthews, Kirstin,* Lauren Smulcer,* Amy Myers Jaffe and Neal Lane. 2008. *Beyond Science: The Economics and Politics of Responding to Climate Change*. Baker Institute Conference Report. (*First and second author contributed equally.)
- Matthews, Kirstin, and Vivian Ho. 2008. "The Grand Challenges for Global Health and Their Impact on U.S. Research." *EMBO Reports* 9(5): 409-412.
- Matthews, Kirstin, and Neal Lane. 2007. *Hot Topic: Stem Cell Controversy—Are Human Skin Cells Really the Breakthrough?* Baker Institute What We're Thinking (December).
- Lane, Neal, and Kirstin Matthews. 2007. *Hot Topic: Science and Technology Innovation*. Baker Institute What We're Thinking (October).
- Matthews, Kirstin, and Neal Lane. 2007. *U.S. Stem Cell Policy—Unintended Consequences*. Baker Institute What We're Thinking (October).
- Matthews, Kirstin. *Avenues for Advancement*. 2007. Baker Institute Conference Summary (August).
- Matthews, Kirstin. 2006. *Lessons Learned: U.S. Embryonic Stem Cell Policies*. Baker Institute Policy Report #33 (October).
- Matthews, Kirstin, and Amy Myers Jaffe, eds. 2006. *Bridging the Gap Between Science and Society: The Relationship Between Policy and Research in National Laboratories, Universities, Government and Industry*. Conference proceedings (September).
- Task Force on "Access to Health Care in Texas: The Challenges of the Uninsured and Underinsured." *Code Red: The Health of Texas*. 2006 (project officer, contributing editor, and author).
- Neal Lane, Matthews, Kirstin, Amy Myers Jaffe and Rosina Bierbaum. 2005. "Bridging the Gap Between Science and Society" Baker Institute Study #32 (November).
- Matthews, Kirstin, and Neal Lane. 2005. *Stem Cells: Saving Lives or Crossing Lines*. Baker Institute Study #31 (September).
- Matthews, Kirstin. 2004, 2005, 2006, 2007, 2008, 2009. *Stem Cell Science and Policy Overview*.
- Matthews, Kirstin. 2009-present. Baker Institute Blog contributor.

Publications Under Review

Carey, Brent J., Padraig G. Moloney, and Kirstin R.W. Matthews. "NASA's Relationship with Nanotechnology: Past, Present, and Future Challenges." *Nature Nanotechnology*, submitted August 2011.

Matthews, Kirstin R.W., Kara M. Calhoun, Nathan Lo, and Vivian Ho, "No More Tomorrow: The Aging of Biomedical Research in the United States." *PLoS ONE*, submitted July 2011.

Invited Presentations

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| July 2011 | "Challenges and Solutions in Medicine in the 21st Century" conference, presented "Stem Cell Research and Regenerative Medicine: Current Hope and Future Benefits" |
| June 2011 | International Society for Stem Cell Research Annual Meeting, presented "International Stem Cell Collaborations: How Disparate Policies between the United States and the United Kingdom Impact Research" in poster session. |
| July 2010, 2009 | National Youth Leadership Forum on Medicine, presented "Stem Cell Research" |
| June 2010 | International Society for Stem Cell Research Annual Meeting, presented "Stem Cell Research in the Greater Middle East: the Importance of Establishing Policy and Ethics Interoperability to Foster International Collaborations" in poster session. |
| March 2010 | The University of Texas LBJ School of Public Affairs, presented "Embryonic Stem Cell Research: Politics and Policy" |
| March 2010 | Rice University, "Perspectives on Stem Cells," spoke to class on stem cell policy |
| February 2010 | Rice University, "Science at Risk," spoke to class on public science and outreach |
| September 2009 | Rice University, Professional Science Master's Program Seminar Series, presented Baker Institute Science and Technology Policy Program overview |
| July 2009 | International Society for Stem Cell Research Annual Meeting, presented "Stem Cell Research in the Middle East" in poster session. |
| July 2009 | Rice University, Department of Bioengineering Graduate Seminar Series, presented careers in policy |
| October 2008 | AAAS, Science Diplomacy and International Collaboration presented on Baker Institute and Rice University science diplomacy efforts |
| November 2007 | University of Texas Health Science Center at Houston, Career Development Seminar |
| July 2006 | HEADS-UP Advance Genetics Teacher Summer Science Institute, presented U.S. stem cell policy |
| May 2006 | Leadership Houston, presented finding and recommendations from <i>Code Red: The Health of Texas</i> |
| March 2004 | Baylor College of Medicine, Career Day Symposium |

Teaching and Research Experience

2011-present	Organized and taught NSCI 511 "Science Policy and Ethics," spring semester
2010	Co-taught (with Elaine Howard Ecklund) SOCI 311 "Science at Risk: Out of the Lab and Into the Public Sphere," fall semester
2004	Co-organized (with Neal Lane and Kristen Kulinowski) course NSCI 511 "Science and Technology Policy," spring semester
2000	Teaching assistant "Advanced Topics in Biochemistry and Molecular Biology"
1996-2003	Graduate research assistant
1999-2001	Mentored undergraduate student—trained undergraduate student Anne Reuter in laboratory techniques skills
1995	Dow Chemical summer intern
1994-1995	Undergraduate research assistant, Dr. Jonathan Sessler, The University of Texas at Austin

Research Publications

Matthews, Kirstin W., and Rick A. Wetsel. 2004. "Carboxypeptidase N: a pleiotropic regulator of inflammation." *Molecular Immunology* 40(11): 785-793.

Matthews, Kirstin W., Scott M. Drouin, Chengyu Liu, James F. Martin, Randall A. Skidgel, and Rick A. Wetsel. 2004. "Expression of the Third Complement Component (C3) and Carboxypeptidase N Small Subunit (CPN1) during Mouse Embryonic Development." *Developmental and Comparative Immunology* 28(6): 647-655.

Matthews, Kirstin W., and Rick A. Wetsel. 2001. "Characterization of Mouse Carboxypeptidase N Small Active Subunit Gene Structure." *Journal of Immunology* 166: 6196-6202.

Kildsgaard, Jens, Travis J. Hollmann, Kirstin W. Matthews, Ka Bian, Ferid Murad, and Rick A. Wetsel. 2000. "Cutting Edge: Targeted disruption of the C3a Receptor Gene Demonstrates a Novel Protective Anti-Inflammatory Role for C3a in Endotoxin-Shock." *Journal of Immunology* 165: 5406-5409.

Hollmann, Travis J., David L. Haviland, Jens Kildsgaard, Kirstin Watts, and Rick A. Wetsel. 1998. "Cloning, Expression, Sequence Determination and Chromosome Localization of Mouse Complement C3a Anaphylatoxin Receptor Gene." *Molecular Immunology* 35(3): 137-148.