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School of Public Policy
Georgia Institute of Technology
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Employment

Georgia Institute of Technology

Associate Professor, School of Public Policy, from August 2013

Director of Graduate Studies, From May 2015

Assistant Professor, School of Public Policy, August 2007 – July 2013

Associate, Center for Ethics and Technology, from January 2008

Member, Institute for Bioengineering and Bioscience, from August 2008

Faculty Participant, Center for Stem Cell Engineering, from August 2010

Centers for Disease Control and Prevention

Guest Researcher, Division of Reproductive Health, from October 2014

Education

Princeton University

Ph.D. in Public Affairs, 2007

Woodrow Wilson School of Public and International Affairs

Program in Science, Technology and Environmental Policy

Dissertation: Human Embryonic Stem Cell Research amid Regulatory Uncertainty

Advisors: Lee M. Silver, Harold T. Shapiro

University of Cambridge

M.Phil. in Biological Sciences, 2002

Thesis: Bioinformatics Approaches to RNA Splicing

Advisor: Richard Durbin

University of North Carolina at Chapel Hill

B.S. in Biology with Highest Honors and Highest Distinction, 2000

Minor in Mathematical Sciences (Computer Science Track)

Thesis: Gene Expression during Arabidopsis Disease Resistance: The Transcriptional Program of Systemic Acquired Resistance

Research Interests

- Biomedical research policy
- Ethical controversy, public policy and the development of emerging biomedical technologies
- Clinical translation of novel therapeutic approaches (including personalized therapies)
- Stem cell ethics and policy
- Self-regulation and the oversight of assisted reproduction

- Science and technology policy
- Science education

Awards / Honors

Georgia Power – Ivan Allen College Professor of Excellence (2013-2014)
 National Science Foundation (NSF) Career Award (2012-2017)
 Young Scientist Award – 14th World Congress on Obstetrics, Gynecology and Infertility (2011)
 Travel Award – International Society for Stem Cell Research Annual Meeting (2010, 2011)
 Most Downloaded Article of the Year – Hastings Center Report (2010)
 Georgia Tech Class of 1969 Teaching Fellow (2008-2009)
 Outstanding Abstract - 4th Stem Cell Research and Therapeutics Conference (2008)
 NSF Young Scholar – U.S.-China Science and Technology Policy Forum (2006)
 Best Graduate Student Paper – Association for Politics and the Life Sciences (2005)
 Lynde and Harry Bradley Fellowship (2005)
 Princeton University Centennial Fellowship (2003-2007)
 NSF Graduate Research Fellowship (2003-2004)
 Christine Mirzayan Science & Technology Policy Graduate Fellowship (Summer 2003)
 Winston Churchill Scholar (2001)
 Howard Hughes Medical Institute Predoctoral Fellowship (Declined)
 John N. Couch Award (2000)
 Phi Beta Kappa (1998)
 John Motley Morehead Scholar (1996-2000)
 Robert C. Byrd Scholar (1996-2000)

Selected Publications

Books - Authored

Levine AD (2007). *Cloning: A Beginner's Guide*. Oxford, England: Oneworld Publications. 192 pages. [Peer-reviewed introduction to the science of cloning and embryonic stem cells and related ethical and policy debates for non-specialists]

Republished as:

Levine AD (2009). *Cloning: A World Issue Today*. New York: Rosen Publishing. 204 pages.
 [Revised hardcover edition of *Cloning: A Beginner's Guide*. This edition included minor revisions to reflect scientific advances since the first version was published.]

Levine AD (2012). *Cloning*. Audio book narrated by Donna Postel. Victoria, Australia: Bolinda Publishing.

Books - Edited

Levine AD, editor (2006). *States and Stem Cells: Policy and Economic Implications of State-Funded Stem Cell Research*. Princeton, NJ: Policy Research Institute for the Region at Princeton University.

Journal Articles

Dodson BP and Levine AD (2015). "Challenges in the commercialization and translation of cell therapies." *BMC Biotechnology*. 15:70

Blake VK, McGowan ML and Levine AD (2015). "Conflicts of interest and effective oversight of assisted reproduction using donated oocytes" *Journal of Law, Medicine & Ethics*. 43(2): 410-424.

Alberta HB, Cheng A, Jackson EL, Pjecha M and Levine AD (2015). "Assessing state stem cell programs in the United States: How has state funding affected publication trends?" *Cell Stem Cell*. 16(2): 115-8.

Alberta HB, Berry RM and Levine AD (2014). "Risk disclosure and the recruitment of oocyte donors: Are advertisers telling the full story?" *Journal of Law, Medicine & Ethics*. 42(2): 232-43.

- Levine AD, Lacy TA and Hearn J (2013). "The origins of human embryonic stem cell research policies in the U.S. States." *Science and Public Policy*. 40(4): 544-58.
- Alberta HB, Berry RM and Levine AD (2013). "Compliance with donor age recommendations in oocyte donor recruitment advertisements in the United States" *Reproductive Biomedicine Online*. 26(4): 400-5.
- Levine AD (2012). "State stem cell policy and the geographic preferences of scientists in a contentious emerging field." *Science and Public Policy*. 39(4): 530-41.
- Levine AD and Wolf LE (2012). "The roles and responsibilities of physicians in patients' decisions about unproven stem cell therapies." *Journal of Law, Medicine & Ethics*. 40(1) 122-34.
- Republished as Levine AD and Wolf LE (2013) "The roles and responsibilities of physicians in patients' decisions about unproven stem cell therapies." In *The Globalization of Health Care: Legal and Ethical Challenges*, Cohen IG (editor). Oxford, UK: Oxford University Press.
- Levine AD (2011). "Access to human embryonic stem cell lines." *Nature Biotechnology*. 29(12): 1079-81.
- Levine AD (2011). "Policy uncertainty and the conduct of stem cell research." *Cell Stem Cell*. 8(2): 132-35.
- Levine AD (2011). "The oversight and practice of oocyte donation in the United States, United Kingdom and Canada." *HEC Forum*. 23(1): 15-30. [Published electronically before print 20 December 2010]
- Karmali RN, Jones NM and Levine AD (2010). "Tracking and assessing the rise of state-funded stem cell research." *Nature Biotechnology*. 28(12): 1246-1248.
- Levine AD (2010). "Stem cell tourism: Assessing the state of knowledge." *SCRIPTed: A Journal of Law, Science and Technology*. 7(2): 274-282.
- Levine AD (2010). "Science policy and the geographic preferences of stem cell scientists: Understanding the appeal of China and Singapore." *New Genetics & Society*. 29(2): 187-208.
- Levine AD (2010). "Self-regulation, compensation and the ethical recruitment of oocyte donors." *Hastings Center Report*. 40(2): 25-36.
- Ryan KA, Sanders AN, Wang DD and Levine AD (2010). "Tracking the rise of stem cell tourism." *Regenerative Medicine*. 5(1): 27-33.
- Levine AD (2008). "Policy considerations for states supporting stem cell research: Evidence from a survey of stem cell scientists." *Public Administration Review*. 68(4): 681-94.
- Levine AD (2008). "Identifying under- and over-performing countries in research related to human embryonic stem cells." *Cell Stem Cell* 2(6): 521-4.
- Follow-up published as: Levine AD (2008). "Response to Letter from Löser *et al.*" *Cell Stem Cell* 3(2):131.
- Levine AD (2006). "Research policy and the mobility of US stem cell scientists." *Nature Biotechnology* 24(7): 865-66.
- Levine A (2005). "Trends in the geographic distribution of human embryonic stem-cell research." *Politics and the Life Sciences* 23(2): 40-45. [Published electronically before print 14 September 2005]
- Levine A and Durbin R (2001). "A computational scan for U12-dependent introns in the human genome sequence." *Nucleic Acids Research* 29(19): 4006-13.
- Maleck K, Levine A, Eulgem T, Schmid J, Lawton KA, Dangl JL and Dietrich RA (2000). "The transcriptome of *Arabidopsis thaliana* during systemic acquired resistance." *Nature Genetics* 26(4): 403-10.

Book Chapters

- Levine AD and Cohen CB (2014). "Gamete donation" in the *Encyclopedia of Bioethics* (4th Edition). Jennings B (editor). Macmillan Reference. 2742-50.
- Levine AD (2012). "Research governance" in the *Encyclopedia of Applied Ethics* (2nd Edition). Chadwick R (editor). San Diego: Academic Press. 805-812.

Levine AD (2011). "Stem cell research and human cloning" in *Governing America: Major Decisions of Federal, State and Local Governments from 1789 to the Present*. Quirk PJ and Cunion W (editors). New York: Facts on File Publishing. 739-49.

Levine AD (2006). "The rise of state-sponsored stem cell research in the United States." in *States and Stem Cells: Policy and Economic Implications of State-Funded Stem Cell Research*. Levine AD (editor), Princeton, NJ: Policy Research Institute for the Region at Princeton University. 7-16.

Other Publications

Levine AD (2012). "Improving oversight of innovative medical interventions in Texas, USA." *Regenerative Medicine* 7(4): 451-453. [Invited Editorial]

Levine AD (2010). "Insights from patients' blogs and the need for systematic data on stem cell tourism." *American Journal of Bioethics* 10(5): 28-9. [Open Peer Commentary]

Levine AD (2010). "The troubling history of regulating reproduction." *Public Administration Review* 70(2): 330-2. [Review of Matthew Connelly's *Fatal Misconception*]

Dickins A and Levine AD (2008). "Embryonic stem cell research in China." George Mason School of Law Policy Brief.

Levine AD (2007). "Trends in the movement of scientists between China and the United States and implications for future collaborations." in *Proceedings of the China-U.S. Forum on Science and Technology Policy*, edited by William A. Blanpied and Zhao Gang, 321-35.

Research Grants

"CAREER: Ethically contentious science and the graduate school experience." National Science Foundation Faculty Early Career Development Programs (2012-1017), PI

"IGERT: Stem cell biomanufacturing." National Science Foundation Integrative Graduate Education and Research Traineeship (2010-2015), Co-Investigator, Steering Committee Member

"Academic entrepreneurship and state science policy: Lessons from state support for stem cell research." Roadmap for an Entrepreneurial Economy Initiative, Georgia Research Alliance & The Kauffman Foundation (2009-2010), PI

"Ethically contentious research and innovation: An interdisciplinary and interinstitutional experiment in ethics education and assessment." National Science Foundation (2009-2011), Collaborator

Ivan Allen College Support for Grant Development (Summer 2008, Summer 2010), PI

"Egg donor recruitment: Identifying the factors influencing donor compensation." Center for Health and Wellbeing, Princeton University (2006), PI

"State stem cell initiatives and researcher mobility." Policy Research Institute for the Region, Princeton University (2005-2006 academic year), PI

Selected Presentations

"Ethics, policy and the development of mitochondrial transfer technology." (Centers for Disease Control and Prevention Division of Reproductive Health Seminar Series: Atlanta, GA). March 31, 2015. [Invited]

"Ethical controversy, public policy and the future of somatic cell nuclear transfer research." (World Stem Cell Summit 2014: San Diego, CA). December 5, 2014. [Invited]

"Challenges in the translation of regenerative medicine and the rise of unproven stem cell therapies." Driving Regenerative Medicine to the Market and Clinic: Toronto, ON). November 6, 2014 [Invited]

"The oversight of egg donation after *Kamakahi v ASRM*." (American Society for Bioethics and Humanities 16th Annual Meeting: San Diego, CA). October 19, 2014.

"Challenges in the translation and commercialization of cell therapies." with Brittany Dodson. (International Society of Stem Cell Research 12th Annual Conference: Vancouver, BC). June 18-21, 2014. [Poster]

"Ethical contention and the development of careers in stem cell science." with Matthew Pjecha and Ruchir Karmali. (International Society of Stem Cell Research 12th Annual Conference: Vancouver, BC). June 18-21, 2014. [Poster]

- “Challenges in the translation and commercialization of regenerative medicine.” with Brittany Dodson. (Second Annual Conference on the Governance of Emerging Technologies: Phoenix, AZ). May 29, 2014.
- “Public policy and the future of somatic cell nuclear transfer research.” (World Stem Cell Summit 2013: San Diego, CA). December 6, 2013.
- “Regenerative medicine and the challenge of unproven stem cell ‘therapies.’” (TERMIS-Americas 2013 Annual Conference and Exposition: Atlanta, GA). November 13, 2013.
- “Policy uncertainty, ethical considerations and the funding of stem cell science.” (American Society for Bioethics and Humanities 15th Annual Meeting: Atlanta, GA). October 24-27, 2013.
- “Challenges in the translation and commercialization of cell therapies.” with Brittany Dodson. (International Society for Cell Therapy – North America Meeting: Philadelphia, PA). September 8-11, 2013.
- “Policy uncertainty, ethical controversy and emerging technologies: Lessons from the funding of stem cell science.” (First Annual Conference on the Governance of Emerging Technologies: Phoenix, AZ). May 20-21, 2013.
- “Assessing patients’ experiences with unproven stem cell based interventions.” (18th Annual Meeting of the International Society for Cellular Therapy: Seattle, WA). June 8, 2012.
- “Understanding the origins and impact of the heterogeneous policy environment for egg donation.” (Qatar International Conference on Stem Cell Science and Policy: Doha, Qatar). February 27-March 1, 2012.
- “International policy heterogeneity and variability in the use of assisted reproduction with donated oocytes.” (14th World Congress on Obstetrics, Gynecology and Infertility: Paris, France). November 17-20, 2011.
- “Academic entrepreneurship and state stem cell policy.” (Association for Public Policy Analysis and Management 33rd Annual Research Conference: Washington, DC). November 3-5, 2011.
- “Gamete donation, conflicts of interest and the ethical shortcomings of self-regulation in the U.S. fertility industry.” (American Society for Bioethics and Humanities 13th Annual Meeting: Minneapolis, MN). Oct 13-16, 2011.
- “The roles and responsibilities of physicians in patients’ decisions about unproven stem cell therapies.” With Leslie Wolf. (Conference on the Globalization of Health Care, Harvard Law School: Cambridge, MA) May 20-21, 2011.
- “Self-Regulation and the market in human eggs.” (Duke University School of Law Seminar on Taboo Trades and Forbidden Exchanges: Durham, NC) March 1, 2010.
- “Salvation or exploitation? Assessing patient experiences with unproven stem cell therapies” (Beyond the Embryo: Transnational, Transdisciplinary and Translational Perspectives on Stem Cell Research: Geneva, Switzerland) November 14-15, 2009.
- “The origins of state human embryonic stem cell research policies.” With T. Austin Lacy and James Hearn. (Association for Public Policy Analysis and Management 31st Annual Research Conference: Washington, DC) November 5-7, 2009.
- “Self-regulation, compensation and the ethical recruitment of oocyte donors.” (American Society for Bioethics and Humanities 11th Annual Meeting: Washington, DC). October 15-18, 2009.
- “Identifying under- and over-performing countries in research related to human embryonic stem cells.” (Emerging Science Powers and the Global Politics of Regenerative Medicine: London, UK). May 2, 2008.
- “Assessing the influence of state stem cell policies on scientists’ careers.” (Stem Cell Research: Understanding the Controversies, Georgia State University College of Law Center for Law, Health and Society: Atlanta, GA). January 10, 2008.

Professional Activities

Professional Service

- Member, Presidential Task Force on the Use of Unproven Cellular Therapies, International Society for Cellular Therapy (2013 – present)
- Member, Institute of Medicine Committee on the Review of the California Institute for Regenerative Medicine (2011-2012)
- Member, Stem Cell Research Oversight Committee, New York Stem Cell Foundation (2012 – present)

Member, Ad-Hoc Task Force on New Member Engagement, American Society for Bioethics and Humanities (2009)

External Reviewer - Journals

Science, Science Translational Medicine, Nature Biotechnology, Nature Methods, Regenerative Medicine, American Journal of Bioethics, American Journal of Bioethics Primary Research, Cell Stem Cell, Bioethics, Kennedy Institute of Ethics Journal, Journal of Medical Ethics, Developing World Bioethics, New Genetics and Society, Human Reproduction, PLoS One, Stanford Journal of Law, Science and Policy, Philosophy & Technology, Stem Cell Reviews & Reports, Expert Review of Neurotherapeutics, Yale Journal of Health Policy, Law and Ethics, Social Problems

External Reviewer – Other

National Science Foundation Science of Science Policy Program, American Society for Bioethics and Humanities Annual Meeting (empirical research and social science categories), International Society for Cellular Therapy Annual Meeting (legal and ethical category), China-India-US Workshop on Science, Technology and Innovation Policy Young Scholar Selection Committee

Event Organization

States & Stem Cells: A Symposium on the Policy and Economic Implications of State-Funded Stem Cell Research, Princeton, NJ (2005)

Executive Committee Member, 2013 Atlanta Conference on Science and Innovation Policy

Affiliations

American Association for the Advancement of Science, American Society for Bioethics and Humanities, Association for Public Policy Analysis and Management, International Society for Stem Cell Research, International Society for Cellular Therapy

Other Experience

Board on Science, Technology and Economic Policy, Summer 2003

U.S. National Academy of Sciences

Christine Mirzayan Science & Technology Policy Graduate Fellow

Bain & Company, Fall 2001 – Spring 2003

Associate Consultant