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## BIOGRAPHICAL SKETCH

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<b>NAME</b> Illes, Judy		<b>POSITION TITLE</b> Principal Investigator Director, Program in Neuroethics	
eRA COMMONS USER NAME Illes.Judy			
<b>INSTITUTION AND LOCATION</b>	<b>DEGREE (if applicable)</b>	<b>YEAR(s)</b>	<b>FIELD OF STUDY</b>
Brandeis University	B.A.	1981	Psychology
McGill University	M.A.	1984	Psychology
Stanford University, Stanford, CA	Ph.D.	1987	Hearing and Speech Sci. Neuropsychology

### RESEARCH AND PROFESSIONAL EXPERIENCE

5-9/80 & 5-9/79:	Research Assistant, Institut d'anatomie, Univ. de Lausanne, Lausanne, Switzerland.
1/79-6/81:	Research Assistant & Histologist, Harvard University, Cambridge, MA.
5/81-12/81:	Research Intern, Electrophysiology, McGill University, Montreal, Canada.
5/83-9/83:	Visiting Scholar, Neuropsychology, Department of Psychology, Stanford University.
7/85-9/85:	Instructor, University of California, Santa Cruz (UCSC) extension.
11/83-8/91:	Research Neuropsychologist, EEG Systems Laboratory (EEGSL), San Francisco, CA (a not-for-profit private brain research laboratory).
9/86-8/91:	Clinical Research Psychologist, SAM Technology, Inc., San Francisco, CA (EEGSL's for-profit counterpart).
4/86-present:	Associate Professor (Part-time), Pacific Graduate School of (Inactive) Psychology (PGSP), Palo Alto, CA (1/88-1/92: Assistant Professor, 4/86-12/87: Instructor).
7/91-9/01:	Director, Strategic Research Development, Department of Radiology, Stanford University Medical Center, Stanford, CA.
9/98-1/01:	Co-founder, Executive Director, Stanford Brain Research Center, Stanford.
9/01-6/06:	Director, Program in Neuroethics and Senior Research Scholar, Stanford Center for Biomedical Ethics, Department of Medicine and Department of Radiology, Stanford.

### SELECTED AWARDS AND HONORS

2003 & 2004:	President-Elect, Women in Neuroscience
2004-present:	Internal Advisory Board Member, and Lead, Ethics & Law Focus Subcommittee, Canadian Institutes of Health, Institute for Neuroscience, Mental Health and Addiction
2005-present:	Co-chair, Committee on Women in Neuroscience, Society for Neuroscience
2005-present:	Member, Dana Alliance for Brain Initiatives
10/06:	J. David Kopf Memorial Lecture on Neuroethics, Society for Neuroscience, Atlanta, Georgia, 2006, <i>"Neuroethics, Neurochallenges: A Needs-based Research Agenda"</i>

### Founding Editor (03/06): American Journal of Bioethics (AJOB) - Neuroscience

**Journal Reviewer:** American Journal of Bioethics, American Journal of Neuroradiology, Academic Radiology, Brain and Cognition, Brain and Language, Journal of Nicotine and Tobacco Research, Neurology, Science and Engineering Ethics, BMC Neurology, Trends in Cognitive Sciences, Medical Science Monitor International, Progress in Neurobiology, Journal of Ethics in Mental Health, JAMA, Journal of Medicine and Philosophy, PLoS Biology, Pediatrics

## SELECTED PUBLICATIONS (from more than 60)

- Illes, J. (Ed.) Ethical Challenges in Advanced Neuroimaging, *Brain and Cognition*, Academic Press, New York. 2002, 50(3).
- Illes, J. and Atlas S.W. (Eds.) *Topics in Magnetic Resonance Imaging: Ethical Issues in MR Imaging*. Lippincott Williams & Wilkins, New York. 2002, 13(2).
- Kim, B.S., Illes, J.\*, Kaplan, R.T., Reiss, A., Atlas, S.W. Neurologic findings in healthy children on pediatric fMRI: Incidence and significance. *American Journal of Neuroradiology*, 2002, 23:1674-1680.
- Moseley, M., Bammer, R., Illes, J. Diffusion tensor imaging of cognitive function. *Brain and Cognition*, 2002, 50(3):396-413.
- Illes, J., Desmond, J., Huang, L.F., Raffin, T., Atlas, S. Ethical and practical considerations in managing incidental neurologic findings in fMRI. *Brain and Cognition*, 2002, 50(3):358-365.
- Illes, J. Neuroethics in a new era of neuroimaging. *AJNR*, 2003, 24(9):1739-1741.
- Illes, J. and Kirschen, M.P. New prospects and ethical challenges for neuroimaging within and outside the health care system. Invited Editorial (Part II). *AJNR*, 2003, 24(10):1932-1934.
- Illes, J., Kirschen, M., Gabrieli, J.D.E. From neuroimaging to neuroethics. *Nat. Neurosci.*, 2003, 6(3):250.
- Farah, M.,\* Illes, J.,\* Cook-Deegan, R., Gardner, H., Kandel, E., King, P., Parens, E., Wolpe, P.R., Sahakian, B. Neurocognitive enhancement: What can we do? What should we do? *Nature Reviews Neuroscience*, 2004, 5:421-425 (\*Lead authors).
- Illes, J. Medical imaging: A hub for the new field of neuroethics. *Acad. Radiol.*, 2004, 11(7):721-723.
- Illes, J., Rosen, A., Huang, L., Goldstein, R.A., Raffin, T.A., Swan, G., Atlas, S.W. Ethical considerations of incidental findings on adult MRI in research. *Neurology*, 2004, 62:888-890.
- Illes, J., Kirschen, M.P., Karetsky, K., Kelly, M., Saha, A., Desmond, J.D., Raffin, T.A., Glover, G.H., Atlas, S.W. Discovery and disclosure of incidental findings on brain MRI in research. *Journal of Magnetic Resonance Imaging*, 2004, 20:743-747.
- Illes, J., Kann, D., Karetsky, K., Letourneau, P., Raffin, T.A., Schraedley-Desmond, P., Koenig, B.A., Atlas, S.W. Advertising, patient decision-making, and self-referral to CT and MR imaging. *Archives of Internal Medicine*, 2004, 164:2406-2408
- Racine, E., Bar-Ilan, O. Illes, J. fMRI in the Public Eye. *Nat. Rev. Neurosci.*, 2005, 6:159-164.
- Illes, J. and Racine, E. Imaging or imagining? A neuroethics challenge informed by genetics. *American Journal of Bioethics*, 2005, 5(2):1-14.
- Illes, J. and Racine, E. Neuroethics: Dialogue on a continuum from tradition to innovation. *American Journal of Bioethics*, 2005, 5(2),W3-4.
- Illes, J., Atlas, S.W., Raffin, T.A. Imaging neuroethics for the imaging neurosciences. *Neurosci. Imaging*, 1(1):1-8.
- Illes, J., DeVries, R., Cho, M.K., Schraedley-Desmond, P. ELSI priorities for brain imaging. *American Journal of Bioethics*. 6(2):24-31..
- Illes, J. (Ed). *Neuroethics: Defining the issues in theory, practice and policy*. Oxford University Press, Oxford, UK. 2006.
- Kirschen, M.P., Jaworska, A., Illes, J. Participant expectations in neuroimaging research. *Journal of Magnetic Resonance Imaging*, 23(2):205-209.
- Illes, J., Kirschen, M.P., Edwards, E., Stanford, L.R., Bandettini, P., Michael, D.B., Ford, P.J., Glover, G.H., Kulynych' J., Macklin R., Wolf, S.M. and the Working Group on Incidental Findings, Handling incidental findings in brain imaging research: Early conclusions in an ongoing debate. *Science*. 311:783-784.
- Illes, J. On the contents of Pandora's Box of incidental findings in brain imaging research. *Nature, Clinical Practice Neurology* (Invited Viewpoint). 23(2):205-209..
- Illes, J., Blakemore, C., Hansson, M., Hensch, T., Leshner, A., Maestre, G., Magistretti, P., Quirion, R., Strata, P., Neuroethics: International perspectives on engaging the public. *Nature Reviews Neuroscience*. 2005, 6, 977-982.
- Illes, J., Gallo, M., Kirschen, M.P. An ethics perspective on the use of transcranial magnetic stimulation (TMS) for human neuromodulation, In A. Pascual-Leone (Ed). TMS: Disrupting the brain to enhance human cognitive abilities. Special Issue of *Behavioral Neurology*, In press.
- Illes, J.,** Bird, S.J. Neuroethics: A modern context for ethics neuroscience. *Trends in Neuroscience*. In press.

## **Active or Completed Research During the Past Three Years**

### **Active Research Support**

**Title: Ethical, Legal and Social Issues in Advanced Neuroimaging**

**Principal Investigator:** Judy Illes, Ph.D.; co-PIs Mildred Cho, Ph.D. & Scott W. Atlas, M.D.

**Sponsor:** NIH/NINDS RO1 #NS045831; 9/30/03-6/30/06

**Goal:** To elucidate ELSI issues in basic research in functional neuroimaging in the laboratory, and in its translation in the clinical setting for diagnosis and prediction of neurologic disease.

**Title: Detection and Disclosure of Incidental Findings in Neuroimaging Research, A Trans-NIH / Stanford Meeting, CSI 8-17-04; NIH RO1 #NS045831-S1**

**Role:** Organizer and Chair

**Sponsors:** NIH (NINDS [lead institute], NIDA, NIA, NIBIB, NIMH, NICHD, NHGRI, NHLBI, NIBIB); 1/5/05-1/7/05; RO1 #NS045831-S1 3/1/05-6/30/06

**Goal:** To develop guidelines for managing incidental findings in brain imaging research.

**Title: Center for Integrating Ethics and Genetics Research**

**Principal Investigator:** Mildred Cho, Ph.D.

**Sponsor:** NIH/NHGRI P50#HG003389-01; 09/01/04-07/31/09

**Goal:** To create a center for developing and testing new models of deliberative, interactive processes that integrate ethical, legal and social considerations into the design and conduct of current and emerging genetic research.

**Title: Mindful Incisions**

**Principal Investigator:** Maren Grainger-Monsen, Role on Project: Co-PI

**Sponsor:** The Greenwall Foundation; Award dates: 1/1/04-present

**Goal:** This grant provides seed funding for a film on neuroethical issues emerging in functional neurosurgery that, while potentially medically beneficial, may have an adverse impact on patients' personality and reasoning abilities. This film will be one in a four-part series, all intended to provide education and stimulate thinking in the new field of neuroethics. This grant does not provide salary support for the investigators.

**Title: Pre-PIONEER (Planning Program in Organizing Neuroethics Education and Research)**

**Principal Investigator:** Judy Illes

**Sponsor:** Neuroscience Institute at Stanford; Award dates; 6/1/05-85/31/07

**Goal:** To develop new collaborations among bioethicists and neuroscientists through pilot seed grants, educational programs, seminars and journal clubs.

**Title: The Impact of Valence in Health Care Advertising**

**Source:** Henry J. Kaiser Family Foundation, Special Discretionary Award Dates: 9/1/04-7/31/05

**Role:** Principal Investigator

**Goal:** To examine the effects of valence in advertising of health products and health care services directly to consumers.

**Title: Regenerative Medicine: Ethical, Environmental, Economic, Legal and Social Issues Network**

**Source:** CIHR, New Emerging Team Grant Program

**Dates:** 2004-2007

**Role:** Collaborator (A. Daar, P.I., University of Toronto)

**Goal:** To anticipate the ethical, economic, environmental, legal and social issues (E<sup>3</sup>LSI) that might be relevant to the use of regenerative technology in order to maximize its benefits and minimize its risks in medical research and practice.

### **Completed**

**Title: Ethical Challenges in Neuroimaging**

**Source:** The Greenwall Foundation

**Dates:** 7/1/01-6/31/04 (no cost extension to 12/31/04)

**Role:** Co-Principal Investigator (S.W. Atlas, P.I. and T.A Raffin, co-P.I.s)

**Goal:** To identify and analyze a range of ethical issues associated with pediatric and adult neuroimaging research and practice.

**Title: Policy for Neurotechnology Development in Small Business**

**Source:** Human Bionics LLC

**Dates:** 1/1/05-06/31/05

**Role:** Principal Investigator

**Goal:** To conduct a comprehensive review of relevant ethics policies from small businesses and businesses engaged in neurotechnology or other relevant R&D, and deliver a set of recommendations that Human Bionics, LLC may implement or adopt as it moves forward in its own R&D efforts.

**Title: NSF Workshop: Neuroethical Challenges in Cognitive Enhancement and Learning**

**Principal Investigator:** Judy Illes, Ph.D.

**Sponsor:** NSF #BCS 0335275 with co-sponsorship of a Mushett Family Foundation grant to the New York Academy of Sciences; Award Dates: 2/01/03-10/31/03

**Goal:** This small workshop of distinguished faculty including the PI (Chair), Martha Farah (Co-chair), Eric Kandel, Howard Gardner, Erik Parens and Paul Root Wolpe focused on the state of the art in enhancement of cognitive function, debated the parameters of enhancement versus therapy, and worked to develop concrete recommendations for where we should and should not go.

**Title: Neuroethics: Mapping the Field Conference**

**Principal Investigator:** Barbara Koenig, Ph.D., Role on Project: Planning Committee Member

**Sponsors:** Dana Foundation, NIH (NINDS, NIMH, NIDA); Award Dates: 10/1/02-5/15/02

**Goal:** Planning and hosting first world conference (May 13-14, 2002) dedicated to delineating a new field of "neuroethics."

**Title: Ethical Dimensions of Neuroscience Research**

**Principal Investigator:** Henry Greely, Role on Project: Co-Investigator

**Sponsor:** Institutional "BioX" Award; Award dates; 3/15/03-8/31/04

**Goal:** To develop new collaborations among bioethicists and neuroscientists through pilot seed grants, educational programs, seminars and journal clubs.