Current Problems in Anthropology Neuro: The Anthropology of Brain Science

Thursdays, 8:30-11:20am KTH/B103

Instructor: Dr. Kathryn Goldfarb

Email: Please contact me through Avenue email

Submit MSAFs to kgold@mcmaster.ca

Office Hours: Thursdays 12-2pm, or by appointment

Overview and Objectives:

How do transformations in neuroscience impact understandings of human nature? Scientific research on the human brain has altered debates about the importance of nature versus culture in human development, and shifted conceptualizations of being "healthy" or "normal." We have even come to understand time in new ways, specifically in our calibration of future risk: brain science has prompted us to re-conceptualize the role of early childhood caregiving in neurological development, and changed how we consider the specter of dementia in old age. Neuroscience sometimes leads us to believe that our subjectivities and futures are biologically determined, while other findings regarding neuroplasticity and epigenetics seem to imply the opposite. What are the connections between the production and social uptake of neuroscientific knowledge, and what does it mean to be human at this historical moment? This course addresses the following themes through an anthropological lens: subjectivity and neuroimaging, disability (or "neurodiversity"), child development, gender, "risk" and neoliberal governance, and the production of scientific expertise.

Course Requirements and Learning Assessments:

1. Class participation

30%

Class attendance, discussion, and submission of short (ungraded) in-class reflections. Inclass written reflections are for the purpose of a) taking attendance; b) helping you remain on top of reading; c) helping you articulate your thoughts for in-class discussion; and d) providing a venue for students less comfortable with speaking in class to express their opinions. There will be no make-ups for missed in-class reflections.

Do not expect to receive a quality grade in this course if you do not attend class and stay on top of the reading.

2. Two reading responses

20% (10% each)

The purposes of these responses are a) to prepare you to speak in class about something you find interesting about a text; b) give you practice writing in close engagement with a text; and c) give me a sense of how you have read a text *before* we approach that text in class. As such: do not feel overly anxious about choosing a text to write on. Rather, write on one that makes you think and that you find especially intriguing. You may write on one piece, or put a piece in conversation with another, or write about a piece in conversation with non-class-related texts/ articles/ films/ etc. *You may also think of these assignments as practice writing closely about texts for the midterm and final papers*.

You may write on any piece assigned in class, but you will need to plan ahead: reading responses are due by 5pm the day before we will be discussing the piece you have chosen. Given the pedagogical goals of the assignment, there are on principle no extensions. You must submit one response during the first half of the term (on or before Feb. 5), and a second response during the second half of the term (on or before Mar. 26). Please submit electronically via Avenue Dropbox.

Responses should be approximately 250-300 words. An effective response should pose and explore a specific question regarding the author's argument, methodology, basic assumptions, theoretical stance, etc. Responses should be highly focused on a specific reading and include textual citations.

3. Option a) midterm (20%) and final (30%) take-home essay exams

Questions will be provided one week in advance. You will choose one question to address in a short paper (approximately 5 double-spaced pages).

Option b) midterm paper proposal (10%) and a final research paper (40%)

Alternatively, you may choose to write a research paper on a topic of your choice. The paper proposal should outline the research topic and several possible questions you might explore (more guidance will be provided). The final paper should be approximately ten double-spaced pages.

Midterms are due by 5pm Feb. 14; Final papers are due by 5pm April 10.

Required texts, available in the campus store:

- 1. Course pack
- 2. Rose, Nikolas and Joelle M. Abi-Rached. 2013. Neuro: The New Brain Sciences and the Management of the Mind. Princeton: Princeton University Press.
- 3. Wilson, Elizabeth A. 2004. Psychosomatic: Feminism and the Neurological Body. Durham: Duke University Press.

Late policy:

Please contact me if you are unable to submit a paper on time. I am generally willing to negotiate assignment deadlines in extenuating circumstances. However, if you do not contact me in advance, late assignments will be docked one-third letter grade for every day late.

Collaboration and academic honesty:

You are encouraged to discuss course concepts with each other in preparation for written assignments. However, all materials submitted for a grade should be your own intellectual product, and analysis should be written in your own words. Any language taken directly or paraphrased from another source must be properly cited.

Schedule

January 9: Introduction

Introduction to class, discussion of syllabus

In-class discussion of: Hacking, Ian. 1996. The Looping Effects of Human Kinds. *In* Causal Cognition: A Multidisciplinary Approach. Dan Sperber, David Premack, and Ann J. Premack, eds. Oxford: Clarendon Press. 351-383.

January 16: Cerebral Subjects?

Rose and Abi-Rached, Neuro. Introduction (1-24) and Ch1: The Neuromolecular Brain (25-52).

Ortega, Francisco and Fernando Vidal. 2007. Mapping the cerebral subject in contemporary culture. Electronic Journal of Communication Information and Innovation in Health 1(2): 255-259.

January 23: Development and Brain Science

Castaneda, Claudia. 2002. Figurations: Child, Bodies, Worlds. Durham: Duke University Press. Introduction (1-11) and Ch2 (46-82). [47pp]

SKIM Rose and Abi-Rached, Neuro. Ch5: The Social Brain (141-163).

January 30: Embodied Minds I

Wilson, Psychosomatic. Introduction: Somatic Compliance (1-14), Ch1: Freud, Prozac, and Melancholic Neurology (15-29), Ch2: The Brain in the Gut (31-47).

February 6: Embodied Minds II

Wilson, Psychosomatic. Ch3: Hypothalamic Preference: LeVay's Study of Sexual Orientation (49-62), Ch4: Trembling, Blushing: Darwin's Nervous System (63-77), Ch5: Emotional Lizards: Evolution and the Reptilian Brain (79-95).

Last day to submit responses for first half of term (must submit by 5pm Feb. 5)

February 13: Neuropsychiatry and Neurostructure

Rose and Abi-Rached, Neuro. Ch4: All in the Brain? (110-140)

Fein, Elizabeth. 2011. Innocent Machines: Asperger's Syndrome and the Neurostructural Self. *In* Sociological Reflections on the Neurosciences, edited by Martyn Pickersgill and Ira Van Keulen. Bingley, UK: Emerald Group Publishing. 27-50.

Midterm papers/Research paper proposals due 5pm Friday, Feb. 14

February 20: Brain Break

McMaster Spring Recess, NO CLASS

February 27: Neurodiversity and Children's Brains

Buchbinder, Mara. 2012. 'Sticky' Brains and Sticky Encounters in a U.S. Pediatric Pain Clinic. Culture, Medicine, & Psychiatry 36: 102-123

Rapp, Rayna. 2011. Chasing Science: Children's Brains, Scientific Inquiries, and Family Labors. Science, Technology, & Human Values 36(5): 662-684.

Ortega, Francisco. 2009. The Cerebral Subject and the Challenge of Neurodiversity. BioSocieties 4: 425-445.

March 6: Imaging the Antisocial Brain

Dumit, Joseph. 2004. Picturing Personhood: Brain Scans and Biomedical Identity. Princeton: Princeton University Press. Ch1 (1-18)

Rose and Abi-Rached, Neuro. Ch6: The Antisocial Brain (164-198)

March 13: Traveling Images

Dumit, Joseph. 2004. Picturing Personhood: Brain Scans and Biomedical Identity. Princeton: Princeton University Press. Ch5: Traveling Images, Popularizing Brains (139-169), Ch6: Conclusion: Here is a PET Image of a Person that Shows Depression (172-185)

March 20: Neuroplasticity

Rubin, Beatrix. 2009. Changing Brains: The Emergence of the Field of Adult Neurogenesis. BioSocieties 4: 407-424.

Rees, Tobias. 2010. Being neurologically human today: Life and science and adult cerebral plasticity (an ethical analysis). American Ethnologist 37(1): 150-166.

March 27: Science and Selfhood

Rose and Abi-Rached, Neuro. Ch7: Personhood in a Neurobiological Age (199-224).

Lock, Margaret. 2005. Eclipse of the Gene and the Return of Divination. Current Anthropology 46 (supplement). S47-S70.

Last day to submit responses for second half of term (must submit by 5pm Mar. 26)

April 3: Conclusions

Rose and Abi-Rached, Neuro. Conclusion: Managing Brains, Minds, and Selves (225-234)

<u>Final papers due 5pm Thursday, April 10. Please submit electronically through Avenue Dropbox.</u>

Course guidelines

1. Handing in assignments:

All assignments for this class should be submitted online via Avenue Dropbox.

2. Late policy:

Please **contact me** if you are unable to submit an assignment on time. I am generally willing to negotiate assignment deadlines in extenuating circumstances. However, **if you do not contact me in advance**, **late assignments will be docked one-third letter grade for every day late.**

3. Email:

Please ask detailed questions about course material and assignments in person. Please contact me through Avenue mail with matters pertaining to class.

Effective September 1, 2010, it is the policy of the Faculty of Social Sciences that all email communication sent from students to instructors (including TAs), and from students to staff, must originate from the student's own McMaster University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student's responsibility to ensure that communication is sent to the university from a McMaster account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply at his or her discretion. Email Forwarding in MUGSI: http://www.mcmaster.ca/uts/support/email/ emailforward.html *Forwarding will take effect 24-hours after students complete the process at the above linkemails that do not originate from a McMaster email account.

4. Laptop Policy:

I prefer that you hand-write class notes, and to print out and annotate course readings, rather than reading and taking notes on your computer.

If you strongly prefer to use a computer in class, this will be allowed. However, please be respectful of the instructor and your classmates, and do not engage in non-class-related activities on your computer.

You will be asked to cease laptop use if it is apparent that your computer is a source of distraction.

5. Academic Ethics:

http://www.mcmaster.ca/univsec/policy/AcademicIntegrity.pdf Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a

notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located on the website above.

The following illustrates only three forms of academic dishonesty:

- ➤ Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
- ➤ Improper collaboration in group work.
- > Copying or using unauthorized aids in tests and examinations.

Course Modifications

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

Student Accessibility Services: http://sas.mcmaster.ca MUSC-B107 905-525-9140 x28652

NOTE: Disclosure of disability-related information is personal and confidential. Student Accessibility Services offers various supports for students with disabilities. We work with full time and part time students. SAS provides or assists students with their academic and disability-related needs, including: Learning Strategies, Assistive Technologies, Test & Exam Administration, Note-Taking Programs, Classroom Accommodations. Please inform the instructor if there are disability needs that are not being met.

McMaster University Policy on Academic Accommodation of Students with Disabilities & McMaster University Anti-Discrimination Policy

• http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf

Student Success Centre: http://studentssuccess.mcmaster.ca GH-110 905-525-9140 x24254 Provides the following services: student orientation, academic skills, leadership, service-learning, volunteerism, educational planning, employment and career transition.

Student Wellness Centre http://wellness.mcmaster.ca/ MUSC-B101& B106 905-525-9140 x27700

Provides services in: Personal and Psychological Counseling, Mental Health Support, Medical and Health Services