A CRITICAL MOMENT
Sex/Gender Research at the Intersections of Culture, Brain, and Behavior

FPR-UCLA 2015 Conference | October 23–24, 2015
This conference occurs at a critical juncture in sex/gender research in neuroscience, anthropology, psychology, and related disciplines. New theories are utilizing a conception of the brain as dynamic, plastic, and adaptable, and of sex/gender brain and behavioral differences as subject to the influence of a broad range of biological, cultural, and social or environmental factors.

In organizing this conference, our aim is to bring the neuro- and social sciences together to consider three cross-cutting questions: Why now? What’s fixed, changeable, changing? What makes a difference and why?

With special thanks to:
Beate Ritz, Marie-Françoise Chesselet, Catherine Weston

Cover image: The Tourist by Yulonda Rios courtesy of the artist.

Visit us at www.thefpr.org and @thefpr_org
CONFERENCE-AT-A-GLANCE

FRIDAY, OCTOBER 23

6:30-8:00  Breakfast

**PART I: WHY NOW?**

8:45–9:00  Opening Remarks
9:00–10:45  Session 1: Introduction
10:45–11:15  Coffee Break
11:15–12:30  Session 1 continued
12:30–2:00  Lunch and Film Screening of *Bitter Honey*

**PART 2: WHAT’S FIXED, CHANGEABLE, CHANGING?**

2:00–3:50  Session 2: Evolutionary, Environmental, and Cultural Contexts of Sex/Gender Differences in Brain & Behavior
3:50–4:20  Coffee Break
4:20–5:15  Session 2 continued
5:15  Day One adjourns

SATURDAY, OCTOBER 24

8:35–10:15  Session 3: Intimacies—Toward a Culture-Brain-Behavioral Understanding of Partnerships, Marriage, Sexual Orientations, Desires, and Practices
10:15–10:45  Coffee Break
10:45–11:15  Session 3 continued

**PART 3: WHAT MAKES A DIFFERENCE AND WHY?**

11:15–12:05  Session 4: What Counts as Adequate Function?
12:05–1:30  Lunch
1:30–2:30  Session 4 continued
2:30–3:20  Session 5: Sex/Gender and Systems of Power
3:20–3:50  Coffee Break
3:50–5:30  Session 5 continued
5:30  Conference adjourns
Dear Colleagues,

As president of The Foundation for Psychocultural Research, I am delighted to welcome you to the 6th FPR-UCLA interdisciplinary conference *A Critical Moment: Sex/Gender Research at the Intersections of Culture, Brain, and Behavior*.

The topic of this year’s conference reflects the foundation’s commitment to support a community of neuroscientists, anthropologists, psychologists, and historians who use a wide range of methods to shed light on our psychobiological understandings of sex/gender and sexuality in a cultural context. This year’s conference promises to be one of our most exciting and rewarding programs yet.

I would also like to thank this conference’s three co-chairs: Art Arnold, Gil Herdt, and Carol Worthman, who have done a superb job in assembling a truly exceptional group of speakers and panelists.

The FPR was established in 1999 to support and advance interdisciplinary and integrative research and training on the interactions between culture, neuroscience, psychiatry, and psychology.

Our primary objective is to help articulate and support the creation of transformative paradigms that address issues of fundamental clinical and social concern. We implement this through research and research training programs as well as workshops, conferences, and publications that allow participants to think across disciplinary boundaries. I would like to take this opportunity to thank our FPR board members—Carole Browner, Marie Françoise Chesselet, Doug Hollan, Marjorie Kagawa-Singer, Steve López, Marv Kano, and Beate Ritz—for helping to organize this conference and more generally for their dedication to our mission.

Finally, on behalf of the conference organizing committee, we thank UCLA for their continued support of these events.

Sincerely,

ROBERT LEMELSON, PHD
FPR FOUNDER AND PRESIDENT
Dear Conference Participants,

We would like to extend a warm welcome on behalf of the FPR board and staff to the 6th FPR-UCLA interdisciplinary conference *A Critical Moment: Sex/Gender Research at the Intersections of Culture, Brain, and Behavior*. We hope you enjoy what is certain to be a stimulating experience!

This handbook contains the program, abstracts, profiles of speakers, and some logistical information.

Kindly note that on the last page of the program, you will find a map indicating key locations and information about meals.

We hope you enjoy what is certain to be a stimulating experience!

We will also be handing out an evaluation form. Please return the completed form to the registration desk on your last day of attendance.

If you have any questions during the conference, please do not hesitate to ask one of our staff members at the registration desk.

With kind regards,

Ir. Irene Sukwandi, MAE, Director
Constance Cummings, PhD, Project Director
Mamie Wong, PhD, Program Officer
• Robert Lemelson, PhD  
Associate Adjunct Professor, Department of Anthropology, UCLA • Founder and President, the FPR

• Carole H. Browner, PhD, MPH  
Distinguished Research Professor, Center for Culture and Health, Semel Institute for Neuroscience and Human Behavior, Departments of Anthropology and Gender Studies, UCLA • Member of the FPR Advisory Board

• Marie-Françoise S. Chesselet, MD, PhD  
Charles H. Markham Professor of Neurology, Distinguished Professor of Neurology and of Neurobiology, Interim Chair, Department of Neurology, School of Medicine, UCLA • Member of the FPR Advisory Board

• Douglas Hollan, PhD  
Professor and Former Chair, Department of Anthropology, UCLA • Senior Instructor, Southern California Psychoanalytic Institute • Editor of Book Series, Society for Psychological Anthropology • Member of the FPR Board of Directors • Co-Director (with Steven López), FPR-UCLA Center for Culture, Brain, Development, and Mental Health • Member of the FPR Advisory Board and the FPR Board of Directors

• Marvin Karno, MD  
Professor Emeritus, Department of Psychiatry and Biobehavioral Sciences, UCLA • Member of the FPR Advisory Board and the FPR Board of Directors

• Steven R. López, PhD  
Professor, Department of Psychology and School of Social Work, University of Southern California • Co-Director (with Douglas Hollan), FPR-UCLA Center for Culture, Brain, Development, and Mental Health • Member of the FPR Advisory Board

• Beate Ritz, MD, PhD  
Chair, Department of Epidemiology • Professor of Epidemiology, Environmental Health Sciences, and Neurology, Schools of Public Health and Medicine, UCLA • Member of the FPR Advisory Board and the FPR Board of Directors

• Marjorie Kagawa-Singer, PhD, MA, MN, RN, FAAN  
Professor, Department of Community Health Sciences, School of Public Health and Asian American Studies, UCLA • Senior Editor, AAPI Nexus Journal • Member of the FPR Advisory Board
CONFERENCE CO-CHAIRS

ART ARNOLD
Art Arnold, PhD, is Director of the Laboratory of Neuroendocrinology at UCLA. The Arnold lab studies biological factors that make males and females different.

Bio on page 28

GILBERT HERDT
Gilbert Herdt, PhD, is Founding Director and Professor in the Graduate Program in Human Sexuality at the California Institute for Integral Studies and Professor Emeritus of the Department of Sexuality Studies at San Francisco State University.

Bio on page 33

CAROL M. WORTHMAN
Carol M. Worthman, PhD, currently holds the Samuel Candler Dobbs Chair in the Department of Anthropology at Emory University, where she also directs the Laboratory for Comparative Human Biology.

Bio on page 38
PART I: Why Now?
Chair: Art Arnold, PhD, Director, Laboratory of Neuroendocrinology, Brain Research Institute, UCLA

8:45–9:00 Opening Remarks
Robert Lemelson, PhD, Founder and President, The FPR; Associate Adjunct Professor, Department of Anthropology, UCLA

Session 1: Introduction

9:00–9:45 Keynote Presentation: Gender as Process, Not Trait: Dynamic Systems Approaches to the Origins of Difference in Infancy
Anne Fausto-Sterling, PhD, Nancy Duke Lewis Professor Emerita of Biology and Gender Studies, Brown University

9:45–10:15 Recent Discoveries and Opportunities for Improved Understanding of Sex-Biasing Biological Factors
Art Arnold, PhD, Director, Laboratory of Neuroendocrinology, Brain Research Institute, UCLA

10:15–10:45 Conceptualizing Sex Differences in the Human Genome
Sarah Richardson, PhD, John L. Loeb Associate Professor of the Social Sciences, Harvard University

10:45–11:15 Coffee Break
11:15–11:50  From Ritual Sex to Sexual Individuality: Sambia Sexual Culture Change Over 40 Years
Gilbert Herdt, PhD, Founding Director and Professor, Graduate Program in Human Sexuality, California Institute for Integral Studies

11:50–12:30  Panel Discussion
Art Arnold, Anne Fausto-Sterling, Gilbert Herdt, Sarah Richardson, Carol M. Worthman

12:30–2:00  Lunch and film screening of Bitter Honey: Polygamy in Bali (81 mins; NRB auditorium), Robert Lemelson, Producer and Director

PART 2:  WHAT’S FIXED, CHANGEABLE, CHANGING?
Chair: Gilbert Herdt, PhD, California Institute for Integral Studies

Session 2: Evolutionary, Environmental, and Cultural Contexts of Sex/Gender Differences in Brain & Behavior

2:00–2:25  A Life History Theory Perspective on Neural, Hormonal, and Genetic Correlates of Variation in Human Paternal Behavior
James Rilling, PhD, Winship Distinguished Research Professor, Department of Anthropology, Emory University

2:25–2:50  Prenatal Stress and the “3-Hit” Theory of Autism
Donald Pfaff, PhD, Professor, Laboratory of Neurobiology and Behavior, The Rockefeller University

2:50–3:50  Film screening, Tales of the Waria (57 mins; Transgender Women in Indonesia)
Kathy Huang, MA, Filmmaker

3:50–4:20  Coffee Break

4:20–4:45  Gender Roles in Mpimbwe: Re-evaluating Bateman's Gradient
Monique Borgerhoff Mulder, PhD, Professor, Department of Anthropology, UC Davis

4:45–5:15  Panel Discussion
Gilbert Herdt, Kathy Huang, Robert Lemelson, Monique Borgerhoff Mulder, Donald Pfaff, James Rilling
PART 2  WHAT’S FIXED, CHANGEABLE, CHANGING? (CONT’D)
Chair: Gilbert Herdt, PhD, California Institute for Integral Studies

Session 3: Intimacies – Toward a Culture-Brain-Behavioral Understanding of Partnerships, Marriage, Sexual Orientations, Desires, and Practices

8:35–9:00  An Evolutionary Perspective on Sexual Orientation, Same-Sex Attraction, and Affiliation
Daniel Fessler, PhD, Professor, Department of Anthropology, UCLA

9:00–9:25  Social Neuroendocrinology, Gender/Sex, and Sexual Desire: Testosterone as Socially Constructed and Evolved
Sari van Anders, PhD, Associate Professor, Psychology & Women’s Studies, University of Michigan

9:25–9:50  Where Does Sexual Orientation Reside?
Lisa M. Diamond, PhD, Professor of Psychology and Gender Studies, Department of Psychology, University of Utah

9:50–10:15  Technology and Globalization: Emergent Intersections of Culture, Brain, and Behavior
Tom Boellstorff, PhD, Professor, Department of Anthropology, UC Irvine

10:15–10:45  Coffee Break

10:45–11:15  Panel Discussion
Sari van Anders, Tom Boellstorff, Lisa M. Diamond, Daniel Fessler, Gilbert Herdt
PART 3: WHAT’S AT STAKE? WHAT MAKES A DIFFERENCE AND WHY?

Chair: Carol M. Worthman, PhD, Samuel Candler Dobbs Professor of Anthropology, Emory University

Session 4: What Counts as Adequate Function?

11:15–11:40  Early Androgen Exposure and Human Gender Development: Outcomes and Mechanisms
Melissa Hines, PhD, Professor, Department of Psychology, University of Cambridge

11:40–12:05  Embodied Capital and the Sexual Division of Labor: Evolution at Multiple Time Scales
Hillard Kaplan, PhD, Professor, Department of Anthropology, University of New Mexico

12:05–1:30  Lunch

1:30–1:55  Male Infertility, Assisted Reproductive Technologies, and Emergent Masculinities in the Arab World
Marcia Inhorn, PhD, MPH, William K. Lanman Jr. Professor of Anthropology and International Affairs, Department of Anthropology, Yale University

1:55–2:30  Panel Discussion
Melissa Hines, Marcia Inhorn, Hillard Kaplan, Carol M. Worthman

Session 5: Sex/Gender and Systems of Power

2:30–2:55  Neoliberalism and the Punitive Turn in Southeast Asia: Implications for Gender, Sexuality, and Graduated Pluralism
Michael Peletz, PhD, Professor, Department of Anthropology, Emory University
Carole H. Browner, PhD, MPH, Distinguished Research Professor, Center for Culture and Health, Semel Institute for Neuroscience and Human Behavior; Departments of Anthropology and Gender Studies, UCLA; Member of the FPR Advisory Board

3:20–3:50  Coffee Break

3:50–4:15  Intimate Partner Violence Against Women
Karen Devries, BSc, PhD, Lecturer in Social Epidemiology, Gender, Violence and Health Centre, Department of Global Health and Development, London School of Hygiene and Tropical Medicine

4:15–4:40  Naturalizing Male Violence and Sexuality
Matthew Gutmann, PhD, MPH, Professor of Anthropology and Faculty Fellow, Watson Institute for International Studies, Brown University

4:40–5:15  Panel Discussion
Carole Browner, Karen Devries, Matthew Gutmann, Michael Peletz, Carol Worthman

5:15–5:30  Final Remarks
Gilbert Herdt, PhD, Founding Director and Professor, Graduate Program in Human Sexuality, California Institute for Integral Studies

5:30  Conference Adjourns
KEYNOTE

Gender as Process, Not Trait: Dynamic Systems Approaches to the Origins of Difference in Infancy

Anne Fausto-Sterling, PhD, Nancy Duke Lewis Professor Emerita of Biology and Gender Studies, Brown University

My ambition is to restructure dichotomous conversations in order to enable an understanding of the inseparability of nature/nurture. My current case studies examine the emergence of gender differences in behavior in infancy. Specifically, I am conducting an empirical study to tease apart how even very early sex-related differences emerge from dyadic (parent–infant) patterns of behavior. For the big three—oft cited—early differences (vocalization, motor activity, and toy preference) there is no moment at which a pre-existing nature can be viewed separately from a simultaneously existing nurture. The question is, how can we profitably study the dynamics of emergent behaviors and emergent arenas of difference without falling into dichotomous patterns of analysis.

SESSION 1

Recent Discoveries and Opportunities for Improved Understanding of Sex-Biasing Biological Factors

Art Arnold, PhD, Director, Laboratory of Neuroendocrinology, Brain Research Institute; Distinguished Professor, Department of Integrative Biology & Physiology, UCLA; Editor-in-Chief, Biology of Sex Differences; Conference Co-Chair

Sex differences in mind and body are caused by a bewildering interaction of biological and environmental forces. Our biology sculpts the environments in which we exist, and the environments in turn have profound physical effects on our genome, altering the biological instructions passed from our ancestors. Genome and environment cannot be understood except through an appreciation of the other. Understanding the sex differences, embedded within our genomes, starts with a consideration
of the sex chromosomes, X and Y, both of which are unequally represented in females and males, and both of which independently cause sex differences in physiology and disease. Some sex-biased biological factors counteract the effects of others, reducing sex differences rather than enhancing them. The biological factors influence each other via numerous mechanisms, including epigenetic modification of the genome. The same epigenetic mechanisms are also sensitive to the social environments that are gendered and considerably different for the two sexes. Although little is known about the epigenetic effects of the gendered environments, the research tools are in place to begin to decipher how environments change the readout of the genome. Hopefully these tools will help achieve a better appreciation of the interplay of genes and environments in creating sex and gender differences.

Conceptualizing Sex Differences in the Human Genome

Sarah S. Richardson, PhD, John L. Loeb Associate Professor of the Social Sciences, Harvard University

Does every cell have a sex? Do males and females have different genomes? These questions are more complex and beguiling than they may first appear. The answers depend not only on empirical data, but also on one’s conceptions of “sex” and of the “genome.” They also reflect often-unarticulated assumptions about the explanatory aims of the sciences of sex. Conceptions of sex differences in the human genome have shifted significantly over time. The discovery of the sex chromosomes at the turn of the twentieth century instigated a historically novel understanding of the biology of sex determination, rooted in the visually compelling binary of the X and Y chromosomes. Today, postgenomic models of sex differences in the human genome postulate sex as a ubiquitous factor in the substructure of gene-environment interactions, imbuing the whole body with networked processes that are sexed—and greatly multiplying the molecular signs and signifiers of biological sex. Using insights from the history and philosophy of science, this talk offers a conceptual analysis of central contestations around the nature and extent of human sex differences in the human genome.
From Ritual Sex to Sexual Individuality: Sambia Sexual Culture Change Over 40 Years

Gilbert Herdt, PhD, Founding Director and Professor, Graduate Program in Human Sexuality, California Institute for Integral Studies; Emeritus Director, National Sexuality Resource Center; Professor of Sexuality and Anthropology, San Francisco State University

In two short generations the Sambia of Papua New Guinea experienced the most extraordinary transition, from constant warfare and ritual-controlled sexuality to contemporary individual-centered sexual meanings and relationships. Based upon long-term anthropological fieldwork [1974–2010] and a humanistic eye both to detail and the big picture, this study reveals how Sambia sexual socialization and desire were grounded through ritual initiation and male-dominated arranged marriages in traditional warrior life, including prescribed secret homoerotic practices for all males. Male sexual fluidity resulted from this regime, enigmatically providing the resources young males needed to navigate a tight-jacket system of ritual-based initiation advancements and arranged marital obligations. However, this ancient form of human development fell away in the colonial context of evolving interpersonal and individual norms, subjectivities, and behavioral development, as evangelical Christian practice revolutionized gendered and sexual relationships through socio-economic development and primary schooling, thus greatly empowering young women in their selection of mates and female preference for “luv” marriage and vaginal over oral sex found in male/male and male/female relationships. Although this overall sexual outcome superficially resembles everyday plain vanilla “date and mate” relationships in modern life, today’s Sambia psychosexual reality is actually more complex because of a powerful inter-generational struggle over the meaning of “good” versus “bad” sexual practice. The Sambia have proved themselves resilient as individuals in this historic transformation, even as their traditional sexuality and hegemonic male rituals have not. Sambia male sexual fluidity in particular was an ancient and extreme adaptation to war and reproductive selective pressure, an expression of human sexual plasticity not so difficult to create in other human groups; but the practice became increasingly problematic to control and keep secret, and ritual sex is now a suppressed history as
the Sambia make their way into the dreary marketplace of global twenty-first century individualism. This evolution and/or revolutionary transformation among the Sambia raises perennial questions regarding the plasticity and innateness of human nature and culture.

**Bitter Honey** (film; 81 mins)

Robert Lemelson, PhD, Founder and President, The Foundation for Psychocultural Research; Associate Adjunct Professor, Department of Anthropology, UCLA

*Bitter Honey* is a feature-length documentary presenting an intimate and emotionally charged portrait of three polygamous families in Bali, Indonesia. Following these families over a seven-year period, the film portrays the plight of Balinese co-wives, for whom marriage is frequently characterized by psychological manipulation, infidelity, domestic violence, and economic hardship. Living in a society where men have authority in many domains, these women have little voice in steering or protesting the conditions of their domestic lives. *Bitter Honey* draws attention to their struggle, documents the work of those taking steps to better protect and empower them, and aims to trigger a wider conversation about contemporary polygamy and women’s rights in Indonesia.

### SESSION 2

**A Life History Theory Perspective on Neural, Hormonal and Genetic Correlates of Variation in Human Paternal Behavior**

James Rilling, PhD, Winship Distinguished Research Professor, Department of Anthropology, Emory University

Compared with maternal caregiving, paternal caregiving is highly variable across species, across human cultures, and among men within any given culture. I will briefly survey variation in paternal behavior across species and cultures, identifying factors associated with higher levels of male caregiving. While paternal provisioning and protection are cross-culturally ubiquitous, direct forms of paternal caregiving are more variable. In our own society, social structural influences place greater direct caregiving demands upon men, and there is good evidence that children benefit from this paternal involvement in terms of social, psychological, and educational outcomes. Yet, men vary in their desire
and ability to embrace the direct caregiving role. While acknowledging the critical influence of non-biological factors, I will use life history theory to attempt to explain variation in male parental caregiving. I will also present hormonal and neuroimaging data from our own lab and others that is consistent with this theory.

**Prenatal Stress and the “3-Hit” Theory of Autism**

Sara Schaalmsma, PhD, Visiting Fellow, and Donald Pfaff, PhD, Professor, Laboratory of Neurobiology and Behavior, The Rockefeller University, New York, NY

Sex differences comprise a prominent aspect of the behavioral biology of animals, but they tend to become very subtle as they proceed from those behaviors essential for reproduction toward those that are not connected with reproduction. Robust mechanistic explanations of sex differences in brain mechanisms and behavior have classically depended on the effects of testosterone and its metabolites. However, the thinking and experimental work of Arthur Arnold (UCLA; Conference Co-Chair) raised the concept of genetic contributions to sex differences independent of testosterone itself (Trends in Genetics, 2012). Beyond having a history of explaining sexually differentiated behaviors (summarized in Man and Woman: An Inside Story, Oxford University Press, 2010), we were drawn to study the large sex difference in autism (80 percent boys), the most prominent biological constant in the huge range of autism spectrum disorders. Our initial approach resulted in a “3-hit” theory of the sex difference: sex x early stress x genetic mutation (Autism Research, 2011). However, that theory was largely testosterone-based, and our subsequent and broader views of sex differences in brain and behavior, influenced by Arnold, were recently published (Frontiers in Neuroendocrinology, 2014). To test the 3-hit theory we used (1) the autism-related CNTNAP2 mutation published by the Geschwind lab; (2) early prenatal stress (first trimester); and (3) comparisons of males with female mice. On the one hand, we have behavioral data that fit the 3-hit theory, and can string together mRNA evidence and epigenomic (histone modification) evidence gathered from the same mice, in order to sketch a potential causal chain of events. On the other hand, not all of our data fit the theory, and we would not argue for the exclusion of other causal factors.
**Tales of the Waria** (film; 57 mins)

Kathy Huang, MA, Filmmaker

At a time when transgender communities around the world are largely ignored or misrepresented in the media, the 60-minute documentary video *Tales of the Waria* intimately explores how one such community confronts issues of love, family, and faith. Traveling to Indonesia, the world’s most populated Muslim country, the film trains its lens on the *warias*, biological men who identify as women and are a surprisingly visible presence in a culture normally associated with strict gender divides. Interweaving the stories of several warias who make extraordinary sacrifices for love, *Tales of the Waria* creates a moving and unexpected portrait of a community that dares to live differently from the norm, despite what consequences may await them.

**Gender Roles in Mpimbwe: Re-evaluating Bateman’s Gradient**

Monique Borgerhoff Mulder, PhD, Professor, Department of Anthropology, UC Davis

In 1948, Angus J. Bateman reported a stronger relationship between mating and reproductive success in male fruit flies compared with females, and concluded that selection should universally favor “an undiscriminating eagerness in the males and a discriminating passivity in the females” to obtain mates. The conventional view of promiscuous, undiscriminating males and coy, choosy females has also been applied to our own species. Here, following the lead of many, I challenge the view that evolutionary theory prescribes stereotypic sex roles in human beings. I present an analysis of Bateman’s gradient using 20 years of longitudinal and cross-sectional data from a Pimbwe community in western Tanzania, to show how, although men enjoy more partner years than do women, women benefit more (in terms of the production of surviving offspring) from multiple spouses than do men. I end with an evaluation of theoretical developments in behavioral ecology that will shape investigations into the explanation of this curious pattern.
An Evolutionary Perspective on Sexual Orientation, Same-Sex Attraction, and Affiliation

Daniel Fessler, PhD, Professor, Department of Anthropology, UCLA

A heritable propensity to be primarily or exclusively sexually attracted to members of the same sex poses a Darwinian puzzle. Although existing evolutionary accounts can explain pieces of this puzzle, substantial portions remain unexplained. Drawing on cross-cultural and cross-species comparisons, I will suggest that, while subject to substantial developmental plasticity (and thus environmental influence), the most common human phenotype includes the capacity for attraction to both sexes, with the trait being controlled by many genetic loci, each of which makes only a small contribution. The affiliation hypothesis of homoerotic attraction posits that, in ancestral human populations, the capacity for same-sex attraction enhanced fitness by furthering alliance formation. Consonant with this hypothesis, results from two studies of self-identified heterosexual American college students reveal a link between attitudes toward homoerotic behavior, a putative hormonal correlate of affiliation, and the need for alliance formation. This emerging portrait of human sexuality is inconsistent with the two folk models of sexual orientation promulgated, respectively, by liberals and conservatives in the U.S., challenging the public to rethink a number of important contemporary social issues.

Social Neuroendocrinology, Gender/Sex, and Sexual Desire: Testosterone as Socially Constructed and Evolved

Sari van Anders, PhD, Associate Professor, Psychology & Women’s Studies, University of Michigan

Social neuroendocrinology is a way to ask hormonal questions that have both social construction and evolution in their answers. Drawing upon empirical and theoretical work from my lab about sexual desire, I will detail how multimethod and feminist science research provides novel and transformative insights into the evolved social functions of testosterone. This human research demonstrates the decoupling of testosterone from masculinity and links it, instead, with constructs detailed in the Steroid/Peptide Theory of Social Bonds (van Anders et al., 2011).
I will highlight how attending to gender/sex in empirical research as simultaneously socialized and biomaterial provides new and powerful ways of conducting socially situated bioscience. In doing so, I articulate a way to provide space for the potential importance of gender/sex without presuming it. Throughout the talk, I will also highlight the value of attending to gender and sexual diversity, and discuss the implications of this research for understandings of sexual desire.

Where Does Sexual Orientation Reside?
Lisa M. Diamond, PhD, Professor of Psychology and Gender Studies, Department of Psychology, University of Utah

Research over the past decade has produced increasing evidence that both men and women possess a capacity for sexual fluidity, defined as situational and contextual variability in the experience and expression of same-sex and other-sex sexuality over the life course. As a result of sexual fluidity, sexual orientation (i.e., one’s general predisposition to experience attractions for the same sex, the other sex, or both sexes) does not rigidly circumscribe the types of attractions that one might experience over the life course, or the types of sexual and affectional relationships that one may find satisfying. This introduces considerable complexity into the study of sexual orientation: Specifically, if sexual orientation is not the primary factor determining one’s sexual attractions or one’s capacity for sexual arousal, then how can we even identify sexual orientation? If an individual experiences a strong same-sex attraction, how do we know whether this attraction signals a generalized same-sex orientation or a situation-specific manifestation of sexual fluidity? In this presentation I will outline the theoretical and scientific importance of this question and present data from my program of biobehavioral research suggesting hormonal differences between “orientation-based” attractions and “fluidity-based” attractions may concern their hormonal correlates.
Technology and Globalization: Emergent Intersections of Culture, Brain, and Behavior

Tom Boellstorff, PhD, Professor, University of California, Irvine

This talk synthesizes and extends three research projects: one on gay, lesbi, and waria Indonesians (as detailed in the books *The Gay Archipelago: Sexuality and Nation in Indonesia* and *A Coincidence of Desires: Anthropology, Queer Studies, Indonesia*), one on culture in virtual worlds (as detailed in the books *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*, and *Ethnography and Virtual Worlds: A Handbook of Method*, and *Data, Now Bigger and Better!*), and a current NSF-funded project on disability and embodiment in virtual worlds. From these projects I will briefly discuss five topics which in my view can contribute to agendas in sexuality and gender research: (1) The particular status of sexuality/gender as domains of the human; (2) the relation between sexuality/gender and spatial scale; (3) the historicity of sexuality/gender, particularly with regard to colonialism and capitalism; (4) the immanence of technology to sexuality/gender; and (5) emergent relationships between the digital/virtual and sexuality/gender, particularly with regard to embodiment, intimacy, and the category of the “real.”

SESSION 4

Early Androgen Exposure and Human Gender Development: Outcomes and Mechanisms

Melissa Hines, PhD, Professor, Department of Psychology, University of Cambridge, UK

Thousands of experimental studies in non-human species have documented the important role of testosterone in sexual differentiation of the mammalian brain and subsequent behavior. These studies suggest that testosterone influences basic processes of neural development, such as cell survival and neural connectivity, early in life, and that these early neural changes produce enduring changes in gender-related behavior. In human beings, early exposure to testosterone also influences the development of gender-related behavior, contributing to behavioral differences between the sexes, as well as individual differences within each sex. The behaviors that are influenced include gender identity, sexual orientation, and childhood gender-typed toy, playmate, and activity choices, with the influences on children’s gender-typed
play being particularly robust. Children's gender-typed play also is influenced by other factors, however, including postnatal socialization and processes related to cognitive understanding of gender. This presentation will explore various mechanisms that could underlie the influence of early testosterone exposure on children's gender-typed play. Conclusions include: (1) Testosterone contributes to the development of human gender-related behavior, but is unlikely to act solely by influencing neural development prenatally. (2) Neurobehavioral sexual differentiation is multi-dimensional, and different types of factors appear to contribute differently to each dimension. (3) A next step is elucidating the mechanisms by which testosterone influences specific aspects of human gender-related behavior.

Embodied Capital and the Sexual Division of Labor: Evolution at Multiple Time Scales

Hillard Kaplan, PhD, Professor, Department of Anthropology, University of New Mexico

The paper reviews data on physiological and behavior investments in cognitive and somatic capital in economies based on foraging or a mix of foraging and horticulture. The review examines how both short and long term payoffs affect optimal physiological and behavioral phenotypes for men and women. Developmental commitments that evolve over many generations appear to interact with current ecological, social, and economic conditions in determining the actual division of labor and its variation within and among societies. The implications of these considerations for the future are then discussed.

Male Infertility, Assisted Reproductive Technologies, and Emergent Masculinities in the Arab World

Marcia Inhorn, PhD, MPH, William K. Lanman Jr. Professor of Anthropology and International Affairs, Department of Anthropology, Yale University

Contrary to popular expectation, male infertility is the world's most common form of infertility, contributing to more than half of all cases of childlessness around the globe. In the twenty-first century, men
in a variety of national settings are engaging in high-tech forms of assisted reproduction to overcome their childlessness. Indeed, the gender relations surrounding infertility appear to have changed significantly over time, as diagnostic semen analysis techniques and assisted reproductive technologies (ARTs) spread around the globe. Overall, ARTs appear to be changing gender relations in several positive ways through: (1) increased knowledge of both male and female infertility among the general population; (2) normalization of both male and female infertility problems as medical conditions that can be overcome; (3) decreased stigma, blame, and social suffering for both men and women; (4) increased marital commitment as husbands and wives seek ART services together; and (5) increased male adoption of ARTs, especially for male infertility problems. In other words, the coming of ARTs to previously ART-poor settings can lead to major, positive impacts on sex/gender systems more generally. Nowhere is this more apparent than in the Middle East, a region that has witnessed a true proliferation of ART services over the past three decades. Through in-depth ethnography undertaken in ART clinics in four countries, this paper captures the “emergent masculinities” of ordinary Middle Eastern men as they struggle to overcome their infertility and childlessness through ARTs. Although few Middle Eastern Muslim men are willing to accept sperm donation or the social fatherhood of donor children, they are nonetheless rethinking manhood and the imperative of biogenetic fatherhood as they undertake transnational quests for conception with wives they love. In forwarding the trope of “emergent masculinities” to capture these new norms and forms of masculine practice, this paper questions taken-for-granted assumptions about Middle Eastern men as men in an era of emerging science and technology.

**SESSION 5**

**Neoliberalism and the Punitive Turn in Southeast Asia: Implications for Gender, Sexuality, and Graduated Pluralism**

Michael G. Peletz, PhD, Professor, Department of Anthropology, Emory University

This paper draws on long-term ethnographic research spanning the period 1978–2013 and has three goals. First, to illustrate how neoliberalism and the punitive cultural-political turn that commonly goes hand-in-hand with it have informed dynamics of gender and sexuality in Southeast Asia, particularly Malaysia and Indonesia. Second, to
engage some of the ways that far-reaching but invariably uneven global processes help shape and give meaning to the intimate and embodied lives of variably situated social actors on the ground. And third, to elucidate how the concepts of “gender pluralism” and “graduated pluralism” that I have developed elsewhere (Peletz, 2009) can facilitate our understanding of these dynamics.

The Politics of Reproduction: Evolutionary Perspectives, Contemporary Realities

Carole H. Browner, PhD, MPH, Distinguished Research Professor, Center for Culture and Health, Semel Institute for Neuroscience and Human Behavior; Departments of Anthropology and Gender Studies, UCLA; Member of the FPR Advisory Board

While societies necessarily hold stakes in their own perpetuation, the extent to which their female members have managed to control their bodily integrity and reproduction has varied throughout time and place. I will discuss the circumstances under which women have succeeded in maintaining control over their bodies, often despite severe societal strictures. In so doing, I offer an analysis of the impact of contemporary population policies, biopower, biopolitics, and neoliberalism in enabling or deterring women from exercising reproductive autonomy. My conclusions will reflect upon global challenges to women's reproductive freedom today and consider whether a comprehensive notion of reproductive justice provides a viable framework for understanding the broad range of threats to reproductive autonomy and the means to overcome them.

Intimate Partner Violence Against Women

Karen Devries, BSc, PhD, Senior Lecturer in Social Epidemiology, Gender, Violence and Health Centre, Department of Global Health and Development, London School of Hygiene and Tropical Medicine

Back in the nineteenth century, the eminent sociologist Emile Durkheim decided that suicide rates were lower among women because the protective respite of the domestic sphere seemed to have a calming and stabilizing influence on mental health. Indeed, for men, it seems that being married is protective against poor mental health outcomes. But new data paints a different picture about what things are actually
like at home, for women. I will present results of a recent global study we conducted to examine the prevalence and health effects of intimate partner violence against women. We showed that fully 30 percent of women will experience physical and/or sexual violence from an intimate partner at some point in their lifetime. Yet, there is considerable variation across regions in levels of violence. Drawing on this study and other recent work, I will discuss whether or not this form of male violence against women is inevitable.

**Naturalizing Male Violence and Sexuality**

Matthew Gutmann, PhD, MPH, Professor, Department of Anthropology; Faculty Fellow, Watson Institute; Director, Brown International Advanced Research Institutes (BIARI), Brown University

I will explore popular enthusiasm for putative scientific beliefs that men have minimal control over their sexual and violent “natures” and that they must be managed and restrained, usually by societal restrictions, and by the women in their lives. A folk biological narrative can be compelling when trying to understand gendered undercurrents in biological explanations about human behavior pervasive today in various societies. Nonetheless the biology of maleness may be more remarked upon than understood, and why and how analytic frames referencing heredity, genes, and hormones hold sway in the popular imaginary in three societies (China, Mexico, and the United States) at this particular historical moment rests on more than simply the credibility of scientific discovery.
**Sari van Anders, PhD**

Associate Professor, Psychology & Women's Studies, University of Michigan

Sari van Anders, PhD, is Associate Professor of Women’s Studies and Psychology at the University of Michigan, and Affiliate Faculty in Neuroscience, Reproductive Sciences, the Biosocial Methods Collaborative, and Science, Technology, and Society. Dr. van Anders is Editor of the *Annual Review of Sex Research*, and on the editorial boards of four other journals related to sexuality, gender, and/or evolution. Dr. van Anders studies social modulation of hormones, sexuality and intimacy, and gender/sex and sexual diversity, using a feminist science lens, and has published over 60 papers related to these topics. Dr. van Anders was named a “Scientist to Watch” by *The Scientist* magazine in 2014, and has won multiple awards for this research program, including the Association for Psychological Science’s 2013 Janet Taylor Spence Award for Transformative Early Career Contributions, the 2014 Society for Behavioral Neuroendocrinology’s Frank Beach Early Career Award, and the Society for the Scientific Study of Sexuality’s 2012 Ira and Harriet Reiss Theory Award. Dr. van Anders’ work is supported by grants from the National Institutes of Health, the Canadian Institute of Health Research, and various other private and university sources. Dr. van Anders’ current work focuses on how various forms of intimacy and gendered behavior modulate testosterone (grounded in the Steroid/Peptide Theory of Social Bonds, van Anders et al., 2011), conceptualization of sexual diversity (grounded in Sexual Configurations Theory, van Anders, 2015), and other projects related to sexuality, hormones, and feminist science using multiple methods ranging from experiments to qualitative interviews. Dr. van Anders also founded and edits GapJunctionScience.org, a website about feminist science.
Art Arnold, PhD, Director, Laboratory of Neuroendocrinology, Brain Research Institute; Distinguished Professor, Department of Integrative Biology & Physiology, UCLA; Editor-in-Chief, Biology of Sex Differences; FPR-UCLA 2015 Conference Co-Chair

The Arnold lab studies biological factors that make males and females different. Many diseases affect the two sexes differently, but the factors that cause the sex differences are poorly understood. Because one sex is often protected from a disease, it makes sense to identify the mechanisms underlying the sex difference as one strategy to find factors that are protective. These factors might be targets for novel therapies.

Most sex differences in physiology and disease are caused by sex hormones coming from the testes or ovaries. We have found, however, that some sex differences also are caused by genes on the sex chromosomes that act outside of the gonads. We are interested in constructing a general theory of sex determination and sexual differentiation that applies to any tissue.

We have used several animal models that offer significant advantages for understanding the factors that cause sex bias in physiology. One is the Four Core Genotypes model, in which the type of the gonad of the animal (testes or ovaries) is not related to its complement of sex chromosomes (XX or XY). This model allows comparing mice that have different sex chromosomes but the same type of gonad, to find traits that are influenced by the complement of sex chromosomes.

We are also interested in understanding the sexome, which is the sum of all sex-biased influences on gene networks and cell systems, studied globally.

Tom Boellstorff, PhD, Professor, Department of Anthropology, University of California, Irvine

Tom Boellstorff (PhD, Anthropology, Stanford, 2000) is Professor in the Department of Anthropology at the University of California, Irvine. From 2007–12 he was Editor-in-Chief of American Anthropologist, the flagship journal of the American Anthropological Association; he currently sits on the editorial boards of many journals, including Cultural Anthropology, Games and Culture, and Sexualities. With Bill Maurer, he is Series Editor for the Princeton Studies in Culture and Technology (Princeton University

**Monique Borgerhoff Mulder, PhD,** Professor, Department of Anthropology, University of California, Davis

I am a human behavioral ecologist working on projects relating to life history, conservation, and global patterns of cultural variation. HBE-ers explore the big “Why” questions about our species, such as why do people marry, what is the basis of gender roles in economic and social behavior, why has fertility dropped so radically in most parts of the world, why are people such poor conservationists of natural resources, and many others. I worked on these topics recently as a fellow at the Wissenschaftskolleg zu Berlin. I have three major foci of interest.

First, I do fieldwork in East Africa, both alone and with students, investigating issues relating to human life history variation, fertility, marriage, inheritance, divorce, sexual conflict, health and household economics; my current behavioral ecological research focuses on Rukwa villages in western Tanzania. Second, I co-coordinate collaborative projects on intergenerational transmission of wealth and inequality and on polygyny at the Santa Fe Institute with Sam Bowles. Third, I conduct
comparative studies of the efficacy of different strategies for conserving biodiversity and mitigating poverty in the developing world, building on *Conservation: Linking Ecology, Economics and Culture* (Princeton University Press 2005); these interests have led to my co-founding of a monitoring and evaluation NGO (Savannas Forever: Data for Development) and to a new project on cooperation and carbon trading on Pemba (Zanzibar). I also edit a book series on the Origins of Human Behavior and Culture with Joe Henrich at the University of California Press.

**Carole H. Browner, PhD, MPH,** Distinguished Research Professor, Semel Institute for Neuroscience and Human Behavior, Departments of Anthropology and Gender Studies, UCLA; Member of the FPR Advisory Board

As a sociocultural anthropologist, my research interests lie principally at the intersection of gender, reproduction, and health. One major focus has been to explicate the ways that gender-based power relations shape women’s and men’s reproductive behavior.

My research sites have included urban Colombia, rural Mexico, and the U. S. In Cali, Colombia I investigated the circumstances that led pregnant women with unintended conceptions to seek illegal abortion. In rural Mexico, I sought to understand how local political relations shape gender-based reproductive strategies. Since 1989, I have worked mainly in the U. S. on issues surrounding the medicalization of pregnancy and prenatal care, particularly the ways that prenatal genetic information may alter reproductive experience. My prize-winning collection, *Reproduction, Globalization and the State: New Theoretical and Ethnographic Perspectives* (with Carolyn Sargent) was published in 2011 by Duke University Press.

Another line of investigation has focused on the growing role of genetic testing in the field of neurology. My monograph, *Neurogenetic Diagnoses, the Power of Hope, and the Limits of Today’s Medicine*, co-authored with Mabel Preloran (Routledge, 2010), explores the diverse meanings and impacts of genetic diagnoses for patients enduring incurable, ultimately fatal neurodegenerative diseases—and for their family caregivers and clinicians. The analysis is framed by increasingly sharp social debates over the consequences of decoding the human genome—and the impact of genetic technology on our lives.

Current research examines the use and misuse of genetic testing for
the diagnosis of neurological diseases in the U.S. and Mexico, and the structural, economic, cultural and psychological barriers to care faced by families with children born with craniofacial deformities in northern Mexico.

Karen Devries, BSc, PhD, Lecturer in Social Epidemiology, Gender, Violence and Health Centre, Department of Global Health and Development, London School of Hygiene and Tropical Medicine

My current work consists of several intervention trials and evidence synthesis projects. I am currently leading a cluster RCT in Uganda to evaluate the Good School Toolkit for prevention of violence against children attending primary schools, with partners at the Institute of Education, Makerere University, and Raising Voices. I am also conducting related work on child protection in East Africa with various partners. I coordinate the GVH Centre’s involvement in Global Burden of Disease Study, and produce estimates of the prevalence of and disease burden associated with intimate partner violence and childhood sexual abuse for every region of the world. I also coordinated SASA!, a cluster-randomised trial of a violence and HIV prevention intervention in Kampala, Uganda.

Lisa M. Diamond, PhD, Professor of Psychology and Gender Studies, Department of Psychology, University of Utah

My research focuses on two distinct but related areas—the nature and development of affectional bonds and the nature and development of same-sex sexuality. The common thread uniting these lines of research is my interest in the psychological and biobehavioral processes underlying intimate relationships and their influence on emotional experience and functioning over the life course. My primary research questions are as follows: (1) what are the basic psychological and biobehavioral processes underlying the formation and functioning of affectional bonds; (2) how are these processes related to sexual desire and sexual orientation; (3) what are the implications of affectional bonding for mental and physical well-being at different stages of life? In addressing these questions, I use a diverse range of research methods, including in-depth qualitative interviews, controlled social-psychophysiologial experiments, and assessment of naturalistic interpersonal behavior.
Anne Fausto-Sterling, PhD, Nancy Duke Lewis Professor Emerita of Biology and Gender Studies, Brown University

Dr. Anne Fausto-Sterling is the Nancy Duke Lewis Professor Emerita of Biology and Gender Studies in the Department of Molecular and Cell Biology and Biochemistry at Brown University, and former director of the Science & Technology Studies Program at Brown University. Dr. Fausto-Sterling has achieved recognition for works that challenge entrenched scientific beliefs while engaging with the general public. She is the author of several acclaimed books that are referenced widely in feminist and scientific inquiry, as well as scientific publications in developmental genetics and developmental biology. Her current research on gender and mother-infant interactions applies developmental systems approaches to understanding how gendered behaviors and preferences might emerge from undifferentiated systems.

Daniel Fessler, PhD, Professor, Department of Anthropology, UCLA

I am an evolutionary anthropologist whose principal focus is contemporary humans. Combining anthropological, psychological, and biological theories and methods, I approach a variety of aspects of human behavior, experience, and health from an integrative perspective in which humans are viewed as both the products of complex evolutionary processes and the possessors of acquired cultural idea systems and behavioral patterns. My research, itself an ever-evolving process, currently focuses on a number of domains, including: emotions; disease avoidance; morality; prosociality and cooperation; conflict, aggression, and risk-taking; cultural transmission; food and eating; and sex and reproduction.

Matthew Gutmann, PhD, MPH, Professor of Anthropology and Faculty Fellow, Watson Institute for International Studies, Brown University

Matthew Gutmann is Professor of Anthropology at Brown University. His research and teaching has focused on studies of men and masculinities; public health; politics; and the military. His published books include The Meanings of Macho: Being a Man in Mexico City; The Romance of Democracy: Compliant Defiance in Mexico City; Fixing Men: Sex, Birth Control and AIDS in Mexico; and Breaking Ranks: Iraq Veterans Speak out against the War (with Catherine Lutz). Gutmann has a Master's in Public Health, and in 2008
he won the Eileen Basker Memorial Award for the best scholarly study on gender and health. He has been a visiting professor in China, France, Mexico, and Spain.

**Gilbert Herdt, PhD**, Professor and Founder, Graduate Program in Human Sexuality, California Institute for Integral Studies, FPR-UCLA 2015 Conference Co-Chair

Gilbert Herdt has an international profile and distinction that spans the United States, Australia, the Pacific Islands, and Western Europe through more than thirty years’ research, teaching, policy and clinical studies. Herdt is a graduate of Sacramento State College, the University of Washington, the Australian National University, and UCLA. He was a Fulbright Scholar to Australia (1974–78), an individual NIMH Scholar at UCLA’s Neuropsychiatric Institute, and has been the recipient of Guggenheim, NEH, and Rockefeller Foundation fellowships. He has taught at Stanford University, University of Chicago, and San Francisco State University (SFSU). He has held major grants from the NIMH, Spencer Foundation, Ford Foundation, and others. Herdt founded the Department of Sexuality Studies and the Master of Arts in Human Sexuality Studies at SFSU, the first in the nation. He is the founder of the University of Amsterdam Summer Institute on Sexuality and Culture and SFSU’s Summer Institute on Sexuality, Health and Society (2001–10). His publications include thirty-five books, monographs, and anthologies, and more than one hundred scientific papers. Herdt continues to conduct fieldwork among the Sambia and is a champion of sexual literacy and human rights in Pacific Island countries.

**Melissa Hines, PhD**, Professor, Developmental Neuroscience, University of Cambridge

I study gender development, and am particularly interested in how prenatal influences (e.g., gonadal hormones) interact with postnatal experience to shape brain development and behavior. My current research program includes studies of individuals with disorders of sex development (formerly called intersex conditions), as well as healthy individuals for whom we have measures of prenatal hormones. Behavioral outcomes of interest include gender identity, sexual orientation, aggression, empathy, mood, sextypical interests in childhood (e.g., toy preferences) and adulthood, and clinical syndromes that show sex differ-
ences. I also study infants, so that we can identify sex differences as they emerge early in life and examine their relationship to prenatal hormones and postnatal socialization. In addition, I am interested in the neural and cognitive mechanisms related to behavioral changes in these areas, as well as in animal models of human behavior.

**Kathy Huang, MA, Filmmaker, Tales of the Waria**

Kathy Huang’s career as a filmmaker began in the dusty fields of South Texas. Inspired by her experiences teaching at-risk youth in a rural high school, she produced her first documentary *Scribble’s Creations* (2004). Shot with the help of her former students, the film follows a teenager coming of age along the US–Mexico border. Since then, Kathy has continued to work with different communities to document social and humanitarian issues. Her subjects have included a charismatic drag king in San Francisco, a young veteran suffering from posttraumatic stress, and a Chinese-American beauty pageant contestant. She recently completed her first feature documentary, *Tales of the Waria* (2011). The ITVS-funded project follows a community of transgender women in Indonesia, the world’s most populous Muslim country, as they search for love and happiness. Four years in the making, the film premiered to sold-out audiences in San Francisco and Los Angeles, and garnered several Audience Choice Awards. *The Advocate* called it “a fascinating exposé” and Jezebel.com noted that the film’s “beauty and honesty are heartbreaking.” The film received a national broadcast on PBS in June 2012. Kathy received a Bachelor’s in History from Harvard University and a Master’s in Documentary Film Production from Stanford University. She is currently at work on *A Guangzhou Love Story*, an ITVS-backed project about the growing trend of marriages in China between African migrants and Chinese women.

**Marcia Inhorn, PhD, MPH, William K. Lanman Jr. Professor of Anthropology and International Affairs, Department of Anthropology, Yale University**

Marcia C. Inhorn, PhD, MPH, is the William K. Lanman, Jr. Professor of Anthropology and International Affairs in the Department of Anthropology and The Whitney and Betty MacMillan Center for International and Area Studies at Yale University. A specialist on Middle Eastern gender, religion, and health, Inhorn has conducted research on the social
impact of infertility and assisted reproductive technologies in Egypt, Lebanon, the United Arab Emirates, and Arab America over the past 30 years. She is the author of five books on the subject, including her latest, *Cosmopolitan Conceptions: IVF Sojourns in Global Dubai* (Duke University Press, 2015). She is also the (co)editor of nine books, the founding editor of the *Journal of Middle East Women’s Studies* (JMEWS), and co-editor of the Berghahn Book series on Fertility, Reproduction, and Sexuality. She has served as president of the Society for Medical Anthropology of the American Anthropological Association; on the Board of Directors of the Middle East Studies Association; and as director of Middle East centers at both Yale and University of Michigan. Inhorn has received numerous awards for her books and scholarship, including the American Anthropological Association’s Robert B. Textor and Family Prize for excellence in anticipatory anthropology; the AAA’s Eileen Basker and Diana Forsythe Prizes for outstanding anthropological research in gender, health, and biomedical technology; the JMEWS Book Award in Middle East gender studies; and the Middle East Distinguished Scholar award from the AAA’s Middle East Section. She has also received the Graduate Mentor Award from the Society for Medical Anthropology’s Student Association. Currently, Inhorn is writing a book on Arab refugee reproductive health, which is under contract with Stanford University Press. She is also conducting a two-year National Science Foundation-funded research study on oocyte cryopreservation (egg freezing) for both medical and elective fertility preservation.

**Hillard Kaplan, PhD**, Professor, Department of Anthropology, University of New Mexico

My research examines the evolution of the human life course. This work has at various times focused on food sharing, fertility decisions, parental investment, sex roles, subsistence behavior, intelligence, and life span. My empirical work draws on fieldwork with a number of populations including the Ache (Paraguay), Mashco-Piro (Peru), Yora/Yaminahua (Peru), Machiguenga (Peru), and Xhosa (South Africa). My past work on fertility and parental investment has also drawn on a data collected from men living in Albuquerque, New Mexico. I currently direct the Tsimane Health and Life History Project with Michael Gurven (UC Santa Barbara).
Robert Lemelson, PhD, Founder and President, The Foundation for Psychocultural Research; Associate Adjunct Professor, Department of Anthropology, UCLA

Robert Lemelson, PhD, is an anthropologist and documentary filmmaker who received his MA from the University of Chicago and his doctoral degree from the University of California, Los Angeles (UCLA). He serves as a research anthropologist at the Semel Institute for Neuroscience and Human Behavior at UCLA, and as an associate adjunct professor in the Department of Anthropology at UCLA.

As an anthropologist and documentary filmmaker, Dr. Lemelson's work centers on culture, personal experience, and mental illness in Indonesia and in the United States. He has been creating documentary films in Indonesia since 1997, focusing on the relationship between culture and disorders including obsessive-compulsive disorder, posttraumatic stress disorder (PTSD), schizophrenia, and Tourette's syndrome. In 2000 he founded Elemental Productions, an ethnographic documentary film production company. In addition, Dr. Lemelson is the founder and president of the Foundation for Psychocultural Research, a non-profit foundation supporting research and training in neuroscience and the social sciences. He also serves as a director of the Lemelson Foundation, promoting innovation of socially beneficial and sustainable technologies to meet basic human needs in countries around the world.

In 2007, Dr. Lemelson began the Lemelson/Society for Psychological Anthropology (SPA) student fellows and conference funds program. The program works to encourage graduate students to pursue fieldwork in psychological anthropology and to support faculty conferences fostering new and creative ideas in psychological anthropology.

Michael Peletz, PhD, Professor, Department of Anthropology, Emory University

Michael G. Peletz joined Emory in 2006 and served as Chair of the Department from 2009 to 2012. His teaching and research interests focus on social and cultural theory; gender and sexual diversity; law, discipline, and disorder; and the cultural politics of religion—especially Islam—and modernity, particularly in Southeast Asia and the Pacific Rim. He has done extensive fieldwork in Malaysia; his research and teaching interests have also involved travel to Singapore, Indonesia, Thailand,
Burma, Vietnam, the Netherlands, and the UK.

Professor Peletz’s newest book, _Gender Pluralism: Southeast Asia Since Early Modern Times_ (2009), was designated by the journal Choice as an “Outstanding Academic Title, 2009.” The book examines three big ideas—difference, legitimacy, and pluralism—and is chiefly concerned with how people construe and deal with variation among fellow human beings. Why under certain circumstances do people embrace, even sanctify, differences, or at least begrudgingly tolerate them, and why in other contexts are people less receptive to difference, sometimes overtly hostile to it and bent on its eradication? What are the cultural and political conditions conducive to the positive valorization and acceptance of difference? And, conversely, what conditions undermine or erode such positive views and acceptance? Taking as its point of departure the prevalence of transgendered ritual specialists and the prestige accorded them throughout much of Southeast Asia’s history, the book examines pluralism in gendered fields and domains in Southeast Asia since the early modern era, which historians and anthropologists of the region commonly define as the period extending roughly from the fifteenth to the eighteenth centuries.

Professor Peletz is currently working on a new book, tentatively entitled _Syariah Transformations_, which deals with processes of bureaucratization, rationalization, corporatization, and Islamization in Malaysia’s Islamic judiciary and in Malaysian cultural and political fields more generally; the book will also address relevant comparative data from Indonesia and Egypt and some of their theoretical and other implications.

**Donald Pfaff, PhD**, Professor, Laboratory of Neurobiology and Behavior, The Rockefeller University

Dr. Pfaff uses molecular, neuroanatomical and neurophysiological methods to study the cellular mechanisms by which the brain controls behavior. His laboratory’s research has focused on steroid hormone effects on nerve cells as they direct natural, instinctive behaviors, as well as the influences of hormones and genes on generalized brain arousal.

**Sarah Richardson, PhD**, John L. Loeb Associate Professor of the Social Sciences, Harvard University

Sarah S. Richardson is John L. Loeb Associate Professor of the Social Sciences at Harvard University. She is jointly appointed in the
Department of the History of Science and the Committee on Degrees in Studies of Women, Gender, and Sexuality. A historian and philosopher of science, her research focuses on race and gender in the biosciences and on the social dimensions of scientific knowledge. She is the author of *Sex Itself: The Search for Male and Female in the Human Genome* (Chicago, 2013) and co-editor of *Revisiting Race in a Genomic Age* (Rutgers, 2008) and *Postgenomics* (Duke, 2015).

**James Rilling, PhD, Winship Distinguished Research Professor, Department of Anthropology, Emory University**

James K. Rilling is Winship Distinguished Research Professor of Anthropology at Emory University, with a secondary appointment in the Department of Psychiatry and Behavioral Sciences. Dr. Rilling and his colleagues use non-invasive functional brain imaging techniques to compare brain structure and function in monkeys, apes and humans, with the goal of identifying human brain specializations and informing our knowledge of human brain evolution. His lab also uses functional MRI to investigate the neural bases of (1) cooperation and (2) paternal care in humans.

**Carol Worthman, PhD, Samuel Candler Dobbs Professor of Anthropology, Emory University; FPR-UCLA 2015 Conference Co-Chair**

Carol M. Worthman currently holds the Samuel Candler Dobbs Chair in the Department of Anthropology, Emory University (Atlanta), where she also directs the Laboratory for Comparative Human Biology. After taking dual undergraduate degrees in biology and botany at Pomona College, Dr. Worthman took her PhD in biological anthropology at Harvard University, having also studied endocrinology at UCSD and neuroscience at MIT. She joined the nascent anthropology faculty at Emory University in 1986, and has helped to build its biocultural focus and establish its leadership position in the field. Professor Worthman takes a biocultural approach to pursuit of comparative interdisciplinary research on human development, reproductive ecology, and biocultural bases of differential mental and physical health. She has conducted cross-cultural ethnographic and biosocial research in ten countries, including Kenya, Tibet, Nepal, Egypt, Japan, and Papua New Guinea, as well as in rural, urban, and semi-urban areas of the United States.
MEAL INFORMATION

Friday, October 23, 2015
7:30 – 8:30 am  Breakfast: Ronald Reagan UCLA Medical Center Dining Commons
12:30 – 2:00 pm  Lunch: Ronald Reagan UCLA Medical Center Dining Commons

Saturday, October 24, 2015
7:30 – 8:15 am  Breakfast: Ronald Reagan UCLA Medical Center Dining Commons Lunch:
12:05 – 1:30 pm  Ronald Reagan UCLA Medical Center Dining Commons

Location and Hours of Operation
Ronald Reagan UCLA Medical Center Dining Commons
757 Westwood Plaza
First Floor, Room 1225
•  Monday–Friday (6:30 am – 10:00 pm)
•  Weekends (7:30 am – 8:00 pm)

Extra seating is available on the patio and in the basement lobby (take main stairs by the front entrance).
MAP OF KEY BUILDINGS

- Neuroscience Research Building
- Ronald Reagan UCLA Medical Center – Dining Commons
- Tiverton House
- P9 = Parking Structure 9
- i = Parking permit kiosk
FPR PUBLICATIONS

Understanding Trauma: Integrating Biological, Clinical, and Cultural Perspectives
Cambridge University Press, 2007
Edited by Laurence J. Kirmayer, Robert Lemelson, and Mark Barad
ISBN 9780521726993
Available at Amazon and Cambridge University Press

Formative Experiences: The Interaction of Caregiving, Culture, and Developmental Psychobiology
Cambridge University Press, 2010
Edited by Carol M. Worthman, Paul M. Plotsky, Daniel S. Schechter, and Constance A. Cummings
ISBN 9781107635180
Available at Amazon and Cambridge University Press

Re-Visioning Psychiatry: Cultural Phenomenology, Critical Neuroscience, and Global Mental Health
Cambridge University Press, 2015
Edited by Laurence J. Kirmayer, Robert Lemelson, and Constance A. Cummings
ISBN 9781107032200
Available at Amazon and Cambridge University Press