

3UC



Inaugural 3UC Evolutionary Behavioral Sciences Conference

California Polytechnic State University, San Luis Obispo

May 5-6 2007

Travel information

- Directions to Cal Poly
- Parking
- Directions to the Hotel

Page 2



Conference overview

- Conference schedule
- Social activities
- Organization team
- Conference sponsoring

Page 3

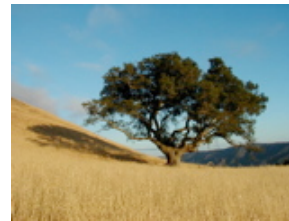


Special interest groups

- Reciprocity
- Foraging
- Waist-hip ratio
- Emotions
- Primatology
- Hormones
- Cultural evolution
- Cooperation
- EEA

Page 4-5

Participating faculty



Page 6 (UCD)
Page 8 (UCLA)
Page 10 (UCSB)

Participating predocs and postdocs

Page 7 (UCD)
Page 9 (UCLA)
Page 11 (UCSB)

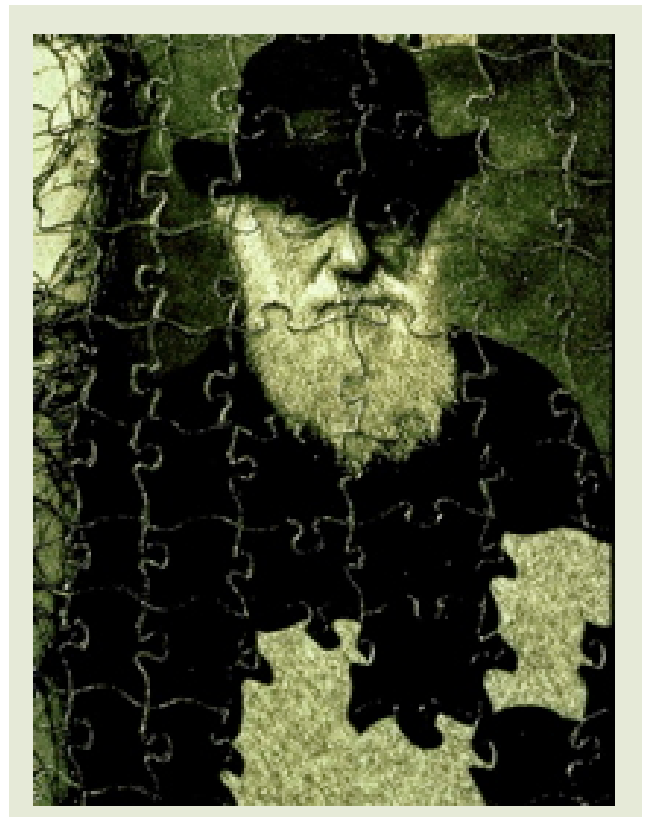


Aims and scope

The application of theories and methods derived from evolutionary biology and ecology to the study of human behavior is a rapidly expanding enterprise, one that holds great promise for a true consilience of knowledge.

Collectively, UCD, UCLA, and UCSB are home to the world's largest community of scholars working in this area. While sharing both intellectual and geographical propinquity, these groups are also characterized by a diversity of approaches and areas of expertise. This meeting brings together faculty and graduate students from these three campuses in pursuit of four goals, as follows:

- (1) Advancing the field through discussion of points of convergence, and divergence, across differing perspectives
- (2) Facilitating the establishment of collaborations that leverage complementary skills and approaches
- (3) Enhancing professional networks that will serve the first two goals
- (4) Planning the future of evolutionary behavioral science as an inter-campus venture within the University of California. Questions to consider as regards future meetings include size and scope, funding, and location; we hope that participants will provide input on these issues as the meeting unfolds.





Directions to Cal Poly

Traveling South on Highway 101:

As you approach San Luis Obispo, exit the freeway at Monterey St. (the first exit in SLO). Make a right turn, then an immediate left turn onto the frontage road (you will be going the same direction you were on the freeway). Go approximately 3 blocks to Grand Ave, turn right (going uphill) and go about 1/4 mile to the south entrance of the campus.

Traveling North on Highway 101:

Go through much of San Luis Obispo and exit at the Grand Avenue/Cal Poly exit. Turn left onto Grand Avenue and go uphill approximately 1/4 mile to the south entrance of the campus.

Parking

There is a faculty parking lot right next to the **Business 3** building (see map above) which is "open parking" on the weekends; there are plenty of spaces

in this lot. Alternatively, leave the car at the hotel and walk over via California Blvd (about 1 mile).

Directions to the Hotel

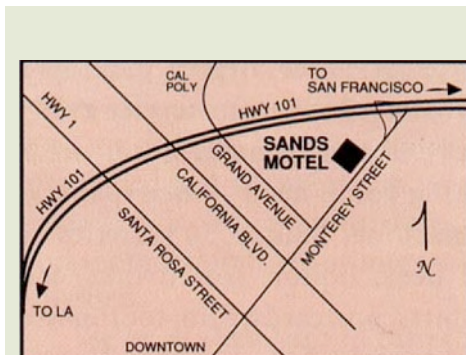
Traveling South on Highway 101:

Take the Monterey St. exit off of the freeway. The exit will be the first San Luis Obispo city exit and will be on your right. At the top of the ramp you will come to a stop. Take a left and cross over the freeway and onto Monterey St. Proceed approx. 500 yards until you reach the hotel. The Sands Suites and Motel will be on your right at 1930 Monterey St., near the corner of Monterey St. and Grand Avenue.

Traveling North on Highway 101:

Take the Monterey St. exit off of the freeway. The exit will be the last San Luis Obispo city exit - and will be on your right. The off ramp gently circles you onto Monterey St. where you will proceed approx. 500 yards until you reach the hotel. The sands

Suites and Motel will be on your right at 1930 Monterey St., near the corner of Monterey St. and Grand Avenue.



Sands Suites and Motel
1930 Monterey Street
San Luis Obispo, CA 93401
phone: 800-441-4657 or 805-544-0500

Conference schedule

Saturday: Rooms 111 & 112 (both reserved all day); each seat 60 persons and have plenty of workspace and updated equipment.

Sunday: Room 111 (7am - 11am) and large lecture hall 213 (7am - 1pm); the lecture hall seats about 220 persons.

SA 10.00 am

Opening remarks by organization team, room 111

SA 10.15 am - 10.55 am

Introduction of participants, room 111

SA 11.00 am - 12.15 pm

SIG 1a, Boyd, room 111

Reciprocity: Why don't the theory and facts agree?

SIG 1b, Winterhalder, room 112

Foraging theory: Venerable but still young

SA 12.15 pm - 1.30 pm

Lunch break

SA 1.30 pm - 2.45 pm

SIG 2a, Gaulin, room 111

What fitness relevant information does WHR confer?

SIG 2b, Fessler, room 112

Evolutionary approaches to the emotions

SA 2.45 pm - 3.05 pm

Coffee break

SA 3.05 pm - 4.20 pm

SIG 3a, Perry, room 111

Methods for studying cultural processes in natural populations

SIG 3b, Roney, 112

The role of hormones in mating psychology

SA 4.20 pm - 4.45 pm

Coffee break

SA 4.45 pm - 6.00 pm

SIG 4a, Richerson, room 111

Cultural evolution and microsocieties

SIG 4b, Silk, room 112

Prosocial preferences and cooperation in primates and humans

SA 6.30 pm

Dinner at Jack House and Gardens

SU 9.30 am - 10.45 am

SIG 5, Tooby, room 111

The EEA: Myth, mantra, or indispensable core of Darwinism?

SU 10.45 am - 11.00 am

Coffee break

SU 11.00 am - 12.00 pm

Roundtable discussion on integration of subfields, room 213

SU 12.00 pm - 12.45 pm

Future directions for 3UC, room 213

SU 12.45 pm

Lunch

Social activities



Pre-conference Party

Where:

Pat McKim's in SLO

When:

Friday May 4th 6:30pm

Pizza, Wine & Beer provided

Bring Jacket or Dress Warmly

Friday party (directions from Sands Suites):

1) Go southwest on Monterey St., 2) turn left onto California Blvd, 3) turn right onto San Luis Dr., 4) turn left onto Johnson Ave and then 5) turn left onto Lizzie St. (Pat lives at 1442 Lizzie St.).

If necessary, check <http://cla.calpoly.edu/~srucas/EMB%202007%20Conf.htm> and download the file *Pre-conference Party* to get a map sketch.

Saturday dinner:

Jack House and Gardens in downtown San Luis Obispo (outside event - bring jacket!).

Organization team

Katie Demps & Pete Richerson — UC Davis

Andreas Wilke — UC Los Angeles

Daniel Sznycer & Jeff Niehaus — UC Santa Barbara

Many thanks to our helpful colleagues at Cal Poly:
Stacey Rucas, Terry Jones & Patrick McKim.

Conference sponsoring

Dean, Graduate Studies, UC Davis.

Dean, Graduate Studies, UC Santa Barbara.

Dean, Science, UC Santa Barbara.

Dean, Social Sciences, UC Santa Barbara.

Dean, UCLA College of Letters and Sciences.

Vice President for Research, UC Office of the President.

Students will have an opportunity to meet and interact with faculty members from each of the campuses during the special interest groups. There will be four blocks on Saturday and one block on Sunday. As there will be two parallel groups during each of the Saturday blocks, students are asked to decide in advance their preferred group (in deciding, read through the abstracts and contact faculty members if requested). Each of the special interest groups will focus on a specific question or topic, such as reciprocity, foraging or hormones. The structure of these groups will be at the discretion of the faculty member in charge.

Reciprocity: Why don't the theory and facts agree?

Robert Boyd (rboyd@anthro.ucla.edu),
SA 11am - 12.15pm, room 111.

Humans cooperate in large groups with individuals in which relatedness based on recent common descent is very low. Ever since Trivers, evolutionary social scientists have explained this behavior in terms of contingent or reciprocal altruism. However, this move is of doubtful validity because there is no empirically tested theory of reciprocity. The mathematical evolutionary theory is extensive, but is not supported by data from people or from other animals. Verbal arguments are not clearly specified and arguably based on pre-scientific folk sociological notions. I hope we can discuss these ideas, and how evolutionary social science should proceed in light of them.

Evolutionary approaches to the emotions

Daniel Fessler (dfessler@anthro.ucla.edu),
SA 1.30pm - 2.45pm, room 112.

It seems to me that there are two fairly different directions we could take on the topic of emotions, as follows:

(1) A conceptual/theoretical examination of emotion that employs, or is amenable to, an evolutionary perspective. For those interested in this emphasis, some relevant readings are:

Griffiths, P. Is emotion a natural kind? Available at http://philsci-archive.pitt.edu/archive/00000566/0/Is_Emotion_a_Natural_Kind.PDF

Cosmides, L. & Tooby, J. Evolutionary psychology and the emotions. Available at <http://www.psych.ucsb.edu/research/cep/emotio>

[n.html](#)

(2) A pragmatic/heuristic approach to emotion, focused on using an evolutionary perspective to guide specific investigations, while remaining agnostic as to the conceptual validity of what may ultimately prove to be folk psychological concepts. For those interested in this emphasis, some relevant readings are:

Haselton, M. & Ketelaar, T. Irrational emotions or emotional wisdom? The evolutionary psychology of emotions and behavior. Available at <http://www.sscnet.ucla.edu/comm/haselton/web/docs/HaseltonKetelaar.pdf>

Fessler, D. & Haley, K. The strategy of affect: Emotions in human cooperation. Available at http://www.sscnet.ucla.edu/anthro/faculty/fessler/pubs/Fessler_Strategy_Of_Affect.pdf

Lastly, a reading that somewhat bridges the two foci, albeit with a heavy weighting on the conceptual issue, is: Barrett, L.F. Are emotions natural kinds? Available at http://www2.bc.edu/~barrettli/pubs/2006/Barrett_2006kinds.pdf

Being a rather simple-minded, perhaps dim-witted, fellow (conceptual issues often give me a headache), my own preference is to focus on the pragmatic/heuristic approach. However, I am happy to hear others thoughts on this, and welcome input from prospective participants (dmtfessler@gmail.com), as I see my role more as discussant than as leader.

What fitness relevant information does WHR confer?

Steven Gaulin (gaulin@anth.ucsb.edu),
SA 1.30pm - 2.45pm, room 111.

The data in support of health and fertility links with WHR are not very good (IMHO), so we've been pursuing the idea that gluteofemoral fat is a privileged store of neurologically essential fatty acids. This view leads to a variety of predictions about menarche, the effects of parity on fat deposits, and, most importantly, the relationship between WHR and cognitive ability. All these predictions seem to be supported based on our analysis of NHANES III data. I'd like to explore the older (health/fertility claims) along with these new ideas. Skepticism is enthusiastically welcomed.



Format: I'd like to circulate a manuscript to likely participants beforehand; then the format could be round-table discussion.

Methods for studying cultural processes in natural populations

Susan Perry (sperry@anthro.ucla.edu),
SA 3.05pm - 4.20pm, room 111.

Optional readings: (1) Introductory and concluding chapters of "The Biology of Traditions: Models and Evidence" (Fragaszy & Perry, Eds., 2003); (2) Perry chapter for "Question of Culture" book (Galef & Laland, Eds., in press; pp. 1-16).

Format: Quick talk (15 min), followed by general discussion. The talk will be a brief summary of the various approaches that I have taken to demonstrate the existence of traditions in wild populations of capuchin monkeys, to give the participant an idea of what sorts of methods are feasible in field studies of nonhumans. The discussion topics will depend on who the participants are.

If there are many primatologists, we may want to talk in depth about methodology and how to create an effective cross-site or cross-species data base for comparative analyses; in this case, I will bring samples of raw data files for people who want to model some aspects of their own research after my group's methods. If the participants are mainly researchers of humans, we will probably want to focus more on ways we can include humans in a cross-species comparative analysis aimed to elucidate the evolutionary origins of human cultural capacities and will structure discussion around the following issues:

(1) To what extent can the methods used by primatologists to diagnose "traditions" be transferred to studies of humans (and vice versa)?

(2) How many cases of true traditions could we pull out of the cultural anthropology literature (for humans) if we applied the same standards of evidence that are used for nonhumans?

(3) In what ways do humans differ from nonhumans with regard to their social learning mechanisms and the type of traditions they exhibit? (Can nonhuman primates be said to have culture in the same way that humans do?) What new methods could we employ to elucidate the differences between humans and other taxa?

Cultural evolution and microsocieties

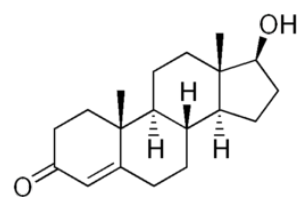
Pete Richerson (pjricherson@ucdavis.edu),
SA 4.45pm - 6.00pm, room 111.

In the beginning, the study of cultural evolution was mainly a theoretical project that depended upon a miscellany of data from the various social sciences and history for empirical inspiration and for rough tests of the reasonableness of the models. Lately the empirical side of the science is coming into its own. Kinds of studies are emerging. (1) Controlled studies of the psychology of social learning, (2) micro-society experiments that get cultural transmission and cultural evolution going in the lab, (3) field studies of microevolution in the "wild," (4) macroevolutionary studies in which theoretical models are used to interpret or even statistically fit archaeological or historical data on a multi generation time scale. Participants who are doing one or the other of these kinds of studies will give the rest of the group a brief description of and rationale for them. Once everyone is up to speed, let's discuss the problems and potentials for different designs. For example, field microevolution studies are hard because we cannot usually determine who a focal individual learned something from. How can we solve or finesse this problem and ones like it?

The role of hormones in mating psychology

Jim Roney (roney@psych.ucsb.edu),
SA 3.05pm - 4.20pm, room 112.

I envision the session as a combination of short data presentations regarding the role of hormones in mating psychology, as well as discussion about the possible directions that research in this area may go. My tentative plan is to provide some brief background information about general roles of sex hormones and then outline three broad topic areas: (1) the role of sex hormones in regulating the perception of others' mate attractiveness, (2) dynamic changes in sex hormone concentrations in reaction to stimuli from potential mates, and (3) the relationship between individuals' sex hormone concentrations and their attractiveness to others. I can present data from my lab pertaining specifically to #2: in particular, the effects of exposure to women



on testosterone concentrations in men. Other participants who would like to present data broadly related to these topics can also do so.

Prosocial preferences and cooperation in primates and humans

Joan Silk (jsilk@anthro.ucla.edu),
SA 4.45pm - 6.00pm, room 112.

There is currently a considerable amount of dispute about whether altruistic behavior in people (and other primates) is motivated by other-regarding preferences and concern for the welfare of others, or by more direct concerns about their own reputation and attractiveness as partners in cooperative exchanges. What evidence would constitute a firm refutation/confirmation of these positions? Are these alternatives necessarily mutually exclusive? How would strong evidence for the presence/absence of other-regarding preferences or reputational concerns in other animals affect our assessment of these alternative possibilities?



The EEA: Myth, mantra, or indispensable core of Darwinism?

John Tooby (tooby@anth.ucsb.edu),
SU 9.30am - 10.45am, room 111.

*** TBA ***

Foraging theory: Venerable but still young

Bruce Winterhalder
(bwinterhalder@ucdavis.edu),
SA 11am - 12.15pm, room 112.

Following a short, informal history of foraging theory, drawing on personal experience and select publications (e.g., Schoener, T. W. (1987). A brief history of optimal foraging ecology. In *Foraging Behavior*, edited by A. C. Kamil, J. R. Krebs and H. R. Pulliam, pp. 5-67. Plenum Press, New York; Winterhalder, B. & Smith, E. A. (2000). Analyzing adaptive strategies: Human behavioral ecology at twenty-five. *Evolu-*

tionary Anthropology 9:51-72), I intend this to be a free-flowing, group discussion.

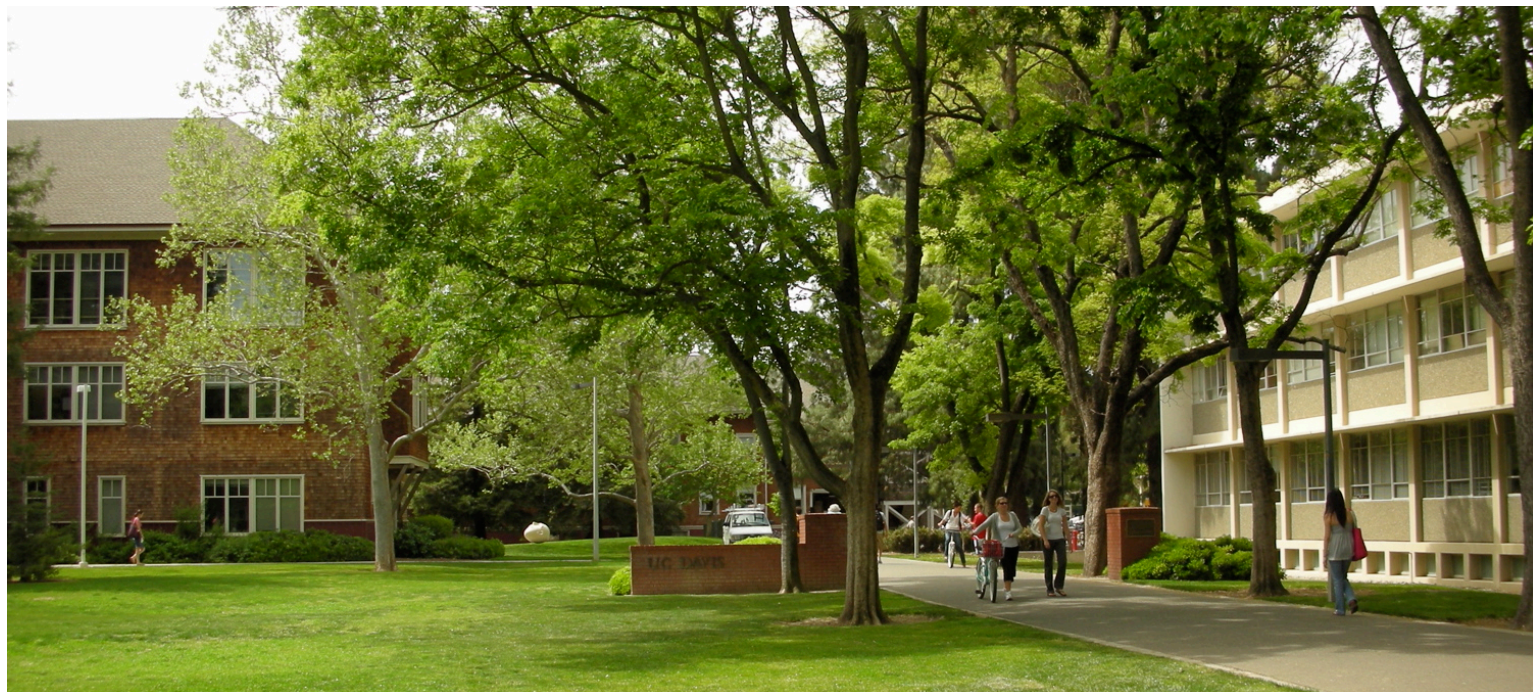
I will ask each faculty and student participant to describe briefly their research interests and/or thesis-dissertation problems. We then will use our pooled experience with fieldwork and the literature in this topic area to offer each other commentary, advice and encouragement.



Among the kinds of foraging models that we might anticipate covering are: resource selection, patch use, central place foraging, group size and structure, population ecology, habitat distribution, intra-group resource transfers, discounting, etc. Our topics might include everything from subsistence, to social stratification and the origins of agriculture (very active, current research areas), to auto theft and internet information foraging. The subject matter might be ethnographic or archaeological (see: Bird, D. W. and J. F. O'Connell. 2006. Behavioral ecology and archaeology. *Journal of Archaeological Research* 14:143-188).

If you want to do some reading in advance, here are two possibilities: Winterhalder, B. (2002). Models. In *Darwin and Archaeology: A Handbook of Key Concepts*, edited by J. P. Hart and J. E. Terrell, pp. 201-223. Bergin & Garvey, Westport, Connecticut; and/or, Winterhalder, B. & Kennett, D. J. (2006). Behavioral ecology and the transition from hunting and gathering to agriculture. In *Behavioral Ecology and the Transition to Agriculture*, edited by D. J. Kennett and B. Winterhalder, pp. 1-21. University of California Press, Berkeley, CA.

It would be quite helpful if individuals who intend to participate in this session could contact me in advance with a sentence or two about their particular interests.



**Robert Bettinger,
Anthropology**



Hunter-gatherers; cultural transmission; origins of agriculture.

**Monique Borgerhoff Mulder,
Anthropology**



Human behavioral ecology; human life history evolution; mating systems and parental investment; cultural phylogenies; evolution and conservation.

**Mark Grote,
Anthropology**



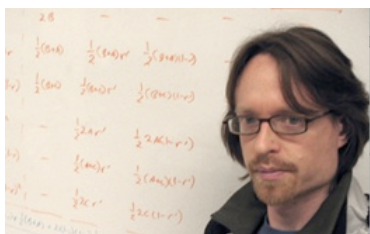
Applied probability and mathematical statistics; data analysis and statistical computing; population genetics and computing.

**Andrew Marshall,
Anthropology**



Primatology; primate evolutionary ecology; forest ecology; conservation.

**Richard McElreath,
Anthropology**



Social learning; cultural dynamics; theoretical evolutionary ecology.

**Pete Richerson,
Environmental Science & Policy**



Cultural evolution; theory and experiments; limnology (aquatic ecology).

**Bruce Winterhalder,
Anthropology**



Behavioral and evolutionary ecology; cultural ecology; hunter-gatherers; agriculturalists/pastoralists; models of human adaptive processes.

**Loucas Barton,
Anthropology**



Prehistoric archaeology; northeast Asia; transition to agriculture; diffusion of innovations; coordinated adaptations.

**Jeremy Brooks,
Ecology**



Conservation behavior; environmental values; Bhutan; conservation and development.

**Katie Demps,
Anthropology**



Cultural evolution; human behavioral ecology; social learning strategies; religious conversion dynamics.

**Sue Glover,
Anthropology**



Human behavioral ecology; life-history strategies; U.S. history; economics; spatial data.

**Micah Hale,
Anthropology**



Cultural evolution; hunter-gatherers; archaeology.

**Vicken Hillis,
Ecology**



Cultural evolution; ethnic markers; cooperation; agricultural development; game theory.

**Whitney Meno,
Animal Behavior**



Animal behavior; development of antipredator behavior; capuchins.

**Kristin Rauch,
Anthropology**



Mate choice; assortative mating; sexual selection; human behavioral ecology.

**Ryan Schacht,
Anthropology**



Mate choice; perceptions of attractiveness; ethnic conflict; Guyana.

**Kari Schroeder,
Anthropology**



Genetic variation; population structure; Native American.

**Nathan Stevens,
Anthropology**



Archaeology (California and the Great Basin); hunter-gatherers; human behavioral ecology; organization of technology; cultural change and transmission.

**Tim Waring,
Anthropology**



Human ecology; cultural evolution; socio-ecological coevolution; environmental management; Southern India..

**Adie Whitaker,
Anthropology**



Coastal archaeology / zooarchaeology; California; foraging models; population depression / conservation; hunter-gatherers.



**Robert Boyd,
Anthropology**



Evolutionary psychology; gene-culture coevolution; cooperation; ethnicity; evolution of technology.

**Greg Bryant,
Communication Studies**



Language and speech communication; acoustic phonetics; pragmatics; cognition and culture; evolutionary psychology.

**Daniel Fessler,
Anthropology**



Emotions; cooperation; disease avoidance; reputation.

**Joe Manson,
Anthropology**



Primate behavior; social relationships; cultural primatology; mate choice.

**Susan Perry,
Anthropology**



Social Learning; communication; social relationships; capuchins; development.

**Joan Silk,
Anthropology**



Social preferences; prosociality; reputation; empathy.

**Rebecca Frank,
Anthropology**



Female social relationships; cooperation; reciprocity; market models.

**Willem Frankenhuis,
Anthropology**



Modularity; development; domain-specificity; cognitive architecture; sexual selection theory.

**David Frederick,
Psychology**



Sexual selection; mating; costly signaling; body image and dieting; close relationships and sexuality.

**Andrew Galperin,
Psychology**



Love; emotions; attribution; sex ratio.

**Matthew Gervais,
Anthropology**



Moral psychology; internalization; learning biases; laughter; neuroscience.

**Katie Hinde,
Anthropology**



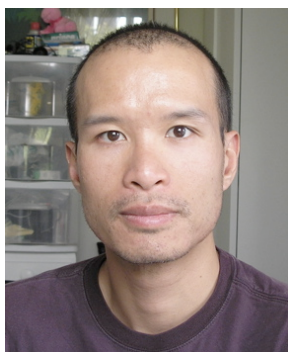
Reproductive investment; milk production; individual variance; infant outcomes; rhesus macaques.

**Michelle Kline,
Anthropology**



Ethnic psychology; cultural transmission.

**Stephen Le,
Anthropology**



Time discounting; cooperation; prisoner's dilemma; context dependence; game theory.

**Sarah Mathew,
Anthropology**



Evolution of cooperation; voluntary participation in models of cooperation; cooperation in warfare; psychological adaptations for war; cultural group selection.

**Cristina Moya,
Anthropology**



Evolution of social group categorization; inductive reasoning; cues to ethnicity; coordination costs across group boundaries.

**Karthik Panchanathan,
Anthropology**



Reciprocity; reputation; inter-group psychology.

**Elizabeth Pillsworth,
Anthropology**



Mate choice; menstrual cycle; Shuar.

**Jeffrey Snyder,
Anthropology**



Sexual selection; female mate preferences; male aggression; male status.

**Andreas Wilke,
Psychology**



Human cognitive evolution; foraging behavior; decision-making; behavioral ecology; MatLab.



Leda Cosmides, Psychology



Evolutionary psychology; cognitive science; evolutionary biology; reasoning; motivation.

Steven Gaulin, Anthropology



Waist-hip ratio; spatial ability; voice; sex differences; fat.

Michael Gurven, Anthropology



Life history evolution; cooperation; demography and health; foraging and hunter-gatherers; aging and development.

Lee Kirkpatrick, Psychology (College of William and Mary)



Social psychology; religion.

Jim Roney, Psychology



Courtship; mate preferences; sex hormones.

John Tooby, Anthropology



Evolutionary psychology; behavioral ecology; evolutionary biology; cognitive science; emotions / motivations.

**Eyal Aharoni,
Psychology**



Punishment;
psychopathy;
aggression.

**Brandy Burkett,
Psychology**



Friendship; deep
engagement
relationships.

**Aldo Cimino,
Anthropology**



Coalitional psychology;
hazing; ritual;
cooperation; evoked
culture.

**Andy Delton,
Psychology**



Cooperation; cognitive
and computational
approaches to
psychology.

**Elsa Ermer,
Psychology**



Status; coalitional
psychology; social
reasoning; risk taking;
cognitive neuroscience.

**Kate Hanson,
Anthropology**



Mate value; individual
differences in mate
preferences; pair bond
formation.

**Carolyn Hodges,
Anthropology**



Vocal signaling;
intrasexual competition;
sex differences; emotion
and expression; status.

**Max Krasnow,
Psychology**



Foraging; tool-artifact-
function reasoning;
cooperation; concepts;
computational
psychology.

**Julian Lim,
Anthropology**



Gratitude; morality;
intentions; friendship;
reciprocity.

**Anthony Lopez,
Political Science**



International relations;
evolutionary political
psychology; coalitional
psychology; aggression.

**Aaron Lukaszewski,
Psychology**



courtship signaling;
dominance and status in
men; female mate
preferences;
testosterone.

**Lisa McAllister,
Anthropology**



Indigenous
demography; human
reproductive ecology;
behavioral ecology;
parental investment.

**Jeff Niehaus,
Psychology**



Visual attention capture
and cuing; agency and
animacy; belief-desire
reasoning.

**David Pietraszewski,
Psychology**



Coalitional / alliance
psychology; accent; race.

**Theresa Robertson,
Psychology**



Social exclusion;
rejection; belonging
regulation; rejection as
recalibrating event.

**Chris von Rueden,
Anthropology**



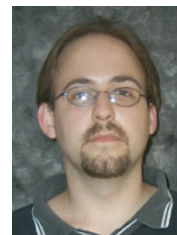
Life history evolution;
health; male social status
and leadership.

**Eric Schniter,
Anthropology**



Intuitive economics;
social niche
specialization; older age.

**Aaron Sell,
Psychology**



Anger; aggression;
formidability; RHP.

**Zach Simmons,
Psychology**



Behavioral
endocrinology; female
mate preferences;
energetic condition /
energy balance.

**Daniel Sznycer,
Anthropology**



Shame; pride;
cooperation;
adaptationist models of
culture.

**Danielle Truxaw,
Psychology**



Tool-artifact-function
reasoning; foraging;
precautionary reasoning.

**Annie Wertz,
Psychology**



Theory of mind;
cognitive development.