

# The EvoS Illuminate

## The Newsletter of the EvoS Consortium

The title of this newsletter is derived from the Jesuit Priest and scholar Pierre Teilhard de Chardin who stated that “Evolution is a light which illuminates all facts, a trajectory which all lines of thought must follow this is what evolution is” (as cited by Dobzhansky, 1973).

### What’s New in EvoS

The past six months have brought many great developments for the EvoS Consortium. From new blogs to a special journal issue, the word about EvoS is getting around!

#### EvoS Journal

*EvoS Journal* has published another issue (vol. 2, issue 1) featuring four articles, half of which are first-authored by undergraduate students. The articles span from using evolutionary theory as a model in education (Muller, 2010; O’Brien & Wilson, 2010) to applying evolutionary theory to psychology and avoiding human shortcomings (Gentle & Goetz, 2010) to politically motivated resistance to evolutionary psychology, specifically related to the topic of sex differences (Geher & Gambacorta, 2010).

You may find the articles at <http://evostudies.org/vol2.html>

#### EvoS Blogs

The EvoS Blogs just keep getting better! Our newest blogger is Steven Platek of Georgia Gwinnett College. In his blog, titled “Walking the Walk: Using Fitness and Nutrition to Educate about Evolution”, readers can be sure to learn all about eating and exercising more in line with the ways our bodies have evolved.

Some of our recent posts include:

Joseph Graves:

- Nature Red in Tooth and Claw
- Making Sense of Biology

Glenn Geher:

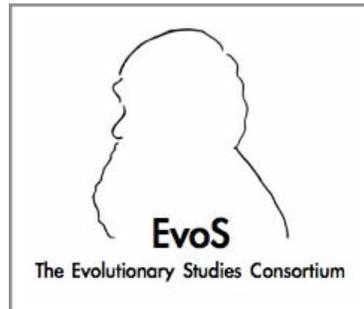
- Darwin’s Lessons for the Graduates
- Luke Skywalker, Han Solo, and the Importance of Adaptation Implementation in Evolutionary Psychology

Rosemarie Sokol Chang:

- Natural Born Mothers?
- Are You Going to Eat the Placenta? And Other New Age Questions a Modern 1st World Mother Must Endure

William Tooke

- 2001: A Space Odyssey (1968 - dir. Stanley Kubrick)



Be sure to sign up for the RSS Feed so you can be first to know when a new post appears! Go to <http://evostudies.org/blog> and click on “subscribe to feed”.

#### Evolution: Education & Outreach

The EvoS Consortium has been invited to oversee the publication of a special issue of *Evolution: Education and Outreach*. The issue will highlight evolutionary studies in higher education, and will be out early next year.

## EvoS Consortium Preparing to Submit NSF Phase III TUES Grant

### By David Sloan Wilson

Our current NSF Phase II CCLI grant has been highly successful in developing the EvoS Consortium to its current level. The NSF CCLI program has morphed into the TUES (Transformation in Undergraduate Education in Science) program and we will be preparing an ambitious proposal for a phase III grant with a due date of Jan 14, 2011, and a maximum amount of 5 million dollars over a 5 year period. This is a much larger amount of money that can be used to establish programs, increase the number of member institutions, and increase services to all member institutions. We also intend to coordinate consortium grants outside the US in parallel to create a worldwide EvoS Consortium.

We will be consulting closely with our member groups in the preparation of the proposal. As a first step we are requesting information from you about the current state of your program. We have created an online [EvoS Participation Survey](http://www.surveymonkey.com/s/BQVV2ZJ) that takes about 10 minutes to fill out - please take a moment to answer the survey, whether or not your institution has an EvoS program. The web address is <http://www.surveymonkey.com/s/BQVV2ZJ>

## SPOTLIGHT ON AN EVOS STUDENT

**BROOKE GENTLE IS AN UNDERGRADUATE STUDENT AT CALIFORNIA STATE UNIVERSITY FULLERTON. SHE IS AN UNDERGRADUATE EDITORIAL BOARD MEMBER FOR EVOS JOURNAL, AND RECENTLY HAD AN ARTICLE PUBLISHED IN THE JOURNAL TITLED “FUNCTIONALITY, PARSIMONY, DISCOVERY, AVOIDING HAMARTIA: HOW EVOLUTIONARY PERSPECTIVES ARE CHANGING PSYCHOLOGY”. SHE DOES RESEARCH ON ATTRACTIVENESS AND FERTILITY CUES UNDER THE ADVISEMENT OF AARON GOETZ.**

BG: I am currently working on a project with one of my lab mates, Amy Steffes, and our lab advisor Dr. Aaron Goetz. We have hypothesized that women with 3 year old children will be perceived as more attractive than women with 6 month old babies due to lactation cues. Lactational amenorrhea significantly reduces a woman's fertility, and thus, men should find them less attractive. We have constructed the stimuli and are currently collecting data. We will present our findings at the upcoming HBES conference this June.

[EN=EVOS NEWSLETTER; BG = BROOKE GENTLE].

EN: What has been your favorite course in school so far?

BG: My favorite course in school so far has been my Evolutionary Psychology graduate seminar. This class provides me with the opportunity to read, discuss, and analyze critically evolutionary psychology literature. Additionally, taking this class as an undergraduate has greatly prepared me for graduate school.

EN: What benefits do you gain by CSUF being a member of the EvoS Consortium?

BG: Since CSUF is a member institution of the EvoS program, the number of evolutionary classes offered on our campus is increasing. I will benefit greatly from this program because I will be able to take these evolutionary classes in biology, psychology, and anthropology.

EN: Please give us a summary of the research you are doing at CSUF, including how it is informed by evolutionary theory.



Our hypothesis was derived from the evolutionary theory of reliable cues. Since it would have benefited men in our ancestral history to pick up on cues of fertility, we predict that men will perceive women who are lactating as less attractive because they will be less fertile than women of reproductive age who are not lactating.

EN: Has evolutionary theory changed how you think about the world?

BG: Evolutionary theory has tremendously altered how I think. I am constantly wondering and hypothesizing about the evolutionary explanations of the world around me.

Brooke's article in EvoS Journal can be found at <http://evostudies.org/vol2.html>

Gentle, B. N., & Goetz, A. T. (2010). Functionality, parsimony, discovery, avoiding hamartia: How evolutionary perspectives are changing psychology. *EvoS Journal: The Journal of the Evolutionary Studies Consortium*, 2(1), 24-31.

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-Brooke Gentle, Psychology Student, California State University Fullerton

## SPOTLIGHT ON AN EVOS FACULTY MEMBER

**AARON GOETZ IS AN ASSISTANT PROFESSOR OF PSYCHOLOGY AT CALIFORNIA STATE UNIVERSITY FULLERTON. HE SERVES AS FACULTY ADVISOR TO UNDERGRADUATE EDITORIAL BOARD MEMBERS FOR EVOS JOURNAL AND HAS TWO CO-AUTHORED PUBLICATIONS IN THE JOURNAL.**

[EN=EVOS NEWLETTER; AG=AARON GOETZ].

EN: What do you think are the primary benefits for students from being part of an EvoS program?

AG: CSUF is an EvoS Member Institution. We have a large number of faculty in Psychology, Anthropology, Biology, Liberal Studies, and Philosophy who actively take evolutionary perspectives, but our formal EvoS program is in it's infancy; a blastocyst maybe. Conception has occurred (we agreed that CSUF is an excellent place for an EvoS curriculum), but implantation has not.

Having a sophisticated understanding evolutionary theory and evolutionary principles is like having a flashlight in the dark. Scratch that. It's like having a *spotlight* in the dark. Being exposed to the explanatory power of evolution by natural selection allows students to make sense of, and make predictions about, the world around them. I've noticed that students with a deep understanding of evolution are much more critical when they hear claims about human psychology and behavior. They recognize that a claim about universal human behavior, for example, must jibe with evolutionary theory.



EN: What would you say are the primary benefits to faculty from being part of an EvoS program?

AG: I imagine that there are many benefits reaped by EvoS faculty, but right now, I'm not able to say which is the primary. Interacting with students who share an interest in and deep understanding of evolutionary perspectives has got to be near the top. Perhaps more selfishly, I also look forward to being exposed to new evolutionary research, via seminars and symposia.

EN: Please give an example of a recent research project you've done, and explain how evolutionary theory informs your research.

AG: Recognizing that failing to detect a partner's sexual infidelity would have been greater for men than for women (due to cuckoldry), Kayla Causey and I hypothesized and found that men should

overperceive the likelihood of their partner's sexual infidelity. In two studies, we asked questions about the participant's own and their partner's likelihood of future infidelity using a Likert-type scale and a visual analog scale.

In both studies, men were more suspicious of their partner's future infidelity. Even though men more likely than women to report that they themselves would commit sexual infidelity in the future, men were still more suspicious. Although men (relative to women) perceived a higher likelihood of being sexually unfaithful in the future, men were still more suspicious of their partner's future infidelity than were women. Complementing other empirical research, these studies are consistent with the hypothesis that men's infidelity detection system was designed with this cognitive bias.

When teaching students how to evaluate theories based on their parsimony, predictive accuracy, interdisciplinary consistency, and empirical harvest, can you think of a better theory than evolution by natural selection?

-Aaron Goetz, Evolutionary Psychologist, CSU Fullerton

EN: What is your favorite course to teach, and why?

AG: This question requires no deliberation on my part. My favorite course to teach is Evolutionary Psychology. I was trained as an evolutionary psychologist so this is the area of my expertise and my passion. I revel in introducing students to an approach to psychology that makes sense of the entire field. I'm humbled when students tell me that I've rekindled their interest in psychology or finally provided an answer to those "why" questions that originally drove them to psychology.

EN: How does evolutionary theory factor into your teaching experience?

AG: It is obviously featured in my Evolutionary Psychology courses, but it helps guide my Human Sex course as well. Evolutionary theory even rears its head in my Research Methods course. When teaching students how to evaluate theories based on their parsimony, predictive accuracy, interdisciplinary consistency, and empirical harvest, can you think of a better theory than evolution by natural selection? Me neither.

EN: James Lipton always ends Inside the Actor's Studio with the question "If Heaven exists, what would you like to hear God say when you arrive at the Pearly Gates?" If Heaven exists, what would you like to ask Darwin when you arrive at the Pearly Gates?

AG: I'd ask Darwin how far his jaw dropped when he found out that heaven exists! Just kidding. I'd love (actually, I'd give almost anything) to ask him about his favorite development in the evolutionary sciences. Would it be evolutionary psychology?! Maybe. Many consider him the first evolutionary psychologist. I have a feeling, however, that he would be amazed to have learned about postcopulatory sexual selection—the area of study that attempts to identify adaptations associated with how males compete for fertilizations and how females select sperm. Of course, Darwin literally wrote the book on precopulatory sexual selection, but his writings suggest that he wasn't aware of competition and selection that occurs after access to a mate.

## The Word from EvoS Members

### NorthEastern Evolutionary Psychology Society: Save the Date

Announcing the fifth Annual Meeting of the NorthEastern Evolutionary Psychology Society, Friday, April 1, through Sunday, April 3, 2011. The 2011 Meeting will be hosted at Binghamton University. Preconference meetings will be held on Thursday, March 31, 2011.

For more information, please visit <http://www.neepsociety.org>

### The 20th Biennial Congress of the International Society for Human Ethology

The famed ISHE conference is meeting this year in Madison, WI from August 1-5. Don't miss the symposium "The Evolutionary Studies (EvoS) Programs and Consortium: A Model for Introducing College Students to Evolutionary Theory".

For more information, please visit <http://ishe.org>

### EvoS Participation Survey!

In case you missed it, we are looking for **YOU** to fill out the [EvoS Participation Survey](http://www.surveymonkey.com/s/BQVV2ZJ), whether or not your institution has an EvoS program. Please take 10 minutes to fill out the survey (<http://www.surveymonkey.com/s/BQVV2ZJ>).



### EvoS Bloggers

[Rosemarie Sokol Chang](#)

[Glenn Geher](#)

[Joseph Graves](#)

[Steven Platek](#)

[William Tooke](#)

[David Sloan Wilson](#)

Do you have your own EvoS Events or news to share? Please send word to [evostudies@gmail.com](mailto:evostudies@gmail.com). Our next newsletter will go out in November 2010.

### Still Not Connected?

For all the groundbreaking news from EvoS Consortium, please join the [list serv](#) or visit us on [Facebook](#).



This newsletter was written by Rosemarie Sokol Chang, except for the EvoS Consortium grant notice which was written by David Sloan Wilson. Special thanks to Brooke Gentle and Aaron Goetz for answering the questions for the EvoS Spotlights. Please send any comments to [evostudies@gmail.com](mailto:evostudies@gmail.com)