



ISHE 2010

20th Biennial Congress of the International Society for Human Ethology

August 1-5, 2010 | Madison, Wisconsin USA



THE PYLE CENTER

What are you looking for?

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ISHE 2010

MADISON, WISCONSIN

ISHE 2010 PROGRAM

Welcome from ISHE!

Welcome to the 20th biennial congress of the International Society for Human Ethology! We are especially glad to have the congress in Madison since Russ and his wife Susie retired here and Glenn is an alumnus of the University of Wisconsin. Please forgive us for our expressions of blatant attachment to this wonderful town.

Thanks to you researchers, we have a full program of outstanding talks and posters. Our keynote speakers are outstanding scholars whose work represents the range of methods and disciplinary perspectives characteristic of human ethology. David Buss is an evolutionary psychologist who has conducted cross-cultural research on mate choice, jealousy, conflict between the sexes, and other topics. Applying observational methods, Heidi Keller analyzes biocultural influences on the development of attachment. Patricia McConnell is an ethologist who investigates dog behavior and training. Toni Ziegler, a neuroendocrinologist, studies paternal hormones in marmosets and tamarins. The work of this array of speakers neatly represents Tinbergen's four levels of behavioral analysis: ontogeny, proximate mechanisms, comparative analysis, and function.

Planning the congress has been greatly eased by Patti Thompson and Deb Curry of the University's Pyle Center and their staff, who have been extremely helpful. ISHE also continues to be indebted to the late Owen Aldis, whose bequest has allowed us to provide financial support to student researchers and to stage conventions with more than minimal amenities. We are also grateful to George Mealey for his sponsorship of the Linda Mealey Fund in his daughter's honor. We are delighted that he will be joining us here to present these awards.

Also deserving mention are the members of the Program Committee, Wulf Schiefenhövel, Chair; Astrid Jütte; John Richer; and Russell Gardner. Maryanne Fisher, Lisa Oberzaucher, Patrick Stewart, Jhanna Rosenberg, and Dan Kruger helped with publicity. Carol Weisfeld served as Advisor to Students. Zeina Hamie designed the T-shirt. We also thank those Madison area artists whose work is on display in the Pyle Center. Lastly, John Richer and the ISHE officers have worked tirelessly to draft a revision of the ISHE constitution, to be proposed at the general assembly on Thursday. This effort should benefit the society for years to come.

The Pyle Center staff, and we ourselves, will be on hand to answer questions or deal with any problems as they arise. The staff can help with planning a tour of other cities and sites in the Midwest.

Although we were warned against mentioning this before people decided to come to Madison, we can now reveal that this city has the largest number of arachnids in the country. But true ethologists should not have been deterred by their presence, and in fact should revel in it.

Enjoy the Congress! And tell your colleagues about ISHE.



Russell Gardner, Jr.
Local Arrangements
Committee
Clinical Professor
University of Wisconsin
Madison, WI



Glenn Weisfeld
Local Arrangements
Committee
Professor
Wayne State University
Detroit, MI

Schedule at a Glance

Where do I go?

MAIN LOBBY OF THE PYLE CENTER ◆

THE PYLE CENTER ALUMNI LOUNGE ✱

ROOM 325 / 326 ■ ROOM 313 ● ROOM 320 ○

MONONA TERRACE ✂

Sunday, August 1, 2010

4:00 p.m. Registration Opens ◆

6:00 p.m. Reception Dinner ✱

Monday, August 2, 2010

7:30 a.m. Registration Opens - Outside ■

Coffee Breaks at 7:30 a.m. and 11:00 a.m.

9:00 a.m. Keynote Address ■

Patricia McConnell "Darwin, Dogs and the Expression of Emotion in People and Animals"

10:00 a.m.	Parallel Session A	Parallel Session B
	Symposium ■	Talks ●

12:00 p.m. Lunch ✱

1:00 p.m.	Parallel Session A	Parallel Session B
	Symposium ■	Talks ●

5:10 p.m. Effigy Mound (optional) Tour to UW Arboretum departs Pyle Center
Preregistration ticket required

Tuesday, August 3, 2010

7:30 a.m. Registration Opens - Outside ■

Coffee Breaks at 7:30 a.m. and 10:40 a.m.

9:00 a.m. Keynote Address ■

David Buss "Sexual Conflict in Humans"

- 10:00 a.m.** Parallel Session A Parallel Session B
Symposium ■ Talks ◆
- 12:00 p.m.** Lunch * ◆
- 1:00 p.m.** Parallel Session A Parallel Session B
Symposium ■ Talks ◆
- 2:00 p.m.** Break and final opportunity to rate impressions of art work in the corridors radiating from either side of room ■

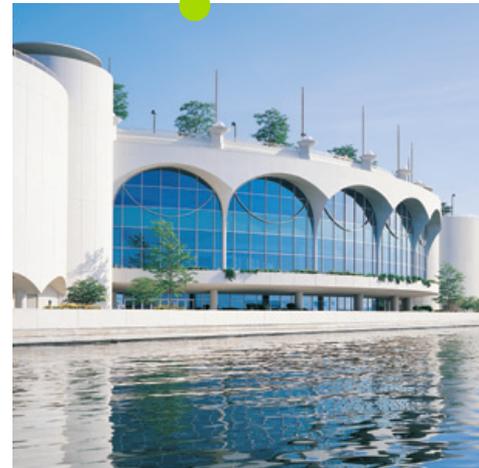
Depart the Pyle Center Main Lobby for walk to the Primate Research Center
Preregistration ticket required

Wednesday, August 4, 2010

- 7:30 a.m.** Registration Opens - Outside ■

Coffee Breaks at 7:30 a.m. and 11:00 a.m.
- 9:00 a.m.** Keynote Address ■
Heidi Keller "Relationship Formation: The Bioculture of Attachment"
- 10:00 a.m.** Single Track Session
Talks ■
- 12:00 p.m.** Lunch * ◆
- 1:00 p.m.** Single Track Session
Symposium ■
- 2:20 p.m.** Talks ■
- 3:30 p.m.** Poster Session * ◆
- 6:15 p.m.** Coach departs Sellery Hall for Monona Terrace Banquet
- 6:25 p.m.** Coach departs Lowell Center for Monona Terrace Banquet
- 6:35 p.m.** Coach departs Edgewater Hotel for Monona Terrace
- 6:45 p.m.** Arrive at Monona Terrace for evening banquet ◆◆
- 7:00 p.m.** Optional tour of Monona Terrace

MONONA TERRACE
DESIGNED BY FRANK LLOYD WRIGHT



7:30 p.m.

Dinner served

Coach bus will depart Monona Terrace for conference hotels immediately following the event

Thursday, August 5, 2010

7:30 a.m.

Registration Opens - Outside ■

Coffee Breaks at 7:30 a.m. and 10:00 a.m.

9:00 a.m.

Keynote Address ■

Toni Ziegler

"The Causes and Consequences of Fatherhood: The Role of Hormones in Biparental Marmoset and Tamarin Monkeys"

10:00 a.m.

General Assembly ■

Awards presentation by *George Mealey*

12:00 p.m.

Lunch *

1:00 p.m.

Single Track Session

Talks ■

4:00 p.m.

Conference ends

4:00 p.m.

Board of Trustees Meeting ○

AWARD-WINNING OLBRICH BOTANICAL GARDENS



MADISON WISCONSIN

ISNE 2010 PROGRAM



Discover all of the wonderful attractions that Madison has to offer. From the family-friendly Henry Vilas Zoo and Madison Children's Museum to the historic University of Wisconsin - Madison campus to the natural beauty of Olbrich Botanical Gardens and the UW-Arboretum, there is something for everyone, right here in the city.

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Program Details

Sunday, August 1, 2010

4:00 p.m. Registration Opens ◆

6:00 p.m. Reception Dinner ✱

Monday, August 2, 2010

7:30 a.m. Registration Opens - Outside ■

Coffee Breaks at 7:30 a.m. and 10:00 a.m.

9:00 a.m. Keynote Address ■

Patricia McConnell "Darwin, Dogs and the Expression of Emotion in People and Animals"

Patricia McConnell

University of Wisconsin, Madison, Wisconsin, USA

For more information, go to www.patriciamccconnell.com or visit her blog, at www.theotherendoftheleash.com

McConnell, Ph.D., CAAB is an Ethologist and Certified Applied Animal Behaviorist who has consulted with cat and dog lovers for over twenty two years who combines a thorough understanding of the science of behavior with years of practical, applied experience. Her nationally syndicated radio show, Calling All Pets, played in over 110 cities for fourteen years and her television show Petline played on Animal Planet for two and a half years. She is the behavior columnist for The Bark magazine ("the New Yorker of Dog Magazines") and is Adjunct Associate Professor in Zoology at the University of Wisconsin-Madison, teaching "The Biology and Philosophy of Human/Animal Relationships." Dr. McConnell is a much sought after speaker and seminar presenter, speaking to training organizations, veterinary conferences, academic meetings and animal shelters around the world about dog and cat behavior, and on science-based and humane solutions to serious behavioral problems. She is the author of thirteen books on training and behavioral problems, as well as the critically acclaimed books *The Other End of the Leash* (translated now into 13 languages), *For the Love of a Dog* and *Tales of Two Species*.

10:00 a.m. Parallel Session A

Symposium ■

Carol Cronin Weisfeld (chairperson)

Ethological Methods for Observing Behavior: Old School, New School

University of Detroit Mercy, Michigan, USA

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This symposium will be an overview of traditional and more modern scientific methods for coding and analyzing behaviors of humans and non-humans. The speakers will visit the spectrum of observational methods, some more simple and inexpensive, and some more



sophisticated and (typically) requiring more resources. Weisfeld will begin with an historical review of traditional ethological approaches, utilizing film studies of children's aggressive behavior as an example. Hill, Malcore and Burnett will demonstrate how computer technology can be used to streamline coding and analysis of behavior; with examples from their mouse studies as illustrations. Greene will demonstrate the use of eye tracker technology, with examples of ways in which the technology reveals visual search movements of which human subjects are frequently not aware.

Oberzaucher will discuss the Bielefeld Model of Communication as an example of capturing multiple levels of behavior simultaneously. Grammer will close with the introduction of "Virtual Ethology" and behavior modeling. Each of the speakers has years of experience using the technology which he or she will demonstrate. This symposium should be useful for the participant who is new to ethology, and for the seasoned ethologist looking for new ways of thinking about observational research.

10:00-10:20

Weisfeld, Carol Cronin

Traditional Ethological Conceptualization and Methods

10:20-10:40

Hill, Elizabeth M.; Malcore, Sylvia; Burnett, Victoria

Computer-aided Coding of Videotaped Behavior (E.M.Hill presents)

10:40-11:00

Greene, Harold H

Eye tracking: A Window on Visual Information Selection

11:00-11:20

Break

11:20-11:40

Oberzaucher, Elisabeth

Multi-Modal Analysis of Behavior

11:40-12:00

Grammer, Karl

Virtual Ethology and Behavior Modeling: An Idea Based on an Underestimated Ethological Tradition

*Carol Cronin Weisfeld***Traditional Ethological Conceptualization and Methods**

University of Detroit Mercy, Michigan, USA

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Grounded in Darwinian thinking, ethology attempts to understand behavior on multiple levels: (a) proximate causation, (b) ultimate causation, (c) phylogeny, and (d) ontogeny. An ethologist begins by cataloging behaviors of the subject species, thus creating an "ethogram" for that species. Ethology takes a meticulous approach to observational research, developing standards for conceptualizing questions, sampling subjects, recording time and space, recording events,

measuring environmental stimuli, and evaluating observers' reliability. An ethologist will choose the most appropriate method for noting and recording the behaviors, possibly *ad libitum* sampling, or event sampling, or one-zero sampling, or focal sampling, or sequence sampling. The use of 16 mm film made delayed analysis possible, in real time or in slow motion. Later video became a less cumbersome medium; now digital options are available with data analysis built in. Nonetheless, it remains important to ask a good question and to respect the entire behavioral repertoire - the ethogram - of your species. Illustrations are provided.

Elizabeth M. Hill, Sylvia Malcore, & Victoria Burnett

Computer-aided Coding of Videotaped Behavior

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Traditional observational methods require much labor and time to achieve rigor and sophistication. A high level of focused attention is needed for collecting reliable measures. New technologies can be labor-saving and more forgiving of error: A significant methodological advance is the combination of computer-aided event coding with video-based records. With videotaped records, behavior sequences can be coded in greater detail, given that scenes can be reviewed in slow motion. Having a permanent record facilitates reliability assessments. Computerized coding improves over paper and pencil by enabling faster collection of data about more behaviors. Because data are aggregated automatically, transcription errors are a vestige of the past. Current systems also include data analysis capability. Nevertheless, a potential disadvantage involves the temptation to collect too much detailed information, when more basic measurements would suffice to address one's research question. These dilemmas are illustrated using examples from observations of rodent maternal behavior.

Harold H. Greene

Eye tracking: A Window on Visual Information Selection

University of Detroit Mercy, Michigan, USA

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One way to access the human mind is simply to ask questions. One may ask, for example, how people (e.g. males vs females, Easterners vs Westerners) select useful information during vision-related activities (e.g. judging attractiveness, interpreting facial expressions, driving). However, this approach is limited by the fact that knowledge is not always available to explicit memory for verbal communication; and it is susceptible to censorship. For some activities, eye movement indices can reveal information that is censored from verbal communication, or that is not available to explicit memory. Advances in eye movement monitoring make it relatively simple to describe moment-to-moment allocation of attention, without much disruption to natural behaviour. Hence, we are able to study how people acquire information from their visual environment. I will discuss, with examples from our laboratory, the utility of eye movement methods as a window on information selection from static and moving scenes.

Elisabeth Oberzaucher

Multimodal Analysis of Behavior

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Based on the Bielefeld Model of Communication (Oberzaucher & Grammer 2008), we introduce a rationale for multimodal behavior analysis. Symbolic, display and analogue behavior cannot be addressed separately since the different levels of behavior affect each other's meanings. The interrelatedness of the different levels will be illustrated based on a waiting room experiment. We will demonstrate methods for the analysis of behavior on the analogue level and provide insights into ongoing research on the development of an algorithm for automated behavior detection from audio and video data. Finally we argue that only by addressing different levels of behavior simultaneously from top and bottom we can hope to understand complex human behavior.

Karl Grammer

Virtual Ethology and Behavior Modeling: An Idea Based on an Underestimated Ethological Tradition

University of Vienna, Austria

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In the mid fifties with the emergence of cybernetics, ethologists started to model animal (and human) behavior. The idea was to describe the general function and the relation between external and internal stimuli and the emergence of respective behaviors. One example is Konrad Lorenz's hydraulic drive model. More complex models are describing the breeding behavior of the herring gull or butterfly courtship. Here I will give an introduction to new approaches in behavior modeling which use embodied models and how they can be used for hypothesis testing with new methods. This will be demonstrated with virtual humans (embodied agents) and control architectures based on evolutionary theories and observed data.

10:00 a.m.

Parallel Session B

Talks 

10:00-10:20

(Mealey Award Paper) Stirrat, Michael; Buls, David; Perrett, David

Male facial-width-ratio, dominance signalling, and untrustworthiness

10:20-10:40

(Mealey Award Paper) Pflüger, Lena S.; Oberzaucher, Elisabeth; Grammer, Karl

Are attractive women more fertile? Evidence from a rural sample

10:40-11:00

(Mealey Award Paper) O'Brien, Daniel; Gallup, Andrew C.; Wilson, David Sloan

The role of social resources in adolescent prosocial development: A longitudinal study at a city-wide scale

11:00-11:20

Break

11:20-11:40

(Mealey Award Paper) Holzleitner, Iris J.; Oberzaucher, Elisabeth; Pflüger, Lena S.; Grammer, Karl

Matching Pairs. Perceived and Anthropometric Facial (Dis-) Similarity in a Rural Sample of Long-Term Mates

11:40-12:00

(Mealey Award Paper) Penkunas, Michael J.; Coss, Richard G.; Shultz, Susanne:

The Effects of Ancient and Current Threats on Risk Assessment in a Modern Setting: A Comparison of English Children and Adults

Michael Stirrat, SFA; David Buls; David Perrett

Male facial-width-ratio, dominance signalling, and untrustworthiness

University of St Andrews, UK

michael@perceptionlab.com

Decisions about whom to trust are biased by stable facial traits such as attractiveness, similarity to kin, and perceived trustworthiness. Research addressing the validity of facial trustworthiness or its basis in facial features is scarce, and the results have been inconsistent. Measures of hominid skulls have been shown to be sexually dimorphic in bizygomatic width. Proxy measures of this from photographs of faces have been shown to relate to male aggression and cooperation. We extend and validate these results using both 2-D and 3-D information. Using a set of 3-D and 2-D images of male heads we tested male variation in bizygomatic width against operational measures of male trustworthiness (the Trust Game) where participants had options to collaborate for mutual financial gain or to exploit for greater personal gain. We also tested for a relationship between other participants' Trust Game decisions and counterpart males' bizygomatic width. In a final study we manipulated male images and tested whether social attributions of trustworthiness were driven by this. Men with greater facial width (in both 2-D and 3-D measures) were more likely to exploit the trust of others and that other players were less likely to trust male counterparts with wide rather than narrow faces (independent of their attractiveness). Moreover, manipulating this facial-width ratio with computer graphics controlled attributions of trustworthiness. The sexually dimorphic trait facial-width-to-height-ratio validly gives facial cue to trustworthiness. Our data suggest that while partner choice is selecting against this sexual dimorphism, variation in this trait may have been maintained through intrasexual selection and competitive display between males. The decrease in sexual dimorphism and reduction of physical robustness accompanying hominid evolution may have facilitated the cooperation and trust that a functional human society demands.

Lena S. Pflüger¹, SFA; Elisabeth Oberzaucher²; Karl Grammer²

Are attractive women more fertile? Evidence from a rural sample

¹Institute of Zoology, University of Hohenheim, Germany; ²Department of Anthropology, University of Vienna, Austria
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In women, attractive facial features are assumed to signal fertility. Only a few studies investigated the association of attractiveness and the ultimate measure of fertility – the number of offspring. We determined the correlation between facial attractiveness and number of children based on pictures taken at adolescence and questionnaire data of 88 postmenopausal women of a rural society. Furthermore, we measured the level of facial fluctuating asymmetry (FA) of women's current (postmenopausal) faces to test whether symmetry, as a single feature of facial attractiveness, affects reproductive success. Among those who never used hormonal contraception, women who were rated as more attractive have more biological offspring than women rated as less attractive. However, whereas a low level of postmenopausal FA affects attractiveness rating of a face, it does not predict reproductive success. We will attempt to confirm the relation between FA and reproductive success with a larger sample size.

Daniel O'Brien¹, SFA; Andrew C. Gallup¹, SFA; David Sloan Wilson^{1,2}, Ph.D.

The role of social resources in adolescent prosocial development: A longitudinal study at a city-wide scale

¹Department of Biology, Binghamton University, ²Department of Anthropology, Binghamton University
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Prosociality can be successful only if it is prevalent in the local environment. We explored the correlates of prosocial development in a cohort of urban adolescents who reported on their own social behaviors, and the quality of their relationships with adults in 2006, and again in 2009. Using multilevel models predicting prosociality and its development, we found that nearly all forms of social support contributed to levels of prosociality at Time 2, and its growth between Times 1 and 2. A neighborhood's capacity for social control predicted higher levels of prosociality in residents; however, in the longitudinal results, only one neighborhood factor predicted change: those who moved into areas of greater residential stability had greater prosocial growth. These findings further support the relevance of evolutionary theory to the of urban social behavior, and provide insight into a model for evolutionary developmental psychology.

Iris J. Holzleitner¹, SFA; Elisabeth Oberzaucher¹; Lena S. Pflüger²; Karl Grammer¹

Matching Pairs. Perceived and Anthropometric Facial (Dis-)Similarity in a Rural Sample of Long-Term Mates

¹Department of Anthropology, University of Vienna, Austria ²Institute of Zoology, University of Hohenheim, Germany
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Homogamy is a well-known mating pattern in animals and also appears to apply to humans. In this study, we investigate positive assortative mating for facial traits in spouses, for the first time combining a qualitative assessment of similarity with a quantitative approach. We collected standardized facial pictures of 57 long-term couples as well as photographs of the subjects at the age they met their partners. In Study I, 542 participants assessed the similarity of actual couples and random pairs in two different tasks; in Study II we used Geometric Morphometrics to quantify facial shape. Findings of Study I are in line with previous results reporting spouses to look alike - however, we found a great variance between couples. Preliminary results for Study II also suggest a non-significant trend of spousal resemblance. We will discuss the outcome of both studies integrating perception and shape measurement into a conceptual framework.

Michael J. Penkunas¹, SFA; Richard G. Coss¹; Susanne Shultz²

The Effects of Ancient and Current Threats on Risk Assessment in a Modern Setting: A Comparison of English Children and Adults

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External injury contributes to a large proportion of death in the modern world. Here we present data illustrating how 3 to 5 year-old English children and adults evaluated causes of mortality. Ranks were calculated from 34 children's ratings of dangers presented by 7 scenarios in a three-dimensional diorama. The children's ranks failed to reflect the data on childhood deaths published by the Office for National Statistics. Children more frequently selected the ancestral threat of encountering a lion as the most common. Adult ratings for the prevalence of 20 external causes of mortality in the general public were positively correlated at a reliable level with the frequency of mortality reported in the national statistics. Nevertheless, adults were seen to underestimate their personal susceptibility to the same 20 dangers. Children and adults differ in risk assessment based initially on early childhood predispositions, with experience altering risk assessment to match the local environment.

12:00 p.m. Lunch 🌿

1:00 p.m.

Parallel Session A

Symposium

Mehu, Marc (chairperson)

Automatic Analysis of Human Behaviour

Swiss Centre for Affective Sciences, University of Geneva, CH
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Despite the rich source of information available in social interactions, researchers seem to have lost interest in observational studies of behaviour. This situation is partly due to methodological issues inherent to the measurement of behaviour. The difficulty for human observer to systematically extract information about behaviour dynamic and movement quality constrained researchers to use less precise categorical measurements. Automatic analysis of behaviour provides a solution to the problems inherent to traditional behavioural research (Mehu). The aims of this symposium are 1) to present a series of research that used automatic measurement of behaviour and 2) to present the benefits and limitations of using automatic analysis of behaviour. A typical example of how automatic analysis can be successfully applied is the study of dance (Grammer). In that context, automatic motion analysis allows a more accurate recording of rhythmic motion and a better understanding of the information conveyed through dancing. Applied to research on emotional expression, automatic analysis provides continuous and precise measurements of the intensity of facial displays, which has been used successfully to examine dynamic patterns of behaviour in mother-infant interactions (Messinger). Continuous tracking of head movements by automatic methods has also been used to detect specific aspects of conversation like speaker's turn, and the expression of attitudes such as dominance, agreement and disagreement (Heylen).

1:00-1:20

Mehu, Marc

Why do Ethologists need automatic behaviour analysis?

1:20-1:40

Grammer, Karl; Oberzaucher, Elisabeth; Holzleitner, Iris; Pfizer, Evelyn

Dance as an embodied dynamic motion system

1:40-2:00

Messinger, Daniel

Continuous measurement of early behaviour: infants, emotion, and autism

2:00-2:20

Heylen, Dirk

Head movement tracking for conversation analysis

2:20-2:40

Break

Marc Mehu

Why do Ethologists need automatic behaviour analysis?

Swiss Centre for Affective Sciences, University of Geneva, CH

marc.mehu@unige.ch

Research based on behavioural observations of social interaction are becoming rare in the behavioural sciences. This situation is probably due to difficulties inherent to traditional methodology which is laborious and time consuming. This, added to the little predictive power offered by naturalistic observations, makes investigations of ethological research questions through behavioural observation a relatively unattractive line of work. The development of new recording techniques and methods of automatic analysis of nonverbal behaviour may provide solutions to some of these problems. Automatic behaviour analysis provides researchers with continuous and precise measures of movement quality and behaviour dynamics and therefore enlarges the range of behavioural measures currently available. In addition, these methods promise to considerably reduce the time invested in behavioural coding and analysis. Benefits and drawbacks of automatic analysis of nonverbal behaviour will be discussed within the framework of traditional ethological research.

Karl Grammer, Elisabeth Oberzaucher, Iris Holzleitner, Evelyn Pfizer

Dance as an embodied dynamic motion system

Department of Anthropology, University of Vienna, AT

karl.grammer@univie.ac.at

Dancing is an ubiquitous human behaviour and related to the context of group cohesion and mate selection. Although we know that attractive dance can reflect developmental stability and hormone levels and thus serve as a fitness indicator, little is known about the actual signals. Traditional dance research uses categorization which is unable to grasp the quality of motion on a low level of observation. We thus suggest that dancing should be studied with automatic motion capturing devices and the resulting data should be treated on the level of dynamic systems theory. This could enable us to pin down the actual signal and relate it to the actual physical construction of the body and thus reproductive quality of its owner.

Daniel Messinger

Continuous measurement of early behaviour: infants, emotion, and autism

Department of Psychology, University of Miami, US

dmessinger@miami.edu

My research employs continuous measurement systems to document and understand human expressivity, interaction, and early development. This research approach involves the use of computer vision and machine learning to make precise measurements of the intensity of facial expressions and gaze direction. Automated measurement has revealed complex dynamics including 1) time-dependent changes in the strength of infant-mother influence during interaction; 2) a single structure for infant joy, which challenges the uniqueness of Duchenne smiling; and 3) a test of the parsimonious hypothesis that a single facial action intensifies expressions of both positive and of negative emotion. Automated measurements are validated with the continuous ratings of non-experts (<http://measurement.psy.miami.edu>). These non-expert ratings are time-varying indices of how a relevant construct is perceived by human observers. Both computer vision and continuous rating techniques can facilitate the development of interdisciplinary approaches to creating reliable documentation of human behaviour and a scientific understanding of our species.

Dirk Heylen

Head movement tracking for conversation analysis

Human Media Interaction Lab, University of Twente, NL

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Within the field of conversational informatics, i.e. the study of the automatic analysis and generation of conversations, we have worked extensively on the study of the determinants of head movements in conversation. Several corpora were collected, annotated with head movement and other information, and head movements were automatically tracked. Besides analyzing the data and looking for correlations between behaviours and functions, machine learning techniques are used to automatically classify certain properties of the situation. This ranges from determining who is speaking and who is listening to who is the least or the most dominant or whether speakers and listeners agree or disagree. On the other hand, the insights in the functioning and distribution of head movements in the corpora can be used to generate head movements for virtual humans and robots accompanying speech or in listening mode.

2:40-3:00

Gardner, Russell, Jr.

An Ethological Approach To Psychiatric Disorder: Relevance To Its Basic Science And Fate Over Three Decades

3:00-3:20

Klingaman, Kristin

Human infant feeding trade-offs: A theoretical model from an experiment in evolutionary medicine

3:20-3:40

Frederick, Michael J.

Scores of schizotypy are positively correlated with measures of physical and reproductive fitness

Russell Gardner Jr.

An Ethological Approach To Psychiatric Disorder: Relevance To Its Basic Science And Fate Over Three Decades

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Psychiatry's concept of disease lags. Other specialities ask how their normal organ system performs with disease if problems disrupt this (tumors, ruptures, environmental constraints). Psychoanalysis with a faux theoretical pathophysiology provided a basis to act with patients but no foundation in science. Then demonization caused pathophysiological focus to depart with the bathwater. Molecularly focused formulations now support drug-use that rationalizes treatments without reference to normal counterpart behavior. For three decades now, the DSM defined disorder but without regard to how such deviates from order. About then I subjected a disorder to ethological analysis in a prestigious psychiatry journal: do formal descriptions of mania and depression echo the social rank hierarchical (SRH) communicational states of alpha displays and over-submission? Then I and others published textbook chapters and articles on psychiatry's basic science; I deliberated and published with a think tank. The *Across Species Comparisons and Psychopathology Newsletter* fostered pathophysiology and observation for 1.5 decades. Psychiatry changed but does not value real not faux pathophysiology and observation. Drug-impacted molecules operate in anyone, not just in wrong ways in patients, e.g., selective serotonin reuptake inhibitors impact monkey SRH and patient side effects include willfulness with indifference to others, as sometimes characterizes alpha status. Even the Nobel Prize awarded to psychiatrist Eric Kandel stemmed from molecular emphases not from how molecules operate in the whole person. Bruene's text gives optimism, but profit-driven motivations maintain ignorance: placebo effects that operate in any medication use find disfavor because positive effects of physician or caretaker behavior shed light on the problems of drug studies. Placebos possess low status, even thought unethical, because they don't show drugs as molecular only. Presently I respond with others to an invitation for an editorial in the *American Journal of Psychiatry*.

Kristin Klingaman

Human infant feeding trade-offs: A theoretical model from an experiment in evolutionary medicine

Center for Developmental Science, University of North Carolina–Chapel Hill, U.S.

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I extend Trivers's (1974) parent-offspring conflict model to conceptualize breastfeeding and predict realization of infant feeding based on maternal-infant trade-offs. Postnatal ward semi-structured interview and naturalistic observational data were collected in Newcastle, England during 2007-09. The impact of the randomly allocated infant side-car crib (three-sided cot that locked onto the maternal bed frame) or standalone cot (standard rooming-in) on breastfeeding was tested by overnight video recording of mother-infant interactions. As predicted, the side-car crib was associated with a reduction of the maternal cost of breastfeeding. However, participants in the intervention group were not observed breastfeeding significantly more frequently than the control group as expected. High maternal cost and/or low perceived infant benefit may have been experienced to such a degree that participants breastfed minimally despite the "huge difference" in infant access afforded by the side-car crib compared to the standalone cot. Regardless, data support the side-car crib as the better arrangement

for mother-infant dyads who underwent a non-labor cesarean section due to the less potential infant risk observed and the benefit to maternal recovery.

Michael J. Frederick, SFA

Scores of schizotypy are positively correlated with measures of physical and reproductive fitness

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Schizophrenia is a serious mental disorder associated with impaired physical health and a drastic reduction in the probability of reproduction. Vulnerability to schizophrenia is heritable, and healthy relatives of schizophrenics score higher on scales of schizotypy. One explanation for why genes associated with schizotypy persist in the population is balancing selection, whereby non-schizophrenics actually benefit from having elevated levels of schizotypy. Previous research has found scores of schizotypy to be related to creativity and mating success. In the current study, 122 college students completed the Brief Schizotypal Personality Questionnaire (SPQ-B), along with a sexual history survey. Several morphological traits were also measured. Men high in schizotypy reported more sexual partners and had increased body weight, head circumference, and handgrip strength. Women high in schizotypy had lower levels of fluctuating asymmetry. These results support the balancing selection hypothesis of schizotypy. Potential benefits to schizotypy in modern and naturalistic environments are discussed.

1:00 p.m.

Parallel Session B

Talks 

1:00-1:20

(Mealey Award Paper) Hirschmann, Thomas

Stress and Creativity – A Hormetic Relationship to Optimize the Social Adaptation of the Phenotype?

1:20-1:40

(Mealey Award Paper) Ferriera, J.H.B.P;Varella, M.A.C; Bussab, V.S.R.

Sex Differences and Patterns in Brazilians' Sexual Strategies

1:40-2:00

(Mealey Award Paper) Dillon, Lisa M., Saleh, Daniel J.

Mating Strategy Sex Differences and Anticipated Duration of The Relationship Sought

2:00-2:20

(Mealey Award Paper) Varella, M.A.C; Ferriera, J.H.B.P; Bussab, V.S.R.

Cross-Cultural Sex Differences in Musicality: Adaptive Hypotheses

2:20-2:40

Break

2:40-3:00

Honts, Christopher SFA; Christiansen, Matthew; Crider, Elizabeth; Fitzgerald, Carey; Pfaff, Christina; Thompson, Matthew; Colarelli, Stephen M.

Effects of a Companion Animal on Individual and Work Group Outcomes

3:00-3:20

(Mealey Award Paper) Flamson, H. Thomas; Barrett, Clark

Encrypted Humor and Social Networks in Rural Brazil

3:20-3:40

Thomson, J.A.; Andrews, P.W.

The Upside of Down: Depression as an Adaptation for Analyzing Complex Social Problems.

3:40-4:00

Apfelauer, Gerhard; Schiefenhövel, Wulf

Songs of the Eipo, Highland of West – New Guinea, analyzed with new software tools

Thomas Hirschmann SFA

Stress and Creativity – A Hormetic Relationship to Optimize the Social Adaptation of the Phenotype?

Institute for Psychology, University of Mannheim, Germany

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The research presented here is applying recent findings about the nature of stress on the subject of creativity, thereby proposing a new evolutionary theory of creativity. Other than explaining creativity as a mere byproduct of sexual selection (Kaufman et al., 2007), this research is emphasizing the general social benefit of creativity for the individual as for its corresponding group. Thus, as a main hypothesis, the presented theory assumes the human stress system to be the motivational link between individual creativity and its social cause: the need for new knowledge as a basis for social learning. Consequently, this hypothesis has been tested in a creativity experiment involving different levels of stress. Results from this experiment are presented, which promise in-depth understanding about the stress-related mechanisms underlying creativity.

José Henrique Benedetti Piccoli Ferreira, Marco Antônio Corrêa Varella, Vera Silvia Raad Bussab

Sex Differences And Patterns In Brazilians' Sexual Strategies

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We explored the pluralistic nature of human mating by using cluster analysis on two different versions of the Sociosexual Orientation Inventory using a highly diverse and representative Brazilian sample. Participants were undergraduate and graduate students, from different programs, years, and Brazilian regions: 1181 young adults answered SOI and 150 answered a new version of SOI. As predicted, men are more unrestricted than women for all regions and SOI versions, and the cluster analyses showed us more than two different coexisting patterns of sexual strategies for both samples and sexes. These patterns are associated with relationship engagement for women. Our results showed that short- and long-term strategies are a set of coexisting, differentially clustered, combinations of attitudes and behaviors. Our statistical method and population sampled seem to promise a detailed understanding of the pluralistic aspect of individual differences on mate strategies.

Lisa M. Dillon SFA, Daniel J. Saleh

Mating Strategy Sex Differences and Anticipated Duration of The Relationship Sought

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We applied Buss and Schmitt's (1993) theory that mating strategies exhibit sex differences and depend on the anticipated duration of the relationship sought. Previous work established that females pursue attractive mates of high genetic quality for short-term relationships and display increased interest in a mate's resources for long-term relationships. Males prize youthfulness and attractiveness in mates and this shows little variation across relationship type sought. Gallant et al found evidence that sexual strategies theory operates in analysis of profile pictures in heterosexual personal ads. We sought to extend their findings in an analysis of 300 profile pictures from gay and lesbian personal advertisements from a popular online dating database, Plenty of Fish, and also tested for other behavioral sex differences relevant to mate selection. We found lesbians smiled more, displayed more skin, and downplayed their height by using a downward camera angle compared to gay men, findings consistent with gender differences in heterosexuals. Similarly, lesbians displayed a higher number of total photos in their profiles than gay men, but both gays and lesbians displayed more photos when seeking a long-term relationship; gay men seeking an intimate encounter displayed fewest photos. When seeking a short-term relationship, both gay men and lesbians smiled less and wore less clothing. Gay men more likely mentioned financial status, but both gays and lesbians mentioned financial status more when seeking a long-term relationship. To further understand the effects, we coded each photo for degree of masculinity/femininity. Main effects resulted. Lesbians rated highly feminine smiled most and wore least clothing compared to men rated highly masculine. Gay men high on masculinity more likely exaggerated their height with an upward camera angle and more likely flexed muscles in photos. Gay men seeking a long-term relationship more likely mentioned financial status in their profile. The present study provides evidence that sexual strategies theory apply to gays and lesbians. Similarities exist between heterosexuals and homosexuals of the same gender, and effects of masculinity-femininity within each sex.

Marco Antônio Corrêa Varella, José Henrique Benedetti Piccoli Ferreira, Vera Silvia Raad Bussab

Cross-Cultural Sex Differences In Aspects Of Musicality: Adaptive Hypotheses

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Major explanations for the ancestral adaptive value of musicality differ about sex differences. Multilevel predicts fewer, but sexual selection specifies: women would be more inclined to musical appreciation, while men to musical display. We compare participant's musicality by sex in Brazilian and European samples. Participants (24,89 years) were 179 men and 202 women

from São Paulo, 53 men and 98 women from Natal city and 38 men and 54 women from 25 European countries. Cross-culturally, women liked more singing ($p=0,000$), appreciating ($p=0,010$) and they considered music most important in their lives ($p=0,001$). European women also liked more dancing ($p=0,019$). Men reported greater musical experience ($p=0,014$) and like for playing instrument ($p=0,000$). Intrasexually, aspects that each sex is more oriented are more cross-culturally constant than those that each sex is less oriented. These indicate some sexual selection influences on musicality evolution, but it is too early to discard other adaptive theories.

Honts, Christopher SFA; Christiansen, Matthew; Crider, Elizabeth; Fitzgerald, Carey; Pfaff, Christina; Thompson, Matthew; Colarelli, Stephen M.

Effects of a Companion Animal on Individual and Work Group Outcomes

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A growing body of research shows that interactions with companion animals (particularly dogs) have health and social benefits to humans, both in ordinary and therapeutic settings. Yet, little research exists on the effects of companion animals in work settings. Drawing from the literature on the effects of companion dogs on humans, we suggest how companion dogs could be beneficial to individuals and groups in the workplace. We also describe two experiments that examine the effects of a companion dog on individual-level and group-level outcomes. Our dependent measures include blood pressure, heart rate, reported stress, anxiety, group cohesion, group trust, interpersonal intimacy, and satisfaction with the group task.

Thomas Flanson SFA, H. Clark Barrett

Encrypted Humor and Social Networks in Rural Brazil

UCLA Anthropology (USA)

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The Encryption Theory of Humor proposes that one of the means by which people develop their social networks is assortment with the most compatible peers by signaling similarity in locally variable personal features through humor. This talk will present experimental and observational evidence obtained on a collective farm in rural Brazil. Participants engaged in an experimental joke-evaluation study and a photo-sorting social-network study. Results demonstrated a significant effect of prior knowledge and some of the predicted interactions between prior knowledge and encryption level, as well as a small but significant effect of social closeness on similarity in joke ratings. Taken together, these findings support the hypotheses that (a) the cognitive processing of humor relies on an encryption-decryption process, (b) similarity in humor preferences reflects similarities in those cognitive processes, and (c) that similarity plays a role in real-world social assortment.

J. Anderson “Andy” Thomson, Jr.¹, Paul W. Andrews²

The Upside of Down: Depression as an Adaptation for Analyzing Complex Social Problems

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Depression ranks as the primary emotional problem for which help is sought. It is often triggered by severe, complex interpersonal problems, and persistent rumination is a common feature. Abundant evidence indicates that depressive rumination is focused on analyzing episode-related problems. Analysis requires uninterrupted thought, and this may explain why depressive rumination is persistent, resistant to distraction, and difficult to suppress. With the analytical rumination hypothesis we propose that depression evolved as a response to complex social problems that require analysis. Depression's function is to produce a coordinated suite of effects designed to promote the sustained analysis of problem-related information and reduce interruption. We support the analytic rumination hypothesis with evidence from a wide range of levels, including neurotransmitters and their receptors, neurophysiology, neuroanatomy, neuroenergetics, pharmacology, cognition and behavior.

Latika Vyas

Innovation-Decision Behaviour of Tribal Women of Udaipur District Regarding Vermiculture Technology

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Innovation-decisions, an information-processing activity, means that the individual wishes to reduce uncertainty in the social process of learning the innovation's advantages and disadvantages. Assessing innovation-decision behavior informs researchers, extensionists and policy makers to learn about low innovation-rates for adopting vermiculture. A questionnaire registered decisions at various stages of

innovation-decision in 246 tribal women of the Udaipur district of Rajasthan and used Rogers-Shoemaker categories. Results: an overall 88% of respondents adopted the technology at early points and 2% more at a later implementation stage. The majority (57%) decided early whereas 17% & 15% adopted very early and later respectively; 11% of respondents decided very late. Early adopters showed a mean innovation period of 272 days that contrasted to late mean of 1487 days. The diffusion pattern took an "S" shape, slow at first, sharply increasing during "take off," and gradually flattening out. neuroenergetics, pharmacology, cognition and behavior:

Gerhard Apfelauer, Wulf Schiefenhövel

Songs of the Eipo, Highland of West – New Guinea, analyzed with new software tools

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In the last hundred years, the anthropology of art and in particular anthropology of music have contributed substantially to a better understanding of various forms of music in ethnic cultures around the world. Music is particularly relevant for human ethology due to its close relation with human emotions, with behaviour (as in dancing and courtship) and its function for the group, particularly as provider and marker of social identity. For a long time, musicologists used means of transcription to analyse songs of indigenous peoples, in spite of the fact, that the classical notes on five lines are by far not sufficient, even for avantgarde classic music. The classic notation system is unable to represent other tonal systems, other aesthetic ideals and other forms of sound production. Notation only provides about 10% of information contained in singing and instrumental music. Seeger and Artur Simon worked to a more holistic notation. Sonography helped to accomplish a structural analysis, e.g., of the overtone spectrum. New software tools document and analyse traditional music. We will demonstrate advantages of this newly developed new transcription method with the songs of the Eipo, an ethnic group in the highlands of West New Guinea. Dynamic and rhythmic attributes of music can thus be evaluated scientifically, specific styles of singing and instrumental music can be better understood in terms of their acoustic quality. Using electroacoustic computer tools, Eipo musical skills become evident. Their basically pentatonic music utilizes polyphonic improvisation, especially dance songs, performed on the stage of the village ground, contain elements found in other cultures too: structures, melody contours, themes as well as variations and interlock techniques. Other elements of these songs are unique, like inspiratory male whistling and a typical female inspiratory high frequency sound. Musicologists believed that people of traditional cultures sang "wrong notes and wrong styles," they could not understand their musical abilities. The new approach does more justice to the quality of non-western music and will help to reveal the universal elements in musical human behaviour:

5:10 p.m.

Optional Effigy Mound Tour to UW Arboretum departs

Pyle Center Main Lobby

Preregistration ticket required

GREENE PRAIRIE
AT UW ARBORETUM



The University of Wisconsin-Madison Arboretum was established in the early 1930s on farmland fields and pastures, when the university decided to re-establish natural landscapes upon the site. From 1935 to 1941 crews from the Civilian Conservation Corps provided most of the labor to accomplish this task. Today the arboretum describes its collection of restored ecosystems as not only the oldest but also the most extensive in the United States. The Arboretum's 1200 acres border the southern half of Lake Wingra. The Arboretum features many distinct ecological communities, several horticultural collections, effigy mounds, historic artifacts, a Visitor Center and more than 20 miles of a trail system composed of footpaths, boardwalks and fire lanes.

Check it out at uwarboretum.org

MONDAY, AUGUST 2 & TUESDAY, AUGUST 3

ISHE 2010 PROGRAM

Tuesday, August 3, 2010

7:30 a.m. Registration Opens - Outside 

Coffee Breaks at 7:30 a.m. and 10:00 a.m.

9:00 a.m. Keynote Address 

David Buss

"Sexual Conflict in Humans"

David M. Buss

Sexual Conflict in Humans

University of Texas, Austin, TX, USA

<http://homepage.psy.utexas.edu/homepage/Group/BussLAB/>

David M. Buss received his B.A. from the University of Texas at Austin in 1976, and his Ph.D. in 1981 from the University of California at Berkeley. He served in professorial positions at Harvard University (1981 – 1985), the University of Michigan (1985 – 1996), and the University of Texas (1996 – present). David Buss received the American Psychological Association (APA) Distinguished Scientific Award for Early Career Contribution to Psychology in 1988; the APA G. Stanley Hall Award in 1990; and the APA Distinguished Scientist Lecturer Award in 2001. The University of Texas awarded Buss the President's Associates Teaching Excellence Award in 2001. He served as President of the Human Behavior and Evolution Society (HBES) from 2005 – 2007. Buss's books include: *The Evolution of Desire: Strategies of Human Mating* (Basic Books, 1994, 2003), which has been translated into 10 languages; *Evolutionary Psychology: The New Science of the Mind* (Allyn & Bacon, 1999, 2004, 2008), which won a Robert W. Hamilton Book Award in 2000; and *The Dangerous Passion: Why Jealousy is as Necessary as Love and Sex* (Free Press, 2000), translated into 13 languages. His most recent books are: *The Murderer Next Door: Why the Mind is Designed to Kill* (2005), which focuses on mating and murder; and *The Handbook of Evolutionary Psychology* (Wiley, 2005), for which he served as editor; and *Why Women Have Sex* (co-authored with Cindy Meston). Buss has more than 200 scientific publications, and is among the most cited psychologists in the world. Buss has extensive cross-cultural research collaborations and lectures widely within the United States and abroad. His primary research interests include human sexuality, mating strategies, conflict between the sexes, the psychology of status and reputation, homicide, jealousy, stalking, and sexual victimization.

10:00 a.m. Parallel Session A

Symposium 

10:00-10:20

Schaafsma, Sara M; Geuze, Reint H; Schiefenhövel, Wulf ; Groothuis Ton GG

Low frequency of left-handedness in a pre-industrial society undermines the fighting hypothesis

10:20-10:40

Butovskaya, M.; Burkova, V.; Vasiliev, V.; Kulikov, A; Lazebnuj, O.; Selverova, N.B.; Ermakova, I.; Mabulla, A.; Ryskov, A.

The associations of aggressive behavior, body size and testosterone with haplotypes of DRD4RPr and SERTPr genes in Hadza males

10:40-11:00

Break

11:00-11:20

(Mealey Award Paper) Hagleitner, Richard; Schiefenhövel, Wulf

Evolutionary aspects of male and female sexual strategies – An empirical on-line study of 661 homosexual and heterosexual persons

11:20-11:40

Burkova, Valentina; Butovskaya, Marina

Ethnic, gender and age differences in aggression and 2D:4D ratio in Russian and Ossetian children and adolescents

11:40-12:00

Coss, Richard; Newmann, G. Michael

Evidence of relict sexual dimorphism in children's rock-wall climbing

Sara M Schaafsma,¹ Reint H Geuze,² Wulf Schiefenhövel,³ Ton GG Groothuis¹

Low frequency of left-handedness in a pre-industrial society undermines the fighting hypothesis

¹Department of Behavioural Biology, University of Groningen, The Netherlands

²Department of Clinical and Developmental Neuropsychology, University of Groningen, The Netherlands

³Human Ethology Group, Max-Planck-Institute, Andechs, Germany s.m.schaafsma@rug.nl

Despite several fitness costs associated with left-handedness, a minority of left-handers still exists in all human societies. This suggests that left-handedness is associated with frequency-dependent benefits. It has been suggested that left-handers outperform right-handers in fights. This fighting hypothesis is supported by an increased percentage of left-handers in interactive sports and a cross-cultural study showing that aggressive societies hold increased frequencies of left-handers. Therefore, we measured direction and strength of handedness in one of these pre-industrial societies reported to have increased levels of homicide and left-handedness in a more direct and detailed way than previously. We measured preference of hand-use and hand skill using several tasks. Furthermore, we investigated fitness components by means of questionnaires. We found extreme low levels of left-handedness in this society, undermining the fighting hypothesis. At the moment data on the different fitness components is still being analysed, but will be discussed at the ISHE meeting.

M. Butovskaya,¹ V. Burkova,¹ V. Vasiliev,² A. Kulikov,³ O. Lazebnui,³ N.B. Selverova,⁴ I. Ermakova,⁴ A. Mabulla,⁵ A. Ryskov²

The associations of aggressive behavior, body size and testosterone with haplotypes of DRD4RPr and SERTPr genes in Hadza males

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The aim of this study was to find to what an extent the haplotypes of DRD4RPr and SERTPr are associated with the individual level of aggression (physical and verbal aggression, anger and hostility), morning testosterone, and physical strength (body mass index, waist to hip ratio, hand grip, 2D:4D ratio) in adult Hadza males. This data were collected during the three field seasons in August – November 2006 – 2008 in Lake Eyasi region of Northern Tanzania. Hadza are known as one of the few currently remained hunter-gatherers. They are highly egalitarian, with no well expressed leadership authority. The current sample is presented by 68 adult Hadza males aged between 18 and 55. All of them living in the bush and practicing traditional hunting and gathering way of life. Self-ratings on aggression were obtained by using the Buss-Perry questionnaire, translated into Kiswahili and validated to this particular culture. Anthropometric measurements were conducted using the Vernier caliper, anthropometer and measuring tape. The saliva samples for testosterone analysis were collected between 7.00 and 9.00 a.m. following the standard procedure. The buccal epithelium for genetic analysis were collected with special shubs and stored in special buffer liquid before the DNA extraction. The self-ratings on physical aggression, anger and hostility were found to be associated with the number of repeats in the promoter region of DRD4 (the short repeats predicting the higher ratings), and SERTPr (with the long repeats associating with the higher ratings), as well as with the interaction effect of DRD4RPr and SERTPr. Lower 2D:4D ratio was associated with the long repeats in SERTPr. Higher waist to hip ratio was associated with the short repeats of DRD4RPr. Higher morning testosterone was registered significantly more frequently in males bearing longer version of SERTPr. Our data suggest that both genes are responsible for the development of aggressive behavior and physical masculinity in Hadza males.

Richard Hagleitner¹ & Wulf Schiefenhövel²

Evolutionary aspects of male and female sexual strategies – An empirical on-line study of 661 homosexual and heterosexual persons

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From an evolutionary perspective sex differences in sexual and reproductive behavior are predictable and have been well described for cross-cultural samples. The present study compared, for the first time to our knowledge, the four main groups of sexual preference: female and male heterosexuals and male and female homosexuals. In an online questionnaire study (n = 661 adults) it was found, among others, that - homosexual males are significantly more promiscuous, less emotionally attached and masturbate more often than persons in the other groups; - homosexual women, somewhat counter intuitively, were the least promiscuous group, their masturbation rate did not differ from that of heterosexual women; - heterosexual women's reported sexual phantasies differed most from real life, that of homosexual men differed least; - homosexual men had the highest rate of pedophile phantasies, an important finding concerning the issue of child abuse by catholic priests.

Valentina Burkova SFA, Marina Butovskaya

Ethnic, gender and age differences in aggression and 2D:4D ratio in Russian and Ossetian children and adolescents
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In this study we study ethnic, gender and age differences of aggressive behavior in Russian and Ossetian children and adolescents. Besides, we examined the correlation between aggression and 2D:4D ratio. Data on 313 Russian schoolchildren were collected Moscow (Central Russia) and that on 308 children in Vladikavkaz (Caucasus). The study groups were composed of children from 10 to 17 ages of age. All participants were interviewed about their ethnics and age and completed the Russian versions of the Buss-Perry Aggression Questionnaire. Also, we used the anthropometrical measurement of 2nd and 4th digits finger lengths directly from the hand using steel Vernier caliper measuring to 0.01 mm (Manning et al. 1998). Our results showed significant ethnic, gender and age differences in aggressive behavior (physical and verbal aggression, anger, hostility). Besides, the significant negative correlation between the anger scale and 2D:4D ratio was found for boys in both cultures and between physical aggression scale and 2D:4D for Ossetian girls only. This study was supported by the program of Presidium of the Russian Academy of Science «Cross-cultural analyses of social environment and regulation of social conflicts: from tradition to modernity» and Russian Foundation for Basic Research (grant №10-06-00010a).

Richard G. Coss and Michael Newmann

Evidence of Relict Sexual Dinichism in Children's Rock-Wall Climbing

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Behavioral relicts can persist for many thousands of years under relaxed selection and can be manifested early in development. Girls differ from boys by their greater aptitude to climb playground structures with fewer injuries and their greater use of arms and feet for stabilizing on balance beams. These differences are hypothesized as Pliocene-age relicts of sex differences in the use of trees as resources in what is termed "sexual dinichism." The current study of children's climbing examined sex differences in beginning rock-wall climbing by 13 girls and 12 boys 5 to 13 years of age. Climbing activity from video recordings was examined using discriminant function analysis, yielding a correct classification of 85% of the boys and 84% of the girls. Girls employed two-handed clasping of supports and leg crossing to reach supports much more than boys, a pattern of activity with possible arboreal origins consistent with the sexual dinichism hypothesis.

10:00 a.m.

Parallel Session B

Talks 

10:00-10:20

Stephen, Ian D; Oldham. Francesca; Perrett, David I; Barton, Robert

Redness enhances perceived aggression, dominance and attractiveness in men's faces

10:20-10:40

Goldberg, Rick

Horns on Display—Human Male Appropriation of an Animal Signal

10:40-11:00

Break

11:00-11:20

Ogas, Ogi; Gaddam, Sai

Erotical Illusions: Novel Gestalts of Adaptive Sexual Cues in Online Erotica

11:20-11:40

Flynn, Shannon; Fisher, Maryanne

Body Shapes of Adult Magazine Centrefolds: Seasonal and Temporal Trends

11:40-12:00

Alley, Thomas R.

An Observational Study of Sharing 'Contaminated' Foods in Mixed-Sex Dyads as an Indicator of Intimacy and Attraction

Ian D Stephen^{1,2}, Francesca H Oldham³, David I Perrett², Robert A Barton³

Redness enhances perceived aggression, dominance and attractiveness in men's faces

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In a range of non-human primate, bird and fish species, red coloration in males is associated with social dominance, testosterone levels and mate selection. In humans, skin redness is associated with health, but it is not known whether it is also associated with dominance and attractiveness. Here we allow female participants to manipulate the redness of skin to maximize the perceived aggression, dominance and attractiveness of photographs of men's faces, and make two findings. First, participants increased redness to enhance each attribute, suggesting that facial redness conveys similar information about a male's qualities in humans as it does in non-human species. Second, there were significant differences between trial types: the highest levels of red were associated with aggression, an intermediate level with dominance, and the least with attractiveness. These differences may reflect a trade-off between the benefits of selecting a healthy, dominant partner and the negative consequences of aggression.

Rick Goldberg

Horns on Display--Human Male Appropriation of an Animal Signal

Binah Yitzrit Foundation, USA

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The need by communicating organisms for signal reliability raises ethological questions pertaining to a wide spectrum of animal communication. In many ungulate species, males grow a paired set of horns that function as both armament and ornament. Despite there being no archaeological evidence that human beings ever grew horns, men cross-culturally have nevertheless prominently displayed the horns of animals as head ornaments to display and thereby enhance their own stature over that of lower ranking rivals. Ornamental horns have been used at various times to elevate, trivialize or even demonize the prestige of targeted individuals or groups. According to animal signaling theory, signal amplifiers may be used so signal-receivers can judge more easily the quality of the signaler. This paper proposes that conspicuous display of animal horns by human males serves as an index amplifier to broadcast the reproductive value of high-quality males.

Ogi Ogas, Sai Gaddam

Erotical Illusions: Novel Gestalts of Adaptive Sexual Cues in Online Erotica

Research-DP, Boston University, Boston, MA, USA

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Many diverse categories of online erotic content are popular across cultures. Some of this content features sexual cues consistent with the adaptationist perspective on attraction psychology articulated by Don Symons and others (e.g., "teen porn"). However, other erotic content poses a challenge to both evolutionary and cultural explanations, such as the cross-cultural appeal of "she-male porn" among heterosexual males. We propose the best way to make sense of these non-adaptive categories of erotica is by considering them as "erotical illusions" parallel to optical illusions. Specifically, an erotical illusion is comprised of multiple adaptive sexual cues that did not appear together in the human environment of evolutionary adaptedness that are processed by the human perceptual system to produce a novel gestalt that is

consciously experienced as highly (and inexplicably) erotic. We describe three erotical illusions in detail ("she-male porn," slash fiction, wetlook), using a four-step methodology.

Shannon C. Flynn, SFA & Maryanne Fisher, Ph.D.

Body Shapes of Adult Magazine Centrefolds: Seasonal and Temporal Trends

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Do women's body shapes change over the years and by season? Previous findings using samples of Playboy centrefold models support a temporal trend toward thinner and less curvaceous female figures over time (Seifert, 2005; Voracek & Fisher, 2002). As well as replicating these findings, we investigated trends in women's body shapes with the aim of uncovering seasonal differences in women's body shapes. If human females reach a seasonal reproductive peak in spring, their body fat distribution will change seasonally to reveal visually detectable cues to their reproductive status. We analysed anthropometric data from 676 Playboy magazine centrefold models. As predicted, the mean body fat distribution of Playboy centrefold models featured in spring issues of the magazine did indicate a more curvaceous figure in the spring compared to those featured in fall issues; these shifts were, however, not significant. The temporal trends found in past research were also replicated.

Thomas R. Alley

An Observational Study of Sharing 'Contaminated' Foods in Mixed-sex Dyads as an Indicator of Intimacy and Attraction

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Mixed-sex dyads (256 pairs) were covertly observed while eating in public, then asked to complete a brief survey. Observations were made at over 33 different locations in 7 states in the eastern and mid-western U.S. An observation coding form was used to record information about the dyad, the location, and the details of each incident of food sharing, kissing, and hugging, if any. Observers noted whether shared food had been 'contaminated' by previous contact with the mouth or hands of the other person. As predicted, food sharing, especially sharing of contaminated food, was more commonly observed in pairs who were romantically involved as opposed to dyads who are just friends or co-workers. Sharing of 'contaminated' food occurred more often in dyads who also displayed affection (kissing or hugging) during the observation period. Dyads who shared contaminated food tended to report feeling closer and more intimate after the meal.

12:00 p.m. Lunch 

1:00 p.m. **Parallel Session A**
Symposium 

1:00-1:20

(Mealey Award Paper) Fink, Hady; Schiefenhövel, Wulf

Baby Blues in Brazil: empirical study of social and cultural factors in the framework of evolutionary medicine

1:20-1:40

de Felipe, Renata Pereira; Bussab, Vera Silvia Raad

Analysis of postpartum depression effect on mother-infant interaction via interactive behaviors and maternal interaction styles

1:40-2:00

Kohl, J.V.

Human Pheromones: Linking Neuroendocrinology and Ethology (revisited)

Hady Fink SFA¹, Wulf Schiefenhövel²

Baby Blues in Brazil: empirical study of social and cultural factors in the framework of evolutionary medicine

¹Passau University, Passau, Germany

²Max-Planck-Institute, Human Ethology Group, Andechs, Germany

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Abstract Presentation of a fieldwork project conducted in the Brazilian state Paraíba. To investigate possible causes for post partum dysphoria (Baby Blues) 146 women and 33 experts were interviewed and the results analyzed. A rather high incidence of dysphoria was found: 69.2%. A number of factors were significantly correlated to the mood disorder, which support the hypothesis that post partum dysphoria is an evolved signal directed to the mother's social group functioning to elicit better support for the baby and herself. In addition to the empirical results, an evaluation of the methodology (triangulation of qualitative and quantitative interviews) is given as well as a presentation of the findings concerning the traditional rites of childbed in northeastern Brazil.

Renata Pereira de Felipe and Vera Silvia Raad Bussab

Analysis of postpartum depression effect on mother-infant interaction via interactive behaviors and maternal interaction styles

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This study is part of a longitudinal research concerning postpartum depression (PPD) and its possible causes and consequences for mother-infant interaction in a high-risk Brazilian sample. The first contacts between the baby and his/her social environment – usually, represented by the mother – occur in postpartum period. It is in this period that some risk factors, as PPD, occur more often and sometimes can affect mother-infant interaction. Depressed mothers are not a homogeneous group, so it is necessary to consider that they can express different interaction styles (withdrawn, intrusive, and good interaction). The current research, aimed to investigate the PPD effect upon the mother-infant interaction at 4 months of age. PPD and maternal interaction styles were considered independent variables in order to associate them with dependent variables represented by interactive behaviors. We applied the Edinburgh Postnatal Depression Scale (EPDS) Brazilian version to a sample of seventy-five participants at 2-4 months postpartum and found a PPD prevalence of 33%. An observer blind to PPD condition did mother-infant interaction recordings of 3 min at 4 months postpartum in order to measure: 1) interactive behaviors (gaze, smile, touch, verbalization/vocalization and cry), coded second-by-second; and 2) maternal interaction styles (intrusive, withdrawn, and good interaction), coded in 10s time sampling units. We found that (1) only non-depressed dyads showed a correlated pattern of verbalization/vocalization, smile and gaze. (2) Three factors included: a) "Dyadic positive affection"; b) "Infant's gaze to mother's hands"; c) "Maternal verbalization". (4) Out of the 75 mothers, 57,3% were considered as good interaction, 33,3% as intrusive, and 9,3% as withdrawn. Although PPD can disturb the interactive arrangements, depressed mothers can interact according to their babies. This result points to existence of resilience mechanisms that may help sublimate the potentially harmful effects of PPD condition.

J.V.Kohl

Human Pheromones: Linking Neuroendocrinology and Ethology (revisited)

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The evolution of food choice and mate choice provides a bottom-up model that reveals we are genetically predisposed to respond to olfactory/pheromonal input with alterations that occur in hormone-secreting cells of tissue in the brain. With unparalleled reciprocity, the development of human personal preferences for visually perceived physical features is accompanied by a top-down model. The direct effect of the olfactory/pheromonal input on the central nervous system alters the genetically predisposed maturation of the neuroendocrine system and the reproductive system during a behavioral maturation sequence driven by the same hormone-secreting nerve cells. This direct effect of olfactory/pheromonal input is associated with other sensory input from the social environment that is not required for the development of human personal preferences (e.g., visual input associated with visually perceived physical features). Cultural effects on behavior are effects of gene-culture co-evolution that allows us to think about the relative salience of sensory input. showed a shorter innovation decision period (272 days) than later adopters or laggards (1487 days).

1:00 p.m.

Parallel Session B

Talks 

1:00-1:20

Fisher, Maryanne; Cox, Anthony

Hero versus Heroine Development in Popular Romance Fiction

1:20-1:40

Weisfeld Glenn; Weisfeld, Miriam B.

Why Do Smiling, Laughter, and Blushing Often Accompany Embarrassment?

1:40-2:00

Strout, Sarah L; Thompson, Nicholas S.; Laird, James D.

Evolutionary Basis of Differences in Emotional Styles

Maryanne Fisher¹ and Anthony Cox²

Hero versus Heroine Development in Popular Romance Fiction

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²Center for Psychology and Computing

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Harlequin romance novels are a well-recognized form of popular romance fiction. As we have previously argued, analyzing these novels provides insight into women's mating preferences, interests, and possible strategies. The novels focus on a heroine and hero who typically meet in the first few pages of the story, with the rest of the novel dedicated to addressing how they overcome obstacles and eventually, begin a committed long-term relationship. We performed a thematic analysis of character development in novels from the long-running Romance series. We found that heroines rarely exhibit substantial development, aside from potentially altering their point of view concerning the hero. In stark contrast, heroes consistently undergo a transformation from a rogue with often hidden positive intentions, to a loyal, caring individual who demonstrates qualities associated with long-term relationships.

Glenn Weisfeld¹ and Miriam B. Weisfeld²

Why Do Smiling, Laughter, and Blushing Often Accompany Embarrassment?

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Is embarrassment distinguishable from shame, guilt, and failure? All share the averted gaze and slumped posture of submission and involve the orbitofrontal cortex. All arise from personal failure, but embarrassing acts tend to be minor infractions of subtle social norms. Furthermore, embarrassment alone frequently elicits laughter from observers—and sometimes the victim. The laughter of embarrassment may reflect a humorous element. In humor as in embarrassment, the butt or victim typically commits some unexpected, minor, amusing faux pas. Perhaps embarrassment blends two emotions, humor appreciation and shame, and might be defined behaviorally as exhibiting submission displays and laughter (or smiles) in response to committing some minor gaffe. Blushing sometimes accompanies embarrassment, perhaps in order to accentuate submission when the mistake is subtle. Signs of embarrassment usually elicit sympathy, functioning as submission displays. Future research might determine if embarrassment, but not shame and failure, activates brain areas implicated in humor appreciation.



"SIXTY STRUT TENSEGRITY SPHERE,"
A NINE FOOT DIAMETER SCULPTURE
MADE OF STAINLESS STEEL IN THE
ENGINEERING BUILDING

Sarah L. Strout,¹ Nicholas S. Thompson² and James D. Laird²

Evolutionary Basis of Differences in Emotional Styles

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Research has shown that people differ in how much their feelings are based on cues from their bodies or the situation. An evolutionary explanation of this phenomenon is that it occurs because of the operation of a cognitive module designed to enable the organism to predict its own impending behavior. This theory suggests that for some individuals (situational cuers) external factors are the best source of information about their own future behavior; whereas for others (personal cuers) information from themselves is best. We theorize that this difference arises from early experiences with caregivers (being in an environment in which caregivers are reliable or unreliable) and thus emotional styles will be related to attachment style. Results support this hypothesis showing significant differences in attachment styles between situational and personal cuers, with situational cuers scoring higher on secure attachment questions and personal cuers scoring higher on insecure attachment questions.

PRIMATE RESEARCH CENTER

2:00 p.m.

Break and final opportunity to rate impressions of art work

Corridors radiating from either side of rooms ■

Depart Pyle Center Main Lobby for walk to the Primate Research Center

Preregistration ticket required



TIP

The Wisconsin National Primate Research Center is one of eight federally supported (NIH-NICRR) National Primate Research Centers and the only one in the Midwest. More than 250 center scientists, through competitive grants, conduct research in primate biology with relevance to human and animal health. The Primate Center is based in the Graduate School of the University of Wisconsin-Madison. The Center has strong research and teaching links to the UW Schools or Colleges of Medicine, Letters and Science, Agriculture and Life Sciences, and Veterinary Medicine. The Center is AAALAC accredited and its policies adhere to the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training.

Check it out at primate.wisc.edu

TUESDAY, AUGUST 3 & WEDNESDAY, AUGUST 4

ISHE 2010 PROGRAM

Wednesday, August 4, 2010

7:30 a.m. Registration Opens - Outside 

Coffee Breaks at 7:30 a.m. and 10:00 a.m.

9:00 a.m. Keynote Address 

Heidi Keller

"Relationship Formation: The Bioculture of Attachment"

Heidi Keller

Relationship Formation: The Bioculture of Attachment

University of Osnabrück, Osnabrück, Germany

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Heidi Keller is a professor of Psychology at the University of Osnabrück. She received her PhD at the University of Mainz and her Habilitation at the Technical University Darmstadt. She directs the department of Culture and Development at the University of Osnabrück and the Department of Culture, Learning and Development of the Lower Saxonian Institute of Early Childhood Development and Education, and also a multicultural longitudinal research program on the cultural solution of universal developmental tasks spanning the first 6 years of life. Her research contributes to the recognition of the systematic influence of culture for human development. The most comprehensive publication of her research is *Cultures of Infancy*, published 2007 with Erlbaum, and translated into Greek with a Spanish translation in preparation. Heidi Keller has held numerous guest professorships, among others at the National Institute of Health, Bethesda, MD, UCLA and the Universidad de Costa Rica in San José. She has been a fellow in residence at the Netherlands Institute for Advanced Study in the Humanities and Social Sciences and a Nehru chair professor at the MS University of Baroda. She is currently the president of the International Association for Cross Cultural Psychology.

10:00 a.m.

Single Track Session

Talks 

10:00-10:20

Schiefenhoevel, Wulf

Concepts of Space and Time in Melanesia - Universal rather than Culture-Specific

10:20-10:40

Kohoutova, D.; Saxton, T.; Havlicek, J.

Changes Of Odour Preferences During Puberty

10:40-11:00

Segal, Nancy L.; Stohs, Joanne Hoven

Chinese twins adopted separately and reared apart: first prospective study of co-twin reunions

11:00-11:20

Break

11:20-11:40

Oldenquist, Andrew

The Evolution of Sociality and Morality

11:40-12:00

MacDonald, Kevin

Evolution and a Dual Processing Theory of Culture: Applications to Moral Idealism and Political Philosophy

Wulf Schiefenhoewel

Concepts of Space and Time in Melanesia - Universal rather than Culture-Specific

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How culture shapes our mental imagery has kept thinkers long busy. In Plato's *Cratylus*, Sokrates argues that words are non-arbitrary, that meaning follows universal rules. In linguistics, cultural anthropology, and similar disciplines, the opposite position of the Sapir-Whorf hypothesis holds, that cultures via linguistic engrams create conceptual worlds of their own, idiosyncratic so that members of other cultures lack easy access. Hopi language allegedly being void of words for time (not correct) remains one of the corner stones in this. Everett recently published another claim of culture-specificity. My contribution describes concepts of space and time in Pacific societies. It shows their concepts to follow a parsimonious intuitive logic like that of other cultures. My fieldwork in Melanesia especially involved linguistic terminology and I made observations while living and traveling with local people. I use others' reports on Polynesian navigation. A small finite number of basic linguistic concepts for spatial deixis developed in Melanesian cultures, concepts not counter-intuitive nor encapsulated in mystery, but easily decoded by outsiders. The same basic claim concerns time. Traditional cultures are often portrayed of having cyclical temporal concepts, but I show Melanesian peoples conceptualize time in a linear way. To survive, ancestors needed a brain to create realistic, sometimes complex (e.g. Pacific navigators), representations of space and time allowing them to return home or to reach safe places. Our species' cognitive powers evolved from that of primate precursors, did not divert into innumerable conceptual constructions influencing behavior in the spatial and temporal environment, but with a limited set of often universal solutions.

D. Kohoutova,¹ T. Saxton,² J. Havlicek¹

Changes Of Odour Preferences During Puberty

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Perception of mate-choice-relevant odours may relate to sexual maturation. Thus, one might expect changes in preferences for bodily odours but not other odours during puberty. We recruited 147 pubescent males and females aged 11-15 years of various demographic backgrounds from mixed-sex general education schools. Pubertal development was determined by a self-assessment questionnaire with gender-specific line drawings of Tanner puberty stages. The test of odour preferences included odours of human origin (androstenone, androstenol, androstadienone), animal origin (castoreum), herbal (mint, salvia) wood (spruce), fruit (pear), spice (vanilla), floral (jasmine), drink (coffee) and food (garlic). Subjects rated two drops of each odorant on a paper strip on 7-point scale. We found differences in the pleasantness ratings of the smell of vanilla. Prepubertal and early pubertal subjects judged the vanilla more pleasant than midpubertal subjects. Further, we found some sex differences in pleasantness and intensity ratings. Boys found the odour of castoreum and mint more pleasant and rated mint, spruce and coffee as less intense than girls. The data do not support the hypothesis that perception of mate-choice relevant odours changes during adolescence, but did find evidence that social experience relevant to food can impact upon preferences and that olfactory and gustatory perception connect to each other. Results suggest puberty affects the olfactory preferences of vanilla odour – younger children liked vanilla more than mid-pubertal children, perhaps because of its sweet flavour.

Nancy L. Segal and Joanne Hoven Stohs

Chinese Twins Adopted Separately and Reared Apart: First Prospective Study of Co-Twin Reunions

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China's One-Child Policy, implemented in 1979-1980, led to the abandonment and adoption of thousands of infants, mostly female. Included among them were twins, adopted by different families and reared separately. Ten pairs have now participated in the first prospective developmental study of reared apart twins. Thirty internationally adopted Chinese twin pairs reared together have also been recruited. The proposed paper will discuss the project's methods and goals, and will summarize descriptive features of the sample. A qualitative analysis of the reared apart twins' reactions to the first meeting with, and first departure from, their co-twin will be presented. A video tape of a pair of six-year-old twins meeting for the first time will be shown. Twins are recruited via web sites, self-referrals and newspaper articles. The reared apart sample includes 5 MZA twin pairs and 5 DZA twin pairs. The mean age at assessment was 5.56 years (SD = 2.39) and ranged between 3.19 to

10.82 years. Parents completed forms concerning rearing family background (e.g., parental age and education), twin's adoption history (e.g., reasons for separation, age at adoption) and behavioral and medical measures (personality, early health). Twins completed the Wechsler IQ test. Twintype is mostly established by DNA testing. Quality of the first meeting, based on parental descriptions, were rated by investigators and students as (1) high: intense reactions (e.g., tears, protests), (2) moderate (e.g., some expressions of sadness) and (3) low (e.g., very withdrawn, little response). Most twins two years of age and older displayed a strong attraction and attachment to one another when meeting for the first time. In contrast, the behaviors of younger pairs were characterized as "neutral." Most striking, the twins showed greater rapport with, and attraction to, each other than to peers. Behaviors at departure were judged as (1) high: intense reactions (e.g., tears, protests), (2) moderate (e.g., expressions of sadness) and (3) low (e.g., withdrawn, little response). Older twins displayed more intense reactions and greater upset upon leaving their co-twin than younger twins. Leave-taking included sadness, even grief, although reactions varied. Younger twins displayed mostly "neutral" behaviors. These age differences are consistent with the childrens' levels of developmental maturity. Future analyses will compare the behaviors of MZ and DZ pairs. Parents raising separated twins are encouraged to reunite the children often (as these parents have), given the social benefits of this unique relationship.

Andrew Oldenquist

The evolution of sociality and morality

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Group egoism began, behaviorally speaking, with utterly mindless kin selection, the patriotism found in ant and termite colonies. Mammals are genetically programmed to bond to a particular (geographically closest) little one. So too with humans' evolved predispositions to bond to their clans and be ready to defend them. No Verfassungspatriotismus for them: Like the termites we bond to our own family members, countries, and with a little philosophical help, species. A view that love must be grounded in properties cannot accommodate our evolutionary history.

Kevin MacDonald

Evolution and a Dual Processing Theory of Culture: Applications to Moral Idealism and Political Philosophy

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Psychology has reached a consensus that there are two types of processing, implicit and explicit. Implicit processing characterizes the modular brain as described by evolutionary psychologists, while explicit processing enables humans to creatively imagine possible worlds in a rational manner and in conformity to a moral ideal. Research is reviewed indicating substantial control of explicit processing over implicit processing. Implications for moral idealism (altruism) and philosophical idealism as a basis for political organization are discussed. Explicit processing enables behavior in accord with moral ideals, including altruism. Explicit processing also enables the construction of societies according to moral ideals, such societies may result in widespread dysphoria because they conflict with human proclivities resulting from our modular psychology.

12:00 p.m. Lunch 

1:00 p.m. **Single Track Session**

Symposium 

Rosemary Sokol Chang (chairperson)

Nicole Giordiano, SFA; Dan O'Brien, SFA

The Evolutionary Studies (EvoS) Consortium: A Model for Introducing College Students to Evolutionary Theory

EvoS Consortium, USA

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The purpose of an Evolutionary Studies (EvoS) program is to expose students majoring in all disciplines to evolutionary theory early in their careers. To date, two full-fledged EvoS programs exist, at Binghamton University and SUNY New Paltz, and there are over 30 schools involved



STATE STREET
PEDESTRIAN MALL

at some level in the EvoS Consortium. The benefits of an EvoS program begin in the classroom, where based on the Evolutionary Attitudes and Literacy Survey, students leave EvoS courses knowing more about and respecting the applications of evolutionary theory far greater than when they enter the courses. Through EvoS programs, students are also engaged in research that has promise for both basic and applied science. For example, the Binghamton Neighborhood Project uses evolutionary theory to unify community groups and academic disciplines in the study and improvement of urban life.

In this symposium, we plan to introduce the audience to 3 aspects of the EvoS Consortium. In the first talk, Rosemarie Chang will review the benefits of creating an EvoS program and becoming involved with the Consortium and discuss future goals for applying for an even larger NSF grant for the EvoS Consortium schools. In the second talk, Nicole Giordano will present the success of the EvoS concentration at SUNY New Paltz as a model program. In the third talk, Daniel O'Brien will review two courses he has developed as part of the EvoS program at Binghamton University, one of which is a core course for EvoS Programs nationwide. Discussion time will be left to consider ways in which people may become involved in the EvoS Consortium.

1:00-1:20

Chang, Rosemarie Sokol

Benefits Of EvoS Program, Becoming Involved, Future Goals

1:20-1:40

Giordano, Nicole

Model Successful Program of EvoS at SUNY New Paltz

1:40-2:00

O'Brien, Dan

Review Of Two Courses Developed As Part EvoS Program At Binghamton University, One Core For EvoS Nationwide

Rosemarie Sokol Chang

The Evolutionary Studies (EvoS) Consortium: A Model for Introducing College Students to Evolutionary Theory
EvoS Consortium, USA

rischang@gmail.com

The EvoS (evolutionary studies) consortium has been created to help bring a subject taught primarily as a biological science, evolution, to all human-related disciplines. The first two EvoS Programs (at Binghamton University and SUNY New Paltz) received NSF funding to organize a multi-institution consortium, which now numbers over 30 institutions, and includes a resource website (<http://evostudies.org>) and peer-reviewed journal (EvoS Journal). As the consortium continues to spread into all ranges of higher education institutions, from major research universities to community colleges, the next step is applying for an even larger NSF grant that can accommodate more institutions, and potentially spread into a worldwide movement. Come learn about the benefits of developing an evolutionary studies program, provide an overview of the

resources provided by the website and journal, and help you consider ways that your school can benefit from the NSF money and start your own evolutionary studies program.

Rachael Carmen SFA, Ben Crosier, SFA, Haley Dillon SFA, Nicole Giordano SFA (presenting), Ashley Peterson SFA, and Glenn Geher
Interdisciplinary Evolutionary Studies at SUNY New Paltz - Bridges between the Islands of the Ivory Archipelago
Department of Psychology, State University of New York, New Paltz, USA

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Since Fall of 2007, the program in Evolutionary Studies (EvoS) at SUNY New Paltz has become one of the most successful programs on campus. With approximately 80 students a year signed up to take the Seminar course that serves as the program's cornerstone, this program has become a model of interdisciplinary scholarship. For the past two years, EvoS-NP has benefited from more an award from the NSF. This program includes courses from across campus, including anthropology, art history, biology, black studies, English, geology, and psychology. The program also includes a lecture series with world-renowned speakers (e.g., Niles Eldredge, Gordon Gallup, and Marlene Zuk) related to evolution from various disciplines. Students in the program have proven successful their pursuit of graduate studies related to evolution. This presentation will depict the basic elements of EvoS-NP as a way to think about how your institution might become involved in the EvoS Consortium.

Daniel O'Brien SFA, David Sloan Wilson

Bringing Undergraduate Education Up to Speed: Two Courses that Highlight the Application of Evolutionary Theory to the Behavioral Sciences

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In recent years, the application of evolutionary theory to human affairs has seen dramatic growth. Because these developments are relevant to all fields, within and outside of academia, it is a primary goal of the EvoS Consortium to make them accessible to undergraduate students. To this end, the authors have constructed two novel courses at Binghamton University: "Evolution for Everyone" and "Cultural Evolutionary Theory." The first is an introductory course that teaches the basic mechanisms of evolution and their application to human affairs. The latter is an advanced course that provides students with a sophisticated understanding of gene-culture coevolution and its implications for human societies. Assignments in both classes are exploratory and encourage students to reinforce class material by applying evolutionary theory to the topics and cultures that most interest them.

2:00 p.m. Break

2:20 p.m. Single Track Session
Talks 

2:20-2:40

Johnsen, Laura L.; Geher, Glenn

The Impact of Marriage and Divorce on the Male to Female Mortality Ratio

2:40-3:00

Kruger, Daniel J.

Sex differences in human mortality rates as a function of life history and male mating competition

3:00-3:20

Oberzaucher, Elisabeth; Grammer, Karl; Stockinger, Emanuela; Filiadis, Chrissoula:

Fast and Frugal Algorithms: Sex Differences in Error Management Persist Beyond Mating Game

Laura L. Johnsen SFA, Glenn Geher

The Impact of Marriage and Divorce on the Male to Female Mortality Ratio

SUNY New Paltz, New York, United States

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Beginning in infancy, males have a higher mortality rate than females throughout life. This is caused by a number of different factors including behavior: Young males partake in risky behavior to find a mate (Kruger & Nesse, 2007). The M:F MR increases until around age 25. Men seem to be getting married at around the same time. The reason for the peak at age 25 could be because married men have less incentive to participate in risky behavior. The M:F MR peaks again at 50. At this time men die due mainly to internal causes (Kruger & Nesse, 2006). However, external causes of death may be influenced by some males getting a second divorce on top of going through "mid-life crisis". At this stage of life, a man comes to terms with his age and may possibly revert to participating in risky behavior in order to feel youthful. They may partake in risky behavior in order to attract a younger mate and prove their dominance over younger males.

Daniel J. Kruger

Sex differences in human mortality rates as a function of life history and male mating competition

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Sex differences in mortality rates stem from genetic, physiological, behavioral, and social causes that are best understood when integrated into an evolutionary life history framework. This presentation depicts how sex differences in mortality rates across age and cause can be understood in the context of life history allocation of somatic and reproductive efforts. Excess male mortality is a result of a trade-off between competitiveness and longevity. Social and environmental conditions intensifying male competition for resources, status, and mates lead to increased male mortality through riskier behavior patterns and the impact of stress on physiological susceptibility. The fact that sex differences in mortality rates are not genetically determined encourages intervention efforts to reduce excess male mortality. These findings also indicate that the sex difference in mortality rates is an important indicator of life history and social conditions.

Elisabeth Oberzaucher, Karl Grammer, Emanuela Stockinger, Chrissoula Filiadis

Fast and Frugal Algorithms: Sex Differences in Error Management Persist Beyond Mating Games

Department of Anthropology, University of Vienna, Austria

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Error management reduces costly errors by means of a fast and frugal algorithm. Since erring in the assessment of a potential mate bears different costs for men and women, differential error management evolved: Women underestimate male interest (Type II error), men overestimate female interest (Type I error). 203 men and 201 women participated in the study. On presentation of a patience game and after manipulation of the puzzle, subjects assessed their ability to solve the puzzle. Men tend to overestimate their capability to solve the puzzle at both times; women tend to underestimate themselves. Men with masculinized 2D:4D show an even more pronounced Type I error management. This study shows that sex differences in error management are not limited to the reproductive context. Furthermore, we could link error management to 2D:4D as a measure for prenatal hormone environment.

3:30 p.m.

Poster Session



Micah Ahmed SFA, Maryanne Fisher



Women's Nonverbal Cues of Presumed Sexual Interest

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In spite of past research that shows men are unable to accurately determine women's intentions while flirting, we propose men should have an approximate idea of women's mating interest, and invest themselves accordingly. We asked

15 men to rate a list of non-verbal female flirting behaviors using a scale of "most indicative" to "least indicative" of women's desire for a sexual encounter. Then we observed 50 women's flirting behaviors at a nightclub, and recorded whether they left with the man with whom they had flirted. Women who exhibited a higher proportion of behaviours thought to be most indicative of sexual interest were also the most likely to leave with the man they had recently interacted, and women displaying the behaviours least

indicative of sexual interest were less likely to leave with the man. These results showed that men are able to determine women's interests with at least some accuracy.

Altay Alves Lino de Souza SFA **2**

THE EFFECT OF PHYSICAL ATTRIBUTES IN THE FIRST IMPRESSION FORMATION: Use of Thematic Apperception Test (TAT) and impact in decision-making of Human Resources employees

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The study intends to verify the effect of physical attributes in decision-making under uncertainty conditions. In the first study, 1014 undergraduates evaluated three of the TAT plates - IV, V and VII in a standard form and a modified version – with a beard drawn on the young man in each plate - based on 26 attributes. Shaved face received higher neoteny scores. Facial hair increases the perception of masculinity and dominance. We not found higher scores of attractiveness by Women, supporting intrasexual selection of facial hair. The second study showed facial hair impact on HR employees. A less intimidating face makes shaven candidates more chosen to corporative jobs. Bearded candidates were chosen to "liberal" jobs, probably because the link among facial hair, nonconformism and creativeness. Is important to note that the success of a person is a multifatorial phenomenon but the impact of first impressions on decision making is indisputable.

I.B.S. Bertelli SFA; M.A.C. Varella; L.M. Carvalho; C.R. Marques **3**

Jealousy In Homosexual Men – Evidence From Brazil

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Heterosexual men tend to experience a more sexual jealousy and women, more emotional one. However some studies have found that homosexual men tend to answer more similar to heterosexual women, while others, found that they are more like heterosexual men. We compare the intensity of sexual and romantic jealousy of homosexual men with heterosexual men and women. Participants were 55 homosexual men, 44 heterosexual men and 92 heterosexual women, all from Brazil. They answered an online Portuguese version of the Buss questionnaire regarding sexual and romantic jealousy and another concerning level of jealousy (Romantic Jealous Scale). Heterosexual men presented more intensity of jealous and sexual jealous than homosexual men, while the romantic jealous was higher in homosexual men than heterosexual men. There was no difference between homosexual men and heterosexual women. Therefore, in this study homosexual men were very similar to heterosexual women concerning their jealousy.

Noelle Bourgeois; Roland R. Denomme; Sarah L. Strout **4**

The Importance of Intelligence, Wealth, Humor and Interest in

Children on Female Mate Choice

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Abstract Previous research has shown specific traits that women prefer in mates (e.g. Buss & Barnes, 1986). The traits that women prefer; however, are based on the type of relationship she is seeking (e.g. Buss and Schmitt, 1993; Li & Kenrick, 2006). Participants rated the attractiveness of ten men and how humorous, wealthy, intelligent and interested in children the man would need to be for her to consider dating him, having sex with him, marrying him, and having children with him. Analyses support our hypothesis. Future research should look at other types of short-term and long-term relationships and other characteristics.

Erik P. Bucy and James Ball **5**

Quantifying the Claim that Nixon Looked Bad: Nonverbal Analysis of the Kennedy-Nixon Debates

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Despite the long-held assumption that Richard Nixon lost the first televised debate against John F. Kennedy in 1960 due to a poor visual presentation and awkward nonverbal communication style, no systematic nonverbal analysis of the debate (or their 3 subsequent encounters) has ever been undertaken. The claim that Kennedy prevailed was based on polling data and anecdotal observations indicating television viewers thought Kennedy won the debate while radio listeners gave Nixon the edge. Aside from television's purported focus on "personality" and "image," what specifically led audiences to form this conclusion? To answer this question, this paper reports on a shot-by-shot analysis of the candidates' nonverbal communication style, delivery, and visual presentation. Within nonverbal communication, the candidates' facial displays (whether threatening, reassuring, evasive, or appealing) is coded, along with their voice tone and behavioral mannerisms. Overall, the candidates' nonverbal behavior is classified as illustrating an agonistic or hedonic style of interaction.

Cristina-Antonia Candea, ¹Silviu Apostol² & Wulf Schiefenhövel¹ **6**

Is positive assortative mating based on facial attractiveness a human mate choice adaptation?

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²University of Bucharest, Faculty of Biology, Romania
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How are possible mates selected? We can assume identifying mechanisms under considerable selection pressure. Physical attractiveness possesses an important element for dating, mating and reproduction in humans so that low fluctuating asymmetry (e.g. expressed in the human face) seems crucial for a good immune system and good genes in general. So, why is not everybody go for Aphrodite or Adonis? Humans are, probably

primarily guided by "face saving," good at judging chances in risky social transactions like courting. Previous work by others found, in work on human assortative mating that in dating situations people match their own physical attractiveness with that of potential partners. Our study tested this hypothesis. We presented photographs and voice recordings of 35 female and male students from Bucharest to 109 raters (84 female, 25 male) of the Human Ethology course at Innsbruck University who rated them on a 5-point scale for beauty and attractiveness. The raters assessed their own attractiveness which we then correlated to the average ratings of each target subject (over all raters). We found a negative correlation between self ascribed attractiveness and the points given to the stimulus faces. Our study shows that persons who perceive themselves as attractive seem to look for potential partners similarly attractive to themselves. This makes positive assortative mating based on facial attractiveness a likely mate choice strategy. We discuss other facets of these results.

Jenny Collard SFA; Joscha Kärtner, Nils Schuhmacher 7
Social and Social-Cognitive Influences on the Development of Prosocial Behavior in the Second Year
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We would like to propose that there are different developmental pathways to early helping behavior, which emerges in the toddlers' second year of life. Which path the toddlers' development takes is contingent on specific socio-cultural influences, namely the emphasis primary caretakers put on the development of their toddlers' subjective experience as an autonomous and independent intentional agent. Besides the self-other differentiation and empathic concern as potential preconditions for early helping we, propose an alternative pathway based on shared intentional relations resulting in situational helping behavior: toddlers to the same types of helping behavior as helping behavior based on empathic concern. We assessed data from 40 German and 40 Turkish-migrant families when toddlers where 17-19 months old. To test our model, we designed several tasks for emotional (simulation of pain and sadness by experimenter and mother) and instrumental (grasping for objects out of reach) helping behavior and analyzed their relation with other developments that necessarily presuppose self-other differentiation: understanding the subjectivity of preferences (Repacholi & Gopnik, 1997), mirror self-recognition, and cooperative behavior (especially reengagement attempts) with parallel and complementary roles.

Laurenz Csokor SFA; Elisabeth Oberzaucher; Karl Grammer 8
Feedback-Use in Mixed-Sex Conversation Settings

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Feedback signals are an important part of human communication. By analyzing videos of conversations of mixed sex dyads, we investigated verbal feedback, addressing the question whether the amount of feedback given can reveal if a person is interested in the conversation or the conversation partner. The amount of feedback seems to reveal just that. Furthermore, high degrees of male feedback seem to increase the woman's interest. Thus, we introduce a feedback model called "female control – male initiation-model", suggesting that women adjust the amount of feedback they give to their interest in their conversation partner. This allows them to decide whether or not to give the man the opportunity to talk big about himself. This study once more highlights that feedback is a very complex part of human communication.

James Doyle 9
Sorting and searching behavior patterns: Analyzing waist-to-hip arrays with the selection sort algorithm
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The goal of this project is to develop a 'peak-shift' index to assess the attractiveness of behavior patterns, rather than images alone. Waist-to-hip ratio arrays comprised of data collected from video recordings of behavior patterns (e.g., walking, dancing) will be sorted using the selection sort algorithm. These view-dependent WHRs, derived from unknown actual-WHRs, will be used to create a 'peak-shift' index. Sorted arrays will be used to find image data of: 1) less than .69, the peak-shifted elements, 2) .70-.72 intermediate elements and 3) greater than .72 elements. In short, data collected from behavior patterns will be sorted and searched. The hypothesis that lower WHR elements increase viewing time will be tested.

Dario Dronova SFA; Marina Butovskaya 10
The choice of marriage partner in India
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The choice of marriage partner in India was realized in three ways. The first, traditional one, is agreement between parents of a bridegroom and a bride. The second appeared under the influence of technical progress, - acquaintance through the Internet. The third way, which is theme of our work, is search of marriage partner with the help of newspaper ads. The aim of research is attempt to confirm gender differences in strategies of the choice of marriage partner in the context of the theory of reproductive success and parental investment offered by R. Trivers and D. Symons

(Trivers 1972, Symons 1979). Significant gender differences were found concerning the preferred characteristics of desired permanent partner. Two regions of India: north and south were subjected to analysis. Significant regional differences were found. Data was analyzed in SPSS-13. Materials were collected from newspaper ads in 2008. Totally there were data on 1100 ads (563 ads from men and 537 – woman, aged between 21 and 49 years).

Julia Fedenok *SFA; Marina Butovskaya; Valentina Burkova* **11**
Adaptation to multicultural environment in Russia: the spatial behavior of children and adolescents
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In modern Russia a problem of interethnic attitudes is quite actual. It is substantially connected with changes in demographic structure of the population: the big inflow of migrants from the CIS countries and an exchange of the population between internal regions of the country. Moscow, as well as other big cities, has faced a problem of migration of people with other mentality, cultural and language traditions. The aim of this study was: to explore the spatial behavior of children and adolescents in multicultural environment of school settings. The ethnological techniques and interviewing were applied to measure the social desirability, cultural and family background. The data were collected four regions including Moscow, Vladikavkaz, October and Krinichny villages. In total the data on 1418 spatial interactions were collected. The age of children ranges from 9 to 17 years. The cultural differences in spatial distances were found. For boys the mean body distances were: in Moscow was 35,6 sm, for Vladikavkaz 30,0 sm, for October village 36,6 sm and for Krinichny 50,4 sm; for girls the mean body distances were: in Moscow 30,6 sm, for Vladikavkaz 23,8 sm, for October village 26,6 sm and for Krinichny 33,6 sm. It was demonstrated that in multicultural school environment the immigrant children adopt the norms of spatial behavior and tactile contacts by the age of 14 – 15 years. The substantial amount of conflicts between school children in multiethnic settings were due to ignorance about the cultural specific norms of spatial and nonverbal behavior. This study was supported by The Owen-Aldis-Award, the program of Presidium of the Russian Academy of Science «Cross-cultural analyses of social environment and regulation of social conflicts: from tradition to modernity» and Russian Foundation for Basic Research (grant №10-06-00010a).

Hady Fink **12**
Petty corruption among Colombian taxi drivers and police officers: an empirical study
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Corruption has been a pervasive problem across cultures and centuries, despite all efforts to curb it. The basic pattern of (anticipated) reciprocity (“do ut des”) as the core of corrupt

relationships can be found in most societies. In this study, Colombian taxi drivers were interviewed to assess the situation of petty corruption between them and police officers. It was found that in Colombia the legal framework as well as the cultural circumstances entering the individual calculus foster corruption

Carey J. Fitzgerald¹ *SFA; Daniel J. Kruger*²; **Tom Peterson**² **13**
Female scarcity reduces women’s marital ages and increases variance in men’s marital ages

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When women are scarce in a population relative to men, they have greater bargaining power in romantic relationships and may be able to secure male commitment at earlier ages. Male motivation for long-term relationships may also be higher; in conjunction with the motivation to secure a partner before another male retains her. However men may also need to acquire greater social status and resources to be considered marriageable, indicating a potential increase in variance for male marital ages when women are scarce. We calculated the Operational Sex Ratio, mean and median female marital age, mean and median male marital age, and variance in male marital age for the 50 largest Metropolitan Statistical Areas in the USA with 2000 U.S. Census data. When women are scarce they marry earlier on average and the variance in male marital age increases. However, there was no significant relationship with mean male marital age.

Daniel Gambacorta¹ *SFA; Seger Breugelmans*²; **Bryan Koenig**³;
Timothy Ketelaar¹ **14**
Sex, Ethnicity, and The Face: A Cross-Cultural Analysis of Facial Displays of Emotion

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Previous research has found that perceptions of facial displays of emotion are dependent upon the context in which these faces appear. Several lines of evolutionary thought would suggest that gender and ethnicity could be important contextual variables influencing emotion perception. In the current study, participants were presented with a series of pictures depicting groups of people and were asked to rate the emotions of a target individual in the center of the picture. This target individual (as well as the background individuals) varied in terms of sex (male, female), ethnicity (Caucasian, Asian) and facial expression displayed (angry, happy or neutral). In three samples of participants from Singapore, the Netherlands and the US we explored several evolutionary hypotheses concerning biases in the perceptions of facial displays of emotions. Results show that contrary to prior findings, emotion perception in Westerners was affected by the

context in which the face appeared.

*Justin R. Garcia*¹ SFA; *Daniel J. Kruger*² 15

Unbuckling in the Bible Belt: Conservative sexual norms lower marital ages

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Sociosexual norms, as well as marital patterns, vary widely across human history and culture. Yet, humans share an evolved psychobiology of sexual motivation that reliably leads to procreation through incentivizing sexual activity. Adaptive mechanisms promoting sexual activity emerge even in nominally monogamous societies with conservative norms for sexual behavior. We predicted that the interaction of the evolved psychology of sexual motivation and strong discouragement of non-marital sex would lead to relatively earlier marriages on average, as young adults seek a socially sanctioned way of expressing sexuality. We examined this hypothesis with 2000 U.S. Census data. We found that cities in the Bible Belt had significantly lower mean and median marital ages for both men and women, supporting our prediction. These relationships held when controlling for median household income, median family income, and even the Operational Sex Ratio for those 18-64 years of age.

*Stefan Goetz*¹ SFA; *Tony Schnotala*; *Kraig Shattuck*; *Amanda Taylor*; *Bob Erickson*; *Robert O. Deaner* 16

Facial Masculinity Does Not Predict Aggression in Criminals or Hockey Players

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Recent studies have reported that facial masculinity predicts aggressive behavior; but the robustness of this effect is unclear. We thus tested whether two putative measures of facial masculinity--the width-to-height ratio and the eye-mouth-eye angle--predicted convictions for non-violent or violent crimes or the number penalty minutes accrued by hockey players. Data and pictures for 688 male criminals were taken from www.michigan.gov/corrections; information for 240 NHL players was taken from sportsillustrated.cnn.com. We achieved high inter-rater reliability for both masculinity measures, yet neither measure predicted aggression in criminals or hockey players. Moreover, these results were unchanged when we controlled for several potential confounds. These results suggest that previous reports of a correlation between facial masculinity and aggression could represent type I error, i.e. false positives. Thus, the cliché, "never judge a book by its cover" remains sound advice.

Karl Grammer; *Elisabeth Oberzaucher* 17

The Case Of Moulay Ismael The Bloodthirsty: Fact Or Fancy?

Department of Anthropology - University of Vienna

The scientific discussion about the case of the Sharifian Emperor of Morocco, Moulay Ismael the Bloodthirsty (1672-1727), who is supposed to have sired 888 children, is an open one. Einon (1995) claimed, based on several factors potentially affecting reproduction, that it is unlikely that he had that many offspring. Contrarily, Gould (2000) states that Einon's assumptions are unrealistic. Apparently this problem can only be solved when it is tested against a realistic model of conception, which predicts the number of copulations necessary to reach this amount of offspring. In order to do so we created a computer simulation based on the Wilcox-Weinberg Model (Wilcox, Weinberg & Baird, 1995) of conception. The Wilcox-Weinberg model takes the survival rate of sperm and the viability of the cycle into account. We combined it with a Bayesian Network which controls for different social and biological factors. The model iteratively simulates copulations until the necessary amount of offspring is reached. We computed simulations for three different scenarios of the emperor's life time reproduction span. The constraints we used in the first model of unlimited random access to females were: religious tabus, the possibility of ovulation detection (females are more attractive at the point of maximum likelihood of conception), the rate of female infertility, and fetal and child mortality. In model two we used a harem as a restricted mating pool and added the following constraints: Possible favorites, wives, cycle synchronization among females, and the number of previous copulations which might affect ovulation probability. Our results indicate that the Emperor could have reached his notorious reproductive success with far fewer copulations than expected.

Zachary Hohman SFA; *Aurelio José Figueredo* 18

Comparing Molar and Molecular Coding Systems Using Varying Levels of Inference in the Human Affect Ethogram

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We designed a real-time coding system, based on the indicators (and affect code structure) of the SPAFF, including those of the FACS. We decided to use one-zero focal animal sampling, which is an ethological "time-sampling" method. The resulting Human Affect Ethogram was used by three independent raters to analyze video data. Two systems for aggregating behavioral items into composites were compared and contrasted, using the composites implied by: (1) the SPAFF, and (2) Ekman's (2004) theory. Two separate groups of coders were trained on the same molecular cues, but coded the same videos at the "molar" level, directly

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recording the affect codes using a 17-item SPAFF-based ethogram or a 7-item Ekman-based ethogram. These systems were compared to each other, and also to the molecular system, testing predictions regarding the evolved capacity of humans to monitor and encode affective behavior at these two different levels.

Mousavi Jazayeri SMH, SFAM¹; A. Preti² 19

Changes in the meaning of beauty across time and space: culture, economy and body shape

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The meaning and the representation of beauty changes over time across cultures. Ancient paintings show that the ideal women as more overweight than modern depictions. In our time, mass media affects life-style and the values. Since economy inter-tangles with popular communication, economic values likely influence representation of beauty in mass media. Economic status of America affected criteria for Beauty Queen of the Year: In the past sixty years, the bodies with more curves were chosen during years of good economic times. When the economy was bad, older and weightier persons, with smaller eyes, and higher waist to hip ratio were chosen. Economic values embedded in mass media influence the beauty ideal, a factor affecting sex and marital choice among humans: hence, economy guides contemporary sex life. We explored current literature about human body to identify indicators of body shape as marker of beauty with the aim of depicting gross changes across time and cultures on the values attached to human beauty representation. We use representation of clothes as used controls. We searched medical, psychological and sociological papers on health, meaning of beauty, and eating disorders were looked for using PubMed/Medline or Ovid. Mass media and economical changes accompanying the so-called globalization importantly impact both body shape and the meanings of beauty. Ideal body is even more depicted as tiny and light, while real bodies become stronger, heavier and taller. On the other hand, clothes are more functional and comfortable now than in the past. Body portrayal in mass media influences

body ideal of adolescents, and in some countries impacted incidence of eating disorders. Across different countries and ethnicities important changes in both the representation of the body and the meaning attach to beauty. This likely impacts risk of eating disorders in the younger generations, since culturally shared beauty and body ideals influence self-esteem. Mass media and fashion industry should not choose very thin persons as fashion models.

Laura L. Johnsen SFA; Nicole Giordano, Glenn Geher 20

Childhood Injuries as an Early Practice of Intra-sexual Competition

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From infancy until about age 25, males die at a faster rate than females due to external causes (Kruger and Nesse 2006). The purpose of our research is to explore the factors surrounding sex differences in childhood injuries from an evolutionary perspective. For instance, boys injured during rough play may be mimicking the mating strategies practiced by adult males. Using a survey that asks participants about childhood injuries and a Life History Measure, we predict that that a) males will report (on average) more injuries in general and more injuries with high severity, b) more male injuries will be caused by rough play or some display of physical activity, and c) the number of the participants childhood injuries will inversely correlate with k strategy. Participants with a low number of injuries will have "high k" and participants with a high number of injuries will have "low k".

Anna M. Keber SFA; Elisabeth Oberzaucher; Karl Grammer 21

The three levels of communication in potential courtship situations

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Human communication is a multimodal process working on different levels: Language, body posture, voice and movement quality. In a zero acquaintance encounter both sexes are in a difficult situation due to the unknown intentions of the counterpart. Hence sexual asymmetry in parental investment

results in sex differences in behavior patterns. Women should behave in a more protean way, shown through a complex interaction of the communication levels. In a waiting room experiment we filmed 84 mixed-sex dyad interactions for 7 minutes. Additionally questionnaire data was collected. Data was analyzed on the different communication levels. The results indicate that the levels of communication are much more interwoven in females than in males. Evolutionary constraints lead to gender-specific behavior patterns. We conclude that women mask their intentions through a more complex interaction between the three communication levels and by doing so have better prospects to uncover the ambitions of their counterpart.

*J.V. Kohl*¹; *L. C. Kelahan*²; *H. Hoffmann*² 22

Human Pheromones Increase Women's Observed Flirtatious Behaviors And Ratings Of Attraction

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Social-environmental odor cues, which conspecifics learn to associate with sexual activity, induce changes in the hypothalamic-pituitary-gonadal axis. Classical conditioning may evoke functional changes in the neuroendocrine pathways that mediate the release of luteinizing hormone (LH), and associated changes in behavior. Mammalian conditioning paradigms suggest that androsterone is a human chemical signal of reproductive fitness, which could be unconsciously associated: (1) with an LH response to androstenol; (2) with other sensory input from the social environment, and (3) with behavior. During a cooperative task, we controlled for variability in non-olfactory/pheromonal sensory input from the social environment, and varied the presence or absence of the chemical mixture that our accomplice applied. We observed statistically significant increases in women's flirtatious behaviors when our accomplice was wearing the androsterone/androstenol mixture, and women's self-reported level of attraction to our accomplice increased. The neurophysiological effect and the associated behavioral affect meet criteria that characterize human pheromones.

Yen-Ju Lee SFA; *Harold. H. Greene*; *Princess L Hearn*s 23

Culture and attention strategy: Do you see as I see?

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Social organization within a culture makes us weight certain aspects of the visual field differently for the allocation of attention. Is the cultural difference reflective of differences in strategies for acquiring information? We measured in Eastern and Western participants, (i) the probability of making saccades towards different directions and (ii)

saccade amplitudes towards different directions, during a visual search task. There were differences, both in the probability of making saccades and in the saccade amplitudes towards different directions. However, no difference was evident between the Eastern and Western participants ($p > .05$). While the results do not question well established cultural differences in cognitive styles between Eastern and Western participants, they suggest that these differences are probably not rooted in different strategies for acquiring information during the encoding stage of information processing.

Pavlina Lenochova; *Dagmar Kohoutova*; *Jan Havlicek* 24

Real men don't smoke... – About a body odour of smokers and non-smokers

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Body odour plays an important role in sexual partner's choice. The odour individuality is considered to be relatively stable. However, subtle changes of odour quality can occur. According to anecdotic sayings, smoking might be one of the factors influencing its nature. In a between-subject study, total of 9 smokers and 9 non-smokers (males) sampled the body odour while adhering to experimental restrictions and either smoking or non-smoking habit. Female raters evaluated the samples for pleasantness, attractiveness, intensity, and masculinity. The Linear Mixed Model analysis found a significant difference in odour masculinity ($p = 0.047$; Confidential Interval = 0.005). The body odour of smokers was rated as less masculine. Despite we do not know the exact causality of smoking and masculinity (i.e., is smoking the reason of its decrease or the way of masking the lack of it), the finding suggests that masculinity and smoking might be connected.

Kathrin Masuch^{1,2} SFA; *Matthias Baldauf*²; *Peter Froehlich*²; *Elisabeth Oberzaucher*¹; *Karl Grammer*¹ 25

Sex differences in orientation by using mobile urban exploration tools

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Male spatial abilities differ from female ones. Evidence indicates that female orientation is landmark-based, whereas men use euclidean information about their environment. We tested whether these evolutionary-based sex differences in orientation also apply when people use modern environments like virtual mobile urban exploration tools. In a field study, participants (13 female and 13 male) were asked to explore their surroundings by using a virtual urban orientation application and select among several

methods for filtering and over-viewing.

Analysis of the behavior of the subjects when interacting with the device revealed that female users prefer content-based visualization methods, while male users refer to spatial representations more often. In urban exploration women prefer content-based information techniques more than men do. This finding is in line with previous studies on spatial orientation.

P.D. Moncrief Jr. 26

Can Same Sex Selection Have Explanatory Value as an Extension of Darwinian Sexual Selection?

Journal of Scientific Exploration
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Same sex attraction as an evolutionary factor will be considered as another possible sexual selection mechanism using similar logic as Darwinian proposals regarding sexual selection (entirely opposite sex selection). Possible consequences will be discussed as a thought experiment. It will be argued that same sex sexual selection could result in more powerful effects than (standard Darwinian) opposite sex sexual selection. New material will be introduced.

P.D. Moncrief Jr. 27

Religion as Instrumental in Late Human Cognitive Development

Journal of Scientific Exploration
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Many explanations for the adaptation advantages of the phenomenon of human religion. This will offer the suggestion that religion contributed to the very high cognitive abilities that have occurred in the human species. Religion likely offered advantages in intergroup rivalry via group cohesion and other advantages. Very high cognitive abilities will be suggested as nurturing religious feelings, enabling more formidable groups, thus promoting survival value for such groups.

N.T. Nowak¹; G.E. Weisfeld¹; C.C. Weisfeld²; E.O. Imamolu³; J. Shen⁴; M. Butovskaya⁵ 28

Attractiveness and Spousal Infidelity as Predictors of Extramarital Sexual Behavior in Couples from Five Cultures

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We investigated the roles of attractiveness and sexual fulfillment within marriage as predictors of extramarital sexual fulfillment in couples from China, Russia, Turkey, the U.K. and the U.S. Spousal infidelity, finding one's spouse unattractive, and finding people outside the marriage attractive were consistent predictors of

infidelity. Next, we selected the couples where the husband, wife, or both reported infidelity with at least some frequency. Spousal infidelity remained a predictor of infidelity for husbands, and for wives of "cheating couples". For husbands of "cheating couples", finding women outside the marriage attractive continued to be a predictor. For wives of "cheating couples", their perception of how attractive they are to their husbands trended toward significance. Our results support the idea that men are motivated by sexual variety regardless of being sexually fulfilled within marriage, and that women may be having sex outside of marriage to enhance their own sense of mate value.

Vera Pivonková; Anna Rubesova, Jitka Lindova; Jan Havlicek 29

Sexual dimorphism and personality attributions in male faces

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Individuals tend to attribute personality traits on the basis of facial traits. This phenomenon has been mostly studied in relation to the halo effect of attractiveness. Thus, our study focus on masculinity. We carried out PCA of 15 anthropometric measurements from 71 male faces, resulting in three components: Face height (C1), Face breadth (C2), Cheekbones/jaw prominence (C3). The targets' photographs were also rated by 210 women and 177 men on scales for masculinity, attractiveness and nine psychological characteristics. We found that masculinity correlated positively with ratings of Dominance and Social Boldness, and that masculinity rated by men correlated positively with ratings of Emotional Stability and Privatness. We found no relationship between masculinity rated by women and the PCA components, while masculinity rated by men correlated negatively with C2 (possibly related to babyface features) and positively with C3 (which includes features developed under the control of testosterone, such as jaw prominence).

Sarah Radtke 30

Human Female Sexual Behaviour Across Sexual Orientation: Evolution, Personality and Fluidity

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Women's sexual behavior across sexual orientations was evaluated in this thesis. Evolutionary theory has shown that women and men pursue different reproductive strategies and predicts that strategic interference results when women and men are trying to acquire mates. This study compared women who varied in sexual orientation to assess differences between lesbian, bisexual and heterosexual female scores in sociosexuality. Masculine and feminine personality traits were additionally assessed by the Bem Sex Role Inventory. Sexual fluidity was assessed via interviews. Results indicated that lesbians and heterosexual women had similar scores in sociosexuality, suggesting little effect of strategic interference on lesbian sociosexuality. Extreme Kinsey scale scores were compared (i.e.

completely heterosexual and completely lesbian), lesbians reported being more restricted in sociosexuality than heterosexual women. Bisexual women were statistically significantly more unrestricted compared to lesbian and heterosexual women. Lesbians had the highest self ratings of femininity when compared to heterosexual and bisexual women. Female fluidity was also analyzed via qualitative interviews. Comparative aspects of sexual behavior between bonobos (*Pan pansicus*) and human females are explored.

Zhanna Rozenberg 31

Attachment Theory and the Plight of Foster Children

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This poster applies the principles of attachment theory, as outlined by John Bowlby and Mary Ainsworth, to behavioral outcomes exhibited by children who are placed in long-term residential or foster care. The basic tenets of attachment theory are discussed, such as prevalent attachment styles, maternal behaviors, which contribute to these, and the developmental stages of attachment process. Following the summary of attachment theory, the findings of several research studies, conducted with foster children and their caregivers, are examined from the perspective of attachment theory. The studies reviewed here compare attachment security among children who were reared in institutions and home settings and examine factors which contribute to secure attachment among foster children. Disorganized attachment style is discussed, as well as behaviors displayed by insecurely attached children, which elicit rejection on the part of foster parents. Finally, the poster discusses implications for foster parents, clinicians, and permanency planning.

Kraig Shattuck SFA; Robert O. Deaner 32

Developing Evolutionarily-based Domain-specific Loyalty Scales

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Loyalty has been researched in many areas (e.g., to brands, lovers, organizations), but little attention has been paid to whether loyalty is a unitary construct or differs across areas or domains. We suggest that loyalty will differ across domains in accordance with the challenges our ancestors faced during their evolutionary history. We propose testing this idea by developing a series of psychometric loyalty scales and using them, as well as existing scales, to test our prediction that there will be significant individual variation across domains. We also predict sex differences in some domains, specifically that men will report greater group loyalty and women will report greater friend and lover loyalty. This research may provide a comprehensive framework for understanding the contextual and

dispositional factors contributing to loyalty.

Patrick A. Stewart; Pearl K. Ford 33

The “Happy Warrior” Revisited: A Pilot Study Concerning Participant Response to Happiness/Reassurance Displays by President Barack Obama and First Lady Michelle Obama

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Building on research of the Dartmouth Group and others on how responses to displays of happiness/reassurance by political leaders, we use Ekman's Facial Action Coding System (FACS) for facial display, especially two different types of smiles: those not engaged but primarily uses the lower face (polite smiles) and the play face using both upper and lower face. Second, we replicate previous work on differences between black and white viewers in their responses to a politician culturally defined as African American. Finally, we examine response to First Lady Michelle Obama. A FACS-trained coder used video of face-to-face seated interviews with multiple smiles and no sound. We asked the following (1) “Leader attention” – will there be better/more accurate identification of President Barack Obama's display behavior when compared with First Lady Michelle Obama? (2) “Angry black man” – will there be a tendency by white subjects to misinterpret facial displays of both Obamas as having greater anger/less happiness? (3) Out-group (party identification) hypothesis – will there be a greater tendency to misinterpret facial displays of out-group targets as having greater anger/less happiness than in-group targets.

Marco Antônio Corrêa Varella;¹ Michel Belyk;² Peter Pfordresher;³ Steven Brown² 34

Are There Sex Differences In Human Singing Ability? Evolutionary Implications

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Evolutionary musicology is concerned with the origins of human musicality. One important aspect relates to potential sex differences in music skills. This study focuses on the ability to vocally imitate a heard melodic sequence. Subjects were played unfamiliar melodies and were asked to sing them. Errors were examined with regard to notes and intervals. The subjects were 98 female and 68 male non-musicians. The results showed no sex differences in singing accuracy. In both groups, around 14% of the subjects were equally classified as inaccurate imitators ($p=0.55$). Nonparametric analyses of singing accuracy showed no sex difference, although there was a trend for women to show

more note ($p=0.050$) and interval ($p=0.059$) accuracy than men. These results are inconsistent with models predicting strong sex differences in musical imitative singing skills, and are instead consistent with models predicting low sex differences, but it is still too early to discard other adaptive theories.

Lia Matos Viegas SFA; Andrea Presotto, Emma Otta 35

Who is better? How males and females walk through an unknown environment

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Spatial cognition's literature shows large sex differences performing in tasks of memorization and following a route. However, experimental routes were created by researchers, and this may influence the results. Based on the hypothesis that techniques to memorize routes were developed during the evolution of human species, females should be as good as males in this task. We tested the hypothesis conducting a pilot study with eight participants. They were asked to create, describe, memorize, and follow a route in a naturalistic setting. Participants had knowledge about the area by visualizing a map. Contrary to the literature, males and females had a similar performance in memorizing/following task, although they had used different techniques to memorize their routes, suggesting that these strategies are equally successful. As a pilot study, our results present restriction and replications are being conducted to increase the size of the sample.

T.Y. Walters SFA; S.M. Platek 36

Oh No She Didn't! Female intrasexual competition is partly mediated by physical characteristics that men find attractive

Georgia Gwinnett College, United States of America
twalters@ggc.edu

Women's intrasexual competition remains an understudied realm in evolutionary psychology, although competition is a primary factor for driving sexually selected adaptations. Our focus is to explore female intrasexual competition by reviewing the minimal amount of literature on perceptions of sex, beauty, and female competition, discuss experiments illustrating that females utilize intrasexual competition based partly on waist-to-hip ratio, and discuss a theory of female intrasexual competition based on female sexual self-perception and the desire of females to "negotiate space" and present themselves as the preferred choice to the opposite sex. These pilot studies suggest that women recognize and employ the same phenotypic cues to female attractiveness that men do and that female relational aggression is an intrasexual competitive behavior partly mediated by the female's own phenotypic quality, relationship status, and facultatively utilized in contexts where a high quality mate is primed.

Wes Young; Angelica Kraushaar; Patrick A. Stewart 37

Fayetteville Farmer's Market: Is it creating or enhancing social capital in the Fayetteville area?

University of Arkansas
pastewar@uark.edu

The Fayetteville Farmers' Market (FM) known for economic and social interactions provided an observational research setting for inferences about the social capital of the market. Phase 1 collected data over one Saturday to learn who entered the market place from each of the four corners (a "snapshot" of participants). Phase 2 collected data over multiple Saturdays by following individual shoppers unobtrusively, noting their economic and social behaviors. The initial exploratory Phase 1 uncovered relationships between age, ethnicity, time of entry, income, and entry point. Amongst other findings, the majority of patrons, young adults, favored the northwest entrance and their young children suggested this as a family entry point. Older patrons favored entry by the northeast and southwest entry points, and minority patrons the southwest corner that we found used significantly more between 7-9 a.m. Preliminary evidence suggests that the Fayetteville FM provides a space to build social capital in the community, but does so in a way that does not meet all the preferred requirements for social capital. It lacks in providing variety as espoused by Oldenburg (1999) noticeable in the lack of participation by minorities. From dress style we inferred participants occupied a middle/lower class income range though some patrons appear to either dress up or portray deceptively higher income in this way. FM also appears to cater to more females than males when attendance compared male/female census data. Retail marketers have long understood the role of store layout upon consumer behaviors, yet few farmers' market studies examine similar connections between market layout and the patron activities. We will present other data about the functions of FM and social capital.

- 6:15 p.m.** Coach departs UW Sellery Hall for ride to Monona Terrace
- 6:25 p.m.** Coach departs Lowell/Campus Inn for ride to Monona Terrace
- 6:35 p.m.** Coach departs Edgewater for ride to Monona Terrace
- 6:45 p.m.** Evening Banquet at Monona Terrace 
- 7:00 p.m.** Optional Tour of Monona Terrace
- 7:30 p.m.** Dinner served

Coach will depart Monona Terrace for conference hotels immediately following the event



Originally designed by Wisconsin native Frank Lloyd Wright, it was first proposed by Wright in 1938. The county board rejected the plan by a single vote. Wright would continue to seek support for the plan (and alter its design) until his death in 1959. For the next three decades, various proposals for a convention center on the Monona Terrace land would be considered and rejected. Several times, it appeared that supporters of the project would be able to secure the public financing to complete the project, but various forces (such as the start of World War II) inevitably sidelined the plan. In 1990, Madison Mayor Paul Soglin resurrected Wright's proposal, which won narrow approval in a public referendum in 1992. Construction began two years later. In 1997, nearly sixty years after Wright's original inception, Monona Terrace Community and Convention Center opened its doors. The building was constructed by J.H. Findorff and Son Inc., a southern Wisconsin contractor. Monona Terrace is located two blocks from the Wisconsin State Capitol building in downtown Madison. From the roof of Monona Terrace, one can see views of downtown Madison, including the Capitol and a panoramic view of Lake Monona.

Check it out at mononaterrace.com



MONONA TERRACE COMMUNITY AND CONVENTION CENTER

WEDNESDAY, AUGUST 4 & THURSDAY, AUGUST 5

ISHE 2010 PROGRAM

Thursday, August 5, 2010

7:30 a.m. Registration Opens - Outside 

Coffee Breaks at 7:30 a.m. and 10:00 a.m.

9:00 a.m. Keynote Address 

Toni Ziegler

"The Causes and Consequences of Fatherhood: The Role of Hormones in Biparental Marmoset and Tamarin Monkeys"

Toni Ziegler

The Causes and Consequences of Fatherhood: The Role of Hormones in Biparental Marmoset and Tamarin Monkeys

University of Wisconsin, Madison, WI U.S.A.

A reproductive neuroendocrinologist. I received my Ph.D. at Texas A&M University in Veterinary Anatomy and Physiology where I studied the reproductive endocrinology of ovarian cycling and social relationships in the common marmoset monkey, *Callithrix jacchus*. I came to the University of Wisconsin – Madison in 1983 for postdoctoral work in the Department of Psychology and with the Wisconsin National Primate Research Center. I began working with the reproductive endocrinology of cotton-top tamarins, *Saguinus oedipus*, and its relationship to their family social structure. Currently, I am a Senior Scientist at the Wisconsin National Primate Research Center and the Director of the Assay Services Unit at the primate center. In the last decade, I have specialized in understanding the neuroendocrine mechanisms involved in fathering in these two model species of family life. By examining both species, the common marmoset and the cotton-top tamarin, I have had the ability to make comparisons in their behavioral expressions of parenting with their hormonal control. Studies in my lab have found that experienced fathers gain weight and have extensive hormonal changes occurring while their mates are pregnant, and that the hormone prolactin is working as a metabolic hormone to prevent weight loss in fathers once their infants are born. My current studies are examining the stimulation of parenting by the steroids, estradiol and testosterone, and its effect on the neuroendocrine hormones, dopamine, prolactin, oxytocin and vasopressin.

10:00 a.m. General Assembly 

Awards presentation by George Mealey

12:00 p.m. Lunch 

1:00 p.m. Single Track Session

Talks 

1:00-1:20

Deaner, Robert O. Winegard, Benjamin M.; Winegard, Bo M.

Misrepresentations of Evolutionary theory in Social Science textbooks

Seegerstrale, Ullica

Have you met a good space lately?

Roach, Paul D.

Birth order effects on women's bodies and lives: data from Amazonian Ecuador and the U.S.

1:20-1:40

1:40-2:00

2:00-2:20

Vavrova, Katerina; Ptackova, Katerina; Dobrovolna, Marie; Gasova, Zdenka; Havlicek, Jan

MHC - Correlated Preferences: Testing the Moderating Effect of the Menstrual Cycle and Partner Status

2:20 p.m.

Break

2:40-3:00

Braschi Diaferia, Lorenzo; Gil-Burmann, Carlos

Regression models for heterosexual and homosexual age preferences in mate choice in the Spanish population

3:00-3:20

Pelusi, Nando

Evolution and Psychotherapy: One Clinician's Experiences

3:20-3:40

Fieder, Martin; Huber, Susanne

Mate choice and the decrease in fertility in modern societies

3:40-4:00

McGrew, W.C.; Hockings, Kimberley J.; Matsuzawa, Tetsuro

The Evolution of Ethanol Ingestion: Seven Hypotheses and Preliminary Data from Wild Chimpanzees

Robert O. Deaner,¹ Benjamin M. Winegard,² Bo M. Winegard¹

Misrepresentations of Evolutionary Theory in Social Science Textbooks

¹Grand Valley State University, Psychology Department;

²University of Missouri, Columbia, Psychology Department

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Evolutionary theory has long been attacked by right wing fundamentalists. In recent decades, however, it has become apparent that evolutionary theory, when applied to human behavior, suffers from similar misrepresentation and derogation by many social scientists. We hypothesize that this arises from a cycle of misinformation: scientists ignorant of evolutionary theory endorse scholarly products (e.g., publications, textbooks) that misrepresent evolution and portray it negatively; these products then foster hostility and ignorance among scholars and students. We tested predictions of this hypothesis by studying the fifteen most widely-used social science textbooks that focus on sex differences. As predicted, textbooks with more misrepresentations of evolutionary theory (1) were more popular ($r=.46$), (2) expressed more hostility towards evolutionary theory ($r=.59$), and (3) showed bias in their portrayal of politically-unpalatable empirical findings ($r=.67$). These results collectively suggest that the goal of cross-disciplinary integration is being obstructed by hostility toward, and ignorance of, evolutionary theory.

Ullica Segerstrale

Have you met a good space lately?

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Over the last half century architects, city planners, sociologists, psychologists and others have tried to establish criteria for "good" places and spaces. It has become increasingly clear that our reactions relate to a multitude of factors, especially emotional, cognitive, functional and symbolic ones. Against the background of half a century of urban renewal and hyper-rational modernist architecture a near consensus has emerged in regard to the nature of human-friendly design. Fortunately, architecture students, even those trained in the Bauhaus tradition, can learn to evaluate spaces and places from a user's rather than a designer's point of view. While evolutionary psychology can provide plausible explanations

for our preferences for particular features in the environment, we need to go to human physiology and non-verbal communication to understand our deeper experiences of particular buildings, places, and spaces. We cannot ignore our surroundings, because we apply the same empathy that we use for understanding humans to the natural and built environment as well. There is now renewed interest in spaces that optimize human well-being and productivity, be these neighborhoods, hospitals, libraries, or schools, as well as analysis of the special nature of "healing spaces".

Paul Roach

Birth order effects on women's bodies and lives: data from Amazonian Ecuador and the U.S.

Century College, Saint Paul, MN , U.S.A.

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Human females respond to their birth order niche and develop bodies, minds, and behaviors associated with different life history courses. Birth order differences I've found so far are in the realm of personality, waist-to-hip ratio, fertility, reproduction, and sociosexuality. My talk reports on data collected among Shuar Indian and U.S. females showing a relationship between birth order and evolutionarily relevant somatic, reproductive, and behavioral measures including waist-to-hip ratio, age at marriage, age at birth of first child, number of births, mortality rates of infants, and for the U.S. population, measures of sociosexuality. The patterns I'm seeing are: 1) females in both populations show significant birth order effects on waist-to-hip ratio with later born females having lower ratios, 2) Later born Shuar females have higher measures of reproductive success and fertility, and 3) U.S. female firstborns score as being more permissive on sociosexuality measures relative to the laterborns.

Katerina Vavrova¹; Katerina Ptackova²; Marie Dobrovolna³; Zdenka Gasova⁴; Jan Havlicek⁵

MHC - Correlated Preferences: Testing the Moderating Effect of the Menstrual Cycle and Partner Status

¹Department of Immunology, Faculty of Science, Charles University, Prague, Czech Republic

²Department of Zoology, Faculty of Science, Charles University, Prague, Czech Republic

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It has been argued that offspring mate-heterozygosity could be one of the key factors in mate choice. Most of the research in this area has focused on highly polymorphic genes of the major histocompatibility complex (MHC, termed human leukocyte antigen, HLA, in humans). These genes play important role in human immune system by recognizing potential pathogens and presenting them to T-cells. The main aim of our study was to test MHC-associated mate choice preferences in odour, facial and vocal modalities. In particular, we focused on factors which could moderate the effects observed in previous studies. These include potential changes in MHC-related preference across the menstrual cycle and relationship status. Hormonal contraception users served as a control group that allows us to validate preference shifts and allow for potential confounding effects of testing the same women twice. Finally, for the first time, a correlation between the MHC and vocal attractiveness was tested.

Braschi Diaferia, Lorenzo¹; Gil-Burmann, Carlos²

Regression models for heterosexual and homosexual age preferences in mate choice in the Spanish population

¹Departamento de Psicología Evolutiva y de la Educación, Universidad Autónoma de Madrid, Spain

²Departamento de Psicología Biológica y de la Salud, Universidad Autónoma de Madrid, Spain

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Partner age preferences in human mating have been shown to be related with evolutionary significant traits. In this presentation we examine the mating preferences of both heterosexual and homosexual men and women using personal advertisements, trying to construct simple models for predicting age preference using several physical and psychological traits. We compared regression coefficients (slope and intercept) in each model to test whether there were any differences between heterosexuals and homosexual men and women. Previous research has established that there are larger differences between sexes than between sexual orientations. We did find that, as expected, there are no significant differences either in slope nor intercept between heterosexual and homosexual women, but that men differ in both coefficients, suggesting a somewhat different pattern across different sexual orientations. Specifically, differences indicate that young homosexuals prefer partners older than themselves, but as they age, they come to prefer much younger partners. These results support those obtained with American populations.



BASCOM HILL
ON UW CAMPUS

Nando Pelosi

Evolution and Psychotherapy: One Clinician's Experiences

Advisor, National Association of Cognitive Behavior Therapists, and Contributing Editor, Psychology Today, Private Practice NYC
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Clinical psychology has largely ignored the insights from evolutionary findings. Applying insights from evolution are not only beneficial, but the process itself becomes a heuristic in which both clinician and client make sense of the client's emotional and practical problems. Most human disturbances fall into categories understood by evolutionary researchers. Problems of survival, emotional regulation, access to mates, status anxiety and depression, anger, jealousy, etc., have been extensively researched within an evolutionary paradigm. Evolutionary research can inform all these areas clinically, including dieting, procrastination, backsliding, social problems, and living in a metropolis where supernormal stimuli rule the day. A brief live demonstration of applied evolutionary psychotherapy is offered.

Martin Fieder¹ and Susanne Huber²

Mate Choice and the Decrease in Fertility in Modern Societies

¹Department of Anthropology University of Vienna, Austria
²Research Institute of Wildlife Ecology Veterinary University of Vienna, Austria
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Problem: Usually the decrease in offspring number with increasing income was supposed to contradict evolutionary assumptions on the influence of status and resources on fertility. Recently, however, it was shown that not only in historical and tribal societies but also in modern industrial as well as developing countries. In the presentation we will demonstrate how mate choice influences reproductive output in men and women in modern societies. Methodology: Statistical analysis of international census data (IPUMS international & IPUMS USA). Results: In men, the link between

social status (income) and offspring count still persists: low income men have a higher probability to remain childless (recent IPUMS census data from Brazil, Mexico, Panama, US, South Africa and Venezuela). We refer this finding to female choice as women are expected to prefer men of higher status offering more resources. This view is supported by our finding using the same census data, that low-income men also have a higher chance to remain unmarried. We further provide some evidence that among other factors, female mate choice may also be responsible for the decrease in female fertility. During the Great Depression in the USA, which was accompanied by high rates of unemployment and decreasing income among men, a higher percentage of women remained both unmarried and childless. In addition, women tend to a higher degree marry older men (who likely have higher income) as well as men who are or have been in another relationship. This finding indicates that women may rather stay unmarried and childless or accept some sort of polygyny than marrying or engaging with a man of low socio-economic status. A similar pattern appears to emerge among highly educated women today: rather than marrying down the social ladder; women rather remain without a partner. By searching an adequate partner, women lose reproductive time and may end up with lower fertility or even childless (19% of highly educated women aged 40 to 45 years are childless (data from Austria). Conclusion: We conclude that evolutionary assumptions have the potential to essentially contribute to the explanation of current demographic trends.

W.C. McGrew¹, Kimberley J. Hockings², Tetsuro Matsuzawa³

The Evolution of Ethanol Ingestion: Seven Hypotheses and Preliminary Data from Wild Chimpanzees

¹Leverhulme Centre for Human Evolutionary Studies, University of Cambridge, UK
²Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa, Portugal
³Primate Research Institute, Kyoto University, Japan

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The spontaneous, natural consumption of ethanol, a toxic substance, by a variety of organisms is a genuine enigma. The widespread occurrence of such apparently maladaptive behaviour, from fruit flies to humans, suggests that it may be adaptive.

We pose 7 hypotheses that might explain ethanol consumption, and 5 of these could be fitness-enhancing. Attempts to test these hypotheses founder on the scarcity of data that meet scientific standards, as most reports from nature are anecdotal and imprecise. We sought to remedy this with a pilot study of wild chimpanzees (*Pan troglodytes*) from Guinea, West Africa. At Bossou, the apes pilfer palm wine from the containers that villagers install in raphia palms. They use elementary technology to do so, and males take the lead. For humans, technological advances have contributed to ethanol production and consumption being a human near-universal, but the function of ethanol consumption remains to be tested adequately.

4:00 p.m. Board of Trustees Meeting 



VENTURE OFF TO MADISON'S DIVERSE NEIGHBORHOODS FOR SHOPPING, STROLLING AND DINNER

Whenever you have time during the Congress, venture off to one of Madison's diverse neighborhoods for shopping, strolling, and dinner:

You will find an assortment of boutiques and local restaurants on **Monroe Street**, which is located just down from Camp Randall stadium. We suggest stopping for a cup of coffee at **Ancora Coffee Roasters** or a glass of wine at **Barrigue's Wine Cave**. You are bound to find something to eat and drink at **Brasserie V**, which has a variety of beers on tap from around the world, a great wine by the glass list and delicious food. Find an incredible assortment of kitchenware, toys, specialty foods, gifts, cards, soaps and much more at the locally owned Orange Tree Imports. Visit the fair trade gift-shop, **SERRV**, to find unique handcrafts and artisanal foods from around the world.

Visit the eclectic **Willy Street** neighborhood on Madison's near east side (Willy Street is short for Williamson Street). Find delicious Tex-Mex and southwestern cuisine at **Eldorado Grill** or enjoy Indonesian cuisine at **Bandung**, both restaurants located on Williamson St. You can also visit **Dobhan** to get a taste of fusion cuisine from Nepal and India right around the corner on Atwood Ave. Browse through many of the diverse shops in the

Willy Street neighborhood, including **The Kitchen Gallery**, where you will find high-end kitchenware and gourmet foods.

Finish your day off at the **Memorial Union Terrace**, and watch the sun set over beautiful **Lake Mendota**, with **Babcock Ice Cream** (served at the Union) or a cold beer and brat. Many summer nights on the terrace, you will be able to enjoy live music.

Learn more at bit.ly/visitmadison



MEMORIAL UNION TERRACE
LAKEFRONT AT NIGHT



Special Events & Tours

WEDNESDAY EVENING BANQUET

Join colleagues for a gala evening of great food and conversation at the Monona Terrace Community and Convention Center. An optional 30 minute tour of Monona Terrace will be offered during the cocktail hour from 7:00 - 7:30 p.m. for those who are interested in Frank Lloyd Wright and the history of this Wright building. The Banquet includes dinner, non-alcoholic beverages, a short program, and a tour of Monona Terrace. A cash bar will be open during the banquet. The conference will also provide one complimentary drink ticket per person.

Attendees may walk to Monona Terrace from their lodging sites (a 15-20 minute leisurely scenic walk) or ride on a coach bus. Attendees may also walk back to their hotels at the end of the evening, or ride the coach.



AN AERIAL VIEW
OF DOWNTOWN MADISON

Evening Schedule

- 6:15 p.m.** Coach pick up at UW Sellery Hall
 - 6:25 p.m.** Coach pick up at Campus Inn and Lowell Center
 - 6:35 p.m.** Coach pick up at The Edgewater
 - 6:45 p.m.** Coach arrives at Monona Terrace
 - 6:45 p.m.** Bar opens
 - 7:00 p.m.** Optional 30 minute Tour of Monona Terrace
 - 7:30 p.m.** Dinner Served
 - 8:30 p.m.** Short Program
- Coach will depart Monona Terrace for conference hotels immediately following the event

Coach Stop Locations

Coach Stop Locations

Campus Inn and The Lowell Center: on Langdon Street at the northeast corner of Langdon and Frances St.

Coach Stop for The Edgewater: on Langdon St. at the corner of Wisconsin Ave.

Coach Stop for UW Sellery Hall: on the Dayton St side of the building.

MONDAY, AUGUST 2, 2010
GUIDED WALKING TOUR OF EFFIGY AND BURIAL MOUNDS AT UNIVERSITY OF WISCONSIN ARBORETUM (PREREGISTRATION TICKET REQUIRED)

Join us for a one hour walking tour of these 1000-year-old Woodland Indian effigy and burial mounds. This tour will invite discussion of the woodland Indians, and the woodlands and wetlands that provided these early inhabitants their sustenance. After the tour, the group will stop at the Arboretum Visitor's Center to explore the bookstore, exhibits, and view a short film about the Arboretum.

Tour Itinerary

- 5:10 p.m.** Depart Pyle Center Main Lobby for coach ride to Arboretum
- 5:30 p.m.** Arrive Arboretum
- 5:30 p.m.** Effigy Mound Tour
- 6:30 p.m.** On one's own in Visitor's Center
- 7:00 p.m.** Drop guests at dorm and hotels

TUESDAY, AUGUST 3, 2010
TOUR OF WISCONSIN NATIONAL PRIMATE RESEARCH CENTER (PREREGISTRATION TICKET REQUIRED)

Attendees will walk as a group from The Pyle Center to The Primate Center and then are on their own at the end of the tour to return to lodging sites. The tour will include viewing and discussion of a family of common marmosets, and information on research and animal care activities. Dr. David Abbott will present a talk on some of his past and present research projects and discoveries related to primate ethology, endocrinology and biomedical research.

Tour Itinerary

- 2:00 p.m.** Depart Pyle Center Main Lobby for walk to Primate Center
- 2:30 p.m.** View Marmosets with talk by Jordana Lenon of the Primate Center
- 3:00 p.m.** Talk by Dr. David Abbott
- 4:00 p.m.** Attendees are on their own after the tour to walk back to lodging sites



AN ANCIENT GOOSE-SHAPED INDIAN EFFIGY MOUND BUILT BY WOODLAND CULTURE INDIANS

RHESUS MONKEY OWEN, 29, THE OLDEST SURVIVING SUBJECT IN A DIET AND AGING STUDY





Helpful Resources

REGISTRATION/INFORMATION DESK HOURS

Sunday, August 1	4:00-8:00 p.m.	(1st Floor Lobby, Pyle Center)
Monday, August 2	7:30 a.m.-4:00 p.m.	(Outside Room 325/326)
Tuesday, August 3	Open during breaks	(Outside Room 325/326)
Wednesday, August 4	Open during breaks	(Outside Room 325/326)
Thursday, August 5	Open during breaks	(Outside Room 325/326)

PARKING

Conference hotels have parking available for hotel guests only. Conference attendees without hotel parking can purchase nearby parking thru The Pyle Center by calling The Pyle Center Front Desk at 608 262 1122.

The City of Madison also has a ticketed ramp at the corner of Lake Street and University Avenue at a rate of \$1.25/hour. Pay cashier upon exit.

INTERNET ACCESS

There are computer kiosks with internet access on each floor of the Pyle Center near the elevators. Wireless access is available with the password provided in your registration materials.

SPEAKER/PRESENTER INFORMATION

The presentation room will be equipped with the following: PC, LCD projector, podium, microphone, laser pointer, wireless mouse, lavalier microphone, speakers. Please prepare your presentation in Microsoft Powerpoint. Please bring your presentation on a USB flashdrive or CD.

CONFERENCE ATTIRE

Business casual is recommended for the conference. Madison weather can often be very hot (90°+) and humid in August.

LITERATURE AND MATERIALS TABLE

Literature and Materials tables will be located just outside room 325/326.

SMOKING

Smoking is prohibited in all public buildings in Wisconsin and inside all restaurants, bars, park shelters, sports venues, and common areas of hotels. If you wish to smoke in your hotel room, you must request a smoking room when you make your hotel reservation.



ABRAHAM LINCOLN STATUE IN
FRONT OF BASCOM HALL

LUGGAGE STORAGE ON DAY OF DEPARTURE

Luggage may be stored at The Pyle Center on the day of departure. Please see the registration desk staff for details.

DEPARTING THE CONFERENCE

Taxi fare from campus/downtown Madison to the airport is approximately \$15.

LOCAL TAXI SERVICES

Union Cab 608 242 2000	Badger Cab 608 256 5566	Madison Taxi 608 255 8294
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DISCLOSURE

Portions of this conference may be videotaped and photographed by the conference and media. By attending this conference, you acknowledge the possibility that you may be video taped or photographed.

LOCAL MADISON INFORMATION

Local Fire, Police, Rescue/Ambulance call 911

ATMs

There are two no-fee ATMs near The Pyle Center. They are located just inside the main doors at the Memorial Union (800 Langdon Street) and on the street just outside the University Bookstore (711 State Street on the library mall).

UNITED STATES POST OFFICE

The closest U.S. Post office to The Lowell Center and The Pyle Center is located at 441 N. Lake Street, just south of the intersection of State and Lake. Open M-F 10am-6pm and Sat. 11:30 a.m.-4 p.m.

CURRENCY EXCHANGE

U.S. Bank
1 South Pinckney Street on the Capitol Square
608 252 4000

Chase Bank
22 East Mifflin Street on the Capitol Square
608 282 6020

CHECK CASHING FOR INTERNATIONAL VISITORS

Checks drawn on U.S. banks may only be cashed at the bank (or a branch of the bank) that the check was drawn on. You will need your passport for identification.



STATE CAPITOL
DOWNTOWN MADISON

ICE FURNITURE
ON THE LAKE





SHOPPING AT DANE COUNTY FARMERS' MARKET

PHARMACY

Walgreens
676 State Street
NO PRESCRIPTION SERVICE
at this location

Walgreens
311 East Campus Mall
608 251 0042
Full Prescription Service at
this location

LOCAL IMMEDIATE CARE (NON-EMERGENCY) CLINICS

Group Health (Capitol Clinic Urgent Care)
675 W. Washington Avenue (at Regent Street)
608 257 9700

Dean Urgent Care
752 N. High Point Road
608 250 1525

1821 S. Stoughton Road
608 250 1525

UW Health Immediate Care
7102 Mineral Point Road
608 828 7603

4122 East Towne Blvd.
608 242 6855

LOCAL HOSPITALS

Meriter Hospital
202 South Park Street
608 267 6000 (general)
608 267 6206 (24 h emergency)

St. Mary's Hospital Medical Center
707 South Mills Street
608 251 6100 (general)
608 258 6800 (24 h emergency)

UW Hospital and Clinics
600 Highland Avenue
608 263 6400 (general)
608 262 2398 (24 h emergency)

DANE COUNTY FARMERS MARKET

The Dane County Farmers' Market on the Capitol Square is a Saturday and Wednesday tradition in Madison. You'll find the season's best bounty of vegetables, flowers, and specialty products from approximately 300 vendors throughout the year. About 150 vendors attend every Saturday. All of the agriculturally-related items are produced in Wisconsin. The Market runs from late April thru early November, rain or shine.

Summer Saturday Market
Around the Capitol Square
6:00 a.m. to 2:00 p.m.

Summer Wednesday Market
200 Block of Martin Luther
King Jr., Blvd.
8:30 a.m. to 2:00 p.m.

EXERCISE AND RECREATIONAL FACILITIES

The University of Wisconsin-Madison campus welcomes visitors to use its recreational facilities. To use the facilities you will need to show your conference name tag, pay a guest fee of \$5, and be 18 years of age. Consult your Madison map for directions or ask at the Registration Desk for locations.

BICYCLE RENTALS (Trail maps available at all local bicycle shops)

Budget Bicycle Center

1230 Regent Street
608 251 8413

Williamson Bicycle Works

640 West Washington Ave
608 255 5292

Machinery Row Bicycles

601 Williamson Street
608 442 5974

BOAT RENTALS (canoes, kayaks, sailboats, sailboards)

Memorial Union Boathouse

800 Langdon Street
608 262 7351

Wingra Canoe and Sailing

824 Knickerbocker Street
608 233 5332

James Madison Park Boathouse

614 East Gorham Street
608 255 2958

LOCAL LOGISTICS COMMITTEE

Russell Gardner

Local Arrangements
Committee
Professor
Wayne State University
Detroit, MI

Glenn Weisfeld

Local Arrangements
Committee
Clinical Professor
University of Wisconsin
Madison, WI

Patti Thompson

Conference Planning Services Manager
University of Wisconsin-Extension

Deborah Curry

Conference Planning Services Specialist
University of Wisconsin-Extension

Christopher Scholke

Conference Planning Services Assistant
University of Wisconsin-Extension

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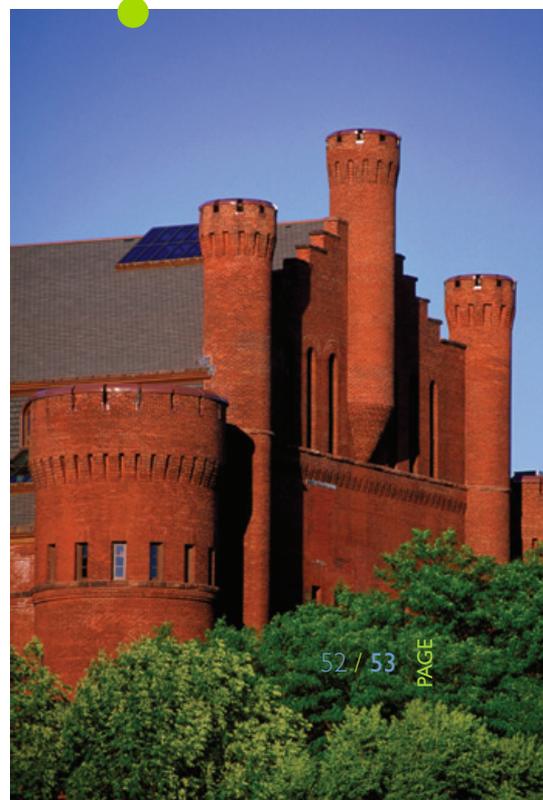
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AEROBIC AT THE UW
GYMNASIUM-NATATORIUM

ARMORY (RED GYM)
ON UW CAMPUS





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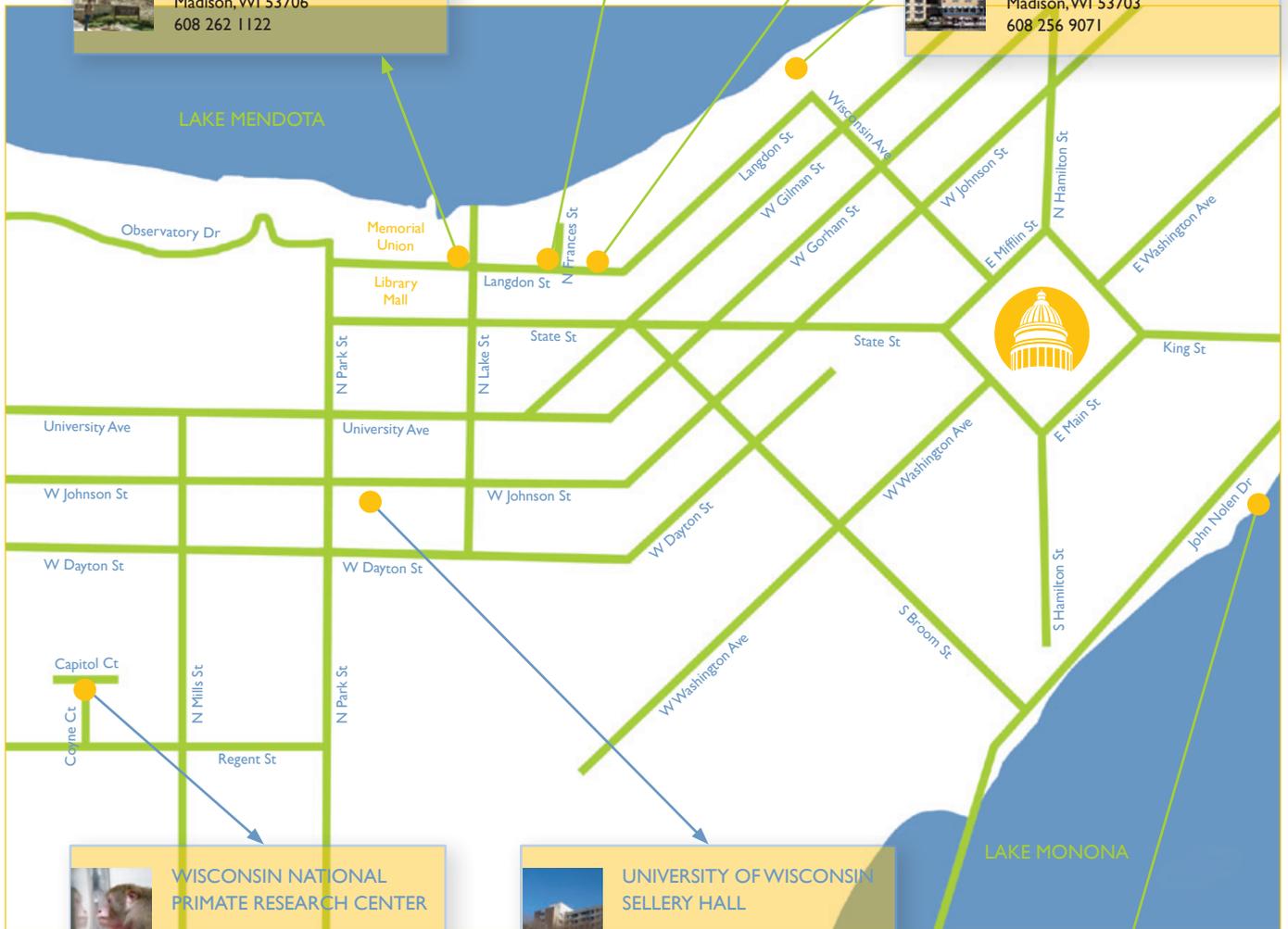
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