

# FOSSIL

Flyover-State Scientists  
Integrating Evolution

**Annual Conference 2023**  
**Fayetteville, AR**  
**University of Arkansas**  
**August 10-11, 2023**



Wi-Fi access: Login through [UArk Guest](#) or use [eduroam](#)

## A Note from the Program Committee

Hello, and welcome to the 2023 FOSSIL Conference! Following a brief hiatus, FOSSIL is back and ready to serve an ever-growing community of evolutionary scholars in the so-called “flyover states.” Despite this somewhat flippant designation, it would be a pity to dismiss this region so readily. Such a dismissal would mean missing out on cutting-edge research from some highly disciplined scientists.

FOSSIL makes a triumphant return within the Ozark Mountains in Fayetteville, AR, hosted by the Department of Psychological Science at University of Arkansas, with some much-appreciated assistance from the founding hosts at Oklahoma State University. Thanks to efforts from these institutes and external sponsorships, this conference is free for students! We would like to acknowledge our sponsorship from the Human Behavior and Evolution Society and University of Arkansas’s Chair of Psychological Science, Dr. Jim Lampinen. A special thanks is also in order for the efforts of student volunteers who made this conference run smoothly. As a conference, we value student involvement at all levels.

The program committee worked hard to provide an engaging experience for attendees. This year, the conference features work from scholars from psychology, anthropology, biology, political science, economics, and philosophy. We can also brag about the reach of scholars attending this conference from many states in the U.S. (e.g., Arkansas, Oklahoma, Kansas, Texas, Michigan) and scholars visiting from other countries (i.e., Norway) and international students studying in these flyover states (e.g., from South Korea, Mexico, Ireland). Talk about some prestige worldwide. The range of submissions further offers a gamut of classic topics in evolutionary sciences to burgeoning frontiers that stand to transform our understanding of multiple fields.

We also want to be sure attendees know about opportunities unique to FOSSIL. First is our keynote address, an inspiring talk from the prolific Dr. Sarah Hill, discussing the all-too-familiar path to greatness beset with countless not-so-great moments. Second is a pair of innovation sessions that provide concrete (and friendly) opportunities to converse with prospective collaborators. If you want to learn more about research on the psychological consequences of hormonal contraceptives or how to generate research ideas with existing stimulus sets, be sure to check out the collaboration innovation sessions. Third is an opportunity to see talks from scholars across disciplines traditionally absent from the conversation on evolutionary behavioral sciences. We offer a unique, interdisciplinary symposium on Friday morning that showcases some of the ways that some Arkansas Razorbacks (WPS!) are contributing to evolutionary science with their own work.

We are deeply grateful to our many sponsors and the contributions for our attendees in making FOSSIL 2023 possible. You are part of something that we hope will grow into a veritable juggernaut in this region.

Kindest Regards from the Program Committee,  
*Stacey Makhanova, University of Arkansas*  
*Mitch Brown, University of Arkansas*  
*Juliana French, Oklahoma State University*  
*Jennifer Byrd-Craven, Oklahoma State University*

## Schedule at a Glance

Thursday, August 10 in Gearhart Hall Rm. 026

**12:00pm: On-Site Registration Opens**

**12:30pm: Welcome**

**1:00pm: Judgment and Decision-Making**

- *Risk Diffusing Operators and Who Uses Them to Help Manage Negative Consequences of Sexual Decision Making* (**Gary L. Brase and Haley Rich**)
- *Writing About a Stressful Experience Impairs Change Detection Performance* (**Colton L. Hunter and Grant S. Shields**)
- *Self-Assessed Mortality Risk as an Internal Regulatory Variable* (**Joseph H. Manson**)

**2:00pm: Break and Additional Registration Time**

**2:30pm: Hormonal Underpinnings of Social Behaviors**

- *Exogenous Testosterone Sensitizes Males to Female Affiliative Behaviors* (**Stefan M. M. Goetz and Justin Carré**)
- *We're Not Really Strangers: Women's Cycle Phase and Contraceptive Use Differentially Predicts Desires for Closeness Through Disclosure* (**Mikayla D. M. Tolliver and Anastasia Makhanova**)
- *Dose-Dependent Effects of Oral Contraception on Emotion Recognition* (**Jenna Lunge and Lisa L. M. Welling**)

**3:45pm: Coffee Break**

**4:00pm: Keynote Address from Sarah E. Hill:**

*Success in Science is a Path Paved with Self-Doubt & Failure*

**5:30-7:30pm: Poster Reception (Reynolds Center) with heavy hors d'oeuvres**

Friday, August 11 in Gearhart Hall Rm. 026

**8:00am: Breakfast & Coffee**

**8:30am: Evolutionary Perspectives on Disease and Disease Avoidance**

- *Increases in Pro-Inflammatory Cytokines Activate the Behavioral Immune System* (**Anastasia Makhanova, Mikayla M. D. Tolliver, and Zach Buckner**)
- *Unifying Evolutionary Theory in Cancer Biology* (**Zachary Compton**)
- *Masked Effects: The Personality Aspects of the Behavioral Immune System* (**Marius Unnvik, Jeffrey Gassen, and Anastasia Makhanova**)

**9:30am: Coffee Break**

**9:45am: Interdisciplinary Showcase of Evolutionary Studies**

- *The Evolutionary History of Insomnia and Whether It Has Overstayed Its Welcome* (**Ivan Vargas**)
- *Mindshaping of Belief Signaling* (**Eric Funkhouser**)
- *Why Education Scholars Ignore Evolution and How That Harms Kids* (**Robert Maranto**)
- *Harnessing Microevolutionary Patterns to Examine Mortuary Behavior at Precolonial Tlatelolco* (**Kathleen S. Paul**)

**11:00am: Coffee Break**

**11:15am: Collaboration Innovation Sessions**

- *Current and New Directions for Hormonal Contraceptives Research*  
**Moderators:** Juliana E. French, Sarah E. Hill, and Anastasia Makhanova (in Old Main)
- *Collaborative Opportunities Through Stimulus Sharing: Discussions from Evolutionary Research on Social Perception*  
**Moderators:** Mitch Brown, Ray Garza, and Nora Balboa (in Old Main)

**12:30pm: Lunch Break** (check out our list of our favorite lunch spots within walking distance!)

**2:00pm: Data Blitz**

- *Reproductive Timing, or Just Timing? The Specificity of Life History Strategy Timing* (**Nora Balboa and Gary L. Brase**)
- *Testing Hypothesized Design Features of Women's Bodyguard Psychology* (**Rebecka K. Hahnel-Peeters and David M. Buss**)
- *Contextual Desirability of Strong Men Employing Affiliative and Aggressive Humor* (**Bridget A. O'Neil, Mitch Brown, and Madeline R. Brown**)
- *Finding Love Through Recreational Fear* (**Paola Baca, Talia Chachkes, and Coltan Scrivner**)
- *Competition Preferences in Friends* (**Krystal Duarte, Jaimie A. Krems, Juliana E. French, and Jennifer Byrd-Craven**)
- *The Face of Getting Over: Facial Formidability Informs Expectations for the Performance of Male Professional Wrestlers* (**Mitch Brown**)

**3:00pm: Coffee Break**

**3:15pm: Conflict in Relationships and Families**

- *Emotion Understanding and Children's Attachment Security to Mothers and Fathers Across the Transition to Siblinghood* (**Lin Tan, Lauren Bader, Brenda Volling, and Richard Gonzalez**)
- *Why Do Women Cheat? Support for the Mate-Switching Hypothesis of Female Infidelity* (**Vincent J. Stabile, Gavin Vance, Virgil Zeigler-Hill, and Todd K. Shackelford**)
- *Heterosexual Men's Reactions to Women's Infidelity with Masculine and Feminine Female Interlopers* (**Samuel E. Snowden, Mitch Brown, and Seth M. Bridges**)

**4:30pm: Motivated Social Perception**

- *Women's Mating Strategies and Mate Value Are Associated with Viewing Time to Facial Masculinity* (**Ray Garza and Jennifer Byrd-Craven**)
- *Navigating the Wild: Insights into U.S. Consumer Preferences for Wild versus Farmed Foods* (**Courtney F. Cooper and Trey Malone**)
- *Men's Neck Musculature Informs Perceptions of Coalitional Utility* (**Mitch Brown**)

**6:00-8:00pm: Banquet, with Closing Remarks and Awards Announcement** (Reynolds Center)

**Stay Connected!**

Live Tweet during the conference using #FOSSIL2023

## **Abstract for Keynote Address**

### **Success in Science is a Path Paved with Self-Doubt & Failure**

Sarah E. Hill

Texas Christian University

Most people assume that the road to a successful research career is linear and paved with accolades and accomplishments. However, success is more often than not the result of resilience and openness to learning from mistakes. In this presentation, I will talk about my own career journey and how my successes have all been built on the shoulders of failure, reflection, and not being afraid to chase after ideas that others told me were a waste of time.

## **Abstracts for Talks**

*Presenters have 15 minutes for a talk with five minutes for questions*

### ***Judgment and Decision-Making (Thursday, 1:00pm)***

#### **Risk Diffusing Operators and Who Uses Them to Help Manage Negative Consequences of Sexual Decision Making**

Gary L. Brase; Haley Rich

Kansas State University

Risk Diffusing Operators (RDOs) are precautions before, or repairs after, attempting a risky event in order to help alter the costs of potential negative outcomes. This study used a repeated “choose your own adventure” paradigm to investigate how individuals use RDOs when making decisions about sexual behavior within the context of a relationship storyline; choosing whether or not to engage in sex and whether to employ RDOs to prevent/mitigate possible negative consequences. Sociosexual attitudes and life history strategy were most associated with decisions and RDO use, whereas participant sex, sociosexual desires and behaviors, and mate value were much less predictive. Domain-specific risk-taking (for fertility and mating) also showed promise as predictors, rather than general risk-taking propensity. These results suggest both a powerful methodology and key variables in relationship decision making research. Research on RDO use more broadly can also benefit from incorporating key individual differences as factors.

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#### **Writing About a Stressful Experience Impairs Change Detection Performance**

Colton L. Hunter; Grant S. Shields

University of Arkansas

The stress response is highly conserved and adaptive, causing a shift in resource allocation that increases an organism's chance of surviving the stressor. Consistent with this idea, acute stress has been found to reduce working memory in humans, as cognitive resources are reallocated toward stressor-relevant processes. Although these processes are relatively well-explored when experiencing an acute stressor, it is less clear how reexperiencing a previous stressor may affect working memory. To address this gap, we recruited 284 participants and randomly assigned them either to remember and write about a previous unresolved stressor or to write about the events of the previous day, after which they completed a change detection task. We found that, relative to control participants, participants in the stressful writing condition showed poorer working memory accuracy overall, and this effect was driven by less attention towards the task. These results suggest that recalling an unresolved stressor can affect working memory in

the same way as experiencing an acute stressor, shifting cognitive resources away from stressor-unrelated processes and presumably toward stressor-related ones.

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### **Self-Assessed Mortality Risk as an Internal Regulatory Variable**

Joseph H. Manson

University of California, Los Angeles

Some versions of life history (LH) theory propose that, over ontogenetic time, individuals at greater risk of dying sooner develop phenotypes that execute a "fast" LH strategy, prioritizing reproductive effort over somatic effort, quantity over quality of offspring, and mating effort over parental effort. If so, then self-assessed mortality risk should act as a psychological internal regulatory variable (IRV). In general, IRVs store summary magnitudes that allow value computation to be integrated into behavior regulation. Data from a study of purchasers of individual life insurance policies indicated that mortality risk ratings assigned by the underwriting process were uncorrelated with self-forecast relative age at death, yet both these variables were independently associated, as predicted, with some hypothesized LH-linked psychological traits (impulsivity, conscientiousness, consideration of future consequences). These findings suggest a mismatch scenario. Specifically, the self-assessed mortality risk IRV may take, as its principal input variables, cues of the probability of ancestrally prevalent sources of mortality (infectious disease, violence), whereas the life insurance underwriting process presumably focuses on cues of the evolutionarily novel principal sources of 21st Century U.S. mortality (heart disease, cancer). Finally, viewing self-assessed mortality risk as an IRV opens the way to generating more finely-tuned hypotheses, compared to the standard LH theoretical toolkit. For example, the behavioral outputs of the self-assessed mortality risk IRV will vary by age and parity: a middle-aged father with high self-perceived mortality risk is expected to behave quite differently from a childless young man with high self-perceived mortality risk.

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### ***Hormonal Underpinnings of Social Behavior (Thursday, 2:30pm)***

#### **Exogenous Testosterone Sensitizes Males to Female Affiliative Behaviors**

Stefan M. M. Goetz<sup>1</sup>; Justin Carré<sup>2</sup>

<sup>1</sup>Peace Research Institute Oslo; <sup>2</sup>Nipissing University

Testosterone has been conceptualized as an endocrine modulator of 'mating effort,' with much research demonstrating that endogenous changes in concentrations are associated with fluctuations in various manifestations of reproductive effort. However, to date, little research has been conducted that directly tests the causal role of testosterone in human mating effort. Additionally, testosterone, and in particular its organizational effects, have been suggested to mediate the sex differences in perceptions of sexual interest. In particular, men seem to over perceive sexual interest in women. On the other hand, past theoretical work has purposed that testosterone rather than directly influencing some of these traits, instead acts as a social hormone, potentiating behaviors rather than causing them directly. Here we investigate the causal role of testosterone on men's perceptions of sexual interest of a woman by administering a 11mg exogenous dose of testosterone. One hundred ninety men were given either testosterone or a placebo before interacting with an attractive female confederate. Raters naïve to our hypotheses and the hormonal status of the men coded the confederates' affiliative behaviors. We collected self-reported perceptions of sexual interest and actual interest for both the participants and the confederate. Our analyses indicated that rather than increasing men's misperceptions of her sexual

interest, testosterone sensitized men to her affiliative behaviors such that her affiliative behaviors. However, this effect was only present for men receiving testosterone. While this finding was exploratory, the results are consistent with the perspective of testosterone as a social neuroendocrine hormone, augmenting perceptions of social behaviors.

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### **We're Not Really Strangers: Women's Cycle Phase and Contraceptive Use Differentially Predicts Desires for Closeness Through Disclosure**

Mikayla D. M. Tolliver; Anastasia Makhanova  
University of Arkansas

Belonging is important for survival. Consequently, people monitor their social environments for signs of inclusion and exclusion. For women, social monitoring is higher in the luteal (vs. follicular) phase of the menstrual cycle and underpinned by increases in progesterone. Progesterone even prompts women to socially engage with others through increasing their desires for positive social contact (Wirth & Schültheiss, 2006). Hormonal contraceptives (HCs) contain synthetic progesterone—progestin—that may also affect social monitoring and desires for positive social engagement. To examine women's social monitoring, we assessed whether cycle phase and HC use (oral contraceptive and IUD) affected how women perceived neutral faces using the functional projection task. Specifically, we hypothesized that women would project greater emotions indicating affiliation or exclusion onto neutral faces in the luteal phase, compared to women in the follicular phase, and explored potential effects of HC use. Although we did not find differences between follicular and luteal phase, oral contraceptive users perceived more rejection and stress (but not more sociality) on neutral faces than did other groups. Next, to examine women's desire for positive social engagement, we assessed whether cycle phase and HC use affected women's self-disclosure during an expected interaction with another woman. Women could select cards with questions (either high self-disclosure or low self-disclosure) they wanted to ask their interaction partner before they were supposedly going to meet them. We found that women on oral contraceptives were significantly less likely to ask high disclosure questions compared to all three other groups. Findings suggest that hormonal changes due to oral contraceptive use may affect women's social monitoring and likelihood of seeking out positive social engagement.

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### **Dose-Dependent Effects of Oral Contraception on Emotion Recognition**

Jenna Lunge; Lisa L. M. Welling  
Oakland University

Emotion recognition is critical for successful social interactions and relationships. Recent research suggests that oral contraceptives may impair the ability to accurately identify emotional expressions (Osorio et al., 2018), however the evidence is mixed (see Gravelsins et al., 2023). OCs vary in progestin type, dosage, potency, and phases, but only recently have the unique effects of different OC formulations been the focus of psychobehavioral research. Designs that account for these factors have begun to identify unique effects of OC formulations on women's social cognition. Here we investigated the relationship between unique domains of OC formulation (pill phase, potency) and emotion recognition. Participants ( $N = 329$ ) provided detailed information about their OC and completed the Revised Reading the Mind in the Eyes Test (RMET; Baron-Cohen et al., 2001) to assess ability to detect complex emotional states from images of eyes. OC users in their active pill phase were significantly less accurate at recognizing emotional expressions than users in their reminder pill phase. No differences were detected in emotion recognition between users of weak androgenic, potent androgenic, and anti-androgenic progestins. Finally, among OC users in their active pill phase, progestin potency (i.e., a ratio of the prescribed dose to



the dose necessary to inhibit ovulation) was positively correlated with the accurate processing of emotions that were generally difficult to detect, but not easily detected emotions. Our group-level findings support the claim that OC use impairs emotion recognition, however more research is needed to improve understanding of the unique effects of OCs on social cognition.

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### ***Evolutionary Perspectives on Disease and Pathogen Avoidance (Friday, 8:30pm)***

#### **Increases in Pro-Inflammatory Cytokines Activate the Behavioral Immune System**

Anastasia Makhanova<sup>1</sup>; Mikayla D. M. Tolliver<sup>1</sup>; Zach Buckner<sup>2</sup>

<sup>1</sup>University of Arkansas; <sup>2</sup>The University of Southern Mississippi

Pathogens have been a pernicious threat in the evolutionary past and remain a significant threat in modern day. People's immune system helps coordinate defenses against pathogens that have been detected inside the body. People additionally use psychological strategies as part of their behavioral immune system to help avoid coming into contact with potential sources of pathogens to reduce the threat of illness. The present research leveraged theories from psychoneuroimmunology to examine effects of acute inflammation on behavioral immune system activation and associated social biases. We found that greater immune system activity in response to a vaccine manipulation (quantified by measuring pro-inflammatory cytokine interleukin-1b) was associated with greater perception of neutral faces as contagious, lower motivation to respond without prejudice, greater ethnocentrism, and biased evaluations of resumes. Findings thus provide preliminary evidence for a link between acute inflammatory processes and the behavioral immune system.

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#### **Unifying Evolutionary Theory in Cancer Biology**

Zachary Compton

Moffitt Cancer Center

Evolutionary theory provides a rich framework for understanding cancer dynamics across scales of biological organization. The field of cancer evolution has largely been divided into two domains, comparative oncology - the study of cancer across the tree of life, and tumor evolution. This work provides a theoretical framework to unify these subfields with the intent that an understanding of the evolutionary dynamics driving cancer risk at one scale can inform the understanding of the dynamics on another scale. The evolution of multicellular life, and the unique vulnerabilities in the cellular mechanisms that underpin it, explain the ubiquity of cancer prevalence across the tree of life. The breakdown in cellular cooperation and communication that were required for multicellular life define the hallmarks of cancer. An understanding of the impact that species' life history theory has on the underlying network of multicellular cooperation and somatic evolution allows for robust predictions on cross-species cancer risk. Changing scales to the cellular level, it lays predictions on the fate of somatic mutations and the fitness benefits they confer to neoplastic cells compared to their healthy counterparts. The cancer hallmarks, far more than just a way to unify the many seemingly unique pathologies defined as cancer, is a powerful toolset to understand how specific mutations may change the fitness of somatic cells throughout carcinogenesis and tumor progression. Alongside highlighting the significant advances in evolutionary approaches to cancer across scales, this work provides a lucid confirmation that an understanding of both scales provides the most complete portrait of evolutionary cancer dynamics.

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## **Masked Effects: The Personality Aspects of the Behavioral Immune System**

Marius Unnvik<sup>1</sup>; Jeff Gassen<sup>2</sup>; Anastasia Makhanova<sup>1</sup>

<sup>1</sup>University of Arkansas; <sup>2</sup>Baylor University

Humans have psychological pathogen defense mechanisms that influence cognition, affect, and a variety of behavioral patterns. Pathogen avoidance motivation can be reliably assessed on a trait level, most commonly by focusing on either the pathogen disgust (PD) subscale of the Three Domain Disgust scale or the germ aversion (GA) subscale of the Perceived Vulnerability to Disease questionnaire. Although PD and GA are often used interchangeably in the scientific literature, there are reasons to suspect that these two subscales may be meaningfully different. One way to assess possible differences between PD and GA is to examine how each is related to other personality traits. Although past research has examined how PD and GA are related to the Big Five traits, the breadth of the Big Five domains may have obscured meaningful differences between PD and GA. In the present research, we focused on the aspect level of personality that breaks down each of the Big Five domains (e.g., neuroticism) into two aspects (i.e., withdrawal and volatility). Following the literature, we hypothesized that higher PD and GA would be predicted by greater orderliness (aspect of conscientiousness) and withdrawal (aspect of neuroticism). In parallel analyses, we predicted PD and GA from the ten aspects. We found that PD was positively predicted by withdrawal and volatility (aspects of neuroticism), whereas GA was positively predicted by industriousness and orderliness (aspects of conscientiousness). These results contradict our hypotheses and provide evidence for the impression that PD and GA may not be interchangeable assessments of trait pathogen avoidance.

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## ***Local Interdisciplinary Showcase of Evolutionary Studies (Friday, 9:45am)***

### **The Evolutionary History of Insomnia and Whether It Has Overstayed Its Welcome**

Ivan Vargas

University of Arkansas

Many would argue that stress reactivity is adaptive. Physiological, cognitive, and behavioral responses to environmental challenges are not only necessary for survival, but they also directly bear on an individual's health and well-being. One salient behavioral response to an acute stressor is sleeplessness (or insomnia). Sleep is often adaptively deferred, irrespective of sleep pressure or sleepiness, to face an acute challenge. Put differently, "we live with insomnia today because, at some point in our evolutionary history, insomnia allowed us to live" (M.L. Perlis, 2005). The present talk will review seminal theoretical models of insomnia that explain how acute instances of insomnia can develop into more chronic forms of insomnia and even insomnia disorder. The talk will highlight perpetuating factors that maintain insomnia over time and after the acute stressor has resolved.

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### **Mindshaping for Belief Signaling**

Eric Funkhouser

University of Arkansas

We are incentivized to have some beliefs because of what they directly communicate to others and the manipulations that they thereby induce. I have argued that, in virtue of having this communicative function, such beliefs are literally signals in and of themselves. Prominent among these are beliefs that function as signals of group identity and commitment (e.g., political or religious beliefs). In addition to having incentives to acquire such belief signals for ourselves, third-parties (e.g., family or in-group

members) are often incentivized to mindshape us so that we acquire beliefs that communicate our group identities and commitments. This can be because they are invested in our social flourishing or otherwise benefit from us advertising our group commitments (e.g., they can identify trusted loyalists, trusted epistemic networks are created, we help maintain the signaling system). I will explain the purpose and form of such mindshaping, which is a special case of what Trivers calls, imposed self-deception.

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### **Why Education Scholars Ignore Evolution and How That Harms Kids**

Robert Maranto

University of Arkansas

Within a framework of censorious social norms, this talk explains that, since the early 20<sup>th</sup> century, U.S. education scholars have invested emotionally and ideologically in compliance mindsets, aligned with the field's worship of bureaucratic authority rather than scientific authority. This has been reinforced by bureaucratic education personal systems. In tandem, these have left educators at the mercy of hierarchical formal authorities rather than more adaptive, dynamic scientific processes using evidence. This compliance mindset has enabled empirically failed paradigms such as whole language-based reading instruction and, more broadly, Anti-Racism and other critical theory approaches to dominate schooling. I suggest how to pursue more effective paths in the future.

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### **Harnessing Microevolutionary Patterns to Examine Mortuary Behavior at Precolonial Tlatelolco**

Kathleen S. Paul

University of Arkansas

Studies of mortuary behavior help to shed light on various aspects of lived experience in ancient communities. Spatial patterning of cemeteries, as well as data on grave architecture, material offerings, and body positioning/orientation provide a foundation for examining sociopolitical dynamics and conceptualizations of belonging and personhood in the past. Kinship, for example, can strongly influence cemetery structure. As such, bioarchaeologists often use skeletal and dental datasets to access patterns of biological relatedness and reconstruct microevolutionary processes (e.g., gene flow, genetic drift) in prehistoric contexts. Here, I present a study of cemetery structure at the precolonial site of Tlatelolco, with a focus on its subadult population. This site, in the heart of modern-day Mexico City, boasted one the largest marketplaces in Mesoamerica throughout the height of the Aztec empire (1300-1521 CE). For this study, dental measurements representing 79 individuals were subjected to principal components analysis and hierarchical clustering. UPGA agglomeration of Euclidean distances resulted in eight distinct groupings, with Groups 1 and 2 containing 92% of the sample. Spatial, contextual, paleopathology, and dismemberment/defleshing patterns do not clearly map onto these results, with one exception: ~50% of Group 1 individuals were recovered from Patio Sur—a context thought to represent a sacrificial event. These results suggest that a) the Patio Sur mortuary event disproportionately impacted individuals of a specific (sub)population affinity, and b) subadult dental variation explains a limited amount of mortuary behavior at Tlatelolco.

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## ***Conflicts in Relationships and Families (Friday, 3:15pm)***

### **Emotion Understanding and Children's Attachment Security to Mothers and Fathers Across the Transition to Siblinghood**

Lin Tan<sup>1</sup>; Lauren R. Bader<sup>2</sup>; Brenda L. Volling<sup>3</sup>; Richard Gonzalez<sup>3</sup>

<sup>1</sup>University of Arkansas; <sup>2</sup>Toulouse Capitole University; <sup>3</sup>University of Michigan

Emotion understanding (EU) is crucial for children's social and emotional development. The family context serves as the earliest environment where children experience and understand emotions. Previous studies have found evidence between secure mother-child attachment relationships and better EU in children. However, the majority of these studies were cross-sectional and only included mothers and not fathers as children's attachment figures. Therefore, the current investigation examined the bidirectional effects between children's attachment to both mothers and fathers and their EU longitudinally. Participants included 220 mothers, fathers, and children (131 girls; M age = 28.77 months) who were part of a longitudinal study examining children's adjustment after the birth of a second child. The current investigation included three-time points: prenatal, 4, and 12 months after the infants' birth. At each time, mothers and fathers completed the Attachment Q-sort to assess children's attachment security, and children completed a battery of EU assessments, consisting of eight EU components. A multigroup structural equation model was conducted to examine the bidirectional relations between children's attachment security to both parents and the growth in their EU over time, considering three age cohorts (1-, 2-, and 3-year-olds). There was significant stability of children's attachment security to both parents over time, as well as in EU across all cohorts. Notably, for 1-year-olds, high attachment security to fathers at prenatal was significantly related to high EU at 4 months. High attachment security to mothers at 4 months was significantly related to high EU at 12 months.

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### **Why Do Women Cheat? Support for the Mate-Switching Hypothesis of Female Infidelity**

Vincent J. Stabile; Gavin Vance; Virgil Zeigler-Hill; Todd K. Shackelford

Oakland University

Whereas the ancestral benefits of male sexual infidelity are straightforward (i.e., inseminating a greater number of women directly increases the probability of reproductive success), the ancestral benefits of female sexual infidelity are less clear. An alternative to the dual mating strategy hypothesis (i.e., that women seek “good genes” from short-term affair partners while securing investment from cuckolded long-term partners) is the mate-switching hypothesis (i.e., that women engage in extra-pair affairs to assess alternative mating options before abandoning an existing long-term partner). From self-reports of heterosexual women in relationships of at least six months duration, the current study tests several predictions in line with the mate-switching hypothesis. We predicted that greater extra-pair sexual involvement would be associated with women's self-reports of (1) perceived “mate value” discrepancies with their current long-term partner, (2) cost-inflicting behaviors displayed by their current long-term partner, (3) feelings of extra-pair love, and (4) commitment to their current long-term relationship (via satisfaction level, investment size, and quality of alternatives). We also consider the path by which these variables lead to sexual infidelity. Preliminary analyses support the claim that the mate-switching hypothesis may explain female infidelity better than alternative hypotheses.

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## **Heterosexual Men's Reactions to Women's Infidelity with Masculine and Feminine Female Interlopers**

Samuel E. Snowden<sup>1</sup>; Mitch Brown<sup>1</sup>; Seth M. Bridges<sup>2</sup>

<sup>1</sup>University of Arkansas; <sup>2</sup>Nexus Children's Hospital

When learning of a romantic partner's infidelity, heterosexual men respond less negatively to female interlopers compared to male interlopers. Although this difference could reflect the absence of cuckoldry threats from women, complementary explanations may exist across different emotions. Men frequently view women's same-sex intercourse sexually arousing, which could serve as a mechanism to view the female interloper as an additional sexual opportunity. Such arousal should be limited to feminine women, as feminine women be more sexually interested in men themselves than masculine female interlopers (e.g., butch lesbians). Feminine women could thus afford additional sexual opportunities. Two studies conceptually replicated previous work to test these competing hypotheses for reactions to same-sex female infidelity. We considered predictions from a cuckoldry mitigation standpoint and one pertaining to identification of sexual opportunities. Heterosexual men reacted to a hypothetical scenario of their romantic partner's infidelity with a male or female interloper. The female interloper was either described as having either a masculine or feminine appearance (Study 1) or represented with such images (Study 2). Men responded less negatively to the female interlopers than the male interloper, though no difference emerged between both women. Nonetheless, the feminine female interloper was consistently perceived as affording more sexual opportunity than the masculine woman. The heightened sexual arousal from that feminine woman mediated the reaction to the female interloper as a function of her sex role presentation, suggesting arousal is a proximal mechanism for this perception. Results provide evidence for parallel reactions to infidelity related to male-specific reproductive goals based on loss aversion and opportunity acquisition.

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## ***Motivated Social Perception (Friday, 4:15pm)***

### **Women's Mating Strategies and Mate Value Are Associated with Viewing Time to Facial Masculinity**

Ray Garza<sup>1</sup>; Jennifer Byrd-Craven<sup>2</sup>

Texas A&M University International<sup>1</sup>; Oklahoma State University<sup>2</sup>

Sexual selection has shaped women's preferences for ideal physical features in men that signal good health. Facial masculinity is often used as a proxy in signaling health, viability, and disease resistance, and it is thought to be attractive because it advertises heritable benefits. Preferences for facial masculinity are also associated with individual differences in one's sociosexuality and mate value, where women oriented toward a short-term mating orientation and are of high mate value may prefer men with masculine features. The current study examined women's sociosexuality and mate value (i.e., self-rating of overall desirability) in rating attractiveness and visual attention to facial masculinity in men's faces using an eye-tracking task. Overall, women ( $N = 72$ ) did not show any significant preferences for men with masculinized over feminized faces. However, women who scored high on sociosexuality (i.e., unrestricted sociosexuality) and mate value demonstrated increased visual attention and looking frequency to masculinized over feminized faces. The study highlights the unique role of cognitive mechanisms in visually assessing a potential mate and how individual differences in short-term mating strategies and mate value may moderate those preferences. These findings underscore the importance of examining individual differences in mate preferences research.

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## **Navigating the Wild: Insights into U.S. Consumer Preferences for Wild versus Farmed Foods**

Courtney Cooper; Trey Malone

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Renewed interest in native, wild, and indigenous foods has followed trends toward niche products accessible through regionalized marketing channels. These inclinations align with emerging dietary practices such as the Paleolithic diet and the burgeoning popularity of foraging. While extant studies have delved into aspects of the perceived 'wildness' value of specific food items ranging from wild game to wild-caught seafood, comprehensive analysis of market opportunities in wild food - irrespective of product type - remains scarce. This article blends insights from discrete choice experiments on salmon, specialty mushrooms, and venison in the United States to explore consumer preferences for wild versus farm-raised food products. Results denote a willingness among certain consumer segments to pay a premium for 'wild' food. However, the breadth of the current market appears restricted and exhibits variation across food products, contingent upon consumer perspectives on credence attributes such as animal welfare.

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## **Men's Neck Musculature Informs Perceptions of Coalitional Utility**

Mitch Brown

University of Arkansas

Men's neck musculature is reliably diagnostic of their formidability from which perceivers estimate men's advantages during physical conflict. These inferences could subsequently inform perceptions of men's coalitional value and track their ability to provide protective opportunities for group members. Nonetheless, connotations of prowess covary with perceptions of hostility that could impede self-protective goals. Three studies sought to identify how salient components of men's neck musculature inform perceptions of their abilities to facilitate and impede self-protection goals. Participants evaluated the coalition value of men exhibiting small and large dimensions of their sternocleidomastoid and trapezius muscles, two highly salient morphological features during face-to-face interactions. They considered the extent to which these men appeared motivated to protect themselves from intergroup threats (Study 1), their abilities to facilitate or impede these goals for group members (Study 2), and whether the perceived protective benefits are at the expense of their ability to nurture offspring (Study 3). Larger neck musculature connoted disinterest in self-protection, although large sternocleidomastoid muscles connoted more opportunities to protect perceivers from physical threats. However, large trapezius muscles implicated men as more threatening to the safety of perceivers. Large trapezii further implicated men as more effective at protecting offspring, albeit at the expense of their ability to nurture them. Results suggest that neck musculature provides numerous connotations of men's coalitional value while acknowledging an underappreciated nuance in the unique signal values of physical features diagnostic of formidability.

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## **Abstract for the Data Blitz**

*Presenters have five minutes for a data blitz with two minutes for questions*

### **Reproductive Timing, or Just Timing? The Specificity of Life History Strategy Timing**

Nora Balboa; Gary L. Brase  
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Life history theory, at its biological roots, functions as a species-level predictor of parental investment tradeoff based on environmental and reproductive resources. This original biological theory has provided reason to predict a degree of differences in risk-taking between species (see Sear, 2020), but has been expanded within the field of psychology to encompass a wide array of psychological traits related to relationship orientation, fertility timing, and mating behaviors. Popular conceptions of psychological life history posit that early environmental information can adjust reproductive strategy in an individual lifetime, along with individual differences in factors like impulsivity. Similarly, in the field of judgment and decision making, the concept of delay discounting, which is often used as a proxy for impulsivity or short-term orientation, is thought to be informed by the uncertainty of a given outcome. The current research seeks to compare the extent to which both psychological life history strategy and delay discounting are informed by environmental factors such as mortality rates, economic standing, and resource scarcity and whether concurrent relationships exist between these factors and individual mating strategy. Preliminary analyses indicate that while delay discounting appears relatively unaffected by these factors, psychological life history strategy shows relationships with attitudes regarding relationship orientation and childhood subjective risk.

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### **Testing Hypothesized Design Features of Women's Bodyguard Psychology**

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One adaptive problem for women is the avoidance of sexual violence. One hypothesized strategy to avoid sexual violence includes women's use of social allies as bodyguards. The original bodyguard hypothesis limited women's potential bodyguards to romantic partners. Across three studies (N = 1,479 women), we supported the expansion of the bodyguard hypothesis to include social allies (i.e., same-sex and opposite-sex friends, romantic partners, and family members) who provide protection through (1) aiding avoidance of would-be assaulters, (2) interrupting on-going attempts, and (3) seeking revenge against perpetrators to deter future assaults. The current talk discusses data testing predicted design features of women's bodyguard psychology including important individual differences (e.g., mate value, fear of crime, perceived strength, and age). For example, we predicted that women who perceive themselves as more physically formidable would be less likely to use bodyguards as a defense against sexual violence. Data collection for Studies 1 and 2 are complete, but Study 3 data collection is ongoing. We will have analyses completed for all three studies before the FOSSIL conference.

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### **Contextual Desirability of Strong Men Employing Affiliative and Aggressive Humor**

Bridget A. O'Neil<sup>1</sup>; Mitch Brown<sup>1</sup>; Madeline R. Brown<sup>2</sup>  
<sup>1</sup>University of Arkansas; <sup>2</sup>Texas A&M University

Women prefer physically strong men as mates. However, this preference emerges primarily within short-term mating contexts, as the inferred benefits of heritable fitness strength connotes would exceed any



potential costs. This boundary implicates strength as presenting its own costs in long-term mating contexts (e.g., infidelity, exploitation). The desirability of men's strength in long-term mating domains could be contingent upon whether the benefits of strength are more salient based on the presence of concomitant behavioral repertoires that signal a prosocial disposition. Men's humor style could be one modality to infer men's interpersonal costs and benefits. Their interest in affiliative humor relative to aggressive humor could provide additional information about strong men's potential value as mates. This study represents a synergistic replication of previous work investigating the desirability of strength and various humor styles in mating domains. Women evaluated the short-term and long-term desirability of a prospective mate. The target man was manipulated to appear physically strong or weak with an accompanying description connoting his interest in using affiliative or aggressive humor when meeting women. We replicated previous findings implicating affiliative humor as desirable in long-term contexts and upper body strength in short-term contexts. However, no interactive effects between these traits emerged. Results indicate that women's mate choices are multimodal and frequently involve evaluating the costs and benefits of various constellations of traits.

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### **Finding Love Through Recreational Fear**

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Previous research finds that play serves as a safe way to experience dangerous situations and learn how to navigate them. In humans, the horror genre is one way for people to safely experience simulations of dangerous situations and emotions such as fear and anxiety that dangerous situations produce. This phenomenon has been called “scary play.” Instances of scary play may also serve as useful indicators of a romantic partner's behavior in times of stress and threat. For example, scary play may offer men the opportunity to showcase bravery in the face of threat and may allow women to see how men respond to threats. Previous research using horror movies found that heterosexual men enjoy a scary movie more when their date is fearful and heterosexual women enjoy a scary movie more when their date displays bravery. The current study reinvestigates these findings in the context of a more extreme form of horror: a haunted house attraction. Heterosexual couples ( $n = 222$ ) completed questionnaires before entering a haunted attraction and after they came out. Our data suggest that men found the haunted house more enjoyable when their partner appeared more afraid ( $r = .19, p = .034$ ). Women did not report a significantly greater enjoyment of the haunt in the presence of man acting brave ( $p = .984$ ), but they did perceive their male partners as more attractive if their partners appeared to be brave during the haunt ( $r = .21, p = .004$ ). These findings suggest that some forms of scary play may offer men the opportunity to showcase bravery in the presence of romantic partners.

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### **Competition Preferences in Friends**

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Here, we investigate the seemingly widespread assumption that people disfavor competitive women friends, and we test between predictions derived from three alternative theoretical viewpoints. A Gender Roles perspective might predict that both men and women disfavor competitiveness in female more than in male friends because women's competitiveness violates gender role norms. A Narrow Evolutionary perspective—premised on the sex-differentiated costs and benefits of intrasexual competition within same-sex groups—might predict that women will disfavor competitiveness in same-sex friends more than men will. We tested a third, nuanced view derived from an Embedded Dyad framework, which integrates



functional understandings of friendship with an ecologically valid understanding of the socio-relational landscape. According to this latter view, although women might value competitiveness in same-sex friends more than men, this will only hold for competitiveness directed toward oneself. This sex difference might disappear or even reverse when women and men think about how competitive they want same-sex friends to be toward other people (e.g., one's own rivals). We supported this latter view in a sample of Midwestern college students responding to questions assessing ideal same- and other-sex friend preferences for competitiveness directed toward a range of targets (e.g., oneself, one's own rivals, the friend's rivals).

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### **The Face of Getting Over: Facial Formidability Informs Expectations for the Performance of Male Professional Wrestlers**

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Professional wrestling requires promoters to identify performers whose appearance implicates them as capable of winning fights. This appearance may track ancestrally relevant morphological features from which perceivers accurately infer men's formidability. One feature diagnostic of men's formidability is their facial width-to-height ratio (fWHR), which connotes actual fighting ability and aggression. This study considered how fWHR informs how professional wrestling fans evaluate the effectiveness of men in their performance. Participants evaluated the extent to which men appeared effective at utilizing various performance styles and how likely they would be to promote these men to the top positions in a company. High-fWHR men appeared most effective as brawlers and powerhouses but less effective in more technical performances. Results indicate how formidability inferences inform decision-making in simulated combat based on expectations of physical prowess.

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### **Abstracts for Posters**

*[Denotes numeric designation for poster assignments]*

### **Effects of Morbid Curiosity on Women's Mate Preferences<sup>[1]</sup>**

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Morbid curiosity exists as an individual difference tracking interest in potentially threatening stimuli despite the social costs they could impose. One potential basis for this interest is the relative novelty of these stimuli that could motivate investigation. Such investigation could include an interest in prospective mates exhibiting exploitative personality traits, particularly women's heightened preference for Dark Triad traits in short-term mating contexts. This study considered how morbid curiosity may specifically shape women's mate preferences. Women evaluated the mating desirability of men exhibiting high and low levels of various dark personality traits in long-term and short-term mating contexts while indicating both affective and behavioral attraction toward these men. Finally, participants reported individual differences in morbid curiosity. Men with dark personalities appeared more desirable in short-term mating contexts, albeit undesirable in long-term contexts. Additionally, morbid curiosity fostered greater behavioral attraction toward men with dark personalities, whereas women's affective attraction remained independent of their morbid curiosity. This behavioral attraction could reflect an approach motivation toward potential social opportunities seen in many promiscuous mating strategies, albeit with the potential risk of harm from exploitative conspecifics.

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## **The Social Networking of Incels (Involuntary Celibates)<sup>[2]</sup>**

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Involuntary celibates (incels) forge their sense of identity around a perceived inability to form sexual or romantic relationships. In 2021, the UK government's Commission for Countering Extremism noted that the movement meets their definition of “hateful extremism.” Given this security policy interest, a thorough understanding of incels, and their motivators, is a contemporary issue of international importance. However, to date there is no research investigating the intricacies of incel social networks. Despite the term “incel ideology” being ubiquitous in mainstream media, there is also a lack of empirical investigation into whether incels view their movement as ideological. We fill this gap with the Swansea Incel Social Network (SISNET) project. We investigate these networks in the largest study of incels to date, quantifying the extent and shape of incel ideology. We also investigate other measures such as prevalence of rape-myth acceptance, dark-triad traits, mating-effort, and potentiality to harm themselves or others.

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## **Formidability Inferences from Men's Upper Body Strength Impedes Recognition of Psychological Distress<sup>[3]</sup>**

Justin C. Long; Bridget A. O'Neil; Mitch Brown

University of Arkansas

Perceivers accurately track men's formidability through cues to their upper body strength from which perceivers can infer men's physical abilities. Such inferences could inform subsequent judgments about men's emotional states based on implicit theories of how formidability covaries with mental resilience. Physically strong men exhibit greater resiliency from psychological disorders, which could potentially be tracked by perceivers through cues to their upper body strength, which could serve to identify resilient coalitional allies. Despite the functionality of these inferences, an acuity toward formidability may nonetheless interfere with other social evaluations, wherein physical appearance would be irrelevant. Assessments for psychological distress require professionals to focus on explicit symptom criteria, yet previous research suggests that physical features connoting formidability bias perceivers into underperceiving one's distress. This study considered how physical cues to upper body strength may impede objective assessments of collegiate athletes reporting psychological distress. Participants imagined themselves as athletic trainers who were tasked with evaluating claims of psychological distress in hypothetical male and female athletes who varied in visible upper body strength while providing recommendations for these athletes. Physically strong targets appeared more resistant to psychological disorders compared to weak men, although strong men were specifically perceived as less needing of psychological counseling for their described symptoms compared to weak men and women. Results provide continued evidence for formidability inferences having downstream consequences on the recognition of psychological distress in men, representing an evolutionary mismatch in social perceptions.

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## **A Short-Term Mating Strategy May Help Fulfill Maximizing Women's Desires to Find “The Best” Partner<sup>[4]</sup>**

Vidhi R. Bansal<sup>1</sup>; Juliana E. French<sup>1</sup>; Emma Altgelt<sup>2</sup>; Andrea L. Meltzer<sup>2</sup>

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When making choices, such as deciding who to pursue as a romantic partner, some individuals (i.e., satisficers) aim to fulfill their basic standards, whereas others (i.e., maximizers) consider all available options and aim to make “the best choice.” According to sexual strategies theory, adopting a short-term mating strategy, such as being sociosexually unrestricted, is one way for women in particular to gain access to a variety of options to assess the suitability of potential romantic partners. Thus, maximizing tendencies may be positively associated with unrestricted sociosexual behaviors, attitudes, and desires. Moreover, such a strategy would be especially optimal for women of high short-term mate value, given such women would be most likely to find “the best” short-term mates. To test this, we assessed 314 undergraduate women's maximizing tendencies, sociosexual orientation, and long- and short-term mate value. As predicted, women high in maximizing tendencies were more likely to be sociosexually unrestricted. Moreover, this association was moderated by short-term mate value (but not long-term mate value), demonstrating that women high in maximizing were more likely to be unrestricted to the extent that they were also high in short-term mate value. These results suggest that being sociosexually unrestricted may functionally enable women to explore many available options for partners as means of making an optimal partner choice.

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## **Examining Effects of Menstrual Cycle Phase and Hormonal Contraceptive Use on Women's Sleep<sup>[5]</sup>**

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University of Arkansas

Women's hormones fluctuate over the course of the menstrual cycle, facilitating behavioral adaptations in anticipation of possible conception (during the ovulatory phase) and preparation for such pregnancy (during the luteal phase). Beyond changes in women's mating and social behavior, cycle phase affects other psychological processes, including sleep. For example, women report the most sleep disturbances in the luteal phase. Furthermore, research has begun to examine how women's sleep is affected by use of hormonal contraceptives (HCs)—an element of modern life that can be viewed as an evolutionary mismatch because of the changes HCs have on women's hormone profiles. Indeed, women using oral contraceptives (OCs) demonstrate significantly higher rates of waking during the night and waking earlier than planned, compared to naturally cycling (NC) women. Although these findings suggest that HC use affects women's sleep, this research has not fully considered the fact that different HCs may differently affect women's sleep. In this study, we aimed to replicate and extend past research by examining subjective sleep quality and wakefulness among naturally cycling women and women using different types of HCs. We aimed to replicate past research showing that women in the luteal phase have worse overall sleep than NC women in any other phase. Moreover, we hypothesized that HC users would report more insomnia and or hypersomnia symptoms than NC women. We additionally explored how women's sleep is affected by different HCs (e.g., hormonal IUD, different types of pills) and time of day OC users take their pill.

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### **Beyond Similarity: Examining Third-Party Assessments of Cues for Friendship Closeness<sup>[6]</sup>**

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Men and women's friendship preferences have shown to vary based on these relationships' functions; however, we do not yet understand how individuals infer closeness between same-sex others according to these preferences. Adapted from Liberman and Shaw (2019), this study aims to assess which cues men and women prioritize when trying to infer friendship closeness between a central target and two of their friends. Specifically, we examined which of the following conditions participants would prioritize when compared: (1) shared interests, (2) venting, and (3) teasing. For example, when comparing shared interests with venting, the central target will be described as having common interests with "friend A," but when the target has a conflict, the target chooses to call "friend B" to vent about it. We predict that men will infer that the friends who tease each other are closer when these conditions are compared to friends who vent to one another or share interests. Meanwhile, we predict that women will infer that the two friends who vent to one another are closer than friends who tease one another or share interests.

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### **Perceived Trustworthiness of Online Dating Biographies<sup>[7]</sup>**

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Online dating biographies (i.e., bios) vary in trustworthiness due to viewers' perception of bio accuracy and the dimensions of selective self-presenting (i.e., SSP), the amount of positive presenting information ranging from modesty to arrogance. Bios containing modest language and warranting language (i.e., WL), or verifiable information that viewers can confirm (e.g., via social media, triangulation techniques) may increase perceived trustworthiness of the profile owner. Assess how high SSP (arrogance) versus low SSP (modesty) and WL usage in online dating bios affect the perceived trustworthiness of profile owners. We hypothesized that modest bios using WL would correlate with high perceived trustworthiness. We also hypothesized arrogant bios lacking WL would correlate with low perceived trustworthiness. Cisgender women attracted to men ( $N=66$ ) provided demographic information and rated 40 different bios (i.e., 20 modest/WL bios, 20 arrogant/No WL bios) on a scale of 1 (*Not at All Trustworthy*) to 10 (*Completely Trustworthy*) via Qualtrics. A paired samples t-test was used to assess the trustworthiness of online dating profiles among (1) modest and verifiable bios and (2) arrogant and unverifiable bios. There was a significant difference in trustworthiness between modest/verifiable bios ( $M=7.63$ ,  $SD=1.21$ ) and arrogant/unverifiable bios ( $M=3.90$ ,  $SD=1.86$ );  $t(65)=13.90$ ,  $p<.001$ . Profile bios signaling modesty via SSP and using WL are perceived as more trustworthy than bios signaling arrogance and lacking WL.

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### **Face of Tiger Dads: Formidability Inferences of Asian Men in Parental Care Domains<sup>[8]</sup>**

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People use facial width-to-height ratio (fWHR) for heuristic judgments in identifying men's formidability. Such inferences afford perceivers the opportunity to determine men's aggressive intent across various social domains, with higher fWHRs connoting more aggression. In parental care domains, formidable men are perceived as preferring disciplinarian strategies with their offspring (e.g., physical punishment). Such expectations could be functionally flexible based on additional parenting stereotypes specific to certain races. Although high-fWHR men should be perceived as harsh disciplinarians toward offspring,

disciplinarian stereotypes relevant to high expectations should be especially pronounced among Asian men with formidable features for what is typically regarded in Asian communities as “tiger parenting.” The current study tasked participants with evaluating White and Asian men whose facial structures varied in relative formidability (i.e., high-fWHR versus low-fWHR). Namely, participants indicated their perceptions of these men as disciplinarians in domains related to corporal punishment and high expectations for a child's success. Perceptions of high-fWHR men as disciplinarians were more apparent among White targets, although high-fWHR men appeared similarly formidable across racial categories. Unexpectedly, low-fWHR Asian men appeared most likely to have higher expectations of their offspring and use strategies seen in tiger parenting. This unexpected finding could reflect the persistent inhumanization of formidably faced men as mentally unsophisticated. Perceptions could have led to stereotypes of low-fWHR Asian men as particularly successful and regarding tiger parenting as important for their offspring's success.

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### **Understanding Approach Motivations: The Effect of Behavioral Activating Systems and Cognitive Traits on Abstract Art Viewing<sup>[9]</sup>**

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Despite the potential threats imposed by ambiguous visual stimuli, myriad benefits for approaching such stimuli remain possible. This proposed ambivalence could implicate individual differences in approach and avoidance systems as predictive of engagement with ambiguous stimuli based on perceptions of threat and opportunity. In the case of artwork, need for cognitive closure and desire for cognition have been associated could predict greater engagement with abstract art in the service of identifying potential fitness benefits from ambiguity. The present study sought to examine how approach tendencies could more robustly inform a person's aesthetic responsiveness in contrast to avoidance tendencies toward abstract, relative to realistic visual art. Participants (n = 262) viewed a series of abstract and realistic paintings sourced from the Vienna Art Picture System (Fekete et al., 2022) and evaluated them. Afterwards, they completed the Behavioral Inhibition and Activation Scale (BIS/BAS; Carver & White, 1994), Need for Cognition Scale (NFCS; Cacioppo & Petty, 1982), and the Need for Cognitive Closure scale (NFCC; Webster & Kruglanski, 1994). A hierarchical regression revealed that NFCS and BAS subfactors, specifically drive and fun seeking, significantly accounted for valence, arousal, and liking ratings of abstract artwork. NFCC and BIS did not significantly predict valence, arousal, and liking ratings of artworks. Interestingly, and contrary to previous research, there was no significant association between individual differences in personality and assessments of realistic artwork. Results suggest that approach responses toward abstract art are a proximate response to evaluate ambiguity as interesting. From a broaden-and-build perspective of inquisitiveness, such engagement could facilitate exploratory behavior to improve the inclusive fitness of a perceiver.

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### **Neuroticism and Relationship Investment: The Role of Motivational Predispositions to Avoid Reproductive Failure<sup>[10]</sup>**

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People have a limited capacity of energetic resources to allocate toward adaptive goals, such as investing in relationships. Thus, efficient allocation of such limited resources has likely been an adaptive challenge throughout human evolutionary history. Two primary investment strategies seem possible in the context

of long-term relationships to maximize individuals' chances of reproductive success: (1) committing to investing in a single partner or (2) adopting a "bet-hedging" approach by withdrawing such commitment in a single partner and displaying interest in alternative partners. In this work, we aimed to examine whether—which, within the framework of behavioral ecology, is thought to reflect a motivational predisposition to avoid adaptive threats—may motivate a "bet-hedging" strategy, presumably to minimize the probability of reproductive failure. Specifically, we predicted that neuroticism would be negatively associated with investment and commitment to one's partner and positively associated with interest in alternatives. Notably, we predicted this association would be stronger among men than women, given men's reproductive success is more strongly threatened by paternity uncertainty. We used data from a survey of 598 Korean premarital dyads and actor-partner interdependence modeling to test these ideas. Results indicated that husbands' neuroticism was negatively associated with their commitment to their partners and positively associated with their interest in alternative partners. These results differed for wives, whose neuroticism was positively associated with their investment and commitment. These findings suggest that neuroticism may motivate men to adopt a bet-hedging strategy in their relationships, whereas neuroticism may motivate a "double-down" strategy among women.

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### **Exploring Mating Preferences: A Replication and Extension Study Among Heterosexual and Non-Heterosexual Individuals<sup>[11]</sup>**

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Past research has demonstrated that men and women tend to differ from each other on mate preferences for traits such as physical appearance and financial prospects. The mate dollar task is one measure that has frequently been used to examine sex-based differences in mate preferences (Li et al., 2002). In this task, participants allocate money to traits they desire for an ideal long-term partner. Within this paradigm, men tend to allocate more to physical attractiveness whereas women allocate more to income and intelligence, particularly when faced with limited budgets. In part due to the fact that mating behavior evolved to increase reproductive success in opposite-sex sexual encounters, research on mate preferences has largely focused on cisgender, heterosexual men and women. Consequently, research on non-heterosexual mate preferences has been limited and yields inconsistent results (i.e., some studies find similarities between heterosexual and non-heterosexual participants, other studies find diverging patterns). It is even harder to compare across studies because they tend to use idiosyncratic measures of mate preferences. In this research, we administered the mate dollar task to a large sample that included both heterosexual participants and non-heterosexual participants (gay men, lesbian women, individuals who identified as bisexual or pansexual). We expect to replicate the reliable sex differences in mate preferences among heterosexual participants. This research additionally explores how non-heterosexual participants allocate money on the mate dollar task. With a larger and more modern sample, our study seeks to enhance our understanding of mating preferences in attraction and romantic relationships.

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### **Spreading Misinformation: A Structural Equation Modeling Insight on Tribalism<sup>[12]</sup>**

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In-group-favoring norms are based on group membership, wherein individuals evaluate themselves within the context of group living. Such evaluations could lead individuals to behave in the service of group cohesion and thus demonstrate their status among group members. Within this motivation to optimize a



group's functioning is the potential downstream consequence of greater interest in sharing misinformation that could favor one's in-group. The current study considered how this proclivity manifests across partisan membership in the U.S. political sphere. Democrats and Republicans within a community sample viewed 20 fake-news stories featured on actual social media sites, with 10 stories aligning with their political beliefs and 10 not aligning with the participants' political beliefs. Critically, participants indicated their interest in sharing these articles. Results indicated that particularly high political knowledge was associated with disbelief of misinformation. Nonetheless, positive feelings toward the government contributed towards the belief of misinformation when such misinformation could have benefited one's political affiliation. I frame results from a standpoint of partisan tribalism that could shape an understanding of how functional interest in group membership fosters socially damaging behavior.

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### **A Folk Theory of Human Nature: Laypeople's Valuation of Body Parts are Similar Within and Across Cultures and Track Workers' Compensation Laws Across Cultures<sup>[13]</sup>**

Yunsuh Nike Wee<sup>1</sup>; Daniel Sznycer<sup>1</sup>; Jaimie A. Krems<sup>2</sup>

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People appear to have a folk Theory of Human Nature (ToHN). ToHN includes the ability to account for other people's behavior through inferences about their beliefs and desires (Theory of Mind; ToM). But ToHN's scope is broader. For example, ToHN also includes knowledge about the value of body parts. This is because (i) different body parts likely vary in their contribution to fitness, and (ii) it would have been advantageous for the mind to be able to compute the corresponding value representations with some accuracy, allowing the mind to, for instance, seek appropriate compensation for bodily damage done by offenders' eye for eye, tooth for tooth. Here, we test three predictions derived from the body parts hypothesis. First, the values laypeople impute to different body parts differ across body parts, and these imputations are similar within and between cultures. Second, the values laypeople impute to different body parts track (perhaps because they inform) the benefits provided by workers' compensation laws from different cultures. We test this with three modern codes (US; South Korea; United Arab Emirates) and one Germanic code from the Early Middle Ages (Law of Æthelberht; Kent, ca. 600 AD). Third, the values laypeople impute to different body parts inform multiple inferences and emotions (e.g., the anger another person will feel if you cause them to lose a body part). Evidence from preregistered studies conducted with American and Indian participants (N = 482) supports all three predictions.

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### **Tracking Gentlemen from Blondes: Functional Mating Stereotypes of Women's Hair Color<sup>[14]</sup>**

Gracie Whitehead; Mitch Brown

University of Arkansas

Mate selection is partially contingent upon an estimation of a prospective mate's similar interest in long-term or short-term mating to the perceiver. Such inferences can emerge through functional stereotypes of physical appearance. When considering women's hair color, various stereotypes exist about women's mating orientation based on the relative signal value the color. Blonde women appear younger, with previous findings implicating them as highly receptive to short-term sexual encounters. Conversely, brunettes appear to have greater potential in facilitating long-term pairbonds, which could implicate them as preferring these relationships themselves. We predicted that blonde women would appear more interested in short-term mating, whereas brunette women would be stereotyped as more interested in long-term mating. From these stereotypes, we further predicted that blonde women would appear as highly successful in mating markets specific to short-term mating (e.g., hook-up apps). This study tasked



participants to evaluate a blonde or brunette model for her perceived interest in long-term and short-term mating while indicating her general suitability for advertisements for various dating apps that focus on short-term and long-term mating goals. The blonde model appeared especially interested in short-term mating, whereas as the brunette model appeared to prefer long-term mating. The blonde model was additionally perceived as more appealing to male app users and thus more successful in using any kind of dating app. Results provide evidence for how functional stereotypes emerge through hair color, which could inform expectations of assortative mating in modern mating contexts.

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### **Effects of Partner Traits on Pregnant Women's Social Nesting<sup>[15]</sup>**

Jenna Thomas; Ariel S. Bloshinsky; Anastasia Makhanova  
University of Arkansas

Pregnancy is a time of challenges, such as increasing struggles of locomotion and greater energy demands. Challenges do not stop with pregnancy. Indeed, parturition is dangerous and newborn babies require a lot of care. Social nesting—preparing one’s social environments for birth and motherhood—can help women prepare to meet these challenges. Consequently, a pregnant person may feel a particularly strong motivation to secure social support from others to provide material, psychological, and emotional support. Specifically, women may strengthen bonds with potential alloparents and withdraw from potential threats. Past research has documented that women engage in social nesting and that some women engage in social nesting more than others (e.g., women who are more germ averse and women with higher SES). However, women may also engage in greater social nesting if their partner is less invested in the relationship to compensate for the lack of support. We examined women’s social nesting behavior and how it was related to their partners’ behavior in a sample of first-time parents. All couples completed a questionnaire between weeks 27 and 32 of pregnancy as part of a larger longitudinal study of the transition to parenthood. Data collection is ongoing. We will use the Actor Partner Independence Model to examine whether women engage in more social nesting if their partner is working longer hours, is avoidantly attached, or is not responsive to their needs. Findings will extend past research on social nesting by examining relational factors that can lead women to put more effort into social preparation for motherhood.

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### **Body Work: An Archival Review of Bridging Alternative Medicine & Trauma-Informed Treatment<sup>[16]</sup>**

Wesley J. Vaught; Lisa M. Corrigan  
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Brain structures—such as the brain stem, basal ganglia, and hypothalamus—have evolved to control bodily and physiological functions. As the study of newer brain structures has begun (e.g., the prefrontal cortex), these structures' involvement in bodily manifestations of affect and consciousness have only recently been investigated. Furthermore, affective, feminist, and queer scholars, as well as scientists, have suggested the significance of acknowledging the bodily effects and loss of bodily agency resulting from traumatic events. This dialectic has begun critiquing cognitive-behavioral therapies that currently dominate the affective space, and potentially provides a complement and alternative to exposure and talk therapies that have been the standard of treatment for stress-related disorders. The present study utilizes archival materials and methods to review the strategies and techniques that were used before the age of neuroimaging and biochemical analysis. This study was conducted at the AMA's Historical Health Fraud and Alternative Medicine Collection in Chicago, IL with various pamphlets, correspondence, and books

from alternative medicines that focuses on body work disciplines such as acupuncture, chiropractic, bodybuilding, and sexual therapies. This review suggests that these alternative medicines were aiming to target somatic manifestations that were ignored by strict germ theorists. By advertising body work disciplines, practitioners were selling a “product” to a population ravaged by post-war panics and trauma; therefore, pamphlets and correspondence evidenced common themes and words such as services treating “nervousness,” “depression,” “addiction,” and inflammatory illnesses.

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### **Women's Intrasexual Competitiveness Varies According to Their Hormonal Contraceptive Use and Progestin Androgenicity<sup>[17]</sup>**

Madison Meredith<sup>1</sup>; Juliana E. French<sup>1</sup>; Mikayla Tolliver<sup>2</sup>; Summer Mengelkoch<sup>3</sup>; Ariel Bloshinsky<sup>2</sup>; Katja Cunningham<sup>4</sup>; Savannah Hastings<sup>4</sup>; Sarah E. Hill<sup>4</sup>; Anastasia Makhanova<sup>2</sup>

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Women’s testosterone and estradiol levels influence intrasexual competition behaviors that enable women to outcompete other women either in the mating market or in the context of their established relationships. Given the role of women’s sex hormones for their intrasexual competitiveness, hormonal contraceptives—which prevent pregnancy by suppressing the natural ovarian production of estradiol and progesterone through administering synthetic versions of these hormones (e.g., ethinyl estradiol, progestins)—may alter how women compete with each other. Furthermore, many of the most commonly prescribed progestins are androgenic, meaning they bind to androgen receptors that normally bind testosterone. Consequently, androgenic hormonal contraceptives (versus non-androgenic hormonal contraceptives) may be more likely to elicit cognitions and behaviors that are associated with testosterone, such as intrasexual competitiveness. We used a sample of 1,624 women to examine whether self-reported intrasexual competitiveness differed between (a) naturally cycling women, (b) women who used an androgenic hormonal contraceptive, and (c) women who used a non-androgenic hormonal contraceptive. Results demonstrated that naturally cycling women reported the highest levels of intrasexual competitiveness, suggesting that hormonal contraceptives may suppress intrasexual competition overall. Nevertheless, women using hormonal contraceptives containing androgenic progestins trended toward reporting higher intrasexual competitiveness, relative to women using hormonal contraceptives containing non-androgenic progestins. Implications and directions for future research will be discussed.

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### **Cycle Phase and Hormonal Contraceptive Use Differentially Predicts Fear of Negative Evaluation Following a Social Stress Induction Paradigm<sup>[18]</sup>**

Charlotte Edds; Mikayla Tolliver; Anastasia Makhanova  
University of Arkansas

Social belonging is important for survival generally and can be especially important in situations that require social support. For women, pregnancy and parturition represent such a situation. Research has shown that women may begin preparing for the additional social needs immediately after ovulation, during the luteal phase of the menstrual cycle, when the body begins to prepare for possible pregnancy. Some of these psychological preparations include greater vigilance to social information in their environment. In this study, we aimed to conceptually replicate past research by examining women’s fear of negative evaluation (i.e., social anxiety and apprehension about others) during the luteal phase versus the follicular phase (before ovulation). We explored how use of hormonal contraceptives (oral contraceptives and hormonal IUD) affected women’s fear of negative evaluations. Four groups of women

(follicular, luteal, oral contraceptive, and IUD) completed the fear of negative evaluations scale after going through the Trier Social Stress Test, which served to additionally heighten social evaluative concerns. Although there was a descriptive trend for women in the luteal phase to report higher fear of negative evaluation than women in the follicular phase, the difference was not statistically significant. However, women in the luteal phase did report significantly higher fear of negative evaluation in comparison to both women using oral contraceptives and women who had an IUD. Findings suggest that hormonal contraceptive use may influence women's concerns about being negatively evaluated by others, and this could have implications for the ways women navigate their social environments.

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### **Assessments of Women's Contextual Mating Interest as a Function of Breast Size and Areolar Pigmentations<sup>[19]</sup>**

Clair Curtis; Mitch Brown  
University of Arkansas

Perceivers track women's reproductive interests through their breasts, wherein larger breasts appear diagnostic of short-term mating interest. Nonetheless, men's interest in large breasts are most apparent when accompanied by dark areolae, an interest rooted in perceptions of women's maturity and thus fecundity. This heightened attractiveness suggests that functional inferences of large breasts could facilitate identification of fertile women who may represent reproductive opportunities for men and intrasexual rivals for women. Additionally, women with smaller breasts are most attractive with lighter areolae, which could track perceptions of emerging fecundity for women who may be less sexually experienced (i.e., reduced concerns of cuckoldry). In this study, we have tasked men and women to evaluate perceptions of women's interest in short-term and long-term mating as a function of their breast size and areolar pigmentation. We predict that large-breasted women will appear most interested in short-term mating when accompanied with darker areolae, whereas such interests should be tracked in smaller breasts through lighter areolae. The former prediction is expected to have roots in perceptions of sexual maturity.

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### **Motivated Social Affordance Judgments of Humor Styles<sup>[20]</sup>**

Dalton Holt; Mitch Brown  
University of Arkansas

Despite the generally ingratiating function of humor to strengthen social bonds, not all humor is created equal in every potential social interaction. Individual differences in humor styles may inform perceptions of whether prospective group members are indeed capable of using humor in a manner that could benefit the group as affiliative opportunities. Affiliative humor is regarded as especially beneficial for group living insofar as it creates social bonds without the humor coming at another's expense. Conversely, aggressive humor could implicate a social target as affording fewer affiliative opportunities and more threats to one's social goals. In this research, we tasked participants with evaluating social targets espousing different humor styles. We tasked participants to identify these targets' abilities satisfy and impede both affiliative and physical safety goals (Study 1). Then, we determined if individual differences in these motives inform interpersonal preferences (Study 2). Affiliative and self-enhancing humor afforded the most affiliative and self-protection opportunities, whereas aggressive humor afforded the most threats. Additionally, higher need to belong heightened preferences for affiliative humor, whereas dangerous world beliefs did not inform preferences for various humor styles. Results provide evidence for

assortative sociality in the identification of optimum group members based on humor displays across various intentions.

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### **Androgenicity of Progestins is Associated with Sociosexuality Among Hormonal Contraceptive Using Women<sup>[21]</sup>**

Patsy Cox<sup>1</sup>; Mikayla Tolliver<sup>1</sup>; Ariel Bloshinsky<sup>1</sup>; Katja Cunningham<sup>2</sup>; Savannah Hastings<sup>2</sup>; Summer Mengelkoch<sup>4</sup>; Sarah E. Hill<sup>2</sup>; Anastasia Makhanova<sup>1</sup>

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Hormones are important for regulating women's sexuality. However, many women take hormonal contraceptives (HCs) that disrupt the links between gonadal hormones and sexuality documented in naturally cycling (NC) women. Moreover, different HCs use different methods of administration (i.e., oral contraceptives versus IUD/implant) and formulations (i.e., progestins, synthetic progesterone contained in HCs, can vary in androgenicity). The current research examined how HC use affected women's sociosexual orientation (SOI), specifically delineating between method of administration and progestin formulation. Generally, HC users reported more unrestricted SOI attitudes than NC women. However, we found some evidence for specificity of this effect. For example, women using the implant were not significantly different than NC women but women on hormonal IUDs did report significantly more unrestricted SOI attitudes than NC women (and in fact were the most unrestricted group overall). The implant and IUD are both long-acting reversible contraceptive options, but they differ in formulation; the progestin in the IUD (levonorgestrel) is high in androgenicity relative to the progestin in the implant (etonogesterel). We observed a similar pattern of more unrestricted SOI attitudes among women taking oral contraceptives containing levonorgestrel. Together findings suggest that the highly androgenic progestin (e.g., levonorgestrel) found in the HCs may influence sociosexuality among women to a greater extent than less androgenic progestins.

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## **FOSSIL FAQs**

**How do I get Wi-Fi?** Free Wi-Fi is available. Log in through [UArk Guest](#) and follow the prompts. We also have eduroam.

**When do I set my poster up?** Before the start of the poster reception, please begin to set your posters up so that we can view them right at 5:30pm. Posters will be hung on the walls with special putty. Please make sure to put your poster up next to the correct number.

**Where should I eat?** Fayetteville has quite a few affordable food options on, or within walking distance of, campus. See the following pages for more information on suggestions! There are also cool places to check out a short drive or Uber away – you can check out Yelp or ask some locals.

**How do I get my presentation to you?** We'll have a computer set up with a clicker. *Please bring your talk on a USB* (or email [fossilconference@gmail.com](mailto:fossilconference@gmail.com)). Let us know if you have any additional requirements for your presentation ahead of time so we can make accommodations (e.g., sound).

**I've lost my...** Check with the volunteers for lost items.

**Science is cool!** That's not a question. But we like your moxie.

## **FOSSIL Professional Conduct Policy**

FOSSIL values freedom of speech and scientific inquiry. It is important to have constructive disagreements about ideas. However, organizers of this conference value the freedom to attend professional conferences and engage in scientific discussions without fear of harassment, discrimination, or *ad hominem* attacks that extend beyond what is appropriate toward controversial research ideas. We are scientists and humans all trying our best.

Toward this goal, the FOSSIL program committee has endorsed and codified the following policy for professional behavior in all contexts within and surrounding professional interactions related to FOSSIL. Such behavior further extends to courteous treatment of FOSSIL staff and vendors. Be mindful that many of our presenters and staff are students. This committee strives to create a welcoming environment for all career stages.

### **Harassment and Misconduct include, but is not limited to:**

- Offensive Verbal Comments
- Unwelcome Physical Attention
- Intimidation
- Sustained Disruption of Presentations or other Events
- Inappropriate Physical Contact
- Stalking

Harassment may take place in-person or through other means of communication (internet, email, telecommunications, etc.).

FOSSIL expects members to comply with local, state, and federal regulations concerning personal interaction. In the event that members engage in unlawful conduct, authorities will be contacted. The program committee takes allegations of unlawful behavior and will investigate it to their fullest extent. *You deserve compassion and dignity.*

### **Definition of Harassment:**

- Scientific disagreements do not fall within the purview of how FOSSIL defines harassment. Data-based scientific findings are just that and should be discussed. The mere fact that one may disagree with scientific findings is not grounds for harassment. Persistent accusations of misconduct and bad practices despite a lack of scientific basis to them fall under the purview of harassment and will not be tolerated. This is a scientific society.
- Sexual harassment refers to unwelcome verbal, physical, and visual conduct of a sexual nature. This may include such conduct as unwanted sexual flirtations, advances, or propositions; verbal comments or physical actions of a sexual nature; degrading words used to describe an individual; an unwelcome display of sexually suggestive objects or pictures; and unwanted physical contact.

**Attendees asked to stop are expected to comply immediately.**

**Reporting an Incident:**

- Anyone can report harassment. If you are being harassed, please contact a member of the program committee. If you cannot find a member of the committee, please go to the registration desk to see if staff can locate one for you. Stay with registration staff if you feel unsafe.
- All complaints will be taken seriously and investigated promptly.

**Disciplinary Action:**

- All reports of harassment will be directed immediately to every FOSSIL organizer who may consult with and engage other staff, leaders, and legal counsel as appropriate.
- If necessary, we will contact local law enforcement, provide escort, offer a safe place or otherwise assist those experiencing harassment and attempt to create a safe environment.
- In response to a report of harassment, FOSSIL may take any action they deem appropriate, ranging from verbal warning to ejection.

**FOSSIL may also deem it necessary to report the incident to the home institution of the transgressing party.**

It is part of the mission of FOSSIL to create a professional environment where all members are free to share their research and ideas without harassment. We thank you for your cooperation.

## **Food and Coffee**

### **On-Campus Caffeine**

- Arsaga's (Law School Library)
- Starbucks (1021 W. Dickson St.)

**Note:** Each site is a short walking distance from conference events, open 9am-5pm

### **Caffeine**

- Puritan Coffee and Beer (205 W. Dickson St.)
- Doomsday Coffee and Roasterie (436 W Watson St.)
- Arsaga's Drive-Thru (1509 Martin Luther King, Jr. Dr.)
- Starbucks Drive-Thru (2117 Martin Luther King, Jr. Dr.)

### **Friday Lunch Location Ideas**

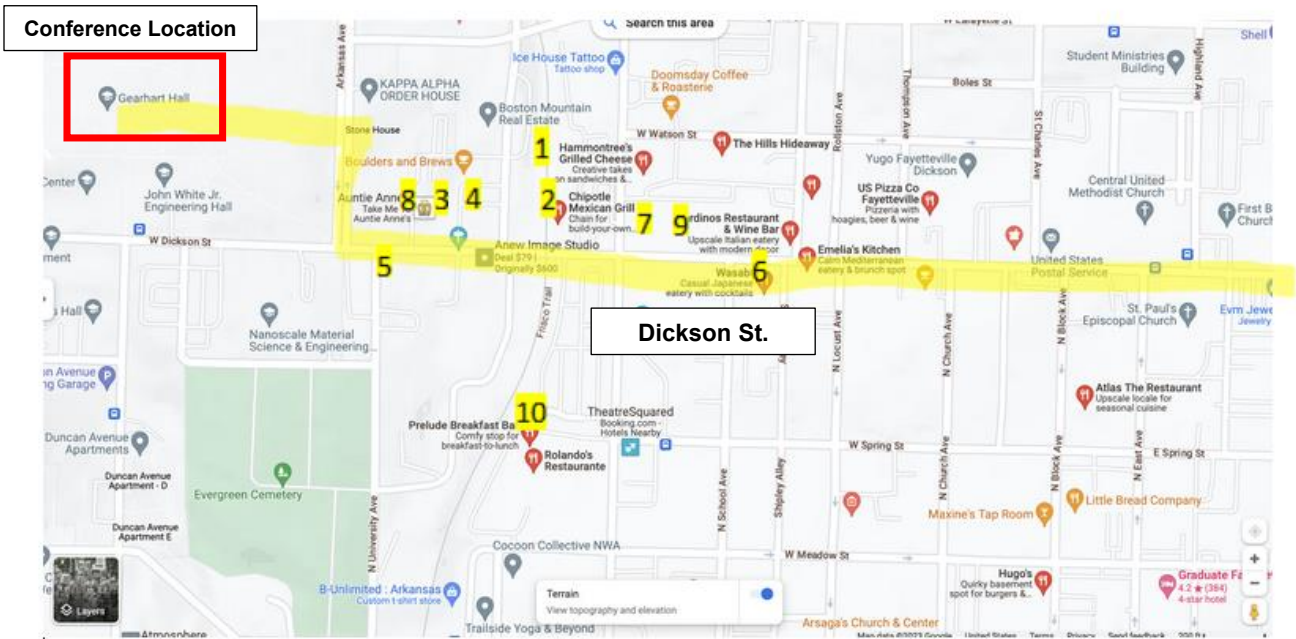
Everything is located along Dickson St. and within walking distance! Check Map 1 for locations relative to conference buildings.

1. **Hammontrees** (326 N West Ave #8), Decadent grilled cheese sandwiches
2. **Chipotle** (550 W Dickson St.)
3. **Jimmy Johns** (518 W Dickson St.)
4. **Sushi 101** (522 W Dickson St.)
5. **Spoon Fusion Korea Oh K-Dog** (603 W Dickson St.)
6. **Wasabi** (313 W Dickson St.)
7. **Los Bobos Taqueria** (404 W Dickson St.)
8. **PLOMO Quesadilla** (644 W Dickson St.)
9. **JJ's Grill** (324 W Dickson St.), Try the chicken tenders with Jasmine sauce. Trust us.
10. **Prelude Breakfast Bar** (509 W Spring St.)

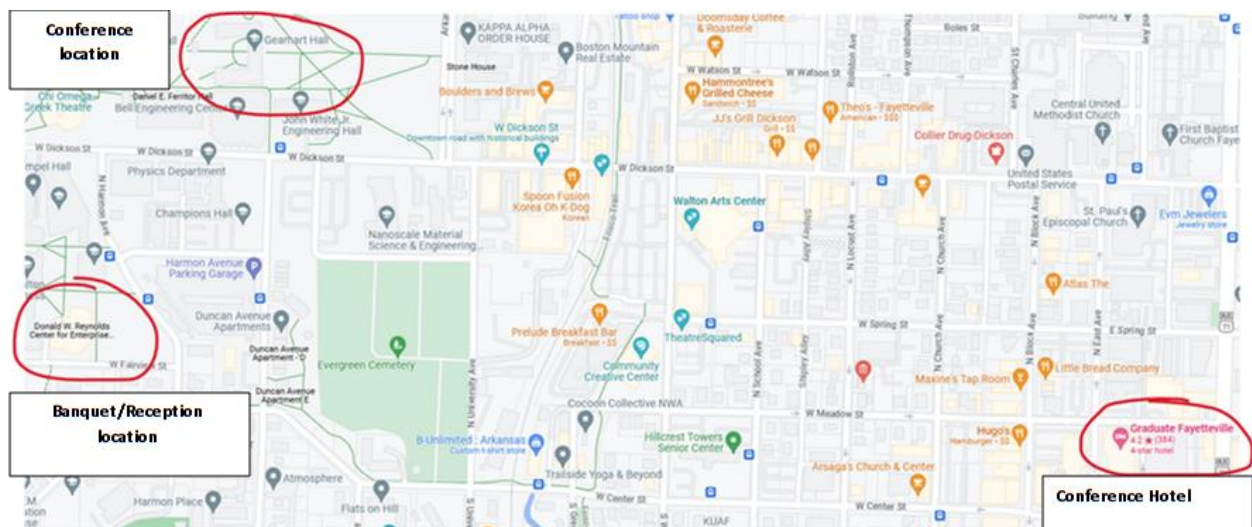
Vegetarian options; Vegan options



## Maps



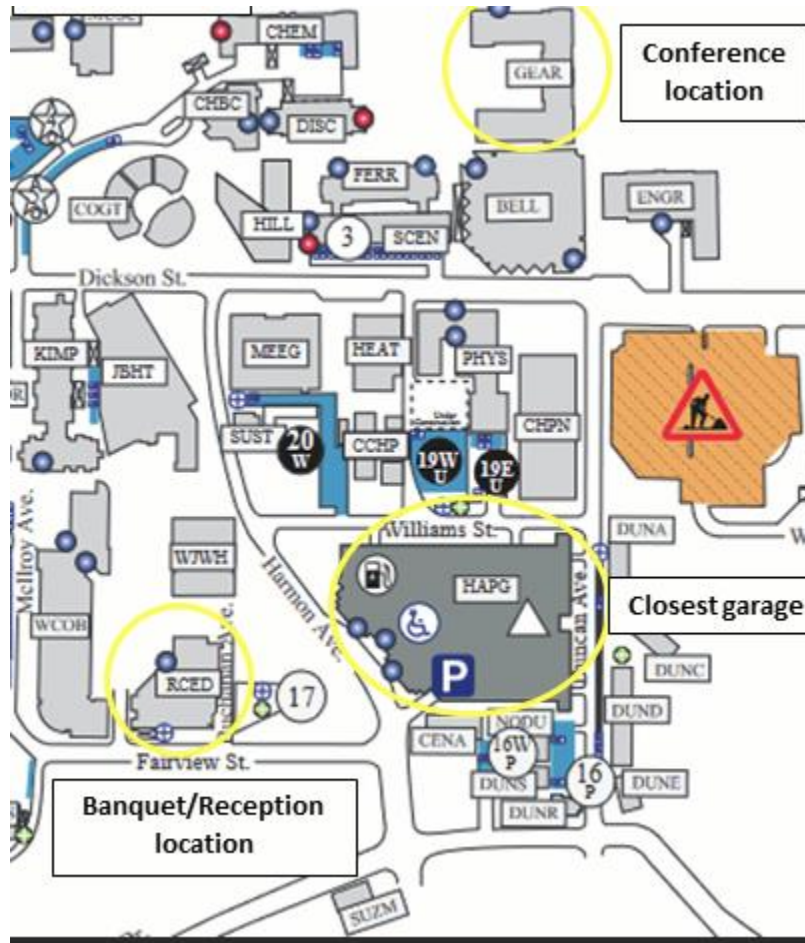
**Map 1.** Suggested lunch spots within walking distance from conference venue.



**Map 2.** Noted locations for conference events and hotel. The official conference hotel is a 17-minute walk to Gearhart Hall.

## Parking

There are four parking garages on campus, which allow visitors to have metered parking spaces. Rates are \$1.90/hour between 7am and 8pm. Harmon Garage (HAPG) is the closest garage to the conference location (GEAR) and reception location (RCED). Parking does not have a daily maximum allotment for time.



## Parking Off-Campus

**\*These lots require more walking time to Gearheart Hall\***

### **On-Street Parking, Spring Street Parking Deck and Municipal Lots**

#### **Monday - Friday**

- 2 a.m. - 2 p.m. - Free
- 2 p.m. - 5 p.m. - \$0.50 per hour
- 5 p.m. - 2 a.m. - \$1 per hour
- All day option - \$5

#### **Saturday and Sunday**

- 2 a.m. - 2 p.m. - Free
- 2 p.m. - 6 p.m. - \$0.50 per hour
- 6 p.m. - 2 a.m. - \$1 per hour
- All day option - \$5

#### **Lot 70 (Gregg Avenue) Pay-n-Display**

Location: Gregg Avenue off Dickson St.

#### **Seven (7) Days per Week:**

- 2 a.m. - 5 p.m. - \$0.75 per hour
- 5 p.m. - 2 a.m. - \$1 per hour

#### **Lot 53 (University Annex) Pay-n-Display**

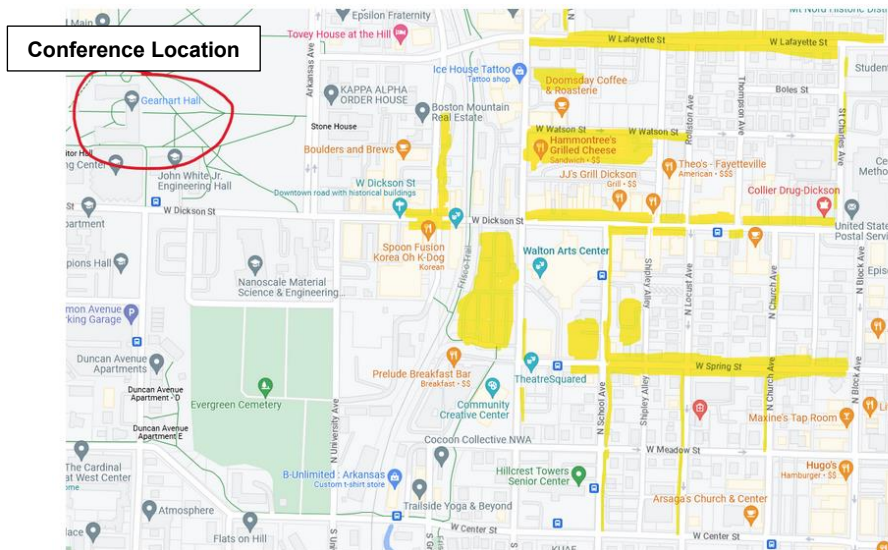
Location: North of Watson Street off West Avenue

#### **Monday - Friday**

- 7 a.m. - 5 p.m. - Restricted (University of Arkansas permits)
- 5 p.m. - 2 a.m. - \$1 per hour (Public parking)
- Maximum Charge - \$5

#### **Saturday and Sunday**

- 2 a.m. - 2 p.m. - Free
- 2 p.m. - 6 p.m. - \$0.50 per hour
- 6 p.m. - 2 a.m. - \$1 per hour
- Maximum Charge - \$5



**Yellow denotes places you can park, always make sure to double-check signage.**



## Free Parking Off-Campus

Some street parking is free in residential areas surrounding campus (common practice for graduate students). ***Pay attention to the signs on that street to make sure it is not for residents!*** Remember that Gearhart Hall is the conference building.

