

# TIMOTHY S. MCHALE, Ph. D.

## BIOMEDICAL ANTHROPOLOGIST

Assistant Professor  
California Polytechnic State University, San Luis Obispo  
Social Sciences Department  
Website: [TsMcHale.com](http://TsMcHale.com)  
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### SUMMARY

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Four-field Biocultural Anthropologist, utilizing methods and theories in Human Biological Evolution, Comparative Primate and Human Behavior, Biomedical Anthropology, Behavioral Endocrinology, and Cultural Anthropology to explain cross-cultural patterns of human variation, health, development, sexuality, gender, and behavior.

- **Experienced instructor:** Instructor of record for **91 courses** with **14 course offerings**.
- **Coauthored 13 peer-reviewed scientific publications and two manuscripts currently under review.**
- **Biomedical and Behavioral Endocrinology research focuses on underrepresented populations:** Transgender males in North America, the Tsimané forager-horticulturalists of the Bolivian Amazon, and urban Hong Kongese juvenile children.
- **Wenner-Gren Foundation grant-funded scholar:** Directed international field research in the U.S. and Hong Kong, resulting in 6 lead-author publications studying the relationship between juvenile children's reactive steroid hormones to social and physical stressors of competition and performance.
- **Published and/or peer reviewer for numerous journals:** *The American Journal of Human Biology, Hormones and Behavior, Human Nature, PLOS ONE, Psychoneuroendocrinology, Sports Sciences, Archives of Sexual Behavior, Steroids, Evolutionary Psychological Science, Adaptive Human Behavior and Physiology, Computers in Human Behavior, and the International Journal of Human Sexuality*

### EDUCATION

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2017 – University of Nevada, Las Vegas

**Ph.D. - Biological Anthropology**

*Advisors:* Drs. Peter Gray, Alyssa Crittenden, Brian Villmoare, Pierre Liénard, and Erin Hannon

2011 – Durham University (United Kingdom)

**M.Sc. - Evolutionary Anthropology**

2007 – University of Central Florida

**B.S. - Biology; B.A. - Philosophy**

### MEDICAL CERTIFICATIONS

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2011 – University of Incarnate Word

**Clinical Allergy Specialist**

### ACADEMIC & RESEARCH APPOINTMENTS

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**Oregon State University**

Fall 2023 – Present

**Lecturer**

Department of Anthropology

**Ohio University, Zanesville**

Fall 2023 – Present

**Lecturer**

Department of Sociology and Anthropology

**University of North Carolina, Wilmington**

Spring 2023 – Present

**Lecturer**

Department of Anthropology

**California State University, Northridge**

Fall 2022 – Spring 2023

**Lecturer**

Anthropology Department

**University of Texas, Rio Grande Valley**

Summer 2022 – Spring 2023

**Lecturer**

Department of Anthropology

**California State University, Dominguez Hills**

January 2022 – Present

**Lecturer**

Anthropology Department

**Simply Rational GmbH - The Decision Institute**

Berlin, Germany

December 2021 – March 2023

**Applied Behavioral Scientist Contractor**

Data and behavioral science consultancy and a spin-off of the Max Planck Institute for Human Development

**California Polytechnic State University,  
San Luis Obispo**

January 2021 – Present

**Lecturer**

Social Sciences Department

**Central Washington University**

September 2018 – July 2022

**Lecturer**

Department of Anthropology and Museum Studies

**University of Connecticut**

January 2022 – May 2022

**Lecturer**

Anthropology Department

**Boston University**

June 2019 – December 2021

**Postdoctoral Research Associate**

Dr. Carolyn Hodges-Simeon's Biomedical Anthropology and Behavioral Ecology Lab

**College of the Canyons**

August 2017 – July 2018

**Adjunct Faculty**

Department of Anthropology

**University of Nevada, Las Vegas**

January 2013 – December 2017

**Lecturer and Graduate Teaching Assistant**

Department of Anthropology

**University of Hong Kong**

August 2016 – January 2017

**Honorary Research Associate**

School of Modern Languages and Cultures

**PUBLICATIONS (N = 13)**

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**Ratings**

**h-index:** 7, **Citations:** 274 (Google Scholar)

**Note:** Student coauthors are underlined

1. Albert, G., Richardson, G. B., Arnocky, S., Bird, B., Fisher, M., Hlay, J., **McHale, T. S.**, & Hodges-Simeon, C. R. 2022. Psychometric Evaluation of the Intrasexual Competition Scale. *Archives of Sexual Behavior*, 1-18. <https://doi.org/10.1007/s10508-021-02167-6>

2. Hodges-Simeon, C. R., Richardson, G. B., Albert, G., **McHale, T. S.**, Weinberg, S., Gurven, M., & Gaulin, S. 2021. Was facial width-to-height ratio a product of sexual selection? A life course approach. *PLOS ONE*, 16(3): e0240284. <https://doi.org/10.1371/journal.pone.0240284>
3. **McHale, T. S.**, Gray, P. B., Hodges-Simeon, C. R., Zava, D. T., Albert, G., Chan, K., & Chee, W. 2020. Juvenile children's salivary aldosterone and cortisone decrease during informal math and table-tennis competitions. *Adaptive Human Behavior and Physiology*, 6(4), 413-435. <https://doi.org/10.1007/s40750-020-00146-0>
4. **McHale, T. S.**, Chee, W., Hodges-Simeon, C. R., Zava, D. T., Albert, G., Chan, K., & Gray, P. B. 2020. Salivary aldosterone and cortisone respond differently to high- and low-psychologically stressful soccer competitions. *Sports Sciences*, 38(23), 2688-2697. <https://doi.org/10.1080/02640414.2020.1796164>
5. Hodges-Simeon, C. R., Grail, G., Albert, G., Landry, N., Ortiz, T. L., Carré, J. M., **McHale, T. S.**, & Arnocky, S. A. 2020. Testosterone, cortisol, and secretory immunoglobulin-A within a single day and across two sequential days among *trans*- and *cis*-gender men. *Steroids*, 160, 108640. <https://doi.org/10.1016/j.steroids.2020.108640>
6. Gray, P.B., Straftis, A., Bird, B., **McHale, T. S.**, & S. Zilioli. 2019. Human reproductive behavior, life history, and the Challenge Hypothesis: A 30-year review, retrospective and future directions. *Hormones and Behavior*, 123, 104530. <https://doi.org/10.1016/j.yhbeh.2019.04.017>
7. **McHale, T. S.**, Gray, P. B., Chan, K., Zava, D. T., & Chee, W. 2018. Hong Kongese juvenile boys' salivary steroid hormone responses during a dyadic athletic competition. *American Journal of Human Biology*, e23190. <https://doi.org/10.1002/ajhb.23190>
8. **McHale, T. S.**, Chee, W., Chan, K., Zava, D. T., & Gray, P. B. 2018. Coalitional physical competition: acute salivary steroid hormone responses among juvenile male soccer players in Hong Kong. *Human Nature*, 29(3), 245-267. <https://doi.org/10.1007/s12110-018-9321-7>
9. **McHale, T. S.**, Gray, P. B., Chan, K., Zava, D. T., & Chee, W. 2018. Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition. *Adaptive Human Behavior and Physiology*, 4(3), 223-247. <https://doi.org/10.1007/s40750-018-0089-0>
10. Gray, P. B., Vuong, J., Zava, D., & **McHale, T. S.** 2018. Testing men's hormone responses to playing League of Legends: No change in testosterone, cortisol, DHEA or androstenedione but a decrease in aldosterone. *Computers in Human Behavior*, 83, 230-234. <https://doi.org/10.1016/j.chb.2018.02.004>
11. Gray, P. B., **McHale, T. S.**, & Carré, J. M. 2017. A review of human male field studies of hormones and behavioral reproductive effort. *Hormones and Behavior*, 91, 52-67. <https://doi.org/10.1016/j.yhbeh.2016.07.004>
12. **McHale, T. S.**, Zava, D. T., Hales, D., & Gray, P. B. 2016. Physical competition increases dehydroepiandrosterone (DHEA) and androstenedione rather than testosterone among juvenile boy soccer players. *Adaptive Human Behavior and Physiology*, 2(1), 44-56. <https://doi.org/10.1007/s40750-015-0030-8>

#### Encyclopedia Publications:

13. **McHale, T. S.**, & Gray, P. B. 2015. Anatomy, Male. In P. Whelehan & A. Bolin (Eds.), *The International Encyclopedia of Human Sexuality*, 75-78. Chichester, West Sussex: Wiley-Blackwell. <https://doi.org/10.1002/9781118896877.wbiehs026>

## MANUSCRIPTS UNDER REVIEW OR IN PREPARATION

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1. Hodges-Simeon, C. R., Arnocky, S., **McHale, T. S.**, Albert, G., Gurven, M., & Gaulin, S. C. Masculine voice is associated with better mucosal immune defense in adolescent and adult males. *Revise and Resubmit. Evolution and Human Behavior.*
2. Villmoare, B., Klein, D., Liénard, P., & **McHale, T. S.** *Under Review.* Time and the fitness landscape: modeling temporal factors in development and behavior. *PLOS ONE.*

## STUDENT MENTORSHIP

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**California Polytechnic State University**  
Fall 2022 – Spring 2023

### **Social Sciences Department**

Mentored former undergraduate first-generation Latinx student in all facets of the graduate application process, **E. Morales was recently accepted to the Anthropology Ph.D. program at UCLA** starting Fall 2023.

**Boston University, Boston**  
Fall 2019 – December 2021

### **Anthropology Department**

Mentored Ph.D. student **G. Albert's** directed study on Methods in Biological Anthropology and **coauthored three publications together.**

**University of Hong Kong, Hong Kong**  
Summer 2016 – Fall 2017

### **School of Modern Languages and Cultures**

Mentored a master's student **K. Chan** at the University of Hong Kong, who assisted in my field research, data collection, and manuscript editing, culminating in **five coauthored publications.**

**University of Nevada, Las Vegas**  
Summer 2016 – Spring 2017

### **Anthropology Department**

Mentored a freshman Anthropology undergraduate student **J. Vuong** who performed participant recruitment, data collection, and manuscript writing, resulting in his **first coauthored publication** in *Computers and Human Behavior.*

## GRANTS, AWARDS, AND SCHOLARSHIPS

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- **Project Title:** Learning to Game, Gaming to Learn: Investigating steroid hormone reactive changes, cognitive abilities, and learning strategies in eSports athletes. Initiation Grant for Faculty Niche Research Areas at Hong Kong Baptist University. **Grant Amount: \$108,000; Under Revision.**  
Co-PIs: **Timothy McHale**, California State University, Dominguez Hills; Wai-chi Chee, Hong Kong Baptist University; Carolyn Hodges-Simeon, Boston University. Co-Is: Peter Gray, University of Nevada, Las Vegas; Yarrow Dunham, Yale University.
- UNLV Liberal Arts Summer Graduate Research Award. **Award Amount: \$3,000; 2017.**
- **Project Title:** Investigating Acute Steroid Hormone Change in Response to Competition among Hong Kong Juvenile Boys. The Wenner-Gren Foundation Dissertation Fieldwork Grant. **Grant Award: \$11,473; 2016.**  
Co-PIs: **Timothy McHale** & Peter Gray, University of Nevada, Las Vegas.
- UNLV College of Liberal Arts Faculty – Ph.D. summer scholarship. **Award Amount: \$3,000; 2016.**

- UNLV Patricia J. Sastaunik Honors Scholarship. **Award Amount: \$2,500; 2016, 2017.**
- UNLV Anthropology Department Edwards & Olswang Scholarship. **Award Amount: \$2,000; 2016.**
- UNLV International Programs Scholarship for Graduate Research. **Award Amount: \$1,000; 2015.**

## CONFERENCE PRESENTATIONS & INVITED TALKS

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Invited Seminar Talk November 2022 Cal State University, Dominguez Hills	<b>California State University, Dominguez Hills, Anthropology Department</b> <i>Biomarkers: a tool for investigating behavior, stressors of competition, and cognitive development</i>
Podium Presentation May 2019 Boston University	<b>Human Behavior and Evolution Society</b> <i>Human reproductive behavior, life history, and the Challenge Hypothesis: A 30-year review, retrospective and future directions</i>
Podium Presentation April 2018 Austin, TX	<b>American Association of Physical Anthropologists</b> <i>Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition</i>
Podium Presentation February 2018 University of Nevada, Las Vegas	<b>Society for Cross-Cultural Research</b> <i>Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition</i>
Podium Presentation November 2017 University of San Diego	<b>Southwestern Association of Biological Anthropologists</b> <i>Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition</i>
Podium Presentation May 2017 Boise State University	<b>Human Behavior and Evolution Society</b> <i>Ontogeny and mechanisms of coalitional competition: Acute hormone responses among juvenile boy soccer players in Hong Kong</i>
Invited Seminar Talk October 2016 University of Hong Kong	<b>School of Modern Languages and Cultures</b> <i>A Cross-Cultural and Evolutionary Examination of Prepubescent Children's Hormone Responses to Physical and Non-Physical Forms of Competition</i>
Poster Presentation March 2015 St. Louis, Missouri	<b>Human Biology Association</b> <i>Investigating Steroid Hormone Change in Response to Competition in Juvenile Boys</i>

## CLINICAL MEDICAL EXPERIENCE

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United Allergy Services May 2012 – January 2013 Nationwide	<b>Physician Orientation Specialist</b> Provided a 1.5-hour physician orientation presentation to medical providers, medical directors, and staff who recently partnered with United Allergy Services. The purpose was to educate the staff on clinical processes and procedures
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regarding and insurance coverage for allergy testing and administration of allergen immunotherapy.

United Allergy Services  
August 2011 – May 2012  
Texas, Oklahoma, Louisiana territories

#### **Quality Assurance Specialist**

Responsible for the quality assurance activities of United Allergy Services, which included reviewing lab clinician practices related to established clinical protocols, policy, and procedures across three state territories.

United Allergy Services; Lifetime Family Medicine  
January 2011 – August 2011  
Flower Mound, Texas

#### **Clinical Allergy Specialist**

Offered specialized allergy related diagnosis and management tools to patients suffering from allergies. Administered allergy tests, created custom allergy immunotherapy serum medication and instructed patients how to use custom-designed antigen therapies to patients.

### **SERVICE TO THE DISCIPLINE**

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- Fall 2021: Reviewer for *Adaptive Human Behavior and Physiology*
- Summer 2021: Reviewer for *Adaptive Human Behavior and Physiology*
- Summer 2021: Reviewer for *Evolutionary Psychology*
- Spring 2021: Reviewer for *Hormones and Behavior*
- Spring 2020: Reviewer for *Evolutionary Psychological Science*
- Spring 2019: Reviewer for *PLOS ONE*
- Summer 2017: Reviewer for *Psychoneuroendocrinology*
- Spring 2017: Reviewer for *Evolutionary Psychology*
- Spring 2017: Reviewer for *PLOS ONE*
- Spring 2015: Co-reviewer for a book chapter in *Springer*
- Spring 2014: Co-reviewer for *The Journal of Gerontology: Social Sciences*

### **PROFESSIONAL AFFILIATIONS**

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- Society for Cross-cultural Research (since 2017)
- Human Behavior and Evolution Society (since 2017)
- American Association of Biological Anthropologists (since 2016)
- Human Biology Association (since 2015)