TIMOTHY S. MCHALE, Ph. D.

BIOMEDICAL ANTHROPOLOGIST

Assistant Professor California Polytechnic State University, San Luis Obispo Social Sciences Department Website: <u>TsMcHale.com</u> E-mail: <u>TsMcHale@calpoly.edu</u>

SUMMARY

Four-field interdisciplinary Biocultural Anthropologist, utilizing methods and theories in Human Biological Evolution, Primatology, Biomedical Anthropology, Behavioral Neuroendocrinology, and Cultural Anthropology to explain cross-cultural patterns of human behavior, health, development, and sexuality.

- **Experienced instructor**: Instructor of record for **95 courses** with **14 course offerings**.
- Coauthored 15 peer-reviewed scientific publications.
- **Biomedical and Behavioral Neuroendocrinology 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: Evolution and Human Behavior, 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

2017 – University of Nevada, Las VegasPh.D. - Biological Anthropology2011 – Durham University (United Kingdom)M.Sc. - Evolutionary Anthropology2007 – University of Central FloridaB.S. - Biology; B.A. - Philosophy

MEDICAL CERTIFICATIONS

2011 – University of Incarnate Word

Clinical Allergy Specialist

ACADEMIC & RESEARCH APPOINTMENTS

California Polytechnic State University, San Luis Obispo January 2021 – Present

Assistant Professor Social Sciences Department **Oregon State University** Fall 2023 – Spring 2024

Ohio University, Zanesville Fall 2023 – Spring 2024

University of North Carolina, Wilmington Spring 2023 – Spring 2024

California State University, Northridge Fall 2022 – Spring 2023

University of Texas, Rio Grande Valley Summer 2022 – Spring 2023

California State University, Dominguez Hills January 2022 – Spring 2024

Simply Rational GmbH - The Decision Institute Berlin, Germany December 2021 – March 2023

Central Washington University September 2018 – July 2022

University of Connecticut January 2022 – May 2022

Boston University June 2019 – December 2021

College of the Canyons August 2017 – July 2018

University of Nevada, Las Vegas January 2013 – December 2017

University of Hong Kong August 2016 – January 2017 **Lecturer** Department of Anthropology

Lecturer Department of Sociology and Anthropology

Lecturer Department of Anthropology

Lecturer Anthropology Department

Lecturer Department of Anthropology

Lecturer Anthropology Department

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

Lecturer Department of Anthropology and Museum Studies

Lecturer Anthropology Department

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

Adjunct Faculty Department of Anthropology

Lecturer and Graduate Teaching Assistant Department of Anthropology

Honorary Research Associate School of Modern Languages and Cultures

PUBLICATIONS (N = 15)

Ratings h-index: 7; i10-index: 6; Citations: 307 (Google Scholar) Note: Student coauthors are underlined

- Hodges-Simeon, C. R., Albert, G., McHale, T.S., Gaulin, S. J., Gurven, M., Landry, N., Hlay, J. K., Merullo, N., Puts, D. A., & Arnocky, S. A. 2024. Masculine voice is associated with better mucosal immune defense in adolescent and adult males. *Evolution and Human Behavior*, 106590. https://doi.org/10.1016/j.evolhumbehav.2024.05.004
- <u>Albert, G.</u>, 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. <u>https://doi.org/10.1007/s10508-021-02167-6</u>
- Hodges-Simeon, C. R., Richardson, G. B., <u>Albert, G</u>., 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. <u>https://doi.org/10.1371/journal.pone.0240284</u>
- McHale, T. S., Gray, P. B., Hodges-Simeon, C. R., Zava, D. T., <u>Albert, G., Chan, K.</u>, & 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. <u>https://doi.org/10.1007/s40750-020-00146-0</u>
- McHale, T. S., Chee, W., Hodges-Simeon, C. R., Zava, D. T., <u>Albert, G., Chan, K.</u>, & Gray, P. B. 2020. Salivary aldosterone and cortisone respond differently to high- and low-psychologically stressful soccer competitions. *Sports Sciences*, *38*(23), 2688-2697. <u>https://doi.org/10.1080/02640414.2020.1796164</u>
- Hodges-Simeon, C. R., Grail, G., <u>Albert, G.</u>, 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. <u>https://doi.org/10.1016/j.steroids.2020.108640</u>
- Gray, P.B., <u>Straftis, A.</u>, 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. <u>https://doi.org/10.1016/j.yhbeh.2019.04.017</u>
- McHale, T. S., Gray, P. B., <u>Chan, K.</u>, 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. <u>https://doi.org/10.1002/ajhb.23190</u>
- McHale, T. S., Chee, W., <u>Chan, K.</u>, 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. <u>https://doi.org/10.1007/s12110-018-9321-7</u>
- McHale, T. S., Gray, P. B., <u>Chan, K.</u>, 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. <u>https://doi.org/10.1007/s40750-018-0089-0</u>
- Gray, P. B., <u>Vuong, J.</u>, 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. <u>https://doi.org/10.1016/j.chb.2018.02.004</u>
- 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. <u>https://doi.org/10.1016/j.yhbeh.2016.07.004</u>

- McHale, T. S., Zava, <u>D. T., Hales</u>, 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. <u>https://doi.org/10.1007/s40750-015-0030-8</u>
- 14. Gray, P. B., & McHale, T.S. 2014. Making a New Male Studies Class: Lessons Learned from Developing and Teaching an Online Male Studies Survey Course. *New Male Studies*, *3*(3).

Encyclopedia Publications:

 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

1. Villmoare, B., Klein, D., Liénard, P., & **McHale, T. S.** *Revise and resubmit.* Time and the fitness landscape: modeling temporal factors in development and behavior. *PLOS ONE.*

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 <i>Computers and Human</i> <i>Behavior</i> .

GRANTS, AWARDS, AND SCHOLARSHIPS

<u>Project Title</u>: 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.

<u>Project Title</u>: 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.

CONFERENCE PRESENTATIONS & INVITED TALKS

Invited Seminar Talk November 2022 Cal State University, Dominguez Hills

Podium Presentation May 2019 Boston University

Podium Presentation April 2018 Austin, TX

Podium Presentation February 2018 University of Nevada, Las Vegas

Podium Presentation November 2017 University of San Diego

Podium Presentation May 2017 Boise State University

Invited Seminar Talk October 2016 University of Hong Kong

Poster Presentation March 2015 St. Louis, Missouri California State University, Dominguez Hills, Anthropology Department Biomarkers: a tool for investigating behavior, stressors of competition, and cognitive development

Human Behavior and Evolution Society Human reproductive behavior, life history, and the

Challenge Hypothesis: A 30-year review, retrospective and future directions

American Association of Physical Anthropologists *Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition*

Society for Cross-Cultural Research *Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition*

Southwestern Association of Biological Anthropologists *Acute salivary steroid hormone responses in juvenile boys and girls to non-physical team competition*

Human Behavior and Evolution Society

Ontogeny and mechanisms of coalitional competition: Acute hormone responses among juvenile boy soccer players in Hong Kong

School of Modern Languages and Cultures

A Cross-Cultural and Evolutionary Examination of Prepubescent Children's Hormone Responses to Physical and Non-Physical Forms of Competition

Human Biology Association

Investigating Steroid Hormone Change in Response to Competition in Juvenile Boys

CLINICAL MEDICAL EXPERIENCE

United Allergy Services May 2012 – January 2013 Nationwide

Physician Orientation Specialist

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 regarding and insurance coverage for allergy testing and administration of allergen immunotherapy.

> McHale CV, p. 5 (July 2024)

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

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

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.

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

- 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

- 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)