

## Interview with Cristine Legare

Hesley Machado Silva<sup>1</sup>

<sup>1</sup>Centro Universitário de Formiga (UNIFOR-MG)



*Cristine Legare is a psychology professor and the director of the Evolution, Variation, and Ontogeny of Learning Laboratory at The University of Texas at Austin. Her research examines how the human mind enables us to learn, create, and transmit culture. She conducts comparisons across age, culture, and species to address fundamental questions about cognitive and cultural evolution.*

*Her research and training reflect her commitment to an interdisciplinary approach to the study of cognitive development. She draws on insights from cognitive, cultural, developmental, educational, and evolutionary psychology as well as cognitive and evolutionary anthropology and philosophy, with the aim of facilitating cross-fertilization within and across these disciplines. As an undergraduate, she took coursework from a variety of social science disciplines, double majoring in human development and cultural studies at the University of California, San Diego. In graduate school, she participated in the Culture and Cognition Program while completing her doctorate in developmental psychology at the University of Michigan.*

*Cristine's research has been widely published in a number of high-impact journals, including Psychological Science, Trends in Cognitive Sciences, Child Development, Developmental Psychology, Cognitive Psychology, Cognition, and Evolution and Human Behavior, and has been covered by a range of media outlets, including NPR, Nature, The Wall Street Journal, and Scientific American. Her research has received funding from the Economic and Social Research Council (UK), the National Science Foundation, the McDonnell Foundation, the John Templeton Foundation, and the National Evolutionary Synthesis Center (NESCent). Cristine was recognized with the 2015 APS Janet Taylor Spence Award for Transformative Early Career Contributions and the 2016 APA Boyd McCandless Award for her research on the evolution and ontogeny of cognition and culture.*

**1. Tell us briefly about your trajectory, from Anthropology to Psychology, reaching studies about Evolution. Why do you have this particular interest about this topic?**

Evolution provides a theoretical foundation for studying human cognition, behavior, and culture. I view the fields of anthropology and psychology as providing complementary toolkits for studying social scientific phenomena. Both of these disciplines are needed to conduct comparative research across development, cultures, and species.

**2. In addition to being a professor, you are the director of the Evolution, Variation, and Ontogenesis of Learning lab at the University of Texas at Austin, a center of great academic production. Tell us a little about the research developed by this laboratory.**

We conduct applied cognitive science. That entails applying the theoretical and methodological tools of cognitive science to solving applied problems and answering open questions in global development, international education, and public health.

**3. Your studies have several interfaces to understand society, culture and evolution, and the pandemic has affected humanity greatly. Are there plans to investigate the ongoing epidemic of COVID-19 and the consequences of this difficult time?**

We are currently designing a large-scale international study with collaborators and participants from 30 countries around the world to examine cultural continuity and variation in how people reason about the cause, spread, risk, and impact of COVID-19.

**4. Share with us the research you have developed that you consider most relevant, of course they all are, but the one that gave you the most pleasure for the discoveries and the results achieved. Give a sample to young Brazilian students how rewarding research can be.**

One of my favorite studies was conducted in Brazil. We examined how people reason about the efficacy of simpatias, and found that reasoning about the efficacy of these kinds of rituals reveals universal biases in how we process causal information. This research used a culturally-specific belief system to uncover universal cognitive processes. The research I am most excited about illustrates the universality as well as the flexibility and diversity of the human mind.

**5. One of the great difficulties encountered in Brazilian research is the regular financing of investigations. You have a lot of research done by several agencies, tell us about the success of this funding.**

I recommend applying to a range of funders, including foundations who fund international research. The national government is an important funding source, but it is one of many sources of research funding available. It is very important to be responsive to feedback about your work, and to persevere. It often takes multiple applications before your research is funded.

**6. Another interesting fact about your academic career is the great production and publication of articles. Brazilian researchers are highly charged in this regard. Present some tips for quality articles to be published in the best journals.**

My interdisciplinary background in anthropology and biology has been very helpful in approaching psychological questions in innovative ways. Read outside your discipline, and collaborate with people who do not have identical expertise. Learn the core research questions in your discipline, and study them in creative ways. It is also critical to invest in cutting edge statistical training and to hone your writing skills.

**7. You were recently at the University of São Paulo (USP), in Brazil, and developed the Workshop "Evolutionary Approaches to Culture" (2019). Tell us a bit about this workshop and your impressions about Brazil, the Brazilian research, and the students.**

The workshop was on cognitive and cultural evolution, topics I am very excited about. I learned a lot about the excellent research on these topics underway at USP, and at Brazilian universities more broadly. I was extremely impressed by the talented faculty and students I met there, and am now collaborating with a Brazilian animal behaviorist I met at the workshop.

**8. Give us some suggestions of "hot" themes from the world academic area and from the USA that should be promising in the coming years, that could inspire young and not so young Brazilian researchers to take up.**

The world is ever more interconnected; the COVID pandemic has made this impossible to deny. Globalization and technology have increased the pace of cultural transmission, providing unprecedented opportunities to study cultural change, transformation, and innovation. It has also introduced social inequality and a variety of socioecological problems that the human population must tackle together. The social and biological sciences must take an active role in translating basic insights about cognition, behavior, and social organizations to tackle applied problems.

**9. Present difficulties that you perceive in the academic area and what paths your group seeks to overcome them.**

The insularity of academic disciplines continues to prevent progress. The problems facing humanity and the globe more generally require the tools and skills of multiple scientific disciplines to solve them. I overcome this by collaborating with scholars in other disciplines, and from other countries. We are a global scientific community, and should conduct our science accordingly.

**10. If a young man, our reader, is interested in being your supervisor in the laboratory in Austin, USA, tell us what characteristics a candidate should have, what are the most desired skills? What are the most common barriers for foreign students in the U.S.?**

A large portion of my students and research staff are and have always been international, which has been instrumental to the quality and impact of my work. Science is a global enterprise, and I actively recruit the best and brightest scientists from all over world. I look for students who are committed to studying critical topics in cognitive science. Creativity, curiosity, conscientiousness, work ethic, and motivation are critical, citizenship is irrelevant to me in choosing who I work with. I am currently working with two Brazilian scientists, and have conducted research in Brazil for a decade. My first PhD student, Andre Souza, is from Belo Horizonte in fact. He was a professor at a US university and has worked for many of the top tech firms. He is now a senior quantitative researcher at Spotify. My advice is to seek out a supervisor who is an active part of the global scientific community.