

**CURRICULUM VITAE**  
**DR. CAMILLA CENNI**

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## RESEARCH FIELDS AND INTERESTS

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**Fields:** Cultural Evolution, Cognitive Ecology, Primatology, Ethology, Behavioural Ecology, Evolutionary Biology

**Interests:** tool use, play behaviour, affordance learning, social learning, behavioral innovations, inter-group traditions, (human) creativity, material culture, urban adaptations, social systems, agent-based modelling

## ACADEMIC POSITIONS

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- June 2024    **Visiting Researcher** –University of Exeter (Cornwall Campus), UK.  
 July 2024    Advisors: Prof. Alex Mesoudi
- Oct. 2023 – present    **Research and Teaching Fellow** – Department of Cross-Cultural Social and Personality Psychology  
 University of Mannheim, Germany.  
 Advisors: Prof. Jochen Gebauer, Prof. Alex Mesoudi (University of Exeter)

## EDUCATION

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- Nov. 2022    **Ph.D. in Evolution and Behaviour**, University of Lethbridge, Lethbridge, AB, Canada  
 Nov. 2016    **M.Sc. in Animal Behaviour** (Distinction award), University of Exeter, Exeter, UK  
 Jul. 2014    **B.Sc. in Biological Sciences** (110/110, Magna Cum Laude), University of Bologna, Bologna, Italy

## PUBLICATIONS

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- Cenni, C**, Nord, C, Christie, JBA, Wandia, IN, & Leca, JB. (2024) How does object play shape tool use emergence? Integrating observations and field experiments in long-tailed macaques. *Animal Behaviour*. <https://doi.org/10.1016/j.anbehav.2024.09.001>
- Cenni, C**, Thierry, B, Wandia, IN, & Leca, JB. (2023) Tool-assisted water scooping in Balinese long-tailed macaques. *Behaviour*. 160, 817–836. <https://doi.org/10.1163/1568539X-bja10230>
- Cenni, C**, Wandia, IN, & Leca, JB. (2023) Twig-assisted masturbation in Balinese long-tailed macaques. *Behaviour*. 160, 683–700. <https://doi.org/10.1163/1568539X-bja10223>
- Cenni, C**, Christie, JBA, Van der Pant, DHL, Gunst, N, Vasey, PL, Wandia, IN, & Leca, JB. (2022) Do monkeys use sex toys? Evidence of stone tool-assisted masturbation in free-ranging long-tailed macaques. *Ethology*. 128, 632–646. <https://doi.org/10.1111/eth.13324>
- Hirsche, L, **Cenni, C**, Leca, JB, Wishaw, IQ (2022) Two types of withdraw-to-eat movement related to food size in long-tailed macaques (*Macaca fascicularis*): Insights into the evolution of the visual control of hand shaping in anthropoid primates. *Animal Cognition and Behavior*. 9, 176–195. <https://doi.org/10.26451/abc.09.02.02.2022>
- Cenni, C**, Pellis, SM, Wandia, IN, & Leca, JB. (2021) Stone affordances as potential for action expression in object play in long-tailed macaques (*Macaca fascicularis*). *Journal of Comparative Psychology*, 135, 430–438. <https://doi.org/10.1037/com0000283>
- Cenni, C**, Casarrubea, M, Gunst, N, Vasey, PL, Pellis, SM, Wandia, IN, Leca, JB. (2020) Inferring tool use behavior patterns from the temporal structure of object play sequences in a non-human primate species. *Physiology & Behavior*, 222, 112938. <https://doi.org/10.1016/j.physbeh.2020.112938>
- Cenni C**, Leca JB. (2020) Technical Intelligence Hypothesis. In J Vonk and T Shackelford (Eds.) *Encyclopedia of Animal Cognition and Behavior*. New York, NY: Springer [https://doi.org/10.1007/978-3-319-47829-6\\_103-1](https://doi.org/10.1007/978-3-319-47829-6_103-1)
- Cenni C**, Leca JB. (2020) Tool Use. In J Vonk and T Shackelford (Eds.) *Encyclopedia of Animal Cognition and Behavior*. New York, NY: Springer [https://doi.org/10.1007/978-3-319-47829-6\\_1541-1](https://doi.org/10.1007/978-3-319-47829-6_1541-1)

**Cenni C**, Fawcett TW. (2018). The coevolution of juvenile play-fighting and adult competition. *Ethology*, 124, 290–301. <https://doi.org/10.1111/eth.12732>

## INVITED TALKS

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- 2024** From monkeying around to tooling around: How object play shapes tool use emergence in a non-human primate, Interacting Minds Centre Seminars, University of Aarhus.
- 2024** Cultural drivers of stone-tool use in Balinese long-tailed macaques, Centre for Research in Animal Behaviour, University of Exeter, Streatham Campus.
- 2024** Cultural drivers of stone-tool use in Balinese long-tailed macaques, Behaviour Discussion Group Seminar, University of Exeter, Penryn Campus.
- 2024** Decoding social learning: leveraging LLMs to investigate the role of personality, Natural Language Processing and Information Retrieval Seminar, University of Mannheim.
- 2024** Cultural drivers of stone-tool use in Balinese long-tailed macaques, Evolutionary Biology and Environmental Study Seminar, University of Zurich.
- 2023** The relationship between object play and tool use in the context of a cultural behavior in a non-human primate species, Psychology Colloquium, University of Mannheim.
- 2022** Science Showcase: What Can Other Species Tell Us About Human Behavior?, American Psychological Association, APA.
- 2018** Object Play: Is it really a step towards tool use?, Psychology Colloquium, University of Lethbridge.

## CONFERENCES

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- Cenni C**, Nord C, Christie JBA, Wandia IN, & Leca JB (2024). From monkeying around to tooling around? The role of object play in the acquisition and expression of tool use in long-tailed macaques. *Diverse Processes in Networks Across Biological Levels – ESLR Workshop*, Plön, Germany. Oral presentation.
- Cenni C**, Nord C, Christie JBA, Wandia IN, & Leca JB (2024). Cultural drivers of stone-tool use in Balinese long-tailed macaques. *Culture Evolution Society Conference 2024*, Durham, UK. Oral presentation.
- Leca JB, Gunst N, Brotcorne F, Bunselmeyer, **Cenni C**, Chertoff S, Pelletier A, Sciaky L, Third B, & Wandia IN. (2024). Cultured long-tailed macaques in Bali: Implications for animal conservation. *Animal Behavior Society 2024*, London, Ontario. Oral presentation.
- Leca JB, Gunst N, Addressi E, Albanese V, Brotcorne F, Bunselmeyer C, Casarrubea C, **Cenni C**, Chertoff S, Christie J, Foroud A, Gardiner M, Giraud G, Holzner A, Huffman M, Jorge Sales L, Llorente M, Neugebauer E, Pelletier A, Pellis S, Sciaky L, Sita S, Third B, Van der Bell O, Wandia IN, & Wright CI. (2024). The diverse cultural repertoire of Balinese long-tailed macaques and its implications for primate welfare and conservation. *Culture Conference 2024*, Zurich, Switzerland. Oral presentation.
- Cenni C**, Nord C, Christie JBA, Wandia IN, & Leca JB (2024). Mechanistic drivers of tool use in foraging contexts: The role of object play and social factors in Balinese long-tailed macaques. *Culture Conference 2024*, Zurich, Switzerland. Oral presentation. First place for best talk.
- Cenni C**, Nord C, Christie JBA, Wandia IN, & Leca JB (2023). From monkeying around to tooling around? The role of object play in the acquisition and expression of tool use in long-tailed macaques. *Animal Cognition: Pure to Applied, Association for the Study of Animal Behaviour (Winter Meeting)*, Edinburgh, UK. Poster presentation.
- Leca JB, **Cenni C**, Gunst N, Vasey PL. (2023). Mechanisms and evolution of masturbation: adaptationist and by-product accounts for a behavioral puzzle. *Puzzle of Sexual Orientation*, Lethbridge, Canada. Oral presentation.
- Leca JB, Gunst N, Addressi E, Albanese V, Brotcorne F, Bunselmeyer C, Casarrubea C, **Cenni C**, Chertoff S, Christie J, Foroud A, Gardiner M, Giraud G, Holzner A, Huffman M, Jorge Sales L, Llorente M, Neugebauer E, Pelletier A, Pellis S, Sciaky L, Sita S, Third B, Van der Bell O, Wandia IN, & Wright CI. (2023). The diverse cultural repertoire of Balinese long-tailed macaques and its implications for primate welfare and conservation. *International Primatological Society Meeting and Malaysian Primatological Society Meeting*, Kuching, Malaysia. Oral presentation.

- Cenni C**, Nord C, Christie JBA, Van der Pant Y, Wright CI, Wandia IN, & Leca JB. (2022). Does object play facilitate tool use? Answers via field experiments in Balinese long-tailed macaques. *8<sup>th</sup> European Student Conference on Behaviour & Cognition*, Rovereto, Italy. Oral presentation. Third place for best talk.
- Cenni C**. (2022). From toys to tool: does object play facilitate tool use? *Three Minute Thesis (3MT®) Western Regionals – University of Winnipeg*, Winnipeg, MA, Canada. Oral presentation.
- Cenni C**. (2022). From toys to tool: does object play facilitate tool use? *Three Minute Thesis (3MT®) – University of Lethbridge*, Virtual meeting. First place for best talk.
- Cenni C**, Christie JBA, Van der Pant DHL, Wandia IN, & Leca JB. (2021). Stone affordances shape the expression of object play in long-tailed macaques (*Macaca fascicularis*). *58th Annual Conference of the Animal Behavior Society*, Virtual meeting. Oral presentation.
- Cenni C**, Christie JBA, Van der Pant DHL, Wandia IN, & Leca JB. (2021). Extrinsic and intrinsic predictors of material culture in a non-human primate species: Stone handling in Balinese long-tailed macaques (*Macaca fascicularis*). *Culture Conference 2021: Evolutionary Perspectives on Culture*, Virtual meeting. Oral presentation.
- Cenni C**, Casarrubea M, Pellis SM, Gunst N, Vase, PL, Wandia IN, & Leca JB. (2020). Object play as a behavioral specialization in a non-human primate species. *57th Annual Conference of the Animal Behavior Society*, Virtual meeting. Oral presentation.
- Chertoff S, Mitchell L, **Cenni C**, Leca JB, & Foroud A. (2020). Do monkeys fidget? Using movement analysis to understand causally opaque object manipulation. *57th Annual Conference of the Animal Behavior Society*, Virtual meeting. Oral presentation.
- Cenni C**, Wright CI, Gunst N, Wandia NI, & Leca JB (2019). Consistent sex differences in stone play and stone tool use in free-ranging Balinese long-tailed macaques. *88th Annual Meeting, American Association of Physical Anthropologists*, Cleveland, OH, US. Poster presentation.
- Cenni C**, Wright CI, Gunst N, Vasey PL, Wandia NI, & Leca JB (2018). Were stones our ancestral sex toys? Tool-assisted genital stimulation in free-ranging Balinese macaques. *Primates in Peril. Primatological Society of Great Britain (Winter Meeting)*, Bristol, UK. Poster presentation.
- Cenni C**, Wright CI, Casarrubea M, Gunst N, Vasey PL, & Leca JB (2018). Are stones being used as sex toys by Balinese macaques? *Behavioural Biology in Animal Welfare Science, Association for the Study of Animal Behaviour (Winter Meeting)*, London, UK. Poster presentation.
- Cenni C**, Wright CI, Gunst N, Vasey PL, & Leca JB (2018). Do male Balinese macaques use stones as sex toys to engage in tool-assisted masturbation? *IV Meeting of the Northeastern Evolutionary Primatologists*, Canisius College, Buffalo, NY. Oral presentation.
- Cenni C**, Mohak S, Furby C, Gunst N, Vasey PL, & Leca JB (2018). Do Balinese monkeys use stones as sex toys? *12th Annual Meeting of the Minds – Multidisciplinary Research Conference*, University of Lethbridge, Canada. Oral presentation.
- Cenni C**, & Fawcett TW (2016). The co-evolution of juvenile play-fighting and adult competition. *Animal navigation: From quantum physics to global migration. Association for the Study of Animal Behaviour (Winter Meeting)*, London, UK. Poster presentation.
- Cenni C**, Spiezio C, Vallisneri M, & Regaiolli B (2015). Colour vision in a nocturnal species: the gray mouse lemur (*Microcebus murinus*). *Joint Meeting: 6th European Federation for Primatology Meeting – XXII Italian Association for Primatology Congress*, Roma, Italy. Poster presentation.
- Cenni C**, Spiezio C, Vallisneri M, & Regaiolli B (2014). Colour vision in a nocturnal species: the gray mouse lemur (*Microcebus murinus*). *5th National Conference on Research in the Parks*, Bussolengo (VR), Italy. Poster presentation.

## **AWARDS, SCHOLARSHIPS, AND ASSISTANTSHIPS**

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- Outstanding BSc Seminar 2024 in the Dept. of Psychology University of Mannheim**, Germany.
- Culture Conference 2024**, Switzerland. (2024) – First place for best lightning talk.
- 8<sup>th</sup> European Student Conference on Behaviour & Cognition**, Italy. (2022) – Third place for best talk.
- Travel Award – Graduate Students’ Association, University of Lethbridge**, Canada. (2022) – CAD 500.
- Three Minute Thesis (3MT®) – University of Lethbridge**, Canada. (2022) – First place. CAD 1,000.
- School of Graduate Studies Fellowship Award – University of Lethbridge**, Canada. (2018) – CAD 15,000.
- NSERC – Foreign Study Supplement Taiwan**, Canada. **DECLINED**. (2018) – CAD 3,900.
- Graduate Research Assistantship – NSERC Discovery Grant to Dr. Leca**, Canada. (2018 – 2022) – CAD 52,800.

**SGS Teaching Assistantship – University of Lethbridge, Canada.** (2018 – 2022) – CAD 28,800.  
**SGS International Tuition Scholarship – University of Lethbridge, Canada.** (2018) – CAD 33,000.  
**Giovanisi – Regione Toscana, Italy.** (2016) – € 14,000.  
**ER.GO – Regione Emilia Romagna, Italy.** (2011 – 2014) – € 13,500  
**Liceo Classico Francesco Petrarca, Italy.** (2011) Graduated 100/100.

## TEACHING EXPERIENCE

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**Position: Teaching Fellow (Oct. 2023 - present)** University of Mannheim, Mannheim, Germany  
Course: “Comparative Approaches to Social Learning”, Seminar graduate course Department of Psychology.  
Course: “Psychology of Creativity and Innovation”, Seminar graduate course Department of Psychology.  
Course: “Psychology of Creativity and Innovation”, SOC 4000-level Seminar course Department of Sociology.  
Course: “Psychology of Creativity and Innovation”, SOC 4000-level Seminar course Department of Psychology.

**Position: Workshop Instructor (Feb. 2024 – present)** Universitätsklinikum Heidelberg  
Course: “Data Visualization in R”, Methods-Peergroup.

**Position: Sessional Instructor (Apr. 2022 – June 2022)** University of Lethbridge  
Course: “Psychology of Creativity and Innovation”, PSYC 3000-level Lecture course Department of Psychology.

**Position: Teaching Assistant (Jan. 2018 – Aug. 2023)**  
***Department of Psychology – University of Lethbridge, Lethbridge, Alberta, Canada***

Course: “Basic Concepts of Psychology” PSYC-1000-level Lecture course.

Instructor: Dr. Margaret Forgie

Duties: Attending classes, answering questions from the students, review exams.

Course: “Methods and Statistics”, PSYC 2000-level Lecture course.

Instructor: Dr. Scott Allen

Duties: Evaluating students, attending classes and answering questions from the students, giving lectures.

Course: “Social Learning and Culture”, PSYC 3000-level Lecture course.

Instructor: Dr. Noëlle Gunst; Dr. Jean-Baptiste Leca

Duties: Evaluating students, attending classes and answering questions from the students, giving lectures.

Course: “Abnormal Psychology”, PSYC 3000-level Lecture course.

Instructor: Dr. Jennifer Williams

Duties: Evaluating students, attending classes and answering questions from the students.

Course: “Psychology of Crime”, PSYC 3000-level Lecture course.

Instructor: Dr. Jennifer Williams

Duties: Evaluating students, attending classes and answering questions from the students.

Course: “Psychology of Aging”, PSYC 3000-level Lecture course.

Instructor: Dr. Jennifer Mather

Duties: Managing online learning platforms, attending classes and answering questions from the students.

Course: “Cultural Organisms”, PSYC 4000-level Seminar course.

Instructor: Dr. Jean-Baptiste Leca

Duties: Guest lecture (“The use of models to understand social learning and cultural evolution”).

Course: “Celluloid Psychology”, PSYC 4000-level Seminar course.

Instructor: Dr. Javid Sadr

Duties: Evaluating students, attending classes and answering questions from the students, giving lectures.

***Department of Analytics – Northeastern University, Toronto, Ontario, Canada***

Course: “Introduction to Data Analytics”, Master-level Lecture course Master of Professional Studies.

Instructor: Dr. Jay Qi; Dr. Steven Habbous

Duties: Giving lectures and help session in R, attending classes and answering questions from the students.

Course: “Probability and Counting”, Master-level Lecture course Master of Professional Studies.

Instructor: Dr. Steven Habbous; Dr. Hootan Kamran Habibkhani

Duties: Evaluating students and providing weekly feedback on professional reports.

Course: “Intermediate Analytics”, Master-level Lecture course Master of Professional Studies.

Instructor: Dr. Yvonne Leung

Duties: Evaluating students and providing weekly feedback on professional reports.

Course: “Communication and Visualization for Data Analytics”, Master-level Lecture course Master of Professional Studies.

Instructor: Dr. Yvonne Leung; Dr. Sean Cornelius; Dr. Harpreet Sharma

Duties: Evaluating students and providing weekly feedback on professional reports.

Course: “Leadership in Analytics”, Master-level Lecture course Master of Professional Studies.

Instructor: Dr. Sasan Mehrabian

Duties: Evaluating students and providing weekly feedback on professional reports.

## **TUTORING AND STRATEGIST EXPERIENCE**

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### **Position: Academic Strategist (Jan. 2022 – Aug. 2023)**

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

### **Position: Tutor (Mar. 2021 – Aug. 2023)**

Course: “Introduction to Psychology”, 1000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Introduction to Methods and Statistics”, 1000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Methods and Statistics”, 2000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Learning and Cognition”, 2000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Psychology of Criminal Behaviour”, 3000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Hormones and Behavior”, 3000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Primate Lives and Human Cognition”, 3000-level Lecture course Department of Psychology.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

Course: “Applied Statistics for Clinical Practice”, 3000-level Lecture course Department of Health Sciences.

Institution: Accommodated Learning Centre, University of Lethbridge, Lethbridge, Alberta, Canada

## **SUPERVISORY EXPERIENCE**

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MSc Thesis, Department of Psychology, University of Mannheim:

- ❖ Gesa Spellmeyer, B.Sc. (2024), “The role of multicultural experiences on the creativity of young people”.

Graduate Research Assistants, Department of Psychology, University of Lethbridge:

- ❖ Jessica Bess Agnes Christie, M.Sc. (2019 – 2021), “Does object play facilitate the expression of tool use? Answers from Balinese long-tailed macaques”.
- ❖ Danielle Hazel Lucy Van der Pant, B.Sc. (2019), “Object play as a precursor of tool use in a social context”.
- ❖ Chloë India Wright\*, M.Sc. (2018), “Stone handling as a precursor to stone tool use in Balinese long-tailed macaques”.

Undergraduate Research Assistants, Department of Psychology, University of Lethbridge:

- ❖ Dhvani Shah, B.Sc. candidate (2022): “Video analysis of stone-directed behavior in a foraging task in Balinese monkeys”
- ❖ Hilary Williams\*, B.Sc. candidate (2019): “Video analysis of stone-play behavior in Balinese monkeys”
- ❖ Samantha Tinworth\*, B.Sc. candidate (2018): “Complex object-directed actions in long-tailed macaques”
- ❖ Brittany Toth\*, B.Sc. candidate (2018): “Repetitive object play in monkeys”.
- ❖ Stephanie Blencowe\*, B.Sc. candidate (2018): “Object manipulation in monkeys”.

\*co-supervised by Dr. Jean-Baptiste Leca

## ACADEMIC SERVICES AND PROFESSIONAL CONTRIBUTIONS

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### Committee services

- ❖ Student representative on Animal Welfare Committee, University of Lethbridge, Canada (2020 - 2022)
- ❖ Student representative on Psychology Personnel Committees, University of Lethbridge, Canada (2018 - 2020)
- ❖ Alternate Student representative on Psychology Department Committee, University of Lethbridge, Canada (2019 - 2021)

### Peer reviewer for scientific journals (number of reviews)

*Behavioral Ecology* (1\*); *Developmental Psychobiology* (1); *Ethology* (1); *Frontiers in Psychology* (2\*); *Journal of Comparative Psychology* (1); *Journal of Ethology* (1); *Journal of Mammalogy* (1); *Primates* (3\*).

\*co-reviewed with Dr. Jean-Baptiste Leca

## MEDIA AND OUTREACH ACTIVITIES

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### Media

- ❖ *National Geographic*, USA (Dec. 2023) [[Link](#)]
- ❖ *Savage Lovecast*, USA (Sept. 2022) [[Link](#)] – Episode #829; min 46:19 – 59:52]
- ❖ *Agencia EFE*, Spain (Aug. 2022) [[Link](#)]
- ❖ *Live Science*, UK (Aug. 2022) [[Link](#)]
- ❖ *NewScientist*, Australia (Aug. 2022) [[Link](#)] [[Link](#)] – Episode #132; min 05:55 – 12:05]
- ❖ *Newsweek*, USA (Aug. 2022) [[Link](#)]
- ❖ *New York Times*, USA (Aug. 2022) [[Link](#)]
- ❖ *Vice*, Singapore (Aug. 2022) [[Link](#)]

### Outreach Activities

- ❖ Speaker for “Penne Amiche della Scienza”, an outreaching organization connecting primary and secondary schools with scientists in Italy (2024).
- ❖ Content Editor for Animal Behavior Podcast (2023 – present).
- ❖ Speaker for “Skype a Scientist”, an outreaching organization connecting kindergarten, primary and secondary schools with scientists around the world (2021).
- ❖ Speaker in a series of outreaching events for primary and secondary schools, grade 1-8, across Canada and US, organized by an Inter-Departmental group at the University of Lethbridge (2020 – 2022).
- ❖ Moderator in a series of Inter-Departmental talks with external guest speakers for the group Behavioral Ecology and Evolution Research Seminar at the University of Lethbridge (2019 – 2022).
- ❖ Judge at the 2019 Lethbridge Regional Science Fair (2019).
- ❖ Judge at the 2018 Lethbridge Regional Science Fair (2018).
- ❖ Guest Lecturer at “Francesco Redi” High School, Arezzo, Italy on “Introduction to Animal Behavior and Comparative Psychology” (2018).

### Current membership of academic societies

- ❖ Cultural Evolution Society
- ❖ The Association of Early-career Social Learning Researchers