

CURRICULUM VITAE

CAMILLA CENNI

Email: cenni.camilla@gmail.com**RESEARCH FIELDS AND INTERESTS**

Fields: Primatology, Ethology, Cognitive Ecology, Behavioural Ecology, Evolutionary Biology**Interests:** tool use, play behaviour, affordance learning, social learning, behavioral innovations, inter-group behavioural traditions, material culture, non-adaptive cultural behavior, social systems, agent-based modelling**ACADEMIC POSITIONS**

Oct. 2023 **Postdoctoral Researcher 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

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

RELEVANT RESEARCH EXPERIENCE

Jan. 2018 **Ph.D. Dissertation:** On the proximate links between object play and tool use in the context of
 Nov. 2022 stone handling behavior in Balinese long-tailed macaques.
 Department of Psychology, University of Lethbridge, Lethbridge, Alberta, Canada
 Advisor: Dr. Jean-Baptiste Leca
 Duties: Designing observational and experimental studies, good knowledge of programming language R.

Nov. 2015 **Master's Thesis:** Coevolution of juvenile play-fighting and adult social system.
 Nov. 2016 Centre for Research in Animal Behaviour, Department of Psychology, University of Exeter, Exeter, UK
 Advisor: Dr. Tim Fawcett
 Duties: Designing individual-based computer simulations, good knowledge of programming language C++.

May 2016 **Research Assistant:** Playful human-robot interactions in public spaces.
 Sept. 2016 Social, Environmental and Organisational research group, University of Exeter, Exeter, UK
 Advisor: Dr. Miriam Koschate-Reis
 Duties: Co-designing a coding system for video-recorded data analysis, good knowledge of BORIS (Behavioral Observation Research Interactive Software).

Sept. 2016 **Intern:** Regional Census of Deer and Wolf population in Foreste Casentinesi National Park
 Foreste Casentinesi National Park, Arezzo, Italy and State Forestry Corps, Italy
 Advisor: Agency Park committee of Foreste Casentinesi National Park
 Duties: Wolf-howling census, deer-belling census, participation in workshops.

- Nov. 2015 **Research Assistant:** Dominance hierarchy analysis from win-loss agonistic interactions in rhesus
Apr. 2016 macaques.
Centre for Research in Animal Behaviour, Department of Psychology, University of Exeter,
Exeter, UK
Advisor: Dr. Lauren Brent
Duties: Genealogical and social data processing and analysis using transition probability
matrices.
- Apr. 2016 **Intern:** The examination of threat-sensitive vigilance behaviours of feral goats (*Capra hircus*
hircus) living in a predator-free environment.
University of Exeter and Landmark Trust, Lundy Island, Bristol Channel, UK
Co- Advisors: Dr. Matthew Collett, Dr. Pizza Ka Yee Chow
Duties: M.Sc. field course, elaboration of a field project, presentation of the project, writing of a
scientific report.
- Mar. 2015 **Research Assistant:** Behavioural ecology and cognition in red-fronted lemurs and chameleons
Jun. 2015 in the Kirindy forest of Western Madagascar.
Behavioural Ecology, Sociobiology, and Anthropology Unit at the German Primate Centre,
Göttingen, Germany
Co- Advisor: Falk Eckhardt (PhD student), Anna Sperber (PhD student)
Duties: Co-designing and conducting field experimental protocols, capture/release of wild
animals, collecting faecal samples, preparation of hormone samples, mastering behavioural
sampling techniques.
- Nov. 2014 **Research Assistant:** Olfactory choice in a captive colony of nocturnal gray mouse lemurs.
Mar. 2015 Behavioural Ecology, Sociobiology, and Anthropology Unit at the German Primate Centre,
Göttingen, Germany
Advisor: Dr. Luca Pozzi
Duties: Co-designing and conducting experimental protocols, video analysis via BORIS.
- Apr. 2014 **Bachelor's Honours Thesis:** Colour vision and welfare in a captive colony of gray mouse lemurs.
Jul. 2014 University of Bologna, Bologna & Parco Natura Viva, Garda Zoological Park srl, Bussolengo (VR),
Italy
Co- Advisors: Dr. Maria Vallisneri and Dr. Caterina Spiezio
Duties: Mastering behavioural sampling techniques in nocturnal conditions, designing
environmental enrichment protocols in captive primates.

PUBLICATIONS

- 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, Whishaw, 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
- 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
- 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

- 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

- 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. *8th 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, Vasey, 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

- 8th 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. Jean-Baptiste Leca**, Canada. (2018 – 2022) – CAD 52,800.
- School of Graduate Studies Teaching Assistantship – University of Lethbridge**, Canada. (2018 – 2022) – CAD 28,800.
- School of Graduate Studies International Tuition Scholarship – University of Lethbridge**, Canada. (2018) – CAD 33,000.
- Giovanisì – Regione Toscana, Toscana County**, Italy. (2016) – € 14,000.
- ER.GO – Regione Emilia Romagna, Emilia Romagna County**, Italy. (2011 – 2014) – € 13,500
- Liceo Classico Francesco Petrarca, Francesco Petrarca High School**, Italy. (2011) Graduated 100/100.

TEACHING EXPERIENCE

Position: Teaching Fellow (Oct. 2023 - present)

Course: "Psychology of Creativity and Innovation", Seminar graduate course Department of Psychology.

Institution: University of Mannheim, Mannheim, Germany

Course: "Psychology of Creativity and Innovation", SOC 4000-level Seminar course Department of Sociology.

Institution: University of Mannheim, Mannheim, Germany

Position: Sessional Instructor (Apr. 2022 – June 2022)

Course: "Psychology of Creativity and Innovation", PSYC 3000-level Lecture course Department of Psychology.

Institution: University of Lethbridge, Lethbridge, Alberta, Canada

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

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

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

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*); *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

Media

- ❖ *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

- ❖ 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

- ❖ Animal Behavior Society