# Duna Susie Lee, PhD

Max Planck Institute for Demographic Research, Konrad-Zuse Straße 1, 18057 Rostock, Deutschland susielee.on at gmail dot com | +49 381 2081-203 | <u>https://dsusielee.wordpress.com/</u>

## Education

2013-2019	PhD, MSc	New York University (NYU), USA
		Biological Anthropology (Supervisor: Dr. James Higham)
2006-2009	MPhil	MPhil, Seoul National University, South Korea
		Biological Anthropology (Supervisor: Dr. Sunyoung Pak)
2002-2006	BSc	BSc cum laude, Seoul National University, South Korea
		Double major in Child Development & Family Studies and Anthropology

# **Professional Experience Highlights**

2020-present Research scientist (post-doc)

Population Health Laboratory, Max Planck Institute for Demographic Research, Germany

- Leading 3 projects (2 first- and 1 second-author) on how **human fertility** responds to the present **challenges to human health and wellbeing** (e.g., extreme BMI, disasters, and COVID-19).
- Teaching of graduate courses 1) "Population Health" module "Evolutionary approaches to population health" and 2) "Research Skills"
- **Presented at academic conferences** for the European Human Behaviour and Evolution Association, Population Association America, International Population Conference.
- Participated in **administrative activities** including **conference organisation** on the COVID-19 impact on human fertility and families (conference page) and organising workshop series "Think Population".

#### 2013-2019 PhD student

NYU and New York Consortium in Evolutionary Primatology, USA

- Thesis: <u>Reproductive trade-offs in the free-ranging rhesus macaque females on Cayo Santiago</u> Thesis committee: James Higham (supervisor), Susan Alberts, Marina Cords, Todd Disotell, Clifford Jolly. Awarded **Dean's Outstanding Dissertation in Social Sciences**, Graduate School of Arts and Sciences.
- Designed original research on the evolved mechanisms underlying reproductive rates in female rhesus macaques, involving fieldwork, endocrinological lab work, and demographic census data analysis.
- Published 4 first-author articles, including Lee et al., 2019, PNAS (Cozzarelli Prize nominated).
- Secured **research grants** (total \$16,150) from National Scientific Foundation of the USA, Leakey Foundation, American Society of Primatologists, and International Primatological Society.
- Hired, trained, and supervised two undergraduates for fieldwork in Puerto Rico.
- Established and managed **international teams of researchers** from Germany (German Primate Center, Max Planck Institute for Evolutionary Anthropology), Puerto Rico (Caribbean Primate Research Center), South Korea (National Primate Research Center), and the UK (Exeter University).
- Taught an undergraduate course "Human Origins" as a TA including twice a week hourly lab sections.

# **Publications**

- Lee DS (2022, forthcoming) Life history theory and reproductive trade-offs in humans, *Current issues of Evolutionary* Behavioural Science (ed. by Sunyoung Pak), Seoul National University Press
- Lee DS, Nitsche N, Barclay K, Body mass index during early adulthood and first births: Racial/ethnic and sex differences in the US NLSY79 cohort. Population Studies (accepted).
- Nitsche N, Lee DS, The role of emotions in the changing fertility intentions during the COVID19 Pandemic (under review at Population Development Review).

#### <Published>

- Lee DS, Knittel T, Heistermann M., Deschner T., Higham JP. (2022) <u>Testing the role of testosterone versus estrogens in</u> mediating reproductive transitions in female rhesus macaques, Hormones and Behavior 139 (data)
- Lee DS, Kang Yul HR, Ruiz-Lambides A., Higham JP. (2021) <u>The observed pattern and hidden process of female reproductive</u> <u>trajectories across the lifespan in a nonhuman primate</u>, Journal of Animal Ecology 90 (12): 2901-2914. (data)
- Lee DS, Mandalaywala T, Dubuc C, Widdig A, Higham JP. (2020) Higher early life mortality with lower infant body mass in a free-ranging primate, Journal of Animal Ecology 89 (10): 2300-2310. (data)
- Lee DS, Ruiz-Lambides A., Higham JP. (2019) <u>Higher offspring mortality with short inter-birth intervals in free-ranging rhesus</u> <u>macaques</u>, Proceedings of National Academy of Sciences (PNAS) 116 (3): 057-6062. (<u>data</u>) Nominated for 2019 Cozzarelli Prize (PNAS paper of the year).

Lee DS (2018) Interbirth interval, In: Encyclopedia of Animal Cognition and Behavior, Springer.

Lee DS (2018) R- and K-strategies, In: Encyclopedia of Animal Cognition and Behavior, Springer.

Dubuc C, Allen WL, Cascio J, Lee DS, Maestripieri D, Petersdorf M, Winters S, Higham JP. (2016) <u>Who cares? Experimental</u> attention biases provide new insights into a mammalian sexual signal, Behavioral Ecology 27 (1): 68-74

Lee DS and Kang HR (2012) The categorization of "bad animal" and its relation to animal appearances: a study of 6-year-old children's perceptions, J Soc, Evol, and Cultural Psy (now Evolutionary Behavioral Sciences) 6 (1), 32-49.

#### **Projects and Collaborations in Progress**

Lee DS, Batyra E, Castro AF, Wilde W, Human fertility after disaster: A systematic literature review. Registered at <a href="https://osf.io/dpgqf/">https://osf.io/dpgqf/</a>

Lee DS, Benjamini J, Park YS, Yearning for a bigger population: The relevance of minority status for fertility preference among the Oromo, Ethiopia

#### **Presentations & Invited Talks**

2022	Invited seminar	"Communities in Anthropocene" seminar series - CATA research group on disaster and sociality
	Poster	European Human Behaviour and Evolution Association
2021	Oral presentation	International Population Conference
		Population Association of America annual meeting
2020	Invited seminar	NYU Primate Reproductive Ecology and Evolution (PhD exit talk)
		Max Planck Institute for Demographic Research (post-doc interview)
2016	Poster	American Society for Physical Anthropology
2009	Oral Presentation	International Society for Human Ethology

### **Teaching and Mentorship**

2021-present	Instructor, International Max Planck School for Population, Health and Data Science
	"Evolutionary Approaches to Population Health" graduate course
	"Research Skills Seminar Series" graduate course
2017-2018	Teaching assistant and lab instructor, Department of Anthropology, NYU
	"Human Origins" undergraduate course and two weekly lab sections ~ 20 students
2008	Teaching assistant, Department of Anthropology, Seoul National University
	"Culture and Language" undergraduate course
	*Best Teaching Assistant Award from the School of Social Sciences

#### Awards, Fellowships, Grants

2019	Dean's Outstanding Dissertation in Social Sciences, NYU GSAS
2018	\$9,450; NSF, Doctoral Dissertation Research Improvement Grant
	\$6,500; The Leakey Foundation, General Research Grants
	"The role of testosterone in the modulation of parental behaviors in primates" (project outcome
	<u>report</u> from the NSF website)
2016	\$1,000; American Society of Primatologists, Small Grants
	\$1,000; International Primatological Society, Research Grants
	"The role of testosterone in the modulation of parental behaviors in primates"
2015	\$3,000; NSF, IGERT Pilot Research Funds
2013-2017	NYU MacCracken Fellowship for stipend and full tuition
2007-2008	Seoul National University Teaching Assistant Scholarship
2005	Seoul National University Honor Scholarship
	Seoul National University Alumni Scholarship for Outstanding Undergraduates

#### **Administrative Activities**

2021-present	Organiser of the workshop series "Think Population" at MPIDR
2021	Organising Committee for the conference "Pandemic Babies? The Covid-19 Pandemic and Its
	Impact on Fertility and Family Dynamics" at MPIDR

#### **Professional Service**

2020-present Reviewed manuscripts on various topics on ageing, reproductive and child health, for the following peer-reviewer journals:

Animal Behaviour

- Behavioral ecology and sociobiology
- Proceedings of the National Academy of Sciences (PNAS)
- The Journal of Maternal-Fetal & Neonatal Medicine

# <u>Outreach</u>

2021-present	Essay writer for the column "The way we say natural" written in Korean for a quarterly magazine read by ~5000 Catholic readers in South Korea. ( <u>Twitter thread summarising my</u>
	<u>works in English)</u> .
2017	Instructor for teaching science at a juvenile detention centre in NYC
2017	Judge for the Urban Barcode Project (UBP) a science competition program for high school student teams conducting a project that uses DNA technology to explore biodiversity in NYC

#### **Other Research and Professional Experience**

2019-2020	Analyst - RAND Europe, Home Affairs and Social Policy team	
Conduct	ted evaluation and research projects on topics related to family, health, and education.	

- Published a **policy memo** on inclusion in early childhood education and care (ECEC) on behalf of the European Platform for Investing in Children project (<u>link</u>) - presented the memo at the European Commission's Working Group on ECEC in Jan 2020.
- Conducted research and evaluation on **topics related to children and family policies** (e.g., childcare preferences by parents, women's prenatal mental health, review of current brain sciences literature on adolescent development and learning).
- **Performed data analysis** for various study designs (randomised control trials, mixed-methods study using a mixture of survey, focus group discussions, interviews).
- 2017 Member Science Advocacy and Action Network (ScAAN)
  - Published a **policy memo** "Are Orphanages for Orphans?" on the UN Sustainable Development Solutions Network blog (<u>link</u>), to advocate the policy to end institutionalised care and invest in supporting vulnerable families.
  - Wrote a **knowledge brief** outlining scientific evidence against solitary confinement (<u>link</u>).
- Participated in an outreach program for teaching science at a juvenile detention centre in New York City.
  Research assistant Tokai Baboon Project, Cape Town, South Africa
  - Conducted fieldwork on 2 troops of chacma baboons (~80) in Cape Town, South Africa, and collected behavioural and physiological data.
  - Set up a behavioral coding scheme and a field station for storing physiological data.

2006-2007 Research assistant - Seoul National University

• Arranged visiting schedules for over 1,000 mother-child pairs and conducted physical measurements and household surveys, for the Korea Research Foundation funded project, "Study on the Effect of Poverty from a Life Cycle Perspective: Focusing on Childhood Poverty."

### <u>Skills</u>

- Programming in R, MATLAB
- Data analysis and research methods: mixed-effects models; Markov-chain models; Cox proportional hazard models; meta-analysis; time-series analysis; systematic review
- Laboratory skills: hormone measurements using enzyme immunoassay techniques; DNA extraction and PCR analysis
- Field animal data collection: non-invasive observation of animal behaviours and collection of physiological samples
- Languages: English (excellent), Korean (excellent), Deutsch (elementary)
- Licence: Certificate for Early Childhood Educator (South Korea)