

PERSONAL DETAILS

Dr Sophie REICHERT

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Date of birth: 5th April 1986

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EDUCATION

2023: HDR equivalence, University of Strasbourg, France.

05/2021: Docent– Adjunct professor in evolutionary physiology, University of Turku (UTU), Finland.

01/10/2010-25/10/2013: Ph.D. in Ecophysiology, with honours, University of Strasbourg, France.

Title: Determinants of telomere length and implications in life-history trade-offs.

09/2007-06/2009: Master in Ecophysiology, Ecology and Ethology, magna cum laude (ranked 2nd out of 20), University of Strasbourg, France.

SCIENTIFIC EXPERIENCE

Current position

10/2023-present day: « Academy of Finland Research Fellow » and « Marie Skłodowska-Curie Individual Fellowship » Junior PI, project: thermal stress in passerines. Department of Biology, UTU, Finland; IPHC-DEPE, Strasbourg, France.

Previous positions

09/2020-09/2023: TCSMT (Turku Collegium for Science, Medicine and Technology) Junior group leader, project: how are ageing rates shaped in the wild? Department of Biology, University of Turku, Finland.

03/2018-08/2020: TCSMT research fellow, project: senescence and fertility determinants in the Asian Elephant. Department of Biology, University of Turku, Finland.

01/2016-12/2017: Marie Skłodowska-Curie fellow, project: ageing markers and senescence patterns in a long-lived mammal. Department of Animal and Plant Sciences, University of Sheffield, UK.

06/2014-10/2015: Post-doctoral research assistant, project: Link between social stress, cognition and telomere dynamics in the European starling. IBAHCM, University of Glasgow-UK

10/2013-06/2014: Research collaborator, project: What links telomere dynamics and individual quality? University of Strasbourg, France

10/2010-10/2013: Ph.D. Candidate in ecophysiology, University of Strasbourg, France.

Title: Determinants of telomere length and implications in life-history trade-offs.

10/2010-10/2013: Teaching assistant in Zoology and Ecology, University of Strasbourg, France

Career breaks, diverse career paths and major life events

Since 11/2021, I am working part-time (80%) due to familial circumstances.

01/2021-10/2021: maternity leave.

2020/2021: COVID and the coup d'état in Myanmar significantly hindered my project on Myanmar Asian Elephants and influenced productivity.

FELLOWSHIPS AND AWARDS

05/2025: Ehrnrooth foundation PhD funding, UTU, Finland (15 000€) – PI.
09/2023-08/2027: Academy of Finland Research Fellow funding, UTU, Finland (729 000€) – PI.
10/2023 – 09/2025: Marie Skłodowska-Curie Individual Fellowship, IPHC-DEPE, France (211 000 €) – PI.
06/2022: Ehrnrooth foundation PhD funding, UTU, Finland (24 000€) – PI.
05/2022: TCSMT research funding, UTU, Finland (10 000€) – PI.
10/2021: TCSMT starting grant, University of Turku, Finland (13900€) - PI
04/2021: EDUFI PHD fellowship, University of Turku, Finland (13500€) - PI
09/2020-08/2025: TCSMT Junior group leader Fellowship, University of Turku, Finland (312 000 €) – PI (declined from 09/2023 onwards).
09/2019-08/2021: Academy of Finland funding for early-career researchers (250 000 €) - PI
03/2018-08/2021: TCSM Fellowship, University of Turku, Finland (120 000 €)
05/2017: NBAF grant, UK (29 000 £)
01/2017: Learned Society Travel grant, University of Sheffield, UK (700 £)
02/2016: Learned Society Travel grant, University of Sheffield, UK (500 £)
01/2016–12/2017: Marie Skłodowska-Curie Individual Fellowship, University of Sheffield, UK (183 000 €)
06/2014: University of Strasbourg PhD Prize, France (1500 €)
10/2010 – 10/2013: PhD Grant, Région Alsace. University of Strasbourg, France (70 000 €)

SUPERVISING EXPERIENCE

Supervision of post-docs: Julie Fleitz 2024-2027 (UTU), Vérane Berger 2020-2022 (UTU), Diogo Santos 2019-2020 (UTU)

Supervision of PhD candidates: Bastien Wagner 2024-2027 (UoS), Clémence Furic 2024-2027 (UTU/UoS), Adrien Levillain 2021-2025 (UoS), Héloïse Moullec 2021-2026 (UTU)

Since 2011: supervision of 12 MScs, 15 BScs and interns

TEACHING EXPERIENCE & DUTIES

10/2025-06/2026 : Teaching at master level: EcoPhysiology (practicals, 21 hours); Ecology (lectures, 20 hours); Evolutionary ecology (lectures and practicals, 20 hours) ; Masters professional project (practicals, 20 hours); University of Strasbourg, France

10/2024-06/2025 : Teaching at master level: EcoPhysiology (practicals, 21 hours); Ecology (lectures, 6 hours); Evolutionary ecology (lectures and practicals, 10 hours) ; Masters professional project (practicals, 20 hours); University of Strasbourg, France

2024 & 2025: Curricula development; University of Strasbourg, France

2024 & 2025: Master thesis opponent; University of Strasbourg, France

10/2023-06/2024: Teaching at master level: EcoPhysiology (lectures and practicals, 8 hours); Ecology (lectures and practicals, 14 hours); Masters internship Preparation (mentoring, 24 hours); Evolutionary ecology in M1 (lectures, 4 hours); University of Strasbourg, France

09/2019-12/2020: Animal physiology teaching (lectures and practicals, 15 hours), UTU, Finland

09/2018-06/2019: Evolutionary biology and animal physiology teaching (lectures, 4 hours), UTU, Finland.

03/2017: Supervision of L3 mini-project (15 hours - introduction to the design and implementation of independent research) University of Glasgow, UK

09/2010-09/2013: Ecology teaching (lectures, 10 hours) and Zoology teaching (practicals, 182 hours) University of Strasbourg, France

SCIENTIFIC DUTIES AND PUBLIC OUTREACH

2025: Grant reviewer: National Science Center, Poland

2025: Co-organisation of the 2026 SPBI conference, University of Strasbourg, France

2025: Organisation of bi-monthly seminars University of Strasbourg, France

2024 & 2025: Participation to “Fête de la Science” (science fest), University of Strasbourg, France

2024: PhD thesis opponent: University of Besançon (France)

2023-2026: Master thesis examiner and jury: University of Strasbourg (France)

09/2024: Co-organisation of the summer school « Theoretical and practical aspects of behavioural ecophysiology » à l’IPHC, Strasbourg, France

07/2022: Co-organisation of the “telomere dynamics in non-model species” symposium at SEB 2022 Montpellier.

08/2019: Co-organisation of the “evolutionary ecology of ageing” symposium at ESEB 2019 (12 talks, 35 participants), Turku.

03-05/2018 – 03-05/2019: Co-organisation of school talks in Turku, Finland.

10/2017: Co-organisation of the “oxidative stress and telomere” symposium at the Telomere Workshop Conference in Edinburgh October 2017 (10 talks, 60 participants).

2016 – 2018: Managing social media for the UofG Physiology and Life-histories group
University of Glasgow - https://www.facebook.com/pg/UofGpals/about/?ref=page_internal

2015: Grant reviewer: Science Foundation/Czech Republic

04/2013: Vice-President of the organizing committee for the 9th Ecology and Behaviour International Meeting. <http://serl2013.sciencesconf.org/?lang=en> (Strasbourg - France); 4 days of conference involving 100 scientists from 17 countries.

09/2012: Participation to “Fête de la Science” (science fest), University of Strasbourg

2012–present day: Referee for different journals; publons profile:
<https://publons.com/researcher/1220897/sophie-reichert/>

2011-2012: Organisation of student weekly seminars University of Strasbourg, France

MAJOR COLLABORATIONS

Dr Suvi Ruuskanen, thermal physiology – University of Jyväskylä, Finland.

Pr Pat Monaghan, life-history strategies and effects of early conditions on phenotypic development and on deterioration in later life – University of Glasgow, UK.

Dr Pierre Bize, implication of telomere dynamics, oxidative stress and mitochondrial function in life-history trade-offs in various vertebrate models, Swiss Ornithological Institute/Switzerland.

Pr Virpi Lummaa, evolutionary ecology, ageing and senescence patterns, human life history - Department of Biology, University of Turku, Finland

Dr. Antoine Stier (IPHC-CNRS) & **Dr. Pablo Burraco** (University of Sevilla): Solving the mysteries of urodele telomeres.

ORAL COMMUNICATIONS

- **EOU conference** – University of Bangor, July 2025. Early-life thermal stress responses in passerines.

- **Metabolica conference** – University of La Rochelle, October 2024. Age-related acute thermal stress responses.

- **Invited seminar** – University of Munich, Germany, January 2024. What can we learn from ageing markers in a behavioural ecology perspective?

- **Invited seminar** – IPHC, France, October 2023. Senescence patterns in long-lived vertebrates.

- **Invited seminar** - University of Dijon, France, January 2020. Linking early-life effects to life-long performances: what can ageing markers tell us?

- **II joint congress on Evolutionary Biology** – Montpellier, France, August 2018. The brother’s curse: cost of elder siblings on subsequent offspring life-history trajectory in Asian elephants.

- **Diversity in telomere dynamics conference** - Edinburgh, UK, October 2017. Does oxidative stress shorten telomeres in vivo?
- **Invited seminar** - University of Turku, Finland, September 2017. Maternal age effects in the Asian elephant.
- **Invited seminar** - University of Glasgow, UK, March 2017. Ageing markers and life-history trade-offs in Asian elephants.
- **Diversity in telomere dynamics conference** – Edinburgh, UK, November 2016. Storage method affects telomere measurement in birds.
- **Invited seminar** - University of Turku, Finland, August 2016. Ageing markers and life-history trade-offs.
- **Invited seminar** - University of Sheffield, UK, November 2014. Implication of telomere dynamics in life-history trade-offs.
- **Diversity in telomere dynamics conference** – Drymen, UK, November 2014. Telomere dynamics across taxa: comparisons between cell types.
- **Diversity in telomere dynamics conference** – Drymen, UK, November 2014. Telomere dynamics and individual maintenance: Experimental increase in telomere length leads to faster feather regeneration.
- **EMPSEB 19th** – Cornwall, UK, September 2013. Maternal telomere length inheritance in the king penguin.
- **16th Evolutionary Biology Meeting** – Marseille, France, September 2012. Telomere length and heredity in bird: indications of maternal inheritance.
- **8th Annual Meeting Ecology and Behaviour** - Chizé, France, April 2012. Cost of reproduction in long-lived vs. short-lived bird species: is accelerated ageing through telomere erosion involved?
- **EGI Field Ornithology** – Oxford, GB, January 2012. Cost of reproduction in long-lived vs. short-lived bird species: is accelerated ageing through telomere erosion involved?

LIST OF PUBLICATIONS

Metrics on publications as at October 2025: ORCID ID: [0000-0001-7151-2773](https://orcid.org/0000-0001-7151-2773); Google Scholar profile: <https://scholar.google.fr/citations?user=HlddALoAAAAJ&hl=en>

Total of 27 publications (15 as 1st or last author and 12 as co-author), 1734 citations, h-index = 18 (Google Scholar) – considered high for my age and field.

1st or last authored papers (15)

15- Moullec H, Berger V, Meier C, **Reichert S***, Bize P* (***shared last authors, equal contributions**). (2025) Effects of parental age at conception on offspring life history trajectories in a long-lived bird. Evolution (accepted).

14- Levillain A, **Reichert S***, Massemin S* (***shared last authors, equal contributions**). (2025) Complex relationship between high temperatures and avian breeding success. Ecology and Evolution (accepted).

13- Moullec H, Berger V, Dos Santos D, Ukonaho S, Yon L, Briga M, Nyeing U.K, Lummaa V*, **Reichert S*** (***shared last authors, equal contributions**). (2024) Testosterone variation in a semi-captive population of Asian elephants in Myanmar. Conservation Physiology 12 (1), coae076.

12- Ukonaho S, Berger V, Dos Santos D, Htut W, Aung H.H, Nyeing U.K, **Reichert S***, Lummaa V* (***shared last authors, equal contributions**). (2023) Seasonal variation in molecular and physiological stress markers in Asian elephants. Conservation Physiology - 11(1), p.coad029. doi.org/10.1093/conphys/coad029

11- **Reichert S***, Berger V* (***shared first authors**), Dos Santos D, Lahdenperä M, U Kyaw Nyein, Htut W, Lummaa V. (2021) Age related variation of health markers in Asian elephants. Experimental gerontology 111629. <https://doi.org/10.1016/j.exger.2021.111629>.

- 10-** Berger V*, **Reichert S***, (***shared first authors**), Lahdenperä M, Jackson J, Htut W, Lummaa V. (2021) The elephant in the family: Costs and benefits of elder siblings on younger offspring life-history trajectory in a matrilineal mammal. Journal of Animal Ecology - doi: 10.1111/1365-2656.13573.
- 9-** **Reichert S***, Berger V* (***shared first authors**), Jackson J, Mar K, Lummaa V. (2019) Effects of maternal age on offspring life history trajectories in the Asian elephant. Journal of Animal Ecology - doi: 10.1111/1365-2656.13049.
- 8-** **Reichert S***, Stier A* (***equal contributions**) (2017) Does oxidative stress shorten telomeres in vivo? A review. Biology Letters – 13 (12), 20170463.
- 7-** **Reichert S***, Froy H* (***shared first authors**), Boner W, Griffiths K, Gillespie R, Nussey D, Monaghan P. (2017) Telomere length measurement by qPCR in birds is affected by storage method of blood samples. Oecologia – 184: 341. <https://doi.org/10.1007/s00442-017-3887-3>.
- 6-** Becker PJJ*, **Reichert S*** (***shared first authors**), Zahn S, Hegelbach J, Massemin S, Keller L, Postma E, Criscuolo F. (2015) Mother-offspring resemblance but no additive genetic variation in telomere length in European dippers. Proceedings of the Royal Society B 22;282(1807):20142924 doi: 10.1098/rspb.2014.2924.
- 5-** **Reichert S**, Criscuolo F, Zahn S, Arrive M, Bize P, Massemin S. (2015) Immediate and delayed effects of growth conditions on ageing parameters in nestling zebra finches. Journal of Experimental Biology 1;218(Pt 3):491-9 doi:10.1242/jeb.109942
- 4-** **Reichert S**, Rojas E, Zahn S, Robin JP, Criscuolo F, Massemin S. (2014) Maternal telomere length inheritance in the king penguin. Heredity 114(1):10-6 doi:10.1038/hdy.2014.60.
- 3-** **Reichert S**, Bize P, Zahn S, Arrive M, Massemin S, Criscuolo F. (2014) Experimental increase in telomere length leads to faster feather regeneration. Experimental Gerontology 52:36-8 doi: 10.1016/j.exger.2014.01.019.
- 2-** **Reichert S**, Stier A, Zahn S, Arrive M, Bize P, Massemin S, Criscuolo F. (2014) Increased reproductive effort leads to persistent eroded telomeres. Frontiers in Ecology and Evolution doi: 10.3389/fevo.2014.00009.
- 1-** **Reichert S**, Criscuolo F, Zahn S, Verinaud E, Massemin S. (2013) Telomere length correlations among somatic tissues in adult zebra finches. Plos One DOI: 10.1371/journal.pone.0081496.

Co-authored papers (12)

- 12-** Moullec H, **Reichert S**, Bize P. (2023) Patterns of aging are trait-and sex-specific in the long-lived Alpine swift. Frontiers in Ecology and Evolution 11: 983266 <https://doi.org/10.3389/fevo.2023.983266>.
- 11-** Dos Santos D, Berger V, Cristofari R, Htut W, U Kyaw Nyein, Htoo Htoo Aung, **Reichert S**, Lummaa V. (2020) Seasonal variation of health in Asian elephants. Conservation Physiology 8 (1), coaa119.
- 10-** Seltsmann M, Ukonaho S, **Reichert S**, Dos Santos D, U Kyaw Nyein, Htut W, Lummaa V. (2020) Faecal Glucocorticoid Metabolites and H/L Ratio are Related Markers of Stress in Semi-Captive Asian Timber Elephants. Animals 10 (1), 94.
- 9-** Andrews C, Nettle D, **Reichert S**, Bedford T, Monaghan P, Bateson M. (2018) A marker of biological ageing predicts risk preference in European starlings, *Sturnus vulgaris*. Behavioral Ecology – 29 (3), 589-597.
- 8-** Andrews C, Nettle D, Larriva M, Gillespie R, **Reichert S**, O Brilot B, Bedford T, Monaghan P, Spencer KA, Bateson M. (2017) A marker of biological age explains individual variation in the strength of the adult stress response. Royal Society Open Science 4(9):171208
- 7-** Nettle D, Andrews C, **Reichert S**, Bedford T, Kolenda C, Parker C, Martin-Ruiz C, Monaghan P, Bateson M. (2017) Early-life adversity accelerates cellular ageing and affects adult inflammation: Experimental evidence from the European starling. Scientific Reports 7:40794 doi:10.1038/srep40794.

- 6- Nettle D, Andrews C, **Reichert S**, Bedford T, Gott A, Parker C, Kolenda C, Martin-Ruiz C, Monaghan P, Bateson M. (2016) Brood size moderates associations between relative size, telomere length, and immune development in European starling nestlings. Ecology and Evolution 1-11 DOI: 10.1002/ece3.2551.
- 5- Noguera JC, Metcalfe NB, **Reichert S**, Monaghan P. (2016) Embryonic and postnatal telomere length decrease with ovulation order within clutches. Scientific Reports 6:25915.
- 4- Stier A, **Reichert S**, F Criscuolo and Bize P. (2015) Red blood cells open promising avenues for longitudinal studies of ageing in laboratory, non-model and wild animals. Experimental Gerontology 71:118-34. doi: 10.1016/j.exger.2015.09.001.
- 3- Stier A, **Reichert S**, Massemin S, Bize P and F Criscuolo. (2012) Constraint and cost of oxidative stress on reproduction: correlative evidence in laboratory mice and review of the literature. Frontiers in Zoology, 26;9(1):37 doi: 10.1186/1742-9994-9-37.
- 2- Geiger S, Le Vaillant M, Lebard T, **Reichert S**, Stier A, Le Maho Y and F Criscuolo. (2012) Catching-up but telomere loss : half-opening the black box of growth and ageing trade-off in wild king penguin chicks. Molecular Ecology, 21(6): 1500-1506 doi: 10.1111/j.1365-294X.2011.05331.x.
- 1- Beaulieu M, **Reichert S**, Le Maho Y, Ancel A and F Criscuolo. (2011) Oxidative status and telomere length in a long-lived bird facing a costly reproductive event. Functional Ecology 25(3): 577-585.