

NICOLE (NIKI) GERVAIS

ASSISTANT PROFESSOR &
ROSALIND FRANKLIN FELLOW
IN BEHAVIOURAL AND
COGNITIVE NEUROSCIENCE
GELIFES, FSE,
UNIVERSITY OF GRONINGEN

PERSONAL INFORMATION

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Groningen, NL
Online: [ORCID](#); [LinkedIn](#); [PURE](#); [lab
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Languages: English (native); French
(proficient); Dutch (beginner, A2)
Citizenship: Canada

PROFESSIONAL & ACADEMIC SERVICE

Internal to UG (since 2023):

- Examination committee for 2 defenses:
Tim Alhuis (GELIFES), Cyprien Guerrin
(UMCG)
- GELIFES Governance and transparency
committee (since April 2025)
- BCN Research School seed grant
committee (since September 2024);
- BCN ReMA Programme Committee
(since September 2024);
- Assessment Chamber (Toetsingskamer
IvD, since September 2024);
- PhD Monitoring Committee (GELIFES,
since March 2025)

External to UG:

- Associate editor for special issues,
Hormones and Behavior (since 2023);
 - Guest editor for virtual special issue
on the Neuroscience of menopause
- Advisory committee for MSc student
(McGill University, Canada);
- ad hoc reviewer for:
 - > 20 peer-reviewed journals
 - 4 international conferences scientific
societies
 - 6 international funding agencies

EMPLOYMENT HISTORY

Current:

Assistant Professor (RTT; since 09/2023; 1.0 FTE);
Neurobiology expertise group; Groningen
Institute for Evolutionary Life Sciences, FSE,
University of Groningen

Previous:

Research Associate & Project Manager
(08/2022-06/2023; 1.0 FTE); BrainsCAN, University
of Western Ontario, Canada

Research Coordinator (01/2022-08/2022; 1.0
FTE); BrainHealth Databank, Centre for
Addiction and Mental Health, Canada

PREVIOUS EDUCATION

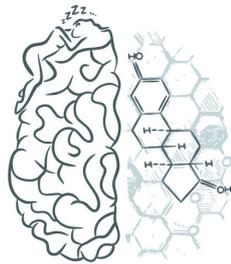
Postdoctoral fellow, Alzheimer Association
Research Fellowship (10/2016-01/2022; 1.0 FTE);
Psychology, University of Toronto, Canada

Postdoctoral Research Associate, (11/2014-
09/2016-01/2022; 1.0 FTE); Psychological and
Brain Sciences, University of Massachusetts,
Amherst, USA

PhD, Psychology (2014); Centre for Studies in
Behavioral Neurobiology, Concordia University,
Canada. Supervisors: Dave Mumby; Wayne Brake.

PROFESSIONALIZATION ACTIVITIES (SINCE 2023)

- **Dutch A2** certification (Talencentrum; August
2024)
- **UTQ** (June 2024)
- Article 9 (FELASA A/B; October 2023)
- Active bystander training (March 2025)
- Successful PhD supervision: A shared journey
(May 2024)
- Introductory course for new PhD supervisors



TEACHING ACTIVITIES

Co-coordinator (as of 2025),

- Neuroendocrine Basis of Behaviour (5 ECTS), MSc Programme: Behavioural Cognitive and Neuroscience ReMA (B track). Previously: guest lecture & practicals. Group size: 15
- Neurodegenerative disease, MSc Programme in Biomedical Sciences (Neuroscience track). Previously: guest lecture, assessment & practicals. 5 ECTS). Group size: 45

Previous (Coordinator equivalent in Canada):

- Human Memory, Health Psychology, University of Toronto (Bachelor's courses)

Statistical Analysis I; Statistical Analysis 2, Concordia University (Bachelor's courses)

Guest Lectures:

- MSc courses: Biological rhythms (with practical; coordinator: Meerlo); Introduction to BCN (coordinator: Sarampalis); Transdisciplinary day, Integrative Biology mini-lecture (coordinator: Laetz)
- BSc courses: Chronobiology (with practical; coordinator: Hut); Minor Behavioural Neuroscience (with assessment & practical coordinator: Scheurink); Psychobiology (coordinator: Drion); Evolutionary Medicine (with assessment coordinator: de Vos); Minor Congress (with practical; coordinator: Drion); Physiology (with practical; coordinator: van Dijk); Behavioural Neuroscience (with practical; University College Groningen; coordinator: Scheurink)

Supervision of individual students (since January 2024):

- MSc research project: 8 total (7 current)
- MSc essay: 7 total (5 current)
- MSc colloquia: 5 total (2 current)
- BSc research project: 6 total (4 current)
- BSc thesis: 7 total (3 current)

RESEARCH ACTIVITIES (SINCE 2023)

Supervision

- 2x PhDs: 1: Luisa Epifani (expected graduation: 2027). Hired on my start-up. Promoter: Peter Meerlo. 2: Danique Zantinge (expected graduation: 2028). Hired on my acquired grants & start-up. Promoter: Robbert Havekes
- 1x student assistant (Małgorzata Tybuszewska; 0.2 FTE). hired on my start-up.
- Mentor: MSc students in Biomedical Sciences -Neuroscience track (since September 2024)

Funding acquired

- as PI
 - Alzheimer's Association Research Grant (2025-2028; **200.000 USD**). Contribution of sleep loss and sex in AD-related pathogenesis.
 - Alzheimer Nederland Cross-border grant (2025-2027; **120.000 EUR**). Synergistic effects of biological sex and sleep loss in an AD mouse model.
- as Co-PI/member
 - Enlight thematic network: REACT (Research and Education in Ageing Collaborative Team. Coordinating institute: U Galway; 150.000 EUR).
 - Enlight thematic network: Brain-24/7 (Brain function and mental health in a modern 24/7 society. Coordinating institute: U Bern; 150.000 EUR)

RESEARCH ACTIVITIES (CONTINUED)

Funding applications submitted:

- as PI
 - Cutting Alzheimer's risk through Endocrinology (CARE). WellcomeLeap (2026-2029; **2.4M USD**). Brain aromatase as a midlife diagnostic target for Alzheimer's prevention in women. April 2025.
- as Co-PI/member
 - Michael J Fox Foundation, Aligning Science Across Parkinson's (ASAP) initiative (**6M USD**). Collaborative Research Network. Letter of intent submitted: March 2025.
 - Weston Brain Institute Rapid Response Program (**\$300.000 CAD**). Female-specific risk factors in neurodegeneration: modelling menopause in a synucleinopathy model. March 2025.
 - European initiative to improve the current SABV initiative. COST Action. October 2024.

MEDIA COVERAGE

Since starting current position:

- [UKrant](#) (2024, Dutch)
- [Brain alterations during perimenopause](#) (2025, Portuguese)

Prior to starting position:

- [Toronto Star](#) (2023, English)
- [MedPage Today](#) (2022, English)
- [Sex, gender and the brain](#) (2019, English)
- [Daily Mail](#) (2018, English)

INVITED PRESENTATIONS (SINCE STARTING POSITION)

Local

- Sleep as a promoter of brain health. VIP (Study association) lecture series, Psychology, University of Groningen. December 2024.
- Neuroendocrinological perspectives on cognition, sleep, and brain health. Experimental Psychology lunch seminar series. Psychology Department, BSS, Groningen. December 2024.
- Genetic vs gonadal sex: implications for psychiatry. Lecture series on: What about sex differences (WASexD), Vlieland, Netherlands. November 2024.
- Introducing the Gervais lab: Memory, Sleep, and Hormones. GELIFES annual symposium. September 2024.
- Closing the gender gap in brain disorders. GELIFES seminar series. December 2023.

International

- Sex-based perspective on sleep and circadian effects on cognition. Serbian Neuroscience Society meeting, Belgrade, **Serbia**. October 2025.
- Translational and sex-based perspectives on sleep regulation of memory in healthy and pathological aging. Symposium: Individual differences in biological rhythms. Canadian Society for Chronobiology, Montreal, **Canada**. May 2025.
- Sleep and sex differences in Alzheimer's Disease and Sleep and Circadian Rhythms (**webinar**). Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment (ISTAART). April 2025.
- Translational perspective on women's brain health. Sleep symposium, GIP Cyceron, University of Caen-Normandy, **France**. November 2024.
- Contribution of sleep loss and sex in AD-related pathogenesis. Seminar, Mongrain lab. CRCHUM, University of Montreal, **Canada**. November 2024.

PUBLICATIONS (GOOGLE SCHOLAR; H-INDEX=15)

Since starting current position:

1. **Gervais, NJ**, Barth, C, Lacreuse, A. (in press). Consequences of menopause for brain health. *Hormones & Behavior*. <https://doi.org/10.1016/j.yhbeh.2025.105727>
2. Brown, A, **Gervais, NJ**, Gravelins, L, Zhao, S, Duchesne, A, Rieck, J, et al. (2025). Effects of Early Midlife Ovarian Removal on Medial Temporal Lobe Gray Matter Volume and Recognition Memory. *Hippocampus*, 35(3), p.e70012. <https://doi.org/10.1002/hipo.70012>
3. Brown A, Gravelins L, **Gervais NJ**, Rieck J, Zhao S, Duchesne A, et al. (2025). Early midlife ovarian removal is associated with lower posterior hippocampal function. *Alzheimer's & Dementia*. 2025 Feb;21(2):e14447. <https://doi.org/10.1002/alz.14447>
4. D'Amico D, Savundranayagam MY, Biles R, Itzhak I, Anderson ND et al. (2024). Engaging older adults in the process of aging research: a multimethod study evaluating the experience and efficacy of a citizen advisory group for a dementia risk reduction program. *Research Involvement and Engagement*. 27;10(1):135. <https://doi.org/10.1186/s40900-024-00643-6>
5. Brown A, **Gervais NJ**, Gravelins L, O'Byrne J, Calvo N, Ramana S, et al. (2024). Effects of early midlife ovarian removal on sleep: Polysomnography-measured cortical arousal, homeostatic drive, and spindle characteristics. *Hormones and Behavior*. 2024 Sep 1;165:105619. <https://doi.org/10.1016/j.yhbeh.2024.105619>
6. **Gervais NJ**, Gravelins L, Brown A, Reuben R, Perovic M, Karkaby L, Nicoll G, Laird K, Ramana S, Bernardini MQ, Jacobson M. Disturbed sleep is associated with reduced verbal episodic memory and entorhinal cortex volume in younger middle-aged women with risk-reducing early ovarian removal. *Frontiers in endocrinology*. 2023 Oct 3;14:1265470. <https://doi.org/10.3389/fendo.2023.1265470>
7. Costantino M, Pigeau G, Parent O, Ziolkowski J, Devenyi GA, **Gervais NJ**, Chakravarty MM. (2023) Menopause, brain anatomy. *Cognition and Alzheimer's Disease*. *eLife* 12. <https://doi.org/10.7554/eLife.91038.1>

Under review:

1. Paraciani, C, Havekes, R, Meerlo, P, **Gervais, NJ**. (revision submitted). Sex as a biological variable (SABV) modulates the consequences of sleep disturbance on hippocampal memory and synaptic plasticity. *Frontiers in Neuroendocrinology*.
2. Zantinge, DC, Meerlo, P, Havekes, R, **Gervais, NJ**. Outcomes of the lifestyle on microglial aging and neurodegenerative diseases along the aging trajectory; Sleep disturbances. In: Tremblay, M.-E. (Ed). *Sleep disturbances in microglial aging: Basic, Translational and Clinical Advances*.
3. Wezel, D, Parent, O, Costantino, M, Sifi, L, Pigeau, G, **Gervais, NJ**, et al. 2024. Untangling age and menopausal status reveals no effect of menopause on white matter hyperintensity volume. *medRxiv*, pp.2024-10. <https://doi.org/10.1101/2024.10.28.24316270>

Invited reviews in preparation:

1. Epifani, L, Meerlo, P, Brake, WG, Lacreuse, A, **Gervais, NJ**. Ovarian hormones and prefrontal-cortex related cognition: an update. In: Paredes, R.G. (Ed.), *Encyclopedia Hormones, Brain and Behavior* (4th edition, vol. 1). Oxford: Academic Press.
 2. Stankeviciute, L, Walsh, N, Perrault, A, Dang-Vu, T, Baker, F, **Gervais, NJ**. Women and Sleep. *Current Psychiatry Reports*.
- Book series (in development): **Gervais, NJ**, Galea, LAM (Eds). *Women's Brain Health. Current Topics in Behavioral Neurosciences*.
 - Co-guest editor, virtual special issue on Menopause and the brain. *Hormones and Behavior*.

SYMPOSIA & ORAL PRESENTATION & CONFERENCE POSTERS (SINCE 2023)

Symposia

- Neuroendocrine changes with menopause: implications for brain aging. 13th international conference on Steroids & Nervous System (2026, Torino, **Italy**). Organizer & chair.

Presentation

- Sex and ovarian hormones in sleep loss induced memory deficits in mice. Presented at the Sex as a biological variable (SABV) symposium at the University of Bern, **Switzerland**. 2024

Posters (presented):

1. Epifani, L, Hazenberg S, Havekes, R, Meerlo, P, **Gervais, NJ**. The Role of Sex and Ovarian Hormones in Sleep Loss-Induced Hippocampal Deficits. Organization for the Study of Sex Differences. 2024 Bergen, **Norway**.

Posters (accepted):

1. Zantinge, DC, Sifi, L, Zernova, M, Epifani, L, Chakravarty, MM, Havekes, R, **Gervais, NJ** Persistence of menopause-associated neuroinflammation: implications for understanding behavioural consequences of ovarian hormone deprivation. International Behavioral Neuroscience Society 34th Annual Meeting. 2025, Tromso, **Norway**.
2. Epifani, L, Hazenberg S, Hoogerhuis, SHE, Havekes, R, Meerlo, P, Gervais, NJ. The Role of Sex and Ovarian Hormones in Sleep Loss-Induced Hippocampal Deficits. International Behavioral Neuroscience Society. International Behavioral Neuroscience Society 34th Annual Meeting 2025, Tromso, **Norway**.
3. Zantinge, DC, Hall, LM, Epifani, L, Meerlo, P, Havekes, R, **Gervais, NJ**. Touchscreen tasks as a sensitive tool for identifying sex effects in early cognitive decline using an Alzheimer's Disease mouse model. Alzheimer's Association International Conference, 2025, Toronto, **Canada**.
4. Epifani, L, Hazenberg S, Hoogerhuis, SHE, Havekes, R, Meerlo, P, **Gervais, NJ**. The Role of Sex and Ovarian Hormones in Sleep Loss-Induced Hippocampal Deficits. Society for Behavioral Neuroendocrinology, 2025 Vancouver, **Canada**.