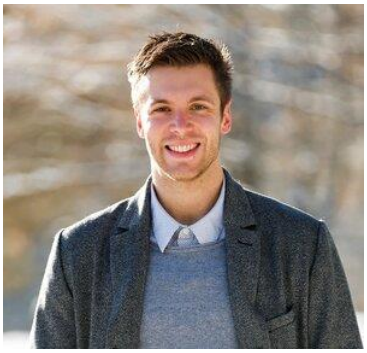

Curriculum vitae

Personal details

Name	Luca Dominik Kolibius
Date of birth	05.05.1993
E-mail address	luca.kolibius@gmail.com
Phone	+44 7401 326668
University	University of Glasgow

Education

2018 – Present	PhD Student at the University of Birmingham (2018 – 2020) and the University of Glasgow (2020 – present) under supervision of Prof Simon Hanslmayr, Prof Maria Wimber and Prof Howard Bowman. Thesis title: "*The hippocampus as an indexing machine for episodic memory"*
2016 – 2018	Master student at Goethe University Frankfurt
2014 – 2015	Undergraduate at Rothberg International School at the Hebrew University of Jerusalem
2012 – 2016	Bachelor student at Goethe University Frankfurt

Publications (published)

Kolibius, L. D., Born, J., & Feld, G. B. (2021). Vast amounts of encoded items nullify but do not reverse the effect of sleep on declarative memory. *Frontiers in Psychology*, *11*, 3685. doi: 10.3389/fpsyg.2020.607070

Griffiths, B. J., Parish, G., Roux, F., Michelmann, S., van der Plas., M., **Kolibius, L. D.**, ... & Hanslmayr, S. (2019). Directional coupling of slow and fast hippocampal gamma with neocortical alpha/beta oscillations in human episodic memory. *Proceedings of the National Academy of Sciences of the United States of America*. doi: 10.1073/pnas.1914180116

Voss, U., D'Agostino, A., **Kolibius, L. D.**, Klimke, A., Scarone, S., & Hobson, J. A. (2018). Insight and dissociation in lucid dreaming and psychosis. *Frontiers in Psychology, 9*, 1-9. doi: 10.3389/fpsyg.2018.02164

Publications (submitted)

Kolibius, L. D., Roux, F., Parish, G. M., ter Wal, M. J., Van Der Plas, M., Chelvarajah, R., ... & Hanslmayr, S. (2021). Hippocampal neurons code individual memory episodes in humans. *bioRxiv* [in review at Science]. doi: 10.1101/2021.06.28.450149.

van Bree, S., Melcón, M., **Kolibius, L. D.**, Kérren, C., Wimber, M., & Hanslmayr, S. (2021). Clock time: a foreign measure to brain dynamics. *bioRxiv* [in review at Nat. Hum. Behav.]. doi: doi.org/10.1101/2021.06.09.447763.

Roux, F., ..., **Kolibius, L. D.**, Staresina, B., Wimber, M., Self, M., & Hanslmayr, S. (2021). Oscillations support co-firing of neurons in the service of human memory formation. *bioRxiv* [1st revision submitted to PNAS]. doi: 10.1101/2021.01.28.428480.

ter Wal, M., Domingo, J. L., Lifanov, J., Roux, F., **Kolibius, L. D.**, Gollwitzer, S., ... & Wimber, M. (2020). Theta rhythmicity governs the timing of behavioral and hippocampal responses in humans specifically during memory-dependent tasks. *bioRxiv* [1st revision submitted to Nat. Commun.]. doi: doi.org/10.1101/2020.11.09.374264.

Publications (books)

Kolibius, L. D. (2019). Computerspiele und Sucht. In Breiner, T. & Kolibius, L. D. (Ed.), *Psychologie der Computerspiele*. Heidelberg: Springer.

Kolibius, L. D. (2019). Potential von Computerspielen in psychologischen Interventionen. In Breiner, T. & Kolibius, L. D. (Ed.), *Psychologie der Computerspiele*. Heidelberg: Springer.

Qualifications

2018 – present

PhD student at the University of Birmingham (2018 – 2020) and the University of Glasgow (2020 – present) under Prof. Simon Hanslmayr, Prof. Maria Wimber and Prof. Howard Bowman

- Analysis of human single unit and LFP (time-frequency, re-referencing) activity in epileptic patients
- Machine learning and classification (LDA, SVM, KNN)
- Co-review manuscripts (Sci. Adv., Nature Comms., Curr. Biol.) and review conference submissions (Conference on Cogn. Computational Neuroscience)

2016

Intern at the Institute for Medical Psychology and Behavioural Neurobiology under Dr. Gordon Feld (Jan Born Lab)

- We investigated the limited capacity of sleep dependent declarative memory consolidation

2015 – 2018

Research assistant at the Vitos Hochtaunus psychiatric clinic under Dr. Ursula Voss

- We investigated the effect of repeated tACS stimulation and were trying to identify potential neurological markers of nightmares

2013 – 2014

Research assistant at the Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with Max Planck Society under Dr. Ayelet Landau (Pascal Fries Lab)

- We investigated the subjective perception of time using MEG and Eyetracker

Scholarships

December 2020 — Society for Neuroscience Trainee Professional Development Award

May 2019 — CoLES PGR Travel Prize a merit-based grant supporting the attendance at a conference or workshop

October 2016 – July 2018 — Deutschlandstipendium (“Germany Scholarship”) awarded to students with excellent academic grades and social commitment

Workshops

Analyzing Neural Time Series Data (August 2019)
: Fourier transform, convolution, time-frequency analysis, synchronization, nonparametric statistics, simulating time series data

Statistical Parametric Mapping for MEG/EEG (May 2019)
: Data pre-processing, general linear model and classical inference, multiple comparisons, Bayesian interference, advanced applications of the general linear model, M/EEG source analysis, dynamic causal modeling

Spiking Neural Networks (September 2019)
: Hardware implementations of spiking neural networks, neuromorphic systems, tempotrons, neurophysiological spiking networks

NVIDIA Deep Learning (November 2019)
: Fundamentals of deep neural networks, image classification and object detection

Spike-sorting workshop (Januar 2019)
: Clustering single neuron activity based on their waveshape using wave_clus3. Wave_clus is an unsupervised non-parametric clustering algorithm that uses superparamagnetic clustering to group spiking activity into putative single neurons.

Posters

Scottish Neuroscience Group Meeting	Aug 2021
SfN Global Connectome	Jan 2021
Workshop on Intracranial Recordings in humans: Epilepsy, DBS	Nov 2019
OxBirm Oscillations Workshop	May 2019
School Research Conference	Apr 2019

Presentations

Summer School on Imaging in Epilepsy (SuSIE)	Sep 2021

Social

2020	Outreach talks to prospective undergraduate students
2016 – 2018	Member of the Student Council (elected as a student representative in the university directorate)
2011 – 2012	Karate coach for children
2009 – 2011	Mentoring new grammar school students