

Lada Kohoutová

POSTDOCTORAL FELLOW

Department of Biomedical Engineering, Sungkyunkwan University, Center for Neuroscience Imaging Research (CNIR), Institute for Basic Science (IBS), Suwon, South Korea

✉ ladakohoutova@gmail.com | 🏠 la-da.me

Research interests

- Computational modelling of brain function in health and disease
- Neural geometry and computational mechanisms of pain and emotions
- Precision brain mapping and individual differences in neural processing

Education

Department of Biomedical Engineering, Sungkyunkwan University

Suwon, South Korea

DOCTOR OF PHILOSOPHY

2019-2023

- Advisor: Dr. Choong-Wan Woo
- Dissertation: Representations of neuroimaging-based predictive models of pain and beyond: validation and insight

Faculty of Electrical Engineering, Czech Technical University

Prague, Czech Republic

MASTER OF SCIENCE

2015-2017

- Study field: Communications, Multimedia, Electronics - Multimedia technology
- Summa cum laude

Faculty of Electrical Engineering, Czech Technical University

Prague, Czech Republic

BACHELOR OF SCIENCE

2012-2015

- Study field: Communications, Multimedia, Electronics - Multimedia technology
- Graduated in a premium advanced form of the study program as one out of 3 students enrolled and out of the total of 132 students enrolled in the study program

Employment & Research experience

Department of Biomedical Engineering, Sungkyunkwan University, Center for Neuroscience Imaging Research (CNIR), Institute for Basic Science (IBS)

Suwon, South Korea

POSTDOCTORAL FELLOW

Mar. 2023 - present

- Advisor: Dr. Choong-Wan Woo
- Research activities: fMRI data analysis and computational modelling

Department of Biomedical Engineering, Sungkyunkwan University, Center for Neuroscience Imaging Research (CNIR), Institute for Basic Science (IBS)

Suwon, South Korea

GRADUATE RESEARCHER

Mar. 2019 - Feb. 2023

- Advisor: Dr. Choong-Wan Woo
- Research activities: fMRI data analysis and computational modelling, design of a thermal pain fMRI experiment with visual stimulation, data collection and preprocessing

Department of Biomedical Engineering, Sungkyunkwan University, Center for Neuroscience Imaging Research (CNIR), Institute for Basic Science (IBS)

Suwon, South Korea

POST-MASTER RESEARCHER

Aug. 2017 - Feb. 2019

- Advisor: Dr. Choong-Wan Woo
- Research activities: fMRI data analysis and computational modelling

Teaching experience

Teaching assistant

BIOSTATS AND BIG DATA CLASS

Spring 2021

Teaching assistant

PROBABILITY AND STATISTICS CLASS

Spring 2019

Awards

Best Paper Award (First prize)

INTELLIGENT PRECISION HEALTHCARE CONVERGENCE

2023

Young Investigator Award

CENTER FOR NEUROSCIENCE IMAGING RESEARCH (CNIR)

2022

Outstanding Trainee Award

KOREAN SOCIETY FOR HUMAN BRAIN MAPPING

2020

Best Paper Award (Third prize)

CENTER FOR NEUROSCIENCE IMAGING RESEARCH

2020

Publications

Kohoutová, L., Atlas, L. Y., Büchel, C., Buhle, J. T., Geuter, S., Jepma, M., Koban, L., Krishnan, A., Lee, D. H., Lee, S., Roy, M., Schafer, S. M., Schmidt, L., Wager, T. D. & Woo, C.-W. (2022). Individual variability in brain representations of pain. *Nature Neuroscience*, 1-11.

Kohoutová, L., Heo, J., Cha, S., Lee, S., Moon, T., Wager, T. D., & Woo, C.-W. (2020). Toward a unified framework for interpreting machine-learning models in neuroimaging. *Nature Protocols*, 15(4), 1399-1435.

Conference presentations & Invited talks

Kohoutová, L., Kim, R. Park, Y., Shim, W. M. & Woo, C.-W. "Effects of pain on the representations of visual stimuli in the ventral visual stream." **Poster presentation.** The 26th Annual Meeting of the Korean Society for Brain and Neural Sciences, September 2023, Busan, South Korea

Kohoutová, L. "Individual Variability in Brain Representations of Pain." **Oral presentation.** 2023 Intelligent Precision Healthcare Convergence Symposium, January 2023, Suwon, South Korea

Kohoutová, L., Atlas, L. Y., Büchel, C., Buhle, J. T., Geuter, S., Jepma, M., Koban, L., Krishnan, A., Lee, D. H., Lee, S., Roy, M., Schafer, S. M., Schmidt, L., Wager, T. D. & Woo, C.-W. "Individual Variability in Brain Representations of Pain." **Poster presentation.** Neuroscience 2022, November 2022, San Diego, CA, USA

Kohoutová, L. "Individualised Predictive Modelling of Pain Processing in the Brain." **Invited talk.** Krembil Neuroimaging Rounds, July 2022, virtual

Kohoutová, L. "Inter-Individual Variability in Brain Representations of Pain." **Oral presentation.** 2022 Intelligent Precision Healthcare Convergence Symposium, February 2022, virtual

Kohoutová, L., Atlas, L. Y., Büchel, C., Buhle, J. T., Geuter, S., Jepma, M., Koban, L., Krishnan, A., Roy, M., Schafer, S. M., Schmidt, L., Wager, T. D. & Woo, C.-W. "Individual Variability of Regional Multivariate Patterns in Pain Prediction." **Poster presentation.** Organization for Human Brain Mapping 2020, July 2020, virtual

Kohoutová, L., Heo, J., Cha, S., Moon, T., Wager, T. D., Woo, C.-W. "Interpreting Machine Learning Models in Neuroimaging: A Unified Framework." **Poster presentation.** Organization for Human Brain Mapping 2019, June 2019, Rome, Italy

Ad hoc manuscript review

Social Cognitive and Affective Neuroscience

Communications Biology

Journal of Neuroscience

Skills

- **Technical skills:** Matlab, R, Python, neuroimaging tools - SPM, FSL
- **Languages:** Czech (native), English (fluent), Korean (intermediate), French (lower intermediate), Italian (basic)