ACADEMIC YEAR 2025-26

Fulbright Czech Republic

Grantees in the U.S.

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Fulbright Czech Republic

Expanding Czech-U.S. collaboration through exchange of talent and knowledge.

The J. William Fulbright Commission in the Czech Republic is a Czech-U.S. binational governmental organization based in Prague, established in 1991. Its main mission is to enhance mutual understanding through educational contacts between the Czech Republic and the United States of America.

The Commission, in cooperation with major stakeholders in regional education, higher education, and research, develops and manages scholarships for students, lecturers and researchers, high school teachers, as well as NGO leaders and professionals.

The Commission is funded by the Czech Ministry of Education, Youth and Sports and the U.S. Department of State and it is supervised by the Czech Fulbright Board. The Board consists of ten members appointed by the Czech Ministry of Education and the U.S. Embassy in the Czech Republic. The U.S. Ambassador to the Czech Republic and the Minister of Education of the Czech Republic serve as the Honorary Co-Chairs of the Board.

The Commission is managed by the Executive Director together with 5 staff members. Annually, the Czech Fulbright Commission awards up to 80 scholarships to Czech and American citizens.

25 Czech scholars and students featured in this catalogue, have received a Fulbright grant to the USA in the academic year 2025-26 to conduct research and study projects, and to develop their professional skills.

Welcome to the world of the Czech Fulbright, where boundaries dissolve, diversity thrives, and talents, together with knowledge and hard work, transcend geographical borders, cultural differences, and disciplinary confines.

J. William Fulbright Commission
Karmelitská 17
118 00 Prague 1, Czech Republic

fulbright@fulbright.gov.cz
www.fulbright.gov.cz
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FULBRIGHT CZECH REPUBLIC GRANTEES IN THE U.S. 2025-26

Visiting Scholar Program

4 **Jindřich Duník**
Engineering
5 **Martin Kovačik**
Biology
6 **Lukáš Picek**
Computer Science
7 **Martin Štumpf**
Electrical Engineering
20 **Jarmila Ptáčková**
Chinese Studies
21 **Lenka Scheinherrová**
Material Science
22 **Adam Vačkář**
Fine Arts

Fulbright - Masaryk Program

8 **Petr Adámek**
Neuroscience
9 **Anna Blechová**
Law
10 **David Fiedler**
Computer Science
11 **Martin Hůla**
Psychology
12 **Věra Jenčová**
Bioengineering
13 **Martin Kákona**
Physics
14 **Martin Laryš**
International Relations
15 **Jiří Minarčík**
Mathematics
16 **Lucie Nepovímová**
Biology
17 **Jiří Netušil**
Medical Science
18 **Petr Neugebauer**
Chemistry
19 **Eliška Přítulová**
Neuroscience

Visiting Student Program

23 **Petr Liška**
Physics
24 **Tomáš Musil**
Computer Science
25 **Štěpán Raška**
Philosophy
26 **Vít Škrhák**
Biology
27 **Martin Rameš**
Computer Science

Scholar-in-Residence

28 **Markéta Košatková**
Education

SPECIALIZATION:
Signal Processing and Navigation

FULBRIGHT PROJECT TITLE:

Integrity Monitoring of Alternative Navigation for Resilient Transport

FULBRIGHT PROJECT DESCRIPTION:

Global navigation satellite systems are essential for efficient and safe transportation. However, what happens if GNSS signals are unavailable? This project aims to design a reliable navigation system that relies on the correlation of Earth features sensed by internal sensors with pre-recorded maps, rather than on externally broadcast satellite signals.

KEY WORDS:
Navigation; signal processing; integrity

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
University of West Bohemia in Pilsen, Faculty of Applied Sciences, Department of Cybernetics, Pilsen

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Virginia Polytechnic Institute and State University, Department of Aerospace and Ocean Engineering, VA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Mathieu Joerger

GRANT PERIOD:

04/2026 - 06/2026

Link to the university profile >>
Link to the CV >>

Jindřich Duník

Associate Professor

Visiting Scholar Program

Academic training:

- Ph.D., 2008, University of West Bohemia, Pilsen, Czech Republic
- Ing., 2003, University of West Bohemia, Pilsen, Czech Republic

Professional background:

- Jindřich is an associate professor at the Department of Cybernetics, University of West Bohemia, and a senior scientist with Honeywell International, Aerospace Advanced Technology Europe. He focuses on state estimation, system identification, inertial and satellite-based, and alternative navigation systems, and integrity monitoring methods.
- He is a co-author of more than 100 papers and patents.

Selected publications:

- J. Matousek, J. Dunik, and O. Straka: "Lagrangian Grid-Based Filters With Application to Terrain-Aided Navigation," IEEE Signal Processing Magazine, vol. 42, no. 2, 2025.
- Y. Dahan, G. Revach, J. Dunik, and N. Shlezinger: "Bayesian KalmanNet: Quantifying Uncertainty in Deep Learning Augmented Kalman Filter," IEEE Transactions on Signal Processing, vol. 73, 2025.
- T. Imbiriba, O. Straka, J. Dunik, and P. Closas: „Augmented Physics-Based Machine Learning for Navigation and Tracking," IEEE Transactions on Aerospace and Electronic Systems, vol. 60, no. 3, June 2024.
- O. Kost, J. Dunik, and O. Straka: „Measurement Difference Method: A Universal Tool for Noise Identification," IEEE Transactions on Automatic Control, vol. 68, no. 3, 2023.
- J. Dunik, O. Straka, J. Matousek, and M. Brandner: „Accurate Density-Weighted Convolution for Point-Mass Filter and Predictor," IEEE Transactions on Aerospace and Electronic Systems, vol. 57, no. 6, 2021.

Fellowships, honors, etc.:

- Associate Editor of IEEE Transactions on Aerospace and Electronic Systems (Navigation Area)
- Member of IEEE AESS Navigation Systems Panel
- 2022 IEEE AESS Harry Rowe Mimno Award
- 2016, 2019 Honeywell Global Technology Achievement Awards
- 2014 Werner von Siemens Excellence Award for Basic Research

Martin Kovačik

Postdoctoral Researcher

Visiting Scholar Program

SPECIALIZATION:
Barley seed development, Epigenetic regulation, and Imprinting

FULBRIGHT PROJECT TITLE:
Decoding Barley Imprinting at the Single-Nucleus Resolution

FULBRIGHT PROJECT DESCRIPTION:
The project aims to identify imprinted genes driving early endosperm development in hybrid barley using single-nucleus transcriptomics, to better understand parental conflict and post-zygotic hybridization barriers that hinder breeding and crop improvement.

KEY WORDS:
Barley; endosperm; imprinting; parental conflict; hybridization barrier

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Czech Academy of Sciences, Institute of Experimental Botany, Centre of Plant Structural and Functional Genomics, Olomouc

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Whitehead institute for Biomedical Research, Department of Biology, MA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Mary Gehring

GRANT PERIOD:
03/2026 - 07/2026

Link to the full CV >>
Link to the university profile >>

Academic training:

- Ph.D., 2024, Palacky University, Olomouc, Czech Republic
- M.S., 2018, University of Ostrava, Czech Republic
- B.S., 2016, University of Ostrava, Czech Republic

Professional background:

- Postdoctoral researcher, Chromatin organization and function group, Centre of Plant Structural and Functional Genomics, Institute of Experimental Botany AS CR, v. v. i, since 2024
- Bioinformatician, Plant Reproduction Evolution lab, Department of Botany, Charles University in Prague, 2023-2024

Selected publications:

- Nowicka, A., Kovacik, M., Maksylewicz, A., Kopeć, P., Dubas, E., Krzewska, M., Springer, A., Hoffie, E., R., Daghma, D., S., Milec, Z., Pecinka, A., Kumlehn, J. & Żur, I. (2024). The transcriptional landscape of the developmental switch from regular pollen maturation towards microsporederived plant regeneration in barley. The Crop Journal, 12(4), 1064-1080.
- Kovacik, M., Nowicka, A., Zwyrtková, J., Strejčková, B., Vardanega, I., Esteban, E., Pasha, E., Kaduchová, K., Krautsova, M., Červenková, M., Šafář, J., Provart, N., J., Simon, R. & Pecinka, A. (2024). The transcriptome landscape of developing barley seeds. The Plant Cell, 36(7), 2512-2530
- Pavlu, S., Nikumbh, S., Kovacik, M., An, T., Lenhard, B., Simkova, H., & Navratilova, P. (2024). Core promoterome of barley embryo. Computational and Structural Biotechnology Journal, 23, 264-277
- Nowicka, A., Ferková, Ľ., Said, M., Kovacik, M., Zwyrtková, J., Baroux, C., & Pecinka, A. (2023). Non-Rabl chromosome organization in endoreduplicated nuclei of barley embryo and endosperm tissues. Journal of Experimental Botany, 74(8), 2527-2541.
- Nowicka, A., Kovacik, M., Tokarz, B., Vrána, J., Zhang, Y., Weigt, D., ... & Pecinka, A. (2021). Dynamics of endoreduplication in developing barley seeds. Journal of Experimental Botany, 72(2), 268-282

Fellowships, honors, etc.:

- 2024 Absolute winner of Scientific competition for the dean's prize in the category Biology & Ecology
- 2021 Short Term Scientific Mission, Epigenetic Mechanisms of Crop Adaptation to Climate Change, European Cooperation in Science & Technology

SPECIALIZATION:
Applied Machine Learning / AI

FULBRIGHT PROJECT TITLE:
Foundational AI Models for Ecology and Conservation

FULBRIGHT PROJECT DESCRIPTION:
My project explores how artificial intelligence can help protect biodiversity. Using available data, I'll develop tools to help identify common and rare species, as well as individual animals. The goal is to help researchers and conservationists better understand ecosystems, track endangered species, and share insights, while keeping wildlife safe..

KEY WORDS:
AI; biodiversity; conservation; wildlife

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
INRIA / University of West Bohemia in Pilsen

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Massachusetts Institute of Technology, CSAIL - Computer Science and Artificial Intelligence Laboratory, Cambridge, MA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Sara Beery

GRANT PERIOD:
03/2026 - 08/2026

Link to the full CV >>

Lukáš Picek

Postdoctoral Researcher

Visiting Scholar Program

Academic training:

- Ph.D., 2023, University of West Bohemia in Pilsen, Czech Republic
- M.S., 2016, University of West Bohemia in Pilsen, Czech Republic
- B.S., 2014, University of West Bohemia in Pilsen, Czech Republic

Professional background:

- Lukáš Picek is a postdoctoral researcher at INRIA Montpellier, France, and a research scientist at the University of West Bohemia, Czechia. His work lies at the intersection of artificial intelligence, ecology, and biodiversity conservation. He develops AI tools to monitor ecosystems, identify individual animals, and detect rare species using computer vision and Earth observation data.
- He is leading or contributing to local and international projects focused on species diversity, climate change, and the development of safe AI for transportation.
- His research supports conservation efforts and promotes data-driven approaches to environmental decision-making.

Selected publications:

- Picek, L., Botella, C., Servajean, M., Leblanc, C., Palard, R., Larcher, T., ... & Joly, A. (2024). GeoPlant: Spatial Plant Species Prediction Dataset. The Thirty-eight Conference on Neural Information Processing Systems.
- Čermák, V., Picek, L., Adam, L., & Papafitsoros, K. (2024). WildlifeDatasets: An open-source toolkit for animal re-identification. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (pp. 5953-5963).
- Picek, L., Šulc, M., Patel, Y., & Matas, J. (2022). Plant recognition by AI: Deep neural nets, transformers, and kNN in deep embeddings. Frontiers in plant science, 13, 787527.
- Picek, L., Šulc, M., Matas, J., Jeppesen, T. S., Heilmann-Clausen, J., Læssøe, T., & Frøslev, T. (2022). Danish fungi 2020-not just another image recognition dataset. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (pp. 1525-1535).
- Bolon, I., Picek, L., Durso, A. M., Alcoba, G., Chappuis, F., & Ruiz de Castañeda, R. (2022). An artificial intelligence model to identify snakes from across the world: Opportunities and challenges for global health and herpetology. PLoS neglected tropical diseases, 16(8).

Fellowships, honors, etc.:

- 2024 Best Paper Award – IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), Waikoloa, Hawaii, USA
- 2023 Awarded with Joseph Fourier Prize in Computer Sciences, Embassy of France, Prague
- 2021 Awarded with Rector's prize for exceptional students, UWB, Faculty of Applied Sciences.
- 2020 1st place in the Hakuna Ma-Data challenge sponsored by Microsoft AI for Earth

SPECIALIZATION:
Electromagnetic field theory, Computational electromagnetics, Wavefield modeling, Electromagnetic pulses

FULBRIGHT PROJECT TITLE:
Rydberg-Atom Inspired Time-Domain Electromagnetic Sensors

FULBRIGHT PROJECT DESCRIPTION:
The project aims at improving the performance of standard probes using analogies between the (classic) wire sensors and the (quantum-mechanic) Rydberg atom-based ones. It is conjectured that the concept of small time-varying loaded scatterers is capable of overcoming fundamental limitations of standard time-invariant sensors.

KEY WORDS:
Electromagnetic fields; time-domain analysis; mathematical modeling; linear time-varying systems

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Brno University of Technology, Department of Radio Electronics, Brno

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
National Institute of Standards and Technology, Boulder Laboratories, CO

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Christopher L. Holloway

GRANT PERIOD:
09/2025 - 04/2026

Link to the full CV >>
Link to the university profile >>

Martin Štumpf

Associate Professor&Visiting Researcher

Visiting Scholar Program

Academic training:

- Ph.D., 2011, Brno University of Technology, Czech Republic
- M.S., 2008, Brno University of Technology, Czech Republic
- B.S., 2006, Brno University of Technology, Czech Republic

Professional background:

- Dr. Stumpf's main research interests include mathematical modeling of electromagnetic wave phenomena with an emphasis on antenna theory and EMC. Among other results, he is the originator of the Cagniard-deHoop method of moments, a time-domain integral-equation technique
- Postdoc, 2012-2013, Katholieke Universitet Leuven, BE
- Visiting Professor, 2018, University of L´Aquila, IT
- Visiting Researcher, since 2022, Lulea University of technology, SE

Selected publications:

- M. Stumpf, J. Gu, I. E. Lager, “Time-domain electromagnetic leaky waves,” IEEE Trans. Antennas Propag., vol. 71, no. 4, pp. 3382–3392, Apr. 2023.
- M. Stumpf, Metasurface Electromagnetics: The Cagniard-DeHoop Time-Domain Approach, London, UK: Institution of Engineering and Technology, 2022.
- M. Stumpf, Time-Domain Electromagnetic Reciprocity in Antenna Modeling, Hoboken, NJ: IEEE Press–John Wiley & Sons, Inc., 2019.
- M. Stumpf, Electromagnetic Reciprocity in Antenna Theory, Hoboken, NJ: IEEE Press–John Wiley & Sons, Inc., 2017.
- M. Stumpf, A. T. de Hoop and G. A. E. Vandenbosch, “Generalized ray theory for time-domain electromagnetic fields in horizontally layered media,” IEEE Trans. Antennas Propag., vol. 61, no. 5, pp. 2676–2687, May 2013.

Fellowships, honors, etc.:

- 2024 ‘Certificate of Merit From the President of the Czech Science Foundation’, project: Pulsed EM Field Interaction With Thin-Film Structures, The Czech Republic.
- 2023 ‘Best Paper Award’, The 2023 IEEE Electrical Design of Advanced Packaging and Systems, Republic of Mauritius (shared with G. Antonini, F. Loreto, D. Romano, J. Ekman and A. Ruehli).
- 2017 A Finalist of the ‘Best SI/PI Paper Award’, The 2017 IEEE EMC Symposium, Washington, D.C., USA.
- 2013 Young Scientist Award, URSI Commission B ElectroMagnetic Theory Symposium, Hiroshima, Japan.
- 2013 Young Scientist Best Paper Award - 3rd prize, URSI Commission B ElectroMagnetic Theory Symposium, Hiroshima, Japan.
- 2010 Young Scientist Award, URSI Commission B ElectroMagnetic Theory Symposium, Berlin, Germany.

SPECIALIZATION:
Neuroscience

FULBRIGHT PROJECT TITLE:
Dopaminergic Modulation of Retinal Receptive Fields: Exploring Sensory Noise in Schizophrenia.

FULBRIGHT PROJECT DESCRIPTION:
The project investigates how dopamine affects retinal receptive fields in schizophrenia, focusing on sensory noise from the visual periphery. Using in vitro retinal cells derived from stem cells, it aims to identify mechanisms behind altered visual processing and their role in schizophrenia development.

KEY WORDS:
Schizophrenia; perception; dopamine; sensory noise

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
National Institute of Mental Health, Klecany

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Harvard Medical School; Center for Genomic Medicine at Massachusetts General Hospital, MA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Rakesh Karmacharya

GRANT PERIOD:
11/2025 - 08/2026

Link to the full CV >>
Link to the university profile >>

Petr Adámek

Researcher

Fulbright-Masaryk Program

Academic training:

- Ph.D., 2024, Charles University, Prague, Czech Republic
- M.A., 2017, Masaryk University, Brno, Czech Republic
- B.A., 2013, University of South Bohemia, České Budějovice, Czech Republic

Professional background:

- Mgr. Petr Adámek, Ph.D. is a neuroscientist and researcher at the National Institute of Mental Health (NUDZ) and Charles University's 3rd Faculty of Medicine in Prague.
- Petr holds an M.A. in Art History (Masaryk University, 2013) and a Ph.D. in Neuroscience at Charles University. His work focuses on visual perception and its disruption in psychotic disorders, particularly schizophrenia, involving fMRI analysis, eye-tracking, behavioral data, and retinal dopamine research.

Selected publications:

- Adámek, P., Grygarová, D., Jajcay, L., Bakštein, E., Fürstová, P., Juríčková, V., ... & Horáček, J. (2024). The gaze of schizophrenia patients captured by bottom-up saliency. Schizophrenia, 10(1), 21.
- Langova, V., Horka, P., Hubeny, J., Novak, T., Vales, K., Adamek, P., ... & Horacek, J. (2023). Ketamine disrupts locomotion and electrolocation in a novel model of schizophrenia, Gnathonemus petersii fish. Journal of neuroscience research, 101(7), 1098-1106.
- Adámek, P., Langová, V., & Horáček, J. (2022). Early-stage visual perception impairment in schizophrenia, bottom-up and back again. Schizophrenia, 8(1), 27.

Fellowships, honors, etc.:

- 2025-2027 Chemogenetically Induced Sensory Noise During Adolescence: A Novel Animal Model of Schizophrenia (AZVj no: NW25J-04-00110)
- 2019–2021 Disturbance of visual salience and attention in patients with schizophrenia, (GAUK no: 1070119)

Anna Blechová

Ph.D. Student

Fulbright-Masaryk Program

SPECIALIZATION:
Space Law, IT Law, Cybersecurity Law

FULBRIGHT PROJECT TITLE:

Guardians of the Final Frontier: A Comparison of Approaches to Cybersecurity Regulation in Outer Space by the EU and US

FULBRIGHT PROJECT DESCRIPTION:
Cybersecurity in outer space is an increasingly crucial issue that lacks a cohesive regulatory framework. This project compares EU and US approaches to regulating New Space cybersecurity, examining soft and hard law. Through semi-structured interviews with relevant stakeholders, it identifies effective compliance strategies and regulatory gaps to inform future research and policy.

KEY WORDS:

Cybersecurity; outer space; law; policy; regulation

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Masaryk University, Institute of Law and Technology, Brno

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Space Policy Institute - The George Washington University and Sibley School of Mechanical and Aerospace Engineering - Cornell University

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Scott Pace (GWU), Gergory Falco (Cornell University)

GRANT PERIOD:
10/2025 - 04/2026

Link to the full CV >>
Link to the university profile >>

Academic training:

- M.A., 2022, Masaryk University, Brno, Czech Republic

Professional background:

- Legal Researcher at the Institute of Law and Technology, Masaryk University (2024–present)
- Cybersecurity Manager, Prosecutor General's Office, Czechia (2023–2024)
- Rights Protection Office worker, Rights Protection Office at Masaryk University (2024–2025)
- Visiting Researcher, Institute of Air and Space Law, Leiden University (2025)
- Deputy Editor-in-Chief, Revue pro právo a technologie (2022–2024)
- Legal Internships: NATO CCDCOE, NÚKIB, and Constitutional Court of the CR

Selected publications:

- BLECHOVÁ, Anna. Quantum-Secured Satellite Communications: Navigating Legal and Cyber Challenges. In R. Bieda, A. Blechová,E. F. López, R. Potenzano. Legal Challenges of Disruptive Technologies. Baden-Baden: Nomos, 2025, s. 35-51. ISBN 978-3-7560-3170-2.
- BLECHOVÁ, Anna. The Next Step in Global Connectivity: Legal Challenges in the Shift from Subsea Cables to Satellites. In C. Kwan, N. Gratzer, M. Tolppa, K. Podinš. 2025 17th International Conference on Cyber Conflict: The Next Step. Tallinn: NATO CCDCOE Publications, 2025, s. 39-56. ISBN 978-9916-9789-8-6.
- BLECHOVÁ, Anna, Jakub HARAŠTA a František KASL. From Space Debris to Space Weaponry: A Legal Examination of Space Debris as a Weapon. In C. Kwan, L. Lindström, D. Giovannelli, K. Podinš, D. Štrucl. 2024 16th International Conference on Cyber Conflict: Over the Horizon. Tallinn: NATO CCDCOE Publications, 2024, s. 263-279. ISBN 978-9916-9789-4-8.
- VYHNÁNEK, Ladislav, Anna BLECHOVÁ, Michael BÁTRLA, Jakub MÍŠEK, Tereza NOVOTNÁ, Amnon REICHMAN a Jakub HARAŠTA. The Dynamics of Proportionality: Constitutional Courts and the Review of COVID-19 Regulations. German Law Journal. Lexington: Washington & Lee University School of Law, 2024, s. 1-21. ISSN 2071-8322. Dostupné z: https://dx.doi.org/10.1017/glj.2023.96.
- KASL, František a Anna BLECHOVÁ. The road towards a legal framework for cybersecurity applicable to the European smart grid for electricity. Jusletter IT. Die Zeitschrift für IT und Recht. Bern: Weblaw, 2024, roč. 2024, March, s. 225-232. ISSN 1664-848X.

Fellowships, honors, etc.:

- 2025 Recognized contribution to the legal injects – NATO CCDCOE Locked Shields exercise
- 2023 First Runner-up for Best Written Project Paper – ECSL Summer Course
- 2023 Finalist, Cyber Woman Researcher category – CEFCYS Trophy
- 2022 Medal for participation in NÚKIB activities during CZ PRES – NÚKIB
- 2022 13th place – Geneva Cyber 9/12 Strategy Challenge, Atlantic Council & GCSP
- 2021 10th place – Geneva Cyber 9/12 Strategy Challenge, Atlantic Council & GCSP

David Fiedler

Researcher

Fulbright-Masaryk Program

SPECIALIZATION:

AI in Transportation

FULBRIGHT PROJECT TITLE:

Designing Networks for Mass Transit Systems Supplemented by Mobility-on-Demand Services

FULBRIGHT PROJECT DESCRIPTION:

Project aims to automate design of mass-transit networks that integrate shared Mobility-on-Demand for first/last-mile service. Such integration enables transportation providers to efficiently combine Mobility-on-Demand with mass transit, instead of incorporating it to a preexisting transportation network. The resulting methodology should reduce costs and expand coverage of public transportation networks.

KEY WORDS:

Public transport; mobility-on-demand; transportation; mass transit

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Czech Technical University, Faculty of Electrical Engineering, Department of Computer Science, Artificial Intelligence Center, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Cornell University, School of Civil and Environmental Engineering, NY

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Samitha Samaranayake

GRANT PERIOD:

09/2025-05/2026

Link to the full CV >>
Link to the university profile >>

Academic training:

- Ph.D., 2024, Czech Technical University, Prague, Czech Republic
- M.A., 2016, University of West Bohemia, Pilsen, Czech Republic
- B.A., 2014, University of West Bohemia, Pilsen, Czech Republic

Professional background:

- Since 2016, David has worked as a researcher at the Artificial Intelligence Center, Czech Technical University in Prague. He studies simulation and optimization of transportation with a focus on Mobility-on-Demand. During his research at AIC, he has published several papers on simulation and optimization and received awards for our transportation solutions.
- David has collaborated on multiple projects in the transportation industry.
- David has learned important technical skills in the field of artificial intelligence, software engineering, and operational research.

Selected publications:

- Fiedler, D., & Mrkos, J. (2023). Large-scale Ridesharing DARP Instances Based on Real Travel Demand. 2023 IEEE 26th International Conference on Intelligent Transportation Systems (ITSC), 2750–2757. https://doi.org/10.1109/ITSC57777.2023.10422146Fiedler, D., Čertický, M., Alonso-Mora, J., Pěchouček, M., & Čáp, M. (2022). Large-scale online ridesharing: The effect of assignment optimality on system performance. Journal of Intelligent Transportation Systems, 0(0), 1–22. https://doi.org/10.1080/15472450.2022.2121651
- Fiedler, D., Čertický, M., Alonso-Mora, J., & Čáp, M. (2018). The Impact of Ridesharing in Mobility-on-Demand Systems: Simulation Case Study in Prague. 2018 21st International Conference on Intelligent Transportation Systems (ITSC), 1173–1178. https://doi.org/10.1109/ITSC.2018.8569451

Fellowships, honors, etc.:

- 2018 Taxify Challenge, first place, aided in developing the best dispatching algorithm for ride-hailing services among all teams in the international competition
- 2017 Simpleway Transportation Hackathon, third place, the team's idea for the hackathon was to create a system for mobility-on-demand with transfers. Developed a prototype dispatching algorithm that was able to dramatically reduce the number of vehicles needed compared to the system without transfers
- 2017 Vision of Mobility in Prague 2030, first place, competition organized by the Prague Institute of Planning and Development. We developed a complete vision of future mobility in Prague, including mobility on demand, ridesharing, dynamic pricing for parking, or congestion pricing

SPECIALIZATION:
Evolutionary Human Behavior

FULBRIGHT PROJECT TITLE:
Preferences for Flowers and Flower-like Objects Among Infants and Young Children

FULBRIGHT PROJECT DESCRIPTION:
Are humans naturally drawn to certain flowers? This project studies how infants and young children respond to different flowers, aiming to uncover patterns of preference that may reflect universal aspects of human nature and help design plant-rich environments with psychological benefits across ages and cultures.

KEY WORDS:
Human-plant interactions; evolutionary aesthetics; phytophilia; flowers

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Charles University, Faculty of Science, Department of Philosophy and History of Science, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
University of California, Department of Psychological and Brain Sciences, Santa Barbara, CA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Annie E. Wertz

GRANT PERIOD:
10/2025 - 03/2026

Link to the full CV >>

Martin Hůla

Researcher

Fulbright-Masaryk Program

Academic training:

- Ph.D., 2023, Charles University, Prague, Czech Republic
- M.S., 2015, Charles University, Prague, Czech Republic
- B.A., 2012, Charles University, Prague, Czech Republic

Professional background:

- Martin is a researcher at Charles University, focusing on human-plant interactions, particularly aesthetic responses to flowers and the impact of plants on human well-being.
- Martin's research is rooted in evolutionary psychology, evolutionary human behavior, and human ethology. His main topics include the origins and expression of human phytophilia—the aesthetic appreciation of plants and flowers—and the effects of plants and plant-rich environments on well-being.

Selected publications:

- Hůla, M., & Šámalová, P. (2024). Does flower preference differ across cultures? A study of Czech and Kenyan populations. Psychology of Aesthetics, Creativity, and the Arts, 18(1), 31–42. https://doi.org/10.1037/aca0000645
- Hejtmánek, L., Hůla, M., Herrová, A., & Surový, P. (2022) Forest digital twin as a relaxation environment: A pilot study. Frontiers in Virtual Reality, 3:1033708. doi: 10.3389/frvir.2022.1033708
- Hůla, M., Flegr, J. (2021). Habitat selection and human aesthetic responses to flowers. Evolutionary Human Sciences, 3, E5. doi:10.1017/ehs.2020.66
- Hůla, M., & Flegr, J. (2016). What flowers do we like? The influence of shape and color on the rating of flower beauty. PeerJ, 4, e2106.

Fellowships, honors, etc.:

- 2021 Best Poster Award, 26th Congress of the International Association of Empirical Aesthetics (IAEA), London, UK (online)
- Poster: "Does preference for flowers differ across cultures? A study on Czech and Kenyan populations"
- 2019 3rd Best Student Talk Award, Konference Naukowa Polskiego Towarzystwa Nauk o Człowieku i Ewolucji (PTNCE), Prague, Czech Republic,
- Talk: "Individual differences in the rating of flower beauty"
- 2018 Best Poster Award, 25th Congress of the International Association of Empirical Aesthetics (IAEA), Toronto, Canada
- Poster: "Symmetry, prototypicality, complexity, color, and human aesthetic perception of flowers and their photographs"

Věra Jenčová

Associate Professor

Fulbright-Masaryk Program

SPECIALIZATION:

Biomedical Engineering

FULBRIGHT PROJECT TITLE:

Study of the crystallinity and mechanical behavior of nanofibrous materials based on biodegradable polyesters during their degradation

FULBRIGHT PROJECT DESCRIPTION:

The presented project studies changes in micro and nanofiber materials during their degradation. Nanofibrous materials from biodegradable polyesters PCL and PLCL will be degraded using hydrolytic enzymes. The course of degradation will be monitored, as well as changes in the thermal behavior and internal arrangement of the polymers in the fibers during degradation using methods available at AU CPAC . The project aims to understand what changes occur depending on the degree of degradation.

KEY WORDS:

Nanofibres; microfibres; biodegradable polymers; degradation; scaffolds

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Technical University of Liberec, Faculty of Science, Humanities and Education, Department of Chemistry, Liberec

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Auburn University, Center for Polymers and Advanced Composites, Auburn, AL

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Bryan Beckingham

GRANT PERIOD:

09/2025-12/2025

Link to the full CV >>
Link to the university profile >>

Academic training:

- Assoc.Prof., 2022, University of Chemistry and Technology in Prague, Czech Republic
- Ph.D., 2005, University of Chemistry and Technology in Prague, Czech Republic
- Ing., 1999, University of Chemistry and Technology in Prague, Czech Republic

Professional background:

- Věra focuses on biomaterials and tissue engineering: nano and microfibrous materials for medical applications. Her research includes electrospinning, drawing, and other fiber-processing techniques to develop functional scaffolds with controlled morphology and bioactive coatings and she investigates how material composition, surface modifications, and bioactive compounds affect scaffold performance in tissue engineering. A key aspect of her work is creating multifunctional nanofiber systems that provide structural support while enhancing tissue regeneration and antimicrobial protection.
- Over the last decade, Věra has been published in high-impact journals, contributing to both fundamental material development and applied medical research.
- Věra holds multiple patents on nanofibrous materials for wound healing, vascular prostheses, and medical textiles, contributed to the NANOTARDIS medical device, an advanced wound dressing that completed clinical evaluation.
- Věra collaborated on joint research activities with Aston University (UK) and Auburn University (USA).
- Beyond academia, she engages in outreach activities to promote nanotechnology in healthcare, mentoring students and early-career researchers. I also participate in public science events, including VědaFest in Prague and bioengineering project days, demonstrating nanofibrous materials' applications.

Selected publications:

- Sivan, M., Madheswaran, D., Hauzerova, S., Novotny, V., Hedvicakova, V., Jencova, V., Kostakova, E.K., Schindler, M., Lukas, D., 2022. AC electrospinning: impact of high voltage and solvent on the electrospinnability and productivity of polycaprolactone electrospun nanofibrous scaffolds. Materials Today Chemistry 26, 101025. https://doi.org/10.1016/j.mtchem.2022.101025
- Lencova, S.; Svarcova, V.; Stiborova, H.; Demnerova, K.; Jencova, V.; Hozdova, K.; Zdenkova, K.: Bacterial Biofilms on Polyamide Nanofibers: Factors Influencing Biofilm Formation and Evaluation. ACS Applied Materials & Interfaces, 13, 2277–2288 (2021). http://doi:10.1021/acsami.0c19016
- Bacakova, M.; Pajorova, J.; Broz, A.; Hadraba, D.; Lopot, F.; Zavadakova, A.; Vistejnova, L.; Beno, M.; Kostic, I.; Jencova, V.; Bacakova, L.: A two-layer skin construct consisting of a collagen hydrogel reinforced by a fibrin-coated polylactide nanofibrous membrane. International Journal of Nanomedicine, Volume 14, 5033–5050 (2019). https://doi:10.2147/IJN.S200782
- Horakova, J.; Mikes, P.; Saman, A.; Svarcova, T.; Jencova, V.; Suchy, T.; Heczkova, B.; Jakubkova, S.; Jirousova, J.; Prochazkova, R.: Comprehensive assessment of electrospun scaffolds hemocompatibility. Materials Science and Engineering: C, 82, 330–335 (2018). https://doi.org/10.1016/j.msec.2017.05.011
- Horakova, J.; Mikes, P.; Saman, A.; Jencova, V.; Klapstova, A.; Svarcova, T.; Ackermann, M.; Novotny, V.; Suchy, T.; Lukas, D.: The effect of ethylene oxide sterilization on electrospun vascular grafts made from biodegradable polyesters. Materials Science and Engineering: C, 92, 132–142 (2018). https://doi.org/10.1016/j.msec.2018.06.041

Fellowships, honors, etc.:

- The monograph "Nanofibers. Theory, Technology and Application", which was published by Academia Publishing House in 2023, won the Josef Hlávka Award for scientific literature in the category of Sciences of Inanimate Nature
- Member of expert Group on Nanomaterials in food of the European Commission (2022-2023, development of European legislation)

Martin Kákona

Researcher

Fulbright-Masaryk Program

SPECIALIZATION:
Cosmic Rays, High Energy Atmospheric Physics

FULBRIGHT PROJECT TITLE:

Integration of Data from SPACEDOS Dosimeter into RadLab

FULBRIGHT PROJECT DESCRIPTION:

The project integrates SPACEDOS dosimeter data into NASA's RadLab database to improve astronaut radiation monitoring. By preprocessing and synchronizing data with ISS trajectories, it enables individualized exposure tracking, advancing risk assessment and research in space radiation dosimetry.

KEY WORDS:

Cosmic Rays; radiation dosimetry; space exploration

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Nuclear Physics Institute of the Czech Academy of Sciences, Department of Radiation Dosimetry, Řež

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Lawrence Berkeley National Laboratory, Life Sciences, Berkeley, CA and NASA Ames, Open Science Data Repository, Moffett Field, CA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Aris Polyzos

GRANT PERIOD:

10/2025 - 01/2026

Link to the university profile >>

Academic training:

- Ph.D., 2020, Czech Technical University, Prague, Czech Republic
- Ing., 1991, Czech Technical University, Prague, Czech Republic

Professional background:

- Martin Kákona is a researcher at the Nuclear Physics Institute of the Czech Academy of Sciences, focusing on cosmic rays, high-energy atmospheric events, and radiation dosimetry.
- His career includes over 25 years in electronics design and computer security, including work under Top Secret classification. He led the development of advanced detectors and dosimeters for aircraft and satellites (AIRDOS, SPACEDOS) and has extensive experience as a chief designer and project manager.

Selected publications:

- Kákona, M., et al. (2022). SPACEDOS: an open-source pin diode dosemeter for applications in space. Radiation Protection Dosimetry, 198(9-11), 611–616. https://doi.org/10.1093/rpd/ncac106.
- Sommer, M., Štěpánová, D., Kákona, M., et al. (2022). Calibration of silicon detectors Liulin and AIRDOS using cosmic rays and Timepix. Radiation Protection Dosimetry, 198(9-11), 597–603. https://doi.org/10.1093/rpd/ncac104.
- Kákona, M., et al. (2021). AIRDOS—open-source PIN diode airborne dosimeter. Journal of Instrumentation, 16(03), T03006. https://doi.org/10.1088/1748-0221/16/03/T03006.
- Kákona, M., et al. (2019). Comparative measurements of mixed radiation fields using Liulin and AIRDOS dosimeters. AIP Conference Proceedings, 2075, 1. https://doi.org/10.1063/1.5091288.
- Kákona, M., et al. (2019). CR10—A public database of cosmic radiation measurements at aviation altitudes. Radiation Protection Dosimetry, 186(2-3), 224–228. https://doi.org/10.1093/rpd/ncz207.

Fellowships, honors, etc.:

- 2023 Postdoctoral fellowship, Institute of Experimental Physics of the Slovak Academy of Sciences, Space Physics Laboratory on Lomnický štít
- 2016–2019 Project Manager and Key Researcher of EU Operational Program CRREAT
- multiple, 2005–2009 Czech National Security Agency R&D grants for cryptographic devices
- 2010–present Chair and later Vice-Chair of the South Bohemian Branch of the Czech Astronomical Society

Martin Laryš

Deputy Research Director

Fulbright-Masaryk Program

SPECIALIZATION:
International Relations

FULBRIGHT PROJECT TITLE:
Drug Trafficking and Delegation of Violence to Pro-Government Militias: Breaking the State's Integrity

FULBRIGHT PROJECT DESCRIPTION:
Why states delegate violence to pro-government militias (PGMs) which engage in the criminal activities, notably drug-related business, despite it undermines the state's integrity which PGMs are supposed to safeguard? Pro-government militias as armed non-state ac-tors operate in support of the government, performing tasks the government may be unwilling or unable to carry out. However, PGMs' involvement in narco-trafficking may undermine counterinsurgency efforts delegated to them by the state.

KEY WORDS:
Drug trafficking; pro-government militias; political violence

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Institute of International Relations Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Northwestern University, Department of Political Science, Evanston, IL

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
William Reno

GRANT PERIOD:
10/2025-05/2026

Link to the university profile >>

Academic training:

- Ph.D., 2023, Charles University, Prague, Czech Republic
- M.A., 2009, Masaryk University, Brno, Czech Republic
- B.A., 2007, Masaryk University, Brno, Czech Republic

Professional background:

- Martin Laryš earned his Ph.D. from Charles University in Prague, Czech Republic, where he has actively contributed to various research projects.
- He has served as an external advisor to the Czech Ministry of Defense in 2022 and currently holds the role of Research Deputy Director at the Institute of International Relations Prague.
- Martin has published over fifteen articles in high-impact academic journals, exploring a wide range of topics, including nationalism and security dynamics in post-Soviet space, organized crime, and political radicalism.

Selected publications:

- Martin Laryš (2025). Pro-war hardline influencers in Putin's regime in the context of Russia's re-invasion of Ukraine. Post-Soviet Affairs, 41(4), 289–310, https://doi.org/10.1080/1060586X.2025.2509057
- Martin Laryš & Karel Svoboda (2024). Delegation of Economic Statecraft to Private Enterprises: Russia, China, and Turkey in Africa, International Studies Review, 26(1), https://doi.org/10.1093/isr/viae009
- Ondřej Ditrych & Martin Laryš (2024). What can European security architecture look like in the wake of Russia's war on Ukraine? European Security, 1–21. https://doi.org/10.1080/09662839.2024.2347221 (online first).
- Martin Laryš (2024). Russia's potential for weaponization of gas supplies after the Re-invasion of Ukraine, Energy Policy, 191, https://doi.org/10.1016/j.enpol.2024.114195
- Emil A. Souleimanov & Martin Laryš (2024) Driven by Revenge: Why Chechen Foreign Fighters Have Joined Ukraine Against Russia, Nationalities Papers, doi:10.1017/nps.2024.85 (online first)

Jiří Minarčík

Researcher

Fulbright-Masaryk Program

SPECIALIZATION:
Applied Mathematics, Geometric Flows, Computational Geometry

FULBRIGHT PROJECT TITLE:
Beyond Minkowski Penalties

FULBRIGHT PROJECT DESCRIPTION:
This project develops new mathematical tools to simulate and untangle complex 3D surfaces. By extending Minkowski penalties, a recent method in geometric optimization, the work enables robust surface manipulation in computer graphics and visualization. The results will support applications in virtual reality, design, and computational science.

KEY WORDS:

Computational geometry; surface untangling; discrete differential geometry; geometric flows; visualization

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Resistant AI, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Carnegie Mellon University, Computer Science Department, Pittsburgh, PA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Keenan Crane

GRANT PERIOD:
09/2025-06/2026

[Link to the full CV >>]
[Link to the university profile >>]

Academic training:

- Ph.D., 2024, Czech Technical University, Prague, Czech Republic
- M.A., 2018, Czech Technical University, Prague, Czech Republic
- B.A., 2016, Czech Technical University, Prague, Czech Republic

Professional background:

- Researcher, Resistant AI, Czech Republic, since 2019
- Teaching Assistant, CTU in Prague, Czech Republic, 2018–2023
- Research Engineer, Eyedea Recognition Ltd., Czech Republic, 2016–2018
- Research Intern, Kanazawa University, Japan, 2017
- Summer Intern, IBM, Czech Republic, 2015

Selected publications:

- Minarčík, J., Fišer, J., Sýkora, D. (2025). Example-Based Authoring of Expressive Space Curves. Computers & Graphics, 130, 104249. https://doi.org/10.1016/j.cag.2025.104249
- Minarčík, J., Estep, S., Ni, W., Crane, K. (2024). Minkowski Penalties: Robust Differentiable Constraint Enforcement for Vector Graphics. ACM SIGGRAPH Conference Proceedings, 43(4). https://doi.org/10.1145/3641519.3657495
- Minarčík, J., Beneš, M. (2022). Non-Degenerate Homotopy and Geometric Flows. Homology, Homotopy and Applications, 24(2), 255–264. https://doi.org/10.4310/HHA.2022.v24.n2.a12
- Minarčík, J., Beneš, M. (2020). Long-Term Behavior of Curve Shortening Flow in $\mathbb{R}^3$. SIAM Journal on Mathematical Analysis, 52(2), 1221–1231. https://doi.org/10.1137/19M1248522

Fellowships, honors, etc.:

- 2024 1st Place, Babuška Prize for Best Ph.D. Thesis in Applied Mathematics
- 2017 Scholarship from Nadání Josefa, Marie a Zdeňky Hlávkových, Kanazawa University Stay
- 2016 2nd Place, National Round of SVOČ Competition in Mathematics and Informatics
- 2015 Rector's Scholarship for Academic Excellence (Grade Average 1.0), CTU in Prague

SPECIALIZATION:
Virology

FULBRIGHT PROJECT TITLE:
Illuminating Enterovirus 71 Replication Sites: CLEM of Virus Replication

FULBRIGHT PROJECT DESCRIPTION:

Enterovirus-A71 causes hand-foot-and-mouth disease and can cause severe neurological complications, yet effective treatments are lacking. This project aims to develop a cryo-correlative light-electron microscopy and cryo-electron tomography workflow to visualize viral replication sites, advancing molecular-level understanding of EV71's life cycle and supporting future antiviral therapeutic development.

KEY WORDS:
Virology; cryo-EM; structural biology

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Masaryk University, CEITEC , Brno

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
University of Wisconsin-Madison, Department of Biochemistry, Madison, WI

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Elizabeth Wright

GRANT PERIOD:
09/2025-03/2026

Link to the full CV >>

Lucie Nepovímová

Ph.D. Researcher

Fulbright-Masaryk Program

Academic training:

- M.S., 2023, Masaryk University, Brno, Czech Republic
- B.S., 2021, King's College London, UK

Professional background:

- Lucie Nepovímová is a Ph.D. researcher at CEITEC Masaryk University in the Structural Virology group.
- She previously worked as a Master's student researcher at CEITEC and as an undergraduate student researcher at the Structural Biology group at BIOCEV in Prague.
- She employs cryo-electron microscopy and fluorescence microscopy to investigate viral replication mechanisms. Her work aims to deepen understanding of enterovirus biology, contributing to potential therapeutic strategies.
- In- addition to her research, she is active in science communication and co-organizes a seminar series for early-career researchers at CEITEC.

Fellowships, honors, etc.:

- 2023 Brno Ph.D. Talent grant
- 2022 Excellent Thesis grant
- 2021 Gowland-Hopkins Prize for an Outstanding Project in Biochemistry

Jiří Netušil

Ph.D. Student

Fulbright-Masaryk Program

SPECIALIZATION:
Cancer Genetics, Bioinformatics

FULBRIGHT PROJECT TITLE:
Spatial and Functional Characterization of Tumor Microenvironment in HPV-Positive Head and Neck Carcinoma

FULBRIGHT PROJECT DESCRIPTION:
Human papillomavirus (HPV) infection has recently emerged as a leading risk factor for the development of head and neck cancer. My project focuses on the specific changes in tumor composition driven by HPV, which are critical for tumor progression and treatment response. These findings can contribute to the development of novel diagnostic and therapeutic strategies for HPV-positive head and neck cancer.

KEY WORDS:
Human papillomavirus, Cancer, Bioinformatics

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Institute of Molecular Genetics of the Czech Academy of Sciences, Department of Genomics and Bioinformatics, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Michigan State University,
Department of Microbiology, Genetics, and Immunology, East Lansing, MI

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Dohun Pyeon

GRANT PERIOD:
10/2025 - 03/2026

Link to the full CV >>

Academic training:

- M.S., 2023, Charles University, Prague, Czech Republic
- B.S., 2021, Charles University, Prague, Czech Republic

Professional background:

- Ph.D. student, Institute of Molecular Genetics of the Czech Academy of Sciences, Laboratory of Genomics and Bioinformatics, since 2023
- Student researcher, Institute of Biotechnology of the Czech Academy of Sciences, Laboratory of Gene Expression, 2020-2023

Selected publications:

- Sindelka, R., Naraine, R., Abaffy, P., Zucha, D., Kraus, D., Netusil, J., Smetana, K. Jr., Lacina, L., Endaya, B. B., Neuzil, J., Psenicka, M., Kubista, M. Characterization of regeneration initiating cells during Xenopus laevis tail regeneration. Genome Biology 25, 251 (2024). https://doi.org/10.1186/s13059-024-03396-3

Fellowships, honors, etc.:

- 2022 Charles University, Faculty of Science, Dean’s scholarship for outstanding academic achievements

SPECIALIZATION:
Physics, Engineering, Physical-Chemistry

FULBRIGHT PROJECT TITLE:
2-Dimensional Polymers of Metalloporphenes

FULBRIGHT PROJECT DESCRIPTION:
The project focuses on mastering the preparation of an unexplored class of 2-dimensional (2D) materials, metalloporphenes. The parent free base porphene is a recently characterised, fully conjugated 2D polymer analogous to graphene, consisting of fused porphyrin, instead of benzene, rings. Porphene is a soft organic material, offering a versatile alternative to currently popular inorganic compounds such as transition metal dichalcogenides. Particularly, metalloporphenes are an entirely new family of flexible highly tunable (conductor/semiconductor/isolator) and patternable 2D organic structures that permit substituent attachment without removing any of the pi-electron centers from conjugation.

KEY WORDS:
2D polymers; metalloporphenes; nanofabrication; synthesis

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Central European Institute of Technology, Brno University of Technology, Brno

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
University of Colorado at Boulder, Department of Chemistry, Boulder, CO

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Niels Harley Damrauer

GRANT PERIOD:
09/2025 - 06/2026

Link to the university profile >>

Petr Neugebauer

Research Group Leader

Fulbright-Masaryk Program

Academic training:

- Ph.D., 2010, Grenoble University, France
- Ing., 2005, Brno University of Technology, Czech Republic

Professional background:

- Petr is the group leader of the Magneto-Optical and THz Spectroscopy group at the Central European Institute of Technology (CEITEC). He has supervised over 80 people in the fields of magnetic resonance, molecular magnetism, and terahertz (THz) technology.
- With extensive experience in the construction of THz measurement systems, Petr has a strong track record in developing electron spin resonance (ESR) techniques and enhancing nuclear magnetic resonance (NMR) signals through Dynamic Nuclear Polarization (DNP). He routinely applies these advanced methods to investigate the electronic properties of molecular nanomagnets and solid-state materials, contributing to numerous national and international research projects.
- Following his doctoral studies, Petr completed a two-year postdoctoral fellowship at the Biomolecular Magnetic Resonance Center (BMRZ) at Goethe University in Frankfurt, and then spent five years conducting research at the University of Stuttgart.

Selected publications:

- O. Laguta, A. Sojka, A. Marko, and P. Neugebauer, “Rapid scan ESR: A versatile tool for the spin relaxation studies at (sub)THz frequencies,” Appl. Phys. Lett. 120, 120502 (2022)
- D. Bloos, J. Kunc, L. Kaeswurm, R. L. Myers-Ward, K. Daniels, M. DeJarld, A. Nath, J. van Slageren, D. K. Gaskill and P. Neugebauer, “Contactless millimeter wave method for quality assessment of large area graphene,” 2D Mater., 6, 035028, 2019.
- P. Neugebauer, D. Bloos, R. Marx, P. Lutz, M. Kern, D. Aguilà, J. Vaverka, O. Laguta, C. Dietrich, R. Clérac, and J. van Slageren, “Ultra-broadband EPR spectroscopy in field and frequency domains,” Phys. Chem. Chem. Phys., 20, 22, 15528–15534, 2018.
- O. Laguta, M. Tuček, J. van Slageren, and P. Neugebauer, “Multi-frequency rapid-scan HFEPR,” Journal of Magnetic Resonance, vol. 296, pp. 138–142, 2018.
- P. Neugebauer, M. Orlita, C. Faugeras, A. L. Barra, M. Potemski, How Perfect Can Graphene Be? Phys. Rev. Lett. 103, 136403, 2009.

Fellowships, honors, etc.:

- Silver Medal - Brno University of Technology
- CEITEC Director Award
- ERC Starting Grant
- Baden-Wurttemberg Elite Program
- Marie Curie Fellowship

SPECIALIZATION:
Neuroscience, Physiology of Animals, Neuroepigenetics

FULBRIGHT PROJECT TITLE:
Effect of Chronic THC Exposure on Chromatin Accessibility in Key Reward Regions of the Rat Brain

FULBRIGHT PROJECT DESCRIPTION:
This project investigates changes in chromatin accessibility in reward-related brain regions following chronic THC exposure in female and male rats. By revealing how repeated cannabis use induces lasting neural changes via epigenetic mechanisms, this research will advance our understanding of addiction vulnerability and the long-term effects of drug use.

KEY WORDS:
Addiction; use disorder; epigenetics; chromatin accessibility

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Charles University, Faculty of Science, Department of Physiology , Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Yale University, School of Medicine, Department of Psychiatry, New Haven, CT

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Matthew Girgenti

GRANT PERIOD:
10/2025-04/2026

Link to the full CV >>
Link to the university profile >>

Eliška Přítulová

Researcher, Ph.D. Candidate

Fulbright-Masaryk Program

Academic training:

- M.A., 2022, Charles University, Prague, Czech Republic
- B.A., 2019, Charles University, Prague, Czech Republic

Professional background:

- Researcher, Department of Physiology, Faculty of Science, Charles University (since 2019)
- Lecturer, Department of Physiology, Faculty of Science, Charles University (since 2023)
- Principal Investigator, Charles University Grant Agency (GAUK) (since 2024)
- Laboratory Technician, Department of Physiology, Charles University (2021–2022)
- Biology Teacher, Gabra Education – prepares students for entrance exams to medical faculties (since 2023)

Selected publications:

- Hronova, A., Pritulova, E., Hejnova, L., & Novotny, J. (2025). An Investigation of the RNA Modification m6A and Its Regulatory Enzymes in Rat Brains Affected by Chronic Morphine Treatment and Withdrawal. International Journal of Molecular Sciences, 26(9), 4371.

Fellowships, honors, etc.:

- 2024 Funded project: GAUK, Charles University Grant Agency, Principal Investigator
- 2022 Stars program fellowship for talented Ph.D. students at Charles University, Faculty of Science

Jarmila Ptáčková

Research Fellow

Fulbright-Masaryk Program

SPECIALIZATION:
Implementation of China's Ethnic Policy in Tibet

FULBRIGHT PROJECT TITLE:
China's Peripheries as Centers Reflecting Interstate Relations and Rivalry. Eastern Tibet(PRC)-Nepal Border and the Walung Community

FULBRIGHT PROJECT DESCRIPTION:
Frontier areas offer space for demonstration of interstate relations in practice. The ways of border permeability and protection reflect the actual grade of mutual trust, friendship, cooperation, dependence or dominance and show political and economic confidence or insecurity of the respective sides.

KEY WORDS:
Sino-Nepalese frontier; Tibet; Himalayan communities; securitization; frontier mobility

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Oriental Institute of the Czech Academy of Sciences, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Columbia University, Weatherhead East Asian Institute, NY

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Lauran R. Hartley

GRANT PERIOD:
09/2025-12/2025

Link to the university profile >>

Academic training:

- Ph.D., 2013, Humboldt Universitat, Berlin, Germany
- M.A., 2006, Humboldt Universitat, Berlin, Germany

Professional background:

- Research fellow at the Oriental Institute of the Czech Academy of Sciences, Prague, since 2014.
- Lecturer, Humboldt Universität zu Berlin, Institute of Asia and Africa Studies, Germany, 2011–2024.
- Lecturer, Charles University, Prague, Institute of South and Central Asia, CZ, 2023–2024.
- Assistant Professor, Humboldt Universität zu Berlin, Institute of Asia and Africa studies, Germany, 2013–2014 .
- Scientific Assistant, Helmholtz-Zetrum, Leipzig, 2010.
- Research fellow, Leipzig University, 2009–2011.

Selected publications:

- Ptáčková, J. and Klimeš, O. Cultural Security in Contemporary China and Mongolia. Amsterdam University Press. 2025.
- Ptáčková, J. Lost on the path towards modernity. Urbanisation and livelihood prospects of the transitional generation in Tibetan rural areas in Qinghai, People's Republic of China. EMSCAT 55. 2024.
- Ptáčková, J. Centralisation of Livestock and Grassland Management through Cooperatives in Tibetan Pastoral Areas of Qinghai, PRC, in: Degen and Dana (eds.) Lifestyle and Livelihood Changes among Formerly Nomadic Peoples. Springer. 2024.
- Ptáčková, J. Where the "Chinese" are Herding Yaks, in: Lange, Ptáčková, Wettstein, Wulff (eds.) Crossing Boundaries. Academia. 2022.
- Ptáčková, J. Exile from the grasslands. Tibetan herders and Chinese development projects. University of Washington Press. 2020.

Fellowships, honors, etc.:

- 2020 AAS First Book Award

Lenka Scheinherrová

Assistant Professor

Fulbright-Masaryk Program

SPECIALIZATION:
Materials Science and Sustainable Cement Chemistry

FULBRIGHT PROJECT TITLE:
Improving the Low Early Strength of Sustainable Cement Through Innovative Additives and Particle Size Optimization

FULBRIGHT PROJECT DESCRIPTION:
This project explores sustainable strategies to improve the early strength of Limestone Calcined Clay Cement (LC^3) by incorporating innovative additives and optimizing particle size distribution. Advanced analytical techniques will be used to understand hydration mechanisms and support broader adoption of low-carbon cement technologies.

KEY WORDS:
LC^3; low-carbon cement; early strength; hydration; additives

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Czech Technical University in Prague, Faculty of Civil Engineering, Department of Materials Engineering and Chemistry, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
University of California, Department of Civil and Environmental Engineering, Berkeley, CA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Franco Zunino

GRANT PERIOD:
10/2025 - 03/2026

Link to the full CV >>
Link to the university profile >>

Academic training:

- Postdoctoral stay, 2021-2022, EPFL Lausanne, Switzerland
- Ph.D., 2018, Czech Technical University in Prague, Czech Republic
- M.A., 2014, Czech Technical University in Prague, Czech Republic

Professional background:

- Lenka Scheinherrová is an Assistant Professor at the Department of Materials Engineering and Chemistry at Czech Technical University in Prague. She focuses on sustainable cement-based materials, especially improving early hydration and strength in low-carbon systems like LC^3
- Alongside teaching and mentoring students, she leads national research projects and actively collaborates with international teams, including LMC at EPFL Lausanne.
- She is also involved in science outreach and laboratory development. Her aim is to build strong global research connections and bring innovative ideas back to the Czech Republic to support more sustainable construction worldwide.

Selected publications:

- Fořt, J., Afolayan, A., Medveď, I., Scheinherrová, L., & Černý, R. (2024).A review of the role of lightweight aggregates in the development of mechanical strength of concrete. Journal of Building Engineering, 109312. doi.org/10.1016/j.jobe.2024.109312
- Scheinherrová, L., Doleželová, M., Vimmrová, A., Vejmelková, E., Jerman, M., Pommer, V., & Černý, R. (2022). Fired clay brick waste as low cost and eco-friendly pozzolana active filler in gypsum-based binders. Journal of Cleaner Production, 368, 133142. doi.org/10.1016/j.jclepro.2022.133142
- Scheinherrová, L., Keppert, M., & Černý, R. (2022). Chemical aspects of the application of basalt in cement composites. Construction and Building Materials, 350, 128873. doi.org/10.1016/j.conbuildmat.2022.128873
- Scheinherrová, L., Vejmelková, E., Keppert, M., Doleželová, M., Rovnaníková, P., & Černý, R. (2021). Effects of accelerated carbonation on properties of ceramic-based geopolymers. Journal of Thermal Analysis and Calorimetry, 145, 2951-2966. doi.org/10.1007/s10973-020-09980-6
- Doleželová, M., Scheinherrová, L., Krejsová, J., Keppert, M., Černý, R., &Vimmrová, A. (2021). Investigation of gypsum composites with different lightweight fillers. Construction and Building Materials, 297, 123791. doi.org/10.1016/j.conbuildmat.2021.123791

Fellowships, honors, etc.:

- 2025-2027 Development of an Innovative Dry Concrete Mix with Aggregate from Recycled Concrete - Co-Investigator, Technology Agency of the Czech Republic (Project No. TQ15000014)
- 2023-2025 Impact of C3A on the Early Strength of Cement - Principal Investigator, Czech Science Foundation (Project No. 23-06157S)
- 2020-2023 Hydration Stoppage Techniques for Cement, Lime, and Gypsum - Principal Investigator, Czech Science Foundation (Project No. 20-14506S)
- 2021-2022 Postdoctoral research stay at EPFL Lausanne - funded by MEYS mobility grant (Project No. CZ.02.2.69/0.0/0.0/18_053/0016980)
- 2018 Winner, FICO Challenge - HackPrague (Wander app for urban exploration)
- 2017-2018 Top 10 PhD Student, Faculty of Civil Engineering, CTU, Prague

SPECIALIZATION:
Visual Arts

FULBRIGHT PROJECT TITLE:
Invasive Plant Intelligence: Interdisciplinary Research at the Intersection of Art, Technology, and Biology

FULBRIGHT PROJECT DESCRIPTION:

Invasive Plant Intelligence bridges art, technology, and biology to explore plant consciousness through invasive species like Giant Hogweed. Collaborating with Dr. Harpreet Sareen at Parsons School of Design, the project uses ultra-sensitive sensors, VR, film, and sound to translate plant signals into immersive artworks, fostering ecological awareness and interdisciplinary understanding.

KEY WORDS:

Plant consciousness; invasive species; interdisciplinary art; ecological awareness; technology

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Brno University of Technology, Faculty of Fine Arts, Brno

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Parsons School of Design, The New School – Synthetic Ecosystems Lab, New York, NY

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Harpreet Sareen

GRANT PERIOD:
12/2025 - 06/2026

Link to the full CV >>
Link to the university profile >>

Adam Vačkář

Visual Artist, Researcher

Fulbright-Masaryk Program

Academic training:

- M.A., 2025, Ecole Nationale Superieure des Beaux-Arts, Paris, France
- B.A., 2023, Academy of Arts, Architecture and Design in Prague, Czech Republic

Professional background:

- Vačkář is a Czech artist and researcher exploring the intersections of visual art, biology, and ecological thought.
- His recent research focuses on invasive plants, particularly the Giant Hogweed, examining their biological, cultural, and historical dimensions.
- Vačkář co-directs the interdisciplinary platforms Transparent Eyeball and Hope Recycling Station, fostering dialogue between art, science, and philosophy.
- Vačkář's work has been exhibited internationally, including at Centre Pompidou, Palais de Tokyo, Art Basel, and S.M.A.K.
- Váčkář lectures at the Faculty of Fine Arts, Brno University of Technology, and collaborates with scientists, philosophers, and curators to develop new approaches to ecological and cultural narratives.

Selected publications:

- Hans Ulrich Obrist, Adam Vačkář's catalogue – Text on Vackar's artistic practice
- Noemi Smolik, Artofrum Review, Summer edition, 2013
- Daniel Kurjakovic, Torrent Magazine
- Max Glauner, Artforum – Review of Vačkář's exhibition This Side of Paradise
- Marc Glöde, Art Basel / Art Film – Text on Vačkář's moving-image works

Fellowships, honors, etc.:

- Delfina Foundation Residency, London, UK
- Le Pavillon Residency, Palais de Tokyo, Paris, France
- Boghosian Foundation Residency, Villa Empain, Brussels, Belgium
- Cité Internationale des Arts Residency, Paris, France
- Fotograf Festival 2024 Co-Curator, Prague, CZ
- Czech National Recovery Plan / Ministry of Culture Grant Recipient, Czech Republic

SPECIALIZATION:
Nanotechnology, Nanophotonics

FULBRIGHT PROJECT TITLE:
Harvesting Exciton Resonances in Perovskite Thin Layers for a New Generation of Flat Optoelectronic Elements

FULBRIGHT PROJECT DESCRIPTION:
In my project, I aim to explore nearly atomically thin layers of perovskite materials that support quantum effects even at room temperature. I would like to utilize these effects to create an electrically tunable optical element a hundred thousand times thinner than a human hair.

KEY WORDS:
Exciton resonances, Perovskites, thin layers, flat optics

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Brno University of Technology, Faculty of Mechanical Engineering, Institute of Physical Engineering

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Stanford University, Department of Material Science and Engineering, CA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Prof. Mark Brongersma

GRANT PERIOD:
09/2025 - 06/2026

Link to the university profile >>

Petr Liška

Ph.D. Student

Visiting Student Program

Academic training:

- Ing., 2021, Brno University of Technology, Czech Republic

Professional background:

- Throughout my academic career, I have focused on the exciting fields of physics, nanotechnology, and particularly nanophotonics at Brno University of Technology. After completing an Erasmus internship at CIC nanoGUNE in San Sebastián, and earning my master's degree, I began a PhD focused on exploring advanced optical materials for novel applications - such as the development of ultra-small optical elements. In addition to my PhD, I teach advanced physics courses and work as a researcher at CEITEC, BUT. I am also actively trying to encourage younger generations to apply for STEM fields and popularize science through Science & Technology Club.

Selected publications:

- 1. Musalek, T., Liska, P., Morsa, A., Arregi, et al. Achieving Different Stoichiometries and Morphologies in Vapor Phase Deposition of Inorganic Halide Perovskites: Single or Dual Precursos Sources? 2025. APL Materials. 13, 031118.
- 2. Bajo, V., Klok, P., Liska, P., et al. 4D-STEM in a FIB-SEM: A proper Tool to Characterize Perovskite Single Photon Emitters and Solar Cells. 2025. Journal of Physical Chemistry C. 129(7), 3905-3912.
- 3. Bouchal, P., Viewegh, P., Liska, P. et al. Spin-Orbit Photonics with Potato Starch Lenses. 2025. Advanced Optical Materials. 2500684.
- 4. Kepic, P., Liska, P., Idesova, B., et al. Pulsed Laser Deposition of Sb2S3 Films for Phase-Change Tunable Nanophotonics. 2024. New Journal of Physics. 26, 013005.
- 5. Liska, P., Musalek, T., Samoril, T., et al. Correlative Imaging of Individual CsPbBr3 Nanocrystals: Role of Isolated Grains in Photoluminescence of Perovskite Polycrystalline Thin Films. 2023. The Journal of Physical Chemistry C. 127(25), 12404-12413.

Fellowships, honors, etc.:

- 2025 Awarded a commemorative certificate for excellence in Ph.D. studies by the Dean on the occasion of the 125th anniversary of the Faculty of Mechanical Engineering, Brno University of Technology.
- 2024 Winner of the ThermoFisher Scientific (TFS) and Czechoslovakia Microscopic Society (CSMS) grant for young scientists.
- 2023 Best poster award at International Conference on Surface Plasmon Photonics (SPP10) in the field of nanophotonics, Houston, Texas, USA.
- 2021 Best master thesis award in the field of spectroscopy, awarded by Jan Marci Marek spectroscopic society.
- 2019 and 2021 Graduated with honors both in bachelor's and master's studies in the programme of Physical Engineering and Nanotechnology, Brno University of Technology.

SPECIALIZATION:
Robotics

FULBRIGHT PROJECT TITLE:
Solving Autonomous Navigation in Burning Environments to Enable Robot Firefighters

FULBRIGHT PROJECT DESCRIPTION:

This project will focus on developing navigation algorithms for autonomous flying robots in burning and smoke-filled environments. These algorithms would allow robots to assist firefighters by quickly scouting an area for potential dangers and people who need to be rescued, leading to faster and safer evacuations.

KEY WORDS:

Robotics; autonomous navigation; firefighting; search and rescue

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Czech Technical University, Department of Cybernetics, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Carnegie Mellon University, Robotics Institute, PA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Sebastian Scherer

GRANT PERIOD:
01/2026 - 05/2026

Link to the full CV >>
Link to the university profile >>

Tomáš Musil

Ph.D. Student

Visiting Student Program

Academic training:

- M.S., 2024, Czech Technical University in Prague, Czech Republic
- B.S., 2021, Czech Technical University in Prague, Czech Republic

Professional background:

- Tomáš Musil is a member of the Multi-Robot Systems group at Czech Technical University in Prague.
- As part of his Ph.D. studies, he deals with localization, mapping and navigation algorithms for autonomous robots, with a special focus on drones for search-and-rescue missions. Taking inspiration from findings on spatial navigation in neuroscience, he aims to develop new approaches that would allow robots to navigate and understand the physical world as reliably as humans.

Selected publications:

- Petrlík M., Petráček P., Krátký V., Musil T., Stasinchuk Y., Vrba M., Báča T., Heřt D., Pecka M., Svoboda T., Saska M. (2023). "UAVs Beneath the Surface: Cooperative Autonomy for Subterranean Search and Rescue in DARPA SubT." Field Robotics, 3, 1-68.
- Musil T., Petrlík M., Saska M. (2022). "SphereMap: Dynamic Multi-Layer Graph Structure for Rapid Safety-Aware UAV Planning." IEEE Robotics and Automation Letters, 7, 11007-11014.

Fellowships, honors, etc.:

- 2024 SPRIN-D Autonomous Flight Challenge - 1st place
- 2021 DARPA Subterranean Challenge Finals, Virtual Track - 2nd place
- 2021 Dean's Award (Bachelor's thesis: "Autonomous Search Strategies for Unmanned Aerial Vehicles in Subterranean Search and Rescue Missions")

Štěpán Raška

Ph.D. Student

Visiting Student Program

SPECIALIZATION:
Political and Social Philosophy, Epistemology

FULBRIGHT PROJECT TITLE:
Pragmatism, Democracy, and Hermeneutics of Fallibility

FULBRIGHT PROJECT DESCRIPTION:
My project is situated within the theoretical framework of philosophical pragmatism. I aim to further develop this tradition, particularly within the field of democratic theory. Primarily, I intend to reconceptualize the pragmatic theory of democracy through the lenses of critical theory and hermeneutics.

KEY WORDS:

Pragmatism; democracy; falibillism; hermeneutics; Dewey

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Charles University, Faculty of Arts, Department of Philosophy and Religious Studies, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

University of North Florida, College of Arts and Sciences, Department of Philosophy and Religious Studies, Jacksonville, FL

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Hans-Herbert Kögler

GRANT PERIOD:

10/2025 - 04/2026

Link to the full CV >>
Link to the university profile >>

Academic training:

- M.A., 2022, Charles University, Prague, Czech Republic
- B.A., 2019, Charles University, Prague, Czech Republic

Professional background:

- Štěpán studied Philosophy and History at the Faculty of Arts, Charles University, spending two semesters at the University of Vienna and one semester at the University of Tübingen. In Philosophy, he is interested in phenomenology, hermeneutics, and especially pragmatism.
- After successfully completing his Master's degree, Štěpán began working on a Ph.D. project in philosophy that seeks to connect his areas of interest within the framework of philosophical pragmatism. He interprets this tradition through the lens of critical theory, exploring its broader relevance. Accordingly, he envisions his work contributing to broader discussions relevant to public debate and policy considerations—particularly with respect to the ongoing democratization processes in the Czech Republic.

Selected publications:

- Raška, Štěpán. Between Dewey, Social Movements and Critical Philosophy. In: FILOZOFIA, 79/10 2024, pp. 1186-1196 (Review-Study on Justo Serrano Zamora's book: Democratization and Struggles against Injustice: A Pragmatist Approach to the Epistemic Practices of Social Movements).
- Raška, Štěpán. Between Hope and Analysis. Review of book: Hans Herbert Kögler's Critical Hermeneutics. Edited by Lubomir Dunaj and Kurt Mertel. In: Pragmatism Today, Vol 15, Issue 1, 2024, pp. 115-119.
- Raška, Štěpán. The Pragmatic-Regulative Concept of Convergence and (the End of) History. In: Pragmatism Today (accepted for publishing).
- Raška, Štěpán. Jürgen Habermas's Communicative Democracy. In: FILOZOFIA (accepted for publishing).

Fellowships, honors, etc.:

- Winter Term 2022 Universität Wien (AKTION-Program); supervisor Prof. Hans Schelkshorn
- May-June 2022 Universität Wien (Mobility Fund – Charles University); supervisor Dr. Lubomir Dunaj
- Summer Term 2021 Universität Wien (Erasmus +)
- Summer Term 2018 Universität Tübingen (Erasmus +)

SPECIALIZATION:
Bioinformatics and Computational Biology

FULBRIGHT PROJECT TITLE:
Search for cryptic binding sites using the integration of protein language models and genomic data

FULBRIGHT PROJECT DESCRIPTION:
The project focuses on developing a novel computational method for detecting hidden (cryptic) binding sites in proteins by integrating genomic data with protein language models. This method will advance our understanding of protein mechanisms through the identification of their binding sites and holds potential for future drug development through the discovery of new drug targets.

KEY WORDS:

Proteins; protein language models; binding sites; genomics

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Charles University, Faculty of Mathematics and Physics, Department of Software Engineering, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

Broad Institute of MIT and Harvard, Cambridge, MA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Sumaiya Iqbal

GRANT PERIOD:

01/2026 -06/2026

Link to the full CV >>
Link to the university profile >>

Vít Škrhák

Ph.D. Student

Visiting Student Program

Academic training:

- M.S., 2023, Charles University, Prague, Czech Republic
- B.S., 2020, Charles University, Prague, Czech Republic

Professional background:

- Vít Škrhák acquired his master's degree at the Faculty of Mathematics and Physics at Charles University in Prague and is currently pursuing a Ph.D. in the Structural Bioinformatics Group. His research focuses on detecting binding sites in proteins, with a particular emphasis on cryptic binding sites - binding sites that are not visible on the protein structure and only emerge upon molecule binding. He applies deep learning techniques, especially protein language models, which are analogous to large language models but trained on amino acid sequences instead of human language.

Selected publications:

- Škrhák, V., Novotný, M., Feidakis, C. P., Kriválk, R., & Hoksza, D. (2024). CryptoBench: Cryptic protein-ligand binding sites dataset and benchmark. Bioinformatics. https://doi.org/10.1093/bioinformatics/btae745
- Škrhák, V., Novotný, M., Riedlova, K., & Hoksza, D. (2023). Cryptic binding site prediction with protein language models. 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). https://doi.org/10.1109/bibm58861.2023.10385497
- Škrhák, V., & Hoksza, D. (2023). Framework for Protein Structures Conformation Analysis. 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 4942–4944. https://doi.org/10.1109/bibm58861.2023.10385905
- Peška, L., Vomlelová, M., Veselý, P., Škrhák, V., & Lokoč, J. (2022). Evaluating a Bayesian-like relevance feedback model with text-to-image search initialization. Multimedia Tools and Applications, 82(15), 22305–22341. https://doi.org/10.1007/s11042-022-14046-w
- Peška, L., Kovalčík, G., Souček, T., Škrhák, V., & Lokoč, J. (2021). W2VV++ BERT Model at VBS 2021. In Lecture notes in computer science (pp. 467–472). https://doi.org/10.1007/978-3-030-67835-7_46

Fellowships, honors, etc.:

- 2025, Charles University Research Grant (GAUK), Principal Investigator
- 2023, Graduated with honors
- 2022, Alpen-Adria-Universität, study stay (Erasmus+)

SPECIALIZATION:
Multi-Agent Systems and Collective Robotics

FULBRIGHT PROJECT TITLE:
Unifying Techniques for Automated Construction

FULBRIGHT PROJECT DESCRIPTION:
This project aims to explore how large groups of construction robots can work together to build complex structures. Creating scalable planning algorithms will enable efficient, autonomous assembly of structures such as house walls. The research will provide deep insights into the problem, which is important for future real-world robotic construction.

KEY WORDS:
Multi-Agent Collective Construction; Multi-Agent Planning; Robotics

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:
Czech Technical University, Faculty of Information Technology, Department of Applied Mathematics, Prague

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:
Carnegie Mellon University, Robotics Institute, PA

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:
Howie Choset

GRANT PERIOD:
01/2026 - 06/2026

Link to the full CV >>

Martin Rameš

Ph.D. Student

Visiting Student Program

Academic training:

- M.S., 2023, Czech Technical University in Prague, Czech Republic
- B.S., 2021, Czech Technical University in Prague, Czech Republic

Professional background:

- Martin is a Ph.D. student at the Faculty of Information Technology, Czech Technical University in Prague, studying multi-agent systems and robotic collective construction. His work focuses on autonomous high-level planning of robot actions, transforming the end goal of the completed block structure into simple instructions the robots can understand. His previous experiences include data processing in the search for the charged Higgs boson as part of his Master thesis, which has provided him with valuable experience working with talented people from multiple countries on a common goal, which he plans to leverage again on this project.

Selected publications:

- Rameš, M., & Surynek, P. (2025). Accessible Hardware Implementation for Multi-Agent Collective Construction. Proceedings of the AAAI Conference on Artificial Intelligence, 39(28), 29688-29690. https://doi.org/10.1609/aaai.v39i28.35368
- Rameš, M., & Surynek, P. (2024). Reaching New Heights in Multi-Agent Collective Construction. In Frontiers in Artificial Intelligence and Applications. IOS Press. https://doi.org/10.3233/faia240921
- Rameš, M., & Surynek, P. (2024). Action Duration Generalization for Exact Multi-Agent Collective Construction. In Proceedings of the 16th International Conference on Agents and Artificial Intelligence (pp. 718–725). 16th International Conference on Agents and Artificial Intelligence. SCITEPRESS - Science and Technology Publications. https://doi.org/10.5220/0012385600003636

Fellowships, honors, etc.:

- 2023 M.S. Knowledge Engineering, FIT CTU in Prague – Graduated with honors
- 2021 B.S. Knowledge Engineering, FIT CTU in Prague – Graduated with honors
- 2021 Dean’s Award (Bachelor’s thesis: “Compilation of Multi-Agent Collective Construction in the Minecraft Game”)

Markéta Košatková

Assistant Professor

Scholar In Residence Program

SPECIALIZATION:
Education and Teaching

FULBRIGHT PROJECT TITLE:

Teaching and Research in Classroom, Management and Teaching Strategies

FULBRIGHT PROJECT DESCRIPTION:

I will teach Classroom Management and Teaching Strategies and guest lectures, while advancing curriculum internationalization and diversity within the School of Teacher Education. My work will involve collaboration with local schools, professional organizations, and UCF faculty to provide comparative reviews of teacher education programs and foster global educational exchange.

KEY WORDS:

Classroom management, Teacher education, Culturally sensitive education, Internationalization of the Curriculum

HOME INSTITUTION AND DEPARTMENT IN THE CZECH REPUBLIC:

Masaryk University, Faculty of Education, Brno

HOST INSTITUTION AND DEPARTMENT IN THE UNITED STATES:

University of Central Florida, Orlando, FL

HOST/CONTACT PERSON AT THE DEPARTMENT IN THE UNITED STATES:

Scott Waring

GRANT PERIOD:

08/2025 - 06/2026

Link to the full CV >>
Link to the university profile >>

Academic training:

- Ph.D., 2020, Masaryk University, Brno, Czech Republic
- M.A., 2014, Masaryk University, Brno, Czech Republic
- B.A., 2013, Masaryk University, Brno, Czech Republic

Professional background:

- Markéta Košátková is an Assistant Professor at the Department of Social Education, Masaryk University. Her research focuses on the educational needs of students from diverse socio-cultural backgrounds, applying her findings to develop training strategies for teachers in diversity-sensitive education. She teaches courses on intercultural and international education, the sociology of post-modern education, education and technology and teachers’ professional development.

Selected publications:

- Bielik, M., Košátková, M., Gulová, L., & Trapl, F. (2025). Inequalities in Education: Benefits of Tutoring for Pre-service Teachers. Culture and Education, 37(2), 380–410.
- Košatka, D., Černý, M., & Košátková, M. (2025). The Crisis of Knowledge as a Background for a Pedeutological Approach: Construction and Orientation in Information Environment. European Education, 57(2), 73–90.
- Denglerová, D., Kalenda, J., Šíp, R., & Košátková, M. (2024). Dancing between Money and Ideas: Inclusion in Primary Education in the Czech Republic from 2005 to 2020. International Journal of Inclusive Education, 28(12), 2853–2870.
- Košatka, D., Košátková, M., Fořtová, N. C., Šašinková, A., & Černý, M. (2023). Implementing Didactic Principles in VR for Language Education. In MUNI Press (pp. 57–85).
- Sedláková, M., & Košatka, D. (2021). Identities in the Era of Globalisation: Reflection on International Experience as a Tool for Culturally Responsive and Inclusive Education. Pedagogika, 71(4), 553–570.

Fellowships, honors, etc.:

- 2023 Award of the Ministry of Education, Youth and Sports for Innovative teaching and outstanding educational activities in Higher Education
- 2022 Award of the Česká Spořitelna Foundation for significant contribution in education
- 2021 Award of the Ministry of Education, Youth and Sports for extra educational activities during pandemic
- 2019 University of Minnesota, Minneapolis - Project on Internationalization of Curriculum
- 2018 University of Vienna, Vienna - Research grant on Social Inequalities
- 2014 – 2019 Ukraine – Kiev, Lviv - Project on Development of Ukrainian Education