PERSONAL INFORMATION

Family name, First name:	Dr. Siegert, Sandra
Researcher unique identifier(s):	http://orcid.org/0000-0001-8635-0877
Nationality:	German
URL for website:	http://ist.ac.at/research/life-sciences/siegert-group/

• EDUCATION

2010 PhD in Neurobiology, Title: "The molecular logic of retinal cell types"
Faculty of Science, University of Basel, Switzerland;
Work performed at the Friedrich Miescher Institute for Biomedical Research (FMI), Division of Neuroscience, Basel, Switzerland.

2005 *Diplom* in biology
Title: "Induction of an immune response against HIV-1 using murine leukemia virus"
Johann Wolfgang Goethe-University, Frankfurt/Main, Germany; worked performed at Georg Speyer-Haus, Frankfurt/Main, Germany and Paul-Ehrlich Institute, Federal Agency for Sera and Vaccines, Langen, Germany

• CURRENT POSITION(S)

2025/07 – Life Sciences Research Area Chair
2023 – Professor, Institute of Science and Technology Austria (ISTA), Klosterneuburg, AT
2023- Co-Founder and Consultant of Syntropic Medical

• PREVIOUS POSITIONS

2015 – 2023 Assistant Professor, Institute of Science and Technology Austria (ISTA), Klosterneuburg, AT
2011 – 2015 Postdoctoral Associate, Massachusetts Institute of Technology (MIT), The Picower Institute for Learning and Memory, Cambridge, MA, USA.
2010 – 2011 Postdoctoral Fellow and
2005 – 2010 Graduate Student, Friedrich Miescher Institute for Biomedical Research, Basel, CH.

• FELLOWSHIPS AND AWARDS

2025 EIT Health DTVBP-11012 – sh*AI*pe (**s**egmentation of **h**igh-dimensional data using ***AI*** for **p**recise **e**valuation)
2023 Horizon 2020 – ERC PoC (SYNTROPIC, #101138423)
2023 FWF Stand Alone (#P37131), "Dissecting the morpho-functional relationship of microglia", Principal investigator
2023 Best Poster Prize at the FENS The Brain Conference: Establishment and Maintenance of Brain Cell States, Rungstedgaard, DK
2019 Neuroscience 2019 "Hot Topic", Society of Neuroscience, Chicago, USA
2017 Liese Prokop-Frauenpreis for science and technology, Lower Austria, Austria
2016 ERC StG #715571 (MICROGLIA-CIRCUIT), European Research Council (ERC)
2013 SWISS OphthAWARD in the category "Best experimental work" for the publication in *Nature Neuroscience* 2012 Jan; 15(3): 487-95
2012 Human Frontier Science Program (HFSP) postdoctoral long-term fellowship
2011 Molecular Biology Organization (EMBO), postdoctoral long-term fellowship (declined)
2011 Swiss National Science Foundation (SNSF), Fellowship for prospective researchers

• SUCCESSFUL CO-APPLICATION FUNDING WITH TEAM MEMBERS

Postdoctoral fellow: 3 (FWF Hertha Firnberg, IST Plus (MSCA-CoFund), IST Fellow)
PhD students: 2 (OeAW DOC fellowship, GFF RTI Dissertation)

• TEACHING ACTIVITIES

2024 – 2025	Lecturer, "Neuroscience core course", ISTA
2019 – 2024	Lecturer, "Introduction to neuroscience", ISTA
2019 – present	Course curriculum developer and lecturer, "Advanced methods in molecular and cell biology", ISTA
2019	Lecturer, "Biology Track core course", ISTA
2017 – 2018	Course curriculum developer and lecturer, "Advanced techniques in Life Sciences: Manipulation of gene expression level", ISTA
2017	Course curriculum developer and lecturer, "Neuroscience Track core course", ISTA

• ORGANISATION OF SCIENTIFIC MEETINGS

2025	Co-Organizer of the ATgliaNet symposium
2025	Co-Organizer of the Sy-Stem meeting
2024	Co-Organizer of ISTA-FKNE-CHET Young PI Symposium in the FENS
2023 - present	Organization of monthly webinars within the Austrian Glial Network (ATglia.net).
2018	Organizer of the session "Neuroimmunlogy" for the 10th annual meeting of the Austrian Association of Molecular Life Sciences and Biotechnology (oegmbt), Vienna, Austria

• RESPONSIBILITIES IN THE SCIENTIFIC COMMUNITY

2024 – 2025	**Panel member** of SNSF Starting Grant Panel LS
2022 – 2025	**Panel member** of Slovak Academy of Sciences – Programme SASPRO2 – evaluation committee

• REVIEWING ACTIVITIES

2015 – present	**Grant Reviewer:** "Fondation maladies rares", Dutch MS Research Foundation, H2020 ERC StG, H2020 FET-OPEN, MRC, NCN: HARMONIA, Netherlands Organization for Scientific Research (NOW) Veni Programme, UKRI-BBSRC, 3RCC-Swiss, Velux Stiftung
2015 – present	**Journal Reviewer:** Acta Neuropathologic Communications, Annals of Medicine, Biology Psychiatry, Cell reports, Communications biology, eLife, Frontiers in Genetics, Frontiers in System Neuroscience, JoVE, Molecular Psychiatry, Molecular Therapy, Nature communication, Nature methods, Nature Neuroscience, PLOS Biology, PLOS ONE, PNAS, Science

• INSTITUTIONAL RESPONSIBILITIES

2017 - 2025	**Member of the ISTA selection committee** for
2023 - 2025	Appointed chair of the ISTA-Fellow and NOMIS fellow committee
2021 - 2025	IST Bridge (MSCA-CoFund 2021)
2021 - 2025	NOMIS
2018 - 2019	IST Plus (externally funded, MSCA-CoFund fellowships)
2023 - 2024	**Member of Tech Transfer Committee**
2016 – 2020	**Member of the ISTA interdisciplinary projects committee** (selecting internal proposals for highly interdisciplinary projects between two groups on campus)
2015 - present	**PhD Thesis committee member** for faculty members Koschak, University of Innsbruck/Austria; Markram, EPFL/Switzerland; Novarino, ISTA/Austria; Roselli, University Ulm/Germany; Sandkühler, Medical University Vienna/Austria; Stefanova, University of Innsbruck/Austria

• MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2023 – present Founder of ATglia.net, an Austrian network of research groups interested in research questions related to glia.
2021 – present Member of AcademiaNet database of excellent female researchers (only nominated based on outstanding academic qualifications, independent leadership activities, and academic credentials)
2016 – present Austrian Neuroscience Association (ANA)
2006 – 2018 ARVO (The Association for Research in Vision and Ophthalmology), interrupted: 2010-2018, 2021-2022

• INTELLECTUAL PROPERTIES (IP)

1. "Induction of Neuroplasticity using ketamine and pulsed light" (Tech ID 19-003), final patenting file submission Oct 16th, **2020**, (PCT/EP2020/079365). Venturino A, **Siegert S** (inventor)

2. "Rod cell-specific promoter", WO 2013068413 A1, filed November 7, 2012, and issued May 16, 2013, Roska B, Jüttner J, **Siegert S** (inventor)

• SELECTED PUBLICATIONS

Pre-prints/ under review:

1. Alamalhoda M, Firoozi A, Venturino A. **Siegert S**, *"trAIce3D: A Prompt-Driven Transformer Based U-Net for Semantic Segmentation of Microglial Cells from Large-Scale 3D Microscopy Images", submitted MICCAI*, 2025, invited for revision

Peer-reviewed research articles:

2. Schmied V, Korkut-Demirbaş M, Venturino A, **Siegert S**, *"Microglia determine an immune-challenged environment and facilitate ibuprofen action in human retinal organoids",* **J. of Neuroinflammation** (in press), 2025. https://doi.org/10.1101/2024.09.20.614136.

3. Schoot Uiterkamp FE, Maes ME, Colombo G, Alamalhoda M, Firoozi A, Colombo G, **Siegert S**, *"Optic nerve crush does not induce retinal ganglion cell loss in the contralateral eye.",* **Invest Ophthalmol Vis Sci.**, 2025 Mar 3;66(3):49. https://doi.org/10.1167/iovs.66.3.49.

4. Maes ME, Colombo G, Schoot Uiterkamp FE, Sternberg F, Venturino A, Pohl EE, **Siegert S**, *"Mitochondrial network adaptations of microglia reveal sex-specific stress response after injury and UCP2 knockout",* **iScience**, 2023 Aug 29;26(10):107780. https://doi.org/10.1016/j.isci.2023.107780.

5. Michalska JM, Lyudchik J, Velicky P, Štefaničková H, Watson JF, Cenameri A, Sommer C, Amberg N, Venturino A, Roessler K, Czech T, Höftberger R, **Siegert S**, Novarino G, Jonas P, Danzl JG "*Imaging brain tissue architecture across millimeter to nanometer scales"*, **Nature Biotechnology**, 2023. https://doi.org/10.1038/s41587-023-01911-8.

6. Hübschmann V, Korkut-Demirbaş M, **Siegert S**, "*Assessing in vitro microglia identity and function by immunostaining, phagocytosis, calcium activity, and inflammation assay*", **STAR Protocols**, 2022, 3(4):101866. https://doi.org/10.1016/j.xpro.2022.101866.

7. Colombo G, Cubero RJA, Kanari L, Venturino A, Schulz R, Scolamiero M, Agerberg J, Mathys H, Tsai L-H, Chachólsk W, Hess K, **Siegert S**, "*A tool for mapping microglial morphology,*

morphOMICs, reveals brain-region and sex-dependent phenotypes", **Nature Neuroscience**, 2022, 25(10):1379-1393. https://doi.org/10.1038/s41593-022-01167-6

MorphOMICs dissects in an unbiased and systematic way microglial morphological heterogeneity, plasticity, and sexual dimorphism across seven brain regions using principles of algebraic topology, statistics and machine learning paradigms.

- Commentary: Ascoli GA, JCN 2022, https://doi.org/10.1002/cne.25429

8. Schulz R, Korkut-Demirbaş M, Colombo G, **Siegert S**, "*Chimeric GPCRs mimic distinct signaling pathways and modulate microglia responses*", **Nature Communication**, 2022, 13(1):4728, https://doi.org/10.1038/s41467-022-32390-1

   We developed chemical-inducible GPCRs based on DREADD allowing CNO-mediated stimulation and recreation of canonical and non-canonical signaling pathways including the inflammatory and migratory response in microglia.

9. Bartalska K, Hübschmann V, Korkut-Demirbaş M, Cubero RJA, Venturino A, Rössler K, Czech T, **Siegert S**, "*A systematic characterization of microglia-like cell occurrence during retinal organoid differentiation*", **iScience**, 2022, 25(7):104580, https://doi.org/10.1016/j.isci.2022.104580

   We show that human induced pluripotent stem cell-derived microglia innately develop in unguided retinal organoid differentiation and preferentially localize within the mesenchymal-like compartment.

10. Venturino A, Schulz R, de Jesus-Cortex H, Reilly-Andujar F, Maes ME, Nagy B, Cubero RJA, Colombo G, Schoot Uiterkamp FE, Bear M, **Siegert S**, "*Microglia dismantle mature perineuronal nets upon anesthetic ketamine exposure or 60-Hz light entrainment in the healthy brain*", **Cell Reports**, 2021, 36(1):109313, https://doi.org/10.1016/j.celrep.2021.109313

    We found that repeated anesthetic ketamine induces microglia-dependent perineuronal net removal, which reinstates juvenile-like ocular dominance plasticity. 60-Hz light entrainment recreated the ketamine-mediated effects.

    Selected community awareness:

    - Wu L and Bosco D: Faculty Opinions Recommendation of [Venturino A et al., Cell Rep 2021 36(1):109313]. In Faculty Opinions, 26 Aug 2021; https://facultyopinions.com/prime/740425005
    - https://www.alzforum.org/news/research-news/not-just-alzheimers-microglia-sculpt-brain-health-and-disease
    - https://www.lucid.news/could-ketamine-restore-child-like-brain-plasticity-and-learning/

11. Venturino A, **Siegert S**, "*Minimally-invasive methods and quantification for microglia-mediated perineuronal net disassembly*", **STAR Protocols**, 2021; 2(4); 101012, https://doi.org/10.1016/j.xpro.2021.101012

    We provide detailed protocols about the strategies to perform perineuronal net disassembly described in Venturino et al. 2021*, and how microglia engulfment can be analyzed.*

12. Maes ME, Wögenstein GM, Colombo G, Casado-Polanco R, **Siegert S**, "*Optimizing AAV2/6 microglial targeting identified enhanced efficiency in the photoreceptor degenerative environment*", **Mol Ther Methods Clin Dev**, 2021; 23:210-224, https://doi.org/10.1016/j.omtm.2021.09.006

    We optimized the transduction efficiency and specificity of adeno-associated viruses (AAVs) for retinal microglia in vivo *and found that disease environments influence microglial susceptibility to viral transduction*

13. Maes ME, Colombo G, Schulz R, **Siegert S**, "*Targeting microglia with lentivirus and AAV: Recent advances and remaining challenges*", **Neuroscience Letters**, 2019; 707:134310, https://doi.org/10.1016/j.neulet.2019.134310

    In this review, we describe the state-of-the-art of current viral microglial transduction strategies

Peer-reviewed research articles before my independent research group:

8. Tsai L-H, **Siegert S**, "*How microRNAs are involved in "splitting the mind*", **JAMA Psychiatry**, 2016; 73(4): 409-10, https://doi.org/10.1001/jamapsychiatry.2015.3144

9. Mungenast AE[*], **Siegert S**[*$], Tsai L-H, "*Modeling Alzheimer's disease with human induced pluripotent stem (iPS) cells*", **Molecular and cellular neuroscience** 2015; 73:13-31, https://doi.org/10.1016/j.mcn.2015.11.010 [*]contributed equally, [$]corresponding author

10. **Siegert S**, Seo J, Kwon EJ, Rudenko A, Cho S, Wang W, Flood Z, Martorell AJ, Ericsson M, Mungenast AE, Tsai L-H, "*The schizophrenia risk gene miR-137 alters presynaptic plasticity*", **Nature Neuroscience** 2015; 18(7): 1008-16, https://doi.org/10.1038/nn.4023
Comment in:
- "Synaptic plasticity: Micro-level disruption" by Yates D. [Nat. Rev. Neurosci. 2015]
- "MIR137: big impacts from small changes" by Han J, Sarkar A, Gage FH [Nat. Neurosci. 2015]
- Schizophrenia Research Forum (www.schizophreniaforum.org/new/detail.asp?id=2182)

11. Rei D, Mason X, Gräff J, Seo J, Rudenko A, Wang J, Rueda R, **Siegert S**, Cho S, Canter RG, Mungenast A, Deisseroth K, Tsai L-H, "*The BLA bidirectionally modulates stress-induced hippocampal learning and memory deficits through a p25/Cdk5-dependent pathway*", **Proc Natl Acad Sci USA** 2015; 112(23): 7291-6, https://doi.org/10.1073/pnas.1415845112

12. **Siegert S**, Cabuy E, Gross Scherf B, Kohler H, Panda S, Le, Y-Z, Fehling HJ, Gaidatzis D, Stadler M, Roska B, "*Transcription factor code and disease map for retinal cell types*", **Nature Neuroscience** 2012; 15(3): 487-95, https://doi.org/10.1038/nn.3032
- Awarded the SWISS OphthAWARD in the category "Best experimental work"

13. Busskamp V, Duebel J, Balya D, Fradot M, Viney TJ, **Siegert S**, Groner AC, Cabuy E, Forster V, Seeliger M, Biel M, Humphries P, Paques M, Mohand-Said S, Trono D, Deisseroth K, Sahel JA, Picaud S, Roska B, "*Genetic reactivation of cone photoreceptors restores complex visual responses in Retinitis pigmentosa*", **Science** 2010; 329(5990): 413-7, https://doi.org/10.1126/science.1190897
Comment in:
- "Sensory systems: Back into the light" by Bodo C [Nat. Rev. Neurosci. 2010]
- "Neuroscience. Seeing the light of day" by Cepko C [Science 2010]

14. **Siegert S**, Gross Scherf B, Del Punta K, Didkovsky N, Heintz N, Roska B, "*Genetic address book for retinal cell types*", **Nature Neuroscience** 2009; 12(9): 1197-204, https://doi.org/10.1038/nn.2370
- Featured on the Nature Neuroscience cover (September 2009, Vol 12, No 9)

15. Münch TA, da Silveira RA, **Siegert S**, Viney TJ, Awatramani GB, Roska B, "*Approach sensitivity in the retina processed by a multifunctional neuronal circuit*", **Nature Neuroscience** 2009 Oct;12(10):1308-16. https://doi.org/10.1038/nn.2389
Comment in:
- "A night vision neuron gets a day job" by Oesch N, Diamond J [Nat. Neurosci. 2009]

16. Viney TJ, Balint K, Hillier D, **Siegert S**, Boldogkoi Z, Enquist LW, Meister M, Cepko CL Roska B, "*Local retinal circuits of melanopsin-containing ganglion cells identified by transsynaptic viral tracing*", **Current Biology** 2007 Jun 5; 17(11): 981-8 https://doi.org/10.1016/j.cub.2007.04.058

17. **Siegert S**, Schnierle P, Schnierle BS, "*Novel anti-viral therapy: Drugs that blocks HIV entry at different target sites*", **Mini Reviews in Medicinal Chemistry** 2006 May; 6(5): 557-62. Review, https://doi.org/10.2174/138955706776876267

18. **Siegert S**, Thaler S, Wagner R, Schnierle BS, "*Assessment of HIV-1 entry inhibitors by MLV/HIV-1 pseudotyped vectors*", **AIDS Research and Therapy** 2005 Sep 12, 2:7 https://doi.org/10.1186/1742-6405-2-7

REFERENCED CONFERENCE PROCEEDINGS

XXIV World Congress of Psychiatric Genetics (WCPG), 2016, Jerusalem, Israel

- **Siegert S**, Seo J, Kwon EJ, Rudenko A, Cho S, Wang W, Flood Z, Martorell AJ, Ericsson M, Mungenast AE, Tsai L-H, "*The schizophrenia risk gene product miR-137 alters presynaptic plasticity*", European Neuropsychopharmacology, Volume 27, Supplement 3, 2017, pp. S497-S498.

ARVO Annual Meeting, 2019, Vancouver, Canada

- Maes M, **Siegert S**, "*Microglia exhibit distinct mitochondrial signatures in retinal degeneration*", Investigative Ophthalmology & Visual Science July 2019, Volume 60, p. 3999.
- Colombo G, Venturino A, Schulz R, Kanari L, Hess K, **Siegert S**, "*Topological classification of retinal microglia during development*", Investigative Ophthalmology & Visual Science July 2019, Volume 60, p. 4010.

XIV European Meeting on Glial Cells in Health and Disease, 2019, Porto, Portugal

- Maes M, **Siegert S**, "*Mitochondrial morphology as an indicator of microglia activity in retinal degeneration*", **GLIA**, Volume 67, Issue S1, 05-032A.
- Venturino A, Schulz R, Colombo G, Nagy B, **Siegert S**, "*Sex specific microglia response to transient reduction of neuronal activity*", **GLIA**, Volume 67, Issue S1, T09-053B.
- Colombo G, Venturino A, Schulz R, Kanari L, Hess K, **Siegert S**, "*Topological classification of microglia*", **GLIA**, Volume 67, Issue S1, T20-011C.
- Nagy B, **Siegert S**, "*Comparing the efficiency of microglia depletion strategies during adulthood and development*", **GLIA**, Volume 67, Issue S1, T21-005C.

ARVO Annual Meeting 2021, online

- Maes M, Wögenstein G, Colombo G, **Siegert S**, "*A modified AAV2/6 enhances retinal microglial transduction in a layer-specific manner*", Investigative Ophthalmology & Visual Science June 2021, Volume 62, p. 1688.

XV European Meeting on Glial Cells in Health and Disease, 2021, online

- Nagy B, Cubero RJ, **Siegert S**, "*Microglia depletion disrupts postnatal retinal development*", **GLIA**, Volume 69, Issue S1, T21-004A.

XVI European Meeting on Glial Cells in Health and Disease, 2021, Berlin, Germany

- Maes M, Colombo G, Schoot-Uiterkamp F, Venturino A, Sternberg F, Pohl E, **Siegert S**, "*Mitochondrial networks reveal sex-specific microglial response to stress and injury"*, **GLIA**, Volume 71, Issue S1, T05-019A, 10.1002/glia.24418
- Colombo G, Cubero RJA, Venturino A, Kanari L, Schulz R, Scolamiero M, Agerberg J, Mathys H, Tsai L-H, Chachólsk W, Hess K, **Siegert S**, *"MorphOMICs: a new algorithm to unravel region- and sex-dependent microglia morphological plasticity in health and disease"*, **GLIA**, Volume 71, Issue S1, T10-002A, 10.1002/glia.24418

- Cubero RJA, Colombo G, Venturino A, Schulz R, Maes M, Gharagozlou S, Scolamiero M, Agerberg J, Kanari L, Hess K, Chachólsk W, **Siegert S**, "*Resolving the morpho-functional responses of locally-constrained retinal microglia with morphOMICs"*, **GLIA**, Volume 71, Issue S1, T10-007A, 10.1002/glia.24418
- Hubschmann V, Korkut-Demirbas M, Venturino A, **Siegert S**, *"Human microglia incorporated into retinal organoids contribute to viral mediated inflammation and impact neuronal activity"*, **GLIA**, Volume 71, Issue S1, T16-018A, 10.1002/glia.24418
- Schoot-Uiterkamp F, Farrelly AM, Maes M, **Siegert S**, *"Loss of Cox-1 attenuates microglia reactivity after optic nerve injury"*, **GLIA**, Volume 71, Issue S1, T16-106B, 10.1002/glia.24418
- Venturino A, Cubero RJA, Benevento M, Alamalhoda M, Schulz R, Roessler K, Czech T, Colombo G, Yeung J, Tasic B, **Siegert S**, *"A sexual dimorphic microglia response modulates visual cortex network activity after ketamine-anesthesia"*, **GLIA**, Volume 71, Issue S1, T17-001A, 10.1002/glia.24418

XVII European Meeting on Glial Cells in Health and Disease, 2025, Marseille, France

- Korkut-Demirbas M, Schmied V, Negrello T, Maya-Arteaga JP, Merrin J, **Siegert S**, *"Investigation of hIPSC-derived microglia migration dynamics using microfludics"*, **GLIA**, Volume 73, Issue S1, E1-E1421, T01-001A, 10.1002/glia.70036
- Siegert S, *Effects of psychedelic drugs on microglia and extracellular matrix"*, **GLIA**, Volume 73, Issue S1, E1-E1421, S07-04, 10.1002/glia.70036
- Venturino A, Alamalhoda M, Negrello T, Cubero RJA, Schulz R, Colombo G, Yeung J, Tasic B, **Siegert S**, *"Corticosterone-linked microglia activity underpins female neuroplasticity after ketamine anesthesia"*, **GLIA**, Volume 73, Issue S1, E1-E1421, T11-037B, 10.1002/glia.70036
- Schoot-Uiterkamp FE, Schmied V, **Siegert S**, *"The role of Cox-1 on microglial response to inflammatory stressors"*, **GLIA**, Volume 73, Issue S1, E1-E1421, T16-069B, 10.1002/glia.70036
- Schmied V, Korkut-Demirbas M, Venturino A, **Siegert S**, *"Microglia determine an immune-challenged environment and facilitate ibuprofen action in human retinal organoids"*, **GLIA**, Volume 73, Issue S1, E1-E1421, T16-076B, 10.1002/glia.70036
- Özgen N, Alamalhoda M, Nagy B, Cubero RJA, **Siegert S**, *"Sustained microglia loss during development results in light-ON retinal pathway alteration in adulthood"*, **GLIA**, Volume 73, Issue S1, E1-E1421, T16-069B, 10.1002/glia.70036

DATA SHARING/SOFTWARE/PUBLISHED DATASETS

- Uploaded 41,886 microglial reconstructions to the NeuroMorpho.org (version 8.4) database, a centrally curated inventory of digitally reconstructed neurons and glia.
  https://neuromorpho.org/
  (A top-20 finalist for the NIH HeroX DataWorks!Challenge Prize).

- Lab github webpage:
  - Pipeline for morphOMICs: https://git.ist.ac.at/rcubero/morphomics, see also: https://github.com/siegert-lab
  -
- Schulz R. Source Data (Chimeric GPCRs mimic distinct signaling pathways and modulate microglia responses). 2022. https://doi.org/10.15479/AT:ISTA:11542

INVITED PRESENTATIONS

6th Central European Biomedical Congress, Krakow, Poland (2025), **XVII European Meeting on Glial Cells in Health and Disease**, Marseille, France (2025); **Winter Neuroscience Conference**, Sölden, Austria (2025): **ESI seminar**, Frankfurt, Germany (2025); **MIT - 30th years of Tsai lab symposium**, Cambridge/MA, USA; **Newcastle University – Symposium: Neuroplasticity in Brain Health and Disease**, Newcastle-upon-Tyne, UK (2024); **Department of Pharmacology, University of Oxford**, Oxford, UK (2024); **NIN Symposium**, Amsterdaym, the Netherlands (2024); **Helmholtz Zentrum München**, München, Germany (2023); **NAD Symposium**, Copenhagen, Denmark (2023); **Cell Physics meeting**, Saarbrücken, Germany (2023); **European Microglia Webinar Series**, online (2023); **Microglia and Neuroinflammation**, Cambridge, UK (2023); **SFB/TRR 167**, online (2023); **CIPMM**, Homburg, Germany (2023); **Keystone Symposia**, Neuro-Immune Interactions in the CNS, Keystone, USA (2022); **Cell Symposia**, The biology of neuropsychiatric disorders, Sitges, USA (2022); **World Wide Neuro** Brain-Body-Interaction Virtual Seminar Series, online (2022); **MIT** Aging Brain Seminar Series, online (2022); **Pro RETINA**, Potsdam, Germany (2022); **Medical University of Vienna**, Vienna, Austria (2021); **University Bonn** "Biomedical vision seminar", Bonn, Germany (2021); **Society for Neuroscience** (SfN), Chicago, USA (2019); **Keystone Symposia** "Neuronal Environment in Disease: Glial responses and Neuroinflammation", Keystone, USA (2019); **Harvard** Neuroendocrine Dialogues – Special Seminar, Boston, USA (2019); **EPFL**, Campus biotech, Geneve, Switzerland (2019); **University of Zürich**, Brain Research Institute, Zürich, Switzerland (2018); **University Innsbruck**, Austria, (2018); **University Ulm**, Germany (2017); **World Congress of Psychiatric Genetics**, Jerusalem, Israel (2016); **VBC recess meeting**, Hernstein, Austria (2016).

OUTREACH ACTIVITIES (selected)

2023	Interview with Sylvia Unterdorfer, ORF, Oct 2023
2021	Interview with „Die Presse", Oct 2021
2020	„Krone der Wissenschaft" article on 25.02.2020: „Neue Verbindungen – ein zwölfköpfiges Team untersucht spezielle Immun- und Nervenzellen im Gehirn"
2019	TV interview in ORF III "Science.talk"
2018	Lecture at "WissensDurst Festival" in Vienna, Austria
2017	Interview with "Die Presse" for the section "Wissenschaft – Junge Forschung"
2017	Talk to Women's association of ÖVP in Lower Austria
Yearly	Open Campus, lab tours/ exhibition, Computer game "Mikroglia: Das Reparatur-Team des Auges", https://pub.ist.ac.at/~stst/Game/20190705_ISTAGAME/

TRAINING (selected)

2024	Psychological safety workshop (1 day)
2023	Hiring the right people for your lab (1 day)
2023	Negotiation training (3 days)
2021	(Stress-related) health issues of group members. How to create a health-promoting environment (1 day)
2018	EMBO Self-leadership workshop for women scientists
2017-2019	Follow-up trainings for ISTA faculty who have done the EMBO lab leadership training (1 or 1/2 day(s) each)
2015	Kaufman Teaching Certificate Program (KTCP) at MIT