



Julian Wolf, MD

Postdoctoral Scholar, Ophthalmology

Bio

HONORS AND AWARDS

- Two best presentation awards, German Society for Ophthalmology, 2021, German Society for Ophthalmology (10/2021)
- Henning-Zügel-Foundation Research Award, Henning-Zügel-Foundation (10/2021)

PROFESSIONAL EDUCATION

- Postdoctoral fellow, Omics Laboratory, Department of Ophthalmology, Byers Eye Institute, Stanford University
- Residency, University Eye Hospital Freiburg, Germany , Ophthalmology
- MD, University Bochum, Germany , Medicine (2020)
- Medical School, University Bochum, Germany , Medicine (2018)

STANFORD ADVISORS

- Vinit Mahajan, Postdoctoral Faculty Sponsor

LINKS

- Google Scholar Profile: <https://scholar.google.com/citations?user=LCz50XkAAAAJ&hl=de&oi=ao>
- Human Eye Transcriptome Atlas: <https://www.eye-transcriptome.com>
- ORCID: <https://orcid.org/0000-0002-3470-9697>

Publications

PUBLICATIONS

- **Single-Cell Protein and Transcriptional Characterization of Epiretinal Membranes From Patients With Proliferative Vitreoretinopathy.** *Investigative ophthalmology & visual science*
Laich, Y., Wolf, J., Hajdu, R. I., Schlecht, A., Bucher, F., Pauleikhoff, L., Busch, M., Martin, G., Faatz, H., Killmer, S., Bengsch, B., Stahl, A., Lommatzsch, et al
2022; 63 (5): 17
- **Transcriptional and Distributional Profiling of Microglia in Retinal Angiomatous Proliferation.** *International journal of molecular sciences*
Schlecht, A., Wolf, J., Boneva, S., Prinz, G., Braunger, B. M., Wieghofer, P., Agostini, H., Schlunck, G., Lange, C.
2022; 23 (7)
- **In-Depth Molecular Profiling Specifies Human Retinal Microglia Identity.** *Frontiers in immunology*
Wolf, J., Boneva, S., Rosmus, D. D., Agostini, H., Schlunck, G., Wieghofer, P., Schlecht, A., Lange, C.
2022; 13: 863158
- **Deciphering the Molecular Signature of Human Hyalocytes in Relation to Other Innate Immune Cell Populations.** *Investigative ophthalmology & visual science*

- Wolf, J., Boneva, S., Rosmus, D. D., Agostini, H., Schlunck, G., Wieghofer, P., Schlecht, A., Lange, C.
2022; 63 (3): 9
- **The Human Eye Transcriptome Atlas: A searchable comparative transcriptome database for healthy and diseased human eye tissue.** *Genomics*
Wolf, J., Boneva, S., Schlecht, A., Lapp, T., Auw-Haedrich, C., Lagrèze, W., Agostini, H., Reinhard, T., Schlunck, G., Lange, C.
2022; 114 (2): 110286
 - **[Web-based gene expression analysis-paving the way to decode healthy and diseased ocular tissue].** *Der Ophthalmologe : Zeitschrift der Deutschen Ophthalmologischen Gesellschaft*
Wolf, J., Lapp, T., Reinhard, T., Agostini, H., Schlunck, G., Lange, C.
2022
 - **Comparative transcriptome analysis of human and murine choroidal neovascularization identifies fibroblast growth factor inducible-14 as phylogenetically conserved mediator of neovascular age-related macular degeneration.** *Biochimica et biophysica acta. Molecular basis of disease*
Wolf, J., Schlecht, A., Rosmus, D. D., Boneva, S., Agostini, H., Schlunck, G., Wieghofer, P., Lange, C.
2022; 1868 (4): 166340
 - **Immunosenescence in Choroidal Neovascularization (CNV)-Transcriptional Profiling of Naïve and CNV-Associated Retinal Myeloid Cells during Aging.** *International journal of molecular sciences*
Schlecht, A., Thien, A., Wolf, J., Prinz, G., Agostini, H., Schlunck, G., Wieghofer, P., Boneva, S., Lange, C.
2021; 22 (24)
 - **In-Depth Molecular Characterization of Neovascular Membranes Suggests a Role for Hyalocyte-to-Myofibroblast Transdifferentiation in Proliferative Diabetic Retinopathy.** *Frontiers in immunology*
Boneva, S. K., Wolf, J., Hajdú, R. I., Prinz, G., Salié, H., Schlecht, A., Killmer, S., Laich, Y., Faatz, H., Lommatzsch, A., Busch, M., Bucher, F., Stahl, et al
2021; 12: 757607
 - **The role of interferon regulatory factor 8 for retinal tissue homeostasis and development of choroidal neovascularisation.** *Journal of neuroinflammation*
Zhang, P., Schlecht, A., Wolf, J., Boneva, S., Laich, Y., Koch, J., Ludwig, F., Boeck, M., Thien, A., Härdtner, C., Kierdorf, K., Agostini, H., Schlunck, et al
2021; 18 (1): 215
 - **Imaging mass cytometry for high-dimensional tissue profiling in the eye.** *BMC ophthalmology*
Schlecht, A., Boneva, S., Salie, H., Killmer, S., Wolf, J., Hajdu, R. I., Auw-Haedrich, C., Agostini, H., Reinhard, T., Schlunck, G., Bengsch, B., Lange, C. A.
2021; 21 (1): 338
 - **Subretinal fibrosis in neovascular age-related macular degeneration: current concepts, therapeutic avenues, and future perspectives.** *Cell and tissue research*
Tenbrock, L., Wolf, J., Boneva, S., Schlecht, A., Agostini, H., Wieghofer, P., Schlunck, G., Lange, C.
2021
 - **Time- and Stimulus-Dependent Characteristics of Innate Immune Cells in Organ-Cultured Human Corneal Tissue.** *Journal of innate immunity*
Zhuang, X., Schlunck, G., Wolf, J., Rosmus, D. D., Bleul, T., Luo, R., Böhringer, D., Wieghofer, P., Lange, C., Reinhard, T., Lapp, T.
2021: 1-14
 - **Characterization of the Cellular Microenvironment and Novel Specific Biomarkers in Pterygia Using RNA Sequencing.** *Frontiers in medicine*
Wolf, J., Hajdu, R. I., Boneva, S., Schlecht, A., Lapp, T., Wacker, K., Agostini, H., Reinhard, T., Auw-Hädlich, C., Schlunck, G., Lange, C.
2021; 8: 714458
 - **Viral S protein histochemistry reveals few potential SARS-CoV-2 entry sites in human ocular tissues.** *Scientific reports*
Martin, G., Wolf, J., Lapp, T., Agostini, H. T., Schlunck, G., Auw-Hädlich, C., Lange, C. A.
2021; 11 (1): 19140
 - **What is the significance of the conjunctiva as a potential transmission route for SARS-CoV-2 infections?** *Der Ophthalmologe : Zeitschrift der Deutschen Ophthalmologischen Gesellschaft*
Lange, C., Wolf, J., Auw-Haedrich, C., Schlecht, A., Boneva, S., Lapp, T., Agostini, H., Martin, G., Reinhard, T., Schlunck, G.
2021; 118 (Suppl 1): 85-88
 - **MACE RNA sequencing analysis of conjunctival squamous cell carcinoma and papilloma using formalin-fixed paraffin-embedded tumor tissue.** *Scientific reports*
Boneva, S., Schlecht, A., Zhang, P., Boehringer, D., Lapp, T., Mittelviehhaus, H., Reinhard, T., Auw-Haedrich, C., Schlunck, G., Wolf, J., Lange, C.
2020; 10 (1): 21292

- **Corneal tissue induces transcription of metallothioneins in monocyte-derived human macrophages.** *Molecular immunology*
Wolf, J., Zhuang, X., Hildebrand, A., Boneva, S., Schwämmle, M., Kammrath Betancor, P., Fan, J., Böhringer, D., Maier, P., Lange, C., Reinhard, T., Schlunck, G., Lapp, et al
2020; 128: 188-194
- **Transcriptional characterization of conjunctival melanoma identifies the cellular tumor microenvironment and prognostic gene signatures.** *Scientific reports*
Wolf, J., Auw-Haedrich, C., Schlecht, A., Boneva, S., Mittelveifhaus, H., Lapp, T., Agostini, H., Reinhard, T., Schlunck, G., Lange, C. A.
2020; 10 (1): 17022
- **3' MACE RNA-sequencing allows for transcriptome profiling in human tissue samples after long-term storage.** *Laboratory investigation; a journal of technical methods and pathology*
Boneva, S., Schlecht, A., Böhringer, D., Mittelveifhaus, H., Reinhard, T., Agostini, H., Auw-Haedrich, C., Schlunck, G., Wolf, J., Lange, C.
2020; 100 (10): 1345-1355
- **Expression of the COVID-19 receptor ACE2 in the human conjunctiva.** *Journal of medical virology*
Lange, C., Wolf, J., Auw-Haedrich, C., Schlecht, A., Boneva, S., Lapp, T., Horres, R., Agostini, H., Martin, G., Reinhard, T., Schlunck, G.
2020; 92 (10): 2081-2086
- **Transcriptional Profiling Uncovers Human Hyalocytes as a Unique Innate Immune Cell Population.** *Frontiers in immunology*
Boneva, S. K., Wolf, J., Rosmus, D. D., Schlecht, A., Prinz, G., Laich, Y., Boeck, M., Zhang, P., Hilgendorf, I., Stahl, A., Reinhard, T., Bainbridge, J., Schlunck, et al
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- **Temporospatial distribution and transcriptional profile of retinal microglia in the oxygen-induced retinopathy mouse model.** *Glia*
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2020; 68 (9): 1859-1873
- **Transcriptomic Characterization of Human Choroidal Neovascular Membranes Identifies Calprotectin as a Novel Biomarker for Patients with Age-Related Macular Degeneration.** *The American journal of pathology*
Schlecht, A., Boneva, S., Gruber, M., Zhang, P., Horres, R., Bucher, F., Auw-Haedrich, C., Hansen, L., Stahl, A., Hilgendorf, I., Agostini, H., Wieghofer, P., Schlunck, et al
2020; 190 (8): 1632-1642
- **RNA Sequencing of Formalin-Fixed and Paraffin-Embedded Tissue as a Complementary Method in Ophthalmopathology.** *Klinische Monatsblätter für Augenheilkunde*
Schlunck, G., Boneva, S., Wolf, J., Schlecht, A., Reinhard, T., Auw-Hädrich, C., Lange, C.
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- **[What is the importance of the conjunctiva as a potential transmission pathway for SARS-CoV-2 infections?]** *Der Ophthalmologe : Zeitschrift der Deutschen Ophthalmologischen Gesellschaft*
Lange, C., Wolf, J., Auw-Haedrich, C., Schlecht, A., Boneva, S., Lapp, T., Agostini, H., Martin, G., Reinhard, T., Schlunck, G.
2020; 117 (7): 626-630
- **Novel insights into retinal neovascularization secondary to central serous chorioretinopathy using 3D optical coherence tomography angiography.** *American journal of ophthalmology case reports*
Gruber, M., Wolf, J., Stahl, A., Ness, T., Scholl, H., Agostini, H., Maloca, P., Lange, C.
2020; 18: 100609
- **Secreted Phosphoprotein 1 Expression in Retinal Mononuclear Phagocytes Links Murine to Human Choroidal Neovascularization.** *Frontiers in cell and developmental biology*
Schlecht, A., Zhang, P., Wolf, J., Thien, A., Rosmus, D. D., Boneva, S., Schlunck, G., Lange, C., Wieghofer, P.
2020; 8: 618598