Thomas Höllt
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Professional Profile

05/2026–today	Professor, Vis group, University of Bergen, Bergen, Norway.
09/2022–04/2026	Assistant Professor - Tenured, Computer Graphics and Visualization, TU Delft, Delft, The Netherlands.
05/2020–09/2022	Assistant Professor - Tenure Track, Computer Graphics and Visualization, TU Delft, Delft, The Netherlands.
09/2018–04/2020	Assistant Professor - Tenure Track, Leiden Computational Biology Center, Leiden University Medical Center, Leiden, The Netherlands.
01/2017–08/2018	Assistant Professor - Tenure Track (Part Time), Leiden Computational Biology Center, Leiden University Medical Center, Leiden, The Netherlands.
01/2017–08/2018	Postdoctoral Fellow (Part Time), Computer Graphics and Visualization, TU Delft, Delft, The Netherlands.
05/2014–12/2016	Postdoctoral Fellow, Computer Graphics and Visualization, TU Delft, Delft, The Netherlands.
01/2014–02/2015	Research Consultant for Visualization, Red Sea Modeling and Prediction Group, King Abdullah University of Science and Technology, Thuwal, KSA.
05/2013–12/2013	Postdoctoral Fellow, GMSV (now Visual Computing Center), King Abdullah University of Science and Technology, Thuwal, KSA.
03/2010–04/2013	PhD Candidate, GMSV (now Visual Computing Center), King Abdullah University of Science and Technology, Thuwal, KSA.
02/2009–02/2010	Researcher, VRVis Research Center, Vienna, Austria.
09/2008–01/2009	Research Assistant, Arbeitsgruppe Computergraphik, Universität Koblenz Landau, Koblenz, Germany.

Guest Research Stays

05/2020–today	Guest Researcher, LKEB, Leiden University Medical Center, Leiden, The Netherlands.
09/2018–04/2020	Guest Researcher, Computer Graphics and Visualization, TU Delft, Delft, The Netherlands.
07/2013–08/2013	Visiting Researcher, Visualization Group, Vienna University of Technology, Vienna, Austria.
07/2012–08/2012	Visiting Researcher, SCI Institute, University of Utah, Salt Lake City, UT.

06/2012	Visiting Researcher, SimVis GmbH, Vienna, Austria.
07/2011–08/2011	Visiting Researcher, SCI Institute, University of Utah, Salt Lake City, UT.
06/2011	Visiting Researcher, SimVis GmbH, Vienna, Austria.
06/2010–08/2010	Guest Researcher, VRVis Research Center, Vienna, Austria.

Education

04/2013	Ph.D. Computer Science *Visual Workflows for Oil and Gas Exploration.* King Abdullah University of Science and Technology, KSA. Advisor: Markus Hadwiger. Committee Members: Charles D. Hansen, Ibrahim Hoteit, Helmut Pottmann, Ganesh Sundaramoorthi.
08/2008	Diplom Informatiker (M.Sc. Computer Science) *Direct Processing of Compressed Volume Data.* Universität Koblenz Landau, Germany. Advisors: Matthias Raspe, Stephan Müller.

Grants & Awards

Grants

Applicant, NVIDIA Academic Hardware Grant Program 2019. Amount awarded in kind in form of one NVIDIA TITAN V GPU. ≈2.000€

Co-applicant as *Young Talent*, NWO Gravitation 2018 - BRAINSCAPES. Amount indicates the LUMC part of a total of 19.654.000€ for the complete consortium. I am in charge of one PhD student on the LUMC side. 1.997.677€

Co-Applicant, NWO/TTW HTSM 2018 - Project 17126 Visual analytics for 3DOMICS. Amount is granted for several positions at LUMC who partly work under my direction on research and development in VA methodology for spatial single-cell analysis and one PhD student at TU Delft, who I will be co-promoting. 980.000€

Awards & Prizes

VRVis Visual Computing Award. Shared winner with Gaia Pavoni of ISTI-CNR. The VRVis Visual Computing Award highlights outstanding research work from Europe that uses visual computing to create sustainable solutions in line with the UN's 17 Sustainable Development Goals. Jury: Dieter Fellner, Ming C. Lin, Heidi Schumann, Anders Ynnerman, Anja Appel, Marco Kamiya, Kirsty Rancier. 2.500€

Honorable Mention for Best Paper Award at **International Symposium on Vision, Modeling, and Visualization** (VMV), Braunschweig, 2023.

Honorable Mention for Best Paper Award at **IEEE VIS**, Sydney, 2023.

Best Poster Award at **Visual Computing for Biology and Medicine** (VCBM), Vienna, 2022.

3rd Prize, Dirk Bartz Prize for Visual Computing in Medicine (Eurographics Medical Prize), Eurovis, Zurich, 2021.

1st Prize, Dirk Bartz Prize for Visual Computing in Medicine (Eurographics Medical Prize), Eurographics, Genova, 2019. 500€

Best Paper Award at **Visual Computing for Biology and Medicine** (VCBM), 2017.

Honorable Mention for Best Paper Award at the **IEEE Pacific Visualization** Symposium, Hong Kong, 2013.

KAUST Academic Excellence Award, 2013. $10.000

KAUST Academic Excellence Award, 2011. $10.000

Teaching

Coordination

2024–2026 Theme coordinator, Interactive Visual Analysis (IVA), MSc - Data Science and Artificial Intelligence Technology (DSAIT) - TU Delft.

Courses

2027 Responsible Lecturer, INF253: Visual Data Science, University of Bergen.

2024, 2025 Responsible Lecturer, DSAIT4080: 3D Visualization, MSc Data Science and Artificial Intelligence Technology (DSAIT), IVA theme, TU Delft.

2024, 2025 Responsible Lecturer, DSAIT4075: Data Visualization, MSc Data Science and Artificial Intelligence Technology (DSAIT), IVA theme, TU Delft.

2024, 2025 Co-Lecturer, DSAIT4000: Data Management and Engineering, MSc Data Science and Artificial Intelligence Technology (DSAIT), core, TU Delft.

2020–2024 Co-Lecturer, IN4310/DSAIT4215/CS4705: Research Seminar Computer Graphics, MSc Data Science and Artificial Intelligence Technology (DSAIT) and MSc Computer Science, TU Delft.

2020–2023 Responsible Lecturer, IN4086-14/IN4089: Data Visualization, MSc Computer Science, TU Delft.

2020–2023 Responsible Lecturer, IN4307: Medical Visualization, MSc Computer Science, TU Delft.

2018–2021 Co-Lecturer, TM11005: Advanced Image Processing, MSc Technical Medicine, TU Delft / Leiden University / Erasmus University Rotterdam.

2020–2026 I have served as mentor in the CSE1000 course and as coach and examiner in the CSE2000 and CSE3000 projects, part of the TU Delft Computer Science BSc education.

2011–2017 Teaching Assistant for various courses at King Abdullah University of Science and Technology and TU Delft.

Training

I have succesfully completed the dutch *Basiskwalifikatie Onderwijs* (University Teaching Qualification - UTQ) consisting of modules on developing, teaching, assessment, and supervision in educational activities.

PhD Supervision

ongoing PhD Co-Promotor for Chen-Chi Phan, TU Delft. *Visual Analytics for Cultural Heritage.*

2026 PhD Co-Promotor for Soumyadeep Basu, Leiden University Medical Center. *Comparative Visual Analytics for Multi-Modal Single-Cell and Spatial Omics Data.*

2026 PhD Co-Promotor for Chang Li, Leiden University Medical Center. *Visual Analytics for Whole-Brain Spatial Transcriptomics.*

2025 PhD Co-Promotor for Alexander Vieth, TU Delft. *Visual Analytics for High-Dimensional Images via Dimensionality Reduction.*

2025 PhD Co-Promotor for Faizan Siddiqui, TU Delft. *Fiber Tracking Uncertainty Visualization for Neurosurgery.* Now Business Data Analyst at TenneT.

2022 PhD Co-Promotor for Antonios Somarakis, Leiden University Medical Center. *Visual Analytics for Spatially Resolved Omics Data at Single Cell Resolution: Methods & Applications.* Now Assistant Computational Scientist at The Jackson Laboratory.

MSc Supervision

2025 Ravi Snellenberg. *Neighborhood-Preserving Dimensionality Reduction for Multivariate Volume Rendering.*

2025 Zixuan Han. *DimenFix–t-SNE: Fixed-dimension t-SNE for Visual Cluster Analysis.* (Publication: DimenFix: A novel meta-strategy to preserve user-defined data values on dimensionality reduction layouts).

2025 Yingkai Song. *Facilitating High-Dimensional Data Exploration With t-SNE Dynamics Visualization.*

2023 Jos Huigen. *Directionality of CSF-Mobility in the Human Subarachnoid and Perivascular Space.*

2022 Andra Popa. *VisuaLayered: Combined Visual Analysis of MA-XRF and RIS Data.* (Publication: Visual Analysis of RIS Data for Endmember Selection).

2022 Sjors Peterse. *Visualization of Fiber Tract Uncertainty During Neurosurgery.*

Professional Activities

Chairing and Committees

2024–today Steering Committee Member – Visual Computing for Biology and Medicine (VCBM).

2024–today Associate Editor – Computer Graphics Forum.

2020–today Publicity/Online Chair – Eurographics Association.

2026, 2027 Tutorial & Panels Chair – EuroVis.

2026 Program Committee – IEEE VIS.

2026 Posters Chair – IEEE VIS.

2025 Program Committee – EuroVis Dirk Bartz Prize.

2025 Jury – VRVis Visual Computing Award for application-oriented research with a focus on sustainable development.

2025 General Chair – Visual Computing for Biology and Medicine (VCBM).

2024	Full Paper Chair – Visual Computing for Biology and Medicine (VCBM).
2022, 2023	Short Paper Chair – Visual Computing for Biology and Medicine (VCBM).
2022, 2023	Short Paper Chair – EuroVis.
2022	Program Committee – Visualization in Biomedical AI.
2022	Program Committee – VisCHI.
2022–2024	Associate Editor – Frontiers in Bioinformatics – Data Visualization.
2021	Jury – Karl-Heinz-Höhne-Preis.
2021, 2022	General Chair – BioVis Challenge at IEEE VIS.
2020–2022	Program Committee – EuroVis State of the Art Reports.
2018–2021	Program Committee – Visual Computing for Biology and Medicine (VCBM).
2018	Program Committee – EuroVis Workshop on Reproducibility, Verification, and Validation in Visualization (EuroRVVV).
2018–2020	Program Committee – EuroVis Poster Track.
2018–2020	Abstracts Co-Chair – BioVis at ISMB.
2017–2024	Program Committee – Workshop on Visual Analytics in Healthcare (VAHC).
2017	Program Committee – Spring Conference on Computer Graphics (SCCG).
2013	Program Committee – International Symposium on Visual Computing.

Conference & Journal Reviewing

Nature Communications; IEEE Transactions on Visualization and Computer Graphics; IEEE Visualization Conference; Eurographics Conference on Visualization; IEEE Pacific Visualization Symposium; Computers & Graphics; Frontiers in Bioinformatics; Workshop on Visualization in Biomedical AI; VisCHI; International Workshop on Visual Analytics in Healthcare; EuroVis Workshop on Reproducibility, Verification, and Validation in Visualization; Visual Computing for Biology and Medicine; Spring Conference on Computer Graphics; International Workshop on Vision, Modeling and Visualization; International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision; Central European Seminar on Computer Graphics.

Selected Invited Talks & Lectures

1. *From Cellular Composition to Tissue Organization: Visual Analytics for Single-Cell and Spatial Data.* Keynote, Eurographics Workshop on Visual Computing for Biology and Medicine (VCBM 2026), Ljubljana, September 18, 2026.
2. *Visual Analytics for Spatially Resolved High-Dimensional Data – Methods and Applications in Biology.* Visualization and User Experience Seminar (VUES) on Spatial Biology, Harvard Medical School, November 19, 2024.

3. *Visual Analysis in Cell Biology.* Science Forum, Takeda Pharamaceuticals, Shonan iPark, May 25, 2023.
4. *Interactive Visual Exploration for Spatial Single-Cell Data.* Inserm Workshop 269 Methods for the Study and Analysis of in Situ Cellular Interactions by Highly Multiparametric Imaging, Bordeaux, October 5, 2022.
5. *Interactive Visual Exploration for Spatial Single-Cell Data.* Cytométrie 2018, 22^{e} congrès annuel de l'AFC, Strasbourg, October 7, 2021.
6. *Explorative Visual Analytics for Large Single-Cell Data.* Annual German Mass Cytometry Forum, Berlin, January 24, 2020.
7. *Exploration of Large Single-Cell Data with Cytosplore and HSNE.* Fluidigm Benelux Mass Cytometry User Group Meeting, Leiden, November 4, 2019.
8. *Dimensionality Reduction.* Invited Lecture, Ministerie van Infrastructuur en Waterstaat (IenW)., The Hague, April 24, 2019.
9. *Exploration of Large Single-Cell Data with Cytosplore and HSNE.* Cytométrie 2018, 22^{e} congrès annuel de l'AFC, Lyon, October 18, 2018.
10. *Exploration of Large Single-Cell Data with Cytosplore and HSNE.* ICG JKU Linz Lab Talk, Johannes Kepler Universität, Linz, March 30, 2018.
11. *Visualizing Large Single-Cell Data with HSNE.* BioSB HotTopics Meeting: Single Cell Analysis, Leiden University Medical Center, Leiden, September 21, 2017.
12. *Interactive Visual Analysis of Large CyTOF Single-Cell Data.* Department of Informatics, Visualization Group, University of Bergen, Norway, May 22, 2017.
13. *Cytosplore: Interactive Immune Cell Phenotyping for Large Singe-Cell Datasets.* VieVisDays 2016, Vienna Symposium on Visualization, TU Wien, Vienna, June 29, 2016.
14. *Interactive Phenotype Specification for Large Single Cell Datasets.* Netherlands eScience Center Symposium: The Science of Big-Data Analytics & Visualization, Utrecht, November 23, 2015.

Peer Reviewed Paper/Conference Talks

1. *Focus+Context Exploration of Hierarchical Embeddings.* EG/VGTC Conference on Visualization (EuroVis), June 6, 2019.
2. *Cytosplore: Interactive Visual Single-Cell Profiling of the Immune System.* Eurographics Conference, May 7, 2019.
3. *Interactive Visual Analysis of Mass Cytometry Data by Hierarchical Stochastic Neighbor Embedding Reveals Rare Cell Types.* ISMB/BioVis, July 9, 2018.
4. *CyteGuide: Visual Guidance for Hierarchical Single-Cell Analysis.* IEEE Visualization (InfoVis), October 10, 2017.
5. *Cytosplore: Interactive Immune Cell Phenotyping for Large Single-Cell Datasets.* EG/VGTC Conference on Visualization (EuroVis), June 8, 2016.

6. *Visual Analysis of Reservoir Simulation Ensembles.* Workshop on Visualisation in Environmental Sciences (EnvirVis), June 6, 2016.
7. *Probability Maps for the Visualization of Assimilation Ensemble Flow Data.* Workshop on Visualisation in Environmental Sciences (EnvirVis), May 26, 2015.
8. *Extraction and Visual Analysis of Seismic Horizon Ensembles.* Eurographics, May 8, 2013.
9. *Visual Analysis of Uncertainties in Ocean Forecasts for Planning and Operation of Off-Shore Structures.* IEEE Pacific Visualization, February 28, 2013.
10. *SeiVis: An Interactive Visual Subsurface Modeling Application.* IEEE Visualization (SciVis), October 18, 2012.
11. *Interactive Seismic Interpretation with Piecewise Global Energy Minimization.* IEEE Pacific Visualization, March 2, 2011.

Outreach

Media

2024	Creating order in chaos: data visualization, TU Delft Science Story: weblink.
2022	LUMC to help build most detailed atlas of human brain to date, LUMC press briefing: weblink.
2021	De motorische cortex van de hersenen gedetailleerd in kaart gebracht, LUMC press briefing: weblink.
2019	Examination of individual cells leads to new understanding of prenatal immune system, Dutch Research Council: weblink.
2017	New tool identifies a few cells among millions, Delta: weblink.
2017	New interactive technology makes rare cell types visible, TU Delft press briefing: weblink.

Software

ManiVault	My current main research platform. website, code.
Cytosplore	The Cytosplore project and corresponding software. website.
Ovis	Visual analysis of ocean forecasts, created during my PhD. website, code.

Publications

Preprints

1. Zeyang Huang, Angelos Chatzimparmpas, Thomas Höllt, and Takanori Fujiwara. **A Spectral Decomposition Framework for Multiscale Nonlinear Dimensionality Reduction**, *arXiv*, 2026. DOI: 10.48550/arXiv.2604.02535.

Peer Reviewed Journal & Conference Papers

2. Shu Dan, Meghan A. Turner, Michael DeBerardine, Lakme Caceres, Victor E. Nieto-Caballero, Jessica Schembri, Kirsten Levandowski, Christopher Cardenas, et al. **Spatial and regulatory organization of cell identity across the primate subcortex**, *Cell*, 189(23), pp. 7471–7491.e10, 2026. DOI: 10.1016/j.cell.2026.10.007.

3. Madeleine N. Hewitt, Meghan A. Turner, Nelson Johansen, Delissa A. McMillen, Shu Dan, Michael DeBerardine, Augustin Ruiz, Mike Huang, et al. **Spatial transcriptomics reveals molecular organization of human and nonhuman primate basal ganglia**, *Cell*, 189(23), pp. 7330–7349.e9, 2026. DOI: 10.1016/j.cell.2026.10.023.

4. Chang Li, Julian Thijssen, Thomas Kroes, Lisa Koorneef, Thomas Höllt, Louise van der Weerd, and Boudewijn Lelieveldt. **PathwayFinder enables linked exploration of cell types and gene modules in spatially resolved transcriptomics data**, *Cell iScience*, 29(11), p. 118043, 2026. DOI: 10.1016/j.isci.2026.118043.

5. Qinyue Jiang, Veerle A. Merkus, Ciska Lindelauf, Jens Krijgsman, Nannan Guo, Laura F. Ouboter, Thomas Höllt, Philip W. Voorneveld, Caroline R. Meijer-Boekel, Frits Koning, Andrea E van der Meulen-de Jong, Maria Fernanda Pascutti, and Vincent van Unen. **Tissue-embedded CD4+ plasticity defines mucosal immunity in inflammatory bowel disease**, *Mucosal Immunology*, p. 100369, 2026. DOI: 10.1016/j.mucimm.2026.100369.

6. Zixuan Han, Diede van der Hoorn, Thomas Höllt, Qiaodan Luo, Leonardo Christino, Evangelos Milios, and Fernando Paulovich. **DimenFix: A novel meta-strategy to preserve user-defined data values on dimensionality reduction layouts**, *Computers and Graphics*, 130, p. 104231, 2025. DOI: 10.1016/j.cag.2025.104231.

7. Katja Bühler, Thomas Höllt, Thomas Schultz, and Pere-Pau Vázquez. **AI-in-the-Loop: The Future of Biomedical Visual Analytics Applications in the Era of AI**, *Computer Graphics and Applications*, 45, pp. 90–99, 2025. DOI: 10.1109/MCG.2024.3517293.

8. Chang Li, Julian Thijssen, Thomas Kroes, Ximaine van der Burg, Louise van der Weerd, Thomas Höllt, and Boudewijn Lelieveldt. **GeneSurfer enables transcriptome-wide exploration and annotation of gene co-expression modules in 3D spatial transcriptomics data**, *Cell iScience*, 28(7), p. 112713, 2025. DOI: 10.1016/j.isci.2025.112713.

9. Soumyadeep Basu, Morgan Wirthlin, Jeroen Eggermont, Thomas Kroes, Boudewijn Lelieveldt, Ed S. Lein, Trygve E. Bakken, and Thomas Höllt. **Cytosplore EvoViewer: Visual Analytics of Conserved Evolutionary Patterns in multi-species single-cell sequencing data**, In *Proceedings of the 18th IEEE Pacific Visualization Symposium*, pp. 149–159, 2025. DOI: 10.1109/PacificVis64226.2025.00021.

10. Faizan Siddiqui, H. Bart Brouwers, Geert-Jan Rutten, Thomas Höllt, and Anna Vilanova. **Effect of White Matter Uncertainty Visualization in Neurosurgical Decision Making**, *Computer Graphics and Applications*, pp. 1–16, 2024. DOI: 10.1109/MCG.2024.3462926.

11. Martin Skrodzki, Hunter van Geffen, Nicolas F. Chaves-de-Plaza, Thomas Höllt, Elmar Eisemann, and Klaus Hildebrandt. **Accelerating Hyperbolic t-SNE**, *IEEE Transactions on Visualization and Computer Graphics*, 2024. DOI: 10.1109/TVCG.2024.3364841.

12. Alexander Vieth, Thomas Kroes, Julian Thijssen, Baldur van Lew, Jeroen Eggermont, Soumyadeep Basu, Elmar Eisemann, Anna Vilanova, Thomas Höllt, and Boudewijn Lelieveldt. **ManiVault: A Flexible and Extensible Visual Analytics Framework for High-Dimensional Data**, *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS 2023)*, 30(2), 2024. **Best Paper Honorable Mention**. DOI: 10.1109/TVCG.2023.3326582.

13. Alexander Vieth, Boudewijn Lelieveldt, Elmar Eisemann, Anna Vilanova, and Thomas Höllt. **Interactions for Seamlessly Coupled Exploration of High-Dimensional Images and Hierarchical Embeddings**, In *Proceedings of the International Symposium on Vision, Modeling, and Visualization*, pp. 63–70, 2023. **Best Paper Honorable Mention**. DOI: 10.2312/vmv.20231227.

14. Soumyadeep Basu, Jeroen Eggermont, Thomas Kroes, Nikolas Jorstad, Trygve Bakken, Ed Lein, Boudewijn Lelieveldt, and Thomas Höllt. **Cytosplore Simian Viewer: Visual Exploration for Multi-Species Single-Cell RNA Sequencing Data**, In *Eurographics Workshop on Visual Computing in Biology and Medicine*, pp. 111–120, 2023. DOI: 10.2312/vcbm.20231219.

15. Faizan Siddiqui, Thomas Höllt, and Anna Vilanova. **Interactive Visual Exploration of Region-Based Sensitivities in Fiber Tracking**, In *Eurographics Workshop on Visual Computing in Biology and Medicine*, pp. 13–22, 2023. DOI: 10.2312/vcbm.20231208.

16. Chang Li, Julian Thijssen, Thomas Kroes, Mitchell de Boer, Tamim Abdelaal, Thomas Höllt, and Boudewijn Lelieveldt. **SpaceWalker Enables Interactive Gradient Exploration for Spatial Transcriptomics Data**, *Cell Reports Methods*, 2023. DOI: 10.1016/j.crmeth.2023.100645.

17. Nikolas L. Jorstad, Janet H.T. Song, David Exposito-Alonso, Hamsini Suresh, Nathan Castro-Pacheco, Fenna M. Krienen, Anna Marie Yanny, Jennie Close, et al. **Comparative transcriptomics reveals human-specific cortical features**, *Science*, 382, p. eade9516, 2023. DOI: 10.1126/science.ade9516.

18. Andra Popa, Francesca Gabrieli, Thomas Kroes, Anna Krekeler, Matthias Alfeld, Boudewijn Lelieveldt, Elmar Eisemann, and Thomas Höllt. **Visual Analysis of RIS Data for Endmember Selection**, In *Proceedings of Eurographics Workshop on Graphics and Cultural Heritage Short Papers*, 2022. DOI: 10.2312/gch.20221233.

19. Alexander Vieth, Anna Vilanova, Boudewijn Lelieveldt, Elmar Eisemann, and Thomas Höllt. **Incorporating Texture Information into Dimensionality Reduction for High-Dimensional Images**, In *Proceedings of the 15th IEEE Pacific Visualization Symposium*, pp. 11–20, 2022. DOI: 10.1109/PacificVis53943.2022.00010.

20. Vincent van Unen, Laura F. Ouboter, Na Li, Mette Schreurs, Tamim Abdelaal, Yvonne Kooy-Winkelaar, Guillaume Beyrend, Thomas Höllt, et al. **Identification of a Disease-Associated Network of Intestinal Immune Cells in Treatment-Naive Inflammatory Bowel Disease**, *Frontiers in Immunology*, 12, 2022. DOI: 10.3389/fimmu.2022.893803.

21. Boyd Kenkhuis, Antonios Somarakis, Lynn R.T. Kleindouwel, Willeke M.C. van Roon-Mom, Thomas Höllt, and Louise van der Weerd. **Co-expression patterns of microglia markers Iba1, TMEM119 and P2RY12 in Alzheimer's disease**, *Neurobiology of Disease*, 167, p. 105684, 2022. DOI: 10.1016/j.nbd.2022.105684.

22. Ziena Abdulrahman, Saskia J. Santegoets, Gregor Sturm, Pornpimol Charoentong, Marieke E. Ijsselsteijn, Antonios Somarakis, Thomas Höllt, Francesca Finotello, Zlatko Trajanoski, Sylvia L. van Egmond, Dana A. M. Mustafa, Marij J. P. Welters, Noel F.C.C. De Miranda, and Sjoerd H. van der Burg. **Tumor-specific T cells support chemokine-driven spatial organization of intratumoral immune microaggregates needed for long survival**, *Journal for ImmunoTherapy of Cancer*, 10(2), p. e004346, 2022. DOI: 10.1136/jitc-2021-004346.

23. Trygve E. Bakken, Nikolas L. Jorstad, Qiwen Hu, Blue B. Lake, Wei Tian, Brian E. Kalmbach, Megan Crow, Rebecca D. Hodge, et al. **Comparative cellular analysis of motor cortex in human, marmoset and mouse**, *Nature*, 598, pp. 111–119, 2021. DOI: 10.1038/s41586-021-03465-8.

24. Marieke E. Ijsselsteijn, Antonios Somarakis, Boudewijn Lelieveldt, Thomas Höllt, and Noel F.C.C. De Miranda. **Semi-Automated Background Removal Limits Loss of Data and Normalises the Images for Downstream Analysis of Imaging Mass Cytometry Data**, *Cytometry Part A*, 99(12), pp. 1187–1197, 2021. DOI: 10.1002/cyto.a.24480.

25. Faizan Siddiqui, Thomas Höllt, and Anna Vilanova. **A Progressive Approach for Uncertainty Visualization in Diffusion Tensor Imaging**, *Computer Graphics Forum (Proceedings of EuroVis 2021)*, 40(3), pp. 411–422, 2021. DOI: 10.1111/cgf.14317.

26. Antonios Somarakis, Marieke E. Ijsselsteijn, Boyd Kenkhuis, Vincent van Unen, Sietse J. Luk, Frits Koning, Louise van der Weerd, Noel F.C.C. De Miranda, Boudewijn Lelieveldt, and Thomas Höllt. **Visual Analysis of Tissue Images at Cellular Level**, In *EuroVis 2021 - Dirk Bartz Prize*, pp. 1–5, 2021. **3rd Prize, Dirk Bartz Prize for Visual Computing in Medicine 2021**. DOI: 10.2312/evm.20211074.

27. Sanne E. de Jong, Vincent van Unen, Mikhael D. Manurung, Koen A. Stam, Jelle J. Goeman, Simon P. Jochems, Thomas Höllt, Nicola Pezzotti, et al. **Systems Analysis and Controlled Malaria Infection in Europeans and Africans Elucidate Naturally Acquired Immunity**, *Nature Immunology*, 2021. DOI: 10.1038/s41590-021-00911-7.

28. Boyd Kenkhuis, Antonios Somarakis, Lorraine de Haan, Oleh Dzyubachyk, Marieke E. Ijsselsteijn, Noel F.C.C. De Miranda, Boudewijn Lelieveldt, Willeke M. C. van Roon-Mom, Thomas Höllt, and Louise van der Weerd. **Iron Loading is a Prominent Feature of Activated Microglia in Alzheimer's Disease Patients**, *Acta Neuropathologica Communications*, 27, Chapter 9, 2021. DOI: 10.1186/s40478-021-01126-5.

29. Thomas Ortner, Andreas Walch, Rebecca Nowak, Robert Barnes, Thomas Höllt, and Meister Eduard Gröller. **InCorr: Interactive Data-Driven Correlation Panels for Digital Outcrop Analysis**, *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VAST 2020)*, 27(2), 2021. DOI: 10.1109/TVCG.2020.3030409.

30. Antonios Somarakis, Marieke E. Ijsselsteijn, Sietse J. Luk, Boyd Kenkhuis, Noel F.C.C. De Miranda, Boudewijn Lelieveldt, and Thomas Höllt. **Visual Cohort Comparison for Spatial Single-Cell Omics-Data**, *IEEE*

Transactions on Visualization and Computer Graphics (Proceedings of IEEE VAST 2020), 27(2), 2021. DOI: 10.1109/TVCG.2020.3030336.

31. Antonios Somarakis, Vincent van Unen, Frits Koning, Boudewijn Lelieveldt, and Thomas Höllt. **ImaCytE: Visual Exploration of Cellular Microenvironments for Imaging Mass Cytometry Data**, *IEEE Transactions on Visualization and Computer Graphics*, 27(1), pp. 98–110, 2021. DOI: 10.1109/TVCG.2019.2931299.

32. Anita van der Zwan, Vincent van Unen, Guillaume Beyrend, Sandra Laban, Carin van der Keur, Hanneke J. M. Kapsenberg, Thomas Höllt, Susana M. Chuva de Sousa Lopes, Marie-Louise P. van der Hoorn, Frits Koning, Frans H. J. Claas, Michael Eikmans, and Sebastiaan Heidt. **Visualizing Dynamic Changes at the Maternal-Fetal Interface Throughout Human Pregnancy by Mass Cytometry**, *Frontiers in Immunology*, 11(571300), 2020. DOI: 10.3389/fimmu.2020.571300.

33. Karin de Ruiter, Simon P. Jochems, Dicky L. Tahapary, Koen A. Stam, Marion König, Vincent van Unen, Sandra Laban, Thomas Höllt, Moustapha Mbow, Boudewijn Lelieveldt, Frits Koning, Erliyani Sartono, Johannes W. A. Smit, Taniawati Supali, and Maria Yazdanbakhsh. **Helminth Infections Drive Heterogeneity in Human Type 2 and Regulatory Cells**, *Science Translational Medicine*, 12(524), p. eaaw3703, 2020. DOI: 10.1126/scitranslmed.aaw3703.

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