

Curriculum vitae Prof. Dr. Frederick Klauschen

Personal Information		Contact
Name	Frederick Klauschen	Institutes of Pathology, Ludwig-Maximilians-Universität München
Birthdate	2 nd July 1974	
Nationality	German	

Research Interests

Systems biological integration of proteogenomic profiles and analysis of histological images through bioinformatics and machine learning/artificial intelligence with the goal to better understand and predict pathological mechanisms in tumors and finally, to better diagnose and treat cancer.

Professional Memberships

German Pathological Society, International Academy of Pathology, German Physical Society

Professional Employment

Since 2021	Professor of pathology (W3), Director & Chair, Institute of Pathology, Ludwig-Maximilians-Universität München & Fellow, Berlin Institute for the Foundations of Learning and Data (BIFOLD)
2019 - 2021	Professor of molecular pathology (W2), Deputy Director Institute of Pathology, Charité Universitätsmedizin Berlin
2016 - 2019	Professor of molecular pathology (W2), senior consultant pathologist and associate director, Institute of Pathology, Charité Universitätsmedizin Berlin
2009- 2016	Group leader and junior pathologist, Charité Universitätsmedizin Berlin, Institute of Pathology, Berlin, Germany
2004-2009	Postdoctoral Fellow, Computational Systems Biology, National Institutes of Health (NIH), Bethesda USA

Education

2013	Habilitation / Venia legendi in Experimental Pathology, Charité
2005	Master of Science in physics (Diplom-Physiker), II. Institut für Theoretische Physik, University of Hamburg
2004	Dr. med. Dissertation, University of Lübeck
2004	Bachelor of Science in physics, University of Hamburg, Germany
2004	License to practice medicine (Approbation)
2001	Graduation from medical school

Awards

2012	Novartis Pathology-Oncology Award
2011	Human Frontier Science Program Young Investigator Award
2004	NIH Postdoctoral Fellowship Award

Professional Service

Scientific Board	German Cancer Consortium DKTK-Master clinical sequencing program
Member	Scientific Committee, Global Congress on Molecular Pathology 2017
Chair	Scientific Committee, European Congress on Digital Pathology 2016

President	European Congress on Digital Pathology 2022
Steering Committee Member	Berlin Institute of Health Platform for Digital Medicine
Steering Committee Member	National Network Genomic Medicine

Number of Citations (According to Google Scholar, as of March 2022)

<https://scholar.google.com/citations?user=yqaK-D8AAAAJ&hl=en>

	All	Since 2017
Citations	15421	12066
h-Index	49	43
i10-Index	107	95

Five Recent Publications

[FKr1]	Binder A, Bockmayr M, Hägele M, Wienert S, Heim D, Hellweg K, Ishii M, Stenzinger A, Hocke A, Denkert C, Müller KR & Klauschen F. Morphological and molecular breast cancer profiling through explainable machine learning. <i>Nature Mach Intel</i> , 2021.
[FKr2]	Jurmeister P, Bockmayr M, Seegerer P, Bockmayr T, Treue D, Montavon G, Vollbrecht C, Arnold A, Teichmann D, Bressemer K, Schüller U, von Laffert M, Müller KR, Capper D, Klauschen F. Machine learning analysis of DNA methylation profiles distinguishes primary lung squamous cell carcinomas from head and neck metastases. <i>Science Transl Med</i> . 2019 Sep 11;11(509).
[FKr3]	Mamlouk S, Childs LH, Aust D, Heim D, Melching F, Oliveira C, Wolf T, Durek P, Schumacher D, Bläker H, von Winterfeld M, Gastl B, Möhr K, Menne A, Zeugner S, Redmer T, Lenze D, Tierling S, Möbs M, Weichert W, Folprecht G, Blanc E, Beule D, Schäfer R, Morkel M, Klauschen F, Leser U, Sers C. DNA copy number changes define spatial patterns of heterogeneity in colorectal cancer. <i>Nat Commun</i> . 2017 Jan 25;8:14093.
[FKr4]	Mondor I, Jorquera A, Sene C, Adriouch S, Adams RH, Zhou B, Wienert S, Klauschen F, Bajénoff M. Clonal Proliferation and Stochastic Pruning Orchestrate Lymph Node Vasculature Remodeling. <i>Immunity</i> . 2016 Oct 18;45(4):877-888.
[FKr5]	Klauschen F, Wienert S, Schmitt WD, Loibl S, Gerber B, Blohmer JU, Huober J, Rüdiger T, Erbstöber E, Mehta K, Lederer B, Dietel M, Denkert C, von Minckwitz G. Standardized Ki67 Diagnostics Using Automated Scoring—Clinical Validation in the GeparTrio Breast Cancer Study. <i>Clin Cancer Res</i> . 2015 Aug 15;21(16):3651-7.

Five Highly Cited Publications

[FKi1]	SAP-controlled T–B cell interactions underlie germinal centre formation H Qi, JL Cannons, F Klauschen, PL Schwartzberg, RN Germain <i>Nature</i> 455 (7214), 764-769.
[FKi2]	Cancer beyond organ and tissue specificity: Next-generation-sequencing gene mutation data reveal complex genetic similarities across major cancers D Heim, J Budczies, A Stenzinger, D Treue, P Hufnagl, C Denkert, F Klauschen. <i>International journal of cancer</i> 135 (10), 2362-2369.
[FKi3]	Sphingosine-1-phosphate mobilizes osteoclast precursors and regulates bone homeostasis M Ishii, JG Egen, F Klauschen, M Meier-Schellersheim, Y Saeki, J Vacher, RN Germain. <i>Nature</i> 458 (7237), 524-528.
[FKi4]	On pixel-wise explanations for non-linear classifier decisions by layer-wise relevance propagation S Bach, A Binder, G Montavon, F Klauschen, KR Müller, W Samek <i>PloS one</i> 10 (7), e0130140.

[FKi5]	A systems analysis identifies a feedforward inflammatory circuit leading to lethal influenza infection M Brandes, F Klauschen, S Kuchen, RN Germain Cell 154 (1), 197-212 Computational modeling of cellular signaling processes embedded into dynamic spatial contexts BR Andeutschn, F Klauschen, AD Garcia, T Prustel, F Zhang, RN Germain, M. Meier-Schellersheim. Nature Methods 9 (3), 283-289.
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