

## Personal Data

Title	Prof. Dr. rer. nat, Dipl.-Inform. Med.
First name	<b>Ulrich</b>
Name	<b>Sax</b>
Current position	W2 Professor Medical Informatics (permanent position)
Current institution	Deputy Head of Department of Medical Informatics University Medical Center Göttingen (UMG)
ORCID	<a href="http://orcid.org/0000-0002-8188-3495">http://orcid.org/0000-0002-8188-3495</a>

## Qualifications and Career

### Degree programme

1990-1995	Studies of Medical Informatics, Dipl.-Inform. Med Ruprecht-Karls University Heidelberg
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### Doctorate

2002	Dr. rer. nat. in Medical Informatics, Georg-August University Göttingen
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## Academic & Professional Experience

Since 2011	Head of WG Infrastructure for Translational Research, Dept. of Medical Informatics, University Medical Center Göttingen (UMG)
2011	Appointed Professor in Medical Informatics (W2), University of Göttingen
2005-2011	Assistant Professor Medical Informatics (W1), University of Göttingen
2009-2014	Head of information technology, University Medical Center Göttingen
2005-2009	Head of the CIO Medical Research Networks, Dept. of Medical Informatics, University Medical Center Göttingen (UMG)
2003-2005	Postdoctoral Research Fellow, Harvard Medical School, Children's HST Informatics Program (CHIP), Harvard-MIT Division of Health Sciences & Technology, Boston, MA, USA
2002	Certificate "Medical Informatics" Gesellschaft für Informatik (GI) und Deutsche Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (GMDS)
2002	Dr. rer. nat. in Medical Informatics, University of Göttingen
1999-2003	Research Associate and Postdoctoral Research Scientist, Medical Computing Center, Georg-August-University, Göttingen
1995-1998	Medical Informaticist, Head of IT-Department, St. Josef-Hospital, Regensburg, Germany
1995	Diploma in Medical Informatics, Ruprecht-Karl Universität Heidelberg

## Supplementary Career Information

### Information on circumstances that might have impaired scientific work:

2009-2014	Head of UMG Medical Computing Center, service-heavy position
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## Research Focus and Key Technology

- Integration and visualization of clinical data in healthcare and biomarkers in biomedical informatics research
- Firsthand experience of heading two IT-departments in patient care and research
- Privacy and security aspects in Biomedical informatics
- Electronic Patient Records, Personal Health Records

## Engagement in the Research System

Since 2017	Member of board of directors of the i2b2/tranSMART foundation
2017-2021	Speaker of the Interoperability working group of the national steering committee of the BMBF Medical Informatics Initiative Germany

- Since 2016 Serving in the SAB for the ZB MED (Deutsche Zentralbibliothek für Medizin - Informationszentrum Lebenswissenschaften Bonn)
- Since 2016 Member executive board of the German Association for Medical Informatics, Biometry and Epidemiology (GMDS) e. V.
- Since 2015 Reviewer for the German Council of Science and Humanities (Wissenschaftsrat)
- Since 2010 Expert panel of the German Medical Informatics Association (GMDS and GI)
- Since 2008 Speaker of the WG IT and Quality Management, Technologie- und Methodenplattform für die vernetzte medizinische Forschung (TMF), Berlin

### Scientific Results - Category A

1. Mansmann U, Locher C, Prasser F, Weissgerber T, Sax U, Posch M, u. a. Implementing clinical trial data sharing requires training a new generation of biomedical researchers. *Nat Med.* Februar 2023;29(2):298–301.
2. Haber AC, Sax U, Prasser F, the NFDI4Health Consortium. Open tools for quantitative anonymization of tabular phenotype data: literature review. *Brief Bioinform.* 10. Oktober 2022;bbac440
3. Emons, G., Auslander, N., Jo, P., Kitz, J., Azizian, A., Hu, Y., Hess, C.F., Roedel, C., Sax, U., Salinas, G., Stroebel, P., Kramer, F., Beissbarth, T., Grade, M., Ghadimi, M., Ruppig, E., Ried, T., Gaedcke, J., 2022. Gene-expression profiles of pretreatment biopsies predict complete response of rectal cancer patients to preoperative chemoradiotherapy. *Br J Cancer.* <https://doi.org/10.1038/s41416-022-01842-2>
4. Borchert, F., Mock, A., Tomczak, A., Hügel, J., Alkarkoukly, S., Knurr, A., Volckmar, A.-L., Stenzinger, A., Schirmacher, P., Debus, J., Jäger, D., Longerich, T., Fröhling, S., Eils, R., Bougatf, N., Sax, U., Schapranow, M.-P., 2021. Knowledge bases and software support for variant interpretation in precision oncology. *Briefings in Bioinformatics.* <https://doi.org/10.1093/bib/bbab246>
5. NFDI4Health Task Force COVID-19, Schmidt, C.O., Darms, J., Shutsko, A., Löbe, M., Nagrani, R., Seifert, B., Lindstädt, B., Golebiewski, M., Koleva, S., Bender, T., Bauer, C.R., Sax, U., Hu, X., Lieser, M., Junker, V., Klopfenstein, S., Zeleke, A., Waltemath, D., Pigeot, I., Fluck, J., 2021. Facilitating Study and Item Level Browsing for Clinical and Epidemiological COVID-19 Studies, in: Mantas, J., Stoicu-Tivadar, L., Chronaki, C., Hasman, A., Weber, P., Gallos, P., Crişan-Vida, M., Zoulias, E., Chirila, O.S. (Eds.), *Studies in Health Technology and Informatics.* IOS Press. <https://doi.org/10.3233/SHTI210284>
6. Bender, T., Parciak, M., Suhr, M., Sax, U., Bauer, C.R., 2021a. Sustainable Deployment of Research Infrastructure Components. 65th Annual Meeting of the German Association for Medical Informatics Biometry and Epidemiology, AustroSwiss Region and Polish Region) of the International Biometric Society (IBS). <https://doi.org/10.3205/20GMDS162>
7. Bender, T., Seidler, T., Bengel, P., Sax, U., Krefting, D., 2021b. Application of Pre-Trained Deep Learning Models for Clinical ECGs. *German Medical Data Sciences 2021: Digital Medicine: Recognize – Understand – Heal* 39–45. <https://doi.org/10.3233/SHTI210539>
8. Kirsten, T., Richter, A., Schmidt, C.O., Drepper, J., Kuntz, A.S., Kusch, H., Intemann, T., Semler, S.C., Ahrens, W., Sax, U., 2021. The FAIR Record Linkage Challenge in NFDI4Health. *German Medical Science GMS Publishing House*, p. DocAbstr. 166. <https://doi.org/10.3205/21gmds005>
9. NFDI4Health Task Force COVID-19, Schmidt, C.O., Darms, J., Shutsko, A., Löbe, M., Nagrani, R., Seifert, B., Lindstädt, B., Golebiewski, M., Koleva, S., Bender, T., Bauer, C.R., Sax, U., Hu, X., Lieser, M., Junker, V., Klopfenstein, S., Zeleke, A., Waltemath, D., Pigeot, I., Fluck, J., 2021. Facilitating Study and Item Level Browsing for Clinical and Epidemiological COVID-19 Studies, in: Mantas, J., Stoicu-Tivadar, L., Chronaki, C., Hasman, A., Weber, P., Gallos, P., Crişan-Vida, M., Zoulias, E., Chirila, O.S. (Eds.),

Studies in Health Technology and Informatics. IOS Press.

<https://doi.org/10.3233/SHTI210284>

10. Umbach N, Beißbarth T, Bleckmann A, Duttge G, Flatau L, König A, [...] Sax U Clinical application of genomic high-throughput data: Infrastructural, ethical, legal and psychosocial aspects. *European neuropsychopharmacology : the journal of the European College of Neuropsychopharmacology*. 2020;31:1–15.

### Category B

- Curatorium TMF ToolPool health research as Head of the TMF working group on IT and Quality Management (ITQM): <https://www.toolpool-gesundheitsforschung.de/index.php/>
- Co-Organizing the i2b2 tranSMART EU user group as member of the ib2b tranSMART foundation board of directors 2013-2020

### Academic Distinctions

2003-2005 Postdoctoral research fellow, Children's Hospital Informatics Program, Harvard-MIT Division of Health Sciences & Technology und Harvard Medical School, Boston, MA, USA

2002 Certificate of Medical Informatics (GMDS and GI)

### Other Information: Third-Party-Funding

Title	Agency	Duration	
Verbund FAIRPaCT – Förderiertes Framework für künstliche Intelligenz zur Optimierung der Behandlung von Bauchspeicheldrüsenkrebs - Standort Universität Göttingen 01KD2208A	BMBF	2023 – 2027	
DALIA: Knowledge-Base for „FAIR data usage and supply“ as Knowledge-Graph	BMBF	2023 - 2027	
CRU5002 Biomedical Informatics Support Platform (BISP) - provides IT structures and pipelines to store, exchange and integrate the numerous phenotypic, genomic and functional data generated in SP1-7 and CP1.	DFG	2020 - 2024	
NFDI4health – A concept for a federated research data infrastructure for personal health data; head of TA6 Privacy and Data Access in Concert; DFG - Projektnummer 442326535	DFG	2020-2025	
NFDI4Health – Task Force COVID-19: Better understanding the COVID-19 outbreak and its consequences through integrated and harmonised research efforts	DFG	2020-2024	
MTBReport - An automated data Integration platform for interpreting genomic data and reporting treatment options in molecular tumor boards (MTB-Report)	Volkswagen-Stiftung	2019 - 2023	
NMDR2 - Weiterentwicklung und Etablierung des Nationalen Metadata Repositories (NMDR) Phase 2 315072261 (SA 1009/3-2)	DFG via TMF	2020 - 2023	
HiGHmed - Medizininformatik - Bessere Patientenversorgung und Forschung durch innovativen Informations- und Datenaustausch Beitrag Universitätsmedizin Göttingen (head of 2 WPs)	BMBF	2018 - 2022	
SysInflame –Teilprojekt CP10 01ZX1606C: „Forschungsdatenmanagement/ Bioinformatik – Ein Werkzeug für Systemmedizin“	BMBF E:med	2014 - 2019	
MyPathSem – Teilprojekt 2 FKZ 031L0024A: „A knowledge base for integrating patient-specific pathways for individualized treatment decisions in clinical applications“	BMBF i:DSem	2016 - 2019	

Title	Agency	Duration	
Forschung ELSA Systemmedizin: GenoPerspektiv - Zum Umgang mit genomischen Hochdurchsatzdaten: die Perspektiven von Klinik, Ethik, Recht und biomedizinischer Informationstechnologie, Teilprojekte 1, 3, 4 und 5	BMBF	2014 - 2017	
Development of statistical and computational methods, tools, and infrastructure as well as data analysis, data management, and support for clinical researchers (KFO179); head of TP08; DFG, FKZ BR655/15	DFG	2007 - 2017	

### Data protection and consent to the processing of optional data

If you provide voluntary information (marked as optional) in this CV, your consent is required. Please confirm your consent by checking the box below.

I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data”<sup>1</sup> in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG ([postmaster@dfg.de](mailto:postmaster@dfg.de)). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimation under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at [www.dfg.de/privacy\\_policy](http://www.dfg.de/privacy_policy) and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

<sup>1</sup> Special categories of personal data are those “revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and (...) genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person’s sex life or sexual orientation” (Article 9(1) GDPR).