

ANNA KÖTTGEN

M.D., M.P.H., née HOPF

CURRICULUM VITAE

PERSONAL INFORMATION

Professor und Institute Director

Institute of Epidemiology and Prevention
Medical Center – University of Freiburg
Hugstetter Str. 49, 79106 Freiburg
Germany

Professor - Adjunct

Dept. of Epidemiology
Johns Hopkins Bloomberg
School of Public Health
Baltimore, Maryland, USA

E-mail: anna.koettgen@uniklinik-freiburg.de

EDUCATION AND TRAINING

2011	Habilitation for Experimental Medicine with Prof. Dr. G. Walz, Medical Faculty, University of Freiburg
2005-2006	Master of Public Health (M.P.H.), Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA. Grade point average: 4.0 (max.)
2003	USMLE II CK
2002-2003	Certificate of Philosophical Ethics, University of Hagen, Germany
2002	Doctoral Thesis with Prof. Dr. Greger, Department of Physiology, Albert-Ludwigs-University of Freiburg, Germany: "Mechanisms of the CFTR-mediated Inhibition of the Epithelial Sodium Channel" (<i>summa cum laude</i>)
2001	Full licensure to work as a physician, German Medical Association
2000	USMLE I
1994-2001	M.D., School of Medicine, Albert-Ludwigs-University of Freiburg, Germany (very good)

PROFESSIONAL EXPERIENCE

Since 2025	Director, Institute of Epidemiology and Prevention
Since 2024	Principal Investigator, NAKO Health Study, Freiburg Study Center
2023	Offer: Chair of Biometry and Epidemiology, University of Leipzig, Germany; declined
Since 2021	Speaker, Collaborative Research Center SFB 1453, Albert-Ludwigs-University of Freiburg
2017-2025	Director of the Institute of Genetic Epidemiology, University of Freiburg
2016-2020	Heisenberg Professorship (Full Professor), University of Freiburg

2013	Offer: Chair of Epidemiology , Ludwigs-Maximilians University Munich und UNIKA-T Augsburg, Germany.
2010-2015	Emmy Noether Research Group Leader , Department of Nephrology, Medical Center – University of Freiburg
Since 2009	Study Site Director , German Chronic Kidney Disease Study, together with Prof. Dr. G. Walz (Dept. of Nephrology)
Since 2009	Professor - Adjunct , Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA
2009	Offer: Assistant Professor (tenure track), Departments of Epidemiology/Biostatistics and Medicine, Case Western Reserve University, Cleveland, USA
2008-2009	Assistant Scientist , Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA
2006-2008	Postdoctoral Research Fellow , German Research Foundation, Department of Epidemiology, Welch Center for Prevention, Epidemiology & Clinical Research, Johns Hopkins University, Baltimore, USA. Academic mentors: Josef Coresh, MD PhD, WH Linda Kao, PhD MHS
2000-2001	Medical Practical Year , Albert-Ludwigs-University Freiburg, Germany

PROFESSIONAL ACTIVITIES

Society Memberships:

American Society of Clinical Investigation, German Society of Nephrology, German Society of Epidemiology, European Renal Association, American Society of Nephrology, International Society of Nephrology

Scientific Boards and Memberships:

Since 2024	Member, University Council (Universitätsrat), University of Freiburg
Since 2022	Scientific Advisory Board, Center for Molecular Medicine Cologne (CMMC)
Since 2021	Member, Cluster of Excellence CIBSS, University of Freiburg
Since 2021	Spokesperson, CRC 1453 "NephroGenetics", University of Freiburg
Since 2020	Board Member, CRC 1536 "Small Data", University of Freiburg
Since 2020	Member of the Research Commission of the Medical Faculty, University of Freiburg
2019-2024	Spokesperson, Medical Scientist Program of the Medical Faculty, University of Freiburg
Since 2019	Scientific Expert Committee Leader, "Kidney" Group, German National Cohort study
2018-2022	Member, Ethics Committee, University of Freiburg
Since 2018	Member, CKD REIN Scientific Committee
2016-2018	Steering Committee Member, International CKD Prognosis Consortium

2016-2018	Board Member, Working Group for Inherited Kidney Diseases, European Renal and Transplant Association
Since 2015	Co-Director, International CKDGen Consortium
Since 2015	Kidney Working Group Leader, CHARGE Consortium
Since 2012	Principal Investigator, Spemann Graduate School of Biology and Medicine, University of Freiburg
Since 2010	Steering Committee Member, German Chronic Kidney Disease Study

EDITORIAL ACTIVITIES

Advisory and Editorial Boards:

American Journal of Kidney Diseases, Kidney International, Nature Reviews Nephrology.

Journal Peer Review:

Science, Nature, New England Journal of Medicine, Nature Genetics, Nature Medicine, Nature Communications, Journal of Clinical Investigation, BMJ, Annals of Internal Medicine, Human Molecular Genetics, Journal of the American Society of Nephrology, Diabetes, Archives of Internal Medicine, Circulation, American Journal of Kidney Diseases, Kidney International, Science Translational Medicine, Atherosclerosis, Nature Reviews Nephrology, Nephrology Dialysis Transplantation.

Funding Bodies:

German Research Foundation, National Institutes of Health (NIH/NIDDK), American Heart Association, American Society of Nephrology, German Society of Nephrology, European Renal Association, UK Great Ormond Street Hospital, British Heart Foundation.

HONORS, SCIENTIFIC CONFERENCES, AWARDS

2024	CHARGE Consortium Golden Tiger Award for Mentorship
2023	1 st International NephGen Symposium, Freiburg, Organizer
Since 2022	European Kidney Summer School, (Co-)Organizer
2021	Elected Member, German National Academy of Sciences Leopoldina
2021	Elected Member, The American Society for Clinical Investigation (ASCI)
2021	Co-Chair, KDIGO Controversies Conference "Genetics in CKD"
2021	Plenary Lecture, Annual Meeting of the European Renal Association, Berlin
2020	Gold Medal Investigator Award, G-CAN Konsortium
2020	"Landesforschungspreis", Basic Science, State of Baden-Württemberg (100,000 €)
2020	Marie Curie Summer School Genetic Epidemiology, Bolzano, Co-Chair
2017	CHARGE Consortium Golden Tiger Award for Working Group Leadership
2017	Franz Volhard Preis of the German Society of Nephrology
2011	Nils Alwall Preis of the German Society of Nephrology
2010	Travel award to the annual meeting of the European Renal Association (ERA-EDTA Congress), Munich, Germany. Abstract among the best abstracts submitted by young authors.

2010	Cozzarelli Prize for outstanding scientific excellence and originality "Identification of a urate transporter, ABCG2, with a common functional polymorphism causing gout"
2009	Jeremiah and Rose Stamler Research Award for New Investigators, American Heart Association
1998-2001	German National Academic Foundation Scholar (Studienstiftung des deutschen Volkes)
1999	Student delegate, Annual Meeting of Nobel Prize Laureates, Lindau, Germany

EXTRAMURAL FUNDING

2024-2028	NAKO Health Study Site Freiburg, Federal Ministry of Education and Research (BMBF). Principal Investigator
2024-2026	Research Collaboration Maze Therapeutics
2023-2025	SPP 2177 „Radiomics“, DFG (DFG KO3598/6-2). Project Leader
2022-2028	CIBSS – EXC 2189, Cluster of Excellence, DFG. Project Leader
2021-2022	Freiburg Innovation and Translation Hubs, Ministry for Science Baden-Württemberg; Project Leader
2021-2026	GRK 2344 "MeInBio – BioInMe", German Research Foundation (DFG). Project Leader
2021-2025	CRC 1479 "OncoEscape", DFG. Project leader
2021-2024	CRC 1453 "NephroGenetics", First Funding Period, DFG. Spokesperson and Project leader
2020-2024	CRC 992 "Medical Epigenetics", DFG (3rd funding period). Project leader
2020-2022	SPP 2177 "Radiomics" (DFG KO3598/6-1), DFG Project Leader
2019-2023	EU Marie Curie ITN TrainCKDis "Genetic Underpinnings and Causality of Novel Biomarkers of CKD in Humans". Project Leader
2019-2024	"Identifying Novel Biological Pathways for Gout using DNA Methylation and Genetics", NIH/NIAMS, R01-AR-073178 (PI Tin). Sub-Award Leader
2016-2020	CRC 992 "Medical Epigenetics", DFG (2nd funding period). Project leader
2015-2019	CRC 1140 "KIDGEM", DFG (1 st funding period). Project leader
2015-2020	Heisenberg Professorship, DFG (DFG KO3598/3-1 and 5-1). Direct stipend
2014-2018	"Epigenetic Landscape of Chronic Kidney Disease", NIH/NIDDK, 2-R01-DK-087635-06 (PI Susztak). Sub-Contract Leader
2014-2023	"Renal Metabolite Handling: from Gene to Function to Disease", Research Grant, DFG (DFG KO3598/4-1 and 4-2). Principal Investigator
2014-2016	"Pediatric investigation for genetic factors associated with renal progression (PediGFR)", NIH/NIDDK, 1 R01 DK082394-01A1 (PI Wong). Sub-Award Leader
2013-2019	Else-Kroener-Forschungskolleg "NAKSYS", Project Leader
2011-2014	"NephAge – Systems Biology of Kidney Aging", German Federal Ministry of Education and Research (BMBF 0315896A). Project Leader
2010-2015	"Identification and Characterization of Genetic Risk Variants for Chronic Kidney Disease and Related Traits", Emmy Noether Group, DFG (DFG KO3598/2-1). Principal Investigator

Since 2009	Study Center of the German Chronic Kidney Disease Study, German Federal Ministry of Education and Research (BMBF 01ER0804), KfH Stiftung Präventivmedizin, various industry partners. Study center Director
2007-2008	"Identification of sequence variations in genes involved in the podocyte signaling network that increase susceptibility of albuminuria", Postdoctoral Fellowship, DFG (DFG KO3598/1-1). Principal Investigator

PATENTS

"Modulation of ABCG2-mediated transport to treat hyperuricemia and gout", US patent 8,722,338 awarded May 13, 2014

TEN IMPORTANT PUBLICATIONS

1. Scherer N, Faessler D, Borisov O, ..., Hertel J, **Köttgen A**. Coupling metabolomics and exome sequencing reveals graded effects of rare damaging heterozygous variants on gene function and human traits. *Nat Genet*. 2025 Jan;57(1):193-205.
2. Schlosser P, Scherer N, ..., **Köttgen A**. Genetic studies of paired metabolomes reveal enzymatic and transport processes at the interface of plasma and urine. *Nat Genet*. 55(6):995-1008 (2023).
3. Schlosser P, Li Y, Sekula P, Raffler J, Grundner-Culemann F, Pietzner M, Cheng Y, Wuttke M, Steinbrenner I, Schultheiss UT, Kotsis F, Kacprowski T, Forer L, Hausknecht B, Ekici AB, Nauck M, Völker U; GCKD Investigators, Walz G, Oefner PJ, Kronenberg F, Mohny RP, Köttgen M, Suhre K, Eckardt KU, Kastenmüller G, **Köttgen A**. Genetic studies of urinary metabolites illuminate mechanisms of detoxification and excretion in humans. *Nat Genet*. 52(2):167-176 (2020).
4. Tin A, Marten J, Halperin Kuhns VL, Li Y, Wuttke M, Kirsten H, ..., Hung AM, Teumer A, Pattaro C, Woodward OM, Vitart V, **Köttgen A**. Target genes, variants, tissues and transcriptional pathways influencing human serum urate levels. *Nat Genet*. 51(10):1459-1474 (2019).
5. Wuttke M, Li Y, Li M, Sieber KB, Feitosa MF, Gorski M, ..., Heid IM, Scholz M, Teumer A, **Köttgen A***, and Pattaro C*. A catalogue of genetic targets for kidney function from analyses of a million individuals. *Nat Genet*. 51(6):957-972 (2019).
6. **Köttgen A**, Albrecht E, Teumer A, Vitart V, ..., Caulfield M, Bochud M, and Gieger C. Genome-wide association analyses identify 18 new loci associated with serum urate concentrations. *Nat Genet*. 45, 145-154 (2013).
7. Suhre K, Shin SY, Petersen AK, Mohny RP, Meredith D, Wagele B, Altmaier E, Deloukas P, Erdmann J, Grundberg E, Hammond CJ, de Angelis MH, Kastenmuller G, **Köttgen A**, Kronenberg F, Mangino M, Meisinger C, Meitinger T, Mewes HW, Milburn MV, Prehn C, Raffler J, Ried JS, Romisch-Margl W, Samani NJ, Small KS, Wichmann HE, Zhai G, Illig T, Spector TD, Adamski J, Soranzo N, and Gieger C. Human metabolic individuality in biomedical and pharmaceutical research. *Nature* 477, 54-60 (2011).
8. **Köttgen A**, Pattaro C, Boger CA, Fuchsberger C, ..., Kao WH, Heid IM, and Fox CS. New loci associated with kidney function and chronic kidney disease. *Nat Genet*. 42, 376-384 (2010).
9. **Köttgen A**, Glazer NL, Dehghan A, Hwang SJ, ..., Witteman JC, Coresh J, Shlipak MG, Fox CS. Multiple loci associated with indices of renal function and chronic kidney disease. *Nat Genet*. 41(6):712-7 (2009).

10. Woodward OM*, Köttgen A*, Coresh J, Boerwinkle E, Guggino WB, Köttgen M. Identification of a urate transporter, ABCG2, with a common functional polymorphism causing gout. *Proc Natl Acad Sci U S A*. 106: 10338-42 (2008).

A list of all publications can be found here:

<https://pubmed.ncbi.nlm.nih.gov/?term=Kottgen+Anna&sort=date&size=200>