ANNA KÖTTGEN

M.D., M.P.H., née HOPF

CURRICULUM VITAE

PERSONAL INFORMATION

Professor
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Dept. of Epidemiology
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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" *(summa cum laude)*
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 2021	**Speaker**, Collaborative Research Center **SFB 1453**, Albert-Ludwigs-University of Freiburg
Since 2017	**Director** of the Institute of Genetic Epidemiology, University of Freiburg
Since 2016	**Heisenberg Professorship** (Full Professor), University of Freiburg
2013	**Offer: Chair of Epidemiology**, Ludwigs-Maximilians University Munich und UNIKA-T Augsburg, Germany.

2010-2015	**Group Leader**, Emmy Noether Research Group, 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 ACTIVITES

Society Memberships:
American Society of Clinical Investigation, German Society of Nephrology, German Society of Epidemiology, European Renal Association, American Society of Nephrology, American Society of Human Genetics, International Society of Nephrology

Scientific Boards and Memberships:

Since 2021	Member, The American Society for Clinical Investigation (ASCI)
Since 2020	Associated Member, Cluster of Excellence CIBSS, University of Freiburg
Since 2020	Board Member, CRC Initiative 1536 “Small Data”, University of Freiburg
Since 2020	Member of the Research Commission of the Medical Faculty, University of Freiburg
Since 2019	Speaker, Medical Scientist Program of the Medical Faculty, University of Freiburg
Since 2019	Scientific Expert Committee Leader, “Kidney” Group, German National Cohort study
2018	Scientific Advisory Board, BeLOVE Studie
Since 2018	Member, Ethics Committee, University of Freiburg
Since 2018	Member, CKD REIN Scientific Committee
2016-2018	Steering Committee Member, International CKD Prognosis Consortium
Since 2016	Principal Investigator, CRC 992 Medical Epigenetics, University of Freiburg
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

2015-2019	Principal Investigator and Board Member, CRC 1140 Kidney Disease Genetics, University of Freiburg
Since 2014	Steering Committee Member, Freiburg Center for Rare Diseases, University Hospital Freiburg
Since 2013	Board Member, Else-Kroener-Forschungskolleg NAKSYS, University Hospital Freiburg
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:

Journal of Nephrology, American Journal of Kidney Diseases, Scientific Reports, 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 AND AWARDS

2021	Member, German National Academy of Sciences Leopoldina
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” for Basic Science, State of Baden-Württemberg
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 at the Annual Meeting of Nobel Prize Laureates, Lindau, Germany

EXTRAMURAL FUNDING

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", DFG. Speaker and Project leader.
2021-2022	“Freiburger Innovation und Translation Hubs“, Ministry of Research, Baden-Württemberg. Sub-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.
2019-2022	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.
2019-2020	Start-up Funds SFB 1453, Ministry of Research, Baden-Württemberg.
2016-2020	CRC 992 "Medical Epigenetics", DFG (2nd funding period). Project leader.
2016-2018	“Genetic Architecture of Gout in CKD“, Investigator-Initiated Sponsored Research, Astra Zeneca.
2015-2019	CRC 1140 “KIDGEM”, DFG (1st 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.
2014-2022	“Renal Metabolite Handling: from Gene to Function to Disease”, Research Grant, DFG (DFG KO3598/4-1 and 4-2). Principal Investigator.
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. Tin A, Schlosser P, ..., Teumer A, **Köttgen A**. Meta-analysis of epigenome-wide association studies of serum urate: new insights into urate co-regulation and the *SLC2A9* locus. *Nat Commun*, 12(1):7173 (2021).
2. 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, Mohney 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).
3. 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).
4. Teumer A, Li Y, Ghasemi S, Prins BP, Wuttke M, Hermle T, ..., Heid IM, Scholz M, Butterworth AS, Hung AM, Pattaro C, **Köttgen A**. Genome-wide association meta-analyses and fine-mapping elucidate pathways influencing albuminuria. *Nat Commun*. 10(1):4130 (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. Tin A, Li Y, Brody JA, Nutile T, Chu AY, ..., Boerwinkle E, Fox CS, Woodward OM, **Köttgen A**. Large-scale whole-exome sequencing association studies identify rare functional variants influencing serum urate levels. *Nat Commun*. 12;9(1):4228 (2018).
7. **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).
8. Suhre K, Shin SY, Petersen AK, Mohney 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).
9. **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).
10. Woodward OM*, **Köttgen A***, Coresh J, Boerwinkle E, Guggino WB, Köttgen M. Identification of a novel urate transporter, ABCG2, with a common functional polymorphism causing gout. *Proc Natl Acad Sci U S A*. 2009 Jun 23;106(25):10338-42.