

Curriculum Vitae

Personal Data

Title	Prof. Dr. med.
First name	Lars
Name	Zender
Current position	Full Professor (W3, permanent)
Current institution(s)/site(s), country	Department of Medical Oncology and Pneumology (Internal Medicine VIII) and iFIT Cluster of Excellence (EXC2180) "Image Guided and Functionally Instructed Tumor Therapies", University Hospital Tübingen, Tübingen, Germany
Identifiers/ORCID	0000-0001-7626-2849

Qualifications and Career

Stages	Periods and Details
Degree program	1995-2002 , Medicine (M.D.), Hannover Medical School, Germany
Doctorate	2022 Doctor of Medicine (Dr. med), Grade: "Summa cum laude" (Excellent). Mentors: Prof. Dr. Michael Manns, Dr. Stefan Kubicka
Stages of academic/professional career	<p>since 2023 Member of the Managing Directorate, National Center for Tumor Diseases (NCT), Partner Site SouthWest (NCT-SW), University Hospital Tuebingen, Germany</p> <p>since 2019 Full Professor (W3) of Medical Oncology, Director & Chair, Dept. of Medical Oncology and Pneumology, University Hospital Tübingen</p> <p>since 2018 Spokesperson iFIT Cluster of Excellence ("Image Guided and Functionally Instructed Tumor Therapies", DFG-CoE 2180)</p> <p>since 2013 Deputy Director, Comprehensive Cancer Center Tübingen Stuttgart (CCC-TS)</p> <p>2015-2022 Spokesperson of the DFG Research Unit FOR2314 "Targeting therapeutic windows in essential cellular processes for tumor therapy"</p> <p>2016-2019 Director and Chair, Dept. of Clinical Tumor Biology, Phase I Unit & Center for Neuroendocrine Tumors, University Hospital Tübingen and Dept. of Physiology I, University of Tübingen, Tübingen, Germany</p> <p>2016-2019 Full professor (W3) and Head of the Division of Gastrointestinal Oncology, Department of Internal Medicine I (Chair: Prof. N.P. Malek), University Hospital Tübingen, Germany</p> <p>2009-2012 Assistant Professor (W1) of Experimental Gastrointestinal Oncology, Dept. of Gastroenterology and Hepatology (Chair: Prof. M. Manns), Medical School Hannover, Germany</p> <p>2008-2012 Fellow in Gastroenterology & Hepatology, GI-Oncology, Hannover Medical School, Hannover, Germany</p>

	<p>2008-2012 Research Group leader (Emmy Noether Research Group and Helmholtz University Research Group) at the Helmholtz Centre for Infection Research and Medical School Hannover, Germany</p> <p>2005-2007 Clinical Fellow (Alan Seligson Fellow), Laboratory of Dr. Scott W. Lowe, Cold Spring Harbor Laboratory, Cold Spring Harbor, USA</p> <p>2004–2005 Postdoctoral Fellow (Emmy Noether Phase I stipend of the German Research Foundation), Laboratory of Dr. Scott W. Lowe, CSH-Laboratory, Cold Spring Harbor, USA</p> <p>2002–2004 Resident and physician scientist in Internal Medicine/Gastroenterology/GI-Oncology, Medical School Hannover, Hannover, Germany</p>
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Activities in the Research System

Memberships (only major societies): German Society for Internal Medicine (DGIM), American College of Physicians (ACP), American Association for Cancer Research (AACR), European Association for Cancer Research (EACR), German Cancer Society (DKG), European Association for the Study of the Liver (EASL), Deutscher Hochschulverband (DHV).

Reviewer for Scientific Journals (selection): Nature, Cell, Nature Medicine, Nature Biotechnology, Cancer Cell, Nature Cell Biology, Nature Cancer, Journal of Experimental Medicine, Genes & Development, Oncogene, Hepatology, Journal of Hepatology.

Reviewer for Funding Agencies (Selection): Deutsche Forschungsgemeinschaft (DFG), Deutsche Krebshilfe (DKH), Association for International Cancer Research (AICR), Wellcome Trust, Research Foundation Flanders, Dutch Cancer Aid.

Organizer for Scientific Conferences: CSHL Asia Conference on Liver Biology, Diseases and Cancer, 2017, Suzhou, China; AEK 19th International Cancer Conference, 2017, Heidelberg, Germany; AIO Symposium on Academic Drug Discovery and Development 2017, Berlin, Germany; AEK 20th International Cancer Conference, 2019, Heidelberg; Germany, AIO Symposium on Academic Drug Discovery and Development 2019, Berlin, Germany; FASEB Liver Biology Conference: Fundamental Mechanisms and translational Applications, 2022, New Orleans, USA; AEK 21st International Cancer Conference, 2023, Kassel, Germany

Publications (ten most relevant)

Zwirner, S., Abu Rmilah, A. A., Klotz, S., Pfaffenroth, B., Kloevekorn, P., Moschopoulou, A. A., Schuette, S., Haag, M., Selig, R., Li, K., Zhou, W., Nelson, E., Poso, A., Chen, H., Amiot, B., Jia, Y., Minshew, A., Michalak, G., Cui, W., Rist, E., Longerich, T., Jung, B., Felgendreff, P., Trompak, O., Premssirut, P. K., Gries, K., Muerdter, T. E., Heinkele, G., Wuestefeld, T., Shapiro, D., Weissbach, M., Koenigsrainer, A., Sipos, B., Ab, E., Zacarias, M. O., Theisgen, S., Gruenheit, N., Biskup, S., Schwab, M., Albrecht, W., Laufer, S., Nyberg, S. & **Zender, L.** First-in-class MKK4 inhibitors enhance liver regeneration and prevent liver failure. *Cell*, **2024**. 187, 1666-1684 e1626. DOI:10.1016/j.cell.2024.02.023.

D'Artista L, Moschopoulou AA, Barozzi I, Craig AJ, Seehawer M, Herrmann L, Minnich M, Kang TW, Rist E, Henning M, Klotz S, Heinzmann F, Harbig J, Sipos B, Longerich T, Eilers M, Dauch D, Zuber J, Wang XW, **Zender L (2023)**. MYC determines lineage commitment in KRAS-driven primary liver cancer development. *Journal of Hepatology* Vol. 79 j 141–149

Hinterleitner C, Straehle J, Malenke E, Hinterleitner M, Henning M, Seehawer M, Bilich T, Heitmann JS, Lutz M, Mattern S, Scheuermann S, Horger M, Maurer S, Walz JS, Fend F, Handgretinger R, Seitz CM, Weigelin B, Singer S, Salih H, Borst O, Kopp H-G, **Zender L. 2021**. Platelet PD-L1 reflects collective intratumoral PD-L1 expression and predicts immunotherapy response in non-small cell lung cancer. **Nature Comm 2021** Dec 1;12(1):7005. doi: 10.1038/s41467-021-27303-7.

Rudalska R, Harbig J, Snaebjornsson MT, Klotz S, Zwirner S, Taranets L, Heinzmann F, Kronenberger T, Forster M, Cui W, d'Artista L, Einig E, Hinterleitner M, Schmitz W, Dylawerska A, Kang T-W, Poso A, T. Rosenfeldt MT, Malek NP, Bitzer M, Laufer S, Pichler B, Popov N, Schulze A, **Zender L***, Dauch D*. 2021. LXR α activation and Raf inhibition trigger lethal lipotoxicity in liver cancer. **Nature Cancer 2:201-217**. *equal contribution and shared last author.

Seehawer M, Heinzmann F, D'Artista L, Harbig J, Roux PF, Hoenicke L, Dang H, Klotz S, Robinson L, Dore G, Rozenblum N, Kang TW, Chawla R, Buch T, Vucur M, Roth M, Zuber J, Lüdde T, Sipos B, Longerich T, Heikenwälder M, Wang XW, Bischof O, **Zender L. 2018**. Necroptosis microenvironment determines lineage commitment in liver cancer. **Nature** 562:69-75.

Dauch D, Rudalska R, Cossa G, Nault JC, Kang TW, Wuestefeld T, Hohmeyer A, Imbeaud S, Yevsa T, Hoenicke L, Patsar T, Bozko P, Malek NP, Longerich T, Laufer S, Poso A, Zucman-Rossi J, Eilers M, **Zender L. 2016**. A MYC-Aurka protein complex represents an actionable drug target in p53 altered liver cancer. **Nat Med 22:744-53**.

Eggert T, Wolter K, Ji J, Ma C, Yevsa T, Klotz S, Medina-Echeverz J, Longerich T, Forgues M, Reisinger F, Heikenwalder M, Wang XW, **Zender L***, Greten TF* (**2016**) Distinct Functions of Senescence-Associated Immune Responses in Liver Tumor Surveillance and Tumor Progression. **Cancer Cell** 30(4):533-47 (*=equal contribution and co-corresponding author).

Rudalska R, Dauch D, Longerich T, McJunkin K, Wuestefeld T, Kang TW, Hohmeyer A, Pesic M, Leibold J, von Thun A, Schirmacher P, Zuber J, Weiss KH, Powers S, Malek NP, Eilers M, Sipos B, Lowe SW, Geffers R, Laufer S, Zender L. **2014**. In vivo RNAi screening identifies a mechanism of sorafenib resistance in liver cancer. **Nat Med** 20:1138-46.

Wuestefeld T, Pesic M, Rudalska R, Dauch D, Longerich T, Kang TW, Yevsa T, Heinzmann F, Hoenicke L, Hohmeyer A, Potapova A, Rittelmeier I, Jarek M, Geffers R, Scharfe M, Klawonn F, Schirmacher P, Malek NP, Ott M, Nordheim A, Vogel A, Manns MP, Zender L. **2013**. A direct in vivo RNAi screen identifies MKK4 as a key regulator of liver regeneration. **Cell** 153:389-401.

Kang TW, Yevsa T, Woller N, Hoenicke L, Wuestefeld T, Dauch D, Hohmeyer A, Gereke M, Rudalska R, Potapova A, Iken M, Vucur M, Weiss S, Heikenwälder M, Khan S, Gil J, Bruder D, Manns MP, Schirmacher P, Tacke F, Ott M, Luedde T, Longerich T, Kubicka S, **Zender L.**

2011. "Senescence surveillance" of premalignant hepatocytes limits carcinoma development through an adaptive immune response. **Nature 479:547-51.**

Academic Distinctions

- 2017 Novartis Prize for Therapy relevant Pharmacological Research
- 2014 Gottfried-Wilhelm-Leibniz Preis of the German Research Foundation
- 2014 Württembergischer Krebspreis
- 2013 Deutscher Krebspreis (Category: Experimental Cancer Research)
- 2012 Johann-Georg-Zimmermann Forschungspreis 2011/2012
- 2012 Carcinogenesis Young Investigator Award 2012 (awarded during EACR 2012)
- 2009 GASL Award (German Association for the Study of the Liver), donated by the YAEL Foundation
- 2009 Cancer Award of the "Berlin-Brandenburgische Akademie der Wissenschaften" (donated by the Monika Kutzner Foundation)
- 2009 Award for Research Cooperation and Highest Excellence in Science (ARCHES), donated by the Minerva Foundation and the German Federal Ministry of Education and Research
- 2007 Rising Star in European Hepato-Gastroenterology of ASNEMGE (Association of European and Mediterranean Societies of Gastroenterology)
- 2007 Bear Necessities Pediatric Cancer Foundation Research Award