

Evelyn Zeiler, Dr. rer. nat. (Ph.D.)

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EDUCATION

- 06/2009 – 11/2012 **Technische Universität München (TUM), Germany**
- Dr. rer. nat. (Ph.D.) Bioorganic Chemistry, November 2012
Target Discovery and Application of Bioactive Compounds, the Natural Product Vibralactone and other β -Lactones
Advisor: Prof. Dr. Stephan A. Sieber
- 04/2003 – 07/2008 **Georg-August-Universität Göttingen, Germany**
- Diplom (M.Sc.) Organic Chemistry (Natural product synthesis), July 2008
Total synthesis of Collinolactone, a model study to synthesize the tricyclic core structure
Advisor: Prof. Dr. Armin de Meijere and Prof. Dr. Paultheo von Zezschwitz
 - Graduate Studies Inorganic/Organic/Physical/Biomolecular Chemistry 2005-2007
 - Vordiplom (B.S.) Inorganic/Organic/Physical Chemistry July 2005

EXPERIENCE

- 11/2019 – present **Clinical Researcher**
TrueNorth Health Foundation (TNHF)
- 2/2013 – 05/2015 **Origins of Life Initiative Postdoctoral Fellow**
Laboratory of Prof. Dr. Ann Pearson, Earth and Planetary Sciences, Harvard University in Cambridge, MA
- 11/2012 – 01/2013 **Postdoctoral Researcher**
Laboratory of Prof. Dr. Stephan A. Sieber, Organic Chemistry, Technische Universität München (TUM), Munich, Germany
- 02/2009 – 03/2009 **Research Assistant**
Laboratory of Prof. Dr. Lutz Ackermann, Organic and Biomolecular Chemistry/Catalysis, Georg-August-Universität Göttingen, Germany

PUBLICATIONS

Scharf E*, Zeiler E, Ncube M, Kolbe P, Hwang S-Y, Goldhamer A, Myers T. The Effects of Prolonged Water-Only Fasting and Refeeding on Markers of Cardiometabolic Risk. *Nutrients* 2022, 14(6), 1183.

Lehmann J, Cheng TY, Aggarwal A, Park AS, Zeiler E, Raju RM, Akopian T, Kandrор O, Sacchetti JC, Moody DB, Rubin EJ, Sieber SA. An Antibacterial β -Lactone Kills Mycobacterium tuberculosis by Disrupting Mycolic Acid Biosynthesis. *Angew Chem Int Ed Engl.* 2018, 57, 348-353.

List A*, Zeiler E*, Gallastegui N, Rusch M, Hedberg C, Sieber SA, Groll M. Omuralide and Vibralactone: Subtle differences in the proteasome β -lactone- γ -lactam binding scaffold alters target preferences. *Angew. Chem. Int. Ed.* 2014, 53, 571–574; Omuralid und Vibralacton: Unterschiede im Proteasom- β -Lacton- γ -Lactamgerüst verändern die Zielmolekülpräferenz. *Angew. Chem.* 2014, 126, 582–585.

Zeiler E, Target Discovery and Application of Bioactive Compounds: The Natural Product Vibralactone and other beta-Lactones, Dissertation, Shaker Verlag 2013, ISBN 978-3-8440-1576-8.

Zeiler E, List A, Alte F, Gersch M, Wachtel R, Groll M, Sieber SA. Structural and functional insights into caseinolytic proteases reveal conformational switching as a regulation principle of their catalytic triad. *PNAS* 2013, 110, 11302-11307.

Küttler EV, Zeißler A, Vosyka O, Zeiler E, Sieber SA, Verhelst SHL. A new class of rhomboid protease inhibitors discovered by activity-based fluorescence polarization. *PLOS ONE* 2013, 8, e72307.

Zeiler E, Braun N, Böttcher T, Kastenmüller A, Weinkauff S, Sieber SA. Vibralactone as a Tool to Study the Activity and Structure of the ClpP1P2 Complex from *Listeria monocytogenes*. *Angew. Chem. Int. Ed.* 2011, 50, 11001–11004; Vibralacton als Sonde zur Aufklärung der Aktivität und Struktur des ClpP1P2-Komplexes aus *Listeria monocytogenes*. *Angew. Chem.* 2011, 123, 11193–11197.

Zeiler E, Korotkov VS, Lorenz-Baath K, Böttcher T, Sieber SA, Development and characterization of improved β -lactone-based anti-virulence drugs targeting ClpP. *Bioorg Med Chem.* 2011, 20, 583-591.