

# Curriculum Vitae

## **Wiedemann, Nils**

Institute of Biochemistry and Molecular Biology, University of Freiburg

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## **Academic education including academic degrees**

1995-1999	Studies in Chemistry, University of Freiburg, Germany, Diploma
1996-1997	Studies in Biochemistry, Cell Biology and Molecular Biology (Master classes), University of Massachusetts Amherst, USA
1993-1995	Studies in Chemistry, University of Frankfurt, Germany

## **Scientific graduation**

2010	Habilitation in Biochemistry and Molecular Biology, Faculty of Medicine, University of Freiburg
1999-2002	Dr. rer. nat., Faculty of Biology, University of Freiburg

## **Employment**

2015 - present	Academic Director and Apl. Professor, Institute of Biochemistry and Molecular Biology, University of Freiburg
2004 - 2015	Group leader, Institute of Biochemistry and Molecular Biology, University of Freiburg
2006	Visiting scientist, La Trobe University, Melbourne, Australia
2002 - 2004	Post Doc, Institute of Biochemistry and Molecular Biology, University of Freiburg

## **Other activities, awards and honours**

2024	Elected into Academia Europaea
2023 - 2024	Editor of two volumes of Methods in Enzymology on ' <i>Mitochondrial Translocases</i> '
2015	ERC consolidator grant
2011	Eugen-Graetz-Price for Research, University of Freiburg
2007	Young Investigator Award, German Society for Biochemistry and Molecular Biology (GBM), Frankfurt
2003	Hans Griesbach Award for Dissertation, Faculty of Biology, University of Freiburg
2002	PhD with ' <i>summa cum laude</i> ', Faculty of Biology, University of Freiburg

## 10 most important publications Nils Wiedemann

1. Central role of Tim17 in mitochondrial presequence protein translocation. Fielden LF, Busch JD, Merkt SG, Ganesan I, Steiert C, Hasselblatt HB, Busto JV, Wirth C, Zufall N, Jungbluth S, Noll K, Dung JM, Butenko L, von der Malsburg K, Koch H-G, Hunte C, van der Laan M, and **Wiedemann N** (2023). **Nature** 621, 627–634. [10.1038/s41586-023-06477-8](https://doi.org/10.1038/s41586-023-06477-8)
2. A multipoint guidance mechanism for β-barrel folding on the SAM complex. Takeda H, Busto JV, Lindau C, Tsutsumi A, Tomii K, Imai K, Yamamori Y, Hirokawa T, Motono C, Ganesan I, Wenz L-S, Becker T, Kikkawa M, Pfanner N\*, Wiedemann N\*, and Endo T\* (2023). **Nat Struct Mol Biol** 30, 176–187. [10.1038/s41594-022-00897-2](https://doi.org/10.1038/s41594-022-00897-2) \*corresponding
3. Quantitative high-confidence human mitochondrial proteome and its dynamics in cellular context. Morgenstern M, Peikert CD, Lübbert P, Suppanz I, Klemm C, Alka O, Steiert C, Naumenko N, Schendzielorz A, Melchionda L, Mühlhäuser WWD, Knapp B, Busch JD, Stiller SB, Dannenmaier S, Lindau C, Licheva M, Eickhorst C, Galbusera R, Zerbes RM, Ryan MT, Kraft C, Kozjak-Pavlovic V, Drepper F, Dennerlein S, Oeljeklaus S, Pfanner N, **Wiedemann N\***, and Warscheid B\* (2021). **Cell Metab** 33, 2464-2483.e18. [10.1016/j.cmet.2021.11.001](https://doi.org/10.1016/j.cmet.2021.11.001) \*corresponding
4. Membrane protein insertion through a mitochondrial β-barrel gate. Höhr AIC, Lindau C, Wirth C, Qiu J, Stroud DA, Kutik S, Guiard B, Hunte C, Becker T, Pfanner N, and **Wiedemann N** (2018). **Science** 359, eaah6834. [10.1126/science.aah6834](https://doi.org/10.1126/science.aah6834)
5. Structural Basis of Membrane Protein Chaperoning through the Mitochondrial Intermembrane Space. Weinhäupl K, Lindau C, Hessel A, Wang Y, Schütze C, Jores T, Melchionda L, Schönfisch B, Kalbacher H, Bersch B, Rapaport D, Brennich M, Lindorff-Larsen K, **Wiedemann N\***, and Schanda P\* (2018). **Cell** 175, 1365-1379.e25. [10.1016/j.cell.2018.10.039](https://doi.org/10.1016/j.cell.2018.10.039) \*corresponding
6. Mitochondrial OXA Translocase Plays a Major Role in Biogenesis of Inner-Membrane Proteins. Stiller SB, Höpker J, Oeljeklaus S, Schütze C, Schrempp SG, Vent-Schmidt J, Horvath SE, Frazier AE, Gebert N, van der Laan M, Bohnert M, Warscheid B, Pfanner N, and **Wiedemann N** (2016). **Cell Metab** 23, 901–908. [10.1016/j.cmet.2016.04.005](https://doi.org/10.1016/j.cmet.2016.04.005)
7. Coupling of Mitochondrial Import and Export Translocases by Receptor-Mediated Supercomplex Formation. Qiu J, Wenz L-S, Zerbes RM, Oeljeklaus S, Bohnert M, Stroud DA, Wirth C, Ellenrieder L, Thornton N, Kutik S, Wiese S, Schulze-Specking A, Zufall N, Chacinska A, Guiard B, Hunte C, Warscheid B, van der Laan M, Pfanner N\*, **Wiedemann N\***, and Becker T (2013). **Cell** 154, 596–608. [10.1016/j.cell.2013.06.033](https://doi.org/10.1016/j.cell.2013.06.033) \*corresponding
8. Dual Function of Sdh3 in the Respiratory Chain and TIM22 Protein Translocase of the Mitochondrial Inner Membrane. Gebert N, Gebert M, Oeljeklaus S, von der Malsburg K, Stroud DA, Kulawiak B, Wirth C, Zahedi RP, Dolezal P, Wiese S, Simon O, Schulze-Specking A, Truscott KN, Sickmann A, Rehling P, Guiard B, Hunte C, Warscheid B, van der Laan M, Pfanner N, and **Wiedemann N** (2011). **Mol Cell** 44, 811–818. [10.1016/j.molcel.2011.09.025](https://doi.org/10.1016/j.molcel.2011.09.025)
9. Kutik S, Stojanovski D, Becker L, Becker T, Meinecke M, Krüger V, Prinz C, Meisinger C, Guiard B, Wagner R, Pfanner N, **Wiedemann N** (2008) Dissecting Membrane Insertion of Mitochondrial β-Barrel Proteins. **Cell** 132:1011-1024. [10.1016/j.cell.2008.01.028](https://doi.org/10.1016/j.cell.2008.01.028)
10. **Wiedemann N**, Kozjak V, Chacinska A, Schönfisch B, Rospert S, Ryan MT, Pfanner N, Meisinger C (2003) Machinery for protein sorting and assembly in the mitochondrial outer membrane. **Nature** 424:565-571. [10.1038/nature01753](https://doi.org/10.1038/nature01753)