

**Curriculum Vitae    Barbara A. Niemeyer****Personal Data**

|                                         |                                                     |
|-----------------------------------------|-----------------------------------------------------|
| Title                                   | Univ.-Prof., PhD                                    |
| First name                              | Barbara A.                                          |
| Name                                    | Niemeyer                                            |
| Current position                        | Professor of Biophysics (permanent)                 |
| Current institution(s)/site(s), country | Saarland University<br>66421 Homburg<br>Deutschland |
| Identifiers/ORCID                       | 0000-0002-6963-0575                                 |

**Qualifications and Career**

| <b>Stages</b>                                                              | <b>Periods and Details</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| School, country                                                            | 8/1971 – 06/1984: basic school and high school, degree: Baccalaureate (Abitur), Germany                                                                                                                                                                                                                                                                                                                                                                                                            |
| Degree programme                                                           | 10/1984 – 11/1990: Biology (Diploma)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Doctorate                                                                  | 11/1996: PhD (Neurosciences), Prof. Charles S. Zuker (HHMI, UCSD Department of Neuroscience) University of California San Diego, U.S.A.                                                                                                                                                                                                                                                                                                                                                            |
| Stages of academic/professional career ( <i>optional after doctorate</i> ) | <p>since 2014 Full Professor (W2), for Molecular Biophysics, Saarland University.</p> <p>2008-2014 Independent Group leader, Biophysics, Saarland University.</p> <p>1999-2007 Group leader (C1), Saarland University, Pharmacology.</p> <p>1997-1999 Postdoc (NIH fellow), Department of Molecular and Cellular Physiology, Stanford University, USA (Prof. Dr. Thomas L. Schwarz).</p> <p>1991-1992 Visiting scientist, UCSD, DAAD fellow; "Gottlieb-Daimler und Karl-Benz Stiftung" fellow.</p> |

**Supplementary Career Information**

Birth of two children (12.04.2001; 26.08.2003, followed by maternity leave: 04/2001-12/2001, 08/2003-10/2003, part-time work: 11/2003-08/2006)

## Engagement in the Research System

|            |                                                                             |
|------------|-----------------------------------------------------------------------------|
| 2022       | Habilitation of group member Dr. rer. nat. Dalia Alansary                   |
| 2022       | Discussion leader Gordon Research Conference                                |
| 2021       | Chair FASEB meeting on Calcium and Cell function                            |
| 2020       | Symposium Organizer NWG Göttingen                                           |
| since 2020 | Board member of the European Calcium Society                                |
| since 2020 | Vice-Ombudsperson of Saarland University, adjunct member of KEF             |
| 2019       | Coordinator, proposal for “Graduate school Interconnectivity” – not granted |
| since 2017 | Project leader TRR219, co-speaker IRTG TRR219                               |
| 2018       | Co-Chair FASEB meeting on Calcium and Cell function.                        |
| since 2013 | Project leader SFB 1027 project C4, 2013-2020 project C7                    |
| 2011-2022  | Project leader SFB 894                                                      |
| 2017-2021  | Co-speaker and project leader IRTG1830                                      |
| 2012-2016  | Co-speaker and project leader GK1326                                        |
| 2015-2018  | Project leader, FOR2289                                                     |
| 2013-1017  | Co-Coordinator for Junior researcher of the SFB1027                         |

## Supervision of Researchers in Early Career Phases (+ 2 years, maternity leave)

| Year     | Name                             | Degree        | Score                 | Titel                                                                                                                              | Career track         |
|----------|----------------------------------|---------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 2015     | Stephanie Saul<br>(with M. Hoth) | Dr. rer. nat. | magna<br>cum<br>laude | Orai and STIM proteins regulate Store-operated Calcium Entry in primary human monocytes and melanoma cell lines                    | Postdoc              |
| 2016     | Kathrin Dörr                     | Dr. rer. nat  | summa<br>cum<br>laude | Regulation of Store-operated Calcium influx by posttranslational mechanisms                                                        | BfArM                |
| 2017     | Maik Konrad                      | Dr. rer. med  | magna<br>cum<br>laude | Characterization of the thioredoxin TXNDC15                                                                                        | Industry             |
| 2017     | Anna-Maria Miederer              | Dr. rer. nat  | summa<br>cum<br>laude | Regulation der Kalzium Homöostase in Immunzellen und in Alzheimer-Modell Zelllinien                                                | Consult.<br>Industry |
| 2017     | Sarah Kircher                    | Dr. rer. nat  | magna<br>cum<br>laude | Ca <sup>2+</sup> Signaling in CD4 T cell subtypes                                                                                  | Industry             |
| 2021     | Maylin-Merino Wong<br>(with DA)  | Dr. rer. nat  | magna<br>cum<br>laude | Investigation of calcium signatures in human CD4+ T cells with a focus on modulation of differentiation by plasma membrane ATPases | Postdoc              |
| 2021     | Mona Knapp,<br>nee Schöppe       | Dr. rer. nat  | summa<br>cum<br>laude | Eine neue STIM1-Spleißvariante modifiziert den speichergesteuerten Calciumeinstrom                                                 | Industry             |
| 2022     | Dr. rer. nat. Dalia Alansary     | Habilitation  |                       | Ca <sup>2+</sup> signatures in immune cells                                                                                        | Group leader         |
| 2023 exp | Girish Ramesh                    | cand.rer.nat. |                       | Characterization of a short isoform of STIM1 in neurons                                                                            |                      |
| 2023 exp | Maryam Amini                     | cand.rer.nat  |                       | Role and processing of IL1 $\alpha$                                                                                                |                      |
| 2023 exp | Vanessa Poth                     | cand.rer.nat  | Thesis handed in      | STIM2.3: An evolutionary late regulator of intracellular calcium signaling                                                         |                      |

|  |                    |              |  |                                                       |  |
|--|--------------------|--------------|--|-------------------------------------------------------|--|
|  | Lukas Jarzembowski | cand.rer.nat |  | Neuronal SOCE: Function and regulation                |  |
|  | Priska Jost        | cand.rer.nat |  | Regulatory T-cell suppressive function and regulation |  |
|  | Batul Kamar        | cand.rer.nat |  | Processing of inflammatory cytokines in CKD           |  |

## Scientific Results

### Category A

- Knapp, ML, Alansary D, Poth V, Förderer K, Sommer F, Zimmer D, Schwarz Y, Künzel N, Kless A, Machaca K, Helms V, Mühlhaus T, Schroda M, Lis A, **Niemeyer BA** (2022): A longer isoform of Stim1 is a negative SOCE regulator but increases cAMP modulated NFAT signaling, *EMBO Rep.*, 23: e53135. doi: 10.15252/embr.202153135.
- Rizo T, Gebhardt L, Riedlberger J, Eberhardt E, Fester L, Alansary D, Winkler J, Turan S, Arnold P, **Niemeyer BA**, Fischer MJM, Winner B (2022): Store-operated calcium entry is reduced in spastin-linked hereditary spastic paraplegia. *Brain*, 145, 3131-3146. doi: 10.1093/brain/awac122
- Ramesh G, Jarzembowski L, Schwarz Y, Konrad M, Poth V, Schwär G, Lauer AA, Grimm MOW, Alansary D, Bruns D, **Niemeyer BA** (2021): Short novel STIM1B uncovers a mechanism of synaptic enhancement. *Cell Reports* 34:108844. doi: 10.1016/j.celrep.2021.108844.
- Zewinger S, Reiser J, Jankowski V, Alansary D, Hahm E, Triem S, Klug M, Schunk SJ, Schmit D, Kramann R, Körbel C, Ampofo E, Laschke MW, Selejan SR, Paschen A, Herter T, Schuster S, Silbernagel G, Sester M, Sester U, Aßmann G, Bals R, Kostner G, Jahnen-Dechent W, Menger MD, Rohrer L, März W, Böhm M, Jankowski J, Kopf M, Latz E, **Niemeyer BA**, Fliser D, Laufs U, Speer T. (2020): Apolipoprotein C3 induces systemic inflammation and organ damage by alternative inflammasome activation. *Nature Immunol.*, 1, 30-41. doi: 10.1038/s41590-019-0548-1.
- Alansary D, Schmidt B, Dörr K, Bogeski I, Rieger H, Kless A, **Niemeyer BA** (2016). Thiol dependent intramolecular locking of Orai1 channels. *Sci Rep* 6, 33347. doi: 10.1038/srep33347.
- Miederer AM, Alansary D, Schwär G, Lee PH, Jung M, Helms V, **Niemeyer BA** (2015). A STIM2 splice variant negatively regulates store-operated calcium entry. *Nat Commun.* 6, 6899. doi: 10.1038/ncomms7899.
- Kilch T, Alansary D, Peglow M, Dörr K, Rychkov G, Rieger H, Peinelt C, **Niemeyer BA** (2013). Mutations of the Ca<sup>2+</sup>-sensing stromal interaction molecule STIM1 regulate Ca<sup>2+</sup> influx by altered oligomerization of STIM1 and by destabilization of the Ca<sup>2+</sup> channel Orai1. *J Biol Chem* 288, 1653-1664. doi: 10.1074/jbc.M112.417246.
- Bogeski I, Kummerow C, Al-Ansary D, Schwarz EC, Koehler R, Kozai D, Takahashi N, Peinelt C, Griesemer D, Bozem M, Mori Y, Hoth M, **Niemeyer BA** (2010). Differential redox regulation of ORAI ion channels: a mechanism to tune cellular calcium signalling. *Sci Signal* 3, ra24. doi: 10.1126/scisignal.2000672.
- Erler I, Hirnet D, Wissenbach U, Flockerzi V, **Niemeyer BA** (2004). Ca<sup>2+</sup>-selective transient receptor potential V channel architecture and function require a specific ankyrin repeat. *J Biol Chem* 279, 34456-34463 doi: 10.1074/jbc.M404778200. (selected Faculty of 1000).

10. **Niemeyer BA**, Suzuki E, Scott K, Jalink K, Zuker CS (1996). The *Drosophila* light-activated conductance is composed of the two channels TRP and TRPL. *Cell* 85, 651-659. doi: 10.1016/s0092-8674(00)81232-5.

## Category B

### Academic Distinctions

|           |                                                                          |
|-----------|--------------------------------------------------------------------------|
| 2002      | Calogero-Pagliarello Research Prize                                      |
| 2001      | Offered a Professorship for Biomedical Sciences, Cornell University, USA |
| 1997-1999 | National Research Service Award (NRSA), Fellowship                       |
| 1997-1998 | Stanford University Dean's Fellowship                                    |
| 1992-1995 | Fellowship „Gottlieb-Daimler und Karl-Benz Stiftung“                     |
| 1991-1992 | Fellowship DAAD                                                          |

### Other Information

Dual Career with my husband, Prof. Dr. Markus Hoth

### Data protection and consent to the processing of optional data

If you provide voluntary information (marked as optional) in this CV, your consent is required. Please confirm your consent by checking the box below.

I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data”<sup>1</sup> in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG ([postmaster@dfg.de](mailto:postmaster@dfg.de)). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at [www.dfg.de/privacy\\_policy](http://www.dfg.de/privacy_policy) and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

<sup>1</sup> Special categories of personal data are those “revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and (...) genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person’s sex life or sexual orientation” (Article 9(1) GDPR).