

### 1) General information

Name: **Univ.-Prof. Dr. Dr. Christian Michael Grimm**  
Address: Walther-Straub-Institute of Pharmacology and Toxicology, Faculty of Medicine, LMU München, Nussbaumstr. 26, 80336 München  
Phone: +49 (0)89-2180-73811  
FAX: +49 (0)89-2180-73817  
eMAIL: christian.grimm@med.uni-muenchen.de  
Web links:  
<https://www.wsi.med.uni-muenchen.de/personen/professoren/grimm/index.html>  
<https://lmu-munich.wixsite.com/lysolabmunich>  
<https://www.linkedin.com/in/prof-dr-dr-christian-grimm-7097795/>  
[https://www.xing.com/profile/ChristianMichael\\_Grimm/cv](https://www.xing.com/profile/ChristianMichael_Grimm/cv)  
[https://www.researchgate.net/profile/Christian\\_Grimm2](https://www.researchgate.net/profile/Christian_Grimm2)

Position: **Professor of Molecular Pharmacology**

### 2) Academic education

2015 **Habilitation** (Dr. rer. nat. habil.) and Venia legendi in **Pharmacology, LMU München**  
2011 **Ph.D.** (Dr. phil. in **Philosophy**; magna cum laude), Universität Kassel, Germany and Max-Planck-Institute for the History of Science, Berlin (Mentors: Prof. Dr. Dr. Kristian Köchy (Kassel) and Prof. Dr. Dr. Hans-Jörg Rheinberger)  
2004 **Ph.D.** (Dr. rer. nat. in **Pharmacology**; summa cum laude), **Freie Universität (FU) Berlin**, Germany (Mentor: Prof. Dr. Günter Schultz)  
2001-2004 Graduate research at the Institute of **Pharmacology**, School of Medicine, **FU Berlin** (Mentors: PD Dr. Christian Harteneck and Prof. Dr. Günter Schultz)  
2000 State Exam. (**M.Sc.** eq.) in **Pharmacy**, Julius-Maximilians-Universität Würzburg, Germany

### 3) Professional experience

2018- **Professor**, Walther-Straub-Institute of Pharmacology and Toxicology,, **Faculty of Medicine, LMU München, Germany**  
2015-2018 “Privatdozent” (Assistant Prof. eq.) and Group Leader, Department of Pharmacology, **Faculty of Chem. & Pharm., LMU München, Germany**  
2011-2015 **Lecturer** (“Habilitation”) and Group Leader, Department of Pharmacology, **Faculty of Chem. & Pharm., LMU München, Germany** (Prof. Dr. Martin Biel)  
2009-2011 **Principal Scientist** (Group Leader), Pain Research Unit - Discovery Biology, **Pfizer Ltd. Global R&D**, Sandwich, Kent, **UK**  
2005-2009 **Post-Doc**, Department of Otolaryngology - Head & Neck Surgery and Molecular & Cellular Physiology, **Stanford University**, CA, **USA** (Prof. Dr. Stefan Heller)  
2004-2005 **Post-Doc**, Department of Otolaryngology and Program in Neuroscience, Massachusetts Eye & Ear Infirmary, **Harvard University**, Boston, MA, **USA** (Prof. Dr. Stefan Heller)  
2000 **Trainee** (6-month internship), Pharmaceutical R&D, **Bayer AG**, Leverkusen, **Germany**

### 4) Offered professorships and shortlist positions

2018 **Primo loco/rank 1 and call** for a tenure-track **Professorship** (W2) in Molecular Pharmacology, Department of Pharmacology, Faculty of Medicine, **LMU München**, Germany (**accepted**)

- 2018 **Primo loco/rank 1** for a **Professorship** in Physiology, Department of Physiology, Faculty of Medicine, **University of Zürich (UZH)**, Switzerland
- 2017 **Call** for a tenure-track **Professorship** (W2) in Experimental Pharmacotherapy, Faculty of Medicine, **Friedrich Schiller University of Jena**, Germany (**declined**)
- 2016 **Primo loco/rank 1 and call** for a tenure-track **Associate Professorship** in Clinical and Experimental Medicine, Faculty of Medicine, **University of Linköping**, Sweden (**declined**)
- 2016-2020 Several secondary and tertiary placements: **Oslo (Cell Biology, 2., 2016)**, **Copenhagen (Cell Biology, 2., 2017)**, **Greifswald (Pharmacology, 3., W3, 2016)**, **Tübingen (Pharmacology, 2., W3, 2019)**, **Bonn (Physiology, 2., W3, 2020)**

### 5) Third-party funding and awards

- 2020-2023 **DFG** (German Research Council) **Grant GR-4315/4-1**
- 2019-2021 **NCL** (Neuronal ceroid lipofuscinosis) **Foundation** and **Werner Reichenberger Foundation Grant** (Co-PI with Dominik Paquet, DZNE)
- 2019-2020 **DAAD** (German Academic Exchange Service) Project 57448707 (Co-PI with Sui-Yuan Chang, NTU Taipei, Taiwan)
- 2019-2020 **DAAD/TRF** (German Academic Exchange Service and Thailand Research Foundation), Project 57453751 (Co-PI with Wanchai De-Eknamkul, Chulalongkorn University Bangkok, Thailand)
- 2018-2020 **MLIV** (Mucopolidosis type IV) **Foundation Grant** (Co-PI with Diego Medina, Telethon Institute, Naples, Italy)
- 2018-2022 **SFB/TRR152** (German Research Council) **Grant TP P04** (PI)
- 2018-2021 **Lung Toxicology Research Training Group GRK 2338-1 P08** (Co-PI with Martin Biel)
- 2018-2021 **DFG** (German Research Council) **Grant GR-4315/2-1** (Co-PI with Martin Biel, Angelika Vollmar, and Franz Bracher)
- 2017 **Care-for-Rare Foundation Award**, LMU Munich (PI)
- 2016-2017 **University of Pennsylvania Orphan Disease Center and MLIV** (Mucopolidosis type IV) **Foundation Grant (MDBR-17-120-ML4)** (PI)
- 2016 **NCL** (Neuronal ceroid lipofuscinosis) **Foundation Award** (PI)
- 2015 **Fritz-Thyssen Foundation Travel Fellowship** (to Geneva/CH)
- 2014-2018 **SFB/TRR152** (German Research Council) **Grant TP P04** (PI)
- 2013-2016 **Bavarian Research Foundation Grant (DOK-154-13)** (PI)
- 2013-2014 **DFG** (German Research Council) **Grant GR-4315/1-1** (PI); successfully transferred into SFB/TRR152 in 2014
- 2005 **Ernst-Reuter Award**, FU Berlin (for best doctoral thesis in 2004)
- 1994 **Fonds of the Chemical Industry Award** (Verband der Chemischen Industrie e.V.) for best "Abitur" (German high school diploma) in Chemistry

### 6) Key publications

- Gerndt S, Chen C-C, Chao YK, Yuan Y, Scotto Rosato A, Krogsaeter E, Burgstaller S, Urban N, Jacob K, Nguyen ONP, Miller MT, Keller M, Vollmar AM, Gudermann T, Zierler S, Schredelseker J, Schaefer M, Biel M, Malli R, Wahl-Schott C, Bracher F, Patel S, **Grimm, C<sup>#</sup>**: Agonist-mediated switching of ion selectivity in TPC2 differentially promotes lysosomal function. *eLIFE* 9.pii: e54712, 2020.

**Impact factor: 7.6**

See also comment in *eLIFE* by Antony Galione and Anthony Morgan, Oxford University:

<https://f1000.com/prime/737547365>

- Scotto Rosato A, Montefusco S, Soldati C, Di Paola S, Capuozzo A, Monfregola J, Polishchuk E, Amabile A, **Grimm C**, Lombardo A, De Matteis MA, Ballabio A, Medina DL: TRPML1 links lysosomal calcium to autophagosome biogenesis through the activation of the CaMKK $\beta$ /VPS34 pathway. *Nature Commun* 10:5630, 2019.

**Impact factor: 12.4**

- Goodridge J, Jacobs B, Saetersmoen M, Clement D, Clancy T, Skarpen E, Brech A, Landskron J, **Grimm C**, Pfefferle A, Meza-Zepeda L, Lorenz S, Thune Wiiger M, Louch WE, Heggernes Ask F, Liu LL, Yi Sheng Oei V, Kjällquist U, Linnarsson S, Patel S, Taskén K, Stenmark H, Malmberg KJ: TRPML1-mediated modulation of dense-core granules determines functional potential in NK cells. *Nature Commun* 10:514, 2019.

**Impact factor: 12.4**

- Villella VR, Venerando A, Cozza G, Esposito S, Ferrari E, Monzani R, Spinella MC, Oikonomou V, Renga G, Tosco A, Rossin F, Guido S, Bear CE, Silano M, Garaci E, Chao YK, **Grimm C**, Luciani A, Romani L, Piacentini M, Raia V, Kroemer G & Maiuri L: A pathogenic role for cystic fibrosis transmembrane conductance regulator in celiac disease. *EMBO J* 38.pii: e100101, 2019.

**Impact factor: 10.6**

- Plesch E, Chen C-C, Butz E, Scotto Rosato A, Krogsaeter EK, Hua Y, Bartel K, Robaa D, Keller M, Teupser D, Holdt LM, Vollmar AM, Sippl W, Puertollano R, Medina DL, Biel M, Wahl-Schott C, Bracher F, **Grimm C**<sup>#</sup>: Isoform-selective agonist of TRPML2 reveals direct role in cytokine release from innate immune cells. *eLIFE* 7.pii: e39720, 2018.

**Impact factor: 7.6**

See also comment in *eLIFE* by Antony Galione, Oxford University:

<https://www.ncbi.nlm.nih.gov/pubmed/30499445>

Article highlighted by Erin R. Williams in *Sci. Signal.* 18 Dec 2018: Vol. 11, Issue 561, eaau2215:

<http://stke.sciencemag.org/content/11/561/eaau2215.full>

- Chao Y-K, Schludi V, Chen C-C, Butz E, Nguyen, P., Müller, M., Krüger J, Kammerbauer C, Vollmar, A., Berking C, Biel M, Wahl-Schott C, **Grimm C**<sup>#</sup>: TPC2 polymorphisms associated with a human hair pigmentation phenotype result in gain of channel function by independent mechanisms. *PNAS* 114:E8595-E8602, 2017.

**Impact factor: 9.7**

- Chen C-C, Butz E, Chao Y-K, Grishchuk Y, Becker L, Heller S, Slaugenhaupt S, Biel M, Wahl-Schott C, **Grimm C**<sup>#</sup>: Small molecules for early endosome specific patch-clamping. *Cell Chem Biol* 24:907-916, 2017.

**Impact factor: 6.7**

- Chen C-C, Chunlei C, Fenske S, Butz E, Chao Y-K, Biel M, Ren D, Wahl-Schott C, **Grimm C**<sup>#</sup>: Patch clamp technique to characterize ion channels in individual intact endolysosomes. *Nature Protoc* 12:1639-1658, 2017.

**Impact factor: 12.4**

- Nguyen P\*, **Grimm C**<sup>#</sup>, Schneider L, Chao Y-K, Watermann A, Ulrich M, Mayr D, Wahl-Schott C, Biel M, Vollmar AM: Two-pore channel function is crucial for migration of invasive cancer cells. *Cancer Res* 77:1427-1438, 2017.

**Impact factor: 9.1**

- Ruas M, Davis LC, Chen C-C, Morgan AJ, Chuang K-T, Walseth TF, **Grimm C**, Garnham C, Powell T, Biel M, Wahl-Schott C, Parrington J, Galione A: Expression of Ca<sup>2+</sup>-permeable two-pore channels rescues NAADP signalling in TPC-deficient cells. *EMBO J* 34:1743-1758, 2015.

**Impact factor: 10.6**

See also comment by Jentsch et al., MDC, Berlin: <https://www.ncbi.nlm.nih.gov/pubmed/26022292>

- Sakurai Y, Kolokoltsov AA, Chen C-C, Tidwell MW, Bauta WE, Klugbauer N, **Grimm C**, Wahl-Schott C, Biel M, Davey RA: Two pore channels control Ebolavirus host cell entry and are drug targets for disease treatment, *Science* 347:995-998, 2015.

**Impact factor: 33.6**

See also comment by Falzarano & Feldmann: <https://www.ncbi.nlm.nih.gov/pubmed/25722396>

- Chen C-C, Keller M, Hess M, Schiffmann R, Urban N, Wolfgardt A, Schaefer M, Bracher F, Biel M, Wahl-Schott C, **Grimm C**<sup>#</sup>: A small molecule restores function to TRPML1 mutant isoforms responsible for mucopolipidosis type IV. *Nature Commun* 5:4681, 2014.

**Impact factor: 12.4**

- **Grimm C**, Holdt LM, Chen C-C, Hassan S, Müller C, Jörs S, Cuny H, Kissing S, Schröder B, Butz E, Northoff B, Castonguay J, Lubber CA, Moser M, Spahn S, Lüllmann-Rauch R, Fendel C, Klugbauer N, Griesbeck O, Haas A, Mann M, Bracher F, Teupser D, Saftig P, Biel M, Wahl-Schott C: High susceptibility to fatty liver disease in two-pore channel 2-deficient mice. *Nature Commun* 5:4699, 2014.

**Impact factor: 12.4**

- Aneiros E, Cao L, Papakosta M, Stevens EB, Phillips SC, **Grimm C**<sup>#</sup>: Biophysical and molecular basis of TRPV1 proton gating. *EMBO J* 30:994-1002, 2011.

**Impact factor: 10.6**

- **Grimm C**, Jörs S, Saldanha SA, Obukhov AG, Pan B, Oshima K, Cuajungco MP, Chase P, Hodder P, Heller S: Small molecule activators of TRPML3. *Cell Chem Biol* (former Chem. & Biol.) 17:135-148, 2010.

**Impact factor: 6.7**

See also comment by Shmuel Muallem, NIH: <https://www.ncbi.nlm.nih.gov/pubmed/20338511>

- **Grimm C**, Cuajungco MP, van Aken AFJ, Schnee M, Jörs S, Kros CJ, Ricci AJ, Heller S: A helix-breaking mutation in TRPML3 leads to constitutive activity underlying deafness in the varitint-waddler mouse. *PNAS* 104:19583-19588, 2007.

**Impact factor: 9.7**

\* authors contributed equally; # corresponding or shared corresponding author