

# Dr. Lukasz Jablonski

## GENERAL INFORMATION

Date of birth: 10.09.1987  
Gender: male  
Nationality: Polish  
Current position: Junior Research Group Leader  
Address: Computational Neuroscience and Neuroengineering  
Institute for Auditory Neuroscience  
University Medical Center Göttingen (UMG)  
and  
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## ACADEMIC EDUCATION

2013–2018 Doctoral Studies, Leipzig University, Germany  
2006–2012 Studies in the field of Technical Physics (major: Information Technology Physics), Faculty of Technical Physics, Information Technology and Applied Mathematics, Lodz University of Technology, Poland

## SCIENTIFIC DEGREES

2018 Dr. rer. med. (Physiology)  
2012 M.Sc.Eng. (Technical Physics)

## PROFESSIONAL CAREER AFTER COMPLETING DEGREE

2022– Junior Research Group Leader, Computational Neuroscience and Neuroengineering, Institute for Auditory Neuroscience (Prof. Dr. med. Tobias Moser), University Medical Center Göttingen, Göttingen, Germany and Auditory Neuroscience and Optogenetics Laboratory, German Primate Center, Göttingen, Germany  
2017–2022 Postdoctoral research associate at the Institute for Auditory Neuroscience (Prof. Dr. med. Tobias Moser), University Medical Center Göttingen, Göttingen, Germany and Auditory Neuroscience and Optogenetics Laboratory, German Primate Center, Göttingen, Germany  
01–04.2017 Guest scientist at the Department of Neurobiology (Prof. Dr. Reinhard Jahn), Max Planck Institute for Biophysical Chemistry, Göttingen, Germany  
2013–2016 Doctoral research associate at the Carl Ludwig Institute for Physiology, Department I (Prof. Dr. med. Stefan Hallermann), Faculty of Medicine, Leipzig University, Leipzig, Germany  
01–03.2013 Student research assistant at the High-frequency Signaling Group (Prof. Dr. med. Stefan Hallermann), European Neuroscience Institute Göttingen, Germany  
09–11.2012 Student research assistant at the Department of Bioinformatics (Prof. Dr. Edgar Wingender), University Medical Center Göttingen, Göttingen, Germany

## PUBLICATIONS

- [1] Khurana L, Harczos T, Moser T#, **Jablonski L#** En route to sound coding strategy for optical cochlear implants (in revision).
- [2] Khurana L, Keppeler D, **Jablonski L#**, Moser T# (2022) Model-based prediction of optogenetic sound encoding in the human cochlea by future optical cochlear implants.

- [3] **Jablonski L\***, Harczos T\*, Wolf B, Hoch G, Dieter A, Hessler R, Ayub S, Ruther P, Moser T# Hearing restoration by a low-weight power-efficient multichannel optogenetic cochlear implant system. bioRxiv 2020.05.25.114868; DOI: [10.1101/2020.05.25.114868](https://doi.org/10.1101/2020.05.25.114868).
- [4] Keppeler D\*, Schwaerzle M\*, Harczos T\*, **Jablonski L**, Dieter A, Wolf B, Ayub S, Vogl C, Wrobel C, Hoch G, Abdellatif K, Jeschke M, Rankovic V, Paul O, Ruther P#, Moser T# Multichannel optogenetic stimulation of the auditory pathway using microfabricated LED cochlear implants. Science Translational Medicine 12(553):eabb8086; DOI: [10.1126/scitranslmed.abb8086](https://doi.org/10.1126/scitranslmed.abb8086).
- [5] Dieter A\*, Klein E\*, Keppeler D, **Jablonski L**, Harczos T, Hoch G, Rankovic V, Paul O, Jeschke M, Ruther P#, Moser T# (2020)  $\mu$ LED-based optical cochlear implants for spectrally selective activation of the auditory nerve. EMBO Molecular Medicine e12387; DOI: [10.15252/emmm.202012387](https://doi.org/10.15252/emmm.202012387).
- [6] Ritzau-Jost A, **Jablonski L**, Viotti J, Lipstein N, Eilers J, Hallermann S# (2018) Apparent calcium dependence of vesicle recruitment. Journal of Physiology 596(19):4693–4707; DOI: [10.1113/JP275911](https://doi.org/10.1113/JP275911).
- [7] Witkowska A#, **Jablonski L**, Jahn R# (2018) A convenient protocol for generating giant unilamellar vesicles containing SNARE proteins using electroformation. Scientific Reports 8:9422; DOI: [10.1038/s41598-018-27456-4](https://doi.org/10.1038/s41598-018-27456-4).
- [8] Delvendahl I, **Jablonski L**, Baade C, Matveev V, Neher E, Hallermann S# (2015) Reduced endogenous  $Ca^{2+}$  buffering speeds active zone  $Ca^{2+}$  signaling. Proceedings of the National Academy of Sciences 112(23):E3075–E3084; DOI: [10.1073/pnas.1508419112](https://doi.org/10.1073/pnas.1508419112).

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