
Daniël O. J. Reijntjes PhD

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Nationality: Dutch

D.O.B.: 10-06-1990

Present position

2019 – now **Johns Hopkins School of Medicine, Baltimore, MD, USA:**
Postdoctoral fellow.
Supervisor: Prof. Elisabeth Glowatzki.

Relevant degrees

2015 – 2019 **University Medical Center Groningen, Groningen, NL:**
Cum Laude doctoral degree in neuroscience.
(1 in 25 PhD students in the NL receive a cum laude distinction) .
Supervisors: Prof. Dr. Pim van Dijk and Dr. Sonja Pyott

2012 – 2014 **University of Groningen, Groningen, NL:**
MSc. Biology/Neuroscience

2008 – 2012 **University of Groningen, Groningen, NL:**
BSc. Life Science and Technology

2010 **Sheffield University, Sheffield, UK:**
Minor in Biomedical Sciences as part of BSc. Program

Research

My research focuses on the inner hair cell – spiral ganglion neuron (SGN) synapses. The question that has captivated me most is how a heterogenous population of type I SGNs is formed, and what would determine their distinct susceptibility to degeneration. During my PhD I studied the contribution of sodium-activated potassium channels to the SGNs and whether they contribute to shaping the heterogeneous group of SGNs. In my postdoctoral work focuses on examining the molecular mechanisms underlying excitotoxicity of the afferent nerve fibers.

Peer reviewed journal articles

2019 Barone, C.M., Douma, S., **Reijntjes, D.O.J.**, Browe, B.M., Köppl, C., Klump, G., Park, T.J., Pyott, S.J., 2019. Altered cochlear innervation in developing and mature naked and Damaraland mole rats. *J. Comp. Neurol.*
<https://doi.org/10.1002/cne.24682>

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- 2019** **Reijntjes, D.O.J.**, Lee, J.H., Park, S., Schubert, N.M.A., van Tuinen, M., Vijayakumar, S., Jones, T.A., Jones, S.M., Gratton, M.A., Xia, X.-M., Yamoah, E.N., Pyott, S.J., 2019. Sodium-activated potassium channels shape peripheral auditory function and activity of the primary auditory neurons in mice. *Sci. Rep.* 9, 2573. <https://doi.org/10.1038/s41598-019-39119-z>
- 2018** **Reijntjes, D.O.J.**, Schubert, N.M., Pietrus-Rajman, A., van Dijk, P., Pyott, S.J., 2018. Changes in spontaneous movement in response to silent gaps are not robust enough to indicate the perception of tinnitus in mice. *PLoS ONE* 13(8): e0202882.
- 2016** **Reijntjes, D.O.J.**, Pyott, S.J., 2016. The afferent signaling complex: regulation of type I spiral ganglion neuron responses in the auditory periphery. *Hear. Res.* 336, 1e16.

Research presentations

- 2016** **Wolfson Centre for Age-Related Diseases, King's College, London, UK:**
"Na⁺ dependent K⁺ channel function in spiral ganglion neurons"

Poster presentations

- 2019** **Annual Midwinter Meeting Association for Research in Otorhinolaryngology, Baltimore, MD, USA:**
(994) Reijntjes, D.O.J., Lee, J.H., Park S., Schubert N.M.A., van Tuinen M., Vijayakumar S., Jones S.M., Jones T.A., Gratton M.A., Xia X., Yamoah E.N., Pyott S.J.
"Genetic Deletion of the Sodium-Activated Potassium Channels KNa1.1 and KNa1.2 Alters Activity of the Primary Auditory Neurons and Auditory Function in Mice"
- 2018** **Annual Midwinter Meeting Association for Research in Otorhinolaryngology, San Diego, CA, USA:**
(1013) Reijntjes, D.O.J., Schubert, N.M.A., Pyott, S.J.
"Postsynaptic Density Proteins in the Inner Hair Cell Afferent Synapses"

(290) Schubert, N.M.A., van Tuinen M., Joosten, K., Reijntjes, D.O.J., Pyott, S.J.
"Expression Patterns Associated with Age-Related Hearing Loss Reveal Distinct Biological Processes and Potential Pharmaceutical Targets"
- 2017** **Annual Midwinter Meeting Association for Research in Otorhinolaryngology, Baltimore, MD, USA:**
(531) Reijntjes, D.O.J., Pietrus-Rajman A., Schubert, N.M., van Dijk, P., Pyott, S.J.
"Spontaneous behaviour is not a suitable indicator of tinnitus in mice"

(547) Katz, E., Kearny, G., Vattino, L.G., Reijntjes, D.O.J., Wedemeyer, C., Meredith A., Pyott S.J., Elgoyhen, A.B.
“Prehearing efferent-inner hair cell synaptic strength and afferent synapse maturation are not altered in mice lacking the BK channel”

Funding

- 2018** **Don Henderson travel award:**
(<https://www.aro.org/general/custom.asp?page=DonHendersonFund>)
Annual Midwinter Meeting Association for Research in Otorhinolaryngology, San Diego, CA, USA. Travel funds provided for the top 16 ARO travel award applicants
- 2015** **TINNET COST grant:** (<http://www.cost.eu/>)
Institute of Experimental Medicine, Academy of Sciences of the Czech Republic, Prague, CZ. Grant covering expenses for participation in TINNET training school in auditory neurosciences.
- 2010** **Erasmus grant:** (<http://www.erasmusbeurs.nl>)
Sheffield University, Sheffield, UK. Grant for a Six month Exchange program.

Teaching experience

- 2016/2017/2018** **University of Groningen, Groningen Institute for Evolutionary Life Sciences, Groningen, NL. Research school of behavioural and cognitive neurosciences**
Research master: Functional Neuroscience course.
Supervision of practical experiments and demonstrations of techniques used in the auditory sciences as part of the functional Neurosciences course, for MSc. Students.
- 2015/2016/2017** **University of Groningen, Groningen Institute for Evolutionary Life Sciences, Groningen, NL. Research school of behavioural and cognitive neurosciences**
Research master:
Supervision of MSc. students during their research projects, includes supervision of Master thesis.
Nick Schubert: University Medical Centre Groningen, Groningen, NL.
Suzanne Bezema: University of Groningen, Groningen, NL
Alexander Pietrus-Rajman: University of Groningen, Groningen, NL
- 2012** **University of Groningen, Groningen Institute for Evolutionary Life Sciences, Groningen, NL:**
Supervision of BSc. students during their research projects, includes supervision of Bachelor thesis.

References

Prof. Elisabeth Glowatzki: Johns Hopkins School of Medicine, Baltimore MD, USA.

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Prof. Dr. Pim van Dijk: University Medical Centre Groningen, Groningen, NL.

Email: p.van.dijk@umcg.nl

Dr. Sonja Pyott: University Medical Centre Groningen, Groningen, NL.

Email: s.pyott@umcg.nl