

Publications

1. Books

- Fatima-Shad K, **Heinbockel T** (ed) (2025) *Two Sides of the Same Coin - Neurotransmitters in Health and Disease*. ISBN978-0-85466-655-3, Print ISBN978-0-85466-656-0, eBook (PDF) ISBN978-0-85466-657-7. London, United Kingdom: IntechOpen, 108 pp. <http://dx.doi.org/10.5772/intechopen.1001719>
- Heinbockel T** (ed) (2024) *Cell Communication and Signaling in Health and Disease*. ISBN: 978-0-85014-481-9, 978-0-85014-480-2 (Print), 978-0-85014-482-6 (eBook, PDF). London, United Kingdom: IntechOpen, 200 pp. <http://dx.doi.org/10.5772/intechopen.114508>. Available at: <http://www.intechopen.com/books/cell-communication-and-signaling-in-health-and-disease>
- Heinbockel T** (ed) (2024) *Learning and Memory – From Molecules and Cells to Mind and Behavior*. ISBN: 978-1-83769-862-2, 978-1-83769-863-9 (e-book). London, United Kingdom: IntechOpen, 124 pp. <http://dx.doi.org/10.5772/intechopen.1000300>. Available at: <https://www.intechopen.com/books/1002527>
- Heinbockel T** (ed) (2023) *Acetylcholine – Recent Advances and New Perspectives*. ISBN: 978-1-80355-598-0, 978-1-80355-599-7 (e-book). London, United Kingdom: IntechOpen, 150 pp. <http://dx.doi.org/10.5772/intechopen.106304>. Available at: <http://www.intechopen.com/books/acetylcholine-recent-advances-and-new-perspectives>
- Heinbockel T** (ed) (2022) *Neurophysiology – Networks, Plasticity, Pathophysiology, and Behavior*. ISBN: 978-1-80356-069-4, ISBN: 978-1-80356-069-4, eBook (PDF) ISBN: 978-1-80356-070-0. London, United Kingdom: IntechOpen, 286 pp. Available at: <https://www.intechopen.com/books/11742>
- Heinbockel T**, Weissert R (eds) (2022) *COVID-19, Neuroimmunology and Neural Function*. ISBN: 978-1-80355-031-2, Print ISBN 978-1-80355-030-5, E-Book (PDF) ISBN 978-1-80355-032-9. London, United Kingdom: IntechOpen, 134 pp. <https://doi.org/10.5772/intechopen.95199> <http://www.intechopen.com/books/covid-19-neuroimmunology-and-neural-function>
- Anwar M, Farooq Z, Rather RA, Tauseef M, **Heinbockel, T** (eds) (2022) *Epigenetics to Optogenetics - A New Paradigm in the Study of Biology*. ISBN: 978-1-83881-123-5, Print ISBN 978-1-83880-993-5, E-Book (PDF) ISBN 978-1-83881-124-2. London, United Kingdom: IntechOpen, 176 pages. Available at: <https://www.intechopen.com/books/9672>
- Heinbockel T**, Zhou Y (eds) (2021) *Connectivity and Functional Specialization in the Brain*. ISBN 978-1-83962-797-2. London, United Kingdom: IntechOpen, 162 pages. Available at: <http://www.intechopen.com/books/connectivity-and-functional-specialization-in-the-brain>
- Heinbockel T**, Gendeh BS (eds) (2020) *Sino-Nasal and Olfactory System Disorders*. ISBN: 978-1-83880-951-5. London, United Kingdom: IntechOpen, 201 pages. Available at: <https://www.intechopen.com/books/sino-nasal-and-olfactory-system-disorders>

Heinbockel T, Csoka AB (eds) (2019) *Neurochemical Basis of Brain Function and Dysfunction*. ISBN: 978-1-78985-999-7. London, United Kingdom: IntechOpen, 166 pages. Available at: <https://www.intechopen.com/books/neurochemical-basis-of-brain-function-and-dysfunction>

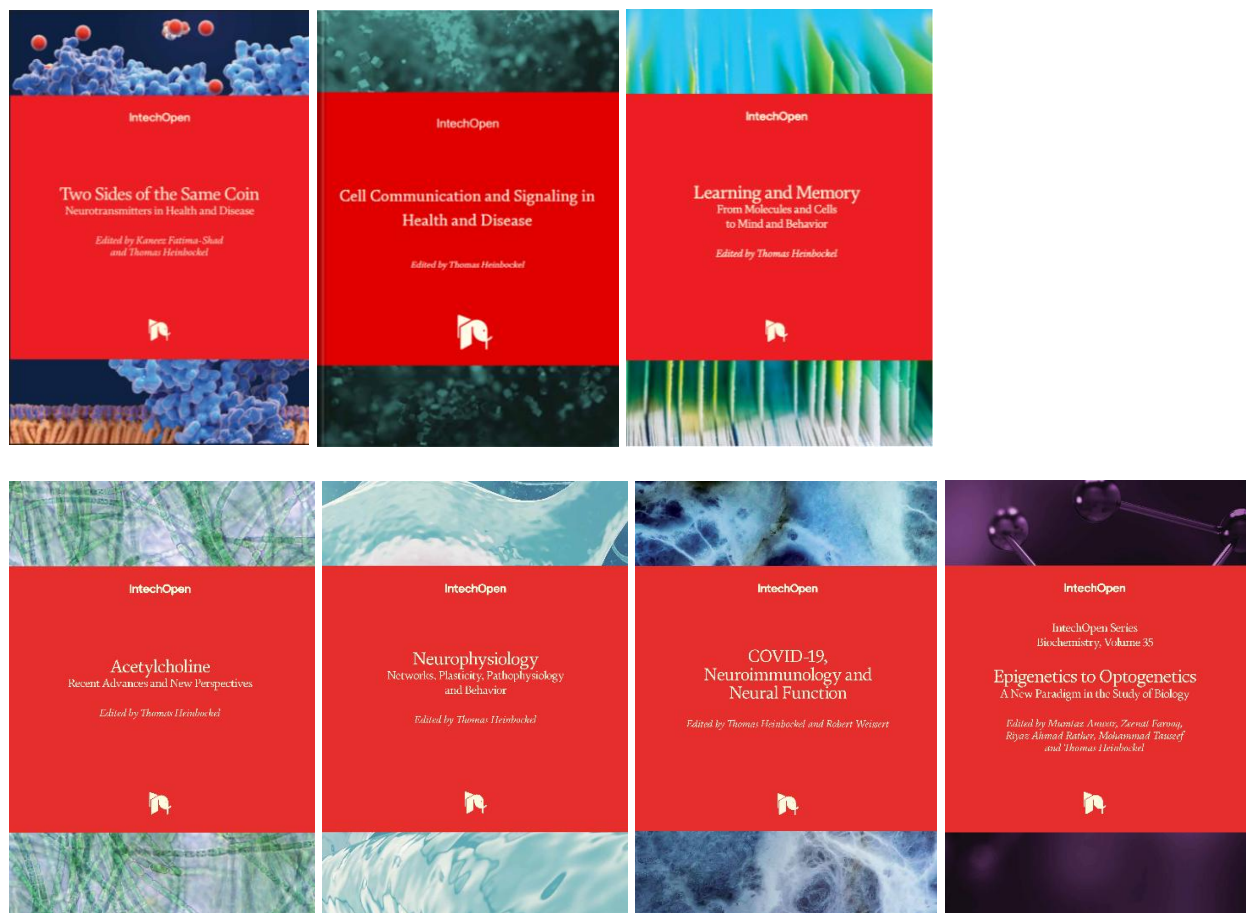
Heinbockel T, Shields VDC (eds) (2019) *Histology*. ISBN: 978-1-78984-971-4. London, United Kingdom: IntechOpen, 135 pages. Available at: <https://www.intechopen.com/books/histology>

Heinbockel T (ed) (2018) *Sensory Nervous System*. ISBN: 978-1-78923-359-9. London, United Kingdom: IntechOpen, 160 pages. Available at: <https://www.intechopen.com/books/sensory-nervous-system>

Heinbockel T (ed) (2017) *Synaptic Plasticity*. ISBN 978-953-51-3234-9. Rijeka, Croatia: IntechOpen, 220 pages. Available at: <https://www.intechopen.com/books/synaptic-plasticity/>

Heinbockel T (ed) (2014) *Neurochemistry*. ISBN 978-953-51-1237-2. Rijeka, Croatia: IntechOpen, 414 pages. Available at: <http://www.intechopen.com/books/neurochemistry>

Heinbockel T (ed) (2012) *Neuroscience*. ISBN 978-953-51-0617-3. Rijeka, Croatia: IntechOpen, 138 pages. Available at: <http://www.intechopen.com/books/neuroscience>





2. Original Reports

Cross CN, Lisi A, Simmonds FC, Washington K, **Heinbockel T**, Campbell MC (2025) The evolutionary landscape of host immunity genes involved in respiratory and other immune-related diseases, and their association with severe COVID-19 outcomes. *medRxiv* 2025.08.28.25334640; doi: <https://doi.org/10.1101/2025.08.28.25334640>

Murataeva N, Mattox S, Lemieux J, Griffis J, Yust K, Du W, **Heinbockel T**, Straiker A (2024) Cannabinoid regulation of sex-dependent murine odorant-stimulated salivation. *Sci Rep* 14:26720; <https://doi.org/10.1038/s41598-024-77761-4>

Wang ZJ, Sun L, **Heinbockel T** (2024) Firing patterns of mitral cells and their transformation in the main olfactory bulb. *Brain Sci* 14(7):678; <https://doi.org/10.3390/brainsci14070678>

Koyama S*, Joseph PV*, Shields* VDC*, **Heinbockel T***, Adhikari P, Kaur R, Kumar R, Alizadeh R, Bhutani S, Calcinoni O, Mucignat-Caretta C, Chen J, Cooper KW, Das SR, Rohlfs Domínguez P, Guàrdia MD, Klyuchnikova MA, Laktionova TK, Mori E, Namjoo Z, Nguyen H, Özdener MH, Parsa S, Özdener Poyraz E, Strub DJ, Taghizadeh-Hesary F, Ueha R and Voznessenskaya VV (2024) Possible roles of phytochemicals with bioactive properties in the prevention and recovery from COVID-19. *Front Nutr* 11:1408248. <https://doi.org/10.3389/fnut.2024.1408248> (*shared first authorship)

Menger NS, Tognetti A, Farruggia MC, Mucignat C, Bhutani S, Cooper KW, Rohlf Domínguez P, **Heinbockel T**, Shields VDC, D'Errico A, Pereda-Loth V, Pierron D, Koyama S, Croijmans I (2024) Giving a Voice to Patients Who Developed Smell Disorders After COVID-19: Cross-Sectional Longitudinal Analysis Using Natural Language Processing of Self-Reports. *Journal of Medical Internet Research Public Health and Surveillance* (JMIR Public Health Surveill) 10:e47064. <https://publichealth.jmir.org/2024/1/e47064/>
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Koyama S, Shields VDC, **Heinbockel T**, Joseph PV, Adhikari P, Kaur R, Kumar R, Alizadeh R, Bhutani S, Calcinoni O, Mucignat-Caretta C, Chen J, Cooper KW, Das S, Dominguez PR, Guardia MD, Klyuchnikova MA, Laktionova TK, Mori E, Namjoo Z, Nguyen H, Ozdener MH, Parsa S, Poyraz EO, Strub DJ, Taghizadeh-Hesary F, Ueha R, Voznessenskaya VV (2024) Possible roles of phytochemicals with bioactive properties in the prevention and recovery from COVID-19. *medRxiv* 2024.01.29.24301882. <https://doi.org/10.1101/2024.01.29.24301882>

Menger NS, Tognetti A, Farruggia MC, Mucignat C, Bhutani S, Cooper KW, Rohlf Domínguez P, **Heinbockel T**, Shields V, D'Errico A, Pereda-Loth V, Pierron D, Koyama S, Croijmans I (2023) Giving a voice to adults with COVID-19: An analysis of the open-ended comments from smell longhaulers and non-longhaulers. *medRxiv* 2023.03.07.23286910. <https://doi.org/10.1101/2023.03.07.23286910>

Alhazzaa R, McKinley R, Getachew B, Tizabi Y, **Heinbockel T**, Csoka AB (2023) Epigenetic changes induced by high glucose in human pancreatic beta cells. *Journal of Diabetes Research*, vol. 2023, Article ID 9947294, 15 pages, 2023. <https://doi.org/10.1155/2023/9947294>

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Shields VDC, May M, Heinbockel TK, **Heinbockel T** (2020) The nose knows: exposing elementary students to insects and the sense of smell. *Annal Behav Neurosci*, 3(1): 306-313. <https://doi.org/10.18314/abne.v3i1.2026>.

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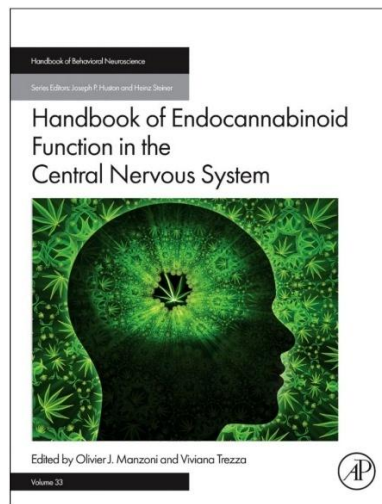
3. Reviews, Chapters and Published Lectures

Csoka AB, Stambler I, West MD, **Heinbockel T**, Bhowmik D, Herbig U, Stair SE (2026) Aging as meta-disease: a comprehensive framework integrating set theory with cellular senescence as causal nexus. In: Stambler I (ed) *Healthy Longevity: Policies and Practices*. Book series *Healthy Ageing and Longevity*. Springer Nature, Cham, 2026 (in press) <https://www.springer.com/series/13277>

Heinbockel T, Brown EA (2026) Multiple roles of cannabinoids in the olfactory system. *Brain Sci* 16, 190 <https://doi.org/10.3390/brainsci16020190>
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Heinbockel T, Brown EA (2025) Endocannabinoids modulate olfactory system development and function. *Preprints* 10.20944/preprints202512.0927.v1
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