

Publikationsliste MH für Homepage (Stand 14.12.2023)

2023

[73] Neusser TP, Bergmeier FS, Gesler H, **Heß M**, Jörger KM, Schrödl M, Brenzinger B (2023) Lebendbeobachtungen und Charakterisierung eines seltenen Exemplars: Gerhard Haszprunar Wien, 1957. **Spixiana** 46(1): 1-5

[72] Melzer RR, Pfannkuchen M, Dujmović S, Mavrić B, **Heß M** (2023) First record of the golden coral shrimp, *Stenopus spinosus* Risso, 1827, in the gulf of Venice. **Annales: Series Historia Naturalis** 33(1): 113-118

[71] Keramidioti A, Schneid S, Busse C, Cramer von Laue C, Bertulat B, Salvenmoser W, **Heß M**, Alexandrova O, Glauber KM, Steele RE, Hobmayer B, Holstein T, David CN (2023) A new look at the architecture and dynamics of the *Hydra* nerve net. Preprint @ bioRxiv (<https://doi.org/10.1101/2023.02.22.529525>)

[70] Tröster M, Kotrba M, **Heß M** (2023) Variation of sperm size and evolution of giant spermatozoa in Lonchopteridae (Diptera). **Arthropod Structure & Development** 75: 101285

[69] **Heß M**, Haacke C (2023) 2000 feet under the sea – visiting deep sea habitats off Roatan (Honduras). **Spixiana** 45(2): 151-158

2022

[68] Lastam J, Griesshaber E, Yin X, Rupp U, Sánchez-Almazo I, **Heß M**, Walter P, Checa A, Schmahl WW (2022) The unique fibrillar to platy nano- and microstructure of twinned foraminiferal shell calcite. (<https://doi.org/10.5281/zenodo.6637309>)

[67] Lastam J, Griesshaber E, Yin X, Rupp U, Sánchez-Almazo I, **Heß M**, Walter P, Checa A, Schmahl WW (2022) Patterns of crystal organization and calcite twin formation in planktonic, roaliid, foraminifera shells and spines. **Journal of Structural Biology** 215(1): 197898

[66] Haszprunar G, Wendler SYC, Jöst AB, Ruthensteiner B, **Heß M** (2022) 3D-anatomy and systematics of cocculinidan limpets (Gastropoda): more data but still an enigma. **Zoomorphology** 141: 151-171

[65] Maiditsch IP, Ladich F, Schulz-Mirbach T, **Heß M**, Schlepütz C (2022) Fish hearing structures in 4D: A standing wave tube-like setup designed for high resolution tomography of sound-induced motion patterns. **Journal of Experimental Biology** 225, jeb243614.

2021

[64] Callan AR, Heß M, Felmy F, Leibold C (2021) Arrangement of excitatory synaptic inputs on dendrites of the medial superior olive. **Journal of Neuroscience** 41(2): 269-283

[63] Prötzel D, Heß M, Schwager M, Glaw F, Scherz MD (2021) Neon-green fluorescence in the desert gecko *Pachydactylus rangei* caused by a new mechanism for tetrapods. **Scientific Reports** 11:297

2020

[62] Kotrba M, Tröster M, Gensler H, Ruthensteiner B, Heß M (2020) Morphology and ultrastructure of the spermatozoa of *Lonchoptera lutea* Panzer, 1809 (Diptera: Lonchopteridae). **Arthropod Structure and Development** 60: 101004

[61] Schulz-Mirbach T, Ladich F, Mittone A, Olbinado M, Bravin A, Maiditsch IP, Melzer RR, Krysl P, Heß M (2020) Auditory chain reaction: Effects of sound pressure and particle motion on auditory structures in fishes. **PLOS ONE** 15(3): e0230578.

2019

[60] Melzer RR, Heß M, Staggl MA, Makovec T, Mavrić B (2019) *Hippolyte prideauxiana* Leach, 1817: First record for the northern Adriatic and observations on mimetic colouration. **Annales Ser Hist Nat** 29(2): 231-234

[59] Schulz-Mirbach T, Plath M, Ladich F, Heß M (Aachen 2019) Why did solid otoliths evolve in the ears of modern bony fishes? **Proceedings of the 23rd International Congress on Acoustics**: 3387-3394

[58] Schulz-Mirbach T, Ladich F, Lychakov DV, Plath M, Heß M (2019) Enigmatic ear stones: What do we know about the functional role and evolution of fish otoliths? **Biological Reviews** 94: 457-482 (doi: 10.1111/brv.12463)

2018

[57] Mirta Smodlaka Tanković, Ana Baričević, Victor Stinga Perusco, Roland R. Melzer, Alejandro Izquierdo Lopez, Jana Sophie Dömel, Martin Heß, Nataša Kužat, Daniela Marić Pfannkuchen, Martin Pfannkuchen (2018) Experimental evidence for shaping and bloom inducing effects of decapod larvae of *Xantho poressa* (Olivi, 1792) on marine phytoplankton. **JMBA** 98(8): 1881-1887

[56] Schulz-Mirbach T, Olbinado M, Rack A, Mittone A, Bravin A, Melzer R, Ladich F, Heß M (2018) In-situ visualization of sound-induced otolith motion using hard X-ray phase contrast imaging. **Scientific Reports** 8: 3121 (12 pp) doi: 10.1038/s41598-018-21367-0

[55] Prötzel D, Heß M, Scherz MD, Schwager M, Padje A, Glaw F (2018) Widespread bone-based fluorescence in chameleons. **Scientific Reports** 8: 698 (9 pp) doi: 10.1038/s41598-017-19070-7

2017

[54] Dreyer N, Hoeg JT, Sorensen S, **Heß M**, Spremberg U, Yusa Y (2017) When dwarf males and hermaphrodites copulate: first record of mating behavior in a dwarf male using androdioecious barnacle *Scalpellum scalpellum* (Crustacea: Ciripedia: Thoracica) **ODE** 18: 115-123

[53] **Heß M** (2017) Ein Hoch auf unseren Chef zum 60. **Spixiana** 40(1): 2-5

[52] Haszprunar G, Kunze T, Warén A, **Heß M** (2017) A reconsideration of epipodial appendages in basal gastropods (Mollusca): on homologies, modules, and evolutionary scenarios. **J Moll Stud** 83: 363-383

[51] Sinclair JL, Fischl MJ, Alexandrova O, **Heß M**, Grothe B, Leibold C, Scheinpflug C (2017) Sound-evoked activity influences myelination of brainstem axons. **Journal of Neuroscience** 37(34): 8239-8255

[50] Fernández-Gago R, **Heß M**, Gensler H, Rocha F (2017) 3D reconstruction of the digestive system in *Octopus vulgaris* Cuvier, 1797 embryos and paralarvae until the first month of life. **Frontiers in Physiology** 8: article 462 (11 pp.)

[49] Lehmann T, **Heß M**, Melzer RR (2017) Sense organs in Pycnogonida: A review. **Acta Zoologica** 99: 211-230.

[48] Ceseña F, Geiselbrecht H, **Heß M**, Landmann S, Lehmann T, Mavric B, Melzer RR, Meyer R, Pfannkuchen M, Bursic M (2017) First record of the snapping shrimp, *Automate branchialis* Holthuis & Gottlieb, 1958 for Croatian waters (Decapoda, Alpheidae). **Spixiana** 40(1): 36

[47] Schwabe E, **Heß M**, Sumner-Rooney LH, Sellanes J (2017) Anatomy of *Zetela alphonsi* Vilvens, 2002 (Mollusca: Solariellidae) casts doubt on its placement according to conchological characters. **Spixiana** 40(2): 161-170

2016

[46] Schulze K, **Heß M**, Schönitzer K (2016) Treehoppers of the ACP Panguana (Peru) (Auchenorrhyncha, Membracidae) with additional faunistic remarks and 3D-SEM illustrations. **Mitteilungen der Münchner Entomologischen Gesellschaft** 106: 39-64

[45] Matzke-Karasz R, Smith RJ, **Heß M** (2017) Removal of extracellular coat from giant sperm in the female's receptacle induces sperm motility in *Mytilocypris mytiloides* (Cyprididae, Ostracoda, Crustacea). **Cell and Tissue Research** 368: 171-186

[44] Melzer RR, Bursic M, Cesena F, Dömel JS, **Heß M**, Landmann S, Metz M, Pfannkuchen M, Reed I, Meyer R (2016) High decapod diversity revealed by minimal-invasive, short-term survey of Brijuni marine protected area. **Biodiversity and Conservation** 25: 1559-1567

[43] Kunze T, **Heß M**, Haszprunar G (2016) 3D-interactive microanatomy of *Ventsia tricarinata* Warén & Bouchet, 1993 (Vetigastropoda: Seguenzioidea) from pacific hydrothermal vents. **J Moll Stud** 82: 366–377

[42] Haszprunar G, Kunze T, Brückner M, **Heß M** (2016) Towards a sound definition of Skeneidae (Mollusca, Vetigastropoda) 3D-interactive anatomy of the type species *Skenea serpuloides* (Montagu, 1808), and comments on related taxa. **ODE** 16: 577-595

[41] Kotrba M, **Heß M**, Dallai R (2016) Giant spermatozoa of *Diasemopsis* (Diopsidae, Diptera) – Structural, ultrastructural and functional aspects. **Arthropod Structure & Development** 45: 42-56

2015

[40] Sumner-Rooney LH, Schrödl M, Lodde-Bensch E, Lindberg DR, **Heß M**, Brennan GP, Sigwart JD (2015) A neurophylogeny approach provides new insight to the evolution of Scaphopoda. **Evolution and Development** 17 (6): 337–346

2014

[39] Lehmann T, **Heß M**, Melzer RR (2014) SEM-atlas of the Pycnogonida of the Mediterranean Sea: I: common littoral species. **Zoosystematics and Evolution** 90(2): 163-224 (doi: 10.3897/zse.90.7520)

[38] Chen CC, Keller M, **Heß M**, Schiffmann R, Urban N, Wolfgardt A, Schaefer M, Bracher F, Biel M, Wahl-Schott CA, Grimm C (2014) A small molecule restores function to TRPML1 mutant isoforms responsible for mucopolidiosis type IV. **Nature Communications** 5: 4681 (doi: 10.1038/ncomms5681)

[37] Lehmann T, **Heß M**, Wanner G, Melzer RR (2014) Dissecting an ancestral neural network – FIB-SEM based 3D-reconstruction of the visual neuropils in the sea spider *Achelia langi* (Dohrn, 1881) (Pycnogonida). **BMC Biology** 12: 59

[36] Bohn JM, **Heß M** (2014) The Antarctic holothurian genus *Echinopsolus* Gutt, 1990 (Dendrochirotida, Cucumariidae): brood pouches, spermatozoa, spermatozeugmata and taxonomic implications. **Zootaxa** 3841(4): 573-591

[35] Wild E, Wollesen T, Haszprunar G, **Heß M** (2014) Comparative 3D-microanatomy and histology of the eyes and central nervous systems in coleoid cephalopod hatchlings. **Organisms Diversity and Evolution** 15: 37-63

[34] Yamada S, Matzke-Karasz R, **Heß M** (2014) How is a giant sperm ejaculator formed? Development of the 'Zenker organ' after the last moult in *Pseudocandona marchica* (Crustacea, Ostracoda, Candonidae). **Zoologischer Anzeiger** 253(6): 449-460

[33] Schulz-Mirbach T, Ladich F, Plath M, Metscher BD, **Heß M** (2014) Are accessory hearing structures linked to inner ear morphology? – Insights from 3D orientation patterns of ciliary bundles in three cichlid species. **Frontiers in Zoology** 11:25

[32] Sigwart J, Sumner-Rooney LH, Schwabe E, **Heß M**, Brennan G, Schroedl M (2014) “Schwabeorgan” Description of a new sensory organ in “primitive” molluscs (Polyplacophora: Lepidopleurida). **Frontiers in Zoology** 11:7

2013

[31] Haszprunar G, Graf L, **Heß M** (2013) 3D-anatomy of the ctenoglossate limpet *Kaiparapelta* (Vetigastropoda: Lepetelloidea). **J Moll Stud** 80: 84-98

[30] Schulz-Mirbach T, **Heß M**, Metscher BD (2013) Sensory epithelia of the fish inner ear in 3D. **Frontiers in Zoology** 10:63

[29] Kotrba M, **Heß M** (2013) Giant spiral shaped spermatozoa of *Diasemopsis comoroensis* (Diptera, Diopsidae) with a unique ultrastructural component. **Tissue and Cell** 45(6): 443-445 + cover picture

[28] Schulz-Mirbach T, **Heß M**, Metscher BD, Ladich F (2013) A unique swim bladder-inner ear connection in a teleost fish revealed by a combined high-resolution microCT and 3D histological study. **BMC Biology** 11:75

[27] Hawe A, **Heß M**, Haszprunar G (2013) 3D-Reconstruction of the anatomy of the ovoviviparous (?) freshwater gastropod *Borysthenia naticina* (Menke, 1845) (Ectobranchia: Valvatidae). **Journal of Molluscan Studies** 79(3): 191-204

2012

[26] Lehmann T, **Heß M**, Melzer R (2012) Wiring a periscope - ocelli, retinula axons, visual neuropils and the ancestry of sea spiders. **PLoS ONE** 7(1): e30474

2011

[25] Schulz-Mirbach T, **Heß M**, Plath M (2011) Inner ear morphology in the atlantic molly *Poecilia Mexicana* – first detailed microanatomical study of the inner ear of a cyprinodontiform species. **PLoS ONE** 6(11): e27734. 14 pp

[24] Haszprunar G, Speimann E, Hawe A, **Heß M** (2011) Interactive 3D-anatomy and affinities of the Hyalogyrinidae, basal Heterobranchia with a rhipidoglossate radula. **Organisms Diversity and Evolution** 11(3): 201-236

[23] Koch PC, **Heß M** (2011) Topographic mapping of retinal neurons in the European anchovy by nuclear staining and immunocytochemistry. **Journal of Neuroscience Research** 89: 1316-1330

[22] Hartmann H, Heß M, Haszprunar G (2011) Anatomy and affinities of Bathysciadiidae (Gastropoda, Coccilinoidea), deep-sea limpets feeding on decaying cephalopod beaks. **Journal of Morphology** 272: 259-279

2010

[21] Martin R, Schrödl M, Heß M, Tomaschko KH (2010) Cnidosac-related structures in *Embletonia* (Mollusca, Nudibranchia) compared with dendronotacean and aeolidacean species. **The Open Marine Biology Journal** 4: 96-100

[20] Koch PC, Seebacher C, Heß M (2010) 3D-topography of cell nuclei in a vertebrate retina – a confocal and two-photon microscopic study. **Journal of Neuroscience Methods** 188: 127-140

2009

[19] Neusser TP, Heß M, Schrödl M (2009) Tiny but complex – interactive 3D visualization of the interstitial acochlidian gastropod *Pseudunela cornuta* (Challis, 1970). **Frontiers in Zoology** 6: 20 (doi: 10.1186/1742-9994-6-20)

[18] Heß M (2009) Triple cones in the retinae of three anchovy species: *Engraulis encrasicolus*, *Cetengraulis mysticetus* and *Anchovia macrolepidota* (Engraulidae, Teleostei). **Vision Research** 49: 1569-1582

[17] Jörger K, Heß M, Neusser T, Schrödl M (2009) Sex in the beach – spermatophores, dermal insemination, and 3D sperm ultrastructure of the aphyllid, acochlid *Pontohedyle milaschewitchii* (Acochlidia, Opisthobranchia, Gastropoda). **Marine Biology** 156: 1159-1170

2008

[16] Martin R, Heß M, Schrödl M, Tomaschko KH (2008) Cnidosac morphology in dendronotacean and aeolidacea nudibranch molluscs: from expulsion of nematocysts to use in defense? **Marine Biology** 156: 261-268

[15] Egea J, Erlacher C, Montanez E, Burtscher I, Yamagishi S, Heß M, Hampel F, Sanchez R, Rodriguez-Manzaneque MT, Boesl M, Fässler R, Lickert H, Klein R (2008): A novel morphogenetic function for the anterior visceral endoderm in restricting epithelial-to-mesenchymal transition to the primitive streak. **Genes & Development** 22: 3349-3362

[14] Heß M, Beck F, Gensler H, Kano Y, Kiel S, Haszprunar G (2008) Microanatomy, shell structure, and molecular phylogeny of *Leptogyra*, *Xyleptogyra* and *Leptogyropsis* (Gastropoda, Neomphalida, Melanodrymiidae) from sunken wood. **Journal of Molluscan Studies** 74(4): 383-401

[13] Ruthensteiner B, **Heß M** (2008) Embedding 3D-models of biological specimens in pdf-publications. **Microscopy Research and Technique** 71(1): 778-786

[12] Kunze T, **Heß M**, Brückner M, Beck F, Haszprunar G (2008) Skeneimorph gastropods in Neomphalina and Vetigastropoda – a preliminary report. **Zoosymposia** 1: 119-131

2007

[11] **Heß M** (2007) Semi-automated mapping of cell nuclei in 3D-stacks from optical-sectioning microscopy. **Lecture Notes in Artificial Intelligence** 4826: 156-164

[10] Neusser TP, **Heß M**, Haszprunar G, Schrödl M (2007) Sperm ultrastructure of *Microhedyle remanei*, an interstitial acochlidian gastropod with dermal fertilization. **Journal of the Marine Biological Association of the UK** 87: 747-754

2006

[9] **Heß M**, Melzer R, Eser R, Smola U (2006) The structure of anchovy outer retinae - a comparative light- and electron-microscopic study with museum-stored material. **Journal of Morphology** 267(11): 1356-1380

[8] Neusser TP, **Heß M**, Haszprunar G, Schrödl M (2006) Computer-based 3-dimensional reconstruction of the anatomy of *Microhedyle remanei* (Marcus, 1953), an interstitial acochlidian gastropod from Bermuda. **Journal of Morphology** 267(2): 231-247

vor 2006

[7] Haszprunar G, **Heß M** (2005) A new *Rhodope* (Gastropoda: Nudibranchia?) from the Roscoff area (Bretagne), with review of *Rhodope* species. **Spixiana** 28(3): 193-197

[6] **Heß M**, Melzer R (2003) *Anoplodactylus petiolatus* (Pycnogonida) and *Hydractinia echinata* (Hydrozoa) - observations on galls, feeding behaviour and the host's defence. **Vie et Milieu** 53(2/3): 135-138

[5] **Heß M**, Melzer R, Smola U (2002) The pattern of cone pedicles and horizontal cells in the retina of the European anchovy, *Engraulis encrasicolus* L. (Engraulidae, Clupeiformes). **Journal of Submicroscopic Cytology and Pathology** 34(4): 355-365

[4] Haacke C, **Heß M**, Melzer R, Gebhart H, Smola U (2001) Fine structure and development of the retina of the grenadier anchovy *Coilia nasus* (Engraulidae, Clupeiformes). **Journal of Morphology** 248: 41-55

[3] **Heß M**, Melzer R, Smola U (1998) The photoreceptors of *Muraena helena* (Linnaeus1758) (Teleostei: Muraenidae) and *Ariosoma balearicum* (Delaroche1809) (Teleostei: Congridae) - a comparison of multiple bank retinae in Anguilliformes. **Zoologischer Anzeiger** 237: 127-137

[2] **Heß M**, Melzer R, Smola U (1996) The eyes of a "nobody", *Anoplodactylus petiolatus* (Pantopoda; Anoplodactylidae). **Helgoländer Meeresuntersuchungen** 50: 25-36

[1] Melzer R, **Heß M**, Dunkel C, Ludwig P, Smola U (1995) Fine structure of the "slit organs" of the pycnogonid *Anoplodactylus petiolatus*. (Pantopoda; Anoplodactylidae). **Acta Zoologica** 77(2): 167-171

Abstracts

[82] Seydel C, **Heß M**, Klingl A, Nägele T (Darmstadt, 2023) Structural and metabolic dynamics of plant cells in context of heat acclimation. Microscopy Conference Proceedings: 337 + Poster

[81] Bergmeier FS, Brenzinger B, Gensler H, Haszprunar G, Hawe A, **Heß M**, Hobelsberger L, Jörger KM, Kunze T, Kohnert PC, Neusser TP, Pinkau C, Schrödl M, Schwabe E, Wild E (WCM Munich, 2022) 20 years of 3D microanatomical research by the Munich malacologists around Prof. Haszprunar – a synopsis. In: Bergmeier FS, Brenzinger B, Neusser TP (eds) Spixiana Supplement 30B (Posterband): 67 (doi 10.23788/SPX-Suppl30B)

[80] Bergmeier FS, Brenzinger B, Gensler H, Haszprunar G, Hawe A, **Heß M**, Hobelsberger L, Jörger KM, Kunze T, Kohnert PC, Neusser TP, Pinkau C, Schrödl M, Schwabe E, Wild E (WCM Munich, 2022) 20 years of 3D microanatomical research by the Munich malacologists around Prof. Haszprunar – a synopsis. In: Bergmeier FS, Brenzinger B, Neusser TP (eds) Spixiana Supplement 30A: 350 (doi 10.23788/SPX-Suppl30A)

[79] Inshyna V, Kaczmarek L, Perkovsky E, Hammel JU, **Heß M**, Haug JT (Kraków, 2022) New fossil Eutardigrada from Rovno Eocene amber (Ukraine, 33-38 MYA). 15th International Symposium on Tardigrades

[78] Schulz-Mirbach T, Schlepütz CM, **Heß M**, Gstöhl SJ, Maiditsch IP, Ladich F (Vienna, 2021) The Weberian apparatus in action - How do the auditory structures of otophysan fishes interact during sound exposure? 92nd Annual meeting of the Paleontological Society. Berichte der Geologischen Bundesanstalt 142: 83

[77] Callan AR, **Heß M**, Leibold C, Felmy F (San José, Calif. 2020) Arrangement of Contact Sites from Single Excitatory Fibers on Medial Superior Olive Dendrites. 43rd ARO MidWinter Meeting. Abstracts of the Association for Research in Otolaryngology: 535

[76] Schulz-Mirbach T, Mittone A, Olbinado M, Schlepütz C, Ladich F, Maiditsch IP, Krysl P, Melzer R, **Heß M** (Munich, 2019) How do fish otoliths and ancillary hearing structures move in a sound field? – Insights from synchrotron radiation-based imaging. Palaeo & Life 2019: 137

[75] Schulz-Mirbach T, **Heß M** (2018) Grundlagen der Schallübertragung im Fischohr. 97. Jahresbericht der Münchener Universitätsgesellschaft: 10-13

[74 V] Schulz-Mirbach T, Olbinado MP, Mittone A, Schillinger B, Ladich F, Melzer RR, **Heß M** (Munich, 2018) The rolling stones live: Hard X-ray phase contrast and neutron imaging allow for the in-situ visualization of otolith motion and associated structures in the fish ear. German conference for research with synchrotron radiation, neutrons and ion beams at large facilities, SNI report of abstracts: 227

[73 V] Schulz-Mirbach T, Mittone A, Bravin A, Rack A, Ladich F, **Heß M** (Boston, 2017) First attempt to visualize otolith motion in situ using synchrotron radiation imaging techniques. *J Acoust Soc Am* 141: 3861

[72 V] Schulz-Mirbach T, Rack A, Olbinado M, Mittone A, Bravin A, Ladich F, **Heß M** (Munich, 2017) First visualization of the *in-situ* motion of otoliths in the fish ear. *European Association of Vertebrate Palaeontology EAVP, Zitteliana* 91: 82.

[71] Scheungrab M, Schulze K, Boergens K, Gour A, Helmstaedter M, Wanner G, **Heß M** (Kiel, 2016) A retinal connectomics study using a combination of mechanical and FIB-based BFSEM. 109. Annual meeting of the German Zoological Society, abstract book: 113

[70] Fernández-Gago R, **Heß M**, Gensler H, Rocha F (Lissabon, 24.11.2015) A 3D description of the development of the gut in *Octopus vulgaris* paralarvae. CEPHS/INACTION workshop, abstract book ...

[69P] Fernández-Gago R, **Heß M**, Gensler H, Rocha F (Hakodate, 6.11.2015) 3D reconstruction of the digestive system in newly hatched *Octopus vulgaris* Cuvier, 1797 paralarvae. CIAC 2015 Conference, abstract book ...

[68P] Rutkowski A, **Heß M** (Graz, 2015) The optic chiasm in the *Octopus vulgaris* hatchling. 108. Annual meeting of the German Zoological Society, abstract book: 95

[67 P] Schulz-Mirbach T, Ladich F, Plath M, **Heß M** (Porto, Portugal 2015) The role of otolith size in hearing – insights from cichlid fishes. 15. European Congress of Ichthyology, *Frontiers in Marine Sciences*, Conference Abstracts (doi: 10.3389/conf.fmars.2015.03.00034)

[66 V] Schulz-Mirbach T, Ladich F, Plath M, **Heß M** (Porto, Portugal 2015) Does improved hearing result in altered inner ear morphology? 15. European Congress of Ichthyology, *Frontiers in Marine Sciences*, Conference Abstracts (doi: 10.3389/conf.fmars.2015.03.00020)

[65P] Scheungrab M, Guder, P, Schulze K, Börgens K, Gour A, Helmstaedter M, Wanner G, **Heß M** (Göttingen, 2015) 3D-imaging and analysis of neural networks using combined 3D-EM approaches. *Microscopy Conference 2015 Proceedings*: 800

[64P] Scheungrab M, Schulze K, Wanner G, **Heß M** (Göttingen, 2015) Order in the chaos - unscrambling the interlaced fine structures of anchovy cone pedicles. *Proceedings of the 11th Meeting of the German Neuroscience Society*: 689-699

[63P] Lehmann T, **Heß M**, Melzer RR (München, 2014) SEM atlas of the sea spiders (Pycnogonida) of the Mediterranean Sea: common littoral species. 8th Meeting of NOBIS Austria, abstract book: 27

[62P] Schulze K, **Heß M**, Schönitzer K (München, 2014) Treehoppers (Hemiptera, Membracidae) of Panguana (Peru). A close look on strange shapes. 8th Meeting of NOBIS Austria, abstract book: 36

[61V] Schulz-Mirbach T, Ladich F, Plath M, Metscher BD, **Heß M** (Mallorca, 2014). What do we know about otolith function in hearing? – insights from cichlids and lifebearing fish. 5th International otolith symposium, abstract book: 93-94

[60P] Scheungrab M, Koch P, Schulze K, Wanner G, **Heß M** (Göttingen, 2014) 3D fine structure and interconnections of cone pedicles in the European anchovy. 107. Annual meeting of the German Zoological Society, abstract book: 226

[59P] de Motte A, Bierling M, Gensler H, **Heß M** (Göttingen, 2014) Pattern and density distribution of photoreceptors in the zebrafish retina. 107. Annual meeting of the German Zoological Society, abstract book: 202

[58V] Sumner-Rooney L, Sigward J, Williams S, **Heß M**, Schwabe E (Berlin, 2014) The evolution of eye reduction: lessons from a family of deep-sea gastropods. ICIM3 abstracts: 51

[57V] Jörger K, Brenzinger B, **Heß M**, Schrödl M, Neusser T (Berlin, 2014) Tales of miniaturization and progenesis: A comparative histological and ultrastructural approach to investigate morphological convergence in mesopsammic slugs. ICIM3 abstracts: 162

[56V] **Heß M**, Koch P, Scheungrab M, Wanner G (München, 2013) Disentangling retinal connectomics with 3D electron microscopy. 106. Annual meeting of the German Zoological Society (Satellite Symposium on 3D Electron Microscopy), abstract book: 60

[55P] de Motte A, **Heß M** (München, 2013) Pseudo 4D-Rekonstruktion der Kopfreion einer Fischlarve (*Engraulis encrasicolus*). 106. Annual meeting of the German Zoological Society, abstract book: 254

[54P] Schulze K, **Heß M** (München, 2013) The pattern of triple cone pedicles in the anchovy retina. 106. Annual meeting of the German Zoological Society, abstract book: 331

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