

Curriculum Vitae - Prof. Lars E. Holmer

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Qualifications: Docent 1992 (Uppsala Univ.), PhD 1988 (Uppsala Univ.), BSc 1983 (Uppsala Univ.)

Relevant employment history:

2000-present: **Full Professor** of Hist. Geol. and Palaeontology, Dept. of Earth Sciences, Uppsala University.
2021-present: **Director of Doctoral Studies**, Dept. of Earth Sciences, Uppsala University.
2021-present: **Elected Member of Faculty Board for Doctoral Studies**, Uppsala University.
2022-present: **Director of CEMUS**, Dept. of Earth Sciences, Uppsala University.
2006-2012: **Head of Palaeobiology Program**, Dept. of Earth Sciences, Uppsala University.
2008-2013: **Dean of Earth Sciences and Faculty Board**, Science and Technology Faculty, Uppsala University.
2008-2013: **Chair faculty gender equality committee**, Science and Technology Faculty, Uppsala University.
2003-2008: **Director of Studies**, Dept. of Earth Sciences, Uppsala University.
2006-2008: **Associate Prefect**, Dept. of Earth Sciences, Uppsala University
1991-2000: **Senior Lecturer**, Dept. of Earth Sciences, Uppsala University.
1986-1988: **Assistant curator**, Dept. of Palaeozoology, Swedish Museum of Natural Hist., Stockholm.
1989-1991: **Post-doc (Research Associate)**, Dept. of Palaeozoology, Swedish Museum of Natural Hist., Stockholm

Esteem Factors: Selected Prizes, Awards, Fellowships, Leadership

2022: Geological Society of Sweden -150-year Jubilee Meeting, Session Co-convenor.
2021: Chairman of the Evaluation of Research Education, Technology, Uppsala University.
2020- present: Elected voting Member of the Subcommittee on Ordovician Stratigraphy, IUGS.
2020: Chairman of the RQ-2020 Earth Science, Lund University
2019: Awarded the Björkénka Prize from Uppsala University
2019: Awarded Gustav Linnarsson Prize from the Geological Society of Sweden
2017-present: Awarded Chinese Zhongjian Yang Scholarship Professor at the Early Life Institute, State Key Laboratory of Continental Dynamics, Northwest University, Xi'an, China.
2017-2018: Awarded visiting professor scholarship, Lille University, France.
2016-2019: Elected Secretary General of the International Palaeontological Association.
2016: Elected member of the Electoral Search Committee for the Vice Chancellor, Uppsala Univ.
2015-2019: Elected member of the Academic Senate, Uppsala University.
2015: International Brachiopod Congress; Nanjing, China, Co-convenor.
2012: Convenor and session chairman, International Field Conference on Cambrian, Guizhou, China.
2011: Acting Chairman Swedish Research Council NT-C.
2011-2014: Member of Uppsala University equal opportunities committee.
2008-2010: Museum Gustavianum, Board member, Uppsala University.
2008-2014: Member of steering committee Baltic University Programme, Uppsala University.
2009-present: Awarded Adjunct Professorship at the Early Life Institute, State Key Laboratory of Continental Dynamics, Northwest University, Xi'an, China.
2012: Antarctic Service Medal from US National Science Foundation for excellence in exploration and research on the Antarctic continent.
2005: International Brachiopod Congress; Copenhagen, Member of Organising Committee; Co-chair, leader of post congress Excursion (Gotland).
2000-2004: Member of the Swedish Research Council NT-C (VR).
2004: Organizing committee and session chairman, Nordic Winter Meeting, Uppsala.
2001-2019: Member of Five International evaluations of Estonian research/teaching
2006-2010: Member of the Swedish Geological National Committee.
2004-2010: Chairman of the Lethaia Foundation.
1999-2003: Elected Board member, Swedish Geological Society (GF), Stockholm.
1997-2004: Regional coordinator, IGCP-410.
1993-2011: Elected Board Member, Dept. of Earth Sciences, Uppsala Univ.
1988: Awarded "Golden Trilobite – best monograph of the year" by the Paleontological Society, USA.
1983-1987: Elected Board Member, Institute of Palaeontology, Uppsala Univ.
1979-1981: Award and scholarship from AAPG (American Association of Petroleum Geologists) and the Sweden-America Association for studies in Geology at University of Missouri-Columbia and Washington State University, USA.

Competitive External Funding (2012-2022):

- 2019 - 2022: **VR 2018-03390 – Holmer, Reassessing the rise and phylogeny of Cambrian organophosphatic shelly lophotrochozoans using molecular fossils** [\$320K]
2017: Awarded Chinese Zhongjian Yang Scholarship Professor at the Early Life Institute, State Key Laboratory of Continental Dynamics, Northwest University, Xi'an, China [\$75K]
2012-2017: **VR 2012-1658 - Holmer, Lophophorate phylogeny in the Cambrian – a Gondwanan perspective.** [\$240K]
2013: Wenner Gren Foundation, Overseas Visiting Scholar Program, Sweden - **Brock & Holmer, Documenting Early Cambrian skeleton-bearing lophotrochozoan animals from Australia and Antarctica.** [\$10K]

HDR supervision: I have supervised a total of 12 research student PhD and Licentiate (Swedish Licentiate or “MPhil” is equivalent of a 50% PhD) projects as Principal or Co-supervisor with 12 completions. Research student completions: **2020:** Tom Claybourn (principal supervisor; co-tutelle with Glenn Brock); **2019:** Zhiliang Zhang (co-supervisor); **2022:** Liang Yue (co-supervisor).
2015: Aodhan Butler (co-supervisor), PhD; **2015:** Lewis Bassett-Butt (principal supervisor), Licentiate; **2014:** Haizhou Wang (principal supervisor), PhD; **2012:** Cecilia Larsson (principal supervisor), PhD; **2009:** Åsa Frisk (principal supervisor), PhD; **2007:** Sandra Pettersson Stolk (principal supervisor, Licentiate; Jenny Sälgeback (principal supervisor), PhD; **2005:** Ole Hoel (principal supervisor), PhD; **2003:** Christian Skovsted (co-supervisor), PhD; **2004:** Eva Egerquist (principal supervisor); **2001:** Tatiana Tolmacheva (principal supervisor), PhD; **1997:** Ivar Puura (principal supervisor), PhD.

Research metrics

H-index = 43, *i10-index* = 142, *Total citations* = 6478 [Source: Google Scholar 02/11/2022]

Publications Selected publications listed. Main project collaborators in **black**.

For a complete list see: <https://scholar.google.se/citations?user=Zc3J22EAAAAJ&hl=en>
<https://www.researchgate.net/profile/Lars-Holmer> <https://orcid.org/0000-0003-3629-0049>

Popular Science 2010-

1. **Holmer, L.E.** 2020. En titt in i alunskifferns ”kristallkuler”– ser vi spår av is i ett tropiskt hav? *Geologiskt forum*, 105, 4-9.
2. **Holmer, L.E.** 2017. Kambrosiluren i Västergötland – en geologisk resa genom tid och rum. In: Christer Ask (ed.), *Sten - en tidsresa. Västergötlands Fornminnesförening tidskrift*, 1-21.

Book Chapters [selected relevant examples 2010-]

1. **Popov, L.E., Holmer, L.E.** Bassett, MG, Ghobadi Pour, M., & Percival, I. 2013. Biogeography of Ordovician linguliform and craniiform brachiopods. *Geological Society, London, Memoirs* 38 (1), 117-126.

Refereed journal articles [selected examples post 2010]

1. Vinn, O., Wilson, M.A., **Holmer, L.E.**, Ernst, A., Tinn, O. & Toom, U. 2022. Diverse endobiotic symbiont fauna from the late Katian (Late Ordovician) of Estonia. *Palaeontologia Electronica* (in press).
2. Wang, H.Z., **Zhang, Z.F., Holmer, L.E.** & Zhang, Z.L. 2022. Redescription and systematic position of *Diandongia pista* from the Chengjiang Lagerstätte. *Palaeoworld* (in press).
3. Fang, R., Liang, Y., Chen, Y., Liu, F., Hua, H., **Holmer, L.E.** & **Zhang, Z.** 2022. Late Ediacaran cavity-dwelling filamentous microorganisms accommodated in a valve-like organism from the uppermost Dengying Formation in eastern Yunnan of South China. *Precambrian Research* 379, 106820.
4. **Álvaro, J. J., Holmer, L.E., Shen, Y., Popov, L.E.,** Ghobadi Pour, M., **Zhang, Z.,** Zhang, Z., **Ahlberg, P.** & Bauert, H. 2022. Submarine metalliferous carbonate mounds in the Cambrian of the Baltoscandian Basin induced by vent networks and water column stratification. *Scientific Reports* 12, 8475 (2022).
5. Wang, H., Li, C., Zhang, Z., Kershaw, S., **Holmer, L.E.,** Zhang, Y., Wei, K. & Liu, P. 2022. Fossil brachiopod identification using a new deep convolutional neural network. *Gondwana Research* 105, 290-298.
6. **Holmer, L.E.,** Clausen, S., **Popov, L.E.,** Ghobadi Pour, M., Liang, Y., **Zhang, Z.,** Reyes, J.J.P., Sosa-Leon, J.P., Buitrón-Sánchez, B.E. 2022. Cambrian (Stage 4 to Wuliuan) brachiopods from Sonora, Mexico. *Journal of Paleontology*, 1-21.
7. Kouchinsky, A., Alexander, R., Bengtson, S., Bowyer, F., Clausen, S., **Holmer, L.E.,** Kolesnikov, K.A., Korovnikov, I.V., Pavlov, V., Skovsted, C.B., Ushatinskaya, G., Wood, R., & Zhuravlev, A.Y. 2022. Early-middle Cambrian stratigraphy and faunas from northern Siberia. *Acta Palaeontologica Polonica* 67 (2), 341-464.
8. Liang, Y., **Holmer, L.E.,** Duan, X. & **Zhang, Z.** 2022. Brachiopods from the Latham Shale Lagerstätte (Cambrian Series 2, Stage 4) and Cadiz Formation (Miaolingian, Wuliuan), California. *Journal of Paleontology* 96 (1), 61-80

9. Vinn, O., **Holmer, L.E.**, Wilson, M.A., Isakar, M. & Toom, U. 2021. Possible drill holes and pseudoborings in obolid shells from the Cambrian/Ordovician boundary beds of Estonia and the uppermost Cambrian of NW Russia. *Historical Biology* 33 (12), 3579-3584.
10. Agbaje, O., Brock, G.A., **Zhang, Z.**, Duru, K.C., Liang, Y., George, S.C. & **Holmer, L.E.** 2021. Biomacromolecules in recent phosphate-shelled brachiopods: identification and characterization of chitin matrix. *Journal of Materials Science* 56 (36), 19884-19898.
11. Hu, Y., **Holmer, L.E.**, Liang, Y., Duan, X. & **Zhang, Z.** 2021. First Report of Small Shelly Fossils from the Cambrian Miaolingian Limestones (Zhangxia and Hsuzhuang Formations) in Yiyang County, Henan Province of North China. *Minerals* 11 (10), 1104.
12. Teece, B.L., Brock, G.A., Paterson, J.R., Skovsted, C.B., **Holmer, L.E.** & George, S.C. 2021. Using laser micropyrolysis to assess potential relationships between Cambrian tommotiids and organophosphatic brachiopods. *Journal of Analytical and Applied Pyrolysis* 158, 105277.
13. Zhang, Z., Topper, T.P., Chen, Y., Strotz, L.C., Chen, F., **Holmer, L.E.**, Brock, G.A. & **Zhang, Z.** 2021. Go large or go conical: allometric trajectory of an early Cambrian acrotretide brachiopod. *Palaeontology* 64 (5), 727-741.
14. Duan, X., Betts, M.J., **Holmer, L.E.**, Chen, Y., Liu, F., Liang, Y. & **Zhang, Z.** 2021. Early Cambrian (Stage 4) brachiopods from the Shipai Formation in the Three Gorges area of South China. *Journal of Paleontology* 95 (3), 497-5267.
15. Hu, Y., Knaust, D., Liang, Y., **Holmer, L.E.** & **Zhang, Z.** 2021. Burrows filled with faecal pellets from the Cambrian (Stage 4) Guanshan biota of South China and their palaeoecological implications. *Palaeogeography, Palaeoclimatology, Palaeoecology* 567, 110249
16. **Popov, L.E.**, Zaman, S., Baranov, V., Ghobadi Pour, M. & **Holmer, L.E.** 2021. Silurian (Aeronian) rhynchonelliform brachiopods of Shabdjereh, south-west Central Iran and their significance for early spiriferide evolution. *Journal of Systematic Palaeontology* 19 (3), 191-219.
17. Claybourn, T., Skovsted, C., Betts, M., **Holmer, L.E.**, Bassett-Butt, L. & Brock, G.B. 2021. Camenellan tommotiids from the Cambrian Series 2 of East Antarctica: Biostratigraphy, palaeobiogeography, and systematics. *Acta Palaeontologica Polonica* 66, 207-229.
18. Zhang, Z., Ghobadi Pour, M., **Popov, L.E.**, **Holmer, L.E.**, Chen, F., Chen, Y., Brock, G.B. & **Zhang, Z.** 2021. The oldest Cambrian trilobite-brachiopod association in South China. *Gondwana Research* 89, 147-167.
19. Duan, X., Liang, Y., **Holmer, L.E.** & **Zhang, Z.** 2021. First report of acrotretoid brachiopod shell beds in the lower Cambrian (Stage 4) Guanshan Biota of eastern Yunnan, South China. *Journal of Paleontology* 95 (1), 40-55.
20. **Holmer, L.E.**, **Popov, L.E.**, Ghobadi Pour, M., Klishevich, I.A., Liang, Y. & **Zhang, Z.** 2020. Linguliform brachiopods from the Cambrian (Guzhangian) Karpinsk Formation of Novaya Zemlya. *Papers in Palaeontology* 6 (4), 571-592.
21. Liang, Y., **Holmer, L.E.**, Skovsted, C.B., Duan, X.L. & Zhang, Z.F. 2020. Shell structure, ornamentation and affinity of the problematic early Cambrian brachiopod *Heliomedusa orientalis*. *Lethaia* 53 (4), 574-587.
22. Pan, B., Skovsted, C.B., Brock, G.A., Topper, T.P., **Holmer, L.E.**, Li, L.Y. & Li, G.X. 2020. Early Cambrian organophosphatic brachiopods from the Xinji Formation, at Shuiyu section, Shanxi Province, North China *Palaeoworld* 29 (3), 512-533.
23. **Zhang, Z.**, **Holmer, L.E.**, Chen, F. & Brock, G.A. 2020. Ontogeny and evolutionary significance of a new acrotretide brachiopod genus from Cambrian Series 2 of South China. *Journal of Systematic Palaeontology* 18 (19), 1569-1588.
24. Claybourn, T.M., Skovsted, C.B., **Holmer, L.E.**, Pan, B., Myrow, P.M., Topper, T. & Brock, G.A. 2020. Brachiopods from the Byrd group (Cambrian Series 2, Stage 4) central transantarctic mountains, East Antarctica: biostratigraphy, phylogeny and systematics. *Papers in Palaeontology* 6 (3), 349-383
25. **Zhang, Z.**, **Holmer, L.E.**, Liang, Y., Chen, Y. & Duan, X. 2020. The oldest 'Lingulellotreta' (Lingulata, Brachiopoda) from China and its phylogenetic significance: integrating new material from the Cambrian Stage 3-4. *Journal of Systematic Palaeontology* 18 (11), 945-973
26. Agbaje, O.B.A., George, S.C., **Zhang, Z.**, Brock, G.A. & **Holmer, L.E.** 2020. Characterization of organophosphatic brachiopod shells: spectroscopic assessment of collagen matrix and biomineral components. *RSC advances* 10 (63), 38456-38467
27. **Holmer, L.E.**, Blodgett, R.B., Liang, Y. & **Zhang, Z.** 2020. The Early Devonian (Emsian) acrotretid microbrachiopod *Opsiconidion minor* Popov, 1981, from the Alaska/Yukon Territory border and Novaya Zemlya. *Estonian journal of earth sciences* 69 (3), 143-153
28. **Holmer, L.E.**, **Popov, L.E.**, Ghobadi Pour, M., & **Álvarez, J. J.**, 2019. Cambrian rhynchonelliform nisusoid brachiopods: phylogeny and distribution. *Papers in Palaeontology* 5 (3), 559-575
29. **Popov, L. E.** **Álvarez, J.J.**, **Holmer, L.E.**, Bauert, H., Ghobadi Pour, M., Dronov, A.V., Lehnert, O., Hints, O., Männik, P., **Zhang, Z.**, & Zhang, Z. 2019. Glendonite occurrences in the Tremadocian of Baltica: First Early Palaeozoic evidence of massive ikaite precipitation at temperate latitudes. *Scientific Reports* 9, 7205 (2019).
30. **Holmer, L.E.**, Yue, L., **Zhang, Z.** & Zhang, Z. 2019. The problematic lingulate brachiopod *Aulonotreta* from the Ordovician (Dapingian-Darriwilian) of Baltoscandia. *Estonian journal of earth sciences* 68 (4), 206-224

31. Zhang, Z., **Popov, L.E., Holmer L.E. & Zhang, Z.**, 2018. Earliest ontogeny of early Cambrian acrotretoid brachiopods—first evidence for metamorphosis and its implications. *BMC evolutionary biology* 18, 1-15.
32. **Holmer, L.E., Popov, L.E.,** Ghobadi Pour, M., Claybourn, L., Zhang, Z., Brock, G.A.B. & **Zhang, Z.** 2018. Evolutionary significance of a middle Cambrian (Series 3) in situ occurrence of the pedunculate rhynchonelliform brachiopod *Nisusia sulcata*. *Lethaia* 51, 424-432.
33. Zhang, Z., **Zhang, Z., Holmer L.E.** & Chen, F. 2018. Post - metamorphic allometry in the earliest acrotretoid brachiopods from the lower Cambrian (Series 2) of South China, and its implications. *Palaeontology* 61, 183-207
34. **Holmer, L.E., Zhang, Z.,** Topper, T., **Popov, L.E.** & Claybourn, T. 2018. The attachment strategies of Cambrian kutorginate brachiopods: the curious case of two pedicle openings and their phylogenetic significance
35. Harper, D.A.T., **Popov, L.E. & Holmer, L.E.** 2017. Brachiopods: origin and early history. *Palaeontology* 91, 609-631.
36. **Holmer, L.E.,** Popov, L.E., Ghobadi Pour, M., Zhang, Z. & Zhang, Z. 2017. Unusual pitted Ordovician brachiopods from the East Baltic: the significance of coarsely pitted ornamentation in linguliforms. *Papers in Palaeontology* 3, 387-399.
37. **Holmer, L.E.,** Ghobadi Pour, M., **Popov, L.E., Zhang, Z.** & Zhang, Z. 2017. Ecology, biofacies, biogeography and systematics of micromorphic lingulate brachiopods from the Ordovician (Darriwilian-Sandbian) of south-central China. *Papers in Palaeontology* 3, 317-361.
38. Topper, T.P., Strotz, T.C., Skovsted, C.B. & **Holmer, L.E.** 2017. Do brachiopods show substrate-related phenotypic variation? A case study from the Burgess Shale. *Palaeontology* 60, 269-279.
39. **Holmer, L.E., Popov, L.E.,** Lehnert, O. & Ghobadi Pour, M. 2016. Ordovician (Darriwilian) linguliform brachiopods from Argentina (Precordillera). *Memoires of the Association of Australasian Palaeontologists*, 49, 31-50.
40. **Holmer, L.E., Popov, L.E.,** Klishevich, I., & Ghobadi Pour, M. 2016. Reassessment of the early Triassic lingulid brachiopod “*Lingula*” *borealis* Bittner, 1899 and related problems of lingulid taxonomy. *GFF* 138, 519-525.
41. Butler, A.D., Streng, M., **Holmer, L.E.** & Babcock, L. 2016. Exceptionally-preserved *Mickwitzia* from the Indian Springs Lagerstätte. *Journal of Paleontology* 89, 933-955.
42. **Popov, L.E., Holmer, L.E.,** Hughes, N.C., Ghobadi Pour, M., & Myrow, P. 2015. Himalayan Cambrian brachiopods. *Papers in Palaeontology* 1(4), 345-399.
43. Devaere, L., **Holmer, L.E.,** Clausen, S., & Vachard, D. 2015. Oldest mickwitziid brachiopod from the Terreneuvian of southern France. *Acta Palaeontologica Polonica* 60(3), 755-768.
44. Skovsted, C. B.; Ushatinskaya, G.; **Holmer, L. E., Popov, L.E.,** & Kouchinsky, A. 2015. Taxonomy, morphology, shell structure and early ontogeny of *Pelmanotreta* nom. nov. from the lower Cambrian of Siberia. *GFF* 137(1), 1-8.
45. Topper, T.P., Strotz, L.C., **Holmer, L.E., Zhang, Z.,** Tait, N.N., & Caron, J-B. 2015. Competition and mimicry: the curious case of chaetae in brachiopods from the middle Cambrian Burgess Shale, *BMC evolutionary biology* 15(1), 1.
46. **Zhang, Z.,** Zhang, Z., **Holmer, L.E.,** & Li, G. 2015. First report of linguloid brachiopods with soft parts from the lower Cambrian (Series 2, Stage 4) of the Three Gorges area, South China. *Annales de Paléontologie* 101(3), 167-177.
47. Hairapetian, V., Ghobadi Pour, M., **Popov, L.E.,** Hejazi, S.H., **Holmer, L.E.,** Evans, D., & Sharafi, A. 2015. Ordovician of the Anarak Region: implications in understanding Early Palaeozoic history of Central Iran. *Stratigraphy* 12(2), 22-30.
48. Jahangir, H., Ghobadi Pour, M., **Holmer, L.E., Popov, L.E.,** Ashuri, A-R., Rushton, A., Tolmacheva, T.Yu., & Amini, A. 2015. Biostratigraphy of the Cambrian–Ordovician boundary beds at Kopet-Dagh, Iran. *Stratigraphy* 12(2), 40-47.
49. Ghobadi Pour, M., **Popov, L.; Holmer, L.E.,** Hosseini-Nezhad, M., Rasuli, R., Fallah, K., Amini, A., & Jahangir, H. 2015. Early Ordovician (Tremadocian) faunas and biostratigraphy of the Gerd-Kuh section, eastern Alborz, Iran. *Stratigraphy* 12(2), 55-61.
50. Topper, T.P., Strotz, L.C., **Holmer, L.E.,** & Caron, J-B. 2015. Survival on a soft seafloor: life strategies of brachiopods from the Cambrian Burgess Shale. *Earth-Science Reviews* 151, 266-287.
51. **Popov, L.P.,** Hairapetian, V., Evans, D.H., Ghobadi Pour, M., **Holmer, L.E.,** & Baars, C. 2015. Review of the Ordovician stratigraphy and fauna of the Anarak Region in Central Iran. *Acta Geologica Polonica* 65(4), 403–435.
52. **Zhang, Z.,** Zhang, Z., Li, G., & **Holmer, L.E.** 2016. The Cambrian brachiopod fauna from the first-trilobite age Shuijingtuo Formation in the Three Gorges area of China. *Palaeoworld* 25, 333-365.
53. Skovsted, C.B., Brock, G.A., **Holmer, L.E.,** Topper, T.P., & Larsson, C.M. 2015. The early Cambrian tommotiid *Kulparina rostrata* from South Australia. *Journal of Palaeontology* 89(6), 920-932.
54. **Zhang, Z.-F.,** Li, G.-X., **Holmer, L.E.,** Brock, G.A., Balthasar, U., Skovsted, C.B., Fu, D-J., Zhang, X.-L., Wang, H.-Z., Butler, A., Zhang, Z.-L., Cao, C-Q., Han, J., Liu, J.-N. & Shu, D.-G. 2014. An early Cambrian agglutinated tubular lophophorate with brachiopod characters. *Scientific Reports* Article number: 4682 (2014) doi:10.1038/srep04682
55. Larsson, C.L., Skovsted, C.B., Brock, G.A., Balthasar, U., **Holmer, L.E.** & Topper, T.P., 2014. *Paterimitra pyramidalis* from South Australia; scleritome construction, shell structure and evolution of a lower Cambrian stem group brachiopod. *Palaeontology* 57, 417-446.
56. Posenato, R., **Holmer, L.E.,** & Prinoth, H. 2014. Adaptive strategies and environmental significance of lingulid brachiopods across the late Permian extinction, *Palaeogeography, Palaeoclimatology, Palaeoecology* 399, 373-384.
57. Kouchinsky, A., **Holmer, L.E.,** Steiner, M. & Ushatinskaya, G.T. 2014. The new stem-group brachiopod *Oymurania* from the lower Cambrian of Siberia. *Acta Palaeontologica Polonica* 60(4), 963-980.

58. Skovsted, C. B., Kouchinsky, A., Bengtson, S. & **Holmer, L. E.** 2015. The problematic early Cambrian fossil *Tumulduria incompta* represents the detached ventral interarea of a paterinid brachiopod. *Acta Palaeontologica Polonica* 59 (2), 359-365.
59. **Holmer, L.E., Popov, L.,** & Bassett, M.G. 2014. Ordovician–Silurian Chileida—first post-Cambrian records of an enigmatic group of Brachiopoda, *Journal of Paleontology* 88(3), 488-496.
60. Wang, H., **Zhang, Z., & Holmer, L.E.** 2014. Oldest glosselline linguliform brachiopod with soft parts from the Lower Cambrian of Yunnan, Southern China. *GFF* 136(4), 539-547.
61. Hints, L., **Popov, L. & Holmer L.E.** 2013. Morphology, ontogeny and affinities of the Hirnantian triplisiid brachiopod *Streptis undifera* from Baltoscandia. *Palaeontology* 56(5), 961-970.
62. **Popov, L.E.,** Zadeh, M.R.K., Ghobadi Pour, M., **Holmer, L.E.** & Modzalevskaia, T. L. 2013. Cambrian (Furongian) rhynchonelliform brachiopods from the Eastern Alborz Mountains, Iran. *Bulletin of Geosciences* 88(3), 525-538.
63. Altenburger, A., Wanninger, A. & **Holmer, L.E.** 2013. Metamorphosis in the craniiform brachiopod *Novocrania anomala*. *Zoomorphology* 132 (4), 379-387.
64. **Holmer, L.E., Popov, L.E.** & Bassett, M.G. 2013. Silurian craniid brachiopods from Gotland. *Palaeontology* 56 (5), 961-970.
65. **Zhang, Z., Holmer, L.E.,** Skovsted, C.B., Brock, G.A., Budd, G.E., Fu, D., Zhang, X., Shu, D., Han, J., Liu, J., Wang, H., Butler, A. & Li, G. 2013. A sclerite-bearing stem group entoproct from the early Cambrian and its implications. *Scientific Reports* 3, 1066, DOI: 10.1038/srep01066.
66. Topper, T.P., **Holmer, L.E.,** Skovsted, C.B., Brock, G.A., Balthasar, U., Larsson, C.L. Petterson Stolk, S. and Harper, D.A.T. 2013. The oldest paterinid brachiopods from the lower Cambrian of South Australia. *Acta Palaeontologica Polonica* 58, 93-109.
67. Wang, H., **Zhang, Z., Holmer, L.E.,** Hu, S., Wang, X. & Li, G. 2012. Peduncular attached secondary tiering acrotretoid brachiopods from the Chengjiang fauna: Implications for the ecological expansion of brachiopods during the Cambrian explosion. *Palaeogeography, Palaeoclimatology, Palaeoecology* 323-325, 60-67.
68. **Popov, L.E.,** Bassett, M.G. & **Holmer, L.E.** Earliest ontogeny of Early Palaeozoic Craniiformea: compelling evidence for lecithotrophy. *Lethaia*, 45(4): 566-573.
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