

**Adrian B. Hehl, Ph.D., Professor, Deputy Director
Vice Dean of Research**

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Mobile: +41-78-737-7646

Place of birth: Bern, Switzerland
Nationality: Swiss

EDUCATION AND TRAINING

| | |
|--------------|---|
| 1985-1989 | Basic and advanced studies in biology with emphasis on cell- and molecular biology, University of Bern |
| 1989-1990 | MSc thesis, Institute for General Microbiology, University of Bern. "Transcription and translation of the retroposon TRS/Ingi in <i>Trypanosoma brucei</i> ". |
| 1991-1994 | Ph.D. thesis work at the Institute for Microbiology, University of Bern |
| 19.5.1994 | Ph.D. "Regulation of procyclin expression in <i>Trypanosoma brucei</i> ", University of Bern |
| 1994 | Postdoc (3 Months), Institute for Microbiology, University of Bern, Prof. I. Roditi. |
| 1995 - 1998 | Research Fellow, Dept. of Microbiology & Immunology, Stanford University School of Medicine, Prof. John C. Boothroyd |
| 1998 - 2003 | Principal investigator (Scientist /Senior Scientist), Institute of Parasitology, University of Zürich |
| 2003 | Principal investigator (Head of Division), Institute of Parasitology, University of Zürich. |
| 2005 | Habilitation in "Molecular Parasitology", University of Zürich |
| 2008 | Associate professor of Molecular Parasitology, University of Zürich |
| 2012-present | Professor in Molecular Parasitology, University of Zürich |

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Institutional Responsibilities

- Vice Dean of Research and Talent Management
- Head Molecular Parasitology Division, Institute of Parasitology (2003-present)
- Deputy Director, Institute of Parasitology, University of Zurich (2012-present)
- Scientific Director, BUSS Summer School, UZH/ETHZ

Fellowships and Competitive Research Awards in the Hehl Lab (last 6 years)

| | |
|------|---|
| 2012 | Swiss National Science Foundation (31003A_140803) |
| 2012 | EuPathDB Driving Biological Projects (NIH; responsible project leader) |
| 2012 | Forschungskredit Uni Zürich (Dr. P. Zumthor) |
| 2012 | Forschungskredit Uni Zürich (Dr. C. Faso) |
| 2013 | Forschungskredit Uni Zürich (Dr. P. Zumthor) |
| 2013 | Swiss Government Excellence Scholarships for Foreign Scholars (to Dr. R. Walker) |
| 2014 | Forschungskredit Uni Zürich (Dr. Ramakrishnan) |
| 2014 | SNF International Short Visit Fellowship (to Drs. Ramakrishnan & Faso) |
| 2015 | SNF Sinergia (CRSII3_160702; responsible project leader) |
| 2016 | Swiss National Science Foundation (31003A_166437) |
| 2016 | NHMRC Grant (Australia), Chief Investigator (shared) |
| 2017 | Stiftung für wissenschaftliche Forschung an der Universität Zürich (Project 3731) |
| 2018 | SNF PRIMA Grant (to Dr. Carmen Faso) |

Appointments and Affiliations

- Science Faculty (MNF), University of Zürich (Promotionsrecht)
- Scientific Advisory Board, Giardia Genome Resource (<http://www.giardiadb.org>)
- Scientific Working Group, EuPathDB Bioinformatics Resource Center (under contract by NIH/NIAID)
- ETH Zurich, Teaching Staff
- University Committees, “Arbeitssicherheit und Gesundheitsschutz” UZH; „Interdisziplinäre Veranstaltungen (KIV)“; Graduate Campus
- Principal investigator, Microbiology and Immunology Program, Life Science Zürich Graduate School
- Associate member, Ecology Program, Life Science Zürich Graduate School
- Expert Committee “Molecular Biology & Biochemistry”, Graduate School for Cellular and Biomedical Sciences, University of Bern
- Ad hoc reviewer for science foundations (e.g. SNF, NSF, Wellcome, DFG) and various high impact journals in the fields of cell biology, parasitology, infectious diseases, and microbiology

- Appointed Reviewer for the European Research Council.
- Faculty Member and Editor, Faculty of 1000.
- Associate Editor, PLoS Neglected Tropical Diseases
- President, Fairmed Foundation <http://www.fairmed.ch>

Peer-reviewed publications Adrian B. Hehl (2018)

1. [Five facts about Giardia lamblia.](#)
Cernikova L, Faso C, **Hehl AB**.
PLoS Pathog. 2018 Sep 27;14(9):e1007250. doi: 10.1371/journal.ppat.1007250. eCollection 2018 Sep.
2. [Mitochondrial glycolysis in a major lineage of eukaryotes.](#)
Bártulos CR, Rogers MB, Williams TA, Gentekaki E, Brinkmann H, Cerff R, Liaud MF, **Hehl AB**, Yarlett NR, Gruber A, Kroth PG, van der Giezen M.
Genome Biol Evol. 2018 Jul 30. doi: 10.1093/gbe/evy164. [
3. [Diversity of Entamoeba spp. in African great apes and humans: an insight from Illumina MiSeq high-throughput sequencing.](#)
Vlčková K, Kreisinger J, Pafčo B, Čížková D, Tagg N, **Hehl AB**, Modrý D.
Int J Parasitol. 2018 Jun;48(7):519-530. doi: 10.1016/j.ijpara.2017.11.008. Epub 2018 Mar 10.
4. [RNA-Seq analysis during the life cycle of Cryptosporidium parvum reveals significant differential gene expression between proliferating stages in the intestine and infectious sporozoites.](#)
Lippuner C, Ramakrishnan C, Basso WU, Schmid MW, Okoniewski M, Smith NC, Hässig M, Deplazes P, **Hehl AB**.
Int J Parasitol. 2018 May;48(6):413-422. doi: 10.1016/j.ijpara.2017.10.007. Epub 2018 Feb 9.
5. [In vitro efficacy of bumped kinase inhibitors against Besnoitia besnoiti tachyzoites.](#)
Jiménez-Meléndez A, Ojo KK, Wallace AM, Smith TR, Hemphill A, Balmer V, Regidor-Cerrillo J, Ortega-Mora LM, **Hehl AB**, Fan E, Maly DJ, Van Voorhis WC, Álvarez-García G.
Int J Parasitol. 2017 Oct;47(12):811-821. doi: 10.1016/j.ijpara.2017.08.005. Epub 2017 Sep 9.
6. [A druggable secretory protein maturase of Toxoplasma essential for invasion and egress.](#)
SK, Mukherjee B, Jacot D, Kockmann T, Molino L, Hammoudi PM, Hartkoorn RC, **Hehl AB**, Soldati-Favre D.
Elife. 2017 Sep 12;6. pii: e27480. doi: 10.7554/eLife.27480.
7. [The merozoite-specific protein, TgGRA11B, identified as a component of the Toxoplasma gondii parasitophorous vacuole in a tachyzoite expression model.](#)
Ramakrishnan C, Walker RA, Eichenberger RM, **Hehl AB**, Smith NC.
Int J Parasitol. 2017 Sep;47(10-11):597-600. doi: 10.1016/j.ijpara.2017.04.001. Epub 2017 May 17.
8. [Genome-wide analysis of gene expression and protein secretion of Babesia canis during virulent infection identifies potential pathogenicity factors.](#)
Eichenberger RM, Ramakrishnan C, Russo G, Deplazes P, **Hehl AB**.
Sci Rep. 2017 Jun 13;7(1):3357. doi: 10.1038/s41598-017-03445-x.

9. [Response to Zamponi et al.](#)
Hehl AB, Faso C.
Trends Parasitol. 2017 Feb;33(2):76. doi: 10.1016/j.pt.2016.12.006. Epub 2017 Jan 9. No abstract available.
10. [Cyst-Wall-Protein-1 is fundamental for Golgi-like organelle neogenesis and cyst-wall biosynthesis in Giardia lamblia.](#)
Ebnetter JA, Heusser SD, Schraner EM, **Hehl AB**, Faso C.
Nat Commun. 2016 Dec 15;7:13859. doi: 10.1038/ncomms13859.
11. [An Interactome-Centered Protein Discovery Approach Reveals Novel Components Involved in Mitosome Function and Homeostasis in Giardia lamblia.](#)
Rout S, Zumthor JP, Schraner EM, Faso C, **Hehl AB**.
PLoS Pathog. 2016 Dec 7;12(12):e1006036. doi: 10.1371/journal.ppat.1006036. eCollection 2016 Dec.
12. [Rac Regulates Giardia lamblia Encystation by Coordinating Cyst Wall Protein Trafficking and Secretion.](#)
Krtkova J, Thomas EB, Alas GC, Schraner EM, Behjatnia HR, **Hehl AB**, Paredez AR.
MBio. 2016 Aug 23;7(4). pii: e01003-16. doi: 10.1128/mBio.01003-16.
13. [Static Clathrin Assemblies at the Peripheral Vacuole-Plasma Membrane Interface of the Parasitic Protozoan Giardia lamblia.](#)
Zumthor JP, Cernikova L, Rout S, Kaech A, Faso C, **Hehl AB**.
PLoS Pathog. 2016 Jul 20;12(7):e1005756. doi: 10.1371/journal.ppat.1005756. eCollection 2016 Jul.
14. [Discovery of a tyrosine-rich sporocyst wall protein in Eimeria tenella.](#)
Walker RA, Niepceon A, Ramakrishnan C, Sedano L, Hehl AB, Brossier F, Smith NC.
Parasit Vectors. 2016 Mar 2;9(1):124. doi: 10.1186/s13071-016-1410-z.
15. [Serotonin promotes acinar dedifferentiation following pancreatitis-induced regeneration in the adult pancreas.](#)
Saponara E, Grabliauskaite K, Bombardo M, Buzzi R, Silva AB, Malagola E, Tian Y, Hehl AB, Schraner EM, Seleznik GM, Zabel A, Reding T, Sonda S, Graf R.
J Pathol. 2015 Dec;237(4):495-507. doi: 10.1002/path.4595. Epub 2015 Sep 10.
16. [RNA Seq analysis of the Eimeria tenella gametocyte transcriptome reveals clues about the molecular basis for sexual reproduction and oocyst biogenesis.](#)
Walker RA, Sharman PA, Miller CM, Lippuner C, Okoniewski M, Eichenberger RM, Ramakrishnan C, Brossier F, Deplazes P, Hehl AB, Smith NC.
BMC Genomics. 2015 Feb 18;16:94. doi: 10.1186/s12864.
17. [Asexual expansion of Toxoplasma gondii merozoites is distinct from tachyzoites and entails expression of non-overlapping gene families to attach, invade, and replicate within feline enterocytes.](#)
Hehl AB, Basso WU, Lippuner C, Ramakrishnan C, Okoniewski M, Walker RA, Grigg ME, Smith NC, Deplazes P.
BMC Genomics. 2015 Feb 13;16:66. doi: 10.1186/s12864-015-1225-x.
18. [The single epsin homolog in Giardia lamblia localizes to the ventral disk of trophozoites and is not associated with clathrin membrane coats.](#)
Ebnetter JA, Hehl AB.

Mol Biochem Parasitol. 2014 Oct;197(1-2):24-7. doi: 10.1016/j.molbiopara.2014.09.008.

19. [Comparative characterisation of two nitroreductases from Giardia lamblia as potential activators of nitro compounds](#)

Müller J, Rout S, Leitsch D, Vaithilingam J, Hehl AB, Müller N.

International Journal for Parasitology: Drugs and Drug Resistance, (2015) doi: 10.1016/j.ijpddr.2015.03.001

20. [p21\(WAF1\) \(/Cip1\) limits senescence and acinar-to-ductal metaplasia formation during pancreatitis.](#)

Grabliauskaite K, Hehl AB, Seleznik GM, Saponara E, Schlesinger K, Zuellig RA, Dittmann A, Bain M, Reding T, Sonda S, Graf R.

J Pathol. 2015 Feb;235(3):502-14. doi: 10.1002/path.4440. Epub 2014 Nov 6.

21. [The Cre/loxP system in Giardia lamblia: genetic manipulations in a binucleate tetraploid protozoan.](#)

Wampfler PB, Faso C, Hehl AB.

Int J Parasitol. 2014 Jul;44(8):497-506. doi: 10.1016/j.ijpara.2014.03.008. Epub 2014 Apr 18.

22. [Proteomics of secretory and endocytic organelles in Giardia lamblia.](#)

Wampfler PB, Tosevski V, Nanni P, Spycher C, Hehl AB.

PLoS One. 2014 Apr 14;9(4):e94089. doi: 10.1371/journal.pone.0094089. eCollection 2014.

23. [The proteome landscape of Giardia lamblia encystation.](#)

Faso C, Bischof S, Hehl AB.

PLoS One. 2013 Dec 31;8(12):e83207. doi: 10.1371/journal.pone.0083207. eCollection 2013.

24. [Deoxysphingolipids, novel biomarkers for type 2 diabetes, are cytotoxic for insulin-producing cells.](#)

Zuellig RA, Hornemann T, Othman A, Hehl AB, Bode H, Güntert T, Ogunshola OO, Saponara E, Grabliauskaite K, Jang JH, Ungethuen U, Wei Y, von Eckardstein A, Graf R, Sonda S.

Diabetes. 2014 Apr;63(4):1326-39. doi: 10.2337/db13-1042. Epub 2013 Dec 30.

25. [An ER-directed transcriptional response to unfolded protein stress in the absence of conserved sensor-transducer proteins in Giardia lamblia.](#)

Spycher C, Herman EK, Morf L, Qi W, Rehrauer H, Aquino Fournier C, Dacks JB, Hehl AB.

Mol Microbiol. 2013 May;88(4):754-71. doi: 10.1111/mmi.12218. Epub 2013 Apr 26.

26. [Toxoplasma gondii infection in Kyrgyzstan: seroprevalence, risk factor analysis, and estimate of congenital and AIDS-related toxoplasmosis.](#)

Minbaeva G, Schweiger A, Bodosheva A, Kuttubaev O, Hehl AB, Tanner I, Ziadinov I, Torgerson PR, Deplazes P.

PLoS Negl Trop Dis. 2013;7(2):e2043. doi: 10.1371/journal.pntd.0002043. Epub 2013 Feb 7.

27. [Export of cyst wall material and Golgi organelle neogenesis in Giardia lamblia depend on endoplasmic reticulum exit sites.](#)

Faso C, Konrad C, Schraner EM, Hehl AB.

Cell Microbiol. 2013 Apr;15(4):537-53. doi: 10.1111/cmi.12054. Epub 2012 Dec 2.

28. [Serotonin regulates amylase secretion and acinar cell damage during murine pancreatitis.](#)

Sonda S, Silva AB, Grabliauskaite K, Saponara E, Weber A, Jang JH, Züllig RA, Bain M, Reding Graf T, Hehl AB, Graf R.

Gut. 2013 Jun;62(6):890-8. doi: 10.1136/gutjnl-2011-301724. Epub 2012 May 16.

29. [Mitosomes in trophozoites and cysts of the reptilian parasite Entamoeba invadens.](#)

Siegesmund MA, Hehl AB, van der Giezen M.

Eukaryot Cell. 2011 Nov;10(11):1582-5. doi: 10.1128/EC.05172-11. Epub 2011 Sep 30.

30. [Membrane trafficking and organelle biogenesis in Giardia lamblia: use it or lose it.](#)

Faso C, Hehl AB.

Int J Parasitol. 2011 Apr;41(5):471-80. doi: 10.1016/j.ijpara.2010.12.014. Epub 2011 Feb 4. Review.

31. [Post-transcriptional repair of a split heat shock protein 90 gene by mRNA trans-splicing.](#)

Nageshan RK, Roy N, Hehl AB, Tatu U.

J Biol Chem. 2011 Mar 4;286(9):7116-22. doi: 10.1074/jbc.C110.208389. Epub 2011 Jan 5.

32. [Expression of Cryptosporidium parvum Cpa135/CpCCP1 chimeras in Giardia duodenalis: organization of the protein domains affects the protein secretion pathway.](#)

Lalle M, Rosati MA, Bien J, Hehl AB, Pozio E, Tosini F.

Exp Parasitol. 2011 Mar;127(3):680-6. doi: 10.1016/j.exppara.2010.11.009. Epub 2010 Nov 26.

33. [The transcriptional response to encystation stimuli in Giardia lamblia is restricted to a small set of genes.](#)

Morf L, Spycher C, Rehrauer H, Fournier CA, Morrison HG, Hehl AB.

Eukaryot Cell. 2010 Oct;9(10):1566-76. doi: 10.1128/EC.00100-10. Epub 2010 Aug 6.

34. [Selective condensation drives partitioning and sequential secretion of cyst wall proteins in differentiating Giardia lamblia.](#)

Konrad C, Spycher C, Hehl AB.

PLoS Pathog. 2010 Apr 8;6(4):e1000835. doi: 10.1371/journal.ppat.1000835.

35. [The P-glycoprotein inhibitor GF120918 modulates Ca²⁺-dependent processes and lipid metabolism in Toxoplasma gondii.](#)

Bottova I, Sauder U, Olivieri V, Hehl AB, Sonda S.

PLoS One. 2010 Apr 8;5(4):e10062. doi: 10.1371/journal.pone.0010062.

36. [Glucosylceramide synthesis inhibition affects cell cycle progression, membrane trafficking, and stage differentiation in Giardia lamblia.](#)

Stefanić S, Spycher C, Morf L, Fabriàs G, Casas J, Schraner E, Wild P, Hehl AB, Sonda S.

J Lipid Res. 2010 Sep;51(9):2527-45. doi: 10.1194/jlr.M003392. Epub 2010 Mar 24.

37. [Epigenetic mechanisms regulate stage differentiation in the minimized protozoan Giardia lamblia.](#)

Sonda S, Morf L, Bottova I, Baetschmann H, Rehrauer H, Caflisch A, Hakimi MA, Hehl AB.

Mol Microbiol. 2010 Apr;76(1):48-67. doi: 10.1111/j.1365-2958.2010.07062.x. Epub 2010 Feb 1.

38. [Stable expression of Escherichia coli beta-glucuronidase A \(GusA\) in Giardia lamblia: application to high-throughput drug susceptibility testing.](#)

Müller J, Nillius D, Hehl A, Hemphill A, Müller N.

J Antimicrob Chemother. 2009 Dec;64(6):1187-91. doi: 10.1093/jac/dkp363. Epub 2009 Oct 10.

39. [A contiguous compartment functions as endoplasmic reticulum and endosome/lysosome in Giardia lamblia.](#)

Abodeely M, DuBois KN, **Hehl A**, Stefanic S, Sajid M, DeSouza W, Attias M, Engel JC, Hsieh I, Fetter RD, McKerrow JH.

Eukaryot Cell. 2009 Nov;8(11):1665-76. doi: 10.1128/EC.00123-09. Epub 2009 Sep 11.

40. [Dual acylation accounts for the localization of {alpha}19-giardin in the ventral flagellum pair of Giardia lamblia.](#)

Saric M, Vahrman A, Niebur D, Kluempers V, Hehl AB, Scholze H.

Eukaryot Cell. 2009 Oct;8(10):1567-74. doi: 10.1128/EC.00136-09. Epub 2009 Aug 14.

41. [Neogenesis and maturation of transient Golgi-like cisternae in a simple eukaryote.](#)

Stefanic S, Morf L, Kulangara C, Regös A, Sonda S, Schraner E, Spycher C, Wild P, Hehl AB.

J Cell Sci. 2009 Aug 15;122(Pt 16):2846-56. doi: 10.1242/jcs.049411. Epub 2009 Jul 21.

42. [Host cell P-glycoprotein is essential for cholesterol uptake and replication of Toxoplasma gondii.](#)

Bottova I, Hehl AB, Stefanic S, Fabriàs G, Casas J, Schraner E, Pieters J, Sonda S.

J Biol Chem. 2009 Jun 26;284(26):17438-48. doi: 10.1074/jbc.M809420200. Epub 2009 Apr 22.

43. [Identification of nucleoli in the early branching protist Giardia duodenalis.](#)

Jiménez-García LF, Zavala G, Chávez-Munguía B, Ramos-Godínez Mdel P, López-Velázquez G, Segura-Valdez Mde L, Montañez C, Hehl AB, Argüello-García R, Ortega-Pierres G.

Int J Parasitol. 2008 Sep;38(11):1297-304. doi: 10.1016/j.ijpara.2008.04.012. Epub 2008 Jun 20.

44. [Release of metabolic enzymes by Giardia in response to interaction with intestinal epithelial cells.](#)

Ringqvist E, Palm JE, Skarin H, Hehl AB, Weiland M, Davids BJ, Reiner DS, Griffiths WJ, Eckmann L, Gillin FD, Svärd SG.

Mol Biochem Parasitol. 2008 Jun;159(2):85-91. doi: 10.1016/j.molbiopara.2008.02.005. Epub 2008 Feb 15.

45. [A sphingolipid inhibitor induces a cytokinesis arrest and blocks stage differentiation in Giardia lamblia.](#)

Sonda S, Stefanic S, Hehl AB.

Antimicrob Agents Chemother. 2008 Feb;52(2):563-9. Epub 2007 Dec 17.

46. [Genomic minimalism in the early diverging intestinal parasite Giardia lamblia.](#)

Morrison HG, McArthur AG, Gillin FD, Aley SB, Adam RD, Olsen GJ, Best AA, Cande WZ, Chen F, Cipriano MJ, Davids BJ, Dawson SC, Elmendorf HG, Hehl AB, Holder ME, Huse SM, Kim UU, Lasek-Nesselquist E, Manning G, Nigam A, Nixon JE, Palm D, Passamaneck NE, Prabhu A, Reich CI, Reiner DS, Samuelson J, Svärd SG, Sogin ML.

Science. 2007 Sep 28;317(5846):1921-6.

47. [The single dynamin family protein in the primitive protozoan Giardia lamblia is essential for stage conversion and endocytic transport.](#)

Gaechter V, Schraner E, Wild P, Hehl AB.

Traffic. 2008 Jan;9(1):57-71. Epub 2007 Oct 31.

48. [Bax function in the absence of mitochondria in the primitive protozoan Giardia lamblia.](#)

Hehl AB, Regos A, Schraner E, Schneider A.

PLoS One. 2007 May 30;2(5):e488.

49. [Clathrin-dependent pathways and the cytoskeleton network are involved in ceramide endocytosis by a parasitic protozoan, Giardia lamblia.](#)
Hernandez Y, Castillo C, Roychowdhury S, Hehl A, Aley SB, Das S.
Int J Parasitol. 2007 Jan;37(1):21-32. Epub 2006 Oct 12.
50. [The use of light- and electron microscopy for studies on the cell- and molecular biology of parasites and parasitic diseases.](#)
Hehl AB, Hemphill A.
Schweiz Arch Tierheilkd. 2006 Sep;148(9):473-81. Review.
51. [Ablation of the single dynamin of T. brucei blocks mitochondrial fission and endocytosis and leads to a precise cytokinesis arrest.](#)
Chanez AL, Hehl AB, Engstler M, Schneider A.
J Cell Sci. 2006 Jul 15;119(Pt 14):2968-74. Epub 2006 Jun 20.
52. [Organelle proteomics reveals cargo maturation mechanisms associated with Golgi-like encystation vesicles in the early-diverged protozoan Giardia lamblia.](#)
Stefanic S, Palm D, Svärd SG, Hehl AB.
J Biol Chem. 2006 Mar 17;281(11):7595-604. Epub 2006 Jan 3.
53. [SNAP-tag mediated live cell labeling as an alternative to GFP in anaerobic organisms.](#)
Regoes A, Hehl AB.
Biotechniques. 2005 Dec;39(6):809-10, 812. No abstract available.
54. [Lipid biology of Apicomplexa: perspectives for new drug targets, particularly for Toxoplasma gondii.](#)
Sonda S, Hehl AB.
Trends Parasitol. 2006 Jan;22(1):41-7. Epub 2005 Nov 21. Review.
55. [Assembly and export of a Toxoplasma microneme complex in Giardia lamblia.](#)
Gaechter V, Hehl AB.
Int J Parasitol. 2005 Nov;35(13):1359-68. Epub 2005 Aug 10.
56. [Protein import, replication, and inheritance of a vestigial mitochondrion.](#)
Regoes A, Zourmpanou D, León-Avila G, van der Giezen M, Tovar J, Hehl AB.
J Biol Chem. 2005 Aug 26;280(34):30557-63. Epub 2005 Jun 28.
57. [Secretory protein trafficking in Giardia intestinalis.](#)
Hehl AB, Marti M.
Mol Microbiol. 2004 Jul;53(1):19-28. Review.
58. [Encystation-specific vesicles in Giardia: a primordial Golgi or just another secretory compartment?](#)
Marti M, Hehl AB.
Trends Parasitol. 2003 Oct;19(10):440-6. Review. No abstract available.
59. [An ancestral secretory apparatus in the protozoan parasite Giardia intestinalis.](#)
Marti M, Regös A, Li Y, Schraner EM, Wild P, Müller N, Knopf LG, Hehl AB.
J Biol Chem. 2003 Jul 4;278(27):24837-48. Epub 2003 Apr 23.

60. [The secretory apparatus of an ancient eukaryote: protein sorting to separate export pathways occurs before formation of transient Golgi-like compartments.](#)
Marti M, Li Y, Schraner EM, Wild P, Köhler P, Hehl AB.
Mol Biol Cell. 2003 Apr;14(4):1433-47.
61. [Conformationally correct expression of membrane-anchored Toxoplasma gondii SAG1 in the primitive protozoan Giardia duodenalis.](#)
Marti M, Li Y, Köhler P, Hehl AB.
Infect Immun. 2002 Feb;70(2):1014-6.
62. [Expression of green fluorescent protein as a marker for effects of antileishmanial compounds in vitro.](#)
Kamau SW, Grimm F, Hehl AB.
Antimicrob Agents Chemother. 2001 Dec;45(12):3654-6.
63. [Success and virulence in Toxoplasma as the result of sexual recombination between two distinct ancestries.](#)
Grigg ME, Bonnefoy S, Hehl AB, Suzuki Y, Boothroyd JC.
Science. 2001 Oct 5;294(5540):161-5.
64. [Toxoplasma gondii homologue of plasmodium apical membrane antigen 1 is involved in invasion of host cells.](#)
Hehl AB, Lekutis C, Grigg ME, Bradley PJ, Dubremetz JF, Ortega-Barria E, Boothroyd JC.
Infect Immun. 2000 Dec;68(12):7078-86.
65. [Stage-specific expression and targeting of cyst wall protein-green fluorescent protein chimeras in Giardia.](#)
Hehl AB, Marti M, Köhler P.
Mol Biol Cell. 2000 May;11(5):1789-800.
66. [The antigenic composition of Neospora caninum.](#)
Hemphill A, Fuchs N, Sonda S, **Hehl A**.
Int J Parasitol. 1999 Aug;29(8):1175-88. Review.
67. [The surface of Toxoplasma tachyzoites is dominated by a family of glycosylphosphatidylinositol-anchored antigens related to SAG1.](#)
Manger ID, Hehl AB, Boothroyd JC.
Infect Immun. 1998 May;66(5):2237-44.
68. [Expressed sequence tag analysis of the bradyzoite stage of Toxoplasma gondii: identification of developmentally regulated genes.](#)
Manger ID, **Hehl A**, Parmley S, Sibley LD, Marra M, Hillier L, Waterston R, Boothroyd JC.
Infect Immun. 1998 Apr;66(4):1632-7.
69. [The surface of Toxoplasma: more and less.](#)
Boothroyd JC, **Hehl A**, Knoll LJ, Manger ID.
Int J Parasitol. 1998 Jan;28(1):3-9. Review.
70. [Gene discovery by EST sequencing in Toxoplasma gondii reveals sequences restricted to the Apicomplexa.](#)
Ajioka JW, Boothroyd JC, Brunk BP, **Hehl A**, Hillier L, Manger ID, Marra M, Overton GC, Roos DS, Wan KL, Waterston R, Sibley LD.

Genome Res. 1998 Jan;8(1):18-28.

71. [Genetic analysis in Toxoplasma: gene discovery with expressed sequence tags and rapid mapping of natural polymorphisms.](#)

Hehl A, Manger ID, Boothroyd JC.

Methods. 1997 Oct;13(2):89-102.

72. [Identification and characterization of SRS1, a Toxoplasma gondii surface antigen upstream of and related to SAG1.](#)

Hehl A, Krieger T, Boothroyd JC.

Mol Biochem Parasitol. 1997 Nov;89(2):271-82.

73. [Genetic and biochemical analysis of development in Toxoplasma gondii.](#)

Boothroyd JC, Black M, Bonnefoy S, **Hehl A**, Knoll LJ, Manger ID, Ortega-Barria E, Tomavo S.

Philos Trans R Soc Lond B Biol Sci. 1997 Sep 29;352(1359):1347-54.

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Book chapter

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