Mark van der Giezen

Name Mark van der Giezen Date of birth 24th May 1968

Nationality Dutch

Marrial status Married with three children e-mail mark.vandergiezen@uis.no website http://www.vandergiezen.org/

Employment

Oct 24 – present	Member Advisory Board NordicDX.
Sep 23 – present	Senior Advisor, Stavanger University Hospital, Norway.
Aug 19 – present	Professor of Biological Chemistry, Department of Chemistry, Bioscience, and Environmental
	Engineering, University of Stavanger, Norway.
Jan 19 – Aug 19	Associate Professor of Evolutionary Biochemistry at Biosciences, University of Exeter, UK.
Sep 07 – Dec 18	Senior Lecturer in Evolutionary Biochemistry at Biosciences, University of Exeter, UK.
Nov 04 – Aug 07	Lecturer in Microbiology at the School of Biological and Chemical Sciences, Queen Mary, University
	of London, UK.
Apr 02 – Oct 04	Post-doc in the group of Dr. Jorge Tovar at the School of Biological Sciences, Royal Holloway,
	University of London, UK.
Oct 97 – Mar 02	EMBO Fellow in the group of Prof. Martin Embley FRS at the Department of Zoology, The Natural
	History Museum, London, UK.
Dec 92 – May 97	PhD-student in the Department of Microbiology, University of Groningen, the Netherlands, in the
	lab of the late Professor Rudolf Prins.

Honours		
2023	President of the Norwegian Society for Microbiology.	
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2019	Honorary Professor of Evolutionary Biochemistry, Department of Biosciences, University of Exeter,	
	UK.	
2018	Senior Fellow of the Higher Education Academy (now Advance HE).	
1998	Fellow of the European Molecular Biology Organisation.	

Degrees & Qualifications

Mar 24	Connected Leadership (Yale University).
Mar 24	Active Listening: Enhancing Communication Skills (Coursera).
Mar 18	Senior Fellow of the Higher Education Academy of the UK (now Advance HE).
Jan 05 – Aug 06	Certificate in Academic Practice, Queen Mary, University of London, UK.
Dec 92 – May 97	PhD in Mathematical and Natural Sciences, University of Groningen, the Netherlands.
Sep 88 – Nov 92	Drs in Biology, University of Groningen, the Netherlands,
	Graduate subjects: Molecular Genetics & Immunology. Grade: 79%.
Sep 74 – Aug 88	Primary and Secondary School, Assen, the Netherlands.

Administrative, Management, and Leadership Responsibilities

Management committee member representing Norway on EU COST action CA23110 - International networking on *in vitro* colon models simulating gut microbiota mediated interactions (INFOGUT) (2024 – present).

Study Programme Leader of MSc Biological Chemistry, University of Stavanger (2022 – present).

Vice-chair EU COST action CA21105 - Blastocystis under One Health (OneHealthBlastocystis) (2022 - 2023).

Management committee member representing Norway on EU COST action CA21105 - *Blastocystis* under One Health (OneHealthBlastocystis) (2022 – present).

Work group leader EU COST action CA21105, working group 3: *Blastocystis* 'omics generation and analyses (2022 – present).

President of the Norwegian Society for Microbiology (2023 – present),

Assistant Treasurer of the Scandinavian-Baltic Society for Parasitology (SBSP) (2019 – present).

Deputy Director Postgraduate Research, Biosciences, University of Exeter (2018 – 2019).

Theme Lead 'Aquatic Diseases' for the Centre of Sustainable Aquaculture Futures (2017 – 2019).

Director Postgraduate Teaching, Biosciences, University of Exeter (2015 – 2019).

Member of the Education Strategy Group, Biosciences, University of Exeter (2015 – 2017).

Programme Director MSc Food Security and Sustainable Agriculture, University of Exeter (2014 – 2017).

Programme Director MSc Biotechnology and Enterprise, University of Exeter (2013 – 2014).

Programme Director BSc Biochemistry, University of Exeter (2012 – 2017).

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Programme Director BSc Biological Sciences, University of Exeter (2010 – 2012).

Member of PhD-student upgrade panels at University of Exeter (2007 – 2019).

Coordinator Flexible and Combined Honours Degree Programme, University of Exeter (2008 – 2010).

Member of the Research Committee of the School of Biosciences, University of Exeter (2008-2010).

Member of the IT Provision Committee for the School of Biological and Chemical Sciences, QMUL (2005-2007).

Elected member of the Council of the University of Groningen, the Netherlands (1994-1996),

Member of the University Board Committee for Student Affairs of the University of Groningen, the Netherlands (1994-1996),

Member of the University Committee for Student Affairs of the University of Groningen, the Netherlands (1994-1995).

Grant Income

Digitalizant Daint of Cara Tacting for all combanding og avlacting i balcationactone. Halca Compus

Awarded 2019-2025, research awards totalling 260M NOK (as co-applicant and main applicant combined):

Oct 24	Digitalisert Point of Care-Testing for økt samhandling og avlasting i helsetjenestene. HelseCampus Stavanger Intensjonssøknad om såkornmidler.Prof. Mark van der Giezen (PI, UiS), NordicDX (main partner), Lena Ailin Heimvik (co-I, SUS), Svein Petter Svendsen (co-I, Stavanger Sparekassen Sykehjem), Tarjei Tørre Asprusten (co-I, Hjelmeland kommune), Roman Benz (co-I, Klepp Kommune), Martha Therese Gjestsen (co-I, SESAM), Marit Hagland (co-I, Norwegian Smart Care Lab). 250k NOK.
Feb 24	PigStick - Diagnostic of bacterial-caused lameness in pigs. Norwegian Research Council Kommersialiseringsprosjekt. Validé (grant holder), Prof. Mark van der Giezen (PI, UiS), Prof.
	Marianne Oropeza-Moe (co-l, NMBU). 500k NOK.
Jan 24	Predicting patients at risk of adverse effects after immunotherapy, a machine learning and Al approach. Folke Hermansens Fond. Mark van der Giezen PI (SUS), Tesfaye Madebo (SUS
	Pulmonology); Bjørnar Gilje (SUS Oncology); Emiel Janssen (SUS Pathology); Tore Grimstad (SUS Gastroenterology); Holger Fröhlich (Fraunhofer Institute). 1.1M NOK.
May 23	PREDICTOM: Prediction of Alzheimer's disease using an AI driven screening platform. EU
,	HORIZON-JU-IHI-2022-03-single-stage. Lead: Prof. Dag Arsland (PI, University Hospital Stavanger), Prof. Mark van der Giezen (co-I, University of Stavanger)), €21M.
Nov 22	Identification of microbiome-associated mechanisms mediating anthocyanin-dependent cognitive improvement in a population at risk for dementia. Leon Jarners Minnefond. Prof. Mark van der Giezen (PI, University of Stavanger), Dr. Chiara de Lucia (PI, King's College, London), Prof. Dag Aarsland (PI, University Hospital Stavanger and King's College, London). 200k NOK.
Jan 22	The role of <i>Blastocystis</i> in inflammatory bowel disease. Norwegian Research Council NFR program: Large Interdisciplinary Project. Prof. Mark van der Giezen (PI, UiS), Dr. Tore Grimstad (SUS), Prof. Emiel Janssen (SUS), Dr. Rune Stensvold (SSI), Prof. Allan Linneberg (Bispebjerg and Frederiksberg Hospital), Dr. Laura Krogsgaard (Bispebjerg and Frederiksberg Hospital), Dr. Thomas Dantoft

Bispebjerg and Frederiksberg Hospital), Dr. Kateřina Jirků (BC CAS), Dr. Martin Kolísko (BC CAS). 41M NOK.

Sep 21 Microbial eukaryotes in inflammatory bowel disease – a pilot study. Søknadsskjema

Forskningsmidler Stavanger Universitetssjukehus 2021. Dr. Tore Grimstad (University Hospital Stavanger), Prof. Mark van der Giezen (PI, UiS), Prof. Emiel Janssen (University Hospital Stavanger),

95k NOK.

Oct 20 Early-life experiences –a lifetime of ovine microbiota? Norwegian Centennial Chair (NOCC) Assoc. Prof.Clare J Phythian (PI, NMBU), Asst. Prof. Noelle Noyes (Col, University of Minnesota), Asst.

Prof. Whitney A Knauer (Col, University of Minisota), Assoc Prof. Sabrina Rodriguez Campos (Col, NMBU), Assoc. Prof Ingrid Holmøy (Col, NMBU), Assoc. Prof Adam D Martin (Col, NMBU), Prof

Mark van der Giezen (Col, University of Stavanger). \$149k.

Mar 20 Enterocolitis due to immune checkpoint inhibitors. Folke Hermansens Fond. Dr. Tore Grimstad

(University Hospital Stavanger), Prof. Mark van der Giezen (PI, UiS), Prof. Emiel Janssen (University Hospital Stavanger), Dr. Tesfaye Madebo (University Hospital Stavanger), Dr. Herish Garresori

(University Hospital Stavanger). 260k NOK.

Dec 19 Mitochondrial glycolysis as a target for disease control of pathogenic stramenopiles. Norwegian

Research Council NFR program: FRIPRO. Prof. Mark van der Giezen (PI, Department of Chemistry, Bioscience and Environmental Technology, University of Stavanger), Prof. Edmund Kunji (Col, Mitochondrial Biology Unit, MRC, Cambridge), Prof. Pieter van West (Col, Institute of Medical Sciences, University of Aberdeen), Dr. Anastasios Tsaousis (Col, School of Biosciences, University

of Kent). 11.5M NOK.

Jan 19 Inflammatory bowel disease and the intestinal microbiome. University of Stavanger Strategic

Project. Prof. Mark van der Giezen (PI, UiS), Prof. Emiel Janssen (University Hospital Stavanger) and Dr. Tore Grimstad (University Hospital Stavanger). 2-year postdoctoral fellowship + 120k NOK

consumables.

Before 2019: 46 awarded proposals (as co-applicant and main applicant combined), some notable ones listed.

Aug 18 Identifying targets for control of *Ichthyophthirius multifiliis* - a major cause of disease in aquaculture. UK Aquaculture Initiative – Cross-Council Call for Collaborative Research and Innovation Proposals. Dr. Mark van der Giezen (PI, Biosciences), Dr. Irene Cano Cejas (Co-I, Centre

for Environment, Fisheries & Aquaculture Science - Cefas), Dr. Nick Taylor (Co-I, Cefas), Dr. Ronny

van Aerle (Co-I, Cefas). £200k.

Mar 17 The oral microbiome and nitric oxide bioavailability across the human lifespan. BBSRC Responsive

Mode grant. Prof. Andrew Jones (PI, Sport and Health Sciences), Dr. Anni Vanhatalo (Co-I, Sport and Health Sciences), Dr. Mark van der Giezen (Co-I, Biosciences), Prof. Paul Winyard (Co-I, Medical School), Prof. David Williams (Co-I, Cardiff), Dr. Artur Ouwehand (DuPont, industrial

partner). £742k.

May 16 Does the potential for AMR selection differ between common UK cattle grazing systems? NERC

AMR in the Real World Pump Priming Grants. Dr. Jenni Dungait (PI, Rothamsted Research), Dr. Will Gaze (Co-I, University of Exeter Medical School) and Dr. Mark van der Giezen (Co-I, Biosciences).

£199k.

Oct 15 Extracting mercury from industrial waste using microalgae. BBSRC Metals in Biology BBSRC

Business Interaction Vouchers. Dr. Mark van der Giezen (PI, University of Exeter, Biosciences), Dr. Mike Allen (Co-I, Plymouth Marine Laboratory) and Dr. Chris Chuck (Co-I, University of Bath).

£10k..

Jan 15 Gut health in European lobsters - the gut microbiome as a health marker in offshore sea cage

culture (joint Centre for Environment, Fisheries & Aquaculture Science (Cefas) and University of Exeter PhD-studentship. Dr. David Bass (Cefas) and Dr. Mark van der Giezen (University of Exeter,

Biosciences) as joint PIs and Dr. Carly Daniels (Co-I, National Lobster Hatchery). £70k.

May 14 Microbial cycling and antibiotic resistance gene flow in flooded soils (University of Exeter, Project

Development Grant, Dr. Mark van der Giezen (PI, University of Exeter, Biosciences), Dr. Jennifer

Dungait (Co-I, Rothamsted), Dr. Michael Lee (Co-I, University of Bristol). £8.5k.

Microbial cycling at the farm - A systems approach to assess risks and opportunities (BBSRC SW-Mar 14 DTP 4-year PhD-studentship. Dr. Jennifer Dungait (Rothamsted) and Dr. Mark van der Giezen (University of Exeter, Biosciences) as joint PIs and Dr. Michael Lee (Co-I, University of Bristol) and Dr. Chris Hodgson (Co-I, Rothamsted). £70k. Dec 12 ExtRACT: Exeter Remediation of Acid mine drainage and recovery of Combustibles and metals. University of Exeter Bridging the Gap. Dr. Chris Bryan (PI, Camborne School of Mines), Dr. Clive Butler (Co-I, University of Exeter, Biosciences) and Dr. Mark van der Giezen (Co-I, University of Exeter, Biosciences). £5.5k. Mar 06 Evolution and function of the anaerobic mitochondrion of an enigmatic human parasite, Blastocystis hominis. Wellcome Trust Project Grant. Dr. Mark van der Giezen (PI, Queen Mary University of London) and Dr. C. Graham Clark (Co-I, London School of Hygiene and Tropical Medicine). £382k.. EMBO Fellowship from the European Molecular Biology Organisation (Heidelberg, Germany), for Feb 98 post-doctoral research at the Department of Zoology, Natural History Museum, London. Under

Outreach

May 21-present Initiator and organiser of Pint of Science Stavanger.

supervision of Prof. Martin Embley.

https://pintofscienceno.wixsite.com/2020/stavanger

Dec 20-present Initiator, organiser of, and speaker at, the Nobel Prize lecture series.

https://www.facebook.com/UniStavanger/videos/428412825212587

Video presenting the intestinal disease work we do at the University of Stavanger for the

Norwegian national science week Forskningsdagene: https://youtu.be/XWggpnSLD7c

List of Publications

h-index: 41 (Google Scholar), 35 (Scopus). Number of citations: >7,000 (Google Scholar), >5,000 (Scopus).

Recent publication (2019-2025):

Sep 20

- 92. Burden, E., Seyoum, Y., Evans, J.P., Thomas, W., Kitson, J., Batten, T., Patel, R., <u>van der Giezen, M.</u>, and Smith C. (2025) Mapping the microbial landscape and variations based on biological sex, age and biopsy location in the shoulder skin microbiome. *J. Shoulder Elb. Surg.*, in press.
- 91. Pyrihová, E., King, M.S., King, A.C., Toleco, M.R., <u>van der Giezen, M.</u>, and Kunji, E.R.S. (2023) A mitochondrial carrier transports glycolytic intermediates to link cytosolic and mitochondrial glycolysis in the human gut parasite *Blastocystis. eLife* 13: RP94187. Previously deposited as a preprint *BioRxiv* https://doi.org/10.1101/2023.11.02.565298.
- 90. L'Heureux, J., <u>van der Giezen, M.</u>, Winyard, P., Jones, A., and Vanhatalo, A. (2023). Localisation of nitrate-reducing and highly abundant microbial communities in the oral cavity. *PLoS ONE.* 18(12): e0295058.
- 89. Záhonová, K., Low, R.S., Warren, C.J., Cantoni, D., Herman E.K., Yiangou, L., Ribeiro, C.A., Phanprasert, Y., Brown, I.R., Rueckert, S., Baker, N.L., Tachezy, J., Betts, E.L., Gentekaki, E., <u>van der Giezen, M.</u>, Clark, C.G., Jackson, A.P., Dacks, J.B., and Tsaousis, A. (2023). Evolutionary analysis of cellular reduction and anaerobicity in the hyperprevalent gut microbe *Blastocystis*. *Curr. Biol.* 33: 1-16.
- 88. Watson, M.M., <u>van der Giezen, M.</u>, and Søreide, K. (2023) Gut microbiome influence on human epigenetics, health, and disease. In: Handbook of epigenetics, T.O. Tollefsbol (ed). Elsevier, Amsterdam, 669-686.
- 87. Stensvold, C.R., Ascuña-Durand, K., Chihi A., Belkessa, S., Kurt, Ö., El-Badry, A., <u>van der Giezen, M.</u>, and Clark, C.G. (2022) Further insight into the genetic diversity of *Entamoeba coli* and *Entamoeba hartmanni*. *J. Euk. Microbiol.*, 70: e12949.
- 86. Thomas, A., Evans, B.D, <u>van der Giezen, M.</u>, and Harmer, N.J. (2022) Survivor bias drives overestimation of stability in reconstructed ancestral proteins. *BioRxiv* https://doi.org/10.1101/2022.11.23.517659.

- 85. Stensvold, C.R., Sørland, B.A., Berg, R.P.K.D., O'Brien Andersen, L., <u>van der Giezen, M.</u>, Bowtell, J.L., El-Badry, A.A., Belkessa, S., Kurt, Ö., and Nielsen, H.V. (2022) Stool microbiota diversity analysis of *Blastocystis*-positive and *Blastocystis*-negative individuals. *Microorganisms*, 10: 326.
- 84. Herman, E.K., Greninger, A.L., van der Giezen, M., Ginger, M.L., Ramirez-Macias, I., Miller, H.C., Morgan, M.J., Tsaousis, A.D., Velle, K., Vargova, K. Záhonová, R., Rodrigo Najle, S., MacIntyre, G., Mueller, N., Wittwer, M., Zysset-Burri, D.C., Elias, M., Slamovits, C.H., Weirauch, M., Fritz-Laylin, L., Marciano-Cabral, F., Puzon, G.J., Walsh, T., Chiu, C.Y. and Dacks, J.B. (2021) Genomics and transcriptomics yields a systems-level view of the biology of the pathogen *Naegleria fowleri*. *BMC Biol.*, 19: 142. Previously deposited as a preprint *BioRxiv*, doi.org/10.1101/2020.01.16.908186.
- 83. Vanhatalo, A., E. L'Heureux, J.E., Kelly, J., Blackwell, J.R., Wylie, L.J., Fulford, J., Winyard, P.G., Williams, D.W., van der <u>Giezen, M.</u>, and Jones, A.M. (2021) Network analysis of nitrate-sensitive oral microbiome reveals interactions with cognitive function and cardiovascular health. *Redox Biol.* 41: 101933.
- 82. Knopp, M., Stockhorst, S., <u>van der Giezen, M.</u>, Garg, S.G., and Gould, S.B. (2020) The asgardarchaeal-unique contribution to eukaryotic protein families is 0.002%. *Gen. Biol. Evol.* 13: evab085. Previously deposited as a preprint *BioRxiv*, doi.org/10.1101/2021.02.09.430432.
- 81. Hess, M., Paul, S.S., Puniya, A.K., <u>van der Giezen, M.</u>, Shaw, C., Edwards, J.E., and Fliegerová, K. (2020) Anaerobic fungi: past, present and future. *Front. Microbiol.*, doi: 10.3389/fmicb.2020.584893.
- 80. Holt, C.C., D. Bass, G. Stentiford and <u>van der Giezen, M.</u> (2020) Understanding the role of the shrimp gut microbiome in health and disease. *J. Invertebr. Pathol.*, https://doi.org/10.1016/j.jip.2020.107387
- 79. Holt, C.C., <u>van der Giezen, M.</u>, Daniels, C.L., Stentiford, G.D. and Bass, D. (2020) Spatial and temporal axes impact bacterial gut ecology and assembly of juvenile European lobster (*Homarus gammarus*): exploration of the gut in a novel sea-based culturing system. *ISME J.*, 14, 531–543.
- 78. Thomas, A., Cutlan, Rhys, Finnigan, W., <u>van der Giezen, M.</u>, and Harmer, N. (2019) Highly thermostable carboxylic acid reductases generated by ancestral protein reconstruction. *Comm. Biol.*, 2: 1–12.
- 77. Huang, J., Nguyen, V., Hamblin, K.A., Maytum, R., <u>van der Giezen, M.</u>, and Fraser, M.E. (2019) ATP-specificity of succinyl-CoA synthetase from *Blastocystis hominis*. *Acta Cryst. D*, 75: 647-659.
- 76. Holt, C.C., Stone, M., Bass. D., Bateman, K.S., van Aerle, R., Daniels, C.L., van der Giezen, M., Ross, S.H., Hooper, C. and Stentiford, G.D. (2019) The first clawed lobster virus *Homarus gammarus* nudivirus (HgNV n. sp.) expands the diversity of the *Nudiviridae*. *Sci. Rep.*, 9: 10086.
- 75. Lear, R., O'Leary, M., O'Brien Andersen, L., Holt, C.C., Stensvold, R., <u>van der Giezen, M.</u> and Bowtell, J. (2019) Tart cherry concentrate does not alter the gut microbiome, glycaemic control or systemic inflammation in a middle-aged population. *Nutrients*, 11: 1063.
- 74. Minardi, D., Studholme, D.J., Oidtmann, B., Pretto, T., and <u>van der Giezen, M.</u> (2019) Improved genotyping method for the causative agent of crayfish plague (*Aphanomyces astaci*) based on mtDNA. *Parasitol*, 8: 1022-1029.
- 73. Tsaousis, A., Hamblin, K.A., Elliot, C., Gourley, C.W., Moore, A.L., and <u>van der Giezen, M.</u> (2018) The human gut colonizer *Blastocystis* respires using Complex II and alternative oxidase to buffer transient oxygen fluctuations in the gut. *Front Cell. Infect. Microbiol.*, 8: 371.

Published before 2019 (but cited over 100 times):

- 70. Vanhatalo, A., Blackwell, J.R., L'Heureux, J., Williams, D.W., Smith, A., van der Giezen, M., Winyard, P.G., Kelly, J. and Jones, A.M. (2018) Nitrate-responsive oral microbiome modulates nitric oxide homeostasis and blood pressure in humans. *Free Radic. Biol. Med.*, 124: 21-30. Cited: 155x.
- 69. Stensvold, C.R. and <u>van der Giezen, M.</u> (2018) Associations between gut microbiota and intestinal parasite colonisation. *Trends Parasitol.*, 34: 369–377. Cited: 150x.
- 66. Gentekaki,E., Curtis,B., Stairs,C., Klimes,V., Elias,M., Salas,D., Herman,E., Eme,L., Arias,M.C., Hilliou,F., Klute,M., Suga,H., Malik,S.-B., Pightling,A., Kolisko, M., Rachubinski,R., Schlacht,A., Tsaousis,A., Archibald,J., Ball,S.G., Dacks,J., Clark,G., van der Giezen, M. and A.J. Roger (2017) Extreme genome diversity in the hyper-prevalent parasitic eukaryote *Blastocystis. PLoS Biol.*, 15(9): e2003769. Cited: 114x.
- 57. Read, B.A., Kegel, J., Klute, M.J., Kuo, A., Lefebvre, S.C., Maumus, F., Meyer, C., Miller, J., Monier, A., Salamov, A., Young, J., Aguilar, M., Claverie, J.M., Frickenhaus, S., Gonzalez, K., Herman, E.K., Lin, Y.C., Napier, J., Ogata, H., Sarno, A.F., Shmutz, J., Schroeder, D., de Vargas, C., Verret, F. von Dassow, P., Valentin, K., Van de Peer, Y., Wheeler, G., *Emiliania huxleyi* Annotation Consortium, Allen, A.E., Bidle, K., Borodovsky, M., Bowler, C., Brownlee, C., Mark Cock, J., Elias, M., Gladyshev, V.N., Groth, M., Guda, C., Hadaegh, A., Debora Iglesias-

- Rodriguez, M., Jenkins, J., Jones, B.M., Lawson, T., Leese, F., Lindquist, E., Lobanov, A., Lomsadze, A., Malik, S.B., Marsh, M.E., Mackinder, L., Mock, T., Mueller-Roeber, B., Pagarete, A., Parker, M., Probert, I., Quesneville, H., Raines, C., Rensing, S.A., Riano-Pachon, D.M., Richier, S., Rokitta, S., Shiraiwa, Y., Soanes, D.M., van der Giezen, M., Wahlund, T.M., Williams, B., Wilson, W., Wolfe, G., Wurche, L.L., Dacks, J.B., Delwiche, C.F., Dyhrman, S.T., Glokner, G., John, U., Richards, T., Worden, A.Z., Zhang, X. and I.V. Grigoriev (2013) Pan genome of the phytoplankton *Emiliania* underpins its global distribution. *Nature*, 499: 209-213. Cited: 500x.
- 54. Müller, M., Mentel, M., van Hellemond, J., Henze, K., Wöhle, C., Gould, S.B., Yu, R.-Y., <u>van der Giezen, M.</u>, Tielens, A.G.M. and W.F. Martin (2012) Biochemistry and evolution of anaerobic energy metabolism in eukaryotes. *Microbiol. Mol. Biol. Rev.*, 76: 444-495. Cited: 792x.
- 40. Puthiyaveetil, S., Kavanagh, T.A., Cain, P., Sullivan, J.A., Newell, C.A., Gray, J.C., Robinson, C., <u>van der Giezen, M.</u>, Rogers, M.B., Allen, J.F. (2008) The ancestral symbiont sensor kinase CSK links photosynthesis with gene expression in chloroplasts. *Proc. Natl. Acad. Sci. U.S.A.*: 105: 10061-10066. Cited: 187x.
- 38. Stechmann, A., Hamblin, K., Perez-Brocal, V., Gaston, D., Richmond, G. S., <u>van der Giezen, M.</u>, Clark, C.G., Roger, A.J. (2008) Organelles in *Blastocystis* that blur the distinction between mitochondria and hydrogenosomes. *Curr. Biol.*: 18: 580-585. Cited: 216x.
- 21. Tovar, J., León-Avila, G., Sánchez, L., Sutak, R., Tachezy, J., <u>van der Giezen, M.</u>, Hernández, M., Müller, M., and Lucocq, J.M. (2003) Mitochondrial remnant organelles of *Giardia* function in iron-sulphur cluster metabolism. *Nature*, 426: 172-176. Cited: 669x.
- 13. <u>van der Giezen, M.</u>, Slotboom, D.J., Horner, D.S., Dyal, P.L., Harding, M., Xue, G.P., Embley, T.M., and Kunji, E.R.S. (2002) Conserved properties of hydrogenosomal and mitochondrial ADP/ATP carriers: a common origin for both organelles. *EMBO J.*, 21: 572-579. Cited: 123x.

Patents

- Application pending: Diagnostics of bacterial lameness in pigs. Inventors: Mark van der Giezen, Marianne Oropeza-Moe, Marit Gaastra Maaland, MitchelRey Toleco (2024).
- WO2019202329A1, Microbiome modulated response to dietary nitrate. Inventors: Paul Graham Winyard, Anni Vanhatalo, Andrew Jones, and Mark van der Giezen (2019).

Communications to Scientific Meetings/Invited Seminars

Over 60 presentations at scientific meetings, last five years:

- 62. Blastocystis *genetic modification*. Invited presentation for the EU-COST-NUS workshop on Parasitology & Microbiomes. Singapore, May 30 June 1, 2023.
- 61. *One Health, Sustainability, and Circular Economy*. Invited presentation for the Korea-Norway workshop: Water treatment technology for carbon neutral era. Seoul, South Korea, December 19-20, 2022.
- 60. What makes a successful research project? Invited talk for early career scientists at the 9th Conference of Scandinavian Baltic Society for Parasitology, Vilnius, Lithuania (virtual), April 21 23, 2021.
- 59. The gut microbiome as a health marker for European lobster in offshore sea culture. Presentation for the Stiim Aqua Cluster, Stavanger, Norway, 4 Dec. 2020.
- 58. *Mitochondrial glycolysis in a major lineage of eukaryotes*. Selected presentation at the Norwegian Biochemical Society Contact meeting, Voss, Norway, 23-26 January 2020.
- 57. *The gut microbiome as a health marker for European lobster in offshore sea culture.* Invited by Dr Fiona Provan, Norce, Stavanger, 13th December 2019.
- 56. *Mitochondrial evolution the intestinal parasite* Blastocystis. Invited by Professor Dirk Linke, Department of Biosciences, University of Oslo, Norway, 25th November 2019.
- 55. *Mitochondrial biochemical innovations in the intestinal parasite* Blastocystis. Invited by Professor Tony Moore at the School of Life Sciences, University of Sussex, UK, 17th May 2019.

Teaching Experience

2024 – present	Module coordinator for BIO600 'Sustainable Future Foods' (~20 students).
2022 – present	Module coordinator for BIOMAS, the MSc research projects (\sim 16 students).
2019 – present	Final year module BIO220 'Microbiology', course organiser and lecturer (~20 students).
2015 - 2018	Final year module BIO3093 'Energy Metabolism', 6 lectures (~50 students).
2014 - 2019	Module coordinator of the MSc module BIOM566 'Sustainable Livestock and Fisheries' (~ 10/15
	students).
2014 - 2019	Module coordinator of the MSc module BIOM562 'Sustainable Land-Use in Grassland Agriculture'
	(~ 10/15 students).
2014 – 2017	Module coordinator of the MSc module BIOM560 'Research Project' (~ 10/15 students).
2013 - 2014	Second year 'BIO2078 – Medical and General Microbiology', 2 lectures (~200 students).
2013 – 2017	First year 'BIO1337- Microbiology'; 6 lectures/1 practical (~400 students).
2013 – 2019	Personal tutor at the University of Exeter.
2012 – 2017	Module coordinator and lecturer for the third year module 'BIO3085 - Horizons in Biochemistry'; 3
	lectures (~50 students).
2009 – 2011	Second year 'BIO2072 - Human molecular biology'; 5 lectures (~60 students).
2009 – 2013	Module coordinator of the second year module 'BIO2071 - Research Skills and Bioethics'; 4
	lectures (~200 students).
2008 - 2013	Module coordinator of the postgraduate course 'BIOM503 - Essentials of Molecular Biology' as
	part of the MSc programme in Bioinformatics; 3 lectures/2 practicals (~15 students).
2008 - 2012	First year 'BIO1327 - The Diversity of Animals, Plants and Protists' module; 5 lectures/1 practical
	(~130 students).
2007 - 2014	Final year 'BIO3066 - Evolution of infectious diseases' module; 7 lectures (~34 students).
2007 – 2019	Academic tutor at the University of Exeter.
2006 – 2006	First year 'Cell Dynamics' course at the School of Biological and Chemical Sciences, Queen Mary; 5
	lectures (~375 students).
2006 – 2006	First year 'The Microbial World and Humans' course for Biomedical students at the School of
	Biological and Chemical Sciences, Queen Mary; 8 lectures/1 practical (~100 students).
2005 – 2006	Second year 'Cell Biology and Developmental Genetics' course at the School of Biological and
	Chemical Sciences, Queen Mary; 6 lectures (∼130 students).
2005 – 2006	Second year 'General Microbiology' course at the School of Biological and Chemical Sciences,
	Queen Mary; 8 lectures/1 practical (~50 students).
2005 – 2007	Student tutorials for foundation programme, 1st, 2nd and 3rd year undergraduates for Essential
	Skills for Biologists (1st year) and Integrative Studies in Biological Sciences (2nd and 3rd year); about
	~7 students per tutor group, ~160 student hours per year.
2004 - 2007	Student advisor/tutor at QMUL for students of all three year-groups (2004–2007).
2004	Lectures on 'Early Eukaryotic and Organellar Evolution' as part of the Third Year Lecture series
	(~25 students) on Molecular and Medical Microbiology, at the School of Biological Sciences, Royal
	Holloway.
1995 – 1995	Supervisor of third year laboratory course (Microbial Physiology) at the Microbiology Department,
	University of Groningen, the Netherlands.
1994 – 1994	Supervisor of third year laboratory course (Microbial Ecology) at the Microbiology Department,
	University of Groningen, the Netherlands.

Services to the Community and Advisory Board membership

Management committee member representing Norway on EU COST action CA23110 - International networking on *in vitro* colon models simulating gut microbiota mediated interactions (INFOGUT) (2024 – present).

President of the Norwegian Society for Microbiology (2023 – present),

Scientific advisory board member for NordixDX (2022 – present).

Management committee member representing Norway on EU COST action CA21105 - *Blastocystis* under One Health (OneHealthBlastocystis) (2022 – present).

Guest editor for Scientific Reports for the Eukaryogenesis Collection (2021).

Member of the Board of the Norwegian Society for Microbiology (2020 – present),

Member of the Board of the Scandinavian-Baltic Society for Parasitology (SBSP) (2019 – present),

Member of the College of Reviewers for the Canada Research Chairs Program (2015 – present),

Member of the Advanced Accreditation Assessment Panel of the Royal Society of Biology (2013 – present),

Member of the Natural Environment Research Council (NERC) Peer Review College (2011 – present),

Member of the Board of Reviewers for the Journal of Eukaryotic Microbiology (2010 – present),

Member of the grant awarding CoSyst panel of the Biotechnology and Biological Sciences Research Council (BBSRC) (2007-2009),

Member of the Steering Group for the PGCAP (Post Graduate Certificate in Academic Practice) and CILT (Certificate in Learning and Teaching) at Queen Mary, University of London (2006-2007),

Member of the grant awarding Systematics Research Fund panel of the Systematics Association and the Linnean Society (2006 and 2007),

Member of the Council of the Systematics Association (2005-2007 and 2008-2010).

Ad hoc referee for international peer-reviewed scientific journals (Advances in Parasitology, Biochimica et Biophysica Acta, BioScience, Biotechnology Journal, BMC Evolutionary Biology; BMC Systems Biology, Current Biology, Eukaryotic Cell, Experimental Parasitology, FEBS Journal, Freshwater Biology, Folia Parasitologica, Genome Biology and Evolution, International Journal for Parasitology, Journal of Eukaryotic Microbiology, Journal of Experimental Botany, Journal of Molecular Biology, Journal of Parasitology Research, Microbiology, Mitochondrion, Molecular Biology and Evolution, Molecular Microbiology, Philosophical Transactions of the Royal Society London, PLoS Neglected Tropical Diseases, PLoS Pathogens, Protist, Science, Tissue & Cell).

Referee for international research proposals (Biotechnology and Biological Sciences Research Council (BBSRC),
Deutsche Forschungs Gemeinschaft (DFG), European Science Foundation (ESF), European Union COST
programme, German-Israeli Foundation for Scientific Research and Development (GIF), Leverhulme Trust,
Natural Environment Research Council (NERC), Systematics Research Fund, the French National Research Agency
(ANR), National Science Center Poland (NCN), REWIRE: Reinforcing Women in Research, Marie Sklodowska-Curie
Actions COFUND Fellowship Programme).

Referee for book proposals (Garland Press).

Reviewer of scripts for Peter Matulavich, an award-winning independent producer whose work is distributed by Discovery Education. He is producing an educational film series about protists and protozoa targeted for students ages 9-14. I reviewed 2 of the 16 scripts: 'Apicomplexans' and 'Protozoa and Disease'.

External PhD examiner: Ms. Ucheoma Ugoji (supervisor Dr. Jorge Tovar) Royal Holloway, University of London, March 2024; Mr. Jamie Newton (supervisor Dr. Anastasios Tsaousis), University of Kent, UK, February 2024; Ms. Liliana Muñoz (supervisor Professor Pieter van West), Institute of Medical Sciences, University of Aberdeen, Scotland, September 2022; Mr. Rui Santos (supervisor Professor Adrian Hehl) Institute for Parasitology, University of Zurich, August 2022 (reading committee); Mr. Nick Bailey (supervisor Professor Robert Hirt), Faculty of Medical Sciences, Newcastle University, December 2021; Ms. Ana Jimena Pacheco Gimenez (supervisor Professor Richard Pickersgill) School of Biological and Behavioural Sciences, Queen Mary University of London, February 2021; Mr. Francesco Delogu (supervisor Professor Phil Pope), Faculty of Biosciences, Norwegian University of Life Sciences, Ås, Norway, April 2020; Mr. Alejandro Jiménez-González (supervisor Dr Jan Andersson), Department of Cell and Molecular Biology, Uppsala University, Sweden, February 2020; Mr. Lukas Novak (supervisor Dr. Vladimir Hampl), Department of Parasitology, Charles University, Prague, Czech Republic, January 2020; Ms. Nurul Iberahim (supervisor Professor Pieter van West), Institute of Medical Sciences, University of Aberdeen, Scotland, November 2018; Ms. Charlotte Thomas (supervisor Professor David Timson), Biological Sciences, Queen's University, Belfast, Northern Ireland, December 2017; Mr. Kanok Preativatanyou (supervisor Professor Neil Hall), Institute of Integrative Biology, University of Liverpool, England, July 2015; Mr. Zdeněk Paris (supervisor Professor Julius Lukeš), Department of Molecular Parasitology, Institute of Parasitology, Academy of Sciences of the Czech Republic, Ceske Budejovice, Czech Republic, September, 2010.

External Habilitation reviewer for the Department of Parasitology, Faculty of Science at the Charles University in Prague, Czech Republic (2014).

Res	ear	ch	Gro	our	1

Postdocs:

- Dr. Vera Sideraki, Postdoc. Mitochondrial glycolysis as a target for disease control of pathogenic stramenopiles. Norwegian Research Council funded project (2023-2025).
- Dr. Yohannes Seyoum Demissie, Postdoc. The role of *Blastocystis* in inflammatory bowel disease. Norwegian Research Council funded project (2023-2026).

PhD-students:

- Ms. Petra Tláskalová, PhD student, The role of *Blastocystis* in inflammatory bowel disease. Norwegian Research Council funded project (starting shortly 2027).
- Ms. Marie Pažoutová, PhD student, The role of *Blastocystis* in inflammatory bowel disease. Norwegian Research Council funded project (2024 2027).
- Mr. Jeff Tomiak, PhD student, The role of *Blastocystis* in inflammatory bowel disease. Norwegian Research Council funded project (2024 2027).
- Ms. Karlijn van Dijk, PhD student. The role of *Blastocystis* in inflammatory bowel disease. Norwegian Research Council funded project (2024 2027).
- Ms. Ankana Banerjee, PhD student. The role of *Blastocystis* in inflammatory bowel disease. Norwegian Research Council funded project (2023-2026).
- Mr. MitchelRey, PhD student. Mitochondrial glycolysis as a target for disease control of pathogenic stramenopiles. Norwegian Research Council funded project (2022-2025).

Alumni:

- Dr. Eva Pyrihová, former postdoc. Now researcher at the Institute of Biotechnology, Prague.
- Dr. Martin Watson, former postdoc, now researcher at Nofima.
- Dr. Franziska Trusch, former postdoc, now postdoc at Imperial College, London, UK.
- Dr. Corey Holt, PhD, former PhD-student, now Lecturer at the University of Bath, UK.
- Dr. Maulood Turfah, former PhD-student, now Lecturer at the University of Baghdad, Iraq.
- Dr. Jamie MacFadzean, former PhD student, now Senior Policy Advisor at Department for Environment, Food and Rural Affairs (Defra).
- Dr. Adam Thomas, PhD, former jointly supervised PhD student (not primary supervisor), now staff scientist at Twist Bioscience.
- Dr. Katy Jones, PhD, former jointly supervised PhD student (not primary supervisor).
- Dr. Diana Minardi, PhD, former PhD-student, currently staff scientist at the Centre for Environment, Fisheries & Aquaculture Science Cefas.
- Dr. Sheera Abdullah, PhD, former PhD-student, currently research technician at the University of Exeter.
- Dr. Maria Siegesmund, PhD (former postdoctoral scientist and PhD-student, now postdoctoral scientist at the University of Kaiserslautern, Germany).
- Dr. Kerem Terali, PhD, MSc, BSc (former PhD-student, now Assistant Professor at Faculty of Medicine at Eastern Mediterranean University, Cyprus).
- Dr. Kailash Chand, PhD, BSc (formal postdoctoral scientist, now PI at the Department of Biochemistry, National Institute for Research in Environmental Health, India).
- Dr. Matthew B. Rogers, PhD, BSc (former postdoctoral scientist, now at PDRA at University of Pittsburgh).
- Dr. Karleigh Hamblin, PhD, BSc (former PhD-student, now at Defence Science and Technology Laboratory, Porton Down).

Conference Organising

2024	Organiser of the training school <i>Blastocystis</i> and the Gut Microbiome for the EU COST action CA21105 - <i>Blastocystis</i> under One Health. Institute of Evolutionary Biology, Barcelona, Spain, 24-26 April 2024.
2023	Organiser of the annual meeting of the Norwegian Society for Microbiology.
2020	Scientific committee of Protist.Online 2 - Electronic Symposium on Protistology. 23-24 June 2020.

Membership of Professional Associations

Member of the Royal Dutch Society for Microbiology (and as such of FEMS),

Member of the International Society of Protistologists (ISOP),

Member of the International Society for Evolutionary Protistology (ISEP),

Fellow of the European Molecular Biology Organisation (EMBO),

Fellow of the Linnean Society,

Member of the Scandinavian-Baltic Society for Parasitology (SBSP),

Member of the Norwegian Society for Microbiology (NFM).

Services to the public

Director for the Primary Academies Trust; this academy is part of a large primary school academy in Devon serving nearly 2,000 children (2012-2013).

Member of the Strategic Governors Committee for the First Federation. The First Federation Governance structure, role and responsibilities and reporting structures are recognised as innovative and examples of best practice nationally. The federation was one of the first primary school federations in the UK (2012 – 2013).

Committee Member of the Friends of the Church at Clyst St George, Devon; this organisation aims to support the fabric of the church as a focal point for the local community (2010 - 2016).

Associate Governor for Lady Seaward's Church of England Primary School at Clyst St. George, Devon (2008 - 2009);

Volunteer for the Clyst St. George Nature Garden. The volunteers keep the garden well maintained so it can be enjoyed by the public and used as external teaching area for local schools (2007- 2012).

Hobbies

Avid reader of historical nonfiction books.

I enjoy running and competed in backyard ultramarathons (maximum distance: 50 km).

Maintaining a modern classic cars and keeping it on the road.