

BIOGRAPHICAL SKETCH

Name: Andreia Albuquerque Wendt

Position title: Advanced Postdoctoral Researcher

Affiliation: Institute of Cell Biology, University of Bern (CH); GHTM, IHMT-NOVA University (PT)

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Personal Statement

After securing a position in the highly competitive Marie Skłodowska-Curie International Training Network: “GlycoPar: Parasite glycobiology and anti-parasitic strategies”, Dr Wendt graduated in 2018 from the Medizinische Hochschule Hannover (DE) with a PhD in Molecular Medicine. The following 6 years, through support of Marie Skłodowska-Curie IF, Medical Research Council and SNSF at the Universities of Oxford, Glasgow (UK) and Bern (CH), respectively; she mastered *Leishmania* sp. genome editing using CRISPR/Cas9, including gene tagging, knock out and episomal gene expression, as well as generating uniquely barcoded lines for high-throughput phenotyping using next generation sequencing (BARseq) methodologies to answer fundamental questions of *Leishmania* sp. biology across its entire life cycle, in vitro and in vivo. Her work has attracted the interest of the research community leading to several invited intercontinental talks on both the fields of *Leishmania* and *Toxoplasma* parasites. Dr Wendt’s research aims to explore the intricate details of host-pathogen-vector interactions in *Leishmania* infections and ultimately harvest basic information for the development of control strategies contributing for the eradication of leishmaniasis.

RESEARCH INTERESTS: Molecular & Cellular Parasitology, Vector Biology, Drug development

EDUCATION

26/01/2018 Doctor of Philosophy (PhD), Molecular Medicine, Medizinische Hochschule Hannover, DE

Thesis title: Glycosylation in Apicomplexan Parasites. Supervisor: Prof. Dr. Françoise Routier

11/12/2013 Master (MSc) of Biomedical Sciences - Molecular Biology and International Tropical Medicine, Instituto de Higiene e Medicina Tropical – Universidade Nova de Lisboa, PT

Thesis title: New species of *Leishmania* and hybrids – implications in the pathogenesis of infection.

Supervisors: Prof. Dr. Lenea Campino and Dr. Sofia Cortes

23/09/2011 Bachelor (BSc) in Biochemistry, Faculdade de Ciências e Tecnologias, Universidade NOVA de Lisboa, Monte da Caparica, PT

Thesis title: Spectroscopic characterization of chalcone (1E, 4E)-1,5-BIS(4-hidroxyfenyl)penta-1,4-diene-3-one. Supervisor: Prof. Dr. César Laia

15/09/2010 Bachelor (BSc) in Applied Chemistry - Biotechnology, Faculdade de Ciências e Tecnologias, Universidade NOVA de Lisboa, Monte da Caparica, PT

Thesis title: Study of in vitro biological behavior of parental and hybrid strains of *Leishmania*. Supervisors: Prof. Dr. Lenea Campino and Dr. Sofia Cortes

PROFESSIONAL EXPERIENCE

From 01/11/2024 Advanced postdoctoral researcher (MSCA GF Fellow), Swiss TPH, Basel, Switzerland & Faculty of Sciences, Charles University, Prague, Czech Republic

Description: Research responsibility for the development of a sand fly colony at the insectary of Swiss TPH, to capacitate infection and chemotherapy experiments using *Leishmania* sp. Generate *Leishmania* sp. genetically modified cell lines containing defined fluorescent tags and unique nucleotide barcodes, enabling NGS based medium to high-throughput compound screening of parasiticide agents in sand flies.

01/11/2023 – 31/10/2024 Advanced postdoctoral researcher, Institute of Cell Biology, University of Bern, Bern, Switzerland

Description: Research responsibility for producing DNA constructs for the generation of selected knockout, add-back and tagged *L. mexicana* cell and phenotypic analysis in vitro. Drug screenings in *L. mexicana* and

L. donovani axenic promastigotes and amastigotes, as well as intracellular amastigotes, using iMAC models, in collaboration with PCU (Swiss TPH). Data analysis, manuscript preparation and outreach. Shared responsibility for supervision of undergraduate and graduate students.

01/09/2020 – 30/08/2023 Postdoctoral researcher, Wellcome Centre for Integrative Parasitology, Institute of Infection & Immunity, College of Medical Veterinary & Life Sciences, University of Glasgow, Glasgow, UK

Description: Research responsibility for producing DNA constructs for the generation of a knockout library (II) of more than 300 individually barcoded mutants and phenotypic analysis of this library in vivo (macrophages, mice and sand flies). Data analysis, manuscript preparation and outreach. Shared responsibility for supervision of undergraduate and graduate students.

01/09/2018 – 30/08/2020 Postdoctoral researcher (MSCA IF Fellow), Sir William Dunn School of Pathology, University of Oxford, United Kingdom

Description: Research responsibility for producing DNA constructs for the generation of a knockout library (I) of more than 300 individually barcoded mutants and phenotypic analysis of this library in vitro (promastigotes). Data analysis, manuscript preparation and outreach. Shared responsibility for supervision of undergraduate and graduate students.

01/02/2018 – 30/08/2018 Postdoctoral researcher, Instituts für Klinische Biochemie, Medizinische Hochschule Hannover, DE

Description: Following graduate studies, research responsibility for maintaining various cell lines including Schneider insect cells, CHO, Vero and HFF cells as well as *Toxoplasma gondii* parental and mutant cell lines. Additional tasks included the expression of various recombinant proteins in eukaryotic heterologous systems, purification, and mass spectrometry analysis. Data analysis, manuscript preparation and outreach. Shared responsibility for supervision of undergraduate and graduate students.

01/06/2011 – 30/06/2014 Research Assistant, Unidade de Parasitologia Médica, Instituto de Higiene e Medicina Tropical – Universidade NOVA de Lisboa, Lisbon, PT

Description: Research responsibility for processing biological samples from dogs and murine model for the isolation, detection and typing of new *Leishmania* strains, developing highly sensitive diagnostic tools for detection of asymptomatic parasitemia, as well as development and testing of leishmanicidal compounds. Shared responsibility for progress reporting to National Science Foundation. Data analysis, manuscript preparation and outreach. Shared responsibility for team management including supervision of undergraduate and graduate students. During this period, she participated in several national and international projects, namely the “New *Leishmania* species and hybrids – risk of introduction and implications to the pathogeny of infection” (PTDC/CVT/112371/2009), financed by Portuguese foundation for Science and Technology (FCT), and “Biology and control of vector-borne infections in Europe- EDEN-next”, financed by EU/FP7 and also “Network for identification of biomarkers potentially useful in discriminating the different clinical outcomes of *Leishmania infantum* infection”, CYTED-Brazil.

RESEARCH MONOGRAPHS

1. **A. Albuquerque**. 2018. Glycosylation in Apicomplexan Parasites. Doctor of Philosophy (PhD) thesis in Molecular Medicine. Medizinische Hochschule Hannover
2. **A. Albuquerque**. 2013. New species of *Leishmania* and hybrids – implications in the pathogenesis of infection. Master (MSc) thesis in Biomedical Sciences: Molecular biology and International Tropical Medicine. Instituto de Higiene e Medicina Tropical – Universidade NOVA de Lisboa
3. **A. Albuquerque**. 2010. Study of in vitro biological behavior of parental and hybrid strains of *Leishmania*. Bachelor (BSc) thesis in Applied Chemistry – Biotechnology. Faculdade de Ciências e Tecnologias, Universidade NOVA de Lisboa

PUBLISHED JOURNAL ARTICLES (*co-first)

1. **A. Albuquerque-Wendt**, C. McCoy, R. Neish, U. Dobramysl, T. Beneke, S.A. Cowley, K. Crouch, R.J. Wheeler, J.C. Mottram and E. Gluenz. TransLeish: Identification of membrane transporters essential for survival of intracellular *Leishmania* parasites in a systematic gene deletion screen. bioRxiv, **2024**. Doi: 10.1101/2024.06.21.600025.

- Role:* Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.
2. T. Beneke, R. Neish, C. M. C. Catta-Preta, J. Smith, J. Valli, C. McCoy **A. Albuquerque-Wendt**, J.C. Mottram and E. Gluenz. IFT and BBSome proteins are required for *Leishmania mexicana* pathogenicity, but flagellar motility is dispensable. *bioRxiv*, **2024**. Doi: 10.1101/2024.09.13.612850.
Role: Investigation, Writing – Review & Editing.
 3. C. Ricce Espada, J. C. Quilles Jr, **A. Albuquerque-Wendt**, M. C. Cruz, T. Beneke, L. Lorenzon, E. Gluenz, A. K. Cruz, S. R. B. Uliana. Effective genome editing in *Leishmania (Viannia) braziliensis* stably expressing Cas9 and T7 RNA Polymerase. *Frontiers in Cellular and Infection Microbiology*, **2021**. Doi: 10.3389/fcimb.2021.772311.
Role: Conceptualization, Supervision, Data Curation, Formal Analysis, Writing – Review & Editing.
 4. C. Ricce Espada, **A. Albuquerque-Wendt**, V. Hornillos, E. Gluenz, A.C. Coelho, S. Uliana. Ros3 (Lem3p/CDC50) gene dosage is implicated in miltefosine susceptibility in *Leishmania (Viannia) braziliensis* clinical isolates and in *Leishmania (Leishmania) major*. *ACS Infectious Diseases*, **2021**. 7(4): 849-858. Doi: 10.1021/acsinfecdis.0c00857.
Role: Conceptualization, Supervision, Data Curation, Formal Analysis, Writing – Review & Editing.
 5. **A. Albuquerque-Wendt**, D. Jacot, N. Pacheco, C. Seegers, P. Zarnovican, D. Soldati-Favre, H. Bakker, F. H. Routier. C-Mannosylation of *Toxoplasma gondii* proteins promotes attachment to host cells and parasite virulence. *Journal of Biological Chemistry*, **2020**, 295(4): 1066-1076. Doi: 10.1074/jbc.RA119.010590.
Role: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.
 6. **A. Albuquerque-Wendt**, H. J. Hütte, F. F. R. F. Buettner, H. Routier, H. Bakker. Membrane Topological Model of Glycosyltransferases of the GT-C Superfamily. *International journal of molecular sciences*, **2019**, 20(19): E4842. Doi: 10.3390/ijms20194842.
Role: Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.
 7. G. Bandini*, **A. Albuquerque-Wendt***, J. Hegermann, J. Samuelson, F. H. Routier. Protein O- and C-glycosylation pathways in *Plasmodium falciparum* and *Toxoplasma gondii*. *Parasitology*, **2019**, 146(14): 1755-1766. Doi: 10.1017/S0031182019000040.
Role: Conceptualization, Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.
 8. S. Cortes*, **A. Albuquerque-Wendt***, C. Maia, M. Carvalho, L. Lima, L. A. R. Freitas, W. L. C. dos-Santos, L. Campino. Elucidating *in vitro* and *in vivo* behaviour of *L. infantum*/*L. major* natural hybrids. *Parasitology*, **2019**, 146(5): 580-587. Doi: 10.1017/S0031182018001993.
Role: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.
 9. C. Hoppe, **A. Albuquerque-Wendt**, A. Shcherbakova, F. F. R. Buettner, L. Izquierdo, H. Bakker, F. H. Routier. Apicomplexan C-mannosyltransferases modify thrombospondin type I containing adhesins of the TRAP family. *Glycobiology*, **2018**, 28(5): 333-343. Doi: 10.1093/glycob/cwy013.
Role: Investigation, Writing – Review & Editing.
 10. **A. Albuquerque**, L. Campino, L. Cardoso, S. Cortes. Evaluation of four molecular methods to detect *Leishmania* infection in dogs. *Parasites & Vectors*, **2017**, 10(1): 57. Doi: 10.1186/s13071-017-2002-2.
Role: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.
 11. S. Cortes*, **A. Albuquerque***, L. Cabral, L. Lopes, L. Campino, M. L. Cristiano. *In vitro* susceptibility of *Leishmania infantum* to Artemisinin Derivatives and selected Trioxolanes. *Antimicrobial Agents and Chemotherapy*, **2015**, 59(8): 5032-5. Doi: 10.1128/AAC.00298-15.
Role: Conceptualization, Methodology, Supervision, Project administration, Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.

12. **A. Albuquerque**, L. Campino, S. Cortes. 2012. In vitro biological behavior of *Leishmania infantum*/*L. major* hybrid strains from Mediterranean basin, Portugal. In XI European Multicolloquium of Parasitology, V. Cosma (Ed.), Medimond International Proceedings, Bolonha, pp. 5-9.
Role: Validation, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization.

Role definitions as per defined by [CRediT](#)

ORAL COMMUNICATIONS (*Last 10 years*)

1. **A. Albuquerque**. 2024. TransLeish: a systematic gene deletion screen identifies an essential role for the *Leishmania* V-ATPase in life cycle progression. XXXV Molecular Parasitology Meeting, Woods Hole, MA, USA
2. **A. Albuquerque**. 2024. Characterisation of *L. mexicana* ABC13 knockout mutants in vitro and in vivo. 40th Swiss Trypanosomatid Meeting, Les Diablerets, Switzerland
3. **A. Albuquerque**. 2023. Science in Nepal: Collaboration Opportunities". GHM Sessions. Instituto de Higiene e Medicina Tropical – Universidade NOVA de Lisboa, Lisbon, Portugal (*by invitation*)
4. **A. Albuquerque**. 2023. Transporters be Gone: CRISPR/Cas9 knockout screen of the transportome of *Leishmania mexicana*. Charles Prague University, Prague, Czech Republic (*by invitation*)
5. **A. Albuquerque**, T. Beneke, C. McCoy, S. Cowley, R. Neish, J. Mottram, E. Gluenz. 2023. Fitness screen of *Leishmania* membrane transporters. 39th Swiss Trypanosomatid Meeting, Leysin, Switzerland
6. **A. Albuquerque**, T. Beneke, C. McCoy, S. Cowley, R. Neish, J. Mottram, E. Gluenz. 2022. CRISPR/Cas9 genetic screen in *Leishmania mexicana* identifies membrane transporters important for parasite survival in the mammalian host. 3rd International Caparica Conference on Leishmaniasis 2022, Caparica, Portugal
7. **A. Albuquerque**, T. Beneke, C. McCoy, S. Cowley, R. Neish, J. Mottram, E. Gluenz. 2022. Identification of transporters proteins important for in vitro and in vivo parasite survival in *Leishmania mexicana*. Swiss TPH, Basel, Switzerland (*by invitation*)
8. **A. Albuquerque**, T. Beneke, C. McCoy, S. Cowley, R. Neish, J. Mottram, E. Gluenz. 2022. CRISPR/Cas9 transportome genetic screen in *Leishmania mexicana* identifies membrane transporters important for parasite survival. WorldLeish7, Cartagena, Colombia
9. **A. Albuquerque**. 2018. A Trypanosomatidae-Apicomplexan playground: A sweet and bumpy rollercoaster. Faculdade de Ciências e Tecnologias, Universidade NOVA de Lisboa, Lisbon, Portugal (*by invitation*)
10. **A. Albuquerque**. 2018. A Trypanosomatidae-Apicomplexan playground: A sweet and bumpy rollercoaster. Instituto de Higiene e Medicina Tropical – Universidade NOVA de Lisboa, Lisbon, Portugal (*by invitation*)
11. **A. Albuquerque**, C. Hoppe, A. Shcherbakova, L. Izquierdo, F. Buettner, H. Bakker, F.H. Routier. 2017. C-mannosylation of *Toxoplasma gondii* Thrombospondin Type 1 Repeats. Glycobiology Gordon Research Seminar, Ventura, CA, USA
12. **A. Albuquerque**. 2016. Mind sucking Parasites – Part II – The Empire strikes back. Science Slam, Leibniz Universität, Hannover, Germany
13. **A. Albuquerque**. 2016. Glycosylation of *Toxoplasma gondii* Thrombospondin Type 1 Repeats. GlycoPar symposium. Liverpool School of Tropical Medicine, United Kingdom
14. **A. Albuquerque**. 2015. Mind sucking Parasites. Science Slam. Leibniz Universität, Hannover, Germany
15. **S. Cortes**, **A. Albuquerque**, L. Cabral, L. Lopes, M.L. Cristiano, L. Campino. 2015. Potential of Artemisin derivatives and trioxolanes as anti-*Leishmania* chemotherapy. National Symposium on Zoonoses Research, Berlin, Germany
16. **A. Albuquerque**. 2014. Unravelling C-mannosylation in Apicomplexan parasites. 7th International PhD Christmas Symposium. Helmholtz International Graduate School for Infection Research, Braunschweig, Germany

POSTER PRESENTATIONS (*Last 10 years*)

1. **A. Albuquerque**, T. Beneke, C. McCoy, S. Cowley, R. Neish, J. Mottram, E. Gluenz. 2022. High-throughput Genetic Screen of the *Leishmania mexicana* transportome highlights transporter proteins important for parasite fitness in vitro and in vivo. Membrane proteins workshop & SMALP, Birmingham, United Kingdom
2. **A. Albuquerque**, T. Beneke, C. C. Espada, McCoy, E. Gluenz. 2020. TransLeishlon: Dissecting the role of membrane transporter proteins in *Leishmania mexicana*. 2nd International Caparica Conference on Leishmaniasis 2020, Caparica, Portugal (on-line)
3. **A. Albuquerque**, E. Gluenz. 2019. TransLeishlon: *Leishmania* Transportome dissection using CRISPR-Cas9. Sir William Dunn School of Pathology Postdoc Symposium, Oxford, United Kingdom
4. **A. Albuquerque**, C. Hoppe, A. Shcherbakova, L. Izquierdo, F. Buettner, H. Bakker, F. Routier. 2018. Apicomplexan C-mannosyltransferases modify adhesins of the TRAP family. BSP Spring Meeting. Aberystwyth, United Kingdom
5. **A. Albuquerque**, C. Hoppe, A. Shcherbakova, L. Izquierdo, F. Buettner, H. Bakker, F. Routier. 2017. C-mannosylation of Apicomplexan TSR containing adhesins. TOXO14. Tomar, Portugal
6. **A. Albuquerque**, L. Cardoso, L. Campino, S. Cortes. 2017. Comparative evaluation of molecular methods to detect *Leishmania* DNA in dogs. BSP Spring Meeting. Dundee, United Kingdom
7. **A. Albuquerque**, C. Hoppe, A. Shcherbakova, L. Izquierdo, F. Buettner, H. Bakker, F. Routier. 2017. C-mannosylation of *Toxoplasma gondii* Thrombospondin Type 1 Repeats. Glycobiology Gordon Research Conference. Ventura, California, United States of America
8. **A. Albuquerque**. Targeting C-mannosylation in Apicomplexan parasites. 2015. BREATH Summer School. International House Sonnenberg, Harz, Germany
9. **A. Albuquerque**, S. Cortes, L. Cabral, L. Lopes, M.L. Cristiano, L. Campino. 2015. Antileishmanial activity of Artemisinin derivatives and selected Trioxolanes. BSP Autumn Meeting – One Health: parasites and beyond. London, United Kingdom
10. **A. Albuquerque**, S. Cortes, C. Maia, M. Carvalho, L. AR de Freitas, W. LC dos-Santos, L. Campino. 2014. Insights on immunological and histopathological features of *L. infantum/L. major* hybrid strains in BALB/c mice infection. BSP Spring Meeting. Cambridge, United Kingdom
11. **A. Albuquerque**, G. Manjate, L. Campino, S. Cortes. 2013. Evaluation of RAW 264.7 cell line permissiveness to *Leishmania* parasites. Microscopy in Research, Monte da Caparica, Portugal
12. S. Cortes, **A. Albuquerque**, L. Cabral, M.L. Cristiano, L. Campino. 2013. In vitro evaluation of the leishmanicidal effect of selected peroxides. WorldLeish 2013, Porto Galinhas, Brazil
13. **A. Albuquerque**, S. Cortes, L. Cardoso, L. Campino. 2013. Evaluation of different PCR protocols for the detection of *Leishmania* DNA in the diagnosis of canine leishmaniasis. WorldLeish 2013, Porto Galinhas, Brazil
14. S. Cortes, J. M. Cristóvão, J. Oliveira, **A. Albuquerque**, J. Nina, L. Campino. 2013. (PT) Casos importados de leishmaniose cutânea em Portugal. 2º Congresso Nacional de Medicina Tropical, Lisbon, Portugal
15. **A. Albuquerque**, L. Campino, S. Cortes. 2013. (PT) Susceptibilidade de estirpes de *Leishmania* spp. do Velho Mundo à Anfotericina B - Resultados preliminares. 2º Congresso Nacional de Medicina Tropical, Lisbon, Portugal

RESEARCH FUNDING

1. **Marie Skłodowska-Curie Global Fellowship**. Start date: 01.11.2024. End date: 31.10.2027. Funder: Marie Skłodowska-Curie Actions (Horizon Europe). Title: LEISHBLOCK: Exploring an antileishmanial drug toolbox for blocking pathogen transmission in the sand fly vector. Total amount: €309,768.48. Role: Postdoctoral fellow (Awardee).
2. **Wellcome Institutional Strategic Support Fund (ISSF) Feasibility Award**. Start date: 01.11.2022 (4 months). Title: Applying genomics and proteomics for characterisation of metabolic pathways of an *L. mexicana* ABCI3 knock-out cell line. Total: £5,061 (~ €5,930). Role: Leading postdoctoral researcher.
3. **PARSUK-Bilateral Research Fund**. Start date: 01.09.2022 (4 months). Funder: Portuguese Association of Researchers and Students in the UK (PARSUK). Title: LINFTAG – Adapting CRISPR/Cas9 protein

tagging in *Leishmania infantum* Portuguese strains. Total amount: €3,000. Role: Leading postdoctoral researcher.

4. **PARSUK-Xperience Scholarship.** Start date: 13.07.2021 (5 weeks). Funder: Portuguese Association of Researchers and Students in the UK (PARSUK). Title: Defining the localisation of calcium transporter proteins in *Leishmania mexicana* parasites. Total amount: €250 (supervisor incentive), €1,500 (supervisee scholarship). Role: Leading postdoctoral researcher.
5. **SULSA ECR Development Award.** Start date: 12.02.2021 (15 months). Funder: Scottish Universities Life Sciences Alliance (SULSA). Title: Essential calcium transporters in *Leishmania*: Biochemical characterisation of *L. mexicana* SERCA and LETM1. Total amount: £4,000 (~ €4,687). Role: Leading postdoctoral researcher.
6. **Marie Skłodowska-Curie Individual Fellowship.** Start date: 01.09.2018. End date: 31.08.2020. Funder: Marie Skłodowska-Curie Actions (European Union FP7). Title: transLEISHion: A targeted knockout screen for identification of Leishmania membrane transporters required for infection of macrophages. Total amount: €195,454. Role: Postdoctoral fellow (Awardee).

OTHER AWARDS (excluding travel awards)

1. Funder: Biochemical Society. Total amount: £500 (~ €585). (2023) “Scientific Outreach Grant Further Funding”, supporting the development of the activities during the seminar and workshop at RIBB, Nepal.
2. Funder: Biochemical Society. Total amount: £1000 (~ €1,171). (2023) “Scientific Outreach Grant”, supporting the development of the public engagement activities during the Glasgow Science Festival, United Kingdom.
3. Funder: British Society for Parasitology (BSP). International Training and Fieldwork Award. Total amount: £1,500 (~ €1,757). (2023) Supporting the development of the activities during the seminar and workshop at RIBB, Nepal.
4. Funder: Generon. Best poster presentation. Total amount: £50 (~ €58) (2022). European SMALP, Birmingham, UK.
5. Funder: Anglo-Portuguese Society. Total amount: £500 (~ €585) (2022) Best research pitch prize awarded to the best (out of 10) 3-minute research pitch at the PARSUK 15th LUSO 2022 conference, Ismaili Centre, London, UK.
6. Funder: Wellcome Centre for Integrative Parasitology. Best oral presentation. (2022) Wellcome Centre for Integrative Parasitology/ISAB retreat, Glasgow, UK.
7. Funder: PROTEOMASS Scientific Society. Excellent Shotgun Communication Prize. (2020). 2nd International Caparica Conference on Leishmaniasis, Caparica – Portugal.
8. Funder: Burroughs Wellcome Fund. C.C. Wang Prize in Molecular Parasitology. Total amount: US\$2,000 (~ €1,848). (2019). Awarded for excellent performance at the Biology of Parasitism Course at the Marine Biological Laboratory, Woods Hole, MA, USA.
9. Funder: Organising Committee of the annual Sir William Dunn School of Pathology, University of Oxford. Total amount: £75 (~ €87). (2019). Best Poster in the Postdoc Symposium, Oxford, UK.

SCIENTIFIC CONTRIBUTIONS

During her BSc and MSc studies, Dr Wendt contributed to the understanding of the phenotypic in vitro and in vivo behavior of *Leishmania infantum*/*L. major* hybrid strains (Cortes, Albuquerque-Wendt et al, 2019) and identifying the antileishmanial potential of artemisinin derived peroxides (Cortes, Albuquerque-Wendt et al, 2015). In addition, during her PhD, she identified C-mannosylation as a post-translational modification essential for the successful infection and virulence of the apicomplexan parasite, *Toxoplasma gondii* (Hoppe, Albuquerque-Wendt et al, 2018; Bandini, Albuquerque-Wendt et al, 2019; Albuquerque-Wendt et al, 2019a), and determined the essential amino acid residues that guarantee the activity of the C-mannosyltransferase (Albuquerque-Wendt et al, 2019b). She developed a highly sensitive diagnostic PCR protocol to detect *Leishmania* gDNA in asymptomatic dogs (Albuquerque et al, 2017), allowing the early detection of *L. infantum* infections, consequently enabling early parasitaemia control in canine reservoirs. Recently, she generated a library of barcoded *L. mexicana* knockout mutants, each lacking a specific predicted transporter gene, which has the potential to discover novel aspects of transporter and parasite biology. For example, she used this

library to identify transporters essential for in vitro promastigote growth, in vivo amastigote growth (inside human induced pluripotent stem cells, mice [Albuquerque et al, 2024] and sand flies), as well as those transporters involved in uptake of anti-leishmanial drugs, such as Miltefosine, Pentamidine, Antimony and Amphotericin (*manuscripts in preparation*).

SUPERVISING AND MENTORING ACTIVITIES

Dr Wendt supervised or co-supervised a total of 5 MSc students, 12 BSc students, 2 high-school students, several visiting postdocs and PhD students, at the Universidade NOVA de Lisboa (PT), Medizinische Hochschule Hannover (DE), University of Oxford (UK), University of Glasgow (UK) and University of Bern (CH). She also participated in different mentoring schemes at the University of Oxford and Glasgow, with a special focus on early career researchers (PhD students and postdocs) and participated in the “Skype a Scientist” series, providing mentoring to international high school students.

ORGANIZATION OF SEMINARS AND WORKSHOPS

Symposium “Leishmaniasis: What is it and why should Nepal care?”, 2023, Research Institute for Bioscience and Biotechnology, Kathmandu, Nepal, 20 attending participants, (1 day)

Hands-on workshop “Setting up a viability assay for eukaryotic organisms”, Research Institute for Bioscience and Biotechnology, Kathmandu, Nepal, 2023, 20 attending participants, (5 days)

Responsibility: Communication with sponsors, speakers, participant registration, chairing, curation of content, preparation of program, materials, advertisement, training and local technical assistance.

Webinar “Gene editing and regulation of protozoan parasites and their vectors”, 2022, 500 international attending participants, (2 days)

Responsibility: Communication with sponsors, speakers, participant registration, chairing, preparation of certificates, flyers, advertisement and local technical assistance.

Hands-on workshop “Gene editing in *Leishmania* parasites”, Instituto de Higiene e Medicina Tropical, Universidade NOVA de Lisboa, Portugal, 16 attending participants, (3 days)

Responsibility: Communication with sponsors, speakers, participant registration, chairing, teaching, preparation of certificates, flyers, advertisement, logistics and local technical assistance.

Seminar “Leishmaniasis: From Clinics to the laboratory”, 2013, Institute of Hygiene and Tropical Medicine – New University of Lisbon, Portugal, 72 attending participants, (2 hours)

Responsibility: Co-coordination of participant applications, preparation of certificates, flyers, logistics and technical assistance.

Workshop “Collection and fixation of tissues for morphological studies”, 2013, Institute of Hygiene and Tropical Medicine – New University of Lisbon, Portugal, 26 attending participants, (2 hours)

Responsibility: Preparation of logistics, reagents and materials for the execution of the workshop.

Seminar “Leishmaniasis in Portugal in the XXI century”, 2011, School of Veterinary Sciences of the University of Trás-os-Montes e Alto Douro, Alto Douro, Portugal, 242 attending participants, (3 hours)

Responsibility: Co-coordination of participant applications, preparation of certificates, flyers, logistics and technical assistance.

PUBLIC ENGAGEMENT OUTREACH (Last 5 years)

2024

Speaker representing the Gluenz lab (IZB, UniBe) at the Biology day, “Now it is there, now it is not. How gene editing helps us discover the magical tricks of *Leishmania* parasites”, Lecture Hall of the Botanical Garden, Bern (CH)

2023

Science demonstrator representing the WCIP at the [Glasgow Science Festival](#), “Can you find a cure for *Leishmaniasis*”, Glasgow (UK)

Science demonstrator representing the WCIP at the Glasgow Science Centre, “*Science Lates: Meet the Expert*”, Glasgow (UK)

Consultant in the generation of a comic book on Leishmaniasis in [English](#) and [Portuguese](#) (a collaborative project between the WCIP PE office (Hannah Bialic) at the UofG and comic book artist Edward Ross, www.edwardross.co.uk, from the [WCIP parasite comic series](#)), Glasgow (UK)

2022

Science demonstrator representing the WCIP at the [New Scientist Live](#), "*Neglected tropical diseases and where to find them*", London (UK)

Creative director in the construction of a 3D-printed model of a female sand fly (a collaborative project between the WCIP PE office (Hannah Bialic) and the CAE and Graphics engineering department (Ewan Russel) at the UofG), Glasgow (UK)

Science demonstrator at the Einstein Garden "Parasites on tour!", Greenman Festival, Wales (UK)

Research pitch talk at the [LUSO 2022](#), London (UK)

2021

Consultant in the generation of a Leishmaniasis and *Leishmania* transporter proteins related [animation](#)

2020

Creative director in the generation of a *Toxoplasma* and Glycobiology related [animation](#)

2019

Science demonstrator at the Pegasus primary school (focus on DNA), Oxford (UK)

2018

Science demonstrator at the Museum of Natural History, "*SUPER SCIENCE SATURDAY: MICROWORLD.*"

- "*Parasites and Parasitism: The good the bad and the ugly*", Oxford (UK)

4.15. ARTICLE REVISION BY INVITATION

Emerging Infectious Diseases

Frontiers Cellular and Infection Microbiology

Frontiers Molecular Biosciences, Parasitology

Gene

International Journal for Parasitology: Parasites and Wildlife

Molecular Microbiology

Parasite & Vectors

Preventive Veterinary Medicine

4.16. MEMBERSHIP OF PROFESSIONAL SOCIETIES

Swiss Society for Tropical Medicine and Parasitology (since June 2024)

Microbiology Society (since April 2021)

British Society for Cell Biology (since February 2020)

Biochemical Society (since September 2018)

PARSUK (since September 2018)

Marie Curie Alumni Association (since July 2014)

British Society of Parasitology (since September 2012)