

BERNADETTE (BARRIE) ROONEY BSC PHD

PERSONAL PROFILE

Dr Barrie Rooney is an internationally renowned specialist on neglected tropical diseases (NTD's) and won the BBSRC Innovator of the Year Award (Social Impact) in 2016.

(<http://www.bbsrc.ac.uk/news/impact/new-diagnostic-tests-for-sleeping-sickness/>) . Barrie originally trained as a microbiologist and worked for a number of years in the pharmaceutical industry before setting up the biotechnology company ExCyte Ltd, which specialised in characterising new drug targets emerging from the human genome sequencing project. She has worked with MSF on a range of humanitarian projects including a drug trial for Sleeping Sickness in Congo-Brazzaville and the mapping of the Trypanosomal disease around central African rainforests. Barrie's laboratory interests are focussed on the use of recombinant technologies to make point of care diagnostic tests for parasitic diseases caused by Kinetidoplastid organisms. Her commitment to open access research and the wider implementation of technologies is demonstrated by the charity company established to bridge the gap between bench and bedside TROZON X. Barrie collaborates widely with organisations such as the World Health Organisation (WHO), World Organisation for Animal Health (OIE), and Médecins Sans Frontières (MSF).

KEY SKILLS

- Experienced communicator of complex scientific ideas to a wide range of audiences from school students to city financiers.
- Accomplished multi-tasker with a proven track record in leading specialist groups and collaborating across complex organisations.
- Acquired financial and legal acumen while involved in private industry.
- Familiar with regulatory requirements of governmental organisations such as HSE, Patent Offices and FDA.

ACADEMIC QUALIFICATIONS

- PhD in Genetics and Biochemistry, Aberdeen
- BSc in Microbiology and Zoology, Galway
- Qualified Teacher Status (QTS) as recognised by the General Teaching Council for England.

TEACHING EXPERIENCE

- MSc in Pharmaceutical Biotechnology, MSc Infectious Disease
- Undergraduate Biotechnology, Biochemistry, Biostatistics
- Supervised 5 PhDs
- External examiner for 2 PhDs
- Train technicians in resource limited settings for MSF and MeBoP, Switzerland, Summer School

PROFESSIONAL ENGAGEMENT

- Invited speaker at national and international conferences
- Access to Education coordinator at local schools and colleges
- Peer review publications and grant proposals
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PUBLIC ENGAGEMENT

- BBC Radio Kent interviews on work in Africa
- Media training and publications with MSF(<http://vimeo.com/38581195>).
- Presentations to local schools, Rotary Clubs

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CAREER HISTORY

TROZON X, CEO

2017 TROZON X17 is a charity company designing diagnostics for Tropical Zone Diseases which are simple to use in any environment.

University of Kent, BBSRC Flip Fellow Research

2014 – 17 Development of point of care tests for neglected tropical diseases using surrogate organisms.(FLIP award BB/L026279/1; Pathfinder award BB/N004434/1; Follow-on Fund award BB/N012496/1). Member of the RAPID research group.
<https://www.kent.ac.uk/bio/news.html?view=1370>

Médecins Sans Frontières MSF , Diagnostic Specialist

2003- Present Established laboratory diagnostic support for clinical trial on new combination therapy (Nifurtimox + Eflornithine) NECT. (Priotto, G *et al*, 2009). Ongoing member of the Mobile Human African Trypanosomiasis (HAT) Team. Organise and train regional lab and mobile teams screening for sleeping sickness in Republic of Congo (RoC) ,Central African Republic (CAR), Chad, South Sudan and Dem. Rep. of Congo. <http://vimeo.com/38581195>

Greenwich University , Lecturer (Part time)

2005- 14 **Research and Teaching** (levels 2, 3, 4)
Genetics / Biochemistry/ Biostatistics to Animal Management students

ExCyte Ltd, Kent. Science Director and Board Member

1996-03 Co-founder of a start-up company ExCyte that grew to business profit making within 3 years. Following takeover by CeNeS Pharmaceuticals plc became Director of Cell and Molecular Biology and co-ordinated the re-location and integration of the division into the company's headquarters in Cambridge , England (now Paion AG).

University of Kent. Lecturer and Research Scientist

1991-96 Investigated the quality and efficacy of Biotherapeutics produced in a range of recombinant expression systems. Taught and published in Oncology and Biotechnology fields while leading a team of 8 researchers.

F.Hoffmann-La Roche AG, Basle, Switzerland

1988-91 Research Scientist in the Cardiovascular Dept.
Involved in drug development and implementation of new technologies.

SELECTED PUBLICATIONS

Rooney, B., Piening, T., Büscher, P. Rogé, S., Smales,C.M. (2015). Expression of Trypanosoma brucei gambiense antigens in Leishmania tarentolae. Potential for rapid serodiagnostic tests (RDTs). PLoS Negl Trop Dis 9(12): e0004271. doi:10.1371/journal.pntd.0004271

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Lewis, J. S., Zweit, J., Dearling, J. L., **Rooney**, B. C., & Blower, P. J. (1996). Copper (I) bis (diphosphine) complexes as a basis for radiopharmaceuticals for positron emission tomography and targeted radiotherapy. *Chemical Communications*, (10), 1093-1094.

Ogonah, O. W., Freedman, R. B., Jenkins, N., Patel, K., & **Rooney**, B. C. (1996). Isolation and characterization of an insect cell line able to perform complex N-linked glycosylation on recombinant proteins. *Nature Biotechnology*, 14(2), 197-202.

James, D. C., Freedman, R. B., Hoare, M., Ogonah, O. W., **Rooney**, B. C., Larionov, O. A., ... & Jenkins, N. (1995). N-Glycosylation of recombinant human interferon- γ produced in different animal expression systems. *Biotechnology*, 13(5927596), 64771.

Herren, B., **Rooney**, B., Weyer, K. A., Iberg, N., Schmid, G., & Pech, M. (1993). Dimerization of extracellular domains of platelet-derived growth factor receptors. A revised model of receptor-ligand interaction. *Journal of Biological Chemistry*, 268(20), 15088-15095.

Rooney, B. C., Horne, C. W., & Hardman, N. (1988). Molecular cloning of a cDNA for human pregnancy-specific β 1-glycoprotein: homology with human carcinoembryonic antigen and related proteins. *Gene*, 71(2), 439-449.

RECENT CONFERENCE CONTRIBUTIONS

- Diagnostics and the Developing World, London Jan 2017. IS
- OIE NTATT conference on Animal Trypanosomiasis. Paris Dec 2016. IS
- ASTMH on Tropical Diseases, Atlanta Nov 2016 .P,RT
- MeBop summer school August 2016 (www.middle-eastbop.com/untitled-c16fk) IS.
- BBSRC Impact Awards , London . May 2016. IS
<http://www.bbsrc.ac.uk/news/people-skills-training/2016/160519-n-bioscience-impact-innovation-competition-winners-announced/>
- British Society for Parasitology (BSP) April 2016. SP

IS= Invited speaker, RT = Roundtable, SP=Short Presentation, P = Poster