



**Maiwenn Kersaudy-Kerhoas, MSc, PhD**



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## Employment History

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2020 – **Professor of Microfluidic Engineering**, Institute of Biological Chemistry, Biophysics and Bioengineering Heriot-Watt University  
2017 – **Associate Professor**, Institute of Biological Chemistry, Biophysics and Bioengineering Heriot-Watt University  
2017 – **Honorary lecturer of the University of Edinburgh** (Infection Medicine)  
2015 – 2018 **Honorary Fellow of the University of Edinburgh** (Infection Medicine)  
2014 – **Lecturer/Assistant Professor**, Institute of Biological Chemistry, Biophysics and Bioengineering Heriot-Watt University  
2013 to 2018 – **Royal Academy of Engineering Research Fellow**, Institute of Biological Chemistry, Biophysics and Bioengineering, Heriot-Watt University.  
2009-2012 (Fixed term) 3 **Post-doctoral Research Associate** positions, School of Engineering and Physical Sciences, Heriot-Watt University, August 2009-December 2012.

## Track Record of Research funding

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### Research Grants Portfolio: Career total >£3.3M. Selected grants:

- *Medical Device Manufacturing Centre*, ERDF, **£3M (Co-Investigator (Co-I) at 5%)**
- *Global Research Challenge Fund*, iSEP-SEQ+, Network grant, **£40,000 - Principal Investigator (PI) 100%**
- *Global Research Challenge Fund*, iSEP-SEQTech: Neonatal Sepsis Monitoring in Sub-Saharan Africa - Advanced Training **£10,000 – PI 100%**
- *Royal Academy of Engineering Frontiers of Development*, iSEP-SEQ: Neonatal sepsis monitoring in Sub-Saharan Africa with a microbial cell-free DNA sequencing approach **£20,000 – PI 100%**
- *OrganOnChip Network Sabbatical Funds*, Next-Generation Material for high-volume production of Sustainable, Biocompatible Organ-On-Chip devices **£12,000 – PI 100%**
- *Natantis Whole Blood Preparation Platform*, Dec 2018 – Feb 2020 – Scottish Enterprise High Growth Spin-out Programme Phase II. **£400,000 – PI 100%**
- *MicroTotal Pre Analytical Systems (MTPAS): Near-patient Approach to the Preparation of Circulating Biomarkers for Next-Generation Sensing* Feb 2018 – Feb 2022 – EPSRC– Healthcare Technology Challenge Award – **£1,3M PI 100%**
- *Natantis Whole Blood Preparation Platform* Sep 2017 – Aug 2018 – Scottish Enterprise. High Growth Spin-out Programme Phase I - **£174,500 PI 100%**
- *Detection of microRNAs indicating drug-induced liver injury at point-of-care* Jan 2018 – Dec 2010 – Rosetrees Trust Collaborative Award, **£250,000 Co-I (33%)**
- *Novel material for the production of low-environmental impact medical disposable consumables* March 2017 – March 2018 – Royal Society. Equipment fund, **£9,300 - PI 100%**
- *Development of microfluidic sample preparation devices for the rapid enrichment and purification of specific circulating tumor DNA fractions*, Sep 2016 - Sep 2020 – Medical Research Scotland, PhD studentship, **£108,000 + £10,000 Industrial contribution - PI 50%**

- *Comparative study of microfluidic and conventional microRNA biomarker purification from human blood in the acute care setting* Sep 2015 - Dec 2016 – Carnegie Trust for the Universities of Scotland: Research Grant, **£49,000 – PI 50%**
- *Novel Sample Preparation For Improved Circulating Tumour Dna Analysis* Oct 2015 - Jun 2017– Chief Scientist Office Research Grant: **£255,000 - Co-I (50%)**
- *Small plumbing! Empowering the next generation of microfluidic engineers*, May 2014 - Nov 2015 – Royal Academy of Engineering, “Ingenious” scheme, **£25,000 – PI 70%**
- *MRC Confidence in Concept programme*, May 2013 - Dec 2014 – MRC/HWU/UoE, Research Grant, **£49,000 – PI 70%**
- *Towards better pregnancy monitoring: miniaturised tools for non-invasive prenatal diagnosis in clinics and hospitals* Jan 2013 – Apr 2018 –Royal Academy of Engineering Research Fellowship, **£500,000 – PI 100%**

## Higher Education Qualifications and Professional Awards

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2010 – PhD (Electrical Engineering), Heriot-Watt University, Edinburgh (UK)

2005 – MSc (Micro and Nanotechnologies), Technological University of Lille (France)

2005 – MSc (Electronics Engineering and Computer Science Degree) awarded by the “Institut Supérieur de l’Electronique et du Numerique” (ISEN, Lille-Brest, France)

### Membership/Fellowship of professional/learned bodies:

2016 – Member of the Royal Society of Edinburgh, Young Academy of Scotland

2016 – Member of the EPSRC College of Peer-Reviewers

2015 – Honorary Fellow of the University of Edinburgh

2014 – Member of the EPSRC Early Career Research Forum in Manufacturing Research

2012 – Royal Academy of Engineering Research Fellow 2013-2018

### Professional Awards and Prizes:

2019 – Selection for Newton Fund, Peru Towards the Digital Hospital, Lima, 10-13<sup>th</sup> June 2019

2019 – Selection for Royal Academy of Engineering, Frontiers of Development workshop, Wellcome Genome Campus, Cambridge, 10-13<sup>th</sup> March 2019

2014 – Selected for Scottish Crucible 2014

2014 – Selected for SET for Britain 2014

2012 – Heriot-Watt Crucible Best Pitch Award 2012

2011 – Heriot-Watt Crucible 2012 Nominee

2010 – Travel Award, 14th international conference of Women Scientists and Engineers.

2007 – First Year PhD award, Heriot-Watt University

## Knowledge Transfer and Intellectual Property

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- Consultancy contracts: (i) August 2011 - *Scottish Enterprise*: Identified, developed and delivered biological testing solutions, (ii) August 2013 – *Epigem Ltd* – Identified potential applications for thin lines printing - (iii) January-June 2019 *Navigate Precision Oncology Ltd*, University of Dundee (iv) June 2019-Apr 2022, *Navigate Precision Oncology Ltd*, University of Dundee (v) Lumira Dx, Jan 2022-Apr 2022

- 1 USPT granted patent, 2 UK granted patents, 3 patents applications (PCT stage)