

Postgraduate Research Students of the Year 2019

The criteria against which their nominations were judged state:

“The nominee should be an outstanding research student who has excelled in some significant manner, for example, after the presentation of a thesis based on the recommendation and judgment of the external examiner; or has had a major research achievement during a PGR programme –e.g. high quality journal publications; research spin off, etc.”

Dr Elke Van Veen, School of Biological Sciences, FBMH

Dr Elke van Veen completed her PhD in March of this year. Her programme of study was funded by Prevent Breast Cancer at the Manchester Centre for Genomic Medicine.

Elke has made significant advances in the understanding of the genetic basis of inherited breast cancer. She has discovered a novel mechanism of silencing the BRCA1 gene due to hypermethylation of the gene promoter (the on/off switch for the gene).

This work has led to an important publication in the American Journal of Human Genetics and much media interest but most importantly to clarification of the risks in the family members affected by this devastating condition.

Elke has also undertaken analysis of risk scores based on common genetic variants in thousands of women from Manchester to personalise their breast cancer screening.

She has participated in a number of public engagement events including the Manchester Science Festival, the NHS careers hub and a Platform for Intervention Event and the Museum of Science and Industry.

Leonie Smith, School of Social Sciences, FHUMS

Leonie Smith is a PhD student in Philosophy and her contributions both in terms of her research and to her subject area are described as simply extraordinary.

During only her second year Leonie has already published two papers and received awards for her work. She has presented widely and enjoyed a three month fellowship at the Tilburg Centre for Logic, Ethic and Philosophy of Science.

Her contributions to her department are viewed as enhancing its reputation both in the UK and overseas, particularly by making Manchester a more appealing offer to PG Research students thinking of embarking on a PhD in Philosophy. She has achieved this by being prolific in organising events such as the weekly PhD seminar series, introducing a PhD Reading Party weekend in the country and co-organising several workshops and a conference.

Her commitment to producing superb research, to improving Manchester’s reputation as a philosophical institution, and to making lasting, positive changes to the research environment make her very deserving of this award.

Dr Michelle Vaqueiro-Contreras, School of Electrical and Electronic Engineering, FSE

Dr Michelle Vaqueiro-Contreras undertook a PhD project in silicon solar cells in the School of Electrical and Electronic Engineering.

Over the last decade silicon solar cells have become one of the cheapest and most environmentally friendly ways of generating electricity. Work undertaken at this University has contributed to this development.

Michelle has worked on a related problem that has vexed the solar energy community for 40 years. The mystery of why normal silicon solar cells lose some of their efficiency in the first few days of operation. Her work at Manchester has enabled us to understand why this happens for the first time so opening the door to the elimination this degradation from commercial cells.

Michelle published six research papers in leading journals as principal or co-author during her time at Manchester, an exceptional achievement during a PhD.

She also found the time to contribute substantially to lab based teaching, winning acclaim and respect from students and academics alike.

Michelle is now continuing her research into solar energy at the University of New South Wales in Sydney.

