

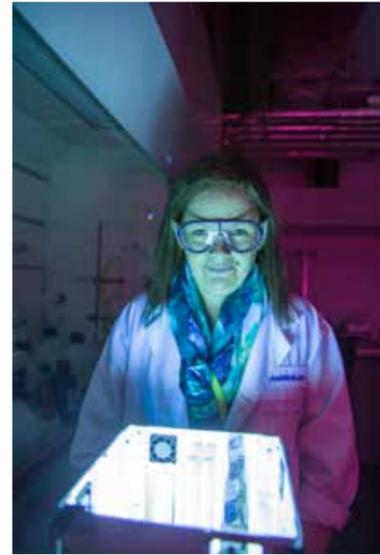


Celebrating

WOMEN

IN SCIENCE TECHNOLOGY, ENGINEERING AND MATHEMATICS

AT RGU



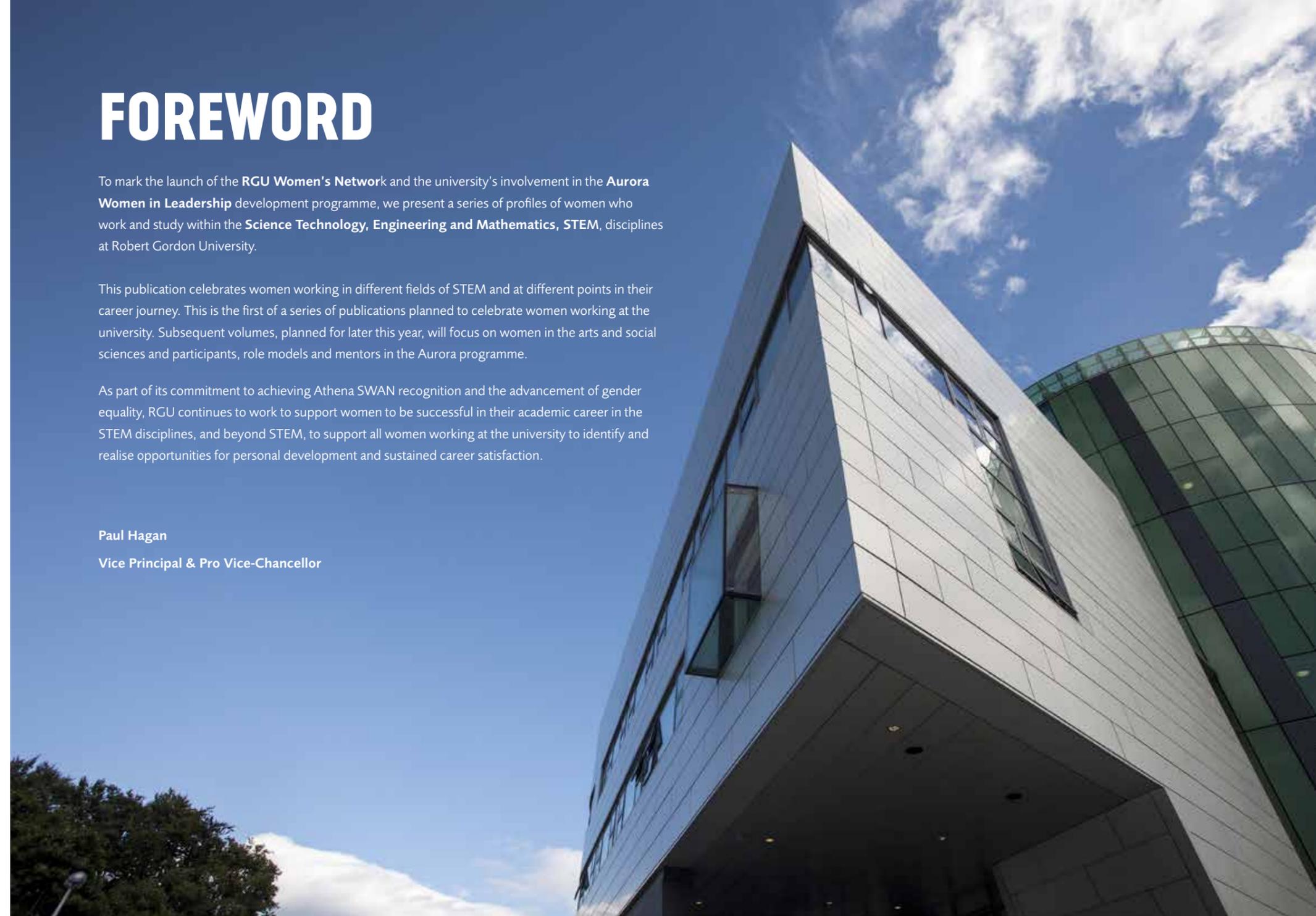
FOREWORD

To mark the launch of the **RGU Women's Network** and the university's involvement in the **Aurora Women in Leadership** development programme, we present a series of profiles of women who work and study within the **Science Technology, Engineering and Mathematics, STEM**, disciplines at Robert Gordon University.

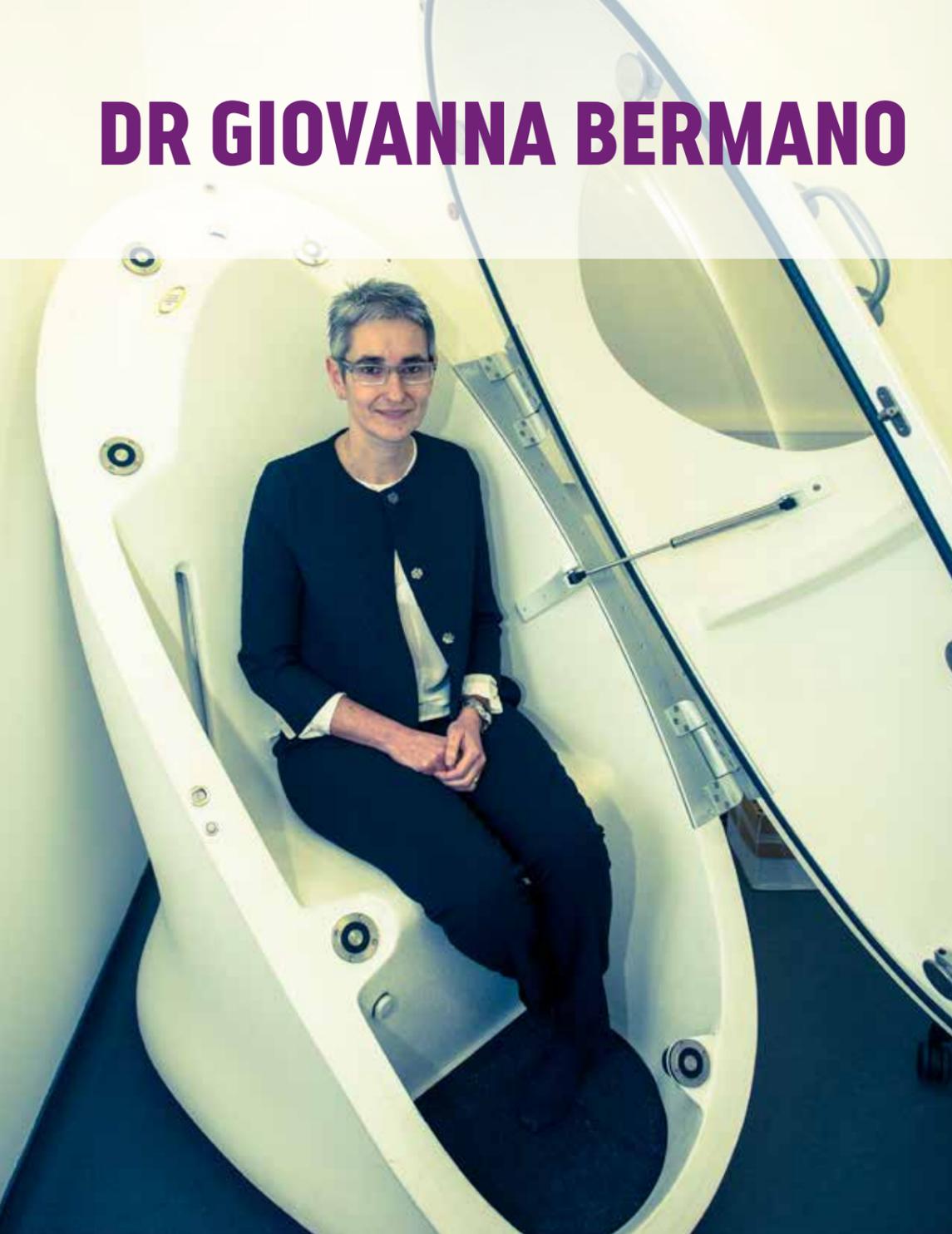
This publication celebrates women working in different fields of STEM and at different points in their career journey. This is the first of a series of publications planned to celebrate women working at the university. Subsequent volumes, planned for later this year, will focus on women in the arts and social sciences and participants, role models and mentors in the Aurora programme.

As part of its commitment to achieving Athena SWAN recognition and the advancement of gender equality, RGU continues to work to support women to be successful in their academic career in the STEM disciplines, and beyond STEM, to support all women working at the university to identify and realise opportunities for personal development and sustained career satisfaction.

Paul Hagan
Vice Principal & Pro Vice-Chancellor



DR GIOVANNA BERMANO



Dr Giovanna Bermano is Reader and Co-Director of the Centre for Obesity Research and Education (CORE).

Originally from Milan, where she studied Food Science and Nutrition before undertaking a PhD in Molecular Biology in Aberdeen, her research focuses on nutrition and health, investigating the interactions between nutrients and genes in preventing diseases such as cardiovascular disease and cancer in obese people. Giovanna says, *"One of the most fulfilling parts of my research is identifying links at a molecular level and then translating my findings to the whole body in order to improve individuals' health through nutrition."*

Giovanna is also very keen on public engagement. She has devised a science exhibit entitled "Fat Body Slim: Shape Matters!" that delves behind the headlines to investigate the science behind obesity, body shape and health. Firstly designed for the 350th anniversary of the Royal Society Summer Science Exhibition in London, and supported by the Scottish Government, she transformed it into a roadshow and tours around Scotland. *"I really enjoy sharing my research with the public, explaining what extra weight does to our body and being challenged by unexpected questions".*

"I really enjoy sharing my research with the public, explaining the science behind obesity and being challenged by unexpected questions."





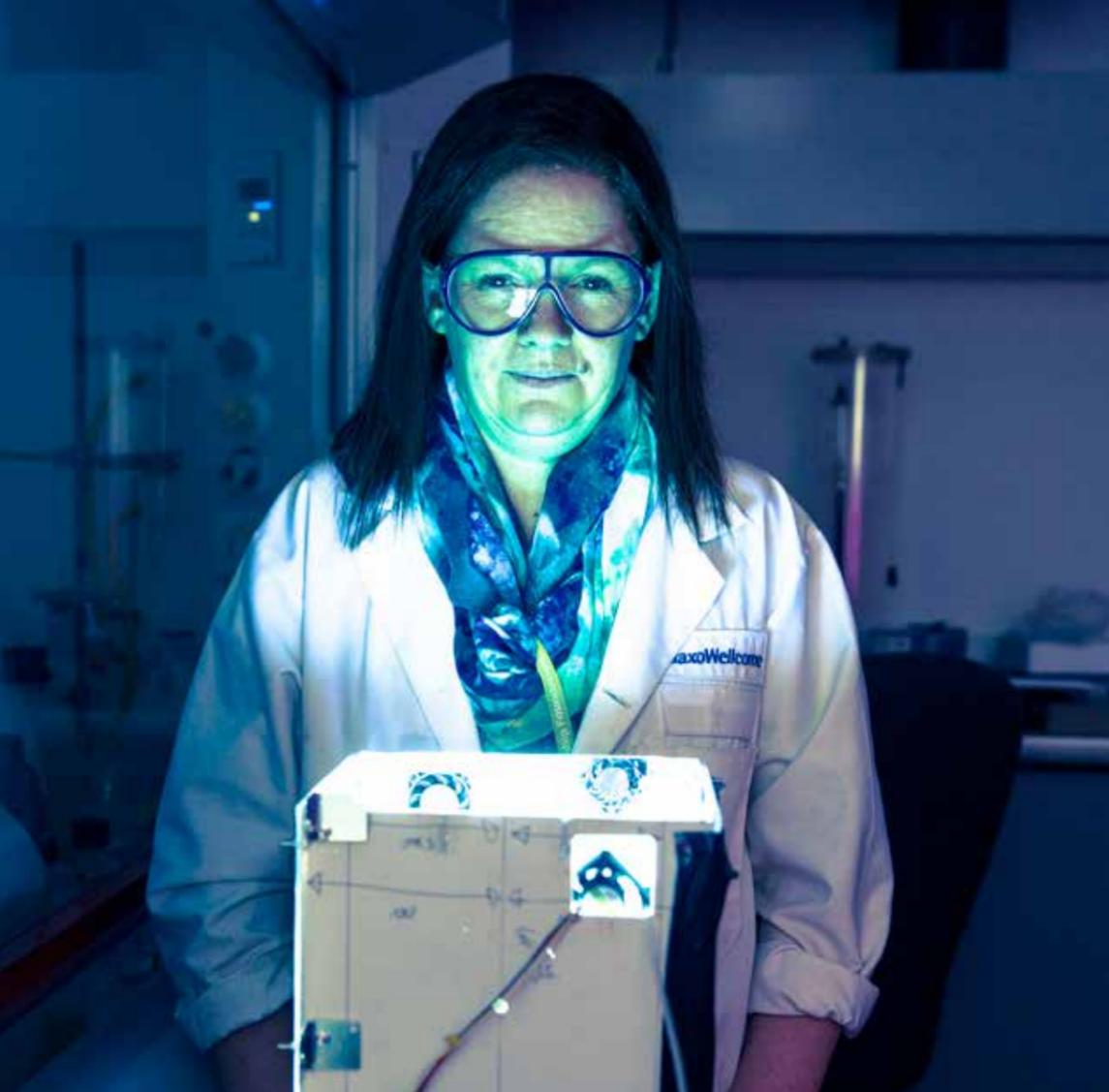
"I like solving problems and learning new things. Doing research provides me with the opportunity to do these two things. I get very excited about new technologies, finding novel algorithms and applying these to real-life applications."

Professor Chrisina Jayne, Head of the School of Computing Science and Digital Media, joined RGU in 2015. She has more than 24 years of experience in academia: teaching, designing and leading new programmes in Computing, Information Systems and Mathematics, and is a senior fellow of the Higher Education Academy and Chartered IT Professional Fellow of the British Computer Society. *"As Head of School, my focus is on our students and their learning experience, making sure they become confident independent learners and successful professionals."*

Chrisina's research is in the area of Machine Learning, which could be described as the study of constructing algorithms that can enable computers to learn from experience. *"For example could we construct a computer system that can recognise faces, or speech? Could we have a computer system that recognises emotions?"* She has worked on problems with real-life applications such as automatic age estimation based on photos; matching photos and sketches; analysing data from student activities and automatically providing feedback similar to human tutor feedback. *"I like solving problems and learning new things. Doing research provides me with the opportunity to do these two things. I get very excited about new technologies, finding novel algorithms and applying these to real-life applications."*

PROFESSOR CHRISINA JAYNE





DR CATHY MCCULLAGH

Dr Cathy McCullagh is a Lecturer in Clean Technology based in the Engineering Department. She started working at RGU in 2003 following a period of postdoctoral research at the University of Ulster at Jordanstown. Although Cathy is based in RGU's Engineering Department her background is in chemistry. Her teaching includes subjects such as environmental engineering, renewable energy systems and environmental impact and risk management, which relate very well to her research field of environmental photochemistry. *"What I enjoy about teaching is translating some of my research into the classroom. My favourite part of teaching is involvement in honours projects when students can expand what they learned in the classroom into the lab and at times investigate something novel."*

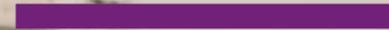
Her overall research area is environmental chemistry, focusing on cleaning water and developing methods to remove trace pollutants from water. *"I love research as there is no limit to what you can try; every day is different which makes it a very interesting job. There is a freedom with it and also the fact that I am constantly learning and discovering things."*



"I love research as there is no limit to what you can try: every day is different which makes it a very interesting job. There is a freedom with it and also the fact that I am constantly learning and discovering things."



"I enjoy being able to see students achieve their potential – and then, in the years after, become the pharmacists that they set out to be. Being part of an active professional network is really fulfilling and one of the best aspects of my work."



Aly Brown, Lecturer in Pharmacy Practice, has had a varied career as a pharmacist, working in community pharmacy management, as a locum and in training and education. She joined RGU in 2007, initially as a teacher practitioner with Rowlands and then as a member of staff. She teaches pharmacy practice, including clinical and consultation skills and leadership, and is also the placement officer for the Master of Pharmacy degree. She is also involved nationally in the Scottish Clinical Skills Network and works across Faculty with simulation and clinical skills projects. *"I enjoy being able to see students achieve their potential – and then, in the years after, become the pharmacists that they set out to be. Being part of an active professional network is really fulfilling and one of the best aspects of my work."*

Aly is now undertaking a PhD exploring the use of social media in pharmacy in the context of professional behaviours and responsibilities. *"One of the biggest challenges I face is time management – working full time and being a mum to three young children. However, one of the biggest benefits that I have is the support of my colleagues, most of whom have been in a similar position before, and I very much thrive on challenges!"*



ALY BROWN



Dr Winifred Eboh is a Senior Lecturer and Teaching Fellow in the School of Nursing and Midwifery. She joined RGU in 1998 having worked as a specialist nurse with children who were diagnosed with sickle cell disorders and their families. She currently teaches student nurses and midwives on subjects relating to genetics and culture, health and illness. *"As a practitioner, both as a qualified nurse and later a midwife, I always aspired to pass on my knowledge and skills to the next generation. I am fortunate to have seen the evolution of nursing and midwifery education from the time I undertook my apprentice-style education to the present when nursing and midwifery are both graduate professions. We have come a long way in 30 years!"*

Winifred's PhD investigated screening and counselling facilities for populations at risk from inherited blood disorders such as sickle cell and thalassaemia, which mainly affect people of Afro-Caribbean origins and countries around the Mediterranean and Middle East. *"Research provides that systematic and logical way of seeing the scientific world but also people's lived experiences. I love discovering new or better ways of caring for people; teaching and supporting student learning and enhancing whatever I do."*

DR WINIFRED EBOH

"Research provides that systematic and logical way of seeing the scientific world but also people's lived experiences. I love discovering new or better ways of caring for people; teaching and supporting student learning and enhancing whatever I do."



"The thing I love most about demonstrating in the labs is the contact with the students in a less formal way than an actual lecture. The added plus is when you see someone fully understanding something they didn't understand before."



Doctoral student **Julia Waack** joined RGU in 2011 as part of a double degree programme with the Bonn Rhein-Sieg University for Applied Science. She went on to do a Masters in Instrumental Analysis and started her PhD in 2013. She is also involved in teaching as a lab demonstrator. *"The thing I love most about demonstrating in the labs is the contact with the students in a less formal way than an actual lecture. The added plus is when you see someone fully understanding something they didn't understand before."*

Julia's doctoral research investigates the uptake of liver toxins produced by algae in edible mussels. This helps to highlight the risks shellfish contaminated with these can pose to humans. *"For me the exciting part of my research lies in the fact that I'm providing data which I hope will have an impact on food safety. It's great to know that I'm helping to make food safer in that way. And I still eat mussels (I am asked that question a lot!)"*

"I feel very much supported by the systems set up in RGU. If there are any problems there is always someone to talk to and people are very friendly and helpful."



JULIA WAACK



Celebrating

WOMEN

IN SCIENCE TECHNOLOGY, ENGINEERING AND MATHEMATICS

AT RGU

Photography & Design by The Gatehouse at RGU