

HWB Doctoral Student Achievements 2019.

I am very pleased to present the second celebratory booklet to celebrate the successes and achievement of our Doctoral students during 2019. We hope you enjoy reading about all the fantastic things our students get up to. Im sure that there are things which are missed but I have had to go from the information provided by Students and Supervisors.

Im sure you will agree that the Doctoral student community is a vibrant one which is essential to our research culture and hope you enjoy reading about all the successful things they get up to. I would like to thank all the Doctoral students for their hard work and hope they are happy with their achievements. I would also like to thank all the Doctoral Supervisors who encourage and support the students throughout their doctorates.

Professor Christine Le Maitre
Head of Research Degrees HWB.

Graduations

We had another record breaking year of students graduating during November 2019; it was great to see so many PhD and DProf students in their robes. Congratulations to the following students who graduated during November 2019:

Dr Claire Louise Gabriel Walsh graduated with a Degree of Doctor of Professional Studies entitled 'A Theoretical Explanation of Interprofessional Simulation in Undergraduate Healthcare Education'.

Dr Nancy Ashraf Ahmed Mohammed Ali graduated with a Degree of Doctor of Professional Studies entitled 'A Doctor or Not? The Egyptian Physician-Physiotherapist Conflict'.



Health Doctoral Students graduation 2019

Dr Ahmad Salah Eldin Alreni graduated with a Degree of Doctor of Professional Studies entitled 'Clinical Management and Measurement of Upper Disability in Neck Pain Patients'.

Dr Rebecca Louise Peake graduated with a Degree of Doctor of Professional Studies entitled 'International Sporting Success Factors for United Kingdom Paralympic Athletes'.

Dr Soumya Shanmughan Chettyar graduated with a Degree of Doctor of Professional Studies entitled 'Patient-Therapist Relationship in Musculoskeletal Settings in India'

Dr Prince Akwasi Gyimah graduated with a Degree of Doctor of Professional Studies entitled 'A Mixed Method Examination of Research Utilisation Among Diagnostic Radiographers in UK'.

Dr Alexander Michael Andrews graduated with a Degree of Doctor of Philosophy entitled 'Periodontal Pathogens Interact with Platelets and Modulate Platelet Function'.

Dr Alexandros Mitropoulos graduated with a Degree of Doctor of Philosophy entitled 'The Feasibility of Exercise as a First Line Approach in Systemic Sclerosis'.

Dr Andrew Hext graduated with a Degree of Doctor of Philosophy entitled 'Capturing Two-dimensional Kinematics in Short Track Speed Skating: a Multi-camera Approach'.

Dr Caroline Susannah Adams graduated with a Degree of Doctor of Philosophy entitled 'Characterising Snowboard Wrist Protectors'.

Dr Emma Elizabeth Beasley graduated with a Degree of Doctor of Philosophy entitled 'Detection and Mapping of Drug Use in Hair by MALDI Mass Spectrometry and 2D-GC'.

Dr Francis Samuel Codjoe graduated with a Degree of Doctor of Philosophy entitled 'Detection and Characterisation of Carbapenem-resistant Gram-negative Bacilli Infections in Ghana'.

Dr Guma A Yuones Beleid graduated with a Degree of Doctor of Philosophy entitled 'Development of 3-Dimensional Skin Infection Model for the Evaluation of Antimicrobial Strategies'.

Dr Hanan M Idris Abdella graduated with a Degree of Doctor of Philosophy entitled 'Intermittent Fasting as a Weight-loss Strategy'.

Dr Hania Mohamed El Aween graduated with a Degree of Doctor of Philosophy entitled 'Investigating the Molecular Basis of Bioremediation by Methane Oxidising Bacteria'.

Dr Ieva Palubeckaite graduated with a Degree of Doctor of Philosophy entitled 'Analysis of Three Dimensional Cultured Cells using Mass Spectrometry Imaging'.

Dr Joseph William Snuggs graduated with a Degree of Doctor of Philosophy entitled 'Role of aquaporins in homoeostasis and disease'.



Dr Katie Marvin-Dowle graduated with a Degree of Doctor of Philosophy entitled 'Exploring the Need for Nutritional Support in Adolescent Pregnancies'.

Dr Martin Adrian Lamb graduated with a Degree of Doctor of Philosophy entitled 'Exploring the Determinants of Sedentary Behaviour in desk-based Employees'.

Dr Michaela Senek graduated with a Degree of Doctor of Philosophy entitled 'Walking in Pregnancy (WiP) - A Social Networking Physical Activity Intervention for Pregnant Obese Women'.

Dr Oranuch Thongchundee graduated with a Degree of Doctor of Philosophy entitled 'Cost-Effectiveness of Atypical Antipsychotics for the treatment of Dementia in Thailand'.

Dr Rachel Elizabeth Hodgson graduated with a Degree of Doctor of Philosophy entitled 'Characterisation of the Role of eIF2B Bodies in CACH/VWM'.

Dr Rebecca Jane Mason graduated with a Degree of Doctor of Philosophy entitled 'Investigating the dynamics and assembly of alpha-synuclein amyloid oligomers'.

Dr Rosa Uhuru Greasley graduated with a Degree of Doctor of Philosophy entitled 'Exercise and Anabolic Agents to Improve Outcomes in Advanced Prostate Cancer'.

Dr Salaheldeen Salem M Enbaia graduated with a Degree of Doctor of Philosophy entitled 'Bioremediation of Hexavalent Chromium by Methane Oxidising Bacteria'.

Dr Thomas Willem van Rossum graduated with a Degree of Doctor of Philosophy entitled 'Development of a Teacher-oriented Movement Assessment Tool for Children Aged 4-7 Years'.

Dr Walter Dudzai Tasosa graduated with a Degree of Doctor of Philosophy entitled 'Alcohol use among Zimbabwean migrants living in the UK'.

Dr Hameida El Farssi graduated with a Degree of Doctor of Philosophy entitled 'Effect of Increased Protein on Weight-loss, Satiety and Gastric Emptying'.

Dr Cristina Russo graduated with a Degree of Doctor of Philosophy entitled 'Imaging the Transport and Biotransformation of Molecules across Biological Membranes'.

Dr Nicola Snowden graduated with a Degree of Doctor of Philosophy entitled 'Investigating Dynamic elastomeric Fibre Orthoses (DEFO's) in adults with neurological impairment'.

Dr Darryl Jonathan Adam Wilson graduated with a Degree of Doctor of Philosophy on the Basis of Published Work entitled 'An Analysis of Nations' Performance in International Multi- Sport Competitions'.

Completions:

In addition to those graduating in November we have had a further 5 candidates pass their viva since graduation and look forward to seeing them graduate next November.

Ricardo De Sousa passed his viva for the Degree of Doctor of Philosophy subject to minor Amendments, entitled 'The Inspiration Effect of Major Sport(s) Events on Attenders' Attitudes and Behaviour'.

Laura Judson passed her viva for the Degree of Doctor of Philosophy subject to minor Amendments, entitled 'Biomechanical Adaptations in the Acceleration Phase of Bend Sprinting'.

James Barnard passed his viva for the Degree of Doctor of Professional Studies subject to minor Amendments, entitled 'Clinical Decision-Making by Acute Medicine Advanced Nurse Practitioners'.

Emma Henly passed her viva for the Degree of Doctor of Philosophy subject to minor Amendments, entitled 'Antimicrobial adaptation in uropathogenic Escherichia coli'.

Kirstie Rawson passed her viva for the Degree of Doctor of Philosophy subject to minor Amendments, entitled 'Antimicrobial Peptides from Venom: Structure, Function and Toxicity'.

RF 2 Completions

Congratulations to the 29 students who passed their RF2 during 2019 across the faculty:

SOUTER, Gary
SAUNDERS, Lesley
THOMPSON, Steve
CHOLERTON, Rachel
GRINVALDS, Natalie
HEATON, Cameron
SPITERI, Karl
DONBAVAND, Joanne
TEMPEST, Rob
SCOTT, Gerry
D'ANDREA, Francesca
PARKINGTON, Tom
LONGDEN, Jennifer
BAGLEY, Ashley
MARDLING, Paul
SALLEM, Hatem
CATLIN, Ellie
SLAY, Oliver
BROOMFIELD, Katherine
Humphrys, Liam
Ready, Joe
Billacura, Maria
Maguas Da Silva
Hanson, Filipe
Knowles, Alex
Hudson, Katie
Beecher, Colette
Strafford, Ben
Appleby, Clare

RF 1 Completions

Congratulations to the 23 students who passed their RF1 during 2019.

Alaswad, Hamza
Alnaser, Tasneem
AlShatti, Royaka
Appleby, Clare
Bell, Lee
Bertelsen, Magnus
Billacura, Maria
Fair, Frankie
Grayson, Amy
Hudson, Katie

Kennedy, Katie
Knowles, Alex
Little, Liam
Longbon, Kim
Luckie, Helen
Maguas Dailva
Hanson, Filipe
Nugent, Shane
Ready, Joe
Smith, Edward
Surgeoner Josh
Turner, Ollie
Mediseni, Fellex

Dissemination of research: Publications

Our PhD students have been prolific publishing their data during 2019 with lots of excellent journal articles published:

ABDELLA, Hanan M., EL FARSSI, Hameida O.El, BROOM, David, HADDEN, Dawn and DALTON, Caroline (2019). Eating behaviours and food cravings; influence of age, sex, BMI and FTO genotype. *Nutrients*, 11 (2), p. 377.

Aldewachi, H; Woodroffe, N; Gardiner, P. (2018) Study of the stability of functionalized gold nanoparticles for the colorimetric detection of dipeptidyl peptidase IV. *Applied Sciences*. (Switzerland), 8 (12). DOI: 10.3390/app8122589

Bach, F; de Rooij, H; Riemers, F; Snuggs, J; de Jong, W; Zhang, Y; Creemers, L; Chan, D; Le Maitre, C.L; Tryfonidou, M; (2019). Hedge- hog proteins and PTHrP are involved in intervertebral disc maturation, degeneration and calcification. *J. Orthopedic Research: Spine*. In Press

Bao, P; Paterson, D; Harrison, P.L; Miller, K; Peyman, S; Jones, J.C; Sandoe, J; Evans, S.D; Bushby, R.J; Gleeson, H.F. (2019). Lipid coat- ed liquid crystal droplets for the on-chip detection of antimicrobial peptides. *Lab on a Chip* 19. DOI: 10.1039/C8LC01291A

Broomfield, K., Harrop, D., Jones, G., Judge, S. & Sage, K. (2019). Appraising the quality of tools used to record patient-reported outcomes in users of alternative and augmentative communication (AAC): A systematic review. *Quality of Life Research*

Codjoe, F.S; Brown, C.A; Smith, T.J; Miller, K; Donkor, E.S. (2019) Genetic relatedness in carbapenem-resistant isolates from clinical specimens in Ghana using ERIC-PCR technique. *PLoS One* Sep 12;14(9). DOI: [https:// doi.org/10.1371/journal.pone.0222168](https://doi.org/10.1371/journal.pone.0222168)

Codjoe, F.S; Donkor, E.S; Smith, T.J; Miller,K. (2019) Phenotypic and Genotypic Characterization of Carbapenem-Resistant Gram-Negative Bacilli Pathogens from Hospitals in Ghana. *Microbial Drug Resistance*. DOI: 10.1089/mdr.2018.0278.

Deininger, L; Francese, S; Clench, M.R; Langenburg, G; Sears, V; Sammon, C. (2018) Investigation of infinite focus microscopy for the determination of the association of blood with fingerprints. *Science and Justice*, 58 (6). DOI: 10.1016/j.scijus.2018.07.001

Delaine-Smith, R; Wright, N; Hanley, C; Hanwell, R; Bhome, R; Bullock, M; Drifka, C; Eliceiri, K; Thomas, G; Knight, M; Mirnezami, A; Peake, N. (2019) Transglutaminase-2 mediates the biomechanical properties of the colorectal cancer tissue microenvironment that contribute to disease progression. *Cancers*, 11 (5). DOI: 10.3390/cancers11050701

DI BONA, Laura, FIELD, Becky, READ, Jennifer, JONES, Natalie, FOWLER-DAVIS, Sally, CUDD, Peter and EVANS, Laura (2019). Weaving a clinical academic career: illuminating the method and pattern to follow. *British Journal of Occupational Therapy*, 82 (1), 60-64.

Dosh, R.H., Jordan-Mahy, N., Sammon, C; Le Maitre, C.L. (2019) Use of I-pNIPAM hydrogel as a 3D-scaffold for intestinal crypts and stem cell tissue engineering. *Biomaterials Science*, 7 (10). DOI: 10.1039/c9bm00541b

Dosh, R.H; Jordan-Mahy, N; Sammon, C.,Le Maitre, C.L.(2019) Long-term in vitro 3D hydrogel co-culture model of inflammatory bowel disease. *Scientific Reports*, 9 (1). DOI: 10.1038/s41598-019-38524-8

Dosh, R; Jordan-Mahy, N; Sammon, C; Le Maitre C. (2018) Tissue engineering laboratory models of the small intestine. *Tissue engineering. Part B, Reviews*, 24 (2). DOI: 10.1089/ten.teb.2017.0276

Dosh, R; Jordan-Mahy, N; Sammon, C; Le Maitre, C. (2018) Interleukin 1 is a key driver of inflammatory bowel disease-demonstration in a murine IL-1Ra knockout model. *Oncotarget*, 10 (37). DOI: 10.18632/oncotarget.26894

Dosh, R; Jordan-Mahy, N; Sammon, C; Le Maitre, C.L. (2019). Long-term in vitro 3D hydrogel co-culture model of inflammatory bowel disease. *Scientific Reports* 9: Article Number: 1812. DOI: 10.1038/s41598-019-38524-8

Elrayess, R.A; Mohallal, M.E; El-Shahat, Y.M; Ebaid, H.M; Miller, K; Strong, P.N; Ab-del-Rahman, M.A. (2019). Cytotoxic effects of Smp24 and Smp43 scorpion venom antimicrobial peptides on tumour and non-tumour cell lines. *International Journal of Peptide Research and Therapeutics*. DOI: 10.1007/s10989-019-09932-1

Eltringham, S.A., Kilner, K., Gee, M., Sage, K., Bray, B., Smith, C. & Pownall, S. (2019) Factors associated with risk of stroke-associated pneumonia in patients with dysphagia: A systematic review. *Dysphagia*

Eltringham, S.A., Pownall, S., Sage, K., Smith, C. & Bray, B., (2019). Variation in dysphagia assessment and management in acute stroke: An interview study. *Geriatrics*

Eltringham, S.A., Pownall, S. Bray, B, Smith, C., Piercy, L. & Sage, K. (2019) Experiences of Dysphagia after Stroke: An Interview Study of Stroke Survivors and Their Informal Caregivers has been published in *Geriatrics* as part of the Special Issue Stroke in the Elderly. *Geriatrics*, 4, 67

Eswayah, A.S; Hondow, N; Scheinost, A.C; Merroun, M; Romero-González, M; Smith, T.J; Gardiner, P.H.E. (2019) Methyl Selenol as a Precursor in Selenite Reduction to Se/S Species by Methane-Oxidizing Bacteria. *Applied and Environmental Microbiology*, 85 (22). DOI: 10.1128/AEM.01379-19.

Fair, F., Ford, G., & Soltani, H. (2019). Interventions for supporting the initiation and continuation of breastfeeding among women who are overweight or obese. *Cochrane Database of Systematic Reviews*. <http://doi.org/10.1002/14651858.CD012099.pub2>

Fitzpatrick, A., Stone, J. A., Choppin, S. & Kelley, J. (2019). Important performance characteristics in elite clay and grass court tennis match-play. *International Journal of Performance Analysis in Sport*, 19(6), 942-952.

Francese, S; Russo, C. (2019) Fingermarks as a New Proteomic Specimen: State of the Art and Perspective of In Situ Proteomics. *American Chemical Society*, 1339. DOI: 10.1021/bk-2019-1339.ch006

Helen Luckie, Kristen Hollands, Tracey Williamson, Chris Nester and Anita Williams (2019): Comfortably numb? Experiences of people with stroke and lower limb sensation deficits: impact and solutions, *Disability and Rehabilitation: Assistive Technology*, DOI:10.1080/17483107.2019.1673490

Henly, E; Dowling, J; Maingay, J.B; Lacey, M; Smith, T; Forbes, S. (2019) Biocide exposure induces changes in susceptibility, pathogenicity and biofilm formation in Uropathogenic *Escherichia coli*. *Antimicrobial Agents and Chemotherapy*, 63 (3). DOI: 10.1128/ AAC.01892-18

Hodgson, R.E; Varanda, B.A; Ashe, M.P; Allen, K.E; Campbell, S.G. (2019) Cellular eIF2B subunit localization: Implications for the integrated stress response and its control by small molecule drugs. *Molecular Biology of the Cell*, 30 (8). DOI: 10.1091/mbc.E18-08-0538

Hudspith, L; Shmam, F; Dalton, C.F; Princivalle, A; Turega, S.M. (2019) Neurotransmitter selection by monoamine oxidase isoforms, dissected in terms of functional groups by mixed double mutant cycles. *Organic and Biomolecular Chemistry*, (39). DOI: 10.1039/c9ob01558b

Keen, C., Hashmi-Greenwood, M., Yorke, J., Sage, K. & Kiely, D. (2019) Exploring a physiotherapy well-being review to deliver community rehabilitation in patients with pulmonary hypertension. *Pulmonary Circulation*.

LALWANI, Nikhil, ALLEN, David, HORTON, Peter N, COLES, Simon J, CROSS, Neil and BRICKLEBANK, Neil (2019). Methoxy-phenyl groups reduce the cytotoxicity and increase the aqueous solubility of phosphonium zwitterions and salts. *Polyhedron*, 158, 515-523.

Mahbub, A.A; Le Maitre, C.L; Haywood-Small, S; Cross, N.A; Jordan-Mahy, N. (2019) Polyphenols enhance the activity of alkylating agents in leukaemia cell lines. *Oncotarget*, 10 (44). DOI: 10.18632/oncotarget.27068

Marvin-Dowle, K and Soltani, H. A comparison of neonatal outcomes between adolescent and adult mothers in developed countries: A systematic review and meta-analysis, *European Journal of Obstetrics & Gynecology and Reproductive Biology*, (in press)

Palubeckaitė, E; Crooks, L; Smith D.P; Cole L.M; Le Maitre, C.L.M; Heijs, B; Clench, M.R; Cross, N.A. (2019) Mass spectrometry imaging of endogenous metabolites in response to doxorubicin in a novel 3D osteosarcoma cell culture model. *Journal of Mass Spectrometry*. DOI:10.1002/jms.4461

Phillips, K.L; Wright, N; McDermott, E; Cross,N.A. (2019) TRAIL responses are enhanced by nuclear export inhibition in osteosarcoma. *Biochemical and Biophysical Research Communications*, 517 (2). DOI: 10.1016/j. bbrc.2019.07.047

Rachel Cholerton, Jeff Breckon, Joanne Butt and Helen Quirk. Experiences Influencing Walking Football Initiation in 55- to 75-Year-Old Adults: A Qualitative Study. *Journal of Aging and Physical Activity*. Ahead of print <https://doi.org/10.1123/japa.2019-0123>

SHAFIZADEH, Mohsen, CROWTHER, Robert, WHEAT, Jonathan and DAVIDS, Keith (2019). Effects of personal and task constraints on limb coordination during walking: a systematic review and meta-analysis. *Clinical Biomechanics*, 61, 1-10.

Sheilabi, M.A; Battacharyya, D; Caetano, L; Thom, M; Reuber, M; Duncan, J.S; Princi- valle, A.P; (2018) Quantitative expression and localization of GABAB receptor protein subunits in hippocampi from patients with refractory temporal lobe epilepsy. *Neuropharmacology*, 136. DOI: 10.1016/j. neuropharm.2017.08.001

Silagi, E; Novais, E; Bisetto, S; Telonis, A; Snuggs, J; Le Maitre, C.L; Qiu, Y; Kurland, I; Shapiro, I; Philp, N; Risbud, M. (2019). Lactate Efflux from Intervertebral Disc Cells is Required for Maintenance of Spine Health. *J. Bone and Mineral Research*. In Press.

Smith Christine, Sun Mingxu, Kenney Laurence, Howard David, Luckie Helen, Waring Karen, Taylor Paul, Merson Earl, Finn Stacey and Cotterill Sarah (2019). A three-Site clinical feasibility study of a flexible functional electrical stimulation system to support functional task practice for upper limb recovery in people with stroke. *Frontiers in Neurology*, 10, p. 227.

Snuggs, J.W; Day, R.E; Bach, F.C; Conner, M.T; Bunning, R.A.D; Tryfonidou, M.A; Le Maitre, C.L. (2019) Aquaporin expression in the human and canine intervertebral disc during maturation and degeneration. *JOR spine*, 2 (1). DOI: 10.1002/jsp2.1049

Soltani H, Marvin-Dowle K, Burley V. Perspectives of youth-support professionals on encouraging healthy eating in adolescent pregnancies. *Evidence Based Midwifery*. 2019 Sep 27;17(3):84-91.

STONE, Joseph, NIMMINS, Josuha and STRAFFORD, Ben (2019). Effect of puck mass as a task constraint on skilled and less-skilled ice hockey players performance. *Journal of motor learning and development*, 7 (1), 1-12.

Swales, J.G; Hamm, G; Clench, M.R; Goodwin, R.J.A. (2019) Mass spectrometry imaging and its application in pharmaceutical re- search and development: A concise review. *International Journal of Mass Spectrometry*, 437. DOI: 10.1016/j.ijms.2018.02.007

Taylor-Whiteley, T.R; Le Maitre, C.L; Duce, J.A; Dalton, C.F and Smith, D.P. (2019) Recapitulating Parkinson's disease pathology in a three-dimensional human neural cell culture model. *Disease Models & Mechanisms*, 12 (4). DOI: 10.1242/dmm.038042.

Young, R., Broom, D., Sage, K., Crossland, K. & Smith, C. (2019). Experiences of venue based exercise interventions for people with stroke in the UK: a systematic review and thematic synthesis of qualitative research. *Physiotherapy*

Dissemination of research: Conferences and Events

Our Doctoral students have visited conferences and events all over the world disseminating their work, building networks and collaborations.

Woodward, A., Supervised exercise training and increased physical activity to reduce cardiovascular disease risk in women with polycystic ovary syndrome: study protocol for a randomized controlled feasibility trial. (in press, accepted in *Trials*).

Woodward, A., Broom, D., Harrop, D. et al. The effects of physical exercise on cardiometabolic outcomes in women with polycystic ovary syndrome not taking the oral contraceptive pill: a systematic review and meta-analysis. *J Diabetes Metab Disord* (2019) 18: 597.
<https://doi.org/10.1007/s40200-019-00425-y>

Woodward, A., Klonizakis, M., Lahart, I. et al. The effects of exercise on cardiometabolic outcomes in women with polycystic ovary syndrome not taking the oral contraceptive pill: protocol for a systematic review and meta-analysis. *Syst Rev* 8, 116 (2019) doi:10.1186/s13643-019-1030-8

Amy Taylor Accepted abstract for a poster presentation in April 2020 at European Society for Radiotherapy and Oncology (ESTRO)

Amy Taylor Invited Speaker United Kingdom Imaging and Oncology conference June 2020 (UKIO)

Amy Taylor March 2019: Proffered paper at Australian Society of Medical Imaging and Radiation Therapy Technologists (ASMRT)

Emma Henly and Sophie Hutchinson presented posters at the Microbiology Society Annual conference, Belfast

Emma Henly presented a poster at ASM Microbe 2019, San Francisco. E. Henly, M. Lacey, T.J. Smith, and S. Forbes, Evaluation of Potential Anti-Infective Coatings for Urinary Catheters using a Bladder Infection Model, ASM Microbe 2019, San Francisco, CA, June 20-24th 2019.

Francesca d'Andrea, Ben Heller, David James, Harald Koerger & Marcus Dunn (2019) Ground reaction force estimation in football using inertial measurement units during alternate lateral bounding, 14th biennial Footwear Biomechanics Symposium held at Kananaskis (Canada) on July 28 -30, 2019. *Footwear Science*, 11:sup1, S77-S78, DOI: 10.1080/19424280.2019.1606087. Awarded the ISEA student engagement award which helped fund the trip.

Franki Fair has a number of abstracts accepted for The 32nd International Confederation of Midwives Triennial conference and will be presented these in 2020: Supporting the initiation and continuation of breastfeeding among women who are overweight or obese' & Healthier weight services before, during and after pregnancy'.

Hudson K, Cross N, Jordan-Mahy N, and Leyland R EACR Tumour Microenvironment at Nottingham. My poster title was 'Programmed death-ligand 1 expression in human cancer cell lines in two-dimensional and three-dimensional cell culture systems'

Janet Ulman, Dr Margaret Dunham, Professor Heidi Probst and Professor Laura Serrant. Listening to women's unheard experiences of developing & living with breast or trunk lymphoedema after treatment for breast cancer'. Janet is an invited speaker for the UK Imaging and Oncology Congress in Liverpool in 2020

Katie Marvin Dowle Presented her work as an oral presentation at Public Health England conference Global perspectives on tackling public health issues in May 2019.

Katie Marvin Dowle was invited lecture to Public Health students at Andalas University, West Sumatra, Indonesia (photo attached) through previous project partnerships between Maternal, Infant and Reproductive Health Research Theme led by Prof H Soltani

Kim Longbon Presented Physical Education Subject Leader: PE expert or sport development professional at the Leisure Studies Association Conference.

Lauren Bateman presented Testosterone Reduces Atherosclerosis and Plaque Specific Inflammatory Markers in the ApoE-/- Mouse Model at the Northern Vascular Biology Forum here at Sheffield Hallam. She presented a poster and was selected for a flash oral poster presentation. She also chaired a session in this meeting.

Lauren Bateman presented Testosterone Reduces Expression of Inflammatory Targets in Human Macrophages as a Potential Mechanism to Improve Atherosclerosis at the annual meeting of the endocrine society (ENDO2019) in New Orleans. Her work was presented as a poster and as a featured abstract in the Guided presidential poster session.

Little LD, Cole L, Allen L, Carolan V, Haywood-Small SL. Volatile profiles of MSTO-211H malignant mesothelioma cells. International Breath Summit, 8-11th September 2019, Loughborough.

Little LD, Cole L, Allen L, Carolan V, Haywood-Small SL. Volatile profiles of MSTO-211H malignant mesothelioma cells. Owlstone Medical's Breath Biopsy Conference 2019, 13-14th November in Cambridge

Luckie H, Smith C, Williams A, Kenney L, Mismatch between Quantitative Results and Participant Perception of Upper Limb Stroke Recovery, Rehab Week 24-28th June 2019, Toronto, Canada.

Luckie H, Waring K, Smith C, Sun M, Kenney L, Howard D, Taylor P, merson E, Finn S, Cotterill S, Clinicians' perspectives on the usability of a flexible functional electrical stimulation system to support upper limb task practice in people with stroke, Rehab Week 24-28th June 2019, Toronto, Canada

Natalie Grinvalds: What Works for Whom, under What Circumstances and Why for the Co-location of Health and Leisure to Increase Physical Activity (PA). Sport and Innovation International conference, Hungary.

Nik Kudiersky presented his work at the Sheffield Teaching Hospitals NHS Trust Stroke Research Conference at George's Church, Sheffield.

Paul Mardling presented Mardling P, Jordan Mahy N, Sammon C, Alderson A, Le Maitre CL. Auxetic and Composite Scaffolds Show Potential for use in Tissue Engineering. Tissue and Cell Engineering Society 2019. Nottingham

Paul Mardling presented Mardling P, Jordan Mahy N, Sammon C, Alderson A, Le Maitre CL. Composite Scaffolds Show Potential for use in Tissue Engineering. Biomaterials and Tissue Engineering Congress 2018. London

Paul Mardling presented Mardling P, Jordan Mahy N, Sammon C, Alderson A, Le Maitre CL. Composite Scaffolds Show Potential for use in Tissue Engineering. Biomaterials and Tissue Engineering Group Meeting 2018. Sheffield

Paul Mardling presented Mardling P, Jordan Mahy N, Sammon C, Alderson A, Le Maitre CL. Composite Scaffolds Show Potential for use in Tissue Engineering. Tissue Engineering and Regenerative Medicine International Society 2019. Rhodes Greece.

Rachel Cholerton presented a poster at the BPS Division of Sport and Exercise Psychology Annual Conference 2019 (02-03 December 2019) – poster titled: What are the experiences of walking football initiation in 55-75 year old adults?

Rob Tempest and Sonia Guarnerio attended the UKEV conference at the Francis Crick Institute in December where Rob presented a poster.

Rob Tempest attended the BACR 2019: Tumour Microenvironment Conference in July presenting a poster.

Rob Tempest attended the first UKEV Summer School in July, a residential workshop providing hands-on experience and guidance on working with extracellular vesicles, alongside lectures from internationally recognised researchers.

Ruvimbo Machaka Created a Research Based Curricula (RBC) tutorial pack titled: "Sociological Perspectives on Migrant Parents' Experiences" for Key Stage 5 Sociology. The work on this project was funded by HeppSY.

Ruvimbo Machaka presented: Settled Southern-African migrants parenting experience in destination countries: A Qualitative Synthesis. The Migration Conference 2019. 20 June, Bari, Italy.

Ruvimbo Machaka presented: Zimbabwean Parents' experiences of bearing and raising children in the UK. The Migration Conference 2019. 19 June, Bari, Italy.

Sabrina Eltringham presented: Factors associated with risk of stroke-associated pneumonia in patients with dysphagia: a systematic review. 5th European Stroke Organisation Conference (ESOC 2019), Milan, Italy, May 22-24, 2019, abstract published: Eltringham, S, Kilner K, Gee, M, Sage, K, Bray, B, Smith C, Pownall, S. AS34-012 Factors associated with risk of stroke-associated pneumonia in patients

with dysphagia: a systematic review. E-Poster Viewing. (2019). *European Stroke Journal*, 4(1_suppl), 150–276.

Sabrina Eltringham presented: How variation in assessment and clinical management of dysphagia in acute stroke affects development of stroke-associated pneumonia (SAP) – Progress of a mixed methodology study. UK Stroke Forum Conference, International Conference Centre, Telford, 4-6 December 2018

Sarah Haywood-Small and Emma Henly, Introducing the Super Cells: A collection of animated motion-graphic videos with and unconventional twist, BSI Congress, Liverpool, 2-5th December 2019

Temi Labinjo presented a paper titled 'Perceptions, attitudes and cultural understandings of mental health in Nigeria: A scoping review of published literature' at The Migration Conference at University of Bari, Italy. June 2019.

In July, a number of students from across the Faculty attended the Doctoral Training Alliance (DTA) Summer School for "Applied Biosciences for Health" students hosted by UCLan. DTA Summer School is an annual event aiming to bring together PhD students, supervisors and other members of the professional community from over 14 universities across the UK.

Dissemination of research: Public and Patient engagement

Lots of our PhD students are involved in public engagement activities and many are registered STEM ambassadors. Including lots of involvement at the Explore event in Heart space City Campus which took place in March. Doctoral students are also involved in a number of exciting public and schools events through the year, some examples are included below.

Emma Henly was awarded a certificate for 50hrs STEM ambassador volunteering

Filipe Hanson and Madalena De Oliveira assisted Dr Susan Campbell and Dr Liz Allen at a Year 12 STEM innovation day on ethics around manipulating genomes.



Filipe and Madalena at Year 12 STEM day

Katie Hudson developed a new 'Cancer Biology Stand' for the Explore event during science week in March. She was the stand lead for this stand with responsibility to develop and organise the activities and execute them on the day alongside other PhD, master students and undergraduates.

Natalie Grinvalds took part in a diabetes patient user group entitled: Ladder research public & patient involvement group in May which informed her research design.

Prizes, Awards and Grants

I was extremely pleased to see the number of grants, awards and prizes our Doctoral students have been awarded during 2019. This is fantastic and demonstrates the excellent quality of the research undertaken by our Doctoral students. Some are mentioned above in the conference section as some provided here:

Emma Henly and Sophie Hutchinson were awarded Travel Grants from Microbiology Society to attend Microbiology Society Annual conference in Belfast.

Emma Henly Awarded ASM student and postdoctoral travel grant \$750

Emma Henly Awarded BSAC travel grant £1,500

Katherine Broomfield won 'best oral presentation for an early career researcher' at the Patient-reported Outcome Measures (PROMs) conference in Leeds in June. The prize was a free open access publication in the Journal for Patient-Reported Outcomes.

Katherine Broomfield won second prize (£50 Waterstones voucher) in the poster competition at the 'Allied Health Professionals, Achieving Impact' conference in London in October.

Katie Hudson has been awarded £700 from Immunology Travel Grant to attend the EACR-AACR-ASPIC Tumour Microenvironment Conference in Lisbon, Portugal in March 2020 and present her poster: Hudson K, Cross N, Jordan-Mahy N, and Leyland R. Exploring the Intrinsic Role of Programmed Death-Ligand 1 in Human Cancers using 2D and 3D Cell Culture Systems

Kim Longbon won an award at the Leisure Studies Association Conference for best community sport development paper. The title of the paper was "Physical Education Subject Leader: PE expert or sport development professional?" see her blog for more details:

<https://spark.adobe.com/page/6xUDxGu2M3CJH/>

Kim with her prize (a signed football)



Lauren Bateman has been awarded a travel award from the Endocrine Society of \$400 to attend the early career forum and free registration for ENDO2020 where she will present her work Testosterone Reduces Atherosclerosis and Plaque Specific Inflammatory Markers in the ApoE-/- Mouse Model and Testosterone Therapy Reduces Inflammatory Activation of Human Monocytes in Hypogonadal Type-

2 Diabetic Men as a Potential Mechanism to Improve Atherosclerosis. The Early Career Forum is a prestigious opportunity offered exclusively to graduate students, medical students, postdoctoral fellows, internal medicine residents, and clinical fellows. This day-long workshop provides early career professionals with a unique opportunity to connect with today's leading endocrinology experts prior to the annual meeting of the endocrine society.

Liam Little was awarded : €400 travel grant from the International Association of Breath Research (IABR). To attend the International Breath Summit, 8-11th September 2019, Loughborough.

Paul Mardling was awarded the RSC Biomaterials Science Turbo Talk Prize at the Tissue and Cell Engineering Society 2019.

Rob Tempest was also awarded an £800 travel grant from the BACR to attend the EACR 2020: Tumour Microenvironment Conference in Lisbon this March and am presenting a poster.

Sabrina Eltringham was awarded First Prize presentation Sheffield Teaching Hospitals Integrated Geriatric and Stroke Medicine Clinical Audit afternoon, 7 December 2018

Temi Labinjo has been elected at the Student Union as The Black and Minority Ethnic (BME) Representative.

Ongoing Positions

It is fantastic to hear the diverse and excellent positions our students go onto after their Doctoral studies. These are just some of the positions I have received, there are many more fantastic jobs gained but these are just the ones informed about, current students please let us know what you do after the Doctorate.

Joseph Snuggs is undertaking a postdoctoral research project in the BMRC with Professor Christine Le Maitre.

Katie Marvin Dowle has been successful in gaining an externally funded Post-doctoral Midwifery Researcher position at SHU since Feb 2019, including successful Burdett Trust funding bid to continue Born in Bradford data analysis focused on intergenerational differences between 1st and 2nd generation Pakistani and White British women.

Rachel Hodgson is undertaking a postdoctoral research project funded by Sparks in the BMRC with Dr Susan Campbell and Dr Liz Allen.

Terssa Whitley is undertaking a postdoctoral research project in the BMRC with Dr David Smith.

Postgraduate Research Experience survey

The postgraduate experience survey is undertaken each year and we were particularly pleased with the sector leading results obtained across the Faculty.

