Centre for Health Sciences Research

HERC News
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Message from the Centre Director

Last academic year we developed a new strategy for our research centre, and from the summer of 2015 we have been implementing it. The strategy comprises various strands, including staff development and support, Post Graduate Research Student development and attainment, grant acquisition, building a research community, integrating our research into our teaching and research excellence. The latter is primarily measured through assessing our journal papers and this is conducted by Professor Richard Baker’s Research Outputs and Monitoring and Evaluation (ROME) committee (http://www.salford.ac.uk/health-sciences/research/research-outputs-monitoring-and-evaluation-rome). In September 2015 Dr Steve Preece (S.Preece@salford.ac.uk) became our Deputy Centre Director, and he will be taking forwards some specific aspects of our Centre strategy, and also standing in for me as required. I anticipate our strategy will be fully implemented by summer 2016.

Early in 2015 we received some extremely positive feedback from REF; it comprised a page of comments about our research. It was pleasing to note that the feedback identified several areas of world leading research conducted within our Centre. The feedback also gave suggestions on how we might improve our research and with this partly in mind, under the leadership of Professors Laurence Kenny and Malcolm Grant, a cross university discussion is in progress to determine whether a health and care research institute would be valuable, particularly for the facilitation of multidisciplinary working. This might feed into discussions about a health and care industry collaborative zone.

The Teaching Excellence Framework (TEF) is going to become an important agenda and for certain our research could play a major role in enhancing the quality of the education we provide. Last academic year we started to make bigger inroads into integrating our research into our teaching and this year I anticipate this will grow in importance. Various activities are planned to facilitate this, including the Centre Open Meeting in December 2015 which generated a lot of discussion and interest, the aligning of Graduate Training Scheme (GTS) PhD students to this agenda and the enthusiasm of professors / research leads / programme leads from taught awards to integrate research into teaching and the student experience generally.

Keep up the good work folks and do remember if you want to talk then please do get in touch with me (p.hogg@salford.ac.uk).

Professor Peter Hogg
Director, Centre for Health Sciences Research
A Warm Welcome to Our New Staff

Rehabilitation Technologies: we welcome Guowu Lei, who joined the University of Salford as a lecturer in mechanical engineering design. Guowu is an expert in mechanisms, robotics and mechanical design and will be working on rehabilitation robot design and related areas.

Measurement and Quantification of Physical Behaviour: we welcome Sathish Sankarpandi in his role as a research fellow; he will be working on the Dowager Countess Eleanor Peel Trust Grant “A Novel Body-Worn Falls detection system: development & evaluation in the frail elderly population”.

Rehabilitation Research: Research Assistant Josh Wood joined the Rheumatology Rehab arm of the Rehabilitation Research Group in November. Josh graduated from Manchester University in Psychology, is an experienced researcher and previously a clinical trials manager at Newcastle CTU. He is supporting the A-GLOVES Trial and WORK research.

Applied Physiology, Social, Physical and Technology Enabled Environments: we welcome Dr Jo Meredith (Lecturer in Psychology) with passion for leadership in qualitative research methodologies, and Sam Royle (Technician in Psychology) who has been eyeing up the research potential for Virtual Reality facilities.

Some of our new staff:

Guowu Wei  Sathish Sankarpandi  Jo Meredith
Meet Emma Sutton, our Research Support Officer:

Hello everyone,
I would like to introduce myself and tell you a little bit more about my role here as the Research Support Officer for the School of Health Sciences.
I have been working at the University now for 15 years, initially as an in-house translator and admin support for the University’s language company (Services for Export and Language), before changing direction and joining the Research & Enterprise team in a research support role.
I currently support supervisors and PGRs in the School of Arts & Media, Salford Languages and the School of Health Sciences and my main role is to assist with all PGR-related queries, to arrange and administer PGR progressions and generally provide help and support throughout the PGR journey, from acceptance to award. And if I can’t help you myself, I generally know someone who can!

I can be found in the Maxwell Building, room 731 for anyone who wants to drop by and say hello – it’s always nice to be able to put names to faces!
Alternatively I can be contacted at: PGR-SupportHS@salford.ac.uk or on tel: 0161 295 6852.
I am also available on a drop-in basis in Allerton Building, room AD101 on occasional Fridays from 2-4pm.

I look forward to seeing those of you who I haven’t yet met very soon.

Research Centre Support from a Research Support Assistant – Sarah Starkey

Hi all! I’d to introduce myself (or re-introduce myself!) I joined the university in 2014 in the Engagement and Innovation team before becoming part of Research & Enterprise as a Research Support Assistant for Health Sciences and Nursing, Midwifery, Social Work & Social Sciences. My role is to provide support for the centres, from assisting with marketing and the research centre website to seminars and events. I also manage the health research ethics process for PGR students and staff and assist with the internal peer review for REF. I look forward to continuing to work with the Research Centres team and the school! For ethics: Health-ResearchEthics@salford.ac.uk, for all other enquiries: HSRC-research@salford.ac.uk

A ‘hello’ from Sam Royle, our new technician in Psychology

Hello! I’m Sam, and I joined the University of Salford as a psychology technician at the beginning of November. Originally from Norfolk, I moved to Keele to study a BSc in Forensic Science and Psychology (Dual hons) which I completed in 2012 before progressing on to an MSc in psychology, which I completed in 2014. My primary area of research is alcohol hangover (always a handy excuse to call drinking “research”), and I am a proponent of social biopsychological approaches to its study. I have presented and published research proposals examining psychosocial correlates of, and possible influences on, hangover severity, and will be hoping to expand on this work over the coming months and years. I’m often asked how one goes about studying hangover, and the simple answer is – students. My previous work,
where I essentially just pulled in random students, found around 30% had been drinking the night before – Ah... to be young and have “free time”.

My role here at the University of Salford is a rather interesting and challenging position, which involves quick and constant learning. As a technician, it is my job to maintain and manage the equipment and facilities we provide for our students and staff to conduct high quality, reproducible research. This is something that being an avid PC gamer has actually been very useful for – since I regularly replace components from my own PC’s I have a good knowledge of hardware, and modifying games (some of which I’ve spent more time modifying than playing) has taught me to take a logical approach to troubleshooting – and my mother called gaming “a waste of time”! These skills really help in maintaining the array of equipment and facilities within the department, which, as well as our new facilities (which I’ll return to later) include: an observation suite with multi-camera recording and two-way mirror, functional near-infrared spectroscopy equipment for brain imaging, and an assortment of eye tracking devices – so quite a selection!

The department has shown a commitment to continued development as well. Our current hope is to create a virtual reality suite, including projection and head mounted display based solutions, that will enable staff and students to carry out a myriad of novel research in a wide variety of areas, including, but not limited to: mental health, prosthetics, scene perception, phobias, and enhancing health and wellbeing through technology – there is already some very interesting research being conducted here that utilises the universities state of the art VR cave, “the octave”, but our hope is to make virtual reality a much more accessible tool for research.

Accessibility of facilities and equipment is an important factor for students of all levels, and the development of a modern facility for conducting lab based investigations demonstrates the departments commitment to this, providing flexible solutions to accommodate the wide assortment of student projects carried out. This new facility includes a number of rooms for conducting research, complete with IT solutions. We also have the ability to adapt these rooms, through use of folding walls, to create a larger space for those who require it. We’ve also included a comfortable waiting room for participants – so no more queuing up outside doors!

**PGR Supervision News - A few words from Anita Williams**

*PhD by published works* is now available for external candidates (one year fee plus a registration fee). This will be promoted on the web site but if you know of any one publishing and who might want to study for one year to achieve a PhD please discuss this with me, Anita Williams, in the first instance *(a.e.williams1@salford.ac.uk)*.

*Student induction/training:* nearly all new students attended a Welcome event on the 21st October. We are looking to expand this event for the next intake in February. We intend for students to receive all the info traditionally provided through the University induction so we can tailor it to their immediate needs whilst giving an overview of their milestones. SPoRT is currently being reviewed, and any suggestions are gladly received *(a.e.williams1@salford.ac.uk)*.

*Supervisor training:* this is currently being reviewed but all new supervisors should attend the training before they commence any supervision, and then attend every three years as a minimum
for an update. Independent chair training is also available, for information please contact Victoria Sheppard (V.M.Sheppard@salford.ac.uk)

**Supervisor forum:** the next supervisor forum is on the 27/1/16 from 1pm to 3.30pm in MS 3.02 - Victoria Sheppard will be presenting/ discussing students training and personal development needs, and Fiona Christie from Careers/ employment enhancement will be providing information on what this service can offer to all our PGR students. All supervisors, co-supervisors and personal tutors are very welcome to attend. For those that have not attended before, it is very informal and was established in order to support supervisors, discuss issues, share information (any changes to the Regulations, Code of practice), and quality initiatives are shared through this forum. Likewise supervisors have the opportunity to make suggestions for improving both theirs and their students’ experiences - these suggestions are taken forward to the University PGR forum and if needed recommendations are made to the University Research Committee. So it is the supervisors/tutors opportunity to influence change and share ideas.

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**Samantha Bird on her time as The Student Representative**

When asked to reflect on my experience as PGR rep, without a doubt the standout benefit for me has been meeting so many PGR students in Health Sciences and across the university (which, as many of you know can be quite difficult when doing your PhD).

Over the past two years, I have been involved in a number of activities within the school of Health Sciences and the students union, some of which include representing the student voice at school and college meetings and sitting on the ethical approval committee.

I am also currently on the committee for Salford Postgraduate Annual Research Conference 2016. Although challenging, these extra activities have been beneficial for me personally, as I have learnt a lot and continue to develop my communication skills. Since my confidence has grown, one of the highlights has been attending induction events to answer questions and share my experience as a student here to help to settle new starter nerves and jitters. This is my final year of my PhD and I will be handing over the role of student rep, I would like to thank Joanne Bragg for taking over. I would also like to say thank you to everyone who shared their successes (and complaints) with me over the course of the last couple of years and wish everyone the best of luck in your studies. Pictured on the left are some of the PhD students within radiography / diagnostic imaging whom I share office space with.
In memory of Professor Lindsey Dugdill (1965—2014)

In December 2014, colleagues were devastated by the death of Professor Lindsey Dugdill following a short battle with cancer. Lindsey’s death was an enormous loss to the public health field and the University of Salford. She was passionate about research and teaching, and particularly in supporting postgraduate research students. She was extremely generous with her time and would go above and beyond a normal level of support in order to help her students achieve their goals. One of her biggest legacies is the large number of academics and students whose careers and experiences have been enhanced by her wealth of knowledge and expertise, vibrancy and generosity. To mark Lindsey’s extraordinary legacy, the ‘Professor Lindsey Dugdill Memorial Award for Outstanding PhD’ was created. In July 2015, the worthy winner of the inaugural award was Dr Anna Cooper for her thesis ‘Effectiveness of a global oral health programme targeting 6-7 year old primary children in the NW England, UK’. During 2015, friends and colleagues have also participated in a number of events to raise money in memory of Lindsey, including the Great North Run in September 2015 (see picture: Anna Cooper, Alex Clarke-Cornwell, Penny Cook and Margaret Coffey, with husbands). In total the team has raised an impressive £4,650 for Macmillan, who provided support for Lindsey and her husband Stuart during her illness. The team would like to thank colleagues in Health Sciences for their generous support.

Let’s Celebrate!

Awards, Promotions & Achievements of Staff:

Robert Higgins – Recipient of the Vice Chancellor Scholarship
Robert joined the University of Salford as a Lecturer in Radiography in 2013. Previous to this he worked as a Radiographer in the NHS undertaking a range of duties. He is accredited as a practice educator and has always had an interest in student learning as well as research. He was awarded the VC Scholarship this year and is currently in the latter stages of completing a PhD by PW. The focus of Robert’s research is exploring how we can translate research into the teaching and learning curriculum on our undergraduate BSc (Hons) Diagnostic Radiography programme. This work will also explore how our research can have impact in the wider context by identifying facilitators and barriers to translation of this into practice.

Yeliz Prior – Recipient of the Vice Chancellor Scholarship
Our Research Fellow Dr Yeliz Prior was awarded the Vice Chancellor’s Early Career Research Scholarship to develop and test a web-based occupational therapy tool to help people with musculoskeletal and rheumatological conditions to self-assess their daily activities and function, which started in September 2015. This two-year project aims to do the ground work for a larger project, which is to develop an online musculoskeletal hub to promote
patient education and self-management for those with long-term chronic musculoskeletal conditions

Rob Bendall who was already a member of staff in the Directorate (Psychology Technician) started his new role in 2015 as a Lecturer in Psychology, also undertaking cutting edge research in the areas of brain and emotion.

Anita Williams – Promoted to Reader in Qualitative Health Science Research

Since moving from a senior clinical role as a podiatrist to an academic career, Anita has achieved national & international recognition for the development of a novel evidence base to the use of podiatry, orthotic & footwear interventions and user experiences of foot problems. The qualitative direction of her research is considered to be highly innovative & a "world first" for a podiatrist. She has a portfolio of successful research with senior research groups in the UK, Spain, The Netherlands and New Zealand. Her links with the footwear industry have also resulted in funded research and a recent KTP.

The underpinning ethos of her research is the translation of research into practice & patient care. She has achieved this through contributions to key practice guidelines, and through professional and patient organisations. She has published 36 peer reviewed journal publications (3* in REF 2014), is editorial manager for the Journal of Foot and Ankle Research, authored books and has been an invited speaker at over 40 conferences. All these activities have contributed in an original & significant way to increasing the body of knowledge within podiatry & other health professions, industry & within the School of Health Sciences.

Anita is also Director of PGR studies and has strategically led initiatives which enhance the student experience & achieve institutional KPI’s. In addition, she recently led the development of the first Pre-registration Masters in Podiatry Programme to be operational in the UK.

In recognition of her contribution to research, education & practice, she was awarded the prestigious Fellowship of the Royal College Surgeons and Physicians (Glas).

“The appointment as reader will provide me with further opportunities to influence the strategic development of our research, build critical mass & grow our reputation whilst enhancing our ‘student’ experience and preparing them for their future clinical or research careers.”

Other Achievements this year included:

Yeliz Prior joined the Editorial Board of BMC Musculoskeletal Disorders as Associate Editor in November 2015 and was an invited speaker at the Arthritis Research UK Policy Meeting, London in June presenting on “Work Rehabilitation in employed people with inflammatory arthritis”. Yeliz and Alison Hammond are also contributors to the newly launched EULAR Online course for Rheumatology Health Professionals, which aims to improve Rheumatology care across Europe. Furthermore, Alison joined the NIHR Clinical Lectureship/Senior Lectureship Awards Panel.

Dr Andrew England became an Associate Editor of Radiography, an international journal.
Kris Hollands was awarded a Grant from the Joint Health and Wellbeing Fund Salford Clinical Commissioning group for developing a community based exercise program for people with dementia/mild cognitive impairment. Kris also gave a Keynote talk at Therapy Expo, have a look: http://www.therapyexpo.co.uk/page.cfm/Action=Visitor/VisitorID=111

Moreover, the Applied Psychology: Social, Physical and Technology-Enabled Environments research team won the BPS Psychobiology Section Summer Internship 2015: the team of psychologists (Simon Cassidy, Rob Bendall, Lynne Marrow and Adam Galpin), based in the Directorate of Psychology and Public Health, were pleased to announce the good news in June this year. Their project, investigating brain imaging and eye-movements as markers of cognitive style, was praised by the Chair of the Psychobiology Section, Dr Richard Stephens, and awarded the first ever British Psychological Society Psychobiology Section Summer Internship. The award allowed the team to work with psychology undergraduate student intern Sarah Lambert to complete the project and to achieve some already excellent research outputs. A job well done!

Let’s Celebrate Some More!!

Achievements of Our Students:

Foot, knee and ankle: Congratulations this year to Dr’s Ciaran Wright (properties of foot skin) and Jon Melvin (effect of footwear on plantar pressures) for completing their PhDs, and Anna Thuesen who has just handed in her hardbound MPhil thesis (foot biomechanics and Achilles function). And a “keeping going” to Declan Sweeney and Ana Martinez, both in the thick of writing up!

Congratulations also to our PhD students that have successfully passed their Interim Exams and Internal Assessments: Ahmed Alahmari, Ali Algarni, Stuart Mailer, and Msaad Mohammed Alzhrani - well done!

Rehabilitation Technologies: Congratulations to now-Dr. Christine Smith who was awarded her PhD earlier this year, entitled ‘Usability engineering in the design and evaluation of a functional electrical stimulation system for upper limb rehabilitation’. Christine’s thesis, which was very well received by the examiners, was completed part time while she was also leading the largest Directorate in the School – quite an achievement, Chris! Congratulations also to Alix Chadwell (Understanding the impact of skill, uncertainty and delays on the control of myoelectric prostheses) and Eleonora Costamagna (Assessing stability of walking frame users) who both passed their Interim Exams, and to Huthaifa Atallah (The effects of in-socket air pressure on short term changes in residuum volume, static pistonning, comfort, and gait kinematics and kinetics: A preliminary study in trans-tibial amputees) for passing his Internal Assessment.

Measurement and Quantification of Physical Behaviour: congratulations to Robert Broadley who passed his Interim Exam with flying colours!

Rehabilitation Research: PhD students Sultan Alharbi and Susanne Vanderveen passed their interim assessments; Susanne was awarded the Brain Travel Award for her conference attendance and presentation at ISPRG.
Diagnostic imaging: congratulations to Dr. Hussein Mriaty, Dr. Shahrzad Ossatti, Dr. John Thompson and Dr. Claire Mercer who all complete their PhD studies successfully in 2015. Further congratulations to all our PhD students who successfully completed their interim assessments and internal examinations (Sam Bird, Seth Angmorterh, Raed Ali, Mohammed Benhalim, Randeep Kulshrestha, Ahmed Abdullah, Olan Olanrewaju and Maryam Jessop).

Further congratulations to Adam Grainger (Sport, Exercise and Health), Cathy Ure (Applied Psychology: Social, Physical and Technology Enabled Environments), Clare Ellen Edge (Equity, Health & Wellbeing), Tamara Brown (Equity Health & Wellbeing), Niamh Gill (Gait analysis) and Josephine Tityiwe (Diagnostic Imaging) who all passed their Interim Exams/Internal Assessments.

General Research Centre News

A Few Words on the Benefits of Open Access

With open access now compulsory under University policy, necessary for the REF, and required by the UK Research Councils, it is easy to focus on compliance and lose sight of the benefits. However, open access publishing can have huge benefits for individual researchers, the advancement of research projects and for the wider world.

Open access can build academic profile and reputation. Several studies have indicated that open access articles either get more citations or get cited early. You can review the evidence at http://sparceurope.org/oaca/

Open access can improve the impact of your research. Open access enthusiasts can often get caught up talking about things like changing publishing business models, but at its heart this is all about who can read and build on your research. A ‘traditional’ paper can only be read by people who are linked to institutions that pay subscriptions to journals (e.g. universities), or who can afford to pay themselves. This can shut out many of the people who have the opportunity to act on your research e.g. patients, small companies who might develop viable products, charities or healthcare professionals not linked to large trusts.

Open access can lead to collaboration. Allowing your research to reach the widest possible audience isn’t just about what you can do for other people. The more people get access to your research, the better the chances of establishing links for generating new ideas for where the research can go next, creating partnerships for future studies, or even securing funding for your next stage.

The Library provides online information about all aspects of open access at http://www.salford.ac.uk/library/research/openaccess, and the Library Open Access Team can be contacted on 56370 or usir@salford.ac.uk

Staff and PGRs at the University can apply for funding to pay article processing charges to make their papers open access at http://www.salford.ac.uk/library/research/openaccess/open-access-funding
An update on the Research Ethical Approval Process:

Further to the disestablishment of the Colleges, research ethical approval is now managed centrally by the Research and Enterprise Division.

In order to streamline the ethical approval process, and to ensure applications for ethical approval are processed efficiently, the joint School Panel for Research, Enterprise and Engagement Ethical Approval have made a few changes to the application form and submission process.

(The new process began on the 1st October 2015) and is as follows –

Applications:
- A fully anonymised electronic application has to be sent to health-ResearchEthics@salford.ac.uk
- For PGR students - THE FORM NEEDS TO BE SUBMITTED FROM THE SUPERVISORS EMAIL ACCOUNT, otherwise it cannot be accepted as signed
- There are NEW forms which can be found here: http://www.salford.ac.uk/chsc/research/staff-pgr-students-research-ethics
  (Any applications submitted on old form templates will not be accepted)
- Applicants must ensure their full name and email address is in the body of the email when they submit an application
- No signed hard copy needs to be submitted
- On the ethics application form the checklist must be completed, including selecting either “NRES”, “Fast-track” or “Full Review”. Any application which is being submitted to NRES (after receiving UoS approval) or Fast track, will be sent to 1 reviewer, those applications needing Full Review will be submitted to 2 reviewers. (Please refer to the ethics guidance ‘filter form’ to determine which type of review your research requires)
- The full review process takes 4 – 6 weeks
- Any changes/amendments requested by the panel have to be returned within 1 month
  (after 3 months the application will be closed and a new submission required)

Members of the panel are academic staff from across both schools, with currently one external member: sadly we have lost Simon Mitchell (external member), Joan Livesley, Sean Welsh, Raymond Healy and Jo-anne Webb. However, we were delighted that we received a great response to our recruitment email and now welcome: Martyn Matthews(HS), Dan Allen (NMSWSS), Fiona MacVane (NMSWSS), Steve Pearson (HS), Mary Smith (Shannon), (NMSWSS), Paul Sindall (HS), Sheila Dunbar (NMSWSS), Cassandra Lynch (NMSWSS), Joy Probyyn (NMSWSS) and Neil Murphy (NMSWSS) to the panel. We now have a total panel membership of 23, with Sue McAndrew continuing in her role as chair.

As more research is being carried out within University of Salford, this is reflected in our statistics:

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<th>New Applications submitted 14/15:</th>
<th>154 new applications (not including amendment requests)</th>
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<td>New Applications submitted 15/16 (as 18/01/16)</td>
<td>60 new applications (not including amendment requests)</td>
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While the new process and additional panel members has greatly impacted on the efficiency of ethical review, there remains a few common issues including – applications being submitted that are not fully anonymised, applications being submitted on old forms and ‘versions’ and ‘dates’ not being included on all documents. That aside, we continue to be impressed by the quality of applications
and the hard work of panel members who continually strive to give applicants constructive feedback. In addition we would also like to thank both NMSWSS and Health Sciences for their continued support.
(For further information on ethics, contact: Sarah Starkey – Health-ResearchEthics@salford.ac.uk)

Upcoming Events

Research Seminar (organised by Kris Hollands): Dr Anna Bjerkefors’ workshop (Feb 11 20106: 9.30-2.30) is on the role of the spinal cord in controlling walking and reaching movements and evidence for rehabilitation in spinal cord injuries; plus a practical on clinical assessment of spinal cord injured patients. Dr. Bjerkefors is a physiotherapist, Lecturer at GIH in Sweden and consultant to the Paralympic committee and Kayak team. More details in the coming weeks, so look out!

Supervisor forum: the next supervisor forum is on the 27/1/16 from 1pm to 3.30pm in MS 3.02 - Victoria Sheppard will be presenting/ discussing students training and personal development needs, and Fiona Christie from Careers/ employment enhancement will be providing information on what this service can offer to all our PGR students. All supervisors, co-supervisors and personal tutors are very welcome to attend.

For further events, and for booking yourself, a place please follow the link: http://www.salford.ac.uk/research/health-sciences/events

Some Research Programme News

Foot, Knee and Ankle (Chris Nester & Richard Jones)

2015 has proven to be a busy but productive and exciting year. Prof Richard Jones and I have been gradually integrating our respective themes into one. This was a strategic decision driven by the obvious connections between our research themes, since knees and feet share so many structures and influence each other. This merger will also enable us to better address the interests of external organisations, not least the Manchester Institute for Health Performance (MIHP), in which Richard has secured a senior strategic Research Director position. Through this new venture between the City Council, Manchester City and the University of Salford we hope to get access to new funding streams and partnership opportunities.

In May we completed the EU funded SMARTPIF project (SMART Tools for insole design) and did so by delivering a series of ‘roadshow’ like dissemination events in England, Wales and Scotland. Ana Martinez is now writing up her PhD based on the work in the project (on novel orthotic designs for offloading the forefoot in people with diabetes). In September Dr Carina Price led completion of the EU funded SoHealthy Project (focussed on creating networks in the footwear sector to better address future research priorities). This project has revealed to us the significant progress that needs to be made in many southern Mediterranean countries in terms of foot health care infrastructure. For example, there are just 23 podiatrists for a population of 30 million. Several new project proposals are already being taken forward. In September we welcomed Jenny Anderson as the Associate working on our most recent KTP award. Jenny is working with Dr Anita Williams to innovate workplace footwear, specifically footwear for healthcare and catering sectors, and is funded by Toffeln footwear.
The In-Respond study is up and running at the NIHR Clinical Research Facility, a collaboration with the ROAM team at Manchester. Prof Richard Jones is PI for the study, which is investigating the effect of foot orthoses on knee pain and structures, with Dr Anmin Liu as the key investigator. The trial will last another 12 months but they are well on the way to recruiting the substantial numbers required. The study is being funded by the Manchester Biomedical Research Unit.

November saw signatures on a major new 5 year programme grant worth £1.5Million, SMALL STEPS, shared equally between ourselves and University of Brighton (Dr Stewart Morrison). This funding from the William Scholl Endowment fund will support two distinct streams of work, starting March 2016. The first is led by Dr Anita Williams (newly promoted to Reader) and will investigate parent and professional beliefs and behaviours related to children’s foot health. The second stream will investigate the changes in foot structure and function that occur as babies make the transition from sitting to standing to independent walking. Dr Carina Price has the job of making these unique biomechanical assessments possible! The project will be supported by Dr’s Jill Phethean, Farina Hashmi and Jane McAdam, and involves lots of external partner input too (e.g. Clarks, health visitors, surgeons, National Podopaediatrics interest group, and so on). This will be our first venture into public health research and will directly address the need to demonstrate the ‘impact’ of our research.

The 3D printed foot orthoses project “AMINO” continues to make progress towards novel foot orthotic designs, though Dr Dan Parker has been focussed on regulatory issues in much of 2015. 3D printing is a fast moving field and the technology and materials are ahead of the regulatory framework in some respects. This project has also brought in Health Economic collaborators from the University of Bangor, which looks to be a very useful relationship moving forwards. It is also supporting a MSc by Research by orthotist staff at East Lancs NHS Trust (Natalie Hall).

In January 2016 we will launch the first ever multi professional national foot orthoses survey. Andrea Graham has taken a lead on this in 2015, working with an external steering group to shape up topics and questions. This goes online in January and we are grateful to our many industry supporters who are helping disseminate news of the survey. Veronica Newton, the newest member of the Podiatry Lecturing staff (poached from Huddersfield) will also join the survey steering group. Part of Veronica’s role is to seek out opportunities for knowledge transfer between our research activities and the UG curriculum related to foot biomechanics, orthoses and footwear. The survey should prove invaluable in ensuring our students receive training and learning opportunities that reflect real world practice.

We welcome Joanna Reeves and Lewis Atkinson, both starting PhDs focussed on foot orthoses. Joanna is investigating the effect of orthoses on muscle action and this will link into the development of new teaching materials as she is funded via the University GTS scheme. Lewis is funded through an industry CASE Award, whereby 50% of the funds comes from industry, our spin off partner SalfordinSole in this case. He is focusing on use of 4D foot shape data to develop new orthotic designs. Lewis has just installed the 4D scanner which was a product of the earlier SMARTPIF EU project.

Rawan Abdeen, Jo Reeves, James Williams, Lewis Atkinson
Dr Gillian Crofts has welcomed Rawan Abdeen and James Williams who are starting their PhD and MSc by research respectively on Lateral Ankle Sprains. Both will be using ultrasound to explore acute and chronic conditions of the ankle. This is one of our priorities as we look to integrate with the MIHP and sports injury agenda. Gillian is taking this forward through a NIHR fellowship proposal in the New Year.

Spring 2016 looks equally busy, with multiple proposals to HTA calls (e.g. gait interventions in rheumatoid arthritis) and EU proposals (including more on 3D printing). There are also keynote lectures being prepared for OT World in Leipzig (March’16) and Australian New South Wales Podiatry Congress (April ’16), and then there is Foot International in Berlin in late June, which incorporates the i-FAB congress (http://foot-international-2016.org/).

2016 will also see us make progress on orthoses that affect foot sensation, which is being led by Dr Kristen Hollands. Kris has already been awarded a Santander travel award to support collaboration between Salford and Dr Leah Bent from the University of Guelph in Canada. This also links into colleagues in Psychology (Bendall and Cassidy) and models of how sensory signals from skin on the feet are used by the brain to help control balance and walking. It is an emerging area and an interesting departure from our usual mechanical paradigms, treating the foot as a more sensory-mechanical organ.

Rehabilitation Technologies (Laurence Kenney)
2015 has been a productive year for the Rehabilitation Technologies and Biomedical Engineering Group. Highlights include the award of £200k as part of a £1.8 million EPSRC-funded project to develop novel systems for monitoring of assistive device use (http://www.aartbc.org/), a new collaboration with Malcolm Granat’s group on the development of a falls monitoring system, and PhD success for Christine Smith. We have also welcomed a number of students to our group, including Abdullah Al-Ani and Eleanora Costamagna.

We have made exciting progress in the EPSRC-funded Energy Efficient Lower Limb Prostheses project, led by Dave Howard. Modern prosthetic legs are developing rapidly, including powered elements in their design. However, these powered elements (such as electric motors) require stored energy, typically in the form of batteries. Part of our project has been pursuing a different approach to storing energy and powering prosthetic legs. We have recently completed a virtual prototyping exercise (using computer modelling) to investigate the use of miniature hydraulics in prosthetic ankles. We have shown that by using a novel combination of hydraulic elements that can ‘harvest’ energy at certain points in the gait cycle and utilise it later, we can design a prosthetic foot that doesn’t need to be ‘charged up’ frequently. Rather the design would charge itself through the natural act of walking, potentially creating a device that could be used for thousands if not millions of steps without needing to be plugged in. We are currently in discussions with Blatchford about patenting and implementing the new technology.

Equity, Health and Wellbeing (Penny Cook)
In May 2015 the ‘Equity, Health and Wellbeing’ research group was established to build on the work previously carried out by the ‘Work, Health and Wellbeing’ group that had been led by the late Professor Lindsey Dugdill. The new group retains a strong interest in issues affecting work and the working age population, but also covers other important contemporary aspects of health and wellbeing. One of the themes in the re-formed group
is ‘digital health’, where our researchers specialise in designing and evaluating mobile applications (Apps) for health. Two of our projects have recently attracted funding: a Research Bidding Support Fund 2015/16 grant is currently being used to conduct a small scale evaluation project to find out how an App may be used to help primary school aged children develop emotional intelligence. To this end, a partnership has been developed between the University of Salford and Karisma Kidz and set out through a Memorandum of Understanding, and we hope that this will put us in a good position to further build on the work and attract funding. Another App, Occubuzz, is the first of its kind to address occupational balance and wellbeing and is applicable to anyone who wants to improve their wellbeing. HEIF funding was previously awarded to enable us to develop version 3 of Occubuzz (which is in the app stores now). A further round of HEIF funding is enabling us to make changes to the app in order to research the relationships people have with their occupations, and how this impacts on their wellbeing.

**Diagnostic Imaging (Peter Hogg)**

In the past few months Dr Gillian Crofts joined our group and brought with her extensive experience in musculo skeletal ultrasound research, conducted jointly with our foot, knee and ankle group. Our PhD student community has grown significantly in the last few years and currently we have 21, the majority of which are externally funded. Dr Andrew England and Professor Peter Hogg have welcomed Sadeq Al-Murshey and Ali Hussain from Iraq; they will be investigating the optimisation of image quality and x-radiation dose in paediatric imaging. Alongside this, radiography has invested heavily in having a much higher proportion of academic staff with PhDs, in order to supervise these students. Our research output has grown tremendously too, and we are now ranked in the top 3 most productive universities in the world with two staff being ranked in the top 18 (A Review of Individual and Institutional Publication Productivity in Medical Radiation Science, Ekpo E, et al M, 2015, in press, Journal of Medical Imaging Radiation Sciences, http://dx.doi.org/10.1016/j.jmir.2015.11.002). Presently we are appointing our first full time research appointment, we hope to have them in place by Easter 2016. Until now our research has been conducted by our lecturing staff in collaboration with clinical staff and our PhD students. Below is an update from one project we have just completed, by Joanne Coward: Imaging modalities can be used individually or in combination to give both anatomical and functional detail. Technology has evolved rapidly in a relatively short time causing debate about how to best utilise the images produced.

Medical images can be subject to artifactual degradation that left uncorrected can cause mis-diagnosis. Single-photon emission tomography (SPECT) used for myocardial perfusion imaging (MPI) of the heart is an example of this. A low-dose computerised tomography (CT) scan can be used in a process called attenuation correction (AC), to reduce artefact and improve SPECT image quality. [1,2] Low-resolution CT images, although considered non-diagnostic and are not intended to be viewed, often reveal incidental findings. Initially, this was thought to be advantageous, allowing asymptomatic pathology to be detected and treated with a potentially better patient prognosis. A multi-centre study involving 3485 patients undergoing SPECT-CT MPI found that 84 (2.4%) had incidental findings that were considered clinically significant at the time of the radiological report but only 10 (0.29%) had findings that were confirmed as clinically significant at definitive diagnosis. Seventy-four patients had false-positive findings that resulted in follow-up tests with related increased risks to the patients. The study concluded that routine radiological reporting of CTAC images from MPI should not be performed because of the high rate of false-positive findings. The psychological effects such as anxiety and depression that patients experience when diagnosed with false-positive findings warrants further consideration.
The practice of reporting on the incidental images is widespread worldwide, and the outcome of our work has highlighted important shortcomings of this practice to such an extent that we recommend the practice should cease. Below are two important publications about this work.


Rehabilitation (Alison Hammond)

Two exciting new projects have been ongoing in Rehabilitation Research. One is the NIHR Research for Patient Benefit (RfPB) funded study “The effects of arthritis gloves on people with Rheumatoid Arthritis or Inflammatory Arthritis with hand pain: a multi-centre randomised controlled trial” (Hammond, A. Prior, Y.) which started on 1.9.15. Approvals, occupational therapists’ training and most site initiation visits are now completed with recruitment starting 1.2.16. This is the largest RCT solely conducted by occupational therapists in the UK across 22 NHS hospitals in England, Scotland and Wales. The other study is the EULAR grant “Psychometric testing of VLAS and MAPHAND in RA in Turkey, Switzerland and the UK” (Prior, Y., Hammond, A.). The UK arm is complete and preliminary results were presented at the American College of Rheumatology conference, San Francisco (November). Recruitment continues in Switzerland and Turkey, and we are now developing and testing the Maphand Questionnaire in the Czech Republic in 2016.

Furthermore, Fani Avgoustaki successfully obtained the ARUK/MRC Centre for Musculoskeletal Health and Work (CMWH) PhD Studentship to study “Work and Osteoarthritis”. Fani is from Greece and recently completed her MSc in Health Psychology at the UWE. Fani’s PhD is supervised by Yeliz Prior, Alison Hammond and Dr Karen Walker-Bone from the University of Southampton, representing the CMHW.

Applied Psychology: Social, Physical and Technology Enabled Environments (Sarah Norgate)

It is SUCH a boost to the vibrancy of a research culture when a research team expands! This year our research team welcomed new members Dr Jo Meredith (Lecturer in Psychology) with a passion for leadership in qualitative research methodologies, Rob Bendall (Lecturer in Psychology) undertaking cutting edge research in brain and emotion, and Sam Royle (Technician in Psychology) who has been eyeing up the research potential for Virtual Reality facilities.

We also had one departure, we wished Dr Jenna Condie (Lecturer in Psychology) well as she moved onto pastures new at the University of Western Sydney, and recognized that she had left an amazing legacy in social media.

Collectively, in 2015 our Applied Psychology team has had the best crop of journal publications in living history – to offer a selection, Quarterly Journal of Experimental Psychology (Dr Catherine Thompson), Frontiers in Psychology (Rob Bendall, Dr Catherine Thompson), Frontiers in Psychology
(Dr. Simon Cassidy), and Journal of GLBT Family Studies (Dr. Sharon Coen) and Journal of Social Science Research Methodology (Dr Joanne Meredith). One paper in Applied Developmental Science (Dr Sarah Norgate) even had an introduction by the global leader on intelligence research and inventor of Triarchic theory of intelligence, Professor Robert Sternberg.

Personally, I’m excited that the University research leadership has now appointed Christopher Hewson leader in ‘impact’. Particularly so because our growing community of PhD students is undertaking research in areas where the societal impact agenda is visible. One shining example of this is John Hudson (supervised by Dr. Ashley Weinberg) who was awarded a British Psychological Society award for his poster at the annual BPS conference. Early in 2016, I am really looking forward to seeking Christopher’s advice around the award winning impact pathway of EPSRC project Smart Mobility Service. The RCUK Digital Economy award ‘Tales of Things’ award, with support from the policy-influencing group Modeshift has enabled us to launch a national cartoon competition for primary school children, winners to be announced in 2016.

Other growth areas for us are research-informed teaching pathways as evidence by the award of an internship from British Psychological Society to Dr Simon Cassidy, Rob Bendall, Lynne Marrow & Dr Adam Galpin, please read the story in the link below! Also we witness exciting strides forwards in international activity, trailblazed by Dr. Clare Allely, again please read her story in the link below.

Finally, new research opportunities are all aglow with our behavioural change StepJockey installation—a collaboration between Psychology and Public Health – again, find out more here: [LINK](#)

**Occupational Therapy (Tracy Collins)**

Members of the occupational therapy directorate have been busy with a range of research activities. Recent publications include:


Conferences papers and posters include:

- **Webb, J., Harrison, D. and Szczepura, K. (2015) Occupational Therapists are you ready to be the “Experts” in Manual Handling? The OT Show, November.**

⇒ If you wish to know more, please contact the named individuals!
What I did last summer…

– Alex Clarke-Cornwell in Brisbane, Australia

The International Conference on Diet and Activity Methods (ICDAM) is a specialist conference that is devoted to improving methods and measures for both diet and physical activity. Sedentary behaviour, as a distinct entity to physical inactivity, is a relatively new research field, and techniques and methods for measuring sedentary behaviour are constantly emerging. I presented work from the principal study of my PhD that focussed on derived thresholds of sedentary behaviour from the Actigraph GT3X+ accelerometer compared to the activPAL™ sedentary classification.

My presentation resulted in some Twitter interaction (below) using the conference hashtag #icdam9, and consequently enabled me to make contacts with experts on accelerometer data. This included a professor who had published a Department of Health review of the current scientific evidence for sedentary behaviour and obesity; this document was the catalyst into researching sedentary behaviour and identified the gaps in the literature on which my PhD is based. I appreciate the opportunity that I had in attending ICDAM and I feel that I was able to build on and improve my own knowledge base, and increase my awareness of new work in the sedentary behaviour research field. The work presented at ICDAM has been written up as a journal article and is currently under review.
Happy News

Last but not least, let’s congratulate our new married couples:

Steve Horten and Eta De Cicco were married on 15th August in Leicestershire, UK. The really fun part came later that day with the Science Fiction / Horror themed fancy dress party and special Wedding Cake!

Mr. Anthony Howarth and Dr. Adam Galpin: their wedding was held at the Lowry Theatre on the 24th of October 2015.
Mingxu Mingxu Sun & Hsin-pei Yu were married on the 18th of December 2015 in Jinan, China.

We wish you all the best for your futures together!

Final note: the next issue of the newsletter will be out July 2016