This report highlights the successes of the Allied Health Research Unit in 2016-2017 including current projects and publications, through to future developments.

Jim Richards
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OVERVIEW

Our focus is on research across the health care professions to help answer important and clinically relevant research questions. Research spans the innovation pathway. This includes the development and evaluation of the effectiveness of products designed to interact with the body, and the effectiveness of surgical and therapeutic treatments.

The Movement Analysis Laboratory is equipped to conduct

- Advanced motion analysis
- Force measurement
- Pressure measurement
- Muscle and strength assessment
- Thermal imaging

These research strands are complemented by a focus on the implementation of research evidence in allied health clinical practice to promote the systematic uptake of research findings into routine allied health practice to improve the quality and effectiveness of health services and care.

Follow us on ResearchGate

MEMBERS

Staff Members: Professor Jim Richards, Dr Hazel Roddam, Dr Louise Connell, Dr Ambreen Chohan, Dr Jessie Janssen, Dr Erin Morehead, Alex Mbili, Olivia Greenhalgh, Nicola Gaskins, Laurence Smith, Lucy Cross, Hannah Shore, Karen May, Jill Alexander, Ken Chance-Larsen, David Rhodes, Paul Ashworth, Andy Cunningham, Mandy Dunbar, Sean Kilmurray, Rob Hamilton, Lisa Hartley-Woodrow, Greg Littler, Gill Rawlinson, Verity Scholes, Heather Stewart, Adam Cook, Mark Leather, Steve Foster, Neil Wilson, Brigt Chesworth, and Sharon Crane.

ASSOCIATE MEMBERS

Professor James Selfe (Manchester Metropolitan University, UK); Professor Paola Dey (Edge Hill); Dr Steven Lindley (Delsys), David Levine (The University of Tennessee at Chattanooga, USA); Associate Professor Yongwook Kim (Jeonju University, Republic of Korea); Dr Renato Trede (Universidade Federal dos Vales do Jequitinhonha e Mucuri, Brazil); Professor Areerat Suputtitada (Chulalongkorn University, Thailand); Dr Komsak Sinsurin (Mahidol University, Thailand); Lucy Hives, Dr Anastasia Topalidou, Professor Jeffer son Cardoso (Universidade Estadual de Londrina, Brazil); Professor Paula Leslie (University of Pittsburgh); Dr Joanne Patterson (University of Newcastle); Dr Catherine Adams (University of Manchester).
**PROF JIM RICHARDS**

Jim Richards was appointed Professor in Biomechanics and research lead for Allied Health Professions at University of Central Lancashire in 2004. Professor Richards work includes the clinical application of biomechanics, the development of new assessment tools for chronic disease, conservative and surgical management of orthopaedic and neurological conditions, and development of evidence based approaches for improving clinical management and rehabilitation.

Professor Richards holds a number International Professorial Chair positions and is an associate editor for “The Knee”. Professor Richards has written and edited a number of textbooks including *Biomechanics in Clinic and Research* (2008) and the 5th edition of *Whittle’s Gait Analysis* (2012) and the forthcoming Comprehensive Textbook of Clinical Biomechanics (2017).

**ORCID ID**

[orcid.org/0000-0002-0637-1801](https://orcid.org/0000-0002-0637-1801)

[www.researchgate.net/profile/Hazel_Roddam](https://www.researchgate.net/profile/Hazel_Roddam)

[@HazelRoddam1](https://twitter.com/HazelRoddam1)

**DR LOUISE CONNELL**

Louise is a physiotherapist and clinician-scientist, with extensive experience in rehabilitation research. She is a Reader in Rehabilitation, and was awarded fellowship status by the Association of Chartered Physiotherapists in Neurology in 2015 for advancing the specialty of neurological physiotherapy. Her research interests include implementation science, intensity of rehabilitation and intervention development. She is a former NIHR Career Development Fellow, and has over 50 peer-reviewed

**ORCID ID**

[orcid.org/0000-0002-4004-3115](https://orcid.org/0000-0002-4004-3115)


[@ProfJimRichards](https://twitter.com/ProfJimRichards)

**DR HAZEL RODDAM**

Hazel is a Speech and Language Therapist with 25 years’ experience in NHS and local authority settings before joining the AHRu in 2006. As a Reader in Allied Health Practice, Hazel has a unique and extensive international track record for teaching and promoting Evidence-Based Practice (EBP) and for supporting research capacity building across all the Allied Health professional communities. She has worked with individual practitioners and teams to raise their awareness of the research environment, to better understand evidence-based practice (EBP), to implement research evidence into their practice, to undertake practice-based research and service evaluations, and to disseminate innovative good practice. Hazel’s knowledge transfer work in EBP has achieved highly significant impact and recognition world-wide. Hazel is the Vice Chair of the Strategy Board for the UK Council for Allied Health Professions Research. She is also Director of the Research Support Network for SLTs (ReSNet), and Co-Director of Advancing Dysphagia Practice.

**ORCID ID**

[orcid.org/0000-0002-0637-1801](https://orcid.org/0000-0002-0637-1801)

[www.researchgate.net/profile/Hazel_Roddam](https://www.researchgate.net/profile/Hazel_Roddam)

[@HazelRoddam1](https://twitter.com/HazelRoddam1)
publications. She is a panel member for many funding bodies and regularly gives invited presentations at international conferences.

**ORCID ID**
[orcid.org/0000-0002-5291-5267](https://orcid.org/0000-0002-5291-5267)

researchgate.net/profile/Louise_Connell2

@researchphysio

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**DR AMBREEN CHOHAN**

Ambreen completed a PhD (2008) in Human Motor Control for a thesis titled “Perception-Action coupling in goal directed behaviour” after completing her initial degree in Medical Engineering (Bachelors). Ambreen joined the AHRu in 2009 and is currently a Research Fellow in Biomechanics. Dr Chohan has a growing track record in research with over 45 peer reviewed articles/abstracts/conference papers and independently funded collaborative work with small medium and large companies. She has been involved in securing over £240,000 both as PI and CI and is currently involved with the £2.4m ERDF funded Innovation clinic project. She supports UG modules and supervises a number of PhD and MSc(Res) students in the area of biomechanics/allied health. Her other roles also include reviewing for around 15 peer-reviewed journals and Chairs the University’s Science, Technology, Engineering, Medicine and Health Ethics Committee.

**ORCID ID**
[orcid.org/0000-0002-5961-2736](https://orcid.org/0000-0002-5961-2736)

researchgate.net/profile/Ambreen_Chohan

@Dr_A_Chohan

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**DR JESSIE JANSSEN**

Jessie trained in the Netherlands as a Biomedical Health Scientist and specialised in Human Movement (Master of Science) and a Physiotherapist (Bachelor). Her PhD thesis explored how to build research capacity in a hospital using a participatory action research approach. Jessie’s experience in research focuses on neuromuscular and musculoskeletal rehabilitation. At UCLan Jessie has coordinated a UK wide clinical research project looking at Targeted Interventions for Patellofemoral Pain (TIPPS). This has led to involvement in similar research projects in Turkey and Malaysia and a book published on Patellofemoral pain in 2017. Additionally Jessie works on the ERDF project and is involved in Stroke, MS and Parkinson’s research. Jessie is a member of the Council of Allied Health Professions Research Cumbria and Lancashire.

**ORCID ID**
[orcid.org/0000-0003-0544-7832](https://orcid.org/0000-0003-0544-7832)

researchgate.net/profile/Jessie_Janssen

@DrJessieJanssen

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**DR ERIN MOREHEAD**

After qualifying as a Physiotherapist from the University of Manchester in 2002, Erin began working with Blackpool Football Club and the NHS in Lancashire. She held these positions for three years before moving up to Glasgow to complete an MSc in Sports and Exercise Medicine. During her time in
Glasgow, Erin worked for the Scottish Football Association and the Scottish Institute of Sport. In 2006, Erin joined the teaching team here at UCLan. She is currently the Course Leader for the MSc Sports Medicine and contributes to teaching on a range of programmes in the School of Health Sciences. In 2014, Erin completed her Professional Doctorate, which focussed on Functional Movement Screening in Football.

Dr Dave Rhodes
Since qualifying as a Sports Scientist in 2003 and developed a keen interest in musculoskeletal injury and completed an MSc in Sports Therapy in 2008 at UCLan. David worked as a Sports Therapist in a variety of professional and semi-professional football clubs and developing his own private practice. In 2011 David became a Senior Lecturer in Sports Therapy at Edge Hill University. During this time at he developed his research interests and in 2017 completed his PhD. Research interest include fatigue, the effects of this on biomechanical function and intervention strategies employed to reduce the effects of fatigue. David joined the teaching staff at UCLan in September 2015 as the Course Leader and Senior Lecturer in Sports Therapy.

Karen May
Karen qualified as a physiotherapist in 1990 and held a number of different positions in the NHS and private sector. In 1995 she became the head Physiotherapist to Bradford Bulls RLFC then in 1999 she joined Huddersfield giants RLFC as head physiotherapist and joined UK Athletics in 2001, and is currently the physiotherapist to Wharfedale Rugby Union and to several elite GB fell and mountain runners. Karen is co-founder of the West Yorkshire ACL group, which aims to improve the rehabilitation of ACL deficient knees. Karen holds an MSc in Sports Medicine from the University of Nottingham in 1997, and is currently the Academic lead for the Division of Physiotherapy and Sports Therapy. Karen’s research interests include; cryotherapy and functional movement with publications in both areas and is currently undertaking her Doctorate.

Kenneth Chance-Larsen
Ken is a Physiotherapist with extensive clinical and academic experience. His clinical expertise is in the musculoskeletal field, and he has worked within the NHS, elite sport, occupational health and private clinical settings. He has experience from Higher Education Institutions in the UK and Australia, combining his clinical skills and research experience into developing and delivering evidence-based learning resources. In his role as Physiotherapy Discipline Leader at Central Queensland University (Australia), he led the development of a new Bachelor of Physiotherapy program, from inception, via
accreditation, to roll-out. Ken commenced his post as Senior Lecturer in Physiotherapy at UCLan in 2017, and is teaching on the Physiotherapy course, and leading the development of a new MSc Physiotherapy (Pre-registration) course due to start in September 2018.

**ORCID ID**

[orcid.org/0000-0002-7619-4054](https://orcid.org/0000-0002-7619-4054)

@KenChanceLarsen

**JILL ALEXANDER**

Jill qualified as a Sports Therapist in 2008 at UCLan. With an interest in equine rider posture, she then completed her MSc in 2011. Jill has worked as a Sports Therapist in Rugby union for over ten years, with positions including Head Therapist at Wharfedale RUFC, Yorkshire Counties Senior XV and recently with the U20’s French National Squad at the World Cup. Jill joined UCLan in 2013 working on multiple commercial research projects within the division and lecturing across Sports Therapy and Sports Medicine programmes. Her research areas include the effects of local and whole-body cryotherapy applications in sport on joint position sense in the lower limb. She is currently pursuing a PhD in the same area.

@JASportsInjury

**ORCID ID**

[orcid.org/0000-0002-6492-1621](https://orcid.org/0000-0002-6492-1621)

**ALEX MBULI**

Alex has previously held positions within academia, and has recently returned to research. Alex graduated with degrees from Edinburgh Napier University (BSc in Sports and Exercise Science) and Roehampton University (MSc in Biomechanics). Previous research projects include “the effect of cutting manoeuvres on the knees of heavy athletes” and “obesity and its effect on spinal curvature”. Alex currently works on UCLan’s European Regional Development Fund Innovation Clinic project working with small and medium enterprises to develop and test new to market products. Alex’s current research interests outside of the ERDF project include the biomechanics of footwear and the use of orthotics in activities of daily living.

@AlexMbuli1

**OLIVIA GREENHALGH**

Olivia completed her degree in Sports Technology (BEng) at Sheffield Hallam University in 2016. Whilst at university, she worked part time within the running shoe industry at Up and Running in Manchester. Following this, Olivia worked within a sports surface construction company for 8 months before joining the University of Central Lancashire’s £2.4 million European
Regional Development Fund project as a Research Assistant in February 2017. During her time at UCLan, Olivia has been involved in numerous research projects assisting small and medium enterprises in Lancashire with product development and testing. Her main research interests include sports engineering and footwear biomechanics.

@OGreenhalgh4

**NICOLA GASKINS**

Nicola qualified as a physiotherapist from the University of Manchester in 1997. Throughout her clinical career, she has worked in a number of NHS Trusts and private healthcare settings in a range of specialisms including cardiac rehabilitation and care of the elderly as well as medicine and neurology. She joined UCLan in 2015 as a research assistant to combine her clinical work with research funded through external projects. These have included public health for allied health professionals and UCLan’s £2.4 million European Regional Development Fund project. Her main research interests include rehabilitation and exercise after stroke and in cardiac conditions.

[ORCID ID](https://orcid.org/0000-0002-4511-3231)

www.researchgate.net/profile/Nicola_Gaskins

**HANNAH SHORE**

Hannah is a recent graduate from the University of Central Lancashire where she has a background in sport. Following on from her Sports Science degree she pursued her interest in biomechanics, graduating with a MSc in Sports Biomechanics in 2016. During her time at University Hannah worked on collaborative research studies exploring the effects of knee bracing and running shoes on the effects of kinematics of running. Joining the team as the Innovate UK KTP associate in September 2017, she is currently working with UK’s leading mattress manufacture, Silentnight Group Ltd, to develop the ‘Ideal Sleep Solution’.

[ORCID ID](https://orcid.org/0000-0002-4511-3231)

researchgate.net/profile/Hannah_Shore

**MAIRI OLIVIER**

After graduating in 2015 from Brunel University in BSc Product Design, Mairi joined UCLan as a research assistant working on medical design projects. Mairi currently works on UCLan’s Innovation Clinic ERDF project within both the engineering department and the Allied Health Research unit’s biomechanics team. Alongside this, she is also involved in Human Factors research projects in the medical design field, specialising in eye-tracking technology.

[ORCID ID](https://orcid.org/0000-0002-3412-7785)

www.researchgate.net/profile/Mairi_Olivier
The AHRU has continued to forge and maintain links with academic institutions worldwide and through programmes and links given students and members of staff of these institutions opportunities to visit and collaborate with the unit.

**ERASMUS**

Eliška Kuboňová: Palacký University, Olomouc, Czech Republic.

Antoine Brabants: Faculty of Kinesiology and Rehabilitation Sciences, Department of Rehabilitation Sciences, University of Leuven, Belgium.

Malika Hennies: Faculty of Mechatronics and Medical Engineering, Ulm University of Applied Sciences, Germany.

Fabian Mager: Faculty of Mechatronics and Medical Engineering, Ulm University of Applied Sciences, Germany.

Prof Felix Capanni, Prof Thomas Engleder, Prof Michael Munz: Faculty of Mechatronics and Medical Engineering, Ulm University of Applied Sciences, Germany.

Kateřina Jinochová and Nicola Klinská: Palacký University, Olomouc, Czech Republic.

**EUROPEAN**

Christian Grüneberg and Doerte Zietz: Health Sciences, Hochschule fur Gesundheit Bochum, Germany.

Nicola Bauer and Andrea Villmar: Midwifery, Hochschule fur Gesundheit Bochum, Germany.

Heike Kockler: Community Health, Hochschule fur Gesundheit Bochum, Germany.

Raúl Valdecabres: Facultad de Ciencias de la Actividad Física y del Deporte, Universidad Católica de Valencia, Spain.

Dr Ana María de Benito Trigueros: Facultad de Ciencias de la Actividad Física y del Deporte, Universidad Católica de Valencia, Spain.

Alejandro Molina: Departamento de Educación Física y Deportiva, Human Motion Analysis Lab (HUMAN LAB), Instituto Mixto Universitario Deporte y Salud, Universidad de Granada, Spain.

**OVERSEAS**

Liane Brito Macedo: Laboratório de Análise da Performance, Doutoranda em Fisioterapia, Neuromuscular Universidade Federal do Rio Grande do Norte, Brazil.

Dr Komsak Sinsurin: Faculty of Physical Therapy, Mahidol University, Thailand.

Mert Dogru: School of Health, Manisa Celal Bayar University, Turkey.

Associate Prof Cathy Stinear, University of Auckland, NZ.

Dr Elizabeth Lynch, University of Adelaide & The Florey Institute of Neuroscience & Mental Health, Australia.

Timporn Vitoonpong: Chulalongkorn University, Bangkok, Thailand.
POST GRADUATE RESEARCH DEGREES
Since 2010 the AHRu has had over 30 successful completions of Post Graduate Research Degrees. The staff within the unit work closely with research students conferring, advising and mentoring each student to ensure a timely and successful completion of their degree programme.

COMPLETIONS 2016-17

Dr Lindsay St-George, MPhil/PhD:
Electromyographic evaluation of muscle firing patterns in the ridden horse during jumping as an objective method of informing current jump training programmes

Dr Caroline Waterworth, PhD:
An exploration of culture and context for Allied Health Professionals using Care Aims in integrated community teams: A case study approach

Dr Berj Kishmishian, PhD:
The effects of acupuncture and sham acupuncture to the Achilles tendon in Achilles tendinopathy.

Dr Gilly Rosic, PhD:
Exploring the relationship between fear of falling and physical activity in obese women under 50 years of age

Dr Dan Baidwar-Kshetri, PhD:
Knee pain in young adults in Nepal: an epidemiological study comparing urban and rural populations

Dr Susan Giblin, PhD:
Enhancing participation and performance in physical activity through primary level physical education: The role of physical literacy

Dr Chukwuemeka Ibeachu, PhD:
Epidemiology of lower limb dysfunction in adolescents

For more information on how to enrol on a research degree with us visit

www.uclan.ac.uk/research/study/research_degrees.php
INTERVENTION DEVELOPMENT

RENEURON
The AHRu are working with ReNeuron plc to develop a rehabilitation intervention for a Phase III clinical trial of stem cells after chronic stroke. We will be working with the trial management team in this international study to ensure the intervention is delivered correctly and monitor fidelity over time. The trial will start recruiting in 2018.

Key contact: Dr Louise Connell

TARGETED INTERVENTIONS FOR PATELLOFEMORAL PAIN
In 2016 we published our results in the British Journal of Sports Medicine on targeted intervention for Patellofemoral Pain studies (TIPPs). This study aimed to identify subgroups in people with patellofemoral pain using six low cost clinical assessment tests and was funded by Arthritis Research UK (£30,000). The main reason for conducting this study was although the current best evidence based treatment method for PFP (multimodal therapy) had some benefits to patients such as improved pain, function and quality of life, in the short term, there was limited evidence to support the longer-term outcomes of this treatment approach. Strong support for the idea of clinically subgrouping PFP patients and delivering targeted treatment has been stated at the International PFP Research Retreats where it was stated that ......

“Identification of subgroups remains the ‘holy grail’ for PFP research”

The study consists of a collaboration between 15 Academics in 9 Universities in 4 Countries, but was initiated at UCLan. Three subgroups were identified; strong’, ‘weak and tight’, and ‘weak and pronated’ (see infogram). It has been picked up internationally and we have currently active studies running in Turkey, Malaysia and South Africa. The data from these projects have been used to validate findings and to build on further collaborations and publications. In November of 2016 Arthritis Research UK awarded us another project to develop an APP to be able to subgroup these patients on an electric device (£50,000) and a prototype App has been developed. In May 2017 we applied for an external pilot RCT with the Arthritis Research UK Clinical Studies grant (£260,000) and are awaiting the results for this.

Key contact: Dr Jessie Janssen
THE INNOVATION CLINIC

The £2.4 million European Regional Development Funded (ERDF) Innovation Clinic project that aims to support businesses within the Lancashire region. The Innovation Clinic is there to support businesses to innovate and grow through the development of new to firm and new to market products. Bringing together extensive industry & academic expertise and the use of UCLan’s state-of-the-art facilities and technology, the project aims to provide fully funded and tailored support at any stage of the product development process from initial concept and market research through to launch.

As part of the project, the AHRu offers bespoke biomechanical testing of products and scientific research to assist companies in the development of their product and explore how each product interacts with the user.

Over the past year, we have supported or are still supporting 17 SMEs. The support offered has ranged from conducting competitor analysis and literature searches to case study testing or full research studies. This has allowed companies to see if there is a market for products, make design changes to products and have evidence to support their claims.

This has led to six further collaborations between the companies and UCLan, whether it has been to further develop products, provide evidence into benefits of products or create links between the company and other resources within the university. The team continually strives to create links with the business community recruiting companies to use the services on offer and offering workshops to companies about the benefits of biomechanical and scientific testing to the company and the end user.

Key contact: Prof Jim Richards

SILENTNIGHT

Established in 1946, Silentnight Group Ltd (The Group) is the UK’s leading bed and mattress manufacturer. The main site produces on average 15000 mattresses/week, mainly branded Silentnight, but Rest Assured, Layezee, Perfecta and some retailer own-label are also produced.

The Group has an exclusive licence for a new innovative comfort layer in mattresses and produce unique zoning systems for optimised support.

Since 2016, the unit have worked on two funded projects with Silentnight Group Ltd, funded through UCLan’s Investment Voucher scheme and through direct company funding.

More recently, the team have been successful in attaining funding for a 2 year Innovate UK KTP. Hannah Shore has joined the project to aid in developing a unique innovative algorithm to determine the ‘Ideal Sleep Solution’.

This project will help the Silentnight Group to maintain their competitive edge, support new product developments, explore new markets, increase turnover, streamline manufacturing processes and improve consumer health and wellbeing.

Key contact: Dr Ambreen Chohan
SOCIAL COMMUNICATION INTERVENTION PROJECT (SCIP²)

Previous research led by Dr Catherine Adams at University of Manchester demonstrated that the SCIP intervention produced changes in children’s conversation, social communication and language skills, and in their classroom learning behaviours. These changes are important to the children’s families and teachers.

However, each child who has Social Communication Disorder has a different profile of strengths and needs. This can make measuring their progress and the outcomes of therapy difficult.

SCIP2 will develop new ways of measuring the outcomes using a goal attainment scale (GAS).

This research study is refining a speech and language therapy intervention that will improve the communication skills of children with Social Communication Disorder.

This has the potential to make a profound difference to the quality of their lives.

Dr Hazel Roddam is responsible for the survey of current SLT practice for children who have SCD and for designing the analysis of audio diaries made by the participating SLTs.

This project presents independent research funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-1014-35011).

www.scip2.bmh.manchester.ac.uk

Key contact: Dr Hazel Roddam
To maximise recovery after stroke, novel methods are needed to increase the amount of arm exercise carried out in stroke rehabilitation units. The Graded Repetitive Arm Supplementary Program (GRASP) is a self-administered arm and hand exercise programme which has been shown to be effective in a randomised controlled trial (RCT) (Harris et al., 2009).

Unlike other existing arm interventions which have been shown to improve recovery after stroke (e.g. Constraint Induced Movement Therapy (CIMT)), GRASP has had an unusually rapid uptake into clinical practice.

The PRACTISE Project, led by Dr Louise Connell, and funded through an NIHR Career Development Fellowship (2012-2016). Had an overall aim to develop a feasible and structured arm exercise program for use in NHS stroke rehabilitation units using GRASP as a starting point because of its success to date.

The project had 3 phases:

- **Phase 1** Exploring current UK Practice for arm rehabilitation
- **Phase 2** Explore the implementation of GRASP in Canada
- **Phase 3** Develop and pilot an intervention to help change practice in UK stroke rehabilitation units

“We developed clinical tools and an implementation strategy that was able to change the routine practice of therapy teams.”

This work has now appeared in several of Louise’s publications.

Key contact: Dr Louise Connell
The Council for Allied Health Professions Research (CAHPR) promotes capacity building for all allied health disciplines, particularly through fostering stronger links for clinical-academic partnerships. There are 23 CAHPR Hubs across UK, led by teams of facilitators to co-ordinate events and initiatives including research workshops, webinars etc. Dr Hazel Roddam is the current Chair of the Cumbria and Lancashire Hub, and also leads the consortium of North West Hubs – including Cheshire and Merseyside, Greater Manchester and the Isle of Man.

Hazel is also the Vice Chair for CAHPR’s national strategy board and is directly involved in engaging new strategic partnerships and collaborations both nationally and internationally.

Key contact: Dr Hazel Roddam
http://uclanahp.blogspot.co.uk/

Dr Hazel Roddam launched the *Advancing Dysphagia Practice* (ADP) initiative in 2011, in partnership with Tees, Esk and Wear Valley NHS Foundation Trust. We deliver international, national and regional continuing professional development seminars and conferences that are open to healthcare professionals working with people who have dysphagia, with emphasis on the context of the Multi-Disciplinary Team.

Our aim is to promote evidence-based professional practice and values-based decision-making in dysphagia care. We focus expressly on facilitating practitioner audiences to gain skills and confidence to engage more actively with the research evidence base for their own field of practice. All the ADP initiatives and events are delivered by highly specialist professionals who are recognised experts in their field.

In July 2017 Hazel launched the “Multidisciplinary Community of Practice for Dysphagia Care” to generate a dynamic and interactive virtual forum to promote excellence in clinical practice through supporting research implementation. Commercial sponsorship for this has been secured for 2018.

dysphagiapractice.blogspot.co.uk

Key contact: Dr Hazel Roddam
The Research Support Network (ResNet) was launched in 2015 as a web-based resource, primarily for SLT practitioners across mainland Europe. It aims to promote increased engagement by practitioners with the research environment through increased skills and confidence for embedding evidence-based practice, as well as actively promoting engagement in practice-based and practice-led research and mentorship. In January 2016 a new monthly online (Twitter) journal club was launched (#ReSNetSLT), to harness the power of social media to facilitate greater interactive participation. The reach and impact of engagement with the new online community was analysed from the Twitter transcripts, web analytics and soft intelligence feedback. In the first year of #ReSNetSLT the automatically generated statistics showed a cumulative impact of approximately 2 million impressions on linked Twitter accounts, with over 750,000 linked Twitter accounts in one single Tweetchat. The analysis has shown that geography is no barrier, with people joining from Australia as well as several countries in mainland Europe. We also noted that many other healthcare professions have regularly joined our discussions, enriching the multi-professional dimensions of the learning experience. Some of the paper authors have also joined the discussions.

In September 2017 Hazel posted on Twitter her live video interview with the Clinical Director of NHS Improvement about the impact of ReSNet.

resnetslt.blogspot.co.uk

Key contact: Dr Hazel Roddam

The Comite Permanent de Liaison des Orthophonistes-Logopedes de l’Union Europeene (CPLOL) represents over 85,000 speech and language therapists across Europe.

The core purpose is to facilitate the reciprocal exchange of research and practice knowledge for the profession. Dr Hazel Roddam has been one of the two UK delegates on this European Commission since 2008, leading working parties to promote knowledge transfer and best practice.

Hazel is currently working with the CPLOL Executive on an organisational review that will streamline CPLOL’s impact on professional services and practitioners.

www.cplol.eu

Key contact: Dr Hazel Roddam
The goal of the ISB Working Group in Motor Control is to provide a forum to highlight and foster the increased interest in scientific work that bridges the fields of Motor Control and Biomechanics.

The group was established as a Seed Group affiliated with the International Society of Biomechanics (ISB) at the XXIV Congress of ISB in Natal (Brazil), in 2013. It was recognized as a Working Group of ISB at the XXV Congress of ISB in Glasgow in 2015.

The Motor Control Seed Group organizes symposia and meetings during ISB congresses to bring together ISB members and Biomechanists around the world to display their work and advance the understanding and application of Motor Control.

**EXECUTIVE BOARD MEMBERS**

<table>
<thead>
<tr>
<th>Dr. Paola Contessa</th>
<th>Prof. Walter Herzog</th>
<th>Prof. Jim Richards</th>
</tr>
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<tbody>
<tr>
<td>Delsys Inc, USA</td>
<td>University of Calgary, Canada</td>
<td>University of Central Lancashire, UK</td>
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Prof Jim Richards spoke at both

The **3rd Symposium on Motor Control in Biomechanics** Boston (USA) on May 31st 2016, on the opening day of the 63rd Annual Meeting of the American College of Sports Medicine (ACSM).

The **4th Symposium on Motor Control in Biomechanics** Chicago (USA) on July 5th 2016 on the opening day of the XXI Congress of the International Society of Electrophysiology and Kinesiology (ISEK).

Key contact: **Prof Jim Richards**
The OATech+ Network is an EPSRC funding project which aims to improve diagnosis, treatment and bring novel therapies to market for osteoarthritis. The networks overarching aims are to identify challenges and knowledge gaps, support and drive multidisciplinary collaborations in UK osteoarthritis research, form the basis for high-level grant funding and high impact papers and, ultimately, improve diagnosis, treatment and bring novel therapies to market.

This network will support; Focus Meetings, Sandpits and Hackathons. Lead by Professor Cathy Holt from Cardiff University, the network was Launched in 2017 with 50 of the UKs top researchers and clinicians attending the first Focus Meeting which was held on the 16th May 2017 in Cardiff.

Prof Jim Richards was appointed as one of 7 theme leaders and is responsible for the theme: Next Generation of Future Leaders.

@OATechNetwork oatechnetwork.org www.facebook.com/OATechNetwork

Key contact: Prof Jim Richards

COLLABORATIONS

Dr Hazel Roddam is currently working as an honorary academic consultant with the first state funded university for nursing, midwifery and allied healthcare in Germany (Hochschule fur Gesundheit, Bochum). Following Hazel’s initial invitation to work with their SLT programme team, she has since facilitated academic visits from their physiotherapy and midwifery teaching and research teams, which led to the signing of a formal memorandum of understanding between Bochum and UCLan’s Faculty of health and Wellbeing.

In September 2018 Hazel will chair the first co-hosted international conference between the two universities, with the theme of collaborative clinical-academic research across nursing, midwifery and health sciences.

Key contact: Dr Hazel Roddam

https://www.hs-gesundheit.de/en/standard/start/
**SELECTED SUCCESSFUL FUNDING 2016-7**

- **£121,500** Knowledge Transfer Partnership funding to use ideal sleep solutions, 2017.
- **£47,000** NIHR Health Education England (HEE) Integrated Clinical Academic Careers Programme evaluation project, 2017
- **£1,186,387** Osteoarthritis Technology Network Plus (OATech+): a multidisciplinary approach to the prevention and treatment of osteoarthritis, led by Cardiff University, 2017
- **£100,000** ReNeuron PISCES II trial: rehabilitation consultancy, 2016-2019
- **£2,460,020** UClan Innovation Clinic, £700,000 to AHRu, 2016
- **£30,000** Innovation voucher, sleep solutions with Silentnight, 2016
- **£110,000** Therapeutic cooling and pressure in the management of musculoskeletal injuries - Swellaway, 2016
- **$5,000** Exploration of the responders and non-responders to an OA shoe in normal individuals, DJO, 2016
- **£5,300** Comparison of conservative management methods for knee OA in South Africa, 2016
- **£20,000 pa** International R&D research centre at UClan, DJO inc, 2008-2016.
- **£3,000** Distinguished Visitor Award for Assoc Prof Cathy Stinear, University of Auckland, 2017
- **£5,000** NIHR Cochrane Review Incentive Awards: to complete update of Repetitive task training for improving functional ability after stroke Cochrane review, 2016
- **£385,745** NIHR Career Development Fellowship, Dec 2012-2016

- **£40,000** Salford Royal NHS Hospitals Trust Health inequalities in Multiple Sclerosis scoping review, 2016

**INVITED TALKS**

During 2016 and 2017 members of the AHRu have been invited to give talks at various conferences, forums and organisational events both nationally and internationally.

**LOUISE CONNELL**

Louise Connell has given invited keynote lectures and seminars in Canada, Australia and key Stroke events in 2016-17, including the UK Stroke Forum Conference 2017. In particular, Louise has given invited and keynote talks at:

- **Webinar** for British Columbia section of the national Neuroscience Division (BCNSD) of the Canadian Physiotherapy Association, Vancouver, BC, Canada, 2016.
- **Therapy Expo, Birmingham NEC. Balance in stroke rehabilitation**, 2016
- **Manchester ACPIN evening lecture. Getting evidence into practice: what we know from research. Physio.co.uk, Manchester, 2016.**

CLAHRC NWC event: Building a research career: a guide for aspiring clinical academics, 2016

UK Stroke Forum, Liverpool. Symposium on Gait and Mobility Rehabilitation, 2017

SMART STROKES10-11th August, Gold Coast, Australia, 2017.


HAZEL RODDAM

Hazel Roddam has given invited keynote lectures and seminars in 4 countries in 2016-17, in addition to 9 keynote presentations in UK for national professional associations. In particular Hazel has given keynote talks at:

- Society and College of Radiography National Conference, Newcastle University 27 Jan 2018
- University of Hertfordshire 25 Nov 2017
- Chartered Society of Physiotherapy National Conference, Liverpool 11 Nov 2017
- North West Clinical Librarians Training Group. Lancaster 8 Sept 2017
- Hazel with the first cohort of Speech and Language Therapy Masters students in Germany, June 2016

Newcastle University 19 July 2017

4th Speech Language Therapists’ Congress of Baltic States EAT SAFE, SPEAK BRAVE! Riga, Latvia 24 Feb 2017

National Hearing and Speech Institute Reykjavik, Iceland 25 Nov 2016

AKL ČR (Association of clinical SLT of Czech Republic) Otrokovice, Moravia 11 Nov 2016

University of Hradec Kralove Czech Republic 5 Nov 2016


RCSLT National Research Champions study day City University London 1 July 2016

Health Education England Integrated clinical academic internship residential conference Lancaster 8 June 2016

Finnish Association of Speech Therapists, Helsinki Finland 19 May 2016

British Dietetic Association annual conference, Preston 30 March 2016
JIM RICHARDS
Jim Richards has had over 50 invited talks, seminars and keynote talks in 18 countries across 5 continents in 2016-17. In particular, Jim has given keynote talks at:

- DJO International Sales Meeting, Rome, Italy, 2017
- Excellence in Healthcare: The Royal College of Physicians and Surgeons of Glasgow, 2017
- APAC distributor summit, Bangkok, Thailand, 2017
- Bangkok Academy of Sports Sciences and Chulalongkorn University, Thailand, 2017
- Malaysian Association of Sports Medicine & Faculty of Sports Science & Recreation (UiTM), KL, Malaysia, 2017
- Seminar: Does athletic taping and bracing of the knee actually do anything, Osaka, Japan, 2017
- Proprioception and knee surgeries a continuum of care, Seoul, S Korea, 2017
- Seminar: Does a Ladder Of Conservative Management For Knee OA Exist, Jeonju University, S Korea, 2017
- Seminar series: Clinical application IM sensors, Porto, Portugal, 2017
- ISB Symposium on Motor Control in Biomechanics. ACSM meeting in Boston, USA, 2016
- American College of Sports Medicine (ACSM) in Boston. USA. 2016
- International Society of Electrophysiology and Kinesiology, Chicago, USA, 2016
- International Congress on Sport Sciences Research and Technology Support iSPORTS, Porto, Portugal, 2016

Seminar series: Conservative Management in Patellofemoral Pain and knee osteoarthritis, Cape Town, Johannesburg, South Africa, 2017
Pain and its Origins, Diagnosis and Treatments

Patellofemoral Pain
An Evidence-Based Clinical Guide

James Selfe, DSc • Jessie Janssen, PhD
Michael Callaghan, PhD

Editors

NEW BOOKS 2016 -2018
2017


5. Oliver, Ben; Cheema, Sam; Dunbar, Amanda; Richards, James (2017). The reliability of a new functional balance protocol for use in sports requiring jump landing tasks. Physiotherapy Practice and Research, 38(2):79-85.2


40. Lackenbauer W and Janssen J Gallensteine als Ursache für muskulären Thorax-Schmerz: Ein
Fallbeispiel (Gallstones mimicking thoracic pain of muscular origin: A case report). Manuelle Therapie. Accepted


For more information please contact us at

JRichards@uclan.ac.uk

Or Follow Us on

@ProfJimRichards
@HazelRoddam1
@researchphysio
@UCLanPaST
@UCLanHealth