### An evaluation of the use of the pro forma as an effective tool for assessment of the patient by Musculoskeletal Physiotherapists.

Emily Goodlad H.C.P.C reg. Physiotherapist
Ph.D Student
Queen Margaret University
Edinburgh
egoodlad@qmu.ac.uk



### **BACKGROUND**

- The pro forma is a formal document used to standardize the collection or presentation of information
- In many institutions they are employed by physiotherapists, in the form of questionnaires; these are used to direct history taking and examination of patients presenting to musculoskeletal outpatient clinics
- Despite the perceived increase in the use of the pro forma in this context, their prevalence and effectiveness has never been formally assessed

### WHAT I HOPE TO ACHIEVE

### The aims of the project are:

- 1. To gain knowledge and understanding on the development and use of the pro forma in a variety of clinical settings
- To determine the current application of a pro forma in assessment of patients attending Musculoskeletal Outpatient Physiotherapy
- 3. To establish the views of Physiotherapists and patients on the use of the pro forma in a musculoskeletal outpatient setting
- 4. To investigate the effectiveness of pro formas in physiotherapy assessment of patients presenting to Musculoskeletal Outpatient Physiotherapy

### **HOW I HOPE TO ACHIEVE THIS**

#### **Experimental design:**

#### 1. Systematic review

 "An evaluation of the use of the pro forma as an effective tool for assessment of the patient by Musculoskeletal Physiotherapists"

#### 2. Interviews with Stakeholders

- Physiotherapy managers of Musculoskeletal (MSK) Outpatient departments (OPDs) in Health Boards across Scotland
- Physiotherapists working in MSK OPDs across Scotland, to include exploration of clinical reasoning process
- Patients receiving assessment in MSK OPDs across Scotland

#### 3. Observation

Physiotherapists in MSK OPDs assessing patients

#### 4. Retrospective study

 Compare clinical diagnosis of physiotherapist with final diagnosis following additional investigations

### WHY I APPLIED TO PPEF

PPEF has the objective of "Advancing education in the field of physiotherapy for the benefit of the public"

I believe my Ph.D investigations will meet this objective by better informing the physiotherapy profession on the use of the pro forma

As a consequence, this should help:

- Optimize the initial examination of patients presenting to musculoskeletal outpatient departments
- Improve management of patients presenting to musculoskeletal outpatient departments

### **DISSEMINATION**

As publications in peer reviewed journals throughout the course of my Ph.D. As platform presentations at professional conferences.

For further information please email; egoodlad@qmu.ac.uk

### Scottish Physio First Conference 2016

### PPEF Sponsored Main Lecturer Roger Kerry

Associate Professor University of Nottingham

### Lecture 1

### Cervical Arterial Dysfunction: Risk Management in Treating Neck Pain

Cervical Spine pre-treatment screening for arterial dysfunction: risks, benefits and differential diagnosis

### Lecture 2

# Whiplash Associated Disorder: Where Does the Evidence Leave Us?



The Scottish Physio First Conference Committee.

The implementation of Cognitive Functional Therapy (CFT), for patients from primary care with non-specific chronic low back pain (NSCLBP)

Ian Cowell MSc HCPC MACP is the recipient of the Private Physiotherapy Educational Foundation (PPEF) research award. This study forms the basis of his part-time PhD at Imperial college London.



i.cowell13@imperial.ac.uk www.brookphysio.co.uk

### **Supervisors**

- Professor Alison McGregor
- Dr Ged Murtagh

#### Collaborators

- Professor Peter O'Sullivan
- Dr Kieran O'Sullivan
- Associate Professor Veronika Schoebe
- Ross Poyton MSc HPC MACP

### Funding acknowledgments

- Private Physiotherapy Educational Foundation (PPEF)
- Musculoskeletal Association of Chartered Physiotherapists (MACP)



### Background to the study

- Cognitive Functional Therapy (CFT) is a stratified approach to low back pain (LBP) based on targeting patients underlying causal pain mechanisms (O'Sullivan, 2005) <a href="https://www.pain-ed.com">www.pain-ed.com</a>
- There are no studies that have investigated whether novice physiotherapists are capable of adopting the CFT system and the training requirements.



### Aims of the study

- To determine whether 10 physiotherapists, who have not been trained in CFT, can identify biopsycho-social factors that underpins the approach.
- To determine whether training in the CFT system will enable these physiotherapists to identify these bio-psycho-social factors.
- To identify the individual barriers to adopting a bio-psycho-social approach to examination and treatment.
- To evaluate the physiotherapists' competency and confidence in delivering the CFT intervention.



### Therapist evaluation methodology

- Physiotherapist's baseline data.
- 'Actual' and 'reported' clinical behaviour.
- Conversation analysis.
- Physiotherapist's individual beliefs around LBP and their confidence in treating it.
- Inter-therapist agreement in identifying the key targets for the CFT intervention.
- Semi-structured interviews



### Contribution to the educational development of neuromusculoskeletal physiotherapy

- To improve understanding of how best to train physiotherapists to integrate targeted physical and psychological approaches to treatment using CFT.
- To explore the clinical challenges and enhance the body of knowledge of how best to translate bio-psycho-social models into routine physiotherapy practice.
- 2 abstracts, from the pre-training data, will be presented at IFOMPT conference 2016 www. Ifomptconference.org







### Shoulder Injuries in Youth Rugby Union

Vincent Singh MSc BK MCSP
PhD Research Project Funded by PPEF





### Why did I apply?



- I have wanted to pursue a PhD for a long time and found that there were limited funding options available for part time study.
- A colleague suggested that there are good opportunities available from PPEF to fund individuals with their professional development.
- After reading through the criteria for the funding from PPEF I felt that my research would meet the criteria to be considered.





### What do I hope to achieve?





Incidence of shoulder injuries in community rugby players



Shoulder injury profile of youth rugby players



Identify shoulder risk factors in youth rugby players.



Shoulder injury risk factor reduction intervention.





### Update on progress



- Post graduate skills and training courses
- Development of a Rugby Shoulder Screening Protocol 2014-15
- Poster Presentation: Rugby Injury Prevention Conference June 2015
- Successful completion of transfer viva in July 2015
- Pilot Study: "Shoulder Injury Surveillance in Youth Rugby" 2015-16 season
- Publication: "Shoulder Injuries in English Community Rugby Union" Int J Sport Med 2016 (In Proof)
- In progress:
  - Reliability study of shoulder screen,
  - development of intervention for the 2016-17 season.





### Dissemination of research



### The research findings will be disseminated by:

- Publications of research
- Conference presentations
- Inform practice on injury epidemiology & prevention interventions
- Educate players, coaches, stakeholders & parents on how to reduce injury risk







# BIOMECHANICALLY DETERMINED INTERVENTIONS FOR PATELLOFEMORAL PAIN – A FEASIBILITY STUDY

Mr Simon Lack, Mr Trevor Prior, Dr Dylan Morrissey





### Feasibility

The feasibility objectives of this study are;

[1] test the methods and procedures of delivering a patient specific tailored intervention to be used on a larger scale trial.

[2] determine the feasibility of patient recruitment and retention within both the private and public sectors

[3] explore specific effects of tailored compared to untailored intervention to inform design of a larger scale trial.





### Patient Flow



Patient with PFP

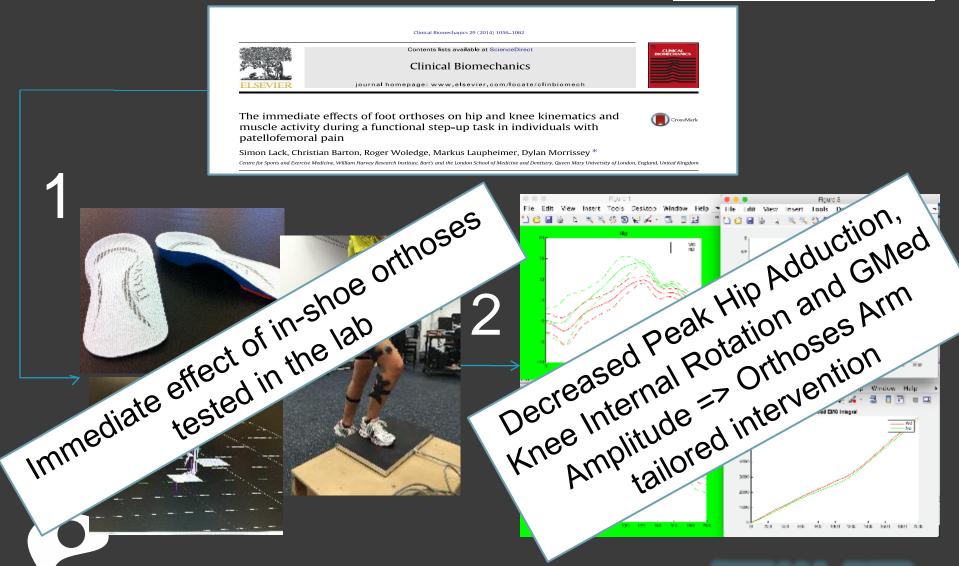
Initial Lab Testing Tailored OR
Untailored
Rx Delivered

8/52 Re-Test in Lab



### Tailoring Intervention





**pure**™ sports medicine #TEAM\_PFP

### **Provisional Results**



[1] Methods and procedures were feasible to be administered within both the NHS and PP [2] Recruitment rate was sufficient -10 participants were recruited over the 3 month trial period [3] Ongoing analysis is underway to explore mechanisms of effect







## Ultrasound tissue characterisation

Achilles and patella tendon studies funded by PPEF

### **PPEF**



The PPEF has co-funded the purchase of an Ultrasound tissues characterisation device for imaging tendons. The funding has been used to buy the unit and also allow a leading expert to come over and train us in its use.

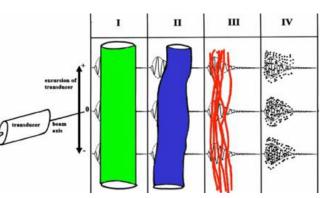
"We applied to the PPEF due to their regular calls for research submission and straight forward application process"



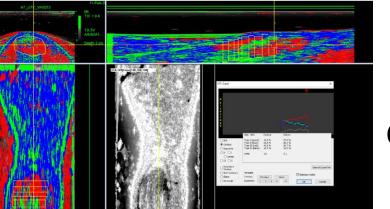
The UTC device analyse tendons in greater detail than any other method



The scanner uses a motordrive to move the US transducer



The images are stored and a computer algorithm determines whether the echopattern relates to good collagen (type I) or degraded areas (Type III and IV collagen).



The structure can then be quantified to allow further study

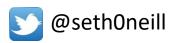
### UTC scanner projects will:



- Determine whether specific fascicles of the Achilles tendon are involved in tendinopathy – namely Soleus.
- Develop new insight into incidence rates of tendinopathy in high risk populations – Chronic Kidney disease, Diabetes, Armed forces, elite sports (football and rugby), Basketball, and badminton.
- Develop greater understanding around risk factors for tendinopathy (patella and Achilles) in these specific groups.
- Develop new knowledge about how activity alters tendon structure.
- Develop pioneering research about how genes affect tendon structure and how this affects the response to exercise.
- Develop knowledge about how different treatment regimes alter tendon structure after an Achilles tendon rupture
- Ultimately improving care for Achilles tendon ruptures.
- Use all of the above insights and a panel of world experts to develop both preventative and monitoring strategies and a reduction in occurrence rates in the distinct populations being investigated.
- Use this UTC unit to develop a research HUB in the Eastmidlands

### Current studies underway:

- Private Physiotherapy Educational Foundation
- We have 2 MSc physio students using the UTC scanner to determine reliability
- We have one iBSc student assessing validity of the UTC scanner using human cadaver tissue
- Rugby and premier football studies are due to start soon.
- Clinical outcome studies are underway.
- Research will be disseminated via publications, conferences and www.achillestendonresearch.com
- If you are interested in research and would like to complete tendon based studies please contact Seth via email so59@le.ac.uk

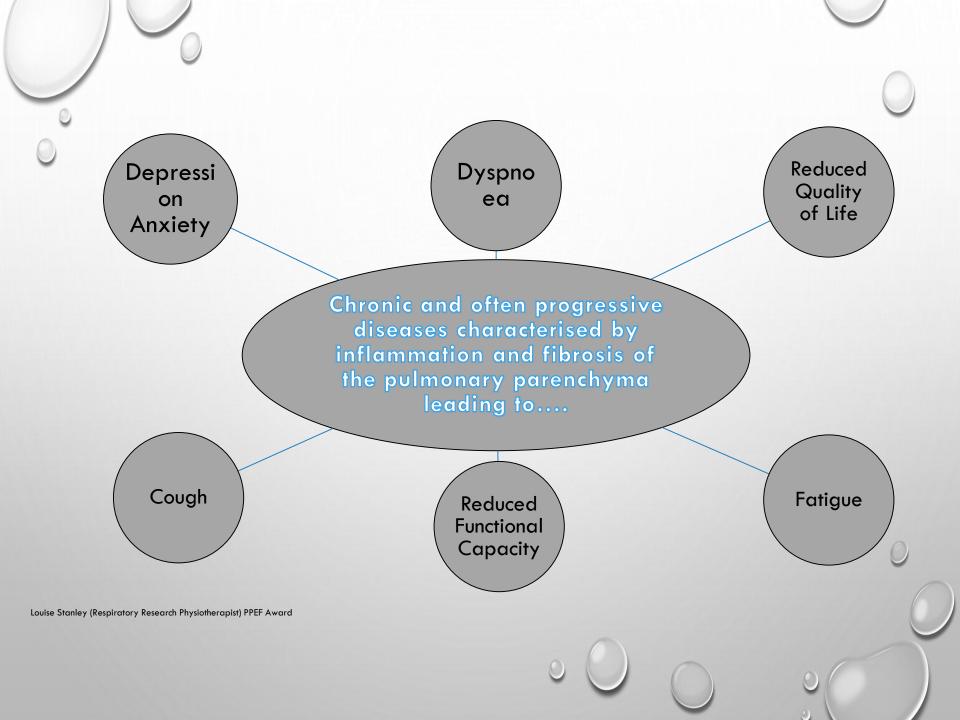




### THE INTERSTITIAL LUNG DISEASES

AN UNEXPLORED DISEASE AMONGST PHYSIOTHERAPISTS

Louise Stanley
Respiratory Research Physiotherapist
University Hospitals Southampton NHS Foundation Trust





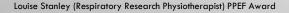
### **CURRENT SITUATION**

- Little evidence exists for the non pharmacological management of these conditions...minimal treatment options available to many ILD
- Strong recommendations for the initiation of best supportive care to offer symptomatic relief, particularly in fibratic ILDs.
- Prognosis for some ILDs namely idiopathic pulmonary fibrosis (IPF) worse than that of many cancers.
- Historically minimal involvement of respiratory physiotherapists in the management of ILDs

### ILD & PHYSIOTHERAPY....WHAT CAN WE OFFER

- Knowledge in management of dyspnoea
- Facilitation of ADL's
- Conditioning and exercise to increase functional capacity
- Opportunity to promote self management and enhance a patients quality of life

Need to expand our knowledge base as Physiotherapists in the field of ILD to better serve this patient cohort





### HOW THE PPEF HAS HELPED

- Supported an MSc module in ILD:
  - Output: a review paper to explore the supportive care needs of patients with idiopathic pulmonary fibrosis (ILD with worst prognosis), submitted to ERS 2016
  - Disseminated review at local ILD support group to patients & carers
- Above module contributed to the completion of a MRes in Clinical Research at University of Southampton
- Output from this module has been used as background to develop an ILD specific pulmonary rehab group and development of a research protocol currently awaiting ethical approval

"Feasibility and acceptability of a modified pulmonary rehabilitation program to an ILD cohort

Louise Stanley (Respiratory Research Physiotherapist) PPEF Award

### PPEF Award Ishmael Beckford





### About

Name: Ishmael Beckford

**Current Role**: Head of Private Services

(Crystal Palace Physio Group)

**Learning Activity**: MSc in Leadership and Management in Health (Kingston Business School, Kingston University London)

Length of course: 2 years

Course Structure: Modular, assignment based assessments + research

dissertation

**PPEF Funding Award**: £2000





# Why I applied?

# For funding:

- PPEF funding was a benefit I had access to as a Physio First member
- The application process was simple
- The available financial support was significant and valuable
- Had financial support not been available I would have not been able to undertake the training

To do a MSc in Leadership and Management in Health:

 Healthcare professionals are often very diligent in developing their clinical skills over years of practice. However, often the commitment to developing non-clinical skills such as management or business competencies proves secondary. To address this on a personal level I decided to apply to undertake this MSc which will support me to develop as a better manager and leader.



# What I hope to achieve?

### Improved knowledge and understanding of the following topics:

- Strategic Health Management and Governance
- Managing Health Services for Quality
- Leading People and Organisational Change in Health
- Health Services Marketing
- Managing Information in Health
- Financial Resource Management in Health
- Research Methods

### What do this mean in real terms?

- I want to improve my productivity
- Increasing my scope of practice
- Develop and improve my ability to manage and lead
- Be a better resource for my colleagues



# Where I hope to disseminate my learning?

- I will disseminate the findings of my course research project with my senior leadership team members via various mediums, with the intent of influencing practice at a senior management level.
- I will share management and leadership best practice with middle management team in my organisation via 1-1 training sessions.
- I contribute to the development of internal training programs and management competencies with our organisation's CPD lead and HR team.
- I will provide feedback for Physio First to use to promote leadership and management best practices in the Private Practice sector.



# Contact details



Ishmael Beckford BSc Dip. Ortho Med. BSc (soon to be + MSc!)

E: i.beckford@cppg.co.uk

**T:** 02087789050

LinkedIn: <a href="https://uk.linkedin.com/in/ishmael-beckford-">https://uk.linkedin.com/in/ishmael-beckford-</a>

a33b304



# Best practice guides to conservative management of Gluteal Tendinopathy & Plantar fasciopathy

Incorporating Level 1 evidence with expert clinical reasoning





# Combining systematic reviews & expert clinical reasoning

- Systematic review of randomised & non-randomised controlled trials for GTPS
- Systematic review of systematic reviews for plantar fasciopathy (PF)

### **PLUS**

 Interviews with world-leading experts in GTPS & PF on clinical reasoning to make the evidence come to life

→ Best Practice guide: a blend of Level 1 Evidence & Expert Clinical Reasoning

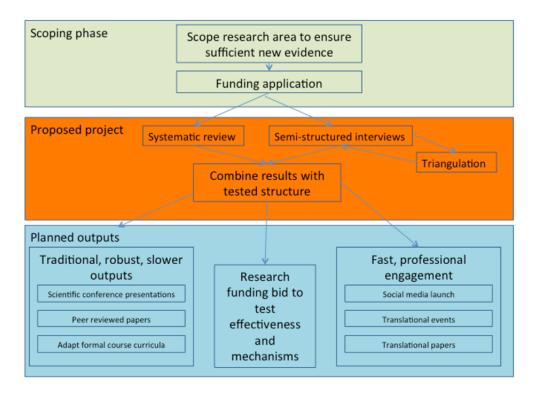








# Methods







- Best practice guides for GTPS & PF; like our PFP paper
- Level 1 Evidence Which interventions have been *proven* to be effective?
- Expert Clinical Reasoning How do we apply the evidence in the management of patients with GTPS & PF?

### Dissemination

- Scientific conference presentations & publications in peerreviewed journals
- Translational events, social media launch

## Follow-up

 Research bid to test hypotheses derived from the two studies



### The 'Best Practice Guide to Conservative Management of Patellofemoral Pain': incorporating level 1 evidence with expert clinical reasoning

Christian John Barton, 1,2,3,4 Simon Lack, 1 Steph Hemmings, 1 Saad Tufail, 1

Importance Patellofemoral pain (PFP) is both chronic and prevalent; it has complex aetiology and many rvative treatment options.

Objective Develop a comprehensive contemporary guide to conservative management of PFP outlining key considerations for clinicians to follow. Design Mixed methods.

Methods We santhesised the findings from six highematic reviews to September 2013 with the opinions of 17 experts obtained via semistructured rviews. Experts had at least 5 years clinical experienc with PFP as a specialist focus, were actively involved in PFF research and contributed to specialist international meetings. The interviews covered clinical reasoning, perception of current evidence and research prioritie Results Multimodal intervention including exercise to strengthen the gluteal and quadriceps musculature, manual therapy and taping possessed the strongest evidence. Evidence also supports use of foot orthoses and acupuncture. Interview transcript analysis identified 23 themes and 58 subthemes. Four key over-arching principle

multifactorial condition requiring an individually tailored multimodal approach. (2) Immediate pain relief should be a priority to gain patient trust. (3) Patient empowement by emphasising active over passive interventions is important. (4) Good patient education and activity modification is essential. Future research priorities include identifying risk factors, testing effective prevention, developing education strategies, evaluating the influence of psychosocial factors on treatment outcomes and how to address them, evaluating the efficacy of movement pattern retraining and nproving clinicians' assessment skills to facilitate optimal

to ensure effective management included—(1) PFP is a

Conclusions and relevance Effective management of conservative interventions. An individually tailored nultimodal intervention programme including gluteal and quadriceps strengthening, patellar taping and an emphasis on education and activity modification should be prescribed for patients with PFP. We provide a 'Best Practice Guide to

general practice, orthopaedic and sports set-tings. Pain is exacerbated by tasks which increase patellofemoral joint (PFJ) loading including

The condition affects a wide range of ages, ofter beginning in early adolescence.5 Between 71 and also increase the risk of developing patellofe

to PFP and these are discussed in more detail else-where. 10 11 As a result, various conservative interventions have been proposed and evaluated, includin tissue manipulation and acupuncture. et al<sup>13</sup> published a review of systematic reviews in 2008, which covered literature until 2007. Since 2007 a number of high-quality reviews covering cor ance for research and clinical practice. Thus, as quality systematic reviews is warranted.

source of concise and accurate information to guide evidence-based practice, limitations in relying solely early research findings due to stringent inclusion and equately address how best to apply findings clinically thus compromising external validity. In a preliminary study exploring experienced clinicians' clinical reasoning, a perceived lack of clinical applicability of research and systematic review findings was a primary barrier inhibiting evidence trans patient management. 14 This is particularly important for clinicians who are confronted with assessing and reating markedly heterogeneous patient pr tions and groups. To achieve optimal results, the clin ician must additionally consider their own clinical experience and, ideally, synthesised expert guidan alongside published evidence. 15 Methods are needed

This study combines findings from ical reasoning from clinicians considered as interquality education through the development of a

Barton CJ, et al. Br J Sports Med 2015:0:1-13. doi:10.1136/bisports-2014-09363

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# Our great Collaborators

**Prof Bill Vicenzino** 



Dr Michael Rathleff



Dr Alison Grimaldi



Trevor Prior, FCPodMed MChS



Dr Christian Barton



Dr Dylan Morrissey



Dr Peter Malliarias



Marinus Winters, MSc







# My name is Annina Schmid

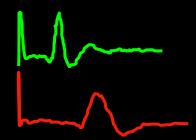


my research focusses on the role of small nerve fibres in patients with entrapment neuropathies

Entrapment neuropathies have been thought to mainly affect thick myelinated nerve fibres.

Hence, we rely on large fibre tests for their diagnosis.

# Electrodiagnostic tests



Reflex and strength tests

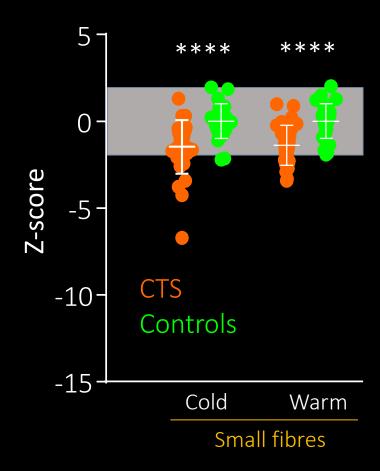


Light touch testing



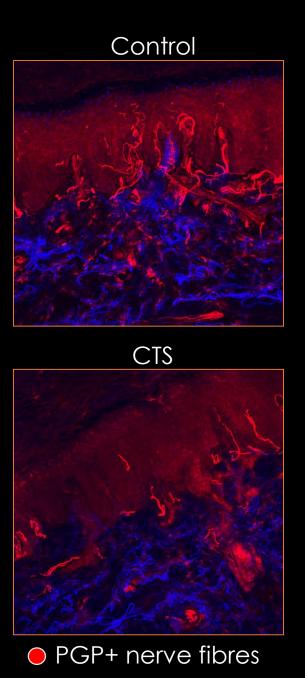
We have however shown that patients with carpal tunnel syndrome (CTS) have difficulties perceiving warm and cold sensations.

This suggests a dysfunction of small nerve fibres.



We have also shown that patients with CTS have less nerve fibres in their affected hand.

This suggests structural degeneration of small nerve fibres.



In 2015, the Private Physiotherapy Educational Foundation generously supported me to present my research at the Neuropathic Pain Conference in France...

...which allowed me to win the prize for the best poster©

Thank you PPEF!



# PPEF Sponsored Lectures at Physio First Conference 2016 16 – 17 April 2016, EMCC, Nottingham



Physio First, with the support of PPEF, are able to sponsor eminent international lecturers.

Professor Bill Vicenzino is a clinician scientist and Professor in Sports Physiotherapy and Director of Master of Physiotherapy (Musculoskeletal, Sports) at the University of Queensland, Australia.



Bill leads a team that has evaluated common and often frustrating musculoskeletal conditions such as chronic tennis elbow and patellofemoral pain.

The funding allows us to provide international speakers who will present evidence based management and cutting edge research, all of which can be implemented into clinical practice. The generosity of PPEF allows Conference to be delivered at a more affordable price.

# PPEF Sponsored Lectures at Physio First Conference 2016 16 – 17 April 2016, EMCC, Nottingham



Physio First, with the support of PPEF, are able to sponsor eminent international lecturers.

This year we have Professor Karim Khan, Karim is the Director of Research and Education at Aspetar Orthopaedic and Sports Medicine Hospital, Professor of Sports Medicine at the Department of Family Practice at the University of British Columbia, Vancouver, Canada and Deputy Director of the Centre for Hip Health and Mobility.



Karim's main research areas are in (i) exercise promotion for health (including bone health and falls prevention) and (ii) pathogenesis and imaging of tendinopathies.



# In Touch

### **Post Conference Edition**

Physio First, thanks to the support of PPEF, were able to publish articles by the speakers who have appeared at Conference in the 2015 Summer edition of In Touch

In Touch is produced quarterly with the post Conference edition themed specifically around the lectures and presentations given at that year's Annual Conference.

The objective of printing articles by our speakers is to give those members unable to attend Conference access to the content and assist in the development and maintenance of ongoing CPD

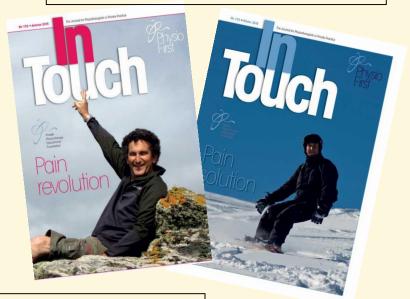
For more information about In Touch or to submit any material for publication please contact the Editor, Paul Johnson editor@physiofirst.org.uk





# In Touch

### Celebrating the work of Louis Gifford



Physio First, with the support of PPEF, dedicated the Autumn and Winter 2015 editions of In Touch to Louis Gifford

For more information about In Touch or to submit any material for publication please contact the Editor, Paul Johnson editor@physiofirst.org.uk The objective was to recognise Louis' contribution to our profession on the current thinking, and ongoing research into treating pain, both through his own work, and that of authors who recognised Louis' influence on their approach to the subject



# Physio First selected attendance at "Learning and Technology Skills Conference 2016"



Physio First, thanks to the support of PPEF, were able to attend the Learning and Technology Skills Conference in February 2016. This conference includes the learning industry's foremost speakers, thinkers, visionaries and practitioners.

Attendance at the largest conference of this type in the annual calendar provides Physio First with a unique opportunity to help us develop a coherent strategy to successfully share learning options with our members.





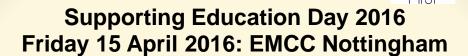
# Physio First selected attendance at WCPT in Singapore May 2015

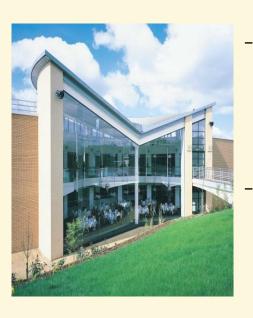


Physio First, thanks to the support of PPEF, had five representatives including Physio First Executive Officers and our Physio First General Secretary at this prestigious World Confederation of Physical Therapists Congress in Singapore.

Attendance assisted
Physio First in benchmarking
its educational strategy against
a host of other physiotherapy
organisations from around the
world. We were also able to
attend and participate in the
meeting of the International
Private Physical Therapy
Association (IPPTA).







- Education Day is always held the day before our Annual Conference to enable Physio First members to attend both events, thereby maximising their CPD opportunities.
- Attendance at both
  Education Day and
  Conference helps our
  members maximise their
  networking and Trade
  Exhibition opportunities.

Physio First have again been awarded monies from PPEF to underpin the shortfall between income and expenditure for Education Day 2016.

Physio First thanks PPEF for their support to enable us to deliver quality educational opportunities at Education Day which showcase newly created courses before they are integrated into the centrally-run programme.





# Physio First attendance at IFOMPT 2016 in Glasgow, Scotland



Physio First would like to thank PPEF for partial funding for our future attendance at International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT) at Glasgow, in July 2016.

Our attendance at this Conference will enable us to Showcase our Data for Impact Project as a platform presentation, a poster presentation and at a stand in the exhibition hall.

This also offered the opportunity for two members of our Executive Committee to attend the International Private Practitioners Association (IPPTA) which is due to take place at the IFOMPT Conference.



# Physio First's Website project

Physio First would like to thank PPEF for partial funding for our new website which will reposition our whole organisation through the Education of our members, non-members and the Public. This will enable us achieve our strategic intent to "Champion evidence based cost effective private physiotherapy with Physio First members in a changing healthcare marketplace."





# **Physio First Data for Impact**

Physio First would like to thank PPEF for the continued support of our Data for Impact project which is undertaken in collaboration with the University of Brighton.

We have developed a shortened web-based Standardised Data Collection Tool, especially for quick, easy, convenient and ongoing data collection within your private practice.



Data collection is crucial for us as individuals to demonstrate the efficacy of private physiotherapy, to benchmark our clinics against others, and to demonstrate our clinical effectiveness.

The **more** members participate, the **more** data sets we will have, and the **more** influence we can have in the healthcare marketplace.



# For further information on the PPEF please visit their stand or go to www.physiofirst.org.uk/ppef