



# Pain Research Institute

*This is the Pain Research Institute newsletter, the purpose of which is to keep researchers and clinicians informed of the current research going on in the institute. We hope this will enable clinicians to identify areas of research that they may be interested in whilst keeping informed about studies opening to recruitment as they may have pain patients they wish to refer.*

Dr. Andreas Goebel, Reader in Pain Medicine & Director of the PRI



Francis McGlone, Professor in Neuroscience, School of Natural Sciences & Psychology, Liverpool John Moores University



Dr. Bernhard Frank, Consultant in Pain Medicine and Anaesthesia  
Walton Centre NHS Foundation Trust



Selina Johnson, Pain Specialist Physiotherapist



Manohar Lal Sharma, Consultant in Pain Medicine, Walton Centre NHS Foundation Trust



Andy Marshall, Senior Lecturer and Honorary Consultant at Walton Centre



Francis O'Neill, Senior Lecturer and Honorary Consultant in Oral Surgery



Helen Poole, Reader in Applied Health Psychology, Liverpool John Moores University



Serena Sensi, Research Technician at the Rheumatology Laboratory, University Hospital Aintree



Hannah Twiddy, Specialist Clinical Psychologist & Research Lead for Pain Management Programmes



Hayley McCullough, PRI Administrator



After a 6 month break in recruitment due to covid-19 we are pleased to announce that we are ready to recommence. Following the risk assessment that has been set out by the trust for users of the Clinical Sciences Building we have set procedures to ensure the safety of our participants & staff.

- The rooms which will be used have all been deep cleaned & hand gel is provided in each room also
- Face masks & hand gel will be provided upon entry to the building
  - All rooms will be cleaned in-between patient visits & temperature checks will take place before any appointment starts
- The building will operate a one way system for entry & exit for those participating in trials & study
- A receptionist will be based at the front desk & patients are to report to her on arrival

## Research Studies... a few to mention

- A Qualitative Study into the experiences of patients being assessed for, and attending, an online Pain Management Programme during the Covid-19 Pandemic-  
[Christian.Ainsley@thewaltoncentre.nhs.uk](mailto:Christian.Ainsley@thewaltoncentre.nhs.uk)
- Serum IgG autoantibodies in patients with Fibromyalgia-We require 100 patients with a diagnoses of FMS (>1year), without other conditions, we will be collecting blood to be used in laboratory experiments. **Principal investigator at** [andreasgoebel@rocketmail.com](mailto:andreasgoebel@rocketmail.com)
- Doctorate Clinical Psychology trainee project- Understanding Perceptions around Forming & Maintaining Intimate Relationships for Women and Chronic Pelvic Pain . **Principal Investigator** [Hannah.Twiddy@thewaltoncentre.nhs.uk](mailto:Hannah.Twiddy@thewaltoncentre.nhs.uk)
- Investigating Diabetic Neuropathy During Initiation of Intensive Glycaemic Control
- The Utility of Non-Invasive Ocular Imaging in Diabetic Foot Disease
- A Multicentre, double-blind, centre-stratified multi-period crossover trial to evaluate the efficiency of the Optimal Pathway for Treating neuropathic pain in Diabetes Mellitus (OPTION-DM)
- **Pain Relief Foundation Studentship**-A study looking into validity of confocal corneal microscopy in patients with painful chemotherapy induced and idiopathic small fibre neuropathy.

**For more information on all of the above studies please contact the Principal Investigator on** [Ualam@Liverpool.ac.uk](mailto:Ualam@Liverpool.ac.uk)

- A study for long term benefit of Spinal Cord Stimulator –Principal Investigator  
[Bernhard.frank@thewaltoncentre.nhs.uk](mailto:Bernhard.frank@thewaltoncentre.nhs.uk)



Pain Relief Foundation are pleased to announce that 2021 new round of grant applications is now open. The available grants have been publicised online with ResearchResearch.com, University of Liverpool & other University press letters. The closing date for applications is 19<sup>th</sup> February 2021 . Please contact Julie Williams on 0151-529-5820 or email [Julie.Williams@painrelieffoundation.org.uk](mailto:Julie.Williams@painrelieffoundation.org.uk) to request an application form



## Spotlight article

This month we would like to aim the spotlight at Dr Manohar Sharma- Consultant in pain medicine at the Walton Centre NHS Foundation Trust. Dr Sharma has been in post for over 15 years and the last 12 months has been the most unusual time due to the Covid-19 pandemic.

### **Pain Neuromodulation**

The Walton Centre has been involved in Reactiv8 Implant to strengthen the back muscles (multifidus muscles) to improve chronic lower back pain. This implantable device includes a wire (lead) with electrodes stimulations nerves controlling the back muscles. These wires are powered by an implanted battery which last about 5 years. We now have prospectively collected outcome data over 24 months 12 patients. Overall there has been a positive outcome in several patients with an improved level of pain, physical activity & satisfaction with the treatment. In these cases otherwise pain relief options are limited. Another large multicenter randomised sham controlled trial has now demonstrated significant improvement in lower back pain comparing active treatment with Reactiv8. Therefore the food and Drugs Administration (FDA) has given approval for Reactiv8 Implant to be used to help mechanical back pain as a safe & clinically effective treatment. This new treatment is now available in the UK on the National Health Service in several leading pain clinics.

The Walton Centre is currently working on developing a patient care pathway to implement this highly specialised treatment by selecting appropriate cases that are likely to benefit most from this new implantable treatment to help sufferers of chronic mechanical lower back pain

A number of other research projects on spinal cord stimulation technique with other pain units are awaiting resumption of research activity due to COVID-19 pandemic.

### **Cancer Pain**

2020 had an excellent start for the year with organization of an interdisciplinary study day to treat refractory cancer pain with neuroablative techniques. Around 50 national and international delegates attended to share their expertise. Live videos of interventional cancer pain techniques including cordotomy, spinal neuroablative blocks and neurosurgical techniques including thalamotomy were presented. The focus was on practical technical aspects so that delegate can refine their skills as otherwise opportunities to learn are scarce. This generated huge interest and discussion benefitting all attendees. The Faculty was from across the world and some presenting via remote video link.

The National Cervical cordotomy Registry for which The Walton Centre contributed the data for the last several years has now been published with the outcomes showing significant improvement in pain as well as significant reduction in the amount of pain killers required to manage refractory pain with better quality of life. The Walton Centre has published its own prospective outcome results following cordotomy for the period of two years with multimodal evaluation.

Another ongoing study with cervical cordotomy is evaluating the neurophysiological effects of cordotomy to correlate with structural lesion location and size with pain relief demonstrated by the patients.

The award winning Cancer Pain Handbook is undergoing further update for the second edition and is due for publication by Oxford University Press in 2021.

### **Spinal pain**

A large multicenter randomized trial (NERVES trial) comparing clinical outcomes and cost effectiveness following surgical microdiscectomy and nerve root injection (epidural) has concluded. In a large series of cases with persistent sciatica of less than 12 month duration has demonstrated significant surgery sparing benefit of nerve root epidural steroid injections over 12 months evaluation period. The study has now been submitted for publication and is likely to influence national pathway for management of sciatica.

Another large multicenter trial to evaluate clinical and cost effectiveness of lumbar denervation (RADICAL trial) is about to start and is in the initial stages. There has been some delay due to the COVID19 pandemic. However, this study is likely to be a key in the field of pain medicine to assess the utility or lack of utility of lumbar radiofrequency denervation treatment for back pain which is currently offered as a routine on the National Health Service but is under threat of decommissioning due to concerns over its evidence.

### **A few contributions to publications over the last 12 months is as below and several of these are in peer reviewed Journals.**

1. Manish Gupta and Manohar L. Sharma. Percutaneous cervical cordotomy for cancer-related pain. Anaesthesia and Intensive care medicine; 2019; <https://doi.org/10.1016/j.mpaic.2019.07.021>
2. Manohar Sharma and Kate Marley. Prospective evaluation of cancer-related pain referrals at a Tertiary Pain and Palliative Medicine Clinic in Liverpool. British Pain Society Pain News 2019.
3. S Gupta, M Sharma. Survey of Awareness of the Guidelines Published by the FPM and BPS. British Journal of Pain 2019; 13: supplement 2, pages 5-6:  
<https://journals.sagepub.com/doi/pdf/10.1177/2049463719865408>
4. Andrew G Marshall, Manohar L Sharma, Kate Marley, Hakan Olausson, Francis P McGlone. Spinal signaling of C-fiber mediated pleasant touch in humans. eLife 2019; 8:e51642. DOI: <https://doi.org/10.7554/eLife.51642>
5. S Gupta, M Sharma. Awareness of the Guidelines Published by the FPM and BPS: A National Survey of Pain Medicine Consultants. British Pain Society Pain News. Pain News, December 2019, Volume 17(4), Page 184-187
6. Sanjeeva Gupta, MD and Manohar Sharma, MD. Interventional Pain Medicine Practice in the UK and the USA: A Survey of 242 Pain Physicians. Pain Physician 2020; 23:127-134 • ISSN 1533-3159
7. Dr A Gulve, Dr G Baranidharan, Prof S Eldabe, Dr M Sharma, Miss S Bojanic, Dr V Mehta, Prof J Fitzgerald, Dr S Thomson. Guidance on Resumption of Neuromodulation Services during the COVID-19 Recovery Phase. NSUKI July 2020



## 8th Liverpool Regional CRPS Networking study day 2020

In September we held the 8th Liverpool regional networking CRPS study day which we aimed at mostly Dr's & trainees in pain medicine. This event was held via a virtual platform and was awarded 2.5 CPD points by RCoA

We have been keeping the publications section on our web page as up to date as possible. Keep checking for the updates at  
<https://www.liverpool.ac.uk/pain-research-institute/our-research/publications/>



### Pain Relief Foundation Social Group

Do you fancy a chat & a cuppa with those who also suffer with chronic pain?

Come & join us on the Last Thursday of every month at PRF, 2<sup>nd</sup> floor, Clinical Sciences building, L9 7AL.

Contact Jo Stephens on 0151-529-5820 for more info

We are looking for **healthy volunteers** between the ages of 30-65 to participate in our Fibromyalgia research project-APIF (Autoimmunity informed Phenotyping in Fibromyalgia Syndrome). The purpose of this research is to understand more about patients skin sensitivity & temperature preference & how this might link to the immune system. We have recently found autoimmune antibodies in Fibromyalgia & this research builds upon that. We need 30 healthy volunteers to help generate a baseline for our sensory tests & to provide blood samples which we can use as a control in our laboratory experiments. Taking part involves meeting with one of the research team for a few questions, some sensory tests & a blood sample. The appt will last 45 min-1 hour. If you're interested in volunteering then please contact [Hayley.McCullough@liv.ac.uk](mailto:Hayley.McCullough@liv.ac.uk)

