

George's Academic Training (GAT) Newsletter

DECEMBER 2019

The GAT webpages have migrated to the new SGUL website and can be found here.

Please let the GAT team know if you have suggestions for additions/improvements to the webpages.



Welcome to Dr Camilla Clarke, NIHR CL in Neurology

My PhD was in social cognition and how it breaks down in behavioural variant frontotemporal dementia, a dementia that predominantly targets personality, leaving memory relatively spared. My lectureship was awarded to investigate social cognition in the traumatic brain injury cohort. This disease group similarly experience destruction of their emotional and social functioning, with significant ramifications for family, work colleagues and wider society. One commonly reported and concerning symptom is angry behavioural outbursts. My first project will investigate the patients' ability to accurately interpret their own internal body states (interoception), including under physiological stress and to what extent this explains the failure to regulate their emotional states. If interoception is found to play a key role in their emotional dysregulation, novel treatment options focusing on this ability may be effective.



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GAT Research Taster Day

George's Academic Training held a very successful Research Training workshop in the Teaching labs on Friday 30th September. Clinical academic trainees had the opportunity to meet Researchers who they can develop research projects with. There was a wide range of projects on offer, including plant biotechnology, cardiology, pain assessment, joint injection, imaging and virtual surgical simulation techniques.

Feedback from the course included:

- "Well organized, good lunch provided"
- "Great day"

"Good talks about what research groups are doing"

Due to the success of the workshop, a further workshop is planned for 2020 and will also welcome medical students.

Here are some photographs from the event.











News from our academic foundation programme doctors

We receive a fixed annual income to our Small Grant Fund from the Isaac Schapera Research Trust to support research conducted during Academic Foundation Programme years.

Three of our AFP doctors have made successful applications to the fund and here are their reports:-



Along with his colleagues Dr Thomas MacKinnon Academic Foundation Programme Year 2 doctor presented a poster at the AMEE conference (International Association for Medical Education) 2019 in Vienna

As a junior doctor passionate about both medical education and academic research, it was a fantastic opportunity to be able to attend the AMEE conference (International Association for Medical Education) 2019 in Vienna. With my colleagues, I was able to help showcase data assessing the efficacy of an alternative and novel sign-based teaching format for clinical finals examinations which we had trialled at a 1-day teaching course for over 200 medical students. Using the positive and constructive feedback gained from this poster presentation, I plan to help lead our team in organising a further 3 courses this year for final year students (including our students here at St George's), gain further feedback for analysis, and ultimately hope to publish our findings in a peer reviewed medical education journal.

Dr Alysha Bhatti Academic Foundation Programme Year 2 doctor presented a poster at the Heart Rhythm Congress in Birmingham

The Heart Rhythm Congress (HRC) took place at the International Convention Centre in Birmingham this year. The conference united healthcare professionals, patients and caregivers alike through a programme of talks, interactive workshops and exhibitions. I was awarded the GAT small grant fund to attend HRC this year and present work I had undertaken with the St George's Cardiology Clinical Academic Group. We presented five posters relating to various aspects of ablation therapy in the treatment of atrial fibrillation, and whether it increased the risk of developing pulmonary hypertension. Presenting at the conference gave me the opportunity to network with cardiologists and contribute to, and learn from, discussions relating to current research.

In addition, there were a multitude of excellent talks throughout the day. In particular, I enjoyed talks on risk stratification of syncope in A&E, stroke prevention in atrial fibrillation and the discovery of new familial cardiomyopathies.

In between talks, I attended the exhibition area, where health technology companies promoted and displayed a plethora of wearable devices for arrythmia



monitoring. This offered a great opportunity to try out some of the wearable tech and appreciate how advances in technology are helping to capture arrythmias and facilitate earlier treatment.

My experience at the HRC was both enjoyable and educational, and through exposure to clinical cases, landmark trials, guideline updates and latest advances, I have garnered an interest in the field. Gaining insight into the diversity of research currently being undertaken was inspiring, and the conference has been valuable in furthering my career interest in cardiology.

News from our academic foundation programme doctors

Dr Louis Dwyer-Hemmings, Academic Foundation Programme Year 1 doctor attended the Operative Skills in Plastic Surgery (OSIPS) course at Chelsea and Westminster Hospital

Internal fixation and external splinting are integral techniques in the management of fractures, especially of the hand. These were two skills taught on the Operative Skills in Plastic Surgery (OSIPS) course, held at Chelsea and Westminster Hospital, and I am grateful for the small grant GAT provided for this. The course was attended to capacity, and as a Foundation Year 1 Doctor, I was one of the more junior delegates. The day was packed with several skill workshops, teaching a range of operative skills: hand fracture fixation with plates and screws; safe immobilisation with fibreglass splints; tendon repair techniques; local skin flap design; and microsurgical skills. The faculty were a mixture of orthopaedic and plastic surgical trainees, overseen by a consultant hand surgeon. They provided excellent real-time feedback which made the course an ideal opportunity to learn from experienced clinicians.

This course will not only aid my clinical practice by teaching invaluable skills, but will also contribute to my academic development. During my academic placement, I plan on trialling a virtual reality surgical simulation curriculum, and attending this course has provided invaluable insight into the composition and execution of a successful practical workshop. It has also taught me essential principles of orthopaedic surgery, which will help with construction of the curriculum. I would highly recommend the course to any junior doctors who are interested in surgery, or would like to learn practical skills useful in emergency or acute general medicine.







Research Skills & Methods Series 2020



We are pleased to announce that the GAT team are again running the research skills and methods training series called '*Research Aware*' in 2020.

- Each session is eligible for self-assessed CPD points
- 1 2hr training sessions to introduce skills & considerations for healthcare research involvement.
- Delivered by experts in research skills & methods across St George's University of London, St George's Healthcare NHS Trust and Faculty of Health, Social Care & Education
- Open to all, and of particular relevance to clinicians and allied health professionals who are:
 - interested in doing research and potentially developing their own projects
 - active researchers who wish to build, broaden or refresh their knowledge

Session titles

- Systematic Review
- How to Read a Research Paper
- Epidemiological Research Introduction
- Epidemiological Research Workshop
- Patient and Public Involvement (PPI) in Research: An Introduction
- ▶ Patient and Public Involvement (PPI) in Research: Best Practice Workshop
- ➡ Significance of Significance
- Getting a Handle on Data: Data Protection, Management and Open Data
- Meta-Analysis: What and Why?
- How to Write a Fellowship Application
- Communicating your Research

For full details and to reserve a place please <u>visit the Research Aware web page</u> or contact Mathew Paul: mpaul@sgul.ac.uk.

News from our trainees

Joseph Westaby – Cardiac Risk in the Young Clinical Research Fellow/PhD student

Joe was appointed as an academic clinical fellow and histopathology specialist registrar at St George's back in 2016. Since then, he has worked under the supervision of Professor Mary N Sheppard undertaking research into sudden cardiac death.

Joe is now registered for a full time PhD at St George's, University of London and has been successfully awarded five years' worth of funding by the charity, Cardiac Risk in the Young. Three years funding will go towards the PhD and a further two will go towards a post which is split 50:50 with the cellular pathology department within St George's Hospital.

Joe's PhD is entitled "Is cardiac innervation altered in the inherited cardiomyopathies? A quantitative histological study". Joe is using immunohistochemistry, slide scanning and digital image analysis to establish whether differences are seen in the nerves in the different cardiomyopathies: hypertrophic cardiomyopathy, dilated cardiomyopathy and arrhythmogenic cardiomyopathy. This will be supplemented by three dimensional image analysis using tissue clearing, immunolabelling and light sheet microscopy.

Joe has recently returned from a trip to Los Angeles to present at the International Society for Autonomic Neuroscience 2019 conference at the University of California, Los Angeles. Joe presented on cardiac innervation in the normal heart demonstrating through immunohistochemistry that the myocardium is richly innervated with small nerve endings lying in close contact with myocytes.

The conference covered a wide variety of cardiac research specifically aimed at the development of new neuromodulatory therapeutic techniques to treat arrhythmia. This is a novel rapidly developing field which is hugely exciting to be a part of. A particular highlight was a presentation on the use of transcutaneous electrical stimulation of the vagus nerve to reduce atrial fibrillation burden.

During the trip Joe was able to meet with his collaborators, including Professor Shivkumar, who have kindly agreed to help analyse the data Joe plans to produce from his three dimensional tissue analysis.

This trip was funded by the academic clinical fellowship bursary and Joe would like to thank both the National Institute of Clinical Research and those who run the Academic Clinical Fellowship scheme at St George's for enabling the visit.



Photo with Professor Drew Armour who first mapped the ganglionated plexi of the heart.

Meet Dr Kirstie Coxon



<u>Kirstie</u> is an Associate Professor (Research) based in the Department of Midwifery in the Joint Faculty. Her research is based in maternity care, often in relation to service delivery and models of care, and she has expertise in qualitative narrative methods, mixed methods and qualitative evidence syntheses.

Kirstie has been based in the joint Faculty of Health, Social Care and Education since March 2017. She is the course director for the MRes (Clinical Research) programme, and for the HEE internship and pre-doctoral bridging programmes hosted at St George's. Together with Dr Nidhi Sofat, Kirstie is co-director for the new St George's <u>PG Cert in Healthcare Research Skills and Methods</u>, which is in its inaugural year, with students from a range of disciplines attending.

As well as research and teaching, Kirstie is very involved in research capacity development – supporting clinicians who are interested in research into clinical academic careers. She is an NIHR Advocate for clinical careers, and also the Training Lead for the NIHR South London Applied Research Collaboration (NIHR ARC - sign up for the ARC newsletter here if interested in applied research opportunities <u>https://www.arc-sl.nihr.ac.uk/</u>). She has recently been awarded a place on the NIHR Future Leaders programme.

News from Felicity Knights, Academic Clinical Fellow in General Practice (ST3)

Felicity attended the Royal College of General Practitioners 's 2019 Annual Conference which took place in Liverpool, 24 - 26 October 2019. Here is her report:-



I took part in the RCGP's Dragon's Den 'event': The RCGP International global health competition, which, like the popular BBC TV series of the same name, set up quickfire pitching of global health projects to be judged by 'dragons' from the RCGP international executive and community. There was a call for submissions prior to conference and the top five submissions competed for the title of 'Best Global Health Project', which I was awarded along

with a cash prize of £500 towards the project I presented.

This project was an initiative to deliver quality improvement training and associated 'toolkits' to support South African colleagues to improve care in their own setting, particularly based around a piece of work I did on improving the spread of nosocomial TB during my time working in South Africa, prior to commencing GP training.

