



2022 in retrospect



2022 marked the year when things begin to get back to normal work-wise after the pandemic. We returned to the office (although not quite as often as we used to) and began to travel to scientific conferences and meetings again. In the coming year we will have a strong representation at several national and international meetings in the fields of rheumatology and chronic pain. The group has been in an expansion phase this year and we welcomed new members of staff across several projects. We will continue to recruit more staff, particularly research fellows, during 2023.

One large project change is that I took on the role of Codirector of the Medical Research Council/Versus Arthritis Centre for Musculoskeletal Health and Work at the beginning of 2022 and this coming year the centre administration will move here. The focus is on maximising the impact of work conducted within the Centre and about securing its longer-term future. This coming year will also be

about delivering on our Advanced Pain Discovery Platform programs and project: CAPE, CRIISP and CHIPP which seek to understand the role of early life adversity on chronic pain in adults; psychosocial influences on pain onset and outcome; and the role of public health interventions on reducing the burden of chronic pain.

An important contributor to our success is the growing influence of our patient partners and the tremendous work which our team has done in establishing the group and enabling their contribution to expand. The quality of the patient partner work undertaken was recognised in an award at the Health Services Research Conference in 2022 to a team which involved Rosemary Hollick.



Of course, we will have the ongoing challenges we have faced during the seventeen years the group has existed in its current form, namely maintaining our success attracting funds for research, developing new collaborations to address priority areas, continuing to evolve our courses for external audiences and attracting the best researchers to work with our group. We will of course continue to rise to these challenges

Professor Gary J Macfarlane Professor of Epidemiology and Head of the Epidemiology Group

PhD Congratulations

Dr Stefanie Doebl



We are delighted to be able to recognise the fantastic achievements of members of our team, past and present, who successfully obtained their doctorates in 2022!

Congratulations firstly go to former group member Stefanie Doebl, who received her PhD in 2022 on the basis of her thesis 'Towards Better Healthcare Delivery for Fibromyalgia: Learning from People's Experiences' which provided key research contributions to the PACFIND programme. Stefanie picked up several awards during her

PhD including the 2020 British Federation of Women Graduates Johnstone & Florence Stoney Prize and the inaugural Images of Research competition hosted by the Postgraduate Research School at the University of Aberdeen. Stefania is currently working with Public Health Scotland, and we wish her all the best in her future.

We are also delighted to extent a hearty congratulations to team members who had previously completed their PhD studies at other institutions, but who successfully gained their doctorate in 2022. Please see our "Staff ins and outs" for further details.

We are exceptionally proud of all our staff, both past and present, who gained their doctorate in 2022, and whether they remain with the group or have now moved on elsewhere we are sure these achievements will put them in great standing for their future careers either in or outside of academia.



Staff ins and outs

The year 2022 has been a year of expansion and we welcomed several new staff members to join the team across various roles ...

Rebecca Parr

Rebecca joined the group at the beginning of January 2022, to work on the UK Antimicrobial Registry (UKAR). Rebecca has over 15 years' experience in laboratory-based scientific research in anti-cancer therapeutics, working for a big pharmaceutical company (Pfizer) and small biotech companies. She recently received her PhD for her work on 'The identification of High Affinity Antibodies and Development of their Potential use in Real Time Monitoring of Local Anaesthetic Targets during Surgery', which was conducted at the University of Aberdeen.

In addition to developing her academic skill set, the PhD provided insight into the world of healthcare, inspiring Rebecca to move into a different area of health science. Rebecca has thoroughly enjoyed working as part of the UKAR team as Assistant Study Coordinator and has learnt a great deal about the legal and ethical governance surrounding research studies. Rebecca has embraced every learning opportunity over the past year and hopes to grow and contribute more to the Epidemiology Group as we move forward into 2023.

Jisha Babu



Jisha joined the Epidemiology Group in January 2022 after she and her family relocated from Dubai to Aberdeen. She assists in planning group meetings and events at various venues while serving as the administration coordinator for the entire epidemiology department. She will be delivering administration associated activities for the CAPE (Consortium Against Pain InEquality) research project, which is about the impact of adverse childhood experiences on chronic pain and responses to treatment. Jisha recently finished her GCP training and is already offering administrative support for other research projects, like QUICK. She has enjoyed her time working with the group and looks forward to expanding her role with every new learning opportunity.

Kate Timmins

Kate started with the Epidemiology Group in January to work on the CAPE (Consortium Against Pain InEquality) project. Since graduating with a Joint Interdisciplinary MRC/ESRC funded PhD in Nutritional Epidemiology from the University of Leeds, she has enjoyed a varied research career, working in the epidemiology of obesity, osteoarthritis, and injuries, at the Universities of Leeds, Nottingham, and Lincoln. She has also lectured on research methods and statistics, physical activity, and nutrition. As a Research Fellow for CAPE, she is looking forward to applying epidemiology methods to investigate the relationship between adverse childhood experiences (ACEs) and chronic pain in adulthood.







Martin Stevens

Martin was really pleased to join the epidemiology group in February 2022 from the MRC Epidemiology Unit in Southampton. The transition felt natural as he knew some of the team already from his PhD based in the Centre for Musculoskeletal Health and Work and was keen to continue this theme of research. He qualified for his PhD in January for his mixed-methods research investigating 'The role of modifiable work-related factors in retirement decisions' using data analysis from the University of Southampton and CMHW's 'Health and Employment After Fifty' (HEAF). Martin's work is based on the QUICK and PACFIND studies where he works as a predominantly qualitative researcher. Martin works remotely, living in Devon and is enjoying visits to Aberdeen and being part of the group.

Amber Guest

Amber joined the Epidemiology Group in March 2022 as a Research Assistant and became a Research Fellow in August upon gaining her doctorate. She has completed her PhD in August 2022, with her thesis 'Assessing the implementation of a multicomponent health intervention in truck drivers and its interaction with psychophysiological responses to stress' based on work conducted at the Loughborough University. Amber has been working on the CRIISP project which aims to understand how psychosocial factors may influence chronic pain and the Making it Work project which aims to support people with musculoskeletal conditions in Scotland to remain in work. In her free time, Amber enjoys walking her dog and going on adventures in her campervan.







Jay joined the Epidemiology Group in September. Before this he completed 2 years of Computer Science at Robert Gordon University (RGU) where received his Diploma of Higher Education in Computing. Shortly after leaving RGU Jay was hired on a temporary contract by The University of Aberdeen's Centre for Healthcare and Randomised Trials (CHaRT) as an Admin Assistant where he worked on a variety of studies doing data entry, archiving, and auditing. Shortly after the CHaRT contract expired, Jay joined the UKAR study team as a project assistant where he continues to develop his understanding of epidemiological research. Outside of work, Jay enjoys spending his time weightlifting at the gym and playing boardgames on the weekends with his friends.

Dalia Aljohani

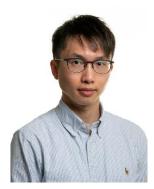
Dalia Aljohani is a first-year PhD student with the Epidemiology Group. Her research project is entitled 'Postoperative Persistent Opioid Use'. In addition, she is a Lecturer in Anaesthesia at Prince Sultan Military College of Health Sciences in Saudi Arabia. She is working with her supervisor Professor Patrice Forget, on pain management research.

She had completed her anaesthesia training at King Abdulaziz Airbase Hospital in Saudi Arabia and University and Rehabilitations Kliniken Hospital in Germany. After that, she started postgraduate studies in Managing Care in Perioperative and Anaesthesia Practice at Cardiff University. Her Master's dissertation focused on the 'Views, Experiences, and Challenges of Anaesthesia Practitioners on Parental Presence During the Induction of



Anaesthesia in Children'. Through her PhD project, she hopes to provide her and clinical practice with more knowledge and comprehension of opioid pain treatment.





... and a fond farewell to Ka Kin Lam

We also said goodbye to Ka Kin Lam, who had joined the group in 2021 as a Research Fellow carrying out data analysis work on the PACFiND project. Ka-Kin returned home to Hong Kong in November 2022, and we thank him for the hard work and dedication he gave to the Epi team and wish him all the best in his future career.

Research summary

Very much back to work properly after two years disrupted by COVID, 2022 was a successful year for the Epidemiology Group with over 40 papers published or in press. Several of our large studies were able to expand back to normal capacity – the British Society for Rheumatology Psoriatic Arthritis Register (BSR-PsA) is continuing recruitment following a slowdown over lockdown and in November recruited the highest monthly number of patients since February 2020.

Preparations for the UK Antimicrobial Registry (<u>UKAR</u>) are underway, and we are on the cusp of commencing recruitment, just getting the final research governance permissions in place. This large study that will capture real-world usage of recently licensed antimicrobial agents, and how they are being utilised in clinical practice. Effective antimicrobial stewardship is key in the fight against antimicrobial resistance, and the study will comprise a key element of surveillance of the use of antimicrobial agents.

2022 saw the birth of the Pain AND Opioids after Surgery (<u>PANDOS</u>) Research Group of the European Society of Anaesthesiology and Intensive Care (ESAIC), coordinated in Aberdeen, whose first objective is the PANDOS study, aimed at improving the quality and safety of postoperative pain management.

Finally, it was great to get back to face-to-face conferences, and the Epidemiology Group had good presence at several national / international meetings, including:

- British Society for Rheumatology (BSR) Annual Scientific Meeting (Glasgow)
- 20th International Vasculitis and ANCA Workshop (Dublin)
- European Alliance of Associations for Rheumatology (EULAR) Annual Scientific Meeting (Copenhagen)
- 12th Congress of the European Pain Federation (EFIC) (Dublin)
- International Association of the Study of Pain (IASP) World Pain Congress (Toronto)
- American College of Rheumatology (ACR) Convergence 2022 (Philadelphia)



Study Updates

DyNAMISM

Do Non-steroidal Anti-inflammatory drugs (NSAIDs) reduce the appearance of sacroiliac joint bone marrow oedema on MRI, in spondyloarthritis?



The DyNAMISM study, ongoing for over 5 yearss, came to an end in 2022.

In rheumatology, MRI evidence of sacroiliitis (inflammation in the sacroiliac joints) is used to assist disease diagnosis and classification in axial spondyloarthritis (axSpA). Because of their widespread availability, and low cost, many patients are already commonly taking non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen before their first present to rheumatology. It is possible that these anti-inflammatory drugs are masking the appearance on inflammation on MRI, and thus making it more difficult to make a correct diagnosis.

We identified 150 patients with MRI evidence of sacroiliitis 1-2wks after stopping their NSAID medication. After restarting, they underwent a second MRI, when around one-quarter showed resolution of the inflammation. These findings suggest that in around 1 in 4 individuals with axSpA NSAIDs can influence the appearance of sacroiliitis. This has important implications for axSpA diagnosis and classification. Based on these results we would recommend that patients with axSpA (or suspected axSpA) should stop taking NSAID medication 1-2wks before any MRI scan, so that accurate scan results can be achieved.

Making it Work™ - Scotland

Supporting people with musculoskeletal disorders in Scotland to remain in work: adapting the Making it Work™ intervention developed for people with inflammatory arthritis in Canada

Musculoskeletal conditions affect around 1 in 3 Scottish adults and have a substantial impact on individuals' work. There is a lack of services supporting individuals with long-term conditions who wish to remain working.

Making it Work™ is a largely online programme which was developed SCOTLAND in Canada to support individuals with inflammatory arthritis (such as rheumatoid arthritis) to stay in work for as long as they wish to do so. The programme helped individuals in Canada to feel more capable of meeting their work demands and reduced the likelihood of sickness absence. Making it Work™ - Scotland plans to adapt this programme to make it suitable for a wider range of inflammatory and non-inflammatory conditions, as well as making changes to make it fit for the Scottish context, and the variety of working situations people are now working in (e.g. zero-hours contracts, multiple part-time jobs).

To inform these changes, we have already carried out a series of focus groups with patients, healthcare professionals, and employers to understand their ideas on changes that would be required. We are now beginning to outline these content-based changes against the original programme materials. We are also working to identify presentation aspects of the programme to adapt to help give it a modern look and feel. We will be working with graphics and eLearning experts to make these changes this year. Once we have made these content- and presentation-based changes, we will get feedback from patients on the adapted programme. We will also carry out a further round of focus groups with healthcare professionals and people working within third sector organisations (e.g. charities) to explore how the programme could be delivered in Scotland.

You can read more about the study at: https://www.abdn.ac.uk/making-it-work-2147.php



Patient and Public Involvement (PPI) group



About the Epi PPI Group

The Epidemiology Group has a well-established PPI group at the heart of its commitment to PPI. This group meets regularly to discuss a variety of study issues with the research team, and to feed back their lived experience to help guide our work. The group currently consist of 10 people with a variety of experiences of living with different musculoskeletal conditions. You can find out more about our PPI group members here: Meet the Group

Sometimes we need advice on a single issue or document from a study, so we may have an online meeting where we discuss something in depth. However, at other times we work together on email, perhaps for some quick feedback on a discrete issue or to get broader input into our research. For this, we also maintain a list of people who wish to be kept up to date with PPI and other research opportunities within the group; we call this our 'PPI Pool'. Pool members are contacted from time to time to ask for feedback on a specific issue, or to offer opportunities to get involved further with our research. Pool members also receive regular newsletter updates keeping them up to date on research from within the Epidemiology group. If you would like to get involved in our PPI Pool, you can fill out an Expression of Interest form here, indicating your preferences of involvement, and we will add your name to the list.

Highlights from 2022

In 2022 our team was able to build upon the great work we had done establishing the PPI group in 2021, and so far, our 'core' members have been involved in providing some insightful suggestions and feedback on a range of issues from ethical considerations surrounding the use of opioids after surgery, to the use of electronic consent mechanisms in studies, to the design and development of new research courses. We also were able to secure some funding from the School of Medicine, Medical Sciences and Nutrition's ISSF Patient and Public Involvement Fund in order to design and develop a series of training seminars for our PPI partners, and we look forward to rolling this out in 2023. We have also been able to provide a number of opportunities during 2022 to our broader PPI 'pool', and have received important feedback on study design, documentation, and have also been able to offer several opportunities to participate in our research studies for those who have expressed an interest.

Find out more, and get involved!

If you would like to find out more about PPI within the Epidemiology Group, you can visit our PPI web pages here.

We are very grateful to Laura, Karen, Stuart and Elaine for taking the PPI group forward. If you would like any further information, you can contact the PPI Team at epippi@abdn.ac.uk



Short Course in Applied Epidemiology - Cardiff



In addition to our annual Intensive Course in Applied Epidemiology returning to a face-to-face format last year, our team were glad to be invited to take our course on the road in 2022.

In May we were invited by Public Health Wales to provide their staff members with a grounding in epidemiological research methods. After making all the necessary preparations, Gary, Gareth, and Stuart headed to the wonderful city of Cardiff, where they were joined by an assembled group of healthcare professionals, analysts and data scientists from the public health body for the five-day intensive course covering a wide range of topics in the field of epidemiological study design and conduct. Rosemary also joined the event later in the week for a session on qualitative research methods, and Dr James Galloway travelled from King's College London to present sessions on randomised controlled trials and the use of disease registries in epidemiological research. We also made use of inhouse virtual technologies to beam in Dr Jess Butler all the way from Aberdeen, as she presented a very engaging session on the use of 'big data' for our course delegates.

All in all, it was a fantastic week, and our attendees gave us some very positive feedback on their experiences of the course. We look forward to further opportunities in the future to 'take our show on the road' and working with researchers across the UK and, hopefully, beyond!





Social Activities

The year saw the return to more normal working patterns after Covid-19 restrictions were eased. Gladly, this made it easier to get together in person, boosting camaraderie and providing a warm welcome to several new colleagues.

Cake club returned with gusto (pun intended), although remote staff still had to provide their own sweet treats for our weekly meetings. Those of us in the office sampled everything from local specialities - rowies, empire biscuits - to lighter-than-cloud cakes and (swiftly melting) ice creams.

In May, there was a trip to Westburn Park bowls pavilion during our 'in-office week', where we showed off our skills in precision aim (some of us, at least!). Early summer also saw our group represented by two teams of keen steppers in the Step Count Challenge (www.stepcount.org.uk): Randomised Controlled Trails, and Not Fast, Just Furious. By the end of June, the latter group stole the lead with an impressive 3,417,978 steps (182nd position overall), with Randomised Controlled Trails not far behind with 3,138, 810. Between them, we estimated they covered more than 2900 miles, or almost walked the equivalent of three return trips from Aberdeen to Bristol.





The Social Committee was re-invigorated in September with a bolstered team, regular meetings, and plenty of enthusiasm. First on the agenda for Laura, Jisha, Stuart, Rebecca, Karen, and Kate were some festive activities for December. The biggest Epidemiology Group Christmas outing in a couple of years, 19 of us braved the snow to meet at All Bar One in early December. The Christmas theme continued with a mince pie taste test (congratulations, Mr Kipling) and Secret Santa, featuring some eclectic treasures from this year's charity shop challenge. Finally, to round off the year, Stuart challenged us all with an online Christmas-flavoured quiz. Jisha, Gareth, Martin, and Maureen were the winning team, impressing us with their knowledge of languages and dingbats.

We began the year celebrating Stefanie's PhD success, but then sadly, later in the year we also bid a fond farewell to Stefanie as well as Ka-Kin, with hybrid get-togethers to wish them all the best for the future, accompanied (predictably) by treats to share one last time.

Despite more opportunity for in-person socialising this year, we maintained a social connection online with our remote and hybrid colleagues, sharing snowy views, pet antics, garden bounty and biscuits from around the world. We're looking forward to continuing our social endeavours, in person and online, with plenty of ideas for 2023.





Articles and grants

Published / accepted manuscripts from 2022

- Bachmair et al. Remotely delivered cognitive behavioural and personalised exercise interventions for fatigue severity and impact in inflammatory rheumatic diseases (LIFT): a multicentre, randomised, controlled, openlabel, parallel-group trial. Lancet Rheumatology 2022; 8: E534-45. https://doi.org/10.1016/S2665-9913(22)00156-4
- 2. Barke et al. Why do we need to implement the ICD-11? When pain science and practice meet policies. *Eur J Pain 2022*; 26: 2003-5. https://doi.org/10.1002/ejp.2015
- 3. Bennett et al. Remotely delivered cognitive-behavioural and personalized exercise interventions to lessen the impact of fatigue: a qualitative evaluation. *Rheumatol Adv Pract 2022*; 6. https://doi.org/10.1093/rap/rkac051
- 4. Bourgonjon et al. Anaesthesia for elite athletes. *Eur J Anaesthesiol* 2022; 39: 825-34. https://doi.org/10.1097/EJA.0000000000001719
- 5. Christiansen et al. European bio-naïve spondyloarthritis patients initiating TNF inhibitor: time trends in baseline characteristics, treatment retention and response. *Rheumatology (Oxford)* 2022; 61: 3799-807. https://doi.org/10.1093/rheumatology/keab945
- 6. Clemes et al. The effectiveness of the Structured Health Intervention For Truckers (SHIFT): a cluster randomised controlled trial (RCT). *BMC Med* 2022; 20: 195. https://doi.org/10.1186/s12916-022-02372-7
- 7. Drosos et al. EULAR recommendations for cardiovascular risk management in rheumatic and musculoskeletal diseases, including systemic lupus erythematosus and antiphospholipid syndrome. *Annals of the Rheumatic Diseases* 2022; 81: 768-79. https://doi.org/10.1136/annrheumdis-2021-221733
- 8. Flamée et al. ST-Segment elevation, Brugada Syndrome, and Propofol? Is this the only thing we should be noticing? *JACC Case Rep* 2022; 4: 111–2. https://doi.org/10.1016/j.jaccas.2021.11.020
- 9. Forget et al. System-level policies on appropriate opioid use, a multi-stakeholder consensus. *BMC Health Serv Res* 2022; 22; 329. https://doi.org/10.1186/s12913-022-07696-x
- 10. Forget. Implementing opioid-free anaesthesia to improve pain management? *Anaesth Crit Care Pain Med* 2022; 41: 101109. https://doi.org/10.1016/j.accpm.2022.101109
- 11. Forget. Opioid-free anaesthesia by total intravenous anaesthesia techniques may be alternative to remifentanil. *BMJ* 2022; 378: o2071. https://doi.org/10.1136/bmj.o2071
- 12. Forget. Prescribing and deprescribing opioids. Pain 2022; 163: 1-2.
- 13. Forget. To better appraise (un)certainty in systematic reviews, useful approaches exist. A comment on Moore et al. *Eur J Pain* 2022; 26: 1179-80. https://doi.org/10.1002/ejp.1929
- 14. Gardner et al. Opioid prescription following wrist and ankle fracture fixation in Scotland tradition prevails. *J Clin Med* 2022; 11: 468. https://doi.org/10.3390/jcm11020468



- 15. Guest et al. Attenuated cardiovascular reactivity to acute psychological stress predicts future fatigue symptoms in truck drivers. *J Occup Environ Med* 2022. doi:10.1097/JOM.000000000002715.
- Guest et al. The structured health intervention for truckers (SHIFT) cluster randomised controlled trial: a mixed methods process evaluation. Int J Behav Nutr Phys Act 2022; 19: 79. https://doi.org/10.1186/s12966-022-01316-x
- 17. Hublet et al. Opioid-free versus opioid-based anesthesia in pancreatic surgery. *BMC Anesthesiol* 2022; 22. https://doi.org/10.1186/s12871-021-01551-y
- 18. Jones et al. The occurrence and characteristics of severe pain in patients with axial spondyloarthritis. *medRxiv* 2022. https://doi.org/10.1101/2022.01.31.22270160
- 19. Karimi et al. Association between alcohol consumption and chronic pain: a systematic review and meta-analysis. *British Journal of Anaesthesia* 2022; 129: 355e365. https://doi.org/10.1016/j.bja.2022.03.010
- 20. Kundakci et al. International, multidisciplinary Delphi consensus recommendations on non-pharmacological interventions for fibromyalgia. *Semin Arthritis Rheum* 2022; 57: 152101. https://doi.org/10.1016/j.semarthrit.2022.152101
- 21. Laidlaw and Hollick. Values and value in patient and public involvement: moving beyond methods. *Future Healthc J* 2022; 9: 238-42. https://doi.org/10.7861/fhj.2022-0108
- 22. Lefrant et al. Peace, not war in Ukraine or anywhere else, please. *Editorial Anaesth Crit Care Pain Med* 2022; 41: 101068. Https://doi.org/10.1016/j.accpm.2022.101068
- 23. Lefrant et al. The journal Anesthesia & Resuscitation (ANREA): novelties and a new impetus. *Anesthesia & Resuscitation* 2022; 8: 1-3.
- 24. Macfarlane et al. The risk of inflammatory bowel disease in patients with axial spondyloarthritis treated with biologic agents: BSRBR-AS and meta-analysis. *J Rheumatol* 2022. https://doi.org/10.3899/jrheum.211034
- 25. Maclaren et al. Understanding recruitment and retention of doctors in rural Scotland: stakeholder perspectives. *Geogr J* 2022; 188: 261–76. https://doi.org/10.1111/geoj.12439
- 26. McKeigue et al. Risk of severe COVID-19 in patients with inflammatory rheumatic diseases treated with immunosuppressive therapy in Scotland. *Scand J Rheumatol* 2022; 1-6. https://doi.org/10.1080/03009742.2022.2063376
- 27. Michelsen et al. Real-world six- and twelve-month drug retention, remission, and response rates of secukinumab in 2,017 patients with psoriatic arthritis in thirteen European countries. *Arthritis Care Res* 2022; 74: 1205-18. https://doi.org/10.1002/acr.24560
- 28. Mokini et al. Anesthetics and long-term cancer outcomes: may epigenetics be the key for pancreatic cancer? *Medicina (Kaunas)* 2022; 58: 1102. https://doi.org/10.3390/medicina58081102
- 29. Mokini et al. Metoclopramide and Propofol to prevent nausea and vomiting during Cesarean section under spinal anesthesia: a randomized, placebo-controlled, double-blind trial. *J Clin Med* 2022; 11: 110. https://doi.org/10.3390/jcm11010110



- 30. Morton et al. Enabling work participation for people with musculoskeletal conditions: lessons from work changes imposed by COVID-19: a mixed-method study. *BMJ Open* 2022; 12: e057919. http://dx.doi.org/10.1136/bmjopen-2021-057919
- 31. Morton et al. Lessons from experiences of accessing healthcare during the pandemic for remobilizing rheumatology services: a national mixed methods study. *Rheumatol Adv Pract* 2022; 6: rkac013. https://doi.org/10.1093/rap/rkac013
- 32. Neilson et al. Generating EQ-5D-5L health utility scores from BASDAI and BASFI: a mapping study in patients with axial spondyloarthritis using longitudinal UK registry data. *Eur J Health Econ* 2022; 23: 1357-69. https://doi.org/10.1007/s10198-022-01429-x
- 33. PAIN OUT Research Group Jena et al. Status quo of pain-related patient-reported outcomes and perioperative pain management in 10,415 patients from 10 countries: Analysis of registry data. *Eur J Pain* 2022; 26: 2120-40. https://doi.org/10.1002/ejp.2024
- 34. Parsons et al. The impact of Covid-19 on research into work and health. *Occup Med (Lond)* 2022; kqac080. https://doi.org/10.1093/occmed/kqac080
- 35. Smith et al. Immunological Insights into opioid-free anaesthesia in oncological surgery: a scoping review. *Curr Oncol Rep* 2022; 24: 1327-36. https://doi.org/10.1007/s11912-022-01300-5
- 36. Thomas et al. Pain and opioid-induced gut microbial dysbiosis. *Biomedicines* 2022; 10: 1815. https://doi.org/10.3390/biomedicines10081815
- 37. Tucker et al. The 2022 British Society for Rheumatology guideline for the treatment of psoriatic arthritis with biologic and targeted synthetic DMARDs. *Rheumatology (Oxford)* 2022; 61: e255-66. https://doi.org/10.1093/rheumatology/keac295
- 38. Uitenbosch et al. Expert multinational consensus statement for total intravenous anaesthesia (TIVA) using the Delphi Method. *J Clin Med* 2022; 11: 3486. https://doi.org/10.3390/jcm11123486
- 39. Van de Velde et al. A new ESAIC open access journal. *European Journal of Anaesthesiology and Intensive Care* 1: e001. https://doi.org/10.1097/EA9.0000000000000001
- 40. van der Merwe et al. Postoperative outcomes associated with procedural sedation conducted by physician and nonphysician anesthesia providers: findings from the prospective, observational African Surgical Outcomes Study. *Anesth Analg* 2022; 135: 250-263. https://doi.org/10.1213/ANE.0000000000005819
- 41. Wainwright et al. Beliefs about worry and pain amongst adolescents with and without chronic pain. *J Pediatr Psychol* 2022; 47: 432-45. https://doi.org/10.1093/jpepsy/jsab109
- 42. Wainwright et al. Trainee doctors' perceptions of the surgeon stereotype and its impact on professional identification: a qualitative study. *BMC Med Educ* 2022; 22: 702. https://doi.org/10.1186/s12909-022-03765-1
- 43. Walker-Bone et al. Morbidities among older workers and work exit: the HEAF cohort. *Occup Med (Lond)* 2022; 72: 470-7. https://doi.org/10.1093/occmed/kqac068



44. Wilson et al. UK healthcare services for people with fibromyalgia: results from two web-based national surveys (the PACFiND study). *BMC Health Serv* Res 2022; 22: 989. https://doi.org/10.1186/s12913-022-08324-4

Grants awarded from 2022

- 1. MRC £998,989. High impact chronic pain and UK Biobank: presentation, transitions and targets for intervention.
- 2. NIHR £267,779. Behaviour change techniques and theoretical mechanisms within psychological interventions seeking to improve work outcomes amongst individuals with chronic pain: a systematic review and network meta-analysis.
- 3. ISSF £22,000. The role of early life experiences on chronic pain reporting in children and adults.
- 4. ISSF £12,596. The DyNAMISM study engineering / demonstrating impact.
- 5. NHS Grampian Endowment Fund £10, 796. What helps people with musculoskeletal pain stay in the labour market, if they are self-employed, precarious or portfolio workers? Patients' and first contact practitioners' views.
- 6. ISFF £12,215. Successful transition from school to post-school occupations for young people with persistent pain.
- 7. Patrice selected to coordinate and chair the PANDOS European Society of Anaesthesiology and Intensive Care (ESAIC) Research Group, with a budget of €10,000 per year. This Research Group is an official endorsement for three years and will support projects and people working on postoperative pain.



Top ten most cited publications

Ordered by average citations per years:

1. EULAR revised recommendations for the management of fibromyalgia (2017), Macfarlane et al. Annals of the Rheumatic Diseases, 76 (2), pp. 318-328.

Cited 588 times (118 average citations per year)

2. Prevalence of chronic pain in the UK: A systematic review and meta-analysis of population studies (2016), Fayaz et al. BMJ Open, 6 (6), art. no. e010364

Cited 525 times (88 average citations per year)

3. Global prevalence of ankylosing spondylitis (2014), Dean et al.

Rheumatology, 53 (4), art. no. ket387, pp. 650-657.

Cited 371 times (47 average citations per year)

4. AAPT Diagnostic Criteria for Fibromyalgia (2019) Arnold et al.

Journal of Pain 20(6) pp.611-28

Cited 135 times (45 average citations per year)

5. The prevalence of fibromyalgia in the general population: A comparison of the American College of Rheumatology 1990, 2010, and modified 2010 classification criteria (2015), Jones et al. Arthritis and Rheumatology, 67 (2), pp. 568-575.

Cited 257 times (37 average citations per year)

6. Defining chronic pain in epidemiological studies: a systematic review and meta-analysis (2017), Steingrímsdóttir et al.

Pain. 2017; 158(11): 2092-2107.

Cited 139 times (28 average citations per year)

7.

Risk of recurrent stillbirth: systematic review and meta-analysis (2015), Lamont K et al. BMJ. 2015; 350: h3080.

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8. Adverse events in childhood and chronic widespread pain in adult life: Results from the 1958 British Birth Cohort Study (2009), Jones et al.

Pain. 2009 May; 143(1-2): 92-6.

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9. The epidemiology of multiple somatic symptoms (2012), Creed FH et al.

J Psychosom Res. 2012; 72(4): 311-7

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10. Persons with chronic widespread pain experience excess mortality: Longitudinal results from UK Biobank and meta-Analysis (2017) Macfarlane et al.

Annals of the Rheumatic Diseases. 76(11), 1815-1822

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Top ten publications by Altmetric score

1.



Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans

British Journal of Surgery, June 2020

2.



Remotely delivered cognitive behavioural and personalised exercise interventions for fatigue severity and impact in inflammatory rheumatic diseases (LIFT): a multicentre, randomised, controlled, open-label, parallel-group trial **The Lancet Rheumatology**, August 2022

3.



Global prevalence of ankylosing spondylitis **Rheumatology**, December 2013

4.



Impact of COVID-19 on opioid use in those awaiting hip and knee arthroplasty: a retrospective cohort study

BMJ Quality & Safety, September 2021

5.



Maternal and neonatal outcomes after caesarean delivery in the African Surgical Outcomes Study: a 7-day prospective observational cohort study

The Lancet Global Health, April 2019

6.



Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies

BMJ Open, June 2016

7.



Perioperative patient outcomes in the African Surgical Outcomes Study: a 7-day prospective observational cohort study

The Lancet, April 2018

8.

9.



Accelerated surgery versus standard care in hip fracture (HIP ATTACK): an international, randomised, controlled trial **The Lancet**, February 2020



EULAR revised recommendations for the management of fibromyalgia **Annals of the Rheumatic Diseases**, July 2016

10.



Mortality after surgery in Europe: a 7 day cohort study **The Lancet**, September 2012



Staff and Students 2023

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Dr Stephen Bridgman, Honorary Senior Lecturer

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Research Fellow Ms Lili Xu.