There were a number of notable events in 2019. On the research front our second five-year programme, as part of the MRC/Versus Arthritis Centre for Musculoskeletal Health and Work, commenced and we are looking forward to working with colleagues at The University of Southampton and other centres in delivering on this exciting programme to help people with arthritis who wish to stay in employment. At the beginning of the year, PACFiND (a 5-year programme grant designing optimal health services for people with fibromyalgia) commenced, and we have made excellent progress in terms of surveying people with the condition and conducting interviews to understand their perspectives on the healthcare they have received and would like. Meanwhile the British Society for Rheumatology (BSR) register in Psoriatic Arthritis (PsA) has made excellent progress this year, now recruiting across 40 centres in Great Britain and having recently exceeded the 500 participant mark. It has also been a very good year for new grants, such that we have led or been involved in new grants awarded of £3 million and the total amount of funds held in Aberdeen from our live grants is £7.5 million.

On the personnel front, we welcomed Professor Patrice Forget to the group as Clinical Chair in Anaesthesia. Patrice has research interests which include the use of opioids for pain in a post-operative setting.

This newsletter provides a taste of our activities during the past year – while we look forward to new adventures in 2020!

Professor Gary J Macfarlane, Head of the Epidemiology Group and Dean of Interdisciplinary Research and Impact
During 2019 we welcomed the following to our team ...

**Patrice Forget**

Patrice joined the group in 2019 as Clinical Chair in Anaesthesia. He is involved in clinical research, focused mainly on postoperative outcomes, such as pain, opioid use, cancer outcomes and mortality, including within epidemiological and public health perspectives.

![Patrice Forget](image1)

**Ovidiu Rotariu**

Ovidiu joined the Epidemiology Group in February 2019 as a Research Assistant. He is a bi-lingual scientist with a successful track record of 25 years of active involvement in applied research delivering significant contributions to a variety of research-led public health projects, related to the epidemiology of gastrointestinal pathogens including *Campylobacter, E.coli O157* and *Listeria monocytogenes*. Main contributor to scientific reports on microbiological food safety published by Food Standards Scotland and the European EFSA report on *Listeria monocytogenes* in ready-to-eat foods.

![Ovidiu Rotariu](image2)

**Stuart Anderson**

Stuart joined the team in February 2018 as a project assistant for the MAmMOTH study after having previously worked as a field interviewer for Scotcen social research. He is currently providing administrative support for the MAmMOTH and PACFiND studies, as well as maintaining the group website.

![Stuart Anderson](image3)
Taalke Sitter

Taalke joined the Epidemiology Group in September 2019. She is a Public Health undergraduate from the University of Bremen in Germany and is doing a 6 months internship with the group.

Renke Biallas

Renke joined the Epidemiology Group in September 2019 as a visiting student from the Germany. He is doing a research internship with the group as part of his Master’s program in Public Health at the LMU – Munich.

Jonathan Lock

Jonny joined the department in April as a Research Assistant after graduating with a Master’s degree from the London School of Hygiene and Tropical Medicine in 2018. Initially working on BSR-PsA and FRESKO studies, in November Jonny switched roles and joined the BSR-PsA study as an Assistant Study Coordinator (maternity cover), working on the establishment of the biobank and setting up several research sites.
Lisa Shearer

Lisa joined the department in October as the Administrator for Epidemiology, having worked within NHS Grampian as an Assistant Manager before taking a career break. She has a BA, BSc Hons and is currently completing a BSc in Sports Science and Therapy to compliment her coaching qualifications.

but we also said goodbye to ....

Kathryn Martin (who transferred to Primary Care), Neil Basu (to the University of Glasgow), Ioana Stanciu (who left to undertake a PhD at the University of Glasgow) and of course Giles O’Donovan (who left to take up a position with the Health Services Research Unit)
Update on Studies

PACFiND is a project aimed at improving healthcare for people with fibromyalgia. We kicked off 2019 with a meeting of the investigative team. Researchers and patients, pictured above, met in Aberdeen in February.

Over the summer, we collected survey responses from 425 people in Scotland. The survey allowed us to identify people with a diagnosis of fibromyalgia. We now have permission to link data from that survey to patients’ medical records.
Stefanie Doebl has been travelling all over Scotland to interview fibromyalgia patients. Patients talked to her on video about their experiences of healthcare for fibromyalgia. These videos will be available on a section of the healthtalk website (www.healthtalk.org).

From September to December, we ran an online survey mapping NHS services. Over 1500 healthcare professionals told us about healthcare for fibromyalgia in their region.

Laura Moir joined the PACFiND team to coordinate Patient Partner activities in October. She is now assembling the first Patient Partner Involvement Group. This group will help in planning regional case studies of services for next year.

Marcus Beasley, PACFiND Study Co-ordinator

Providing optimal care for people with musculoskeletal conditions living in rural settings

A significant proportion of the UK population live in a rural setting; almost 20% of the population in Scotland and England, 30% in Wales and almost one third of people in Northern Ireland. There is a perception of a rural idyll, with more green space, higher employment and lower crime rates. However, rurality is complex and there is increasing recognition of hidden socio-economic deprivation in rural areas. Living in a rural setting shapes decisions as to how and when people access health care, and their experiences of care. Delivering specialist, multi-disciplinary services for people with chronic conditions living in rural settings presents particular challenges. There is some evidence of poorer outcomes in certain conditions such as cancer, although evidence in musculoskeletal disease remains sparse.

In September 2019, Rosemary Hollick and Gary Macfarlane, in conjunction with Versus Arthritis, convened a workshop that brought together patients, care providers, researchers and representatives from Versus Arthritis. We considered what we currently knew and did not know about care in rural settings, our vision for the future and priorities and actions to achieve this.

Our patient partners strongly expressed the importance of developing sustainable services that deliver equitable outcomes for all, not matter where they live. Key themes and priority areas for action were identified and the full report from the workshop will be available in early 2020. A steering group will then be convened to identify how the various activities can be coordinated and resourced.

A note from staff abroad: “When you go, will you send back a letter from America .....”

As part of my Foundation Fellowship Versus Arthritis, I am being supported to gain training, undertake research, and build collaborative networks in the USA. Although my official home while here is the University of Michigan in Ann Arbor, the past year has been punctuated by research-related travel. Attendance at the American Pain Society meeting in Milwaukee, Wisconsin (America’s Dairyland – see the conference photo!) allowed me to share findings from a study of factors on the pathway between sleep and pain. Later in the year, I had the opportunity
to present a session at the American College of Rheumatology Annual Scientific meeting in Atlanta, Georgia, highlighting the importance of assessing sleep in the rheumatology context. It was really important to me that the ‘patient voice’ was represented at this talk, and was very pleased to work with Eileen Davidson from Arthritis Research Canada's Arthritis Patient Advisory Board. In addition to conference attendances, I have also travelled for training, including to Harvard University in Boston, Massachusetts, where I expanded my understanding of current and emerging methods to support causal inference when using observational data. The year was topped off with a trip to Washington DC to attend a meeting for an NIH-funded translational research programme that is focused on back pain.

Back in Ann Arbor, I’m pleased to report that I was selected as the inaugural recipient of the Michigan Medicine Dan Barry grant. This grant is named after a physiatrist, scientist, astronaut, CBS Survivor cast member, ABC Battlebots team member, and inventor... a lot to live up to! It’s supporting me to work with people with osteoarthritis to refine the design of a sleep and physical activity improvement intervention. As 2019 comes to a close, recruitment is well underway and I’m looking forward to bringing back findings to share with my @UoAEpi family when I return in September!

Daniel Whibley, PhD
Research summary

Compared to the previous year, 2019 saw a step up in output, with 32 papers published or in press\(^1\). We had a good presence at all the major national and international meetings, including the American College of Rheumatology and British Society for Rheumatology annual scientific meetings, and the European Federation of IASP Chapters biennial conference.

It was also a good year for research grant success, etc., with awarded grants of over £3 million, key among which was the renewal of the Versus Arthritis / Medical Research Council Centre for Musculoskeletal Health and Work. This brings the total live grant income (considering only the amounts held by Aberdeen) to £7.5 million.

Recruitment to the British Society for Rheumatology Psoriatic Arthritis Register continues apace, and in December we crossed the ‘500 patient’ mark. Over the next twelve months this study will see, not only the continuation of recruitment, but also the start of analysis of this data. The DyNAMISM study (examining the role of non-steroidal anti-inflammatory drugs in imaging, in spondyloarthritis) and the LIFT trial (targeting fatigue in inflammatory arthritis) both near the end of their recruitment phase, but 2019 saw the end of the FoMAX study (optimising the management of fibromyalgia in axial spondyloarthritis). This study was only a feasibility pilot, and discussions are afoot of how best to take this forward to a full trial. Also last year, we saw the launch of the PACFiND study (identifying new management pathways for persons with fibromyalgia) and also the presentation of the first results from the large MAmMOTH trial, aimed at preventing the onset of chronic widespread pain.

In terms of personnel, former PhD student Daniel Whibley continued his Versus Arthritis Foundation Fellowship sabbatical at the University of Michigan, and congratulations are due to Dr Shifa Sarica who graduated with her PhD in June, and (Dr) LaKrista Morton who submitted and successfully defended her PhD thesis. Shifa has moved on to pastures new, but we’re delighted that LaKrista is staying with the Epidemiology Group to work on the Centre for Musculoskeletal Health and Work programme of work.

Published papers

   

   

\(^1\) They have been given a DOI
   www.ncbi.nlm.nih.gov/pubmed/30629805

   www.ncbi.nlm.nih.gov/pubmed/31577634

   www.ncbi.nlm.nih.gov/pubmed/31743136

   www.ncbi.nlm.nih.gov/pubmed/31617277

   www.ncbi.nlm.nih.gov/pubmed/31077168

   www.ncbi.nlm.nih.gov/pubmed/30787073


    www.ncbi.nlm.nih.gov/pubmed/30997149

    www.ncbi.nlm.nih.gov/pubmed/31520733

    www.ncbi.nlm.nih.gov/pubmed/31738192

    www.ncbi.nlm.nih.gov/pubmed/31609548
www.ncbi.nlm.nih.gov/pubmed/31143851

www.ncbi.nlm.nih.gov/pubmed/31662321

www.ncbi.nlm.nih.gov/pubmed/30705244

www.ncbi.nlm.nih.gov/pubmed/31034106

www.ncbi.nlm.nih.gov/pubmed/31125067

www.ncbi.nlm.nih.gov/pubmed/29984553

www.ncbi.nlm.nih.gov/pubmed/31841268

www.ncbi.nlm.nih.gov/pubmed/29878103

www.ncbi.nlm.nih.gov/pubmed/31431486

www.ncbi.nlm.nih.gov/pubmed/30775964

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www.ncbi.nlm.nih.gov/pubmed/30829737

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www.ncbi.nlm.nih.gov/pubmed/31710380

www.ncbi.nlm.nih.gov/pubmed/31494304


www.ncbi.nlm.nih.gov/pubmed/31005901

www.ncbi.nlm.nih.gov/pubmed/30762311

www.ncbi.nlm.nih.gov/pubmed/30561738

Research grants awarded

1. EULAR recommendations for cardiovascular risk management in rheumatic and musculoskeletal diseases including SLE and antiphospholipid syndrome. European League Against Rheumatism. €50,000.


4. Harnessing participatory action research to guide the design of a sleep and physical activity improvement intervention for adults with osteoarthritis. Dan Barry research program grant. $2500.

5. A study of the relationship between pain, sleep and productivity in ankylosing spondylitis patients captured within the SIRAS registry. GlaxoSmithKline. £78,300.

Top ten “most cited” publications

Papers published in last 10 years, ordered by average citations per year.

2. Fayaz et al. Prevalence of chronic pain in the UK: A systematic review and meta-analysis of population studies (2016) BMJ Open, 6 (6), art. no. e010364 Cited 151 times
and our publications with the highest Altmetric scores

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<tr>
<th>Title</th>
<th>Journal</th>
<th>Year</th>
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<td>Prevalence of chronic pain in the UK: a systematic review and meta-analysis of...</td>
<td><em>BJJ Open</em></td>
<td>June 2016</td>
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<td>Chronic widespread body pain is increased among individuals with history of...</td>
<td><em>Archives of Osteoporosis</em></td>
<td>December 2015</td>
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<td>Oral health, dental care and mouthwash associated with upper aerodigestive...</td>
<td><em>Archives of Otolaryngology</em></td>
<td>June 2014</td>
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<td>Alcohol Consumption in Relation to Risk and Severity of Chronic Widespread Pain...</td>
<td><em>Arthritis Care &amp; Research</em></td>
<td>August 2015</td>
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<td>Global prevalence of ankylosing spondylitis</td>
<td><em>Annals of Rheumatic Diseases</em></td>
<td>December 2013</td>
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<td>Risk of recurrent stillbirth: systematic review and meta-analysis</td>
<td><em>British Medical Journal</em></td>
<td>June 2015</td>
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<td>Low back pain in schoolchildren: the role of mechanical and psychosocial factors</td>
<td><em>Archives of Disease in Childhood</em></td>
<td>January 2015</td>
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<td>Genome-wide association analyses identify new susceptibility loci for end...</td>
<td><em>Nature Genetics</em></td>
<td>October 2016</td>
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<td>Persons with chronic widespread pain experience excess mortality: longitudinal...</td>
<td><em>Annals of the Rheumatic Diseases</em></td>
<td>July 2017</td>
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Staff and Students 2020

Academic Staff

Professor Gary J Macfarlane Chair (Clinical) in Epidemiology and Head of Group
Professor Patrice Forget, Clinical Chair in Anaesthetics
Dr Gareth T Jones Reader of Epidemiology and Deputy Head of Group
Dr Rosemary Hollick Clinical Senior Lecturer in Rheumatology

Research Staff

Dr Daniel Whibley, Research Fellow (currently at University of Michigan)
Ms LaKrista Morton, Research Fellow (maternity cover)
Dr Linda Dean, Research Associate
Dr Ovidiu Rotariu Research Assistant

Academic-related staff

Mr R Stuart Anderson, Project Assistant
Dr Eva-Maria Bachmair, Study Co-ordinator (LIFT study)
Ms Jill Barber, Data Co-ordinator (LIFT study)
Ms Jane Brady, (currently on maternity leave)
Mr Marcus Beasley Study Co-ordinator (MAmMOTH study)
Dr Karen Forrest Keenan Study Co-ordinator (BSR-PsA study)
Ms. Maureen Heddle Assistant Study Co-ordinator (BSR PsA study)
Mr Jonathan Lock Assistant Study Co-ordinator (BSR PsA study)
Ms Laura Moir Study Co-ordinator (PACFiND, FRESKO and DyNAMISM studies)
Mr Barry Morris Project Assistant
Mrs Lisa Shearer Group Secretary

Post-graduate research students

Ms Stefanie Döbl, PhD student
Mr Ross MacDonald, PhD student

Visiting staff and students: Taalke Sitter (University of Bremen), Renke Biallas (LMU – Munich)
Visiting Students, Ilaria Maccora (Visiting Staff)

Honorary Staff: Dr Neil Basu - Honorary Clinical Senior Lecturer; Dr Tatiana Macfarlane Honorary Reader; Dr Gabriele Simonini Honorary Senior Research Fellow; Dr. Ilaria Maccora Honorary Research Fellow

2 Registered for the degree of PhD