



Dr Celia Gregson

B.Med.Sci., M.B.,B.S.(Nott.), M.R.C.P.(UK), MSc, CCT, PhD

Consultant Senior Lecturer in Musculoskeletal Medicine

Area of research

Epidemiology of musculoskeletal disease

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Summary

Celia Gregson is a Consultant Senior Lecturer in Musculoskeletal Medicine and Arthritis Research UK Clinician Scientist at the Musculoskeletal Research Unit (MRU), University of Bristol and is an Honorary Consultant Orthogeriatrician at the Royal United Hospital NHS Foundation Trust in Bath. She qualified in Medicine from the University of Nottingham. Following physician training she was awarded a Wellcome Trust Clinical Research Training Fellowship. She completed a one-year MSc in Epidemiology from the London School of Hygiene and Tropical Medicine and then a PhD at the University of Bristol, during which she set up and still runs the UK DINAG consortium (DXA-databases to Identify Novel Anabolic Genes). She then worked as a Senior Scientist at the MRC Lifecourse Epidemiology Unit at the University of Southampton, prior to taking up her current Arthritis Research UK Clinician Scientist Fellowship.

Her research interests include the epidemiology and genetics of osteoporosis and fractures, high bone mass disorders, the role bone plays in the pathogenesis of osteoarthritis, the impact of social deprivation on fracture incidence and outcomes, the impact of neurological diseases and HIV infection on musculoskeletal health, and the cross-talk between muscle, fat and bone. With Global Challenges funding, Celia recently launched the Sub-Saharan African Musculoskeletal Network SAMSON (<https://thesamson.org/>).

Celia chairs the Royal College of Physicians Falls and Fragility Fracture Audit Programme Scientific and Publications Committee and is a member of their Fracture Liaison Service Database Advisory Group. She is a member of the National Osteoporosis Guideline Group Advisory Committee, the National Joint Registry Research Committee, and past committee member for the Bone Research Society, having organised the annual UK conference in Bristol in 2017. She is a Fellow of the Royal College of Physicians of London. In 2018 she became co-chair of the British Geriatric Society Falls and Bone Health Section. Celia represents the University of Bristol on the World University Network Global Africa Group.

Keywords

- Musculoskeletal Osteoporosis Fractures High Bone Mass Osteoarthritis Muscle Falls Ageing Epidemiology

Skills

- Osteoporosis High Bone Mass Disorders Falls and Frailty Osteoarthritis HIV Non-Communicable Diseases

Processes and functions

- Clinical Epidemiology Genetic Epidemiology

Expertise

I run a UK-wide study intended to characterise patients with very dense bones, and to identify genetic abnormalities which underlie these. Understanding the causes of high bone mass may help us to identify new ways of treating conditions associated with reduced bone mass, like osteoporosis. This study may also help to shed new light on the cause of other conditions where excess bone occurs, such as osteoarthritis, in which new bone is produced in the form of osteophytes at the edges of worn out joints.

- bones
- dense bones
- genetic abnormalities
- high bone mass
- reduced bone mass
- osteoporosis
- osteoarthritis

Memberships

Organisations

[Bristol Medical School \(THS\)](#)

Academic staff

- [School of Clinical Sciences Academic Staff](#)

Research groupings

- [Academic Rheumatology](#)
- [Musculoskeletal Research Unit](#)

Recent publications

- Sheehan, K, Fitzgerald, L, Hatherley, S, Potter, C, Ayis, S, Martin, F, Gregson, C, Cameron, I, Beaupre, L, Wyatt, D, Milton-Cole, R, DiGiorgio, S & Sackley, C, 2019, '[Inequality in Rehabilitation Interventions after Hip Fracture: A Systematic Review](#)'. *Age and Ageing*.
- Whitehouse, M, Berstock, JR, Kelly, M, Gregson, C, Judge, A, Sayers, A & Chesser, TJ, 2019, '[Higher 30-day mortality associated with the use of intramedullary nails compared with sliding hip screws for the treatment of trochanteric hip fractures: a prospective national registry study](#)'. *Bone and Joint Journal*, vol 101-B., pp. 83-91
- Gregson, CL, Cassim, B, Micklesfield, LK, Lukhele, M, Ferrand, RA, Ward, KA & , 2019, '[Fragility fractures in sub-Saharan Africa: time to break the myth](#)'. *Lancet Global Health*, vol 7., pp. e26-e27
- , Morris, JA, Kemp, JP, Youlten, SE, Laurent, L, Logan, JG, Chai, RC, Vulpescu, NA, Forgetta, V, Kleinman, A, Mohanty, ST, Sergio, CM, Quinn, J, Nguyen-Yamamoto, L, Luco, AL, Vijay, J, Simon, MM, Pramatarova, A, Medina-Gomez, C, Trajanoska, K, Ghirardello, EJ, Butterfield, NC, Curry, KF, Leitch, VD, Sparkes, PC, Adoum, AT, Mannan, NS, Komla-Ebri, DS, Pollard, AS, Dewhurst, HF, Hassall, TA, Beltejar, MJG, Agee, M, Alipanahi, B, Auton, A, Bell, RK, Bryc, K, Elson, SL, Fontanillas, P, Furlotte, NA & others 2018, '[An atlas of genetic influences on osteoporosis in humans and mice](#)'. *Nature Genetics*.
- Bhimjiyani, A, Neuburger, J, Jones, T, Ben-Shlomo, Y & Gregson, CL, 2018, '[Inequalities in hip fracture incidence are greatest in the North of England: regional analysis of the effects of social deprivation on hip fracture incidence across England](#)'. *Public Health*, vol 162., pp. 25-31
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- Hartley, A, Gregson, CL, Hannam, K, Deere, KC, Clark, EM & Tobias, JH, 2018, '[Sarcopenia Is Negatively Related to High Gravitational Impacts Achieved from Day-to-day Physical Activity](#)'. *Journals of Gerontology, Series A*, vol 73., pp. 652-659
- Bhimjiyani, A, Neuburger, J, Jones, T, Ben-Shlomo, Y & Gregson, CL, 2018, '[The effect of social deprivation on hip fracture incidence in England has not changed over 14 years: an analysis of the English Hospital Episodes Statistics \(2001–2015\)](#)'. *Osteoporosis International*, vol 29., pp. 115-124
- Penner, J, Ferrand, R, Richards, C, Ward, K, Burns, J & Gregson, C, 2018, '[The Impact of Vitamin D Supplementation on Musculoskeletal Health Outcomes in Children, Adolescents, and Young Adults living with HIV: A Systematic Review](#)'. *PLoS ONE*, vol 13.
- Rukuni, R, McHugh, G, Majonga, E, Kranzer, K, Mujuru, H, Munyati, S, Nathoo, K, Gregson, CL, Kuper, H & Ferrand, RA, 2018, '[Disability, social functioning and school inclusion among older children and adolescents living with HIV in Zimbabwe](#)'. *Tropical Medicine and International Health*, vol 23., pp. 149-155

[View complete publications list](#) in the University of Bristol publications system

Networks & contacts

- Prof Matt Brown & Assoc Prof Emma Duncan University of Queensland Brisbane
- Prof Bill Fraser University of East Anglia
- Prof Cyrus Cooper MRC Lifecourse Epidemiology Unit University of Southampton
- Prof Joern Rittweger Manchester Metropolitan University & German Aerospace Center Cologne