

CONTACT DETAILS	Medical Research Council Integrative Epidemiology Unit at the University of Bristol, Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, BS8 2BN, UK. Email: a.elhakeem@bristol.ac.uk	
CURRENT POSITIONS	Research Fellow Population Health Sciences, University of Bristol, UK	2023 – now
	Honorary Research Fellow University of Exeter, UK	2023 – now
PREVIOUS POSITIONS	Research Fellow University of Exeter, UK	2022 – 2023
	Associate Lecturer Anglia Ruskin University, UK	2022 – 2023
	Consultant Statistician Albert Einstein College of Medicine, USA	2021 – 2022
	Senior Research Associate Population Health Sciences, University of Bristol, UK	2017 – 2023
	Senior Research Associate Musculoskeletal Research Unit, University of Bristol, UK	2016 – 2017
	Research Assistant University College London, UK	2015
	Statistical Information Assistant Cancer Research UK, UK	2012 – 2013
	University College London, UK Doctor of Philosophy (PhD) in Epidemiology "Socioeconomic and developmental factors from early life and leisure-time physical activity across adulthood"	2013 – 2016
EDUCATION	University of Essex, UK Master's (MPH) in Public Health (with distinction)	2011 – 2012
	University College Cork, Ireland Undergraduate degree in Medical Sciences (1 st class)	2006 – 2010
	MRC-NIHR New Investigator Research Grant SITAR enhancements to support state-of-the-art analysis of individual growth curves and their correlates, £540,000, 2025-28 (PI)	
RESEARCH FUNDING (>£12M)	Research Development International Collaboration Award Machine learning for growth trajectory modelling in longitudinal population studies, £3,300, 2025-26 (PI)	
	GW4 Building Communities Programme grant Exploring pathways to children and young people's mental health, £20,000, 2024-25 (Collaborator)	
	GW4 Building Communities Programme grant	

InFer GW4 IVF Network, £20,000, 2023-24 (Co-I)

Benjamin Meaker Annual Award

Joint effect of lead and vitamin D on preterm birth, £20,000, 2023 (Co-I)

Elizabeth Blackwell Institute Discovery Research Scheme

Applied P-spline analysis for epidemiology, £5,550, 2022-23 (PI)

LifeCycle Fellowship

Prenatal air pollution and adiposity in childhood: role of fetal growth, inflammation, and moderation by sex, €6000, 2022-24 (Co-I)

Wellcome Mental Health Data Prize

Mental health trajectories following pharmacological and psychological treatment, £50,000, 2022-23 (Co-I)

European Research Council Advanced Grant

ART-Health: Conception by artificial reproductive technologies and offspring health, £2.5M, 2022-26 (collaborator & WP lead)

Jean Golding Institute Seed Corn Funding

Effects of adolescent physical activity on physical and mental health in adulthood: novel multivariate pattern analysis, £3,650, 2021-22 (PI)

LifeCycle Fellowship

Effect of pregnancy exposures on offspring & maternal health: exposome-wide approach in the EU Child Cohort Network, €5500, 2020-22 (PI)

EU Horizon 2020 Research and Innovation Programme

LongITools: Dynamic longitudinal exposome trajectories in cardiovascular & metabolic non-communicable diseases, €1.1M, 2020-26 (Co-I & WP lead)

TEACHING

Introduction to R – Lead organiser 2024 – now
Bristol Medical School Short Courses

Analysis of Repeated Measures – Lead organiser 2022 – now
Bristol Medical School Short Courses

NCD Epidemiology Unit – Lecture & Practical 2023 – now
MSc Epidemiology

Advanced Statistics Unit – Lecture & Practical X 3 2022 – now
MSc Medical Statistics and Health Data Science

Evidence Based Medicine – Tutor 2019 – now
MB ChB Medicine

EXPERT
ACTIVITIES

Expert / Steering Group Membership

- ALSPAC Researcher Panel Member	2024 – now
- Expert Panel Member, Medical and Health Sciences Expert Panel, Estonian Research Council	2022 – now
- Bristol Medical School Future Leaders Forum Member	2022 – now
- Steering Committee Member, LongITools Consortium	2020 – now

Editorial Board Membership

- BMC Medical Research Methodology	2022 – now
- BMC Public Health	2023 – 2024
- Int J Behav Nutr Phys Act	2022 – 2024

	Groups / Consortia	
	- Longitudinal Modelling Group Leader	2021 – now
	- ART-HEALTH ^{PARTNERSHIP} Cohort Collaboration Co-PI	2020 – now
	- ALSPAC DataSHIELD Manager	2020 – now
	Grant Reviewing	
	- ESRC Secondary Data Analysis Initiative	2024
	- Estonian Research Council Centres of Excellence	2023
	Journal Reviewing	
	The BMJ, Nature Human Behaviour, European Heart Journal, JAMA Network Open, International Journal of Epidemiology & others	
PHD STUDENTS	Rong Huang (expected end date: 2026) “Physical activity, nutrition, and body composition”	
PAST PHD STUDENTS	Sindre Hoff Petersen (2024) “Complications in pregnancies after assisted reproduction”	
SOFTWARE (R PACKAGES)	<ul style="list-style-type: none"> - sitar: Super Imposition by Translation and Rotation Growth Curve Analysis (<i>taking over ownership from Prof Tim Cole</i>) - bsitar: Bayesian SITAR growth curve analysis - psme: Penalized Splines Mixed-Effects Models - tidal: Tool to Implement Developmental Analysis of Longitudinal data - spluti: Spline Utilities 	exp. 2025 exp. 2025 exp. 2025 2025 2022
AWARDS	Carbon Literacy Accreditation Carbon Literacy Project	
	New Investigator Award International Conference on Children's Bone Health	
	Conference Travel Bursaries Bone Research Society, Wellcome Population Studies meeting, Society for Longitudinal and Lifecourse Studies, Society for Social Medicine & Population Health	
	Doctoral Fellowship in Life Course Epidemiology Medical Research Council	
	Best overall MSc performance University of Essex	
SELECTED INVITED TALKS	<ul style="list-style-type: none"> - ‘Infant and child growth dynamics: modelling, pre-natal correlates, and life-course outcomes’ ISGA Conference (keynote talk), 2024 - ‘Evaluation and comparison of pubertal measures’ Catherine Peckham Symposium, UCL Institute of Child Health 2024 - ‘Using P-splines to identify features of longitudinal mental health trajectories’ Shandong University, 2024 - ‘ART and long-term offspring health’ Obstetric Cross City Research Meeting, Bristol, 2023 - ‘Nonlinear trajectory modelling with splines’ National Centre for Research Methods, 2023 - ‘Effects of prenatal exposures on life course health’ ISGlobal, 2022 	

15 SELECTED
PUBLICATIONS
(H-INDEX: 20)

1. Dieberger A...**Elhakeem A**. [Effect of a physical activity and healthy eating lifestyle intervention in pregnancy on fetal growth trajectories: the DALI randomised controlled trial](#). *Pediatric Obesity* 2025
2. Petersen S...**Elhakeem A**, Opdahl S. [Preterm birth in assisted reproduction: the mediating role of hypertensive disorders in pregnancy](#). *Human Reproduction* 2025
3. Gonçalves R, Blaauwendraad S, Avraam D, Beneito A, Charles MA, **Elhakeem A** et al. [Early-life growth and emotional, behavior and cognitive outcomes in childhood and adolescence in the EU Child Cohort Network](#). *The Lancet Regional Health – Europe* 2025
4. Venkatesh SS, Wittemans L, Palmer D, Baya N, Ferreira T, Hill, Frederik Lassen F, Parker M, Reibe S, **Elhakeem A** et al. [Genome-wide analyses identify 25 infertility loci and relationships with reproductive traits across the allele frequency spectrum](#). *Nature Genetics* (In Press)
5. Soares A...**Elhakeem A**, Timpson NJ [Prenatal urban environment and blood pressure trajectories from childhood to early adulthood](#). *JACC: Advances* 2024
6. Cadman T, Avraam D, Carson J, **Elhakeem A** et al. [Social inequalities in child mental health trajectories. A longitudinal study using birth cohort data in 12 countries](#). *BMC Public Health* 2024.
7. Barry KM, Avraam D, Cadman T, **Elhakeem A** et al. [Early childcare arrangements and children's internalizing and externalizing symptoms: an individual participant data meta-analysis of six prospective birth cohorts in Europe](#). *The Lancet Regional Health – Europe* 2024
8. **Elhakeem A** et al. [Evaluation and comparison of nine growth and development-based measures of pubertal timing](#). *Communications Medicine* 2024.
9. **Elhakeem A** et al. [Effect of common pregnancy and perinatal complications on offspring metabolic traits across the life course: a multi-cohort study](#). *BMC Medicine* 2023
10. **Elhakeem A** et al. [Long-term cardiometabolic health in people born after assisted reproductive technology: a multi-cohort analysis](#) *European Heart Journal* 2023
11. **Elhakeem A** et al. [Using linear and natural cubic splines, SITAR, and latent trajectory models to characterise nonlinear longitudinal growth trajectories in cohort studies](#). *BMC Med Res Methodol* 2022
12. **Elhakeem A** et al. [Association of assisted reproductive technology with offspring growth and adiposity from infancy to early adulthood](#). *JAMA Network Open* 2022
13. Cousminer D, Wagley Y, Pippin J, **Elhakeem A** et al. [Genome-wide association study implicates novel loci and reveals candidate effector genes for longitudinal pediatric bone accrual](#). *Genome Biology* 2021
14. **Elhakeem A** et al. [Physical activity throughout adolescence and peak hip strength in young adults](#). *JAMA Network Open* 2020
15. **Elhakeem A** et al. [Association between age at puberty and bone accrual from 10 to 25 years of age](#). *JAMA Network Open* 2019

SELECTED
BLOG POSTS

- [Exposure to common pregnancy complications unlikely to lead to harmful molecular changes across a baby's life](#). LongITools, 2023
- [Teens who hit puberty later could face bone health issues later in life, studies suggest](#). *The Conversation*, 2019

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| SELECTED
MEDIA / PRESS
COVERAGE | <ul style="list-style-type: none"> - Modern methods for longitudinal modelling in epidemiology. Elizabeth Blackwell Institute, 2025 - Exposure to high humidity and temperature in pregnancy could influence blood pressure change in childhood. University of Bristol, 2024 - Fertility treatment does not adversely affect cardiovascular health of offspring, international study suggests. The Human Fertilisation and Embryology Authority, 2023 - The HFEA respond to study about effects of fertility treatment on children's development. The Human Fertilisation and Embryology Authority, 2022 - Dispelling concerns about children conceived through infertility treatments. European Commission, 2022 - New study links bone strength to timing of puberty. Royal Osteoporosis Society, 2019 - People born underweight do less exercise throughout their lives. New Scientist, 2016 |
| SELECTED
EDITORIAL
COVERAGE | <ul style="list-style-type: none"> - Underlying parental infertility and offspring cardiometabolic risk, <i>Fertility and Sterility</i> 2024 - The prenatal and early life exposome: shaping health across the lifespan. <i>JACC: Advances</i> 2024 - Reassurance for parents with children born via assisted reproductive technology or too soon to tell? <i>European Heart Journal</i> 2023 - Physical activity level during adolescence-possible ways to apply the knowledge gathered. <i>JAMA Network Open</i> 2020 - Persistent physical activities in leisure time over decades improve late life CVD markers. <i>Atherosclerosis</i> 2018 - Is early life motor performance related to physical activity in adulthood? <i>Paediatric & Perinatal Epidemiology</i> 2018 |