

Research Fellow in Health Data Science

School of Medicine, Medical Sciences and Nutrition

Closing date: 22 March 2021
Interview date: To Be Confirmed
Reference number: IHS092R



INTRODUCTION

Building our Aberdeen Centre for Health Data Science

The University of Aberdeen looks to appoint a **Postdoctoral Research Fellow in Health Data Science**. The successful candidate will be based in the **Aberdeen Centre for Health Data Science (ACHDS)**, School of Medicine, Medical Sciences and Nutrition (SMMSN) and will join our multi-disciplinary team to lead the synthesis and analysis of unique large-scale electronic health record data sets with the goal of improving health services for rheumatic and musculoskeletal diseases.

ACHDS launched in early 2018 to lead Aberdeen in this complex, interdisciplinary and fast-moving research arena. The Centre aims to harnesses the quadruple helix of academia, NHS, industry and public to create innovative, interdisciplinary, data science solutions to the big challenges for health and health care, to improve health for individuals, local communities and internationally.

Aberdeen has an established reputation in the competitive UK health data science research environment. Importantly, Aberdeen is a partner in the five UK substantive sites (22 Academic institutions) that comprise the **Health Data Research UK** Institute. In 2019, it launched the North hub of the Scottish **Industrial Centre for Artificial Intelligence Research in Digital Diagnostics (ICAIRD)**; a £15M pan-Scotland collaboration of 15 partners from across academia, the NHS, and industry. Investment in our **core research facilities**: Data Safe Haven, Bioimaging Centre, Bio-repository, SHARE and Centre for Genome Enabled Biology and Medicine, provide researchers in Aberdeen with the capability to work across the multiple data domains essential for cutting edge health data science. The Grampian Data Safe Haven is Scottish Government accredited for processing health and care data and is part of the Scottish Federated Network of approved safe havens. Our data partnerships enable **scalable** Scotland wide research with demonstrated ability to replicate across the UK and Globally.

ACHDS comprises eight interdisciplinary Associate Directors (representing School of Medicine, Medical Science and Nutrition, School Natural and Computing Science, Aberdeen Bioimaging Centre, NHS Innovation Hub, NHS Health Intelligence, Digital Research Services, Clinical Academia and Digital Engagement and Education). In this post, the candidate will work to harness expertise across School of Medicine, Medical Science and Nutrition, School Natural and Computing Science and NHS.

The commitment of our local NHS places the North East at the forefront of methodology development to unlock the potential of health data for research and innovation. Co-located on one of the **largest health campuses in Europe** facilitates a strong partnership with clinical teams, innovation hub and senior leadership enabling **exceptional electronic health record access** within our secure data environment.

In particular, we have a strong partnership with the **Aberdeen Centre for Arthritis and Musculoskeletal Health (ACAMH)**. ACAMH undertakes pioneering research to understand mechanisms of disabling musculoskeletal conditions, describe their epidemiology and provide evidence to guide effective management. Members of the group involve clinical researchers, clinicians and patient partners. ACAMH has a growing portfolio of applied health services research involving health data science and we seek to build further capacity, establishing the North East as a data driven learning health ecosystem combining local strength with a global vision.



JOB DESCRIPTION

Main purpose of the role:

We are seeking to appoint an exceptional **Research Fellow** in health data sciences to join the Aberdeen Centre of Health Data Science, University of Aberdeen. You will join a team of staff and collaborators within ACAMH to lead the analysis of novel large-scale electronic health record data sets with the goal of improving health services for rheumatic and musculoskeletal diseases. You will work to harness expertise across School of Medicine, Medical Science and Nutrition, School Natural and Computing Science and NHS, allowing you a **unique opportunity to advance your health data science skills**.

We seek expertise in health data science methodology and epidemiology to

- Contribute to study design
- Lead permissions and approvals
- Coordinate the creation of new linked data
- Analyse, visualise and interpret data sets on people with musculoskeletal diseases.
- Work with colleagues to apply epidemiological, statistical and computing science approaches to analysis and data visualisation
- To work with patients, public, practitioners understand, interpret and communicate with data in order to improve patient care

AT A GLANCE:

SALARY:

Grade 6 (£33,797 -
£38,017 per annum)

HOURS OF WORK:

Full Time – 37.5 hours
per week

CONTRACT TYPE:

Project Limited – 12
months

Key Responsibilities:

Research Fellow in Data Health Science

- Analyse unique large-scale electronic health record data sets with the goal of improving health services for rheumatic and musculoskeletal diseases
- Work interchangeably across other similar projects as required
- Collaborate as an enthusiastic and effective team member
- Contribute to development of the Aberdeen Centre for Health Data Science and Aberdeen Centre for Arthritis and Musculoskeletal Health
- Conduct high quality research, providing sustained and active support for departmental research
- Some participation in general academic administration and research support duties

CANDIDATE BACKGROUND

We are looking for an exceptional researcher to join our team

You will have a PhD (or equivalent) in a relevant discipline.

You should demonstrate capacity for high-quality research and publication in a relevant area of data science, strong quantitative analytical skills, and a strong understanding of statistical and epidemiological methodologies.

You will have significant programming experience, the main tools used at the centre are written with R.

You will have experience of working with large data sets, secondary data analysis of routinely collected administrative and health data, and visualisation of complex data.

You will be committed to working to high standards of data analytical transparency and reproducibility.

You will demonstrate experience of working within interdisciplinary teams.

You will be ambitious, enthusiastic, have excellent communication skills, good team-working, organisational and interpersonal skills.



TERMS OF APPOINTMENT

Salary will be at the appropriate point on the Grade 6 salary scale (£33,797- £38,017 per annum) and negotiable with placement according to qualifications and experience.

Any appointment will be made subject to satisfactory references and a 12 month probation period.

At this time the team are currently working from home in line with Scottish Government guidance.

For further information on various staff benefits and policies please visit www.abdn.ac.uk/staffnet/working-here

We are also recruiting for a Post-doctoral Research Fellow for 24 months to work on the PACFiND and RHEUMAPS studies. Candidates applying for both positions should submit two separate applications but will be considered for both posts at one interview.

Should you require a visa to undertake employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship under the requirements of the Skilled Worker visa. At the time an offer of appointment is made, you will be asked to demonstrate that you fulfil the criteria in respect of qualification and competency in English. For research and academic posts, we will consider eligibility under the Global Talent visa. Please do not hesitate to contact Natalie Reid, HR Adviser (e-mail: n.reid@abdn.ac.uk) for further information.



PERSON SPECIFICATION

	<i>Essential</i>	<i>Desirable</i>
Education/Qualifications Academic, technical and professional education and training	<ul style="list-style-type: none"> Completed PhD (or equivalent experience) in relevant discipline at the time of appointment 	
Work and Other relevant experience (including training) e.g. Specialist knowledge, levels of experience, supervisory experience, research	<ul style="list-style-type: none"> Experience of working with large data sets, secondary data analysis of routinely collected administrative and health data, and visualisation of complex data. Expertise in advanced statistical computing, ideally in R. Demonstrated capacity for high-quality research and publication in a relevant area of data science. Strong quantitative analytical skills, and a strong understanding of statistical and epidemiological methodologies. Commitment to reproducible open science. 	<ul style="list-style-type: none"> Experience of communicating complex information (verbally and written) to a variety of audiences.
Personal qualities and abilities eg initiative, leadership, ability to work on own or with others, communication skills	<ul style="list-style-type: none"> High level of analytical capability. Good problem-solving and critical thinking skills. Good organisational and record keeping skills. High levels of accuracy and attention to detail. Good interpersonal skills with the ability to interact constructively with a wide range of colleagues across different disciplines. Team player with the ability to work independently and use initiative. Willingness and ability to undertake administrative and research support duties. Experience in managing more than one project with competing time demands. 	<ul style="list-style-type: none"> Experience of partnership with NHS, patients, and public.

Other

eg special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.

- Knowledge of equality and diversity in the workplace.
- Willingness to travel to national and international meetings with research collaborators if required.

UNIVERSITY OF ABERDEEN

*Open to all and dedicated to the pursuit of
truth in the service of others*

Aberdeen is a broad based, research intensive University, which puts students at the centre of everything it does. Outstanding in a wide range of discipline areas, Aberdeen has also been credited for its international reach and its commercialisation of research ideas into spin out companies. The University has over 16,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation, and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges and inspires.

2019 HIGHLIGHTS

SCOTTISH UNIVERSITY OF THE
YEAR (TIMES & SUNDAY TIMES)

70TH IN THE WORLD FOR
RESEARCH CITATIONS (THE)

32ND IN THE WORLD FOR
CONTRIBUTION TO THE UN
SUSTAINABLE DEVELOPMENT
GOALS (THE)

28TH MOST INTERNATIONAL
UNIVERSITY IN THE WORLD
(THE)

15TH EQUAL IN THE UK FOR
OVERALL STUDENT SATISFACTION
(NSS)

11TH BEST STUDENT INTAKE IN
THE UK (TIMES & SUNDAY TIMES)

PERCENTAGE OF SCOTTISH
INTAKE FROM MOST DEPRIVED
AREAS UP FROM 4.5% IN
2018/19 TO 9% IN 2019/20

CURRENT CONTEXT

The University will build on the significant achievements above in 2020 and beyond. Underpinning our high performance and significant growth is a £100m investment in Aberdeen's estate which will include the completion of a new Science Teaching Hub, the regeneration of the historic King's Quarter, and a new Business School building. The University has also invested in 50 new academic posts, and 2020 will see the launch of 5 Interdisciplinary, cross-institution Research Centres that will catalyse world-leading research in our areas of research strength. The 5 Interdisciplinary Challenges are: Energy Transition; Social Inclusion and Cultural Diversity; Environment and Biodiversity; Data and Artificial Intelligence; and Health, Nutrition and Wellbeing.

The University of Aberdeen is a recent recipient of The Queen's Anniversary Prize, awarded to recognise world-class excellence in innovation and practical benefit to people and society. The University was given this award for health service research leading to improvements in academic and clinical practice and delivery of health care.

INTERNATIONAL

Aberdeen is also increasing its international presence, positioning the University as a global organisation, and building on its established partnership in Qatar with new partnerships in Sri Lanka, with the International Institute of Health Sciences, and in China, with Shanghai University and SCNU.

The University of Aberdeen is proud to be the first UK University to operate on a dedicated campus in Qatar. Phase 1 of this partnership with AFG College has successfully recruited over 600 students. Phase 2 will see the creation of a substantially larger campus, with capacity for at least 5,000 students and research activity. For further information on our Qatar campus, visit <https://www.abdn.ac.uk/qatar/>.



ABERDEEN 2040

On Founders' day in 2020, our 525th anniversary as a University, we launched our new strategy 'Aberdeen 2040'. Over the next 20 years, four strategic themes will shape our learning, discovery and strategic actions:

INCLUSIVE: We welcome students, staff and partners from all backgrounds, organisations and communities. We value diversity.

INTERNATIONAL: We connect with others and extend our networks and partnerships around the world. We think across borders.

INTERDISCIPLINARY: We innovate in education and research by generating, sharing and applying new kinds of knowledge. We learn together.

SUSTAINABLE: We understand and nurture our environment, and take care of our resources, including our people and our finances. We work responsibly.

OUR EDUCATION

Recognised as the Scottish University of the Year in the Times and Sunday Times Good University Guide 2019, we remain true to our roots as an ancient Scottish university, combining breadth and depth in our degree programmes and drawing strength from the quality of our research. Our flexible curriculum encourages students to grow as independent learners and therefore to thrive as graduates in the diverse workplaces of the future and become change-makers across the globe. Our education is open to all and we are setting ambitious targets to further widen access.

OUR RESEARCH

Researchers at the University of Aberdeen have been at the forefront of innovation and excellence throughout the centuries, generating insights in medicine, science, engineering, law, social sciences, arts and humanities. This research has contributed to five Nobel prizes as well as other awards such as the Queen's Anniversary prize. Our research is intellectually rigorous, working within our established areas of excellence as well as new methods of enquiry. We will continue to generate new knowledge addressing economic and societal issues with ambition and imagination, ensuring that it is globally excellent and locally relevant.

ABERDEEN AND ABERDEENSHIRE

With a population of approximately 230,000, the city stands between the Rivers Dee and Don. This historic city has many architectural splendours and the use of its sparkling local granite has earned Aberdeen the name of the Silver City. Recognised as the energy capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live.

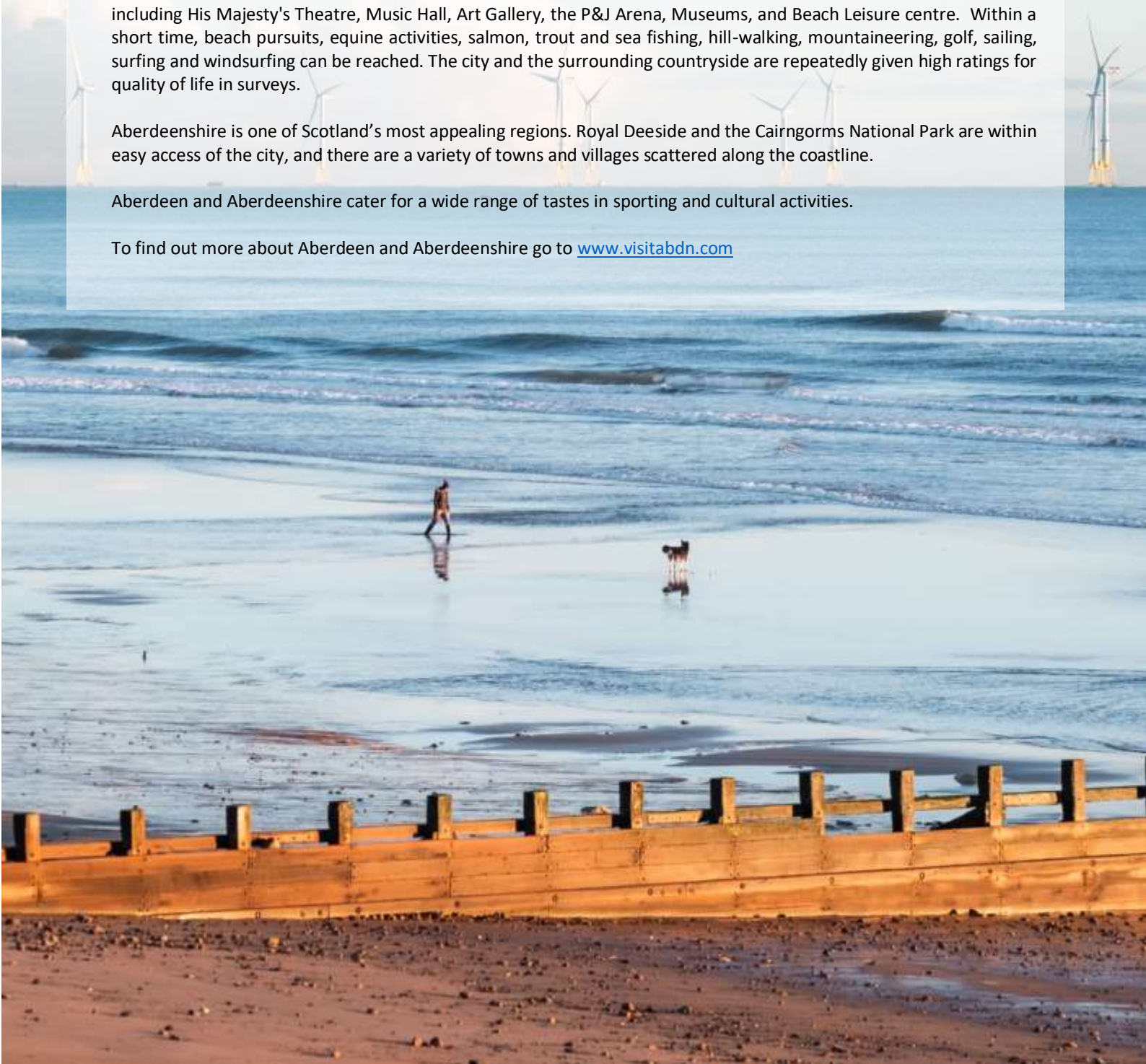
Aberdeen enjoys excellent communication services with other European cities - e.g. flying time to London is just over one hour with regular daily flights. There are direct air links to London (City, Heathrow, and Luton), Manchester, Birmingham, Leeds, Southampton, Belfast and East Midlands within the U.K. There are also flights to international hub airports: Amsterdam (Schiphol), and Paris (Charles De-Gaulle) as well as flights to other European destinations. <http://www.aberdeenairport.com> Road and rail links are also well developed.

The Grampian Region which took its name from the Grampian Mountains has a population of approximately 545,000. It is made up of five districts – Aberdeen, Banff & Buchan, Gordon, Kincardine & Deeside and Moray. The city and the surrounding countryside provide a variety of urban, sea-side and country pursuits. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the P&J Arena, Museums, and Beach Leisure centre. Within a short time, beach pursuits, equine activities, salmon, trout and sea fishing, hill-walking, mountaineering, golf, sailing, surfing and windsurfing can be reached. The city and the surrounding countryside are repeatedly given high ratings for quality of life in surveys.

Aberdeenshire is one of Scotland's most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

Aberdeen and Aberdeenshire cater for a wide range of tastes in sporting and cultural activities.

To find out more about Aberdeen and Aberdeenshire go to www.visitabdn.com



EQUALITY & DIVERSITY

The University values a diverse working environment and recognises the benefits this can bring. The University is keen to receive applications from individuals from across all of the equality protected characteristics (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation).

The University supports opportunities for flexible working for a range of reasons and has policies in place to facilitate this. The policies can be found here: <https://www.abdn.ac.uk/staffnet/working-here/flexible-working--5607.php>

The University's commitment to gender equality has been recognised through the achievement of an Athena SWAN Bronze award at institutional level and across all its subject areas. The University is also a Stonewall Diversity Champion to further LGBT+ equality.

The University is signed up to Advance HE's Race Equality Charter, affirming the University's commitment to the charter's aim of improving the representation, progression and success of minority ethnic staff and students within higher education.

Candidates who are British Sign Language (BSL) user can contact us directly by using [contact SCOTLAND-BSL](#)

The University is delighted to be accredited as a [Disability Confident](#) employer and strives to ensure that disabled staff and students have the opportunity to work and study in an inclusive, accessible and supportive environment.

<https://www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277.php>

HOW TO APPLY

Applications should include a curriculum vitae and personal statement of no more than two sides of A4, outlining your reasons for making an application.

Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 22 March 2021

Should you wish to make an informal enquiry please contact: Dr Rosemary Hollick, Senior Clinical Lecturer in Rheumatology at rhollick@abdn.ac.uk

Please do not send application forms or CVs to Dr Hollick

Please quote reference number IHS092R on all correspondence