Chair in Health Data Science
School of Medicine, Medical Sciences and Nutrition

Closing date: 15 December 2019
Interview date: To Be Confirmed
Reference number: IHS049A
Introduction

Building our Aberdeen Centre for Health Data Science

The University of Aberdeen is investing in the Aberdeen Centre for Health Data Science (ACHDS), School of Medicine, Medical Sciences and Nutrition (SMMSN) giving it priority status for new resource including academic posts. This is an excellent time to join the Centre and to help shape its future direction. We wish to recruit a leading Data Scientist with a strong applied health research background to contribute strategic direction to the new Centre.

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 strategic leadership from the Director (Prof Corri Black), Centre Programme Manager (Dr Sharon Gordon) and eight interdisciplinary Associate Directors (representing School Natural and Computing Science, Aberdeen Bioimaging Centre, NHS Innovation Hub, NHS Health Intelligence, Digital Research Services, Clinical Academia and Digital Engagement and Education). The core centre team comprises 20+ academic, academic related and NHS staff, an active PhD and studentship community and 10+ Associate Partner Leads who act as Data Science Champions across organisations, clinical teams and research groups. With >100 associate members, reflecting the large research and innovation community active in a vibrant and growing interdisciplinary data health science community.

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. An established programme of public, patient and policy engagement and involvement form a central core.

Through our iCAIRD project, we have rapidly growing Industrial partnerships blending international Companies with SMEs to create a vibrant digital health technology quarter supported by Opportunity North East and the development of a Bio-Hub for Innovation in North East Scotland, providing space for start-up businesses, specialist shared facilities and support services.

You will join a team of staff and collaborators and be able to contribute your expertise and ideas to build capacity and help drive the Centre’s strategic growth and future success 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:

A Chair in Health Data Science to provide senior leadership is sought with a strong research background who wishes to further develop an already successful academic career in computing or data intensive science applied to health and care.

This is an outstanding opportunity for a candidate with a proven track record in securing grants, leading a research group, publishing in high impact journals and providing academic leadership in both research and teaching. To enable the development of a research programme, support will be provided.

We are committed to making three academic appointments to strengthen our team; this current Chair plus two Senior Lecturer/Lecturers. We seek expertise across learning health system methodologies, accountable, explainable and transparent AI, machine learning, and digital technology co-design and evaluation.

New staff will have the support of our existing team and colleagues to rapidly diversify our funding streams and grow through:

- Accelerating our Innovation and Learning Health System portfolios
- Opening up funding streams through EPSRC, GCRF and other funders where significant calls are focused on data science and health
- Opening up our competitiveness in Innovate UK funding calls
- Increasing capacity, enabling the ACHDS to establish both an MSc in Data Health Science (by 2020) and a portfolio of CPD training courses
- Attracting high quality international PhD students across a wider disciplinary base

As Chair in Health Data Science, you will work closely with colleagues across the University and particularly fostering the collaboration between the SMMSN and School of Natural and Computing Science.

Key responsibilities:

Chair in Data Health Science and Computing

Promote and support the University of Aberdeen academic profile in Health Data Science at both national and international levels.

Provide strategic leadership for the further development of the Aberdeen Centre for Health Data Science.

Bring expertise in areas of health data science that complement the strengths already in the Centre.

Outstanding publication track record in high impact journals.

Establish an externally funded research programme that acts as a focus for others to develop their research output.

Undertake and provide leadership for interdisciplinary research, applying for funding with colleagues from ACHDS, School of Medicine, Medical Science and Nutrition, School of Natural and Computing Science and NHS.

Establish internal and external partnerships to maximise available resources and collaborations.

Develop and secure studentships, and recruit PhD students to add capacity to the research group.

At a glance

Salary:
Grade 9 (£59,828 – £67,318 per annum)

Hours of work:
Full-Time (37.5 hours per week)

Contract type:
Substantive
Contribute to UGT, PGT and CPD teaching and supervision in the SMMSN and SNCS.

Senior staff are expected to undertake line management responsibilities for staff and to provide leadership and mentoring.

Undertake School-level administration as determined by the Head of School.

Candidate background

**We are looking for an exceptional academic to join our team**

You will have a PhD or equivalent experience in a computing science or data intensive discipline.

You will be an established leader in the UK and/or International Data Science research field with extensive experience of working in health and/or social care related domains, a track record of publications in your domain and a strong track record in securing and delivering large scale grants.

You will be demonstrate experience in leadership in an interdisciplinary environment, developing partnerships with academics across the University, NHS, Industry and Internationally.

You will be an experienced and enthusiastic communicator about health data science, who will inspire and engage a wide range of audiences and support and mentor the next generation of health data scientists.

You should demonstrate excellence in education and supervision at undergraduate and/or postgraduate levels.

Terms of appointment

Salary will be at the appropriate point on the Grade 9 salary scale and negotiable with placement according to qualifications and experience.

Any appointment will be made subject to satisfactory references and a 3 year probation period.

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

Should you require a visa to undertake paid employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship and Tier 2 visa. As appropriate, at the time an offer of appointment is made you will be asked to demonstrate that you fulfil the criteria in respect of financial maintenance and competency in English. Please do not hesitate to contact Grant Rae, HR Adviser on +44 (0)1224 437068 or email grant.rae@abdn.ac.uk for further information.
# Person specification

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<th>Education/Qualifications</th>
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<tr>
<td>Academic, technical and professional education and training</td>
<td>• PhD or equivalent in relevant discipline</td>
<td>• HEA or equivalent teaching qualification or commitment to obtain within first 2 years</td>
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<td>• Extensive experience, expertise and leadership in health data science</td>
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<th>Work and Other relevant experience (including training)</th>
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<tr>
<td>eg Specialist knowledge, levels of experience, supervisory experience, research</td>
<td>• Established leadership and reputation in chosen field of research</td>
<td>• Track record in research and teaching within AI with a focus in one or more of the following areas: machine learning; explainable, accountable and transparent AI; applications of AI to healthcare</td>
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<td>• A sustained track record in attracting high levels of research funding</td>
<td>• Track Record in research and/or teaching in Learning Health System methodologies</td>
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<td>• Evidence of research output in the form of high quality peer reviewed publications</td>
<td>• Formal training in performance of colleagues through line management, coaching and mentoring</td>
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<td>• Evidence of contribution to the development and performance of colleagues through line management, coaching and mentoring</td>
<td>• Evidence of leadership in undergraduate and/or postgraduate teaching</td>
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<td>• Experience and capability to act as a role model in areas of research, teaching and management as appropriate</td>
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<td>• Experience of teaching and supervision at UG at PG levels</td>
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<td>• Commitment to and experience of reproducible open science</td>
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<th>Personal qualities and abilities</th>
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<td>eg initiative, leadership, ability to work on own or with others, communication skills</td>
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<td>• Have a high level of analytical capability and an enquiring, critical approach to work</td>
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<td>• Excellent written and verbal communication skills</td>
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<td>• Good interpersonal skills with the ability to interact constructively with a wide range of colleagues</td>
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<td>• Proven organisational abilities, including evidence of effective time-management and negotiating skills.</td>
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<td>• Ability to work as part of a team as well as on own</td>
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<td><strong>Other</strong></td>
<td><strong>Willingness to travel to national and international meetings with research collaborators.</strong></td>
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<td>eg special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.</td>
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The University

*Founded in 1495, Aberdeen is Scotland’s third oldest University and the fifth oldest in the UK. Ranked within the world top 160 in the recent Times Higher Education Rankings 2019 and named Scottish University of the Year in the Times and Sunday Times Good University Guide 2019, Aberdeen is ‘open to all and dedicated to the pursuit of truth in the service of others’; the ‘global University of the north’, and has been named Scottish University of the Year in the Times and Sunday Times Good University Guide 2019.*

Aberdeen is a broad based, research intensive University, which puts students at the head of everything it does. It has significant academic strengths and potential across a wide variety of disciplines. Outstanding in a wide range of discipline areas across the entire research spectrum, Aberdeen has also been credited for its international reach and its commercialisation of research ideas into spin out companies.

The University has over 14,000 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, inspires and helps every individual to reach their full potential.

The University combines a distinguished heritage with a forward looking attitude. In the past few years, the University has encouraged creativity in its academic staff, broken new ground with an innovative curriculum, and developed state-of-the-art facilities including the new Sir Duncan Rice Library and the Aberdeen Sports Village and Aquatics Centre. In looking to the future, the University seeks to enhance its reputation as one of the world’s leading Universities by moving forward with ever more ground breaking research; ensuring students have an intellectual and social experience second to none; and capitalising upon the dual role as one of the major institutions of the north and as a cornerstone of regional economic and cultural life.
The School (https://www.abdn.ac.uk/smmsn/index.php) encompasses all of the disciplines that underpin today's medicine, including biomedical sciences, health sciences, nutrition and medical, medical science and dental education and these are organised into five Institutes. The largest school in the University, the SMMSN has five Institutes: the Institute of Medical Sciences (IMS), the Institute of Applied Health Sciences (IAHS), the Rowett Institute, the Institute of Education in Medical and Dental Sciences (IEMDS) and the Institute of Dentistry, comprising all of our undergraduate and postgraduate programmes and our own graduate entry Dental School.

Staff are line managed and research opportunities are supported through our institutes which work together in an integrated and coordinated way to deliver research and teaching across the School, details of which can be found on their websites as below.

- The Institute of Applied Health Sciences https://www.abdn.ac.uk/iahs/
- The Institute of Medical Sciences http://www.abdn.ac.uk/ims/
- The Rowett Institute http://www.abdn.ac.uk/rowett/
- The Institute of Education for Medical and Dental Sciences https://www.abdn.ac.uk/iemds/
- The Institute of Dentistry https://www.abdn.ac.uk/dental/

Within the IMS, our scientists are working towards the creation of effective therapies for patients with a range of debilitating and life-threatening conditions. Current research areas include: arthritis and musculoskeletal medicine; cell developmental and cancer biology; immunity, infection and inflammation; metabolic and cardiovascular health; microbiology and translational neuroscience.

Within the IAHS, research is focused on improving health and health care delivery. It is home to a multidisciplinary grouping of around 100 university academic staff who conduct population and clinically-orientated health research and hosts the Health Services Research Unit (HSRU) and Health Economics Research Unit (HERU), both funded by the Chief Scientist’s Office (CSO) of the Scottish Government.

As well as being the organisational home to the teaching scholarship staff and responsible for oversight of the UG and PGT programmes offered by the School, the IEMDS promotes and supports excellence in medical education through research and development, with a focus on conceptually and theoretically robust research and development which has strong potential for reaching international recognition.

The Dental Institute runs an undergraduate BDS programme and a growing suite of masters programmes for professional development.

We have a number of specialist Centres representing areas of particular research strength and capacity within the School all of which are willing to support colleagues on projects in their areas. More information is available at the following websites.

- Centre for Healthcare Education Research and Innovation (https://www.abdn.ac.uk/acdc/)
- Aberdeen Centre for Health Data Science (https://www.abdn.ac.uk/achds/)
- Aberdeen Cardiovascular & Diabetes Centre (https://www.abdn.ac.uk/acdc/) and
- Aberdeen Centre for Arthritis and Musculoskeletal Health (https://www.abdn.ac.uk/acamh/)

The School is home to over 800 staff and 2000fte students. It is located on the Foresterhill site, shared with our main clinical partner, NHS Grampian, with whom we work in close collaboration at primary and secondary care levels. This is one of the largest integrated healthcare delivery, training and research sites in Europe and has rich assets including state-
of-the-art academic (research and teaching) and clinical buildings. Excellent infrastructure is also provided through core facilities for biomedical science including flow cytometry, proteomics, microscopy and genome sequencing, support for data health science projects and clinical trials.

The last major academic capital development was the opening of the Rowett Institute, occupied in March 2016, whose staff undertakes nutrition research to help improve people’s lives through the prevention of ill-health and disease. Their new £40M building has provided the University of Aberdeen with a facility with unique capabilities for human nutrition and metabolic research. Currently, the NHSG is carrying out an exciting £164 million building development creating The Baird Family Hospital and The Aberdeen and North Centre for Haematology, Oncology and Radiotherapy (ANCHOR) Centre Project, scheduled for completion in 2021.
The city and the region

Aberdeen and Aberdeenshire

Aberdeen is world renowned for the key part it plays in Europe’s energy industry and the region is both the agricultural heartland of Scotland and a hub of the food and drink industry,

With the population approaching 230,000, Aberdeen is big enough to provide all the advantages of city life, yet compact enough to enjoy the more intimate atmosphere usually associated with small towns.

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

How to apply

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

The closing date for receipt of applications is 15 December 2019

Should you wish to make an informal enquiry please contact:

Professor Amanda Lee, Director of Institute of Applied Health Sciences
01224 437111/437975
a.j.lee@abdn.ac.uk

or

Professor Corri Black, Director of the Aberdeen Centre for Health Data Sciences
01224 437132
corri.black@abdn.ac.uk

Please do not send application forms or CVs to Professors Lee or Black.

Please quote reference number IHS049A on all correspondence

The University pursues a policy of equal opportunities in the appointment and promotion of staff.