Programmer

Institute of Applied Health Sciences

Closing date: 14 April 2022
Interview date: To be confirmed
Reference number: HSR060A
INTRODUCTION

The Health Services Research Unit (HSRU) has a national remit to research the best ways to provide health care, and to train those working in the health services in research methods. Most research projects aim to find out whether developments within the health service really are effective, efficient and appropriate. There are approximately 70 members of staff, working together cohesively, with everyone’s contribution valued. The atmosphere is friendly, informal and efficient.

The Unit has responsibility for the following general remit:

1. To study or evaluate clinical activities with a view to improving effectiveness and efficiency in health care;
2. To work for the implementation of proven changes in clinical activities;
3. To encourage and support similar work throughout Scotland;
4. To train NHS staff in Scotland, and others, in the principles and practice of health services research in general, and health care evaluation in particular.

In pursuit of this remit, the Unit has established an internationally recognised portfolio of health services research focusing on two main programmes (described below). Programmes of knowledge synthesis and methodological research underpin the substantive research. The research is marked by being multidisciplinary and collaborative, involving a range of national and international partners. In 2017 the Unit (jointly with the University’s Health Economics Research Unit) won the Queen’s Anniversary Prize for Further and Higher Education, the highest national honour available for a UK university in recognition of our world-leading research into health services.

Staff from HSRU made a major contribution to the University’s submission to the Unit of Assessment 2 (Public Health, Health Services and Primary Care) in the 2014 Research Excellence Framework. REF 2014 confirmed that we are top for Public Health, Health Services and Primary Care research in Scotland and over 80% of our submitted work was rated as “internationally excellent” or “world leading”. The Unit has an outstanding publications record – approximately 150 academic articles, monographs, reports and presentations are recorded every year and we also encourage staff to take part in other forms of public engagement. Further details about our publications are at http://www.abdn.ac.uk/hsru/publications/

The Unit also contributes to health services research training at four levels - undergraduate, postgraduate, professional and continuing.

We also co-host:

- Centre for Healthcare Randomised Trials (CHaRT)
- NIHR HTA Technology Assessment Review (TARs) team

For more information on our research, please see our website (www.abdn.ac.uk/hsru).
MAIN PURPOSE OF THE ROLE:

We have an exciting opportunity for a programmer to join an experienced team of clinical trial programmers in the Centre for Healthcare Randomised Trials (CHaRT). CHaRT, part of the Health Services Research Unit (HSRU), University of Aberdeen, is a leader in UK clinical trials and the programming team contributes to worthwhile research by providing programming support and data management for multi-centre health care randomised trials and other research studies. This includes preparing randomisation schedules, setting up databases and online programming applications for data collection and assisting with the conduct of the studies (such as monitoring recruitment and scheduling participant follow up).

The trials compare forms of health care. The role offers the opportunity to work with other staff in CHaRT/HSRU to deliver high quality work for important research questions whilst also providing excellent CPD prospects. Further details about the CHaRT trial portfolio are available at www.charttrials.abdn.ac.uk

KEY RESPONSIBILITIES:

You will be responsible for the programming requirements for various randomised clinical trials and other research studies, under the supervision of the CHaRT Senior IT Development Manager and Senior Programmer. These will include:

- Setting up and maintaining study databases in MS SQL
- Authoring online Clinical Trial Data Management applications using ASP.NET (ASP .NET Forms/MVC) and C# that allow remote data capture and also contribute to the smooth conduct of the study
- Preparing randomisation applications
- Presenting information to team and other internal groups
- Managing, prioritising, assigning, investigating and resolving support requests
- Dealing with general enquiries and organising team e-mail
- Authoring, gathering and clarifying requirements
- Supervising team members
- Carry out staff training and trial team user training
- Producing user guides and training materials
- Authoring, updating and managing documentation for operating procedures and working practice documents relevant to the programming team

Clinical trials software programs will be developed for new trials. Data solutions have web-based .Net front ends linked to SQL Server databases. Individual trials websites may incorporate video and audio to enhance the appearance and functionality of the site and reporting using SQL Server Reporting Services is used to further enhance the applications.

You will be a member of CHaRT (Centre for Healthcare Randomised Trials), based in the Health Services Research Unit. You will be supervised on a day-to-day basis by CHaRT’s Senior IT Development Manager (Mark Forrest) and the Senior Programmer and will liaise with trial staff. The CHaRT Director, HCA Programme Director and the HSRU Unit Director provide overall direction of the trials service.
CANDIDATE BACKGROUND

You should have a relevant degree in a subject allied to information technology or computer science along with demonstrable programming experience. Applicants must have experience of Application development in a clinical trials software environment, authoring procedural documentation for clinical trials software, creating dynamic web applications using ASP.NET (C#), knowledge of relational database systems in SQL, team organisation and requirement gathering. Experience in handling large volumes of data and knowledge of GDPR is desirable. The ability to work effectively within a multidisciplinary research team and with a broad range of people, without close supervision, to competing and tight deadlines is essential. Excellent communication skills, both written and verbal, are also a requirement role.

TERMS OF APPOINTMENT

Salary will be at the appropriate point on Grade 5/6, £28,756 - £40,927 per annum, and negotiable with placement according to qualifications and experience.

Any appointment will be made subject to satisfactory references and probation period

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

This role is based in the UK and as such the successful candidate will be required to live and work in the UK.

The candidate appointed to this post may be eligible for homeworking on a regular or permanent basis. For more information please refer to our Homworking Policy. Please note that where permanent homeworking is approved there will still be a requirement to work at a University location from time to time, albeit on an infrequent basis.

This post does not meet the minimum requirements for visa sponsorship under the Skilled Worker Route. We are therefore unable to consider applicants for this post that require sponsorship to work in the UK.

AT A GLANCE

SALARY:
Grade 5/6
£28,756 - £40,927 per annum

HOURS OF WORK:
Full-time, 37.5 hours

CONTRACT TYPE:
Project limited, 12 months

LOCATION:
Aberdeen
# Person Specification

## Education/Qualifications

**Academic, technical and professional education and training**

- First degree in computing or a relevant subject
- Knowledge of full software development cycle

**Mathematical qualification (at least Higher Grade)**

## Work and Other relevant experience (including training)

- Experience of authoring procedural documentation for development of clinical trials software
- Experience in using Visual Studio and MS SQL Management Studio
- Experience of creating dynamic web applications using ASP.NET and C#
- Experience of relational database design using SQL
- Experience gathering software requirements
- Experience of Microsoft Office
- Experience in workload management
- Experience with randomisation algorithms

- Experience of developing user-friendly data access forms
- Experience of developing for mobile apps
- Knowledge of the Data Protection Act
- Experience of creating dynamic web applications using MVC (Core)

## Personal qualities and abilities

- The ability to work effectively within a multi-disciplinary research team
- Ability to communicate software specifications clearly both orally and in writing
- Ability to work on own initiative
- Ability to work without close supervision, to competing and tight deadlines
- Ability to handle a fast-paced multitasking environment
- Ability to demonstrate IT solutions to trial personnel
- Ability to work to deadlines

- An interest in the new developing technologies for electronic data collection
- Willing to demonstrate IT solutions to trials personnel
- Demonstrate an analytical approach to problem solving

## Other

- Ability to work in an open plan office
- Ability to work from home
- Ability to travel within the UK, if necessary
open to all and dedicated to the pursuit of truth in the service of others

The University of Aberdeen is a broad based, research intensive University, and we put students at the centre of everything we do. Outstanding in a wide range of discipline areas, Aberdeen is credited for its international reach and 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.

CURRENT CONTEXT

The University continues to build on its achievements. 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 in 2020 launched five interdisciplinary, cross-institution Research Centres that will catalyse world-leading research in our areas of strength. Our five Interdisciplinary Challenges are: Energy Transition; Social Inclusion and Cultural Diversity; Environment and Biodiversity; Data and Artificial Intelligence; and Health, Nutrition and Wellbeing.

ABERDEEN 2040

On our 525th anniversary as a University we launched Aberdeen 2040, our strategic vision for the next 20 years. Four strategic themes will shape our learning and discovery, underlined by 20 commitments we have made against each theme:

- **Inclusive**
  We welcome students, staff and partners from all backgrounds, organisations and communities. We value diversity.

- **Interdisciplinary**
  We innovate in education and research by generating, sharing and applying new kinds of knowledge. We learn together.

- **International**
  We connect with others and extend our networks and partnerships around the world. We think across borders.

- **Sustainable**
  We understand and nurture our environment, and take care of our resources, including our people and 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. 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.

INTERNATIONAL
Aberdeen is increasing its international presence, positioning the University as a global organisation and building on established global partnerships in e.g. Qatar, China, North America, Europe. We feature in the top 50 institutions worldwide for international students¹ and have been named 31st in the world for International Outlook². The University of Aberdeen is proud to be the first UK University to deliver programmes on a dedicated campus in Qatar in partnership with AFG College. Phase 1 has successfully recruited over 600 students and 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 www.abdn.ac.uk/qatar.

IMPACT
Our dedication to building a sustainable future is reflected in the Times Higher Education Impact Rankings 2021 where we were ranked in the top 60 Universities worldwide for positive impact on society.

In 2020 the University signed the United Nations Sustainable Development Goals accord, solidifying our commitment to developing the world in a sustainable way. In 2021 we were listed in the global Top 50 for 6 of these goals and in the UK Top 20 for all 17³.

¹ QS World University Rankings 2022
² Times Higher Education World University Rankings 2022
³ Times Higher Education Impact Rankings 2021
THE SCHOOL OF MEDICINE, MEDICAL SCIENCES AND NUTRITION

The School of Medicine, Medical Sciences, and Nutrition provides a world-class environment for students, tutors and researchers to come together from many different disciplines and create opportunities for greater knowledge that will underpin maintaining good health and treating disease.

The School is committed to developing excellence in our students and has expertise in the teaching of Medicine, Dentistry and Science students in a range of disciplines. We have 780 staff, providing teaching and research excellence and clinical expertise, who support a community of almost 2,000 students.

We have a thriving community of postgraduate students undertaking both taught and research degree programmes which strongly link to our areas of research excellence.

Our research is organised into Institutes, incorporating world-class Research Centres, focused in areas of excellence which address the key challenges facing society today. These provide an innovative and creative environment to allow fundamental discovery, and facilitate its translation into maintaining health and treating disease effectively.

We provide an inclusive environment which ensures equality and diversity in supporting our students and staff to have the opportunity to reach their full potential.
Scotland’s third largest city, Aberdeen sits on the coast between the mountains of Aberdeenshire and the stunning North Sea coastline. The Aberdeen City region is a can-do place that is actively investing, at scale, in its future.

Renowned as a Global Energy Hub, Aberdeen is a vibrant, entrepreneurial region, home to a unique mix of business opportunities and specialist skills across various sectors including energy, technology, life sciences and food & drink. More than 20% of Scotland’s top businesses are located in this region which is taking great strides to ensure that it continues to compete on a world stage. Investments of more than £10 billion of public and private infrastructure is due to be delivered before 2030, marking an exciting time to be part of a genuine world-class location.

Built from sparkling local granite Aberdeen has earned the name of the Silver City. As the energy capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live, work and study. Due to its global business and international energy industry credentials, Aberdeen is well served by local and national transport infrastructure with excellent rail networks that run both North and South of Scotland and the rest of the UK. It also acts as an international travel hub. Flying time to London is just over one hour with regular daily flights and serves international travel to European centres such as Amsterdam (Schiphol) and Paris (Charles de-Gaulle) as well as flights to other European destinations.

The City and the surrounding countryside provide a variety of urban, seaside and country attractions. Aberdeen has first class amenities including His Majesty’s Theatre, Music Hall, Art Gallery, the P&J Arena, Museums, and Beach Leisure Centre. The City is framed by its accessible beach front which is within a short walk of the city centre and there are an array of activities available across the region such as hill walking; mountaineering; sailing; surfing; salmon, trout and sea fishing; golf; sailing; surfing and windsurfing. The surrounding countryside, known as Aberdeenshire, is also 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 has ranked consistently highly in nationally recognised quality of life surveys, and was recently named the happiest city in the UK to live and work in.

To find our more visit [www.visitabdn.com](http://www.visitabdn.com)

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4 Shawbrook Bank Happiest Cities Index 2021
EQUALITY AND 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 at 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 an 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) users 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.

www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277

HOW TO APPLY

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

The closing date for receipt of applications is **14 April 2022**

Should you wish to make an informal enquiry please contact:

Mark Forrest, Senior IT Development manager.
01224 438188
mmforrest@abdn.ac.uk

Please do **not** send application forms or CVs to Mark Forrest.

Please quote reference number **HSR060A** on all correspondence