Recruitment pack

Senior Data Scientist – Nutrition Accountability Framework



About the GNR

The [Global Nutrition Report](https://globalnutritionreport.org/) (GNR) is the world’s leading independent assessment of the state of global nutrition and leads the [Nutrition Accountability Framework](https://globalnutritionreport.org/resources/nutrition-accountability-framework/).[[1]](#footnote-1) The GNR was established in 2014 following the first [Nutrition for Growth](https://nutritionforgrowth.org/) (N4G) Summit as an accountability mechanism to track progress against global nutrition targets and the commitments made to reach them. It acts as a stocktake on the world’s nutrition – globally, regionally and country by country – and on efforts to improve it.

The GNR is a multi-stakeholder initiative, consisting of a Stakeholder Group (SG), an Independent Expert Group (IEG) and the GNR Host (the current Host is Development Initiatives (DI)). The GNR aims to provide a single authoritative source on progress towards addressing poor diets and malnutrition on a global scale, with high standards of quality and independence. The GNR provides the best available data, in-depth analysis and expert opinion rooted in evidence to help drive action on nutrition where it is urgently needed. Through a comprehensive [Report](https://globalnutritionreport.org/reports/), interactive [Country Nutrition Profiles](https://globalnutritionreport.org/resources/nutrition-profiles/) and [Nutrition Commitment Tracking](https://globalnutritionreport.org/resources/nutrition-growth-commitment-tracking/), the GNR sheds light on poor diets and the burden of malnutrition, from undernutrition to diet-related non-communicable diseases (NCDs), tracks progress on global nutrition targets and highlights working solutions to improve nutrition around the world.

The GNR is led by the [IEG Chair](https://globalnutritionreport.org/about/independent-expert-group/), who is supported by IEG members to develop an independent and high quality GNR. The current IEG Chair is Dr. Renata Micha.

GNR’s goal is to inform, shape and inspire action with data and evidence on policy, practice and financing which result in greater accountability and progress in tackling poor diets and malnutrition globally.

About the GNR Host, Development Initiatives

The Host organisation supports the IEG in developing the GNR, providing the IEG with data analysis and research support as well as coordinating and managing functions. The Host leads on fundraising and the production, communication and dissemination of the report, as well as maintaining the website and managing all digital assets of the GNR. [Development Initiatives](https://devinit.org/) was awarded this role in 2018, and its hosting was extended in 2020 for a further three years, from March 2021 to March 2024.

Development Initiatives (DI) is an international development organisation that focuses on putting data-driven decision-making at the heart of poverty eradication.

Our vision is a world without poverty that invests in human security and where everyone shares the benefits of opportunity and growth.

We provide rigorous information to support better decisions, influence policy outcomes, increase accountability and strengthen the use of data to eradicate poverty.

“At DI we constantly strive to make the best contribution we can to ending poverty, building resilience and ensuring that no one is left behind. We know that good data is essential to successfully and sustainably end poverty. We use our specialist expertise in data to bring forth information about people in poverty, where financing is going, what’s working, and whether those in greatest need are reached. We also play a role in improving the openness, quality and use of data. This is crucial for resources to be used effectively to address poverty and ensure that everyone is being counted.”

Harpinder Collacott, Executive Director, Development Initiatives

# Senior data scientist – Nutrition Accountability Framework

## Role content and purpose

The post-holder will be responsible for providing data science and analytical expertise for the [Nutrition Accountability Framework](https://globalnutritionreport.org/resources/nutrition-accountability-framework/). You will be an experienced data scientist with a background relevant to this area of research – that is, epidemiology, biostatistics and/or public health, especially in population-based nutrition data and indicators.

The post-holder will be accountable for the delivery of all data and analytical elements of the Nutrition Accountability Framework and will work under the guidance and oversight of the Independent Expert Group (IEG) Chair and designated IEG members as appropriate.

The role will involve developing, managing and maintaining large and complex/heterogeneous datasets, as well as developing all necessary methods and protocols to support this (for example, researching, identifying and selecting indicators for inclusion, assessing data integrity, performing quality checks and standardisation). Alongside the responsibility for data management and quality, the post-holder will apply rigorous statistical methods to process, analyse and evaluate nutrition commitments and policies, develop data visualisations, and provide clear narrative reports. The post-holder should also have experience in researching the literature (ideally in evidence synthesis) to be able to draw from the evidence base and best practices.

## Contractual details

Start date: As soon as possible, depending on notice period

Location: Bristol, UK. Alternative locations within the UK will be considered for the right candidate

Length: Fixed-term contract for 12 months

Salary: £43,000–£53,000 per annum, dependent on experience

Hours: Full-time (although part-time will be considered for exceptional candidates)

Probation: 3 months

Leave: 25 days pro rata, plus all bank/public holidays

## Technical duties

* Develop scientific, research, methodological and analytical content for the Nutrition Accountability Framework, with overall responsibility for the developed content as approved by the IEG Chair.
* Oversee and manage the sourcing, management and analysis of data for the Nutrition Accountability Framework (including the N4G Commitment Tracker), as approved by the IEG Chair.
* Collate, process and standardise relevant data for analysis, interpretation and reporting.
* Develop and maintain a central analytical database of data to support the Nutrition Accountability Framework.
* Contribute to the development of the platform, including to surveys used to facilitate the registration of commitments and progress made towards those commitments annually.
* Develop standardised methods for assessing the quality of the nutrition commitments and progress made towards them annually.
* Develop and implement protocols and methods for data acquisition and database management, including ensuring data integrity and quality, developing standardisation processes and the creation of metadata.
* Applying rigorous statistical methods to evaluate and analyse nutrition commitments and policies.
* Perform data analyses, interpretation and reporting.
* Conduct evidence synthesis on specific topics identified by the IEG Chair, interpret and draw evidence-based conclusions from the scientific literature.
* Explore and visualise data to present the ‘story’ in a clear and compelling way to both technical and non-technical audiences.
* Use an evolving range of analysis tools and techniques, learning quickly as and when required.
* Ensure documentation and knowledge management for data are processed to improve speed of analysis and minimise duplication and errors.
* Quality-assure analytical work of involved data team or other colleagues, challenge source data and assumptions, and interpret final analyses.
* Represent DI externally in area of expertise.
* Work collaboratively across teams, providing high-quality input in area of expertise.
* Engage in an open and effective manner with the wider nutrition community, including the IEG and the Stakeholder Group.

### Organisational responsibilities

* Lead on data science for the Nutrition Accountability Framework.
* Support the data science profession within DI to identify opportunities to grow data science skills across the organisation.
* Implement and manage strategic projects and activities in line with DI’s vision, mission, values and goals.
* Develop and maintain effective systems, ensuring these are consistent with DI’s operational requirements and policies.
* Support the day-to-day management within own team.
* Demonstrate creativity in applying solutions.
* Provide vital administration and logistical support to ongoing project work.

Management duties

* Lead DI data team members supporting the technical duties related to the Nutrition Accountability Framework.
* Ensure line reports are delivering to a high standard across their objectives, and performance-manage or up-skill if and when appropriate.
* Lead or contribute to team meetings and provide updates as required.

General responsibilities

* Be aware of and take personal responsibility for any health and safety issues and obligations.
* Uphold all aspects of company policies and procedures and legal requirements in relation to personal conduct.
* Prepare for and engage in one-to-one meetings and performance management appraisals.
* Continuously maintain and expand a range of technical, leadership and communication skills as part of professional development and personal development plans.
* Be willing and committed to taking on new work as required and be proactive.
* Work flexibly where needed to accommodate meetings across different time zones.

No job description or role profile can encompass all tasks and duties that may be required, and we will expect the postholder to carry out other duties and tasks from time to time that are broadly consistent with those in this document.

## Person specification

Experience

*Essential*

* Minimum 3-5 years’ professional experience in data science at postgraduate level relevant to the area of research, with a strong epidemiology, biostatistics and/or public health background.
* Extensive experience in exploring, preparing and managing large, multi-dimensional and heterogeneous datasets.
* Expert in the application of data science skills for database creation and management, including development of protocols for standardisation, quality and data integrity.
* Proven experience in the application of robust quantitative/statistical methods for public health, epidemiological or biostatistical analysis, especially using population-based (nutrition) indicators.
* Proven experience using a range datasets and data types, including both cross-sectional and longitudinal.
* Proven experience in selecting the appropriate statistical methods to deliver descriptive statistics and trends analysis, and assess statistical bias and confidence.
* Expert user of statistical/programming software, such as Stata, R, SAS or Python.
* Proven experience in evidence synthesis, including in literature search, systematic reviews and/or meta-analyses and writing research reports.

*Desirable*

* Experience of working in multi-disciplinary teams and environments.
* Experience working in nutrition surveys/programmes at the national or sub-national level.
* Work experience in more than one location or area of related work.
* Experience in nutrition data standardisation and harmonisation.
* Experience in project management and organisation, including administrative tasks, keeping track of processes/actions, and developing operating protocols/manuals.

Skills and Abilities

*Essential*

* Strong communication skills, including experience in working effectively across cultures and with diverse audiences, and communicating clearly and effectively both verbally and in written English.
* Able to create new data solutions/collections through the manipulation of multiple data sources to better meet needs. Able to apply techniques to link or match data.
* Highly knowledgeable of the breadth of data sources available for use, and their strengths and limitations.
* Highly knowledgeable of the breadth of techniques available for manipulating and creating new data sources through linking or matching multiple datasets. Leads and advises others on data manipulations and appropriate innovations.
* Superior ability to understand the concepts of data storage, data warehouses and data lakes, query data from databases, and perform data wrangling and data preparation.
* Knowledge of where to look and how to use appropriate analytical techniques, including assumptions, applications, and limitations, and the ability to assess the potential of emerging technology.
* Broad data analysis knowledge base, and the ability to use lessons learned from own and others’ work in order to implement changes to processes and methods which improve practices and drive efficiency.
* Ability to identify and apply the most appropriate analytical method in different situations, with knowledge of what the expected outputs would look like and how to interpret findings.
* First-rate written skills evidenced in published work, with the ability to present complex issues clearly to a wide audience by using appropriate scientific terminology.
* Ability to work in a fast-paced environment yet deliver on time with attention to detail and accuracy.
* Ability to work independently with minimal support as well as in a team environment.
* Multi-tasking, project- and time-management skills, including ability to prioritise and coordinate tasks with a great degree of flexibility.
* People-management skills, including ability to interact effectively and efficiently with people at all levels.

*Desirable*

* Ability to build machine learning models.

Education

*Essential*

* Educated to degree level in a highly numerate discipline such as data science, statistics or mathematics.
* Master’s degree in data science, epidemiology, public health, biostatistics or a related field.

*Desirable*

* PhD in biostatistics, epidemiology, public health or a related field.

Knowledge

*Essential*

* Knowledge of complex data and databases, including related software such as SQL for data warehousing.
* Knowledge of R, Python or other related programming language.
* Expert knowledge of statistical methods for use in epidemiology, biostatistics or public health, including knowledge of statistical software.
* Data visualisation techniques, methods and software (such as tableau).

*Desirable*

* Existing awareness of/links with the GNR.
* Knowledge of and/or contacts within the nutrition environment.

Personal Attributes

* Strong drive for results.
* Willingness to work flexibly to accommodate meetings across different time zones when required.

## Application details

To apply, please upload your application to our [online application portal](https://cezanneondemand.intervieweb.it/developmentinitiatives/jobs/senior_data_scientist_16888/en/). This includes your CV (up to three pages), a brief personal statement (one page) detailing how your skills, experience and long-term career goals contribute to your candidacy, one or two letters of reference from a professor, prior supervisor or other professional familiar with your abilities and experience, and an official copy of academic transcript(s).

Early applications are highly encouraged; we will be reviewing submissions as they arrive, and interviews will be held periodically. As we are advertising on a rolling basis, we reserve the right to end advertisement without notice.

## Other

We welcome applications from all sections of the community.

We have a duty to prevent illegal working by checking potential employees’ documents, before employing them, to ensure they have the right to work in the country in which this post is based.

We are unable to offer sponsorship for a work permit/visa application.

DI is an equal opportunities employer and in line with our policies, we aim to ensure that no job applicant receives less favourable treatment on the grounds of race, colour, nationality, religion, ethnic or national origin, age, gender, marital status, sexual orientation or disability.

We find it helpful for all applicants to complete our Diversity Monitoring Form found on our website at: <http://devinit.org/working-with-us/vacancies/>

## Working together

“People are our greatest asset” – it’s a well-used saying, but at DI it really is true.

We acknowledge that we work in an environment where the pace is often fast, and we need our people to be able to respond swiftly and creatively to new situations and demands, so it makes sense that the better our employees are, the more effective we will be and for this reason, we work hard to create an environment that meets everyone’s needs.

In line with our values (empowering, transparent, innovative, agile, quality), we aim for a culture of honesty and openness and want to attract and retain talented people who share our vision. We also like to offer individuals the space to use their talents in an innovative working environment with colleagues who are passionate about our vision.

### UK

* Informal work environment (e.g. casual dress)
* Pension scheme with 5% employer contribution
* Blended approach to home and office working
* Healthcare scheme with employee assistance programme
* Paid study leave and financial support
* Paid professional membership fees
* Buy/sell holiday scheme
* Cycle to work scheme
* Enhanced holiday entitlement, plus all bank and public holidays and discretionary paid time off at Christmas
* Up to five days’ paid volunteering leave (addressing poverty/helping vulnerable people).
* Access to onsite office gym
* Free fruit in office on a weekly basis
1. The N4G Accountability Working Group, formed under the auspices of the Government of Japan, has called for “an independent, coherent, streamlined, unified, well financed and cost-effective accountability framework to hold all stakeholders, including governments, businesses, civil society organizations (CSOs) and philanthropic organizations accountable”. The Working Group has recommended that, as the key accountability mechanism for N4G commitment tracking, the GNR should be the natural choice for coordinating the overall nutrition accountability framework, thus extending N4G commitments aimed at coordinating nutrition accountability as a whole in the long term. See: <https://nutritionforgrowth.org/wp-content/uploads/2020/10/Accountability-WG-Final-report-designed-VF_Compressed.pdf> [↑](#footnote-ref-1)