

The Award seeks to celebrate successful initiatives that have had a measurable impact on the careers of women within the institution. Such initiatives can serve as exemplars of best practice within the community, with the potential to be widely adopted by other institutions. Submissions will need to demonstrate the impact that has been achieved.*

For 2019 examples of impact could include an improved success rate in recruiting, retaining and promoting female staff, increased satisfaction scores from objective surveys of staff experience, achievement of 'beacon' status (i.e. being used as an exemplar within national or regional initiatives).

The proposal should include:

*** Contact information of the Head/Director of the applying Department or Faculty and the responsible for the application:**

Dr Cordelia Langford, Director of Scientific Operations and Chair of the Equality, Diversity and Inclusion (EDI) Forum, Genome Research Limited (GRL) (this incorporates the Wellcome Trust Sanger Institute (WTSI), and Connecting Science (CS))

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About us

Genome Research Limited (GRL) encompasses three main activities undertaken by our operations at Wellcome Genome Campus. They are the Wellcome Sanger Institute, Connecting Science, and Enterprise and Innovation. All of these activities work in the fields of Genomes and Biodata and are closely interlinked.

The Wellcome Sanger Institute (<https://www.sanger.ac.uk/>) is one of the world's leading genome centres. Through its ability to conduct research at scale, it is able to engage in bold and long-term exploratory projects that are designed to influence and empower medical science globally. Institute research findings, generated through its own research programmes and through its leading role in international consortia, are being used to develop new diagnostics and treatments for human disease.

Wellcome Genome Campus Connecting Science's mission is to enable everyone to explore genomic science and its impact on research, health and society. We connect researchers, health professionals and the wider public, creating opportunities and spaces to explore genomic science and its impact on people. Connecting Science inspires new thinking, sparks conversation, supports learning and measures attitudes, drawing on the ground-breaking research taking place on the Wellcome Genome Campus: www.wellcomegenomecampus.org/connectingscience

Acknowledgements

This work would not be possible without the valuable and enthusiastic contribution from past and present members of the Equality, Diversity and inclusion Forum and Campus-wide Equality in Science Working Group.

*** A brief summary or abstract (100 words or less) which can be made public;**

The Equality, Diversity and Inclusion Programme at Genome Research Limited catalyses organisational culture change, develops partnerships, communicates activities and champions our women in science work at a national and international level.

Key areas where we have made significant and impactful progress:

- Impact on senior women leaders
- Improved career and leadership opportunities for women
- Enhanced policies, support and positive cultural changes
- Nurturing a family-friendly and inclusive Campus

The numerous impactful changes to our policies, practices and way of working have transformed us into a more attractive place to work, as evidenced by data analyses, staff surveys and individual feedback.

WORD COUNT: 98

*** Description of the initiative (max 2 pages);**

The attrition of women along the academic career-path is a well-documented phenomenon, and similar to other STEM disciplines. In the Biological Sciences, there are 61% women at PhD level, which drops to 18% women at professorial level [1]. At GRL, 50% of our PhD students are female. (students include wet lab scientists, mathematical and computational scientists - these disciplines have different gender profiles nationally - 38% female in the Mathematical Sciences and 17% female in Computer Science [2]). Although 59% of our Post-Doctoral Fellows are women, women make up less than 20% of our senior scientific leadership roles ('Faculty'), partly due to a limited selection pool and the small number of roles that become available year on year. Despite the challenges, the under representation of women in senior leadership positions is an area that we are committed to addressing. There is also a well-documented pay gap; in the UK, women who work full time earn 17% less than men based on mean hourly earnings [3].

GRL is committed to fostering an inclusive, stimulating and rewarding culture where **everyone can thrive and diversity is celebrated**. We work closely with leadership and staff across the organisation to develop actions and initiatives that ensure that we are an inclusive, engaging and enjoyable place to work, which is supported by our EDI strategy.

Our activities focus on: **Representation** - increasing the proportion of female applications for scientific leadership positions and the levels below this that can feed into the scientific pipeline; **Perceptions** – dispelling myths and challenging misconceptions; **Achievement** – ensuring that there are no gender barriers; **Progression** – inspiring women and men at different stages of their scientific careers to progress to senior levels; **Pay** – conducting gender pay gap analyses and working towards abolishing the gender pay gap.

An ambitious action plan underpins our endeavours, which covers areas such as increasing the representation of women at senior scientific levels, gender balance on decision-making committees, equality of access to promotion and development opportunities, further developing and promoting a women/family friendly culture, awareness and training and increasing the take-up of flexible working/family-friendly policies. We work closely with comparable Biological Sciences Research Institutions, such as The Babraham Institute, Francis Crick Institute and Institute of Cancer Research, to share data, good practice and policies and cross-fertilise ideas.

The EDI Programme is governed by the EDI Forum, which meets quarterly to review progress and advance new initiatives. Its 21 members include representation from all career stages and disciplines across the organisation, including the Institute Director, PhD students and Post-doctoral Fellows.

GRL holds an Athena SWAN bronze award and is working towards silver accreditation [4]. In addition, we actively engage with networks beyond Campus to share good practice and cross-fertilise ideas. For example, we are members of The Royal Society of Biology's 'Returners to Biosciences' group, nationwide Athena SWAN networks and lead an Equality Network in the Biosciences that brings Higher Education Institutions and private biosciences-related organisations together to foster discussion, share good practice and drive sectoral change. Scientific excellence cannot be achieved without the support of the entirety of our workforce and in 2018 we signed the Technician Commitment [5], an initiative led by the Science Council to ensure greater visibility, recognition, career development and sustainability for technicians.

Our Culture - We provide a range of progressive policies which support everyone to achieve a positive work life balance. We actively promote, encourage and support flexible working practices, both formally and informally, to help maintain a healthy work-life balance. Staff are empowered to work flexibly from the start of their employment.

Our enhanced Maternity Leave Policy provides an entitlement to six months full pay. There is no qualifying period of employment before an employee is entitled to benefit from this enhanced policy and there is no return to work requirement. Our Shared Parental Leave policy mirrors this policy and we have seen an increase of 84% over the past year in take-up of Shared Parental Leave.

Our Paid Leave for Carers policy provides our employees with up to 10 additional days paid leave a year to deal with short-term, extraordinary caring situations such as looking after a sick child.

We have in place an innovative and flexible approach within our scientific leadership model. Faculty who have taken parental leave can extend their tenure by up to an additional 18 months to support their transition back to research.

Our Carers Grant enables employees to attend training, conferences, collaborative research visits, or invited talks whilst receiving financial support to cover additional care costs for dependents.

In response to a recent challenge under our Whistleblowing policy, we have taken the opportunity to conduct an extensive review of our culture and working practices. We have subsequently developed an extensive range of actions to address the root causes of disparity in our Faculty that will form the basis of a long-term strategy to achieve equality and will take positive action to create an equitable environment.

Our Working Environment - Cultivating a friendly and supportive workplace is key to helping our researchers, students, and staff to thrive. We have a family-friendly environment that permeates the fabric of our campus. For example, we have high chairs in the cafes, priority bus boarding for parents travelling with their children on the Campus buses, baby changing facilities, priority parking for pregnant employees and New and Expectant Mother rooms, an on-site nursery and a subsidised Campus summer holiday-club.

Recruitment - As part of our commitment to ensure that our processes encourage the selection of the right candidate, regardless of their background, we introduced a bespoke Unconscious Bias and Recruitment Training Programme in mid-2017. It is now mandatory that every interview panel includes at least one person who has undertaken this training. In addition, we have an unconscious bias observer present during the recruitment process for both Faculty and senior level recruitment campaigns and will not interview if there is an all-male shortlist. Hiring managers are supported to use online gender decoder tools to ensure gender neutral language and we provide bespoke support in writing adverts that appeal to a diverse range of people. We include information about career breaks and positive action statements in job adverts.

Support for returners - We are committed to opening routes back into science for those who have had a break from scientific research. Our Janet Thornton post-doctoral level fellowship is specifically aimed at those who have taken a career break of at least 12 months [6]. One Fellowship is awarded annually and can be worked full time, or flexibly. Each year, this attracts a strong field of applicants and we have hosted five returners to date.

Maximising opportunities for women leaders - Our bespoke 'Talented Women's Impact Programme' is a five month programme designed to accelerate the development and promotion of high-potential women within our organisation. It is delivered using an effective combination of one-day workshops, small group work, telephone coaching sessions and individual communication sessions. In 2018, 22 women successfully completed this programme. After attending, 94% of attendees agreed that they felt either confident or very confident in their leadership ability.

Campus-wide activity - We established our Campus-wide Sex in Science programme in 2011 (this has been superseded by our 'Equality in Science' (EiS) programme [7]). With partners on Campus, we explore issues affecting minority and under-represented groups; look to inspire researchers; develop discussion and drive changes in practices and policy. We are delighted that EiS was nominated for the inaugural Royal Society Athena Prize in 2016, which recognises individuals, and teams in the UK research community who have contributed towards the advancement of diversity in science, technology, engineering and mathematics in their organisations [8]. The EiS programme has a dedicated events budget of £15k pa, while a substantial number of further activities are generously and sustainably funded through GRL, EMBL-European Bioinformatics Institute and Campus core budgets (amounting to >£3M to date). The backbone of EiS is a series of monthly events, including inspirational talks, interactive workshops (e.g. on mentoring, work-life balance, flexible working, unconscious bias), debates, an annual careers day, discussion panels, conferences, pathway to independence courses and theatrical plays that engage all staff). All events are followed by networking and include peer organisations and policy makers.

*** Evidence of its impact (max 2 pages);**

Impact on senior women – We have six grades within our pay framework: Grades 1-5 (Grade 1 at the higher end) and a Personal Salary Grade (PSG) beyond this, which is the highest salary band for staff with strategic responsibilities, including Faculty. This has the highest level of remuneration. Post-Doctoral Fellows (PDFs) have a dedicated incremental pay scale that is aligned with the national scale of payment across Higher Education Institutions.

Changes to our recruitment and selection processes are having a positive impact. 71% of our hires into PSG were women over 2017-2018, compared to an average of 45% across 2012-2016. This has significantly altered the demographic profile of the highest pay band as we see a steady positive increase: 23% (2014), 32% (2016), 44% (2019). We are committed to ensuring gender balance at the PSG level within the next three years.

Examining the data at Grade 1, which feeds into the PSG, the proportion of women is also steadily increasing - 38% (2014), 41% (2016) and 44% (2019).

In our 2014 staff survey 57% (141) women and 55% (107) men agreed that promotion criteria are fair and transparent. This is a significant increase from 2012, where 35% agreed. We have recently embarked on a review of our promotion processes and criteria to continue to ensure a robust, transparent and equitable process. 52% of our promotion over the last year were for women.

The numbers of women in scientific leadership roles, defined as our “Faculty” has increased from three (2013) to seven (2019). This represents less than 20% of the cohort, however we note that female representation (e.g. at the Professorial level in universities) is nationally low at these levels (18% in the Biosciences, 9% in Mathematics and 13% in IT, systems sciences & computer software engineering [1]). Proportions of applications by women to Faculty positions have increased as a result of our targeted interventions from 26% to 40%. The most recent recruitment rounds across our Cellular Genetics and Human Genetics programmes had 53% women shortlisted (n=9) and 43% of the hires were women (n=3). The numbers are very small here, but the trend shows that our matrix of proactive interventions are having a positive impact.

Gender pay gap – Our median gender pay gap (GPG) has decreased from 10.2% (2017) to 9.50% (2018) and is below the national average of 17.9% [9]. In 2017 we introduced a new pay structure for the PSG which had a positive impact on our GPG by reducing the mean GPG at this senior level from 27% to 13%. 2018 has once again seen a reduction in this pay group to a mean GPG of 10%. Holding job family and grade constant across all staff and conducting regression analyses shows that the gender gap has decreased from 5.5% to 1.1%.

Training and Development – In 2014, 96% (n=50) of female and 86% (n=24) of male PhD students and PDFs agreed that the range of training opportunities provided meets their needs (an increase from 75% in 2012). In 2018, around 63% of PDFs attended at least one training course and 80% of PhD students.

Our career tracker of PhD students and PDFs shows that our interventions have a positive impact on the careers of our early stage researchers. The last tracker survey took place in November 2015. Of the 74 respondents 46% (n=34) were female and 49% (n=36) male, while 5% (n=4) did not specify their gender. There were 11 instances of women being named as lead applicants on a grant (17 for men); 1 woman is a Career Development Fellow and 4 in scientific leadership positions (12 men).

Both our female and male PhD students continue their scientific careers in equitable proportions after they complete their PhDs. Of the 24 women who completed their PhD over 2013-2016, 16 are PDFs, 1 is an intern in a contract research organisation, 1 is an MBPhD medical student and 4 are clinicians. From our 2010 PhD cohort (73% (n=11) female and 27% (n=4) male, 3 female students have been awarded highly-prestigious Wellcome Trust-funded Sir Henry Wellcome Postdoctoral Fellowships. From our recent PDF community, 2 female PDFs have been promoted to a GRL Faculty position (2018/19).

Our Coaching and Mentoring scheme provides a framework through regular workshops and detailed guidance on our intranet. There are 50 mentors and coaches who are provided with full training.

Female mentors make up approximately 60% of the network. 65% (n=33) female and 65% (n=18) of male PhD students and PDFs report that they can access a mentor (previously 55% in 2012).

Flexible working environment - As we have proactively promoted and supported flexible working for our staff, the numbers of staff who have requested this has increased by 48% over 3 years - an increase of 42% for women and 86% for men. Managers initiate discussions on flexibility with new staff, and we have had positive feedback on this approach. The majority (80%) of employees in our 2016 staff survey (82% (n=268) of women and 77% (n=204) of men) agreed that they are able to balance their work and personal responsibilities. This is an increase from 72% from our 2012 survey. We have distributed the carers' grant to over 50 members of staff and have made a pledge to meet every request. This additional help to our staff has received hugely positive feedback.

Parental Leave - Shared parental leave (SPL) came into force in the UK in 2015 and is an important tool to help challenge societal expectations around parental leave. We encourage and support our staff to take-up SPL and actively promote the compatibility of research and family. Our culture of supporting working parents has resulted in increasing numbers of men taking up this enhanced provision – over the past three years, 16 men have taken SPL. Our favourable maternity, paternity and SPL policies have had a positive impact on our retention rates. Between a three year period we had 88 members of staff go on maternity leave and 100% of these returned to work. We provide cover when any employee takes parental or other long-term leave. This can involve allowing other staff to take on additional responsibilities for their own development, and/or the recruitment of short-term staff. If they wish, PDFs can use their 'Keeping in Touch' days to oversee key elements of their project. We provide salary extensions to PDFs to extend fixed-term contracts (whether on core or external funding) to take into account parental leave. We also bridge gaps between contracts. Our favourable student parental leave policy provides students with six months on full stipend and intermission for the period of their leave, with their submission deadline extended accordingly (this is explicitly mentioned on the website and during induction). Four female PhD students who were due to submit in the last three years have had a period of maternity leave and all four of these students have subsequently submitted their PhD within this extended timeframe.

Communication - We adopt a collaborative approach - communication and staff consultation shape the direction of our EDI activities. This is achieved through dedicated talks, emails, our intranet, staff surveys and focus groups. The Director updates on progress and promotes related activities, for example, at the annual 'Sanger Day'. Additionally, we hold regular Town Meetings, where employees and managers can share their views, and also organise discussion panel meetings (e.g. on work-life balance and flexible working) at which information and opinions are shared and sought. As the Campus grows, we ensure that new organisations align with our principles through our Campus Gateway Policy, and we share and lead expertise and foster a culture of equality.

Beacon activities – We influence change in the culture of science and engage with external organisations to share good practice, thinking and approaches. Over the last three years we have delivered 16 talks, including presenting at the 2019 International Society for Biocuration meeting, giving the keynote at the 2017 EMBL/DFG Women in Science Network meeting, presenting at the 2016 International Gender Summit. We are members of the national EDIS Network (driving EDI in Science and Health [10]); The Royal Society of Biology Diversity and Equality group and shaped Athena SWAN's approach to Research Institutes. We lead an Equality Network across the Biosciences-related sector which currently has representation from 15 organisations, including global pharmas and professional bodies with an international reach.

Our invited blog for Nature Genetics' Free Association received extended social media attention and has had a twitter reach of 177,400 individuals to date [11].

Connecting Science's Advanced Courses and Scientific Conferences has developed an innovative gender balance policy and in 2016 mandated that 50% of their invited speakers are female. Within 18 months, they met their target and continue to trail blaze and share good practice across the sector [12].

*** An optional reference list (which may include URLs of supporting material);**

[1] HESA staff record 2013/14

[2] Equality in Higher Education – statistical report 2015, ECU

[3] http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/d/robertsreview_introch1.pdf

[4] <https://www.ecu.ac.uk/equality-charters/athena-swan/>

[5] <https://sciencecouncil.org/employers/technician-commitment/>

[6] <https://www.sanger.ac.uk/about/equality-science/janet-thornton-fellowship>

[7] <https://www.sanger.ac.uk/about/equality-science>

[8] <https://royalsociety.org/grants-schemes-awards/awards/athena-prize/>

[9] https://www.sanger.ac.uk/sites/default/files/Mar2019/GRL_Gender_Pay_Gap_Report_2018.pdf

[10] <https://edisgroup.org/>

[11] <http://blogs.nature.com/blog/tag/eleftheria-zeggini/>

[12] <https://connectingscience.wellcomegenomecampus.org/what-we-do/advanced-courses-and-scientific-conferences/blood-sweat-and-success-implementing-a-gender-balance-policy/>

Twitter: [@EqualityScience](https://twitter.com/EqualityScience)