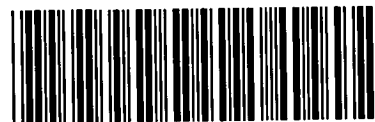




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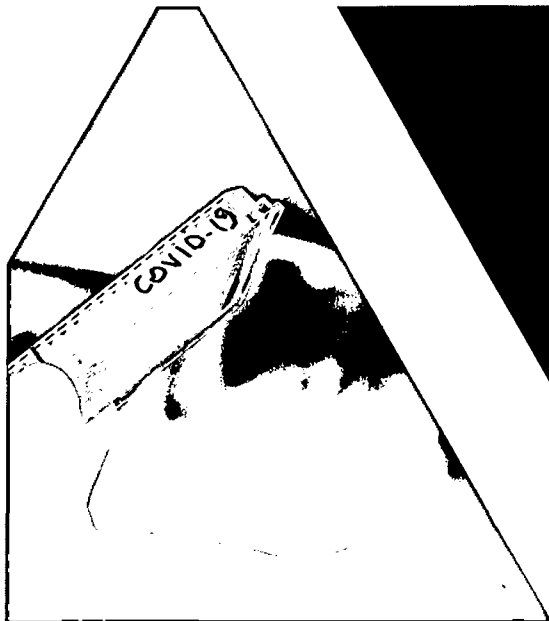
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COMPANIES HOUSE

Genome Research Limited

Annual Report and Financial Statements

For year ended 30 September 2020



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Chief Executive's Introduction

Genome Research Limited ("GRL") encompasses a number of activities undertaken by our operation at the Wellcome Genome Campus. All of these activities work in the fields of Genomes and Biodata and are very much interlinked. The three pillars of activity are research, discourse, and enterprise and innovation which are delivered by the Wellcome Sanger Institute ("Sanger Institute") and Connecting Science based at the Wellcome Genome Campus.

As the former UK Chief Medical Officer outlined in her report *Health, our global asset – partnering for progress* we live in a global village where the health issues of one country swiftly impact another. In this world, genomics – powered by open-access data sharing – is central to delivering the rapid, insightful information needed for effective healthcare delivery and to shape successful therapies.

As evidenced by the outbreak of the COVID-19 coronavirus, seamless and open sharing of genomic data is powering the worldwide race to develop vaccines and guide international public health responses. Here at the Institute, this openness has always been part of our culture. We analyse malaria parasite genomes from both neighbouring countries and continents to track the emergence and spread of drug resistance, guiding public health strategies. By successfully pooling datasets on cancer samples, databases and analysis across continents we are revealing the causes and potential treatments for tumours, driving the development of precision, personalised medicine.

Over the last year the Wellcome Sanger Institute had some major successes, a collaborative award from Wellcome to deliver the first phase of the UK wide Darwin Tree of Life Project, funding from the Bill and Melinda Gates Foundation to deliver malaria surveillance at actionable scale, and a raft of documents were submitted to Wellcome in December 2019 to support our 5-year (2021-2026) funding request.

The coronavirus pandemic continues to have a profound impact on our ability to deliver genomic science. The Wellcome Sanger Institute and Connecting Science closed in March 2020 to all but essential work. Research programmes and projects have slowed or paused, the quinquennial review site visit scheduled for June 2020 has been postponed, and all training and engagement activities have become virtual.

Alongside these considerable challenges the Institute has committed £6.3 million of funding to sequence 180,000 SARS-CoV-2 samples over the next year as its contribution to the COG-UK Consortium. Over 200 staff volunteered to contribute to this initiative, a real world demonstration of the value of the UK science base, the Sanger Institute scientific infrastructure and the value of genomics to aid decision making and policy development.

The Campus has been converted into a 'COVID secure' workplace, our genome sequencing platforms are close to full capacity once again, and we hope that other data generation platforms will follow shortly. Science and collaboration will be the solution to this pandemic and at GRL we will play our part.



Professor Sir Mike Stratton,
Director, Wellcome Sanger Institute
Chief Executive, Wellcome Genome
Campus



Resurrected ancient gene explains malaria's jump from gorillas to humans

New malaria drug targets identified in liver stage of life cycle

Cancer Dependency Map uses CRISPR to narrow drug target list

Jeremy Farrar becomes Head of Genome Research Limited Board

Red and grey squirrel genomes sequenced for first time

Sanger Institute joins COG-UK consortium to sequence COVID-19 virus spread

Gosia Trynka becomes Open Targets' Experimental Director

COG UK 
COVID-19 GENOMICS UK CONSORTIUM

Oct

Nov

Dec

Jan

Feb

Mar

First cell map shows how the liver develops

Colon crypts and lasers reveal pathway to cancer

Mouse models reveal 140+ genes linked to immune system control

Root of childhood kidney cancer discovered

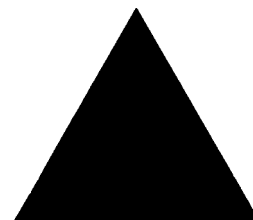
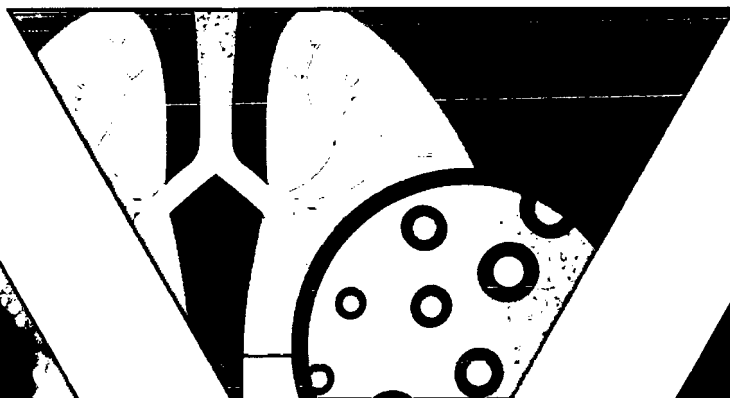
Cancer map for uncharted 99% of genome made by Global Pan-Cancer Project

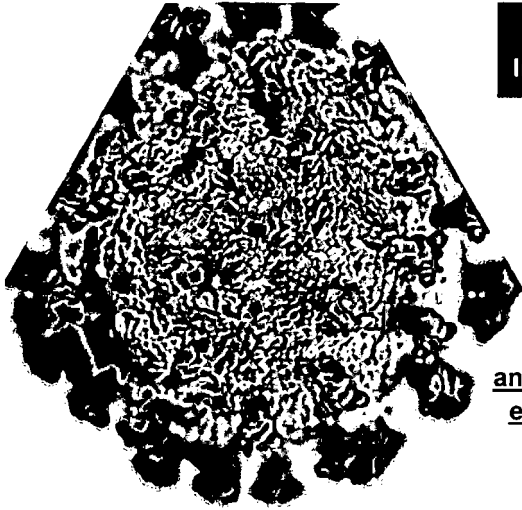
Gut cell atlas maps how bacteria and immune cells interact

Darwin Tree of Life project launches

Never too late to quit – ex-smokers' lungs repair genetic damage

Wellcome Genome Campus temporarily closes, critical research continues





Introduction

Trustees' Report

Financial Statements

Genomic surveillance of antibiotic resistance established in the Philippines

Sanger researchers join UK Consortium to unlock immune system's role in COVID-19

Key nose cells identified as likely COVID-19 virus entry points

Innovations Team launches BIODATA interactive talks

Sixth form student genomics text book published

Sanger collaboration to explore marine and freshwater ecosystems

6 Sanger researchers recognised by Academy of Medical Sciences

Secondary and primary school digital home learning packs released

Public trust on data vital for genomic research

Apr

May

Jun

Jul

Aug

Sep

Seeds of uterine cancer sown early in life

Sanger extends postdoctoral funding to cover COVID-19 lockdown

Microbiotica collaborates on landmark cancer microbiome studies

DECIPHER opens up whole genome for rare disease diagnoses

Mentoring podcast supports early career researchers

First cell atlas of mosquito immune cells

Cell atlas maps the human heart

Pharma-Academia collaboration brings personalised medicine closer

Bulk of genetic variation responsible for blood cell health revealed

Genome Research Limited awarded Athena SWAN Silver



Athena SWAN
Silver Award

Trustees' Report

The Directors of Genome Research Limited ("the Charitable Company") who are also the Trustees of Genome Research Limited for the purposes of the Charities Act 2011, present their Annual Report (including the Directors' Report and Strategic Report) and audited Financial Statements for the year ended 30 September 2020.

Objectives and activities

Genome Research Limited's ("GRL") objectives are:

- Advance understanding of biology using genome sequences and biodata.
- Apply genome science for human health and other societal benefits.
- Foster discussion of the scientific, medical and wider implications of genomes.

Vision

Motivated by the remarkable challenges and opportunities presented to 21st century science by genome sequences, the ambition of GRL over the next two decades is to strengthen its well-established scientific foundations and to build on them, such that the Wellcome Genome Campus becomes an international centre for scientific, business, cultural and educational activities emanating from Genomes and Biodata.

The objectives are delivered via three main activities as follows:

- Research (via the Sanger Institute)
- Discourse (via Connecting Science)
- Enterprise and Innovation.

Mission

Sanger Institute

One of the major challenges and opportunities for biological science in the 21st century is to understand and utilise the DNA sequences that constitute the genetic code of humans and other living organisms.

The Sanger Institute uses genome



sequences to increase understanding of human and pathogen biology in order to improve human health.

To achieve this goal, we conduct basic and translational research delivered across five research programmes and two associate research programmes:

- Cancer, Ageing and Somatic Mutation

Cellular Genetics

- Human Genetics
- Parasites and Microbes
- Tree of Life
- Health Data Research UK (Associate Research Programme)
- Open Targets (Associate Research Programme)

Our scientific niche is in large-scale, high-throughput biology, often incorporating systematic genome-wide screens. This is enabled by major data generation platforms in DNA sequencing, cellular genetics and mouse genetics with an accompanying large IT platform supporting computational data interpretation and analysis.

An overarching theme of our science is genome variation; naturally occurring and engineered, inherited and somatic; explored in human beings, pathogenic microorganisms, human cells and mice. These studies of genome variation will provide insights into human and

pathogen evolution, the phenotypic consequences of genome variation and the processes which cause mutations. We will generate deeper understanding of the genetic causes, pathogenesis and epidemiology of human disease, of human development and ageing and of human gene function. We aim to identify therapeutic and vaccine targets and to explore the genomic changes influencing sensitivity and resistance to such agents.

The Sanger Institute sits at the centre of a global network of science, engaging proactively with researchers external to the Institute, enabling and empowering their science and extending our scientific repertoire through their biological insights and questions. A major priority of our research portfolio is the scientific questions arising from the health issues facing low- and middle-income countries. We continue to champion the policy of early and open data release and ensure resources generated through our research enable the research of others through publicly accessible databases.

Connecting Science

Connecting Science's mission is to enable everyone to explore genomic science and its impact on research, health and society. It connects researchers, health professionals and the wider public, creating spaces and

opportunities to inspire new thinking, spark conversation, support learning, and measure attitudes.

Enterprise and Innovation

Enterprise and Innovation is the third pillar in delivering our ambitious vision for the Genome Campus. We aspire to:

- grow the Charitable Company's innovation culture
- support the translational and entrepreneurial opportunities that arise from Sanger research
- establish the Campus as a leading location for innovative genome and biodata businesses to benefit from, and contribute to, the exceptional Campus intellectual capital.

Essential to our success is the creation of a diverse and strongly integrated Genome and Biodata community with free-flowing exchange of perspectives across organisations and sectors.

Strategic Report

Achievements and Performance

i) The Sanger Institute

The achievements highlighted below often reflect the results of many years of research. The majority of the Institute's research supports hypothesis-based investigation and the outcome of such activities cannot be predicted with certainty. Scientific

research is inherently cumulative and progressive, opening up new knowledge, understanding and applications. However, the highlights below from each programme demonstrate how our people produce valuable information and insight in support of our overall mission.

Research of this scale is a truly collaborative endeavour, both within the Institute, nationally and internationally. It is only through the tireless efforts of researchers on the ground to collect samples and phenotypic data, combined with the sequencing and computational skills of teams around the world, that we can make the advances we do. To celebrate the invaluable work of our technicians to deliver our science at scale, we are proud signatories to the Technician Commitment to develop the talents and careers of our staff. We are also delighted that our International Fellowship scheme is enabling new continental networks of genomic research to grow and deliver science.

Most of these achievements were delivered before the COVID-19 pandemic, the subsequent closedown of our laboratories has drastically impacted our ability to deliver science. However, it has been possible for our scientific leaders to apply their expertise and the Institute infrastructure to the biology of COVID-19.

Cancer, Ageing and Somatic Mutation

- Uncovered the hidden world of genetic mutations in healthy colon tissue to shed light on the very

earliest stages of cancer and help to understand how a healthy cell becomes a cancerous one.

- Discovered protective cells in the lung that are shielded from the harmful effects of tobacco. These cells begin to repair the airways, but only after someone stops smoking, protecting against lung cancer.
- Together with Open Targets used CRISPR-Cas9 technology to disrupt every single gene in more than 300 cancer models, representing 30 types of cancer in order to discover key survival genes in order of priority for drug development.
- Completed the most comprehensive study of whole cancer genomes. The decade-long Pan-Cancer project involved over 1,300 scientists and clinicians from 37 countries and analysed more than 2,600 genomes of 38 tumour types, including breast, bone and blood cancers signposting new directions for diagnosis and treatment.

Cellular Genetics

- Mapped the cellular landscape of the developing liver to enhance understanding of how the blood and immune system develop— a process known as haematopoiesis.
- Uncovered the genetic origins of childhood kidney cancer.
- Together with Open Targets mapped the location, type, and activity of cells in the lungs, uncovering a new cell state responsible for creating mucus.
- Identified the key type of cell in the nose most likely to be the initial infection route for SARS-CoV-2 virus.

Human Genetics

- Found how measles causes long-term damage to the immune system and leaves people much more susceptible to other infectious diseases for months or years after infection.
- Resolved part of a long-running debate about the movement of modern humans out-of-Africa some 50,000–70,000 years ago.



- Described how 'Jumping genes' can cause rare developmental disorders in children leading to diagnosis of three more children with rare developmental diseases through the Deciphering Developmental Disorders (DDD) study.

Parasites and Microbes

- Uncovered the different species that colonise a baby's gut at birth and how this gut microbiome – the genetic material of all the microbes living in the gut – may differ according to vaginal birth or C-section.
- Delineated how the diarrhoea-causing bacteria *Clostridium difficile* is evolving into two separate species adapting to spread in hospitals.
- Outlined that a combination of common drugs could be used to treat Methicillin-resistant *Staphylococcus aureus* bacterium – MRSA.
- Revealed the molecular pathway that enabled the world's deadliest malaria parasite to jump from gorillas to humans around 50,000 years ago.

Tree of Life

- The Darwin Tree of Life project secured £9.4 million in funding from Wellcome.
- Sequenced and released the genomes of the Brown Trout, Red Squirrel and Grey Squirrel.

Key Metrics

The Sanger Institute's mission is to increase understanding of human and pathogen biology. Measuring our performance against this objective is inherently difficult, however in order to assess our scientific impact we have established 5 key metrics that are widely used to evaluate published

research. We are currently assessing this data against similar organisations in order to understand what constitutes a 'good' performance for the Institute. The table below shows data for the year ended 31 December 2019, the most recent data collection period, against the same period in 2018.

At the start of each financial year, we set budgets based on our scientific objectives for the following period. While spend in the year does not provide a good indication of the impact of our science, it does provide some insight into how successful we have been in conducting our planned research. In the year ended 30 September 2020 we spent 76% (2019: 90%) of our core budget. The main driver for the lower level of spend was the closure of the campus due to the coronavirus pandemic; however this was partially recovered through work performed in response to the outbreak.

Data sharing

The research conducted by the Sanger Institute results in a vast amount of data produced, which is shared widely and as effectively as possible. Open access to our data and resources has been championed from the start. Data Access Agreements are used to safeguard ethical use of the human data.

Since 2015, the Sanger Institute has approved 1609 different Data Access Agreements (DAAs) for human data with 50 countries as seen in the map on page 11; 179 of these had been granted between January and September 2020. Data requests come from all over the world, but the majority from the organisations based in the USA and the UK. The map provides an illustration of how successful we have been in sharing the data, and areas we would like to improve our reach.

Requests for data tend to come mostly from universities and research institutes (combined 80 per cent) and the rest from hospitals and commercial entities.

Other achievements of The Sanger Institute can be found below:

Faculty

Over the past year we have published 603 (2019: 544) research papers in peer-reviewed journals, of which 180 (2019: 163) had a Sanger Institute first and/or last author, which means they were either the leading author or the lead investigator for the study. Three quarters of Sanger publications are a result of collaborative partnerships, and authors from the Sanger Institute have been leading contributors to a significant proportion of these publications.

Associate Research Programme

Our Associate Faculty provides opportunities to enrich and diversify our science portfolio, enabling external organisations and scientists to access the Institute's intellectual environment and data-generation/data analysis infrastructure. The aim is to deliver scientific impact that cannot be achieved either (i) without Sanger's unique science and infrastructure; or (ii) through more conventional academic collaborations.

Research Training

The Sanger Institute provides an exceptional intellectual environment and infrastructure for training and inspiring the next generation of leaders in genomics research. The Institute currently has over 100 postdoctoral fellows, on time-limited appointments of 3-5 years, from 30 countries supported by core funds and funding agencies.

Graduate Programme

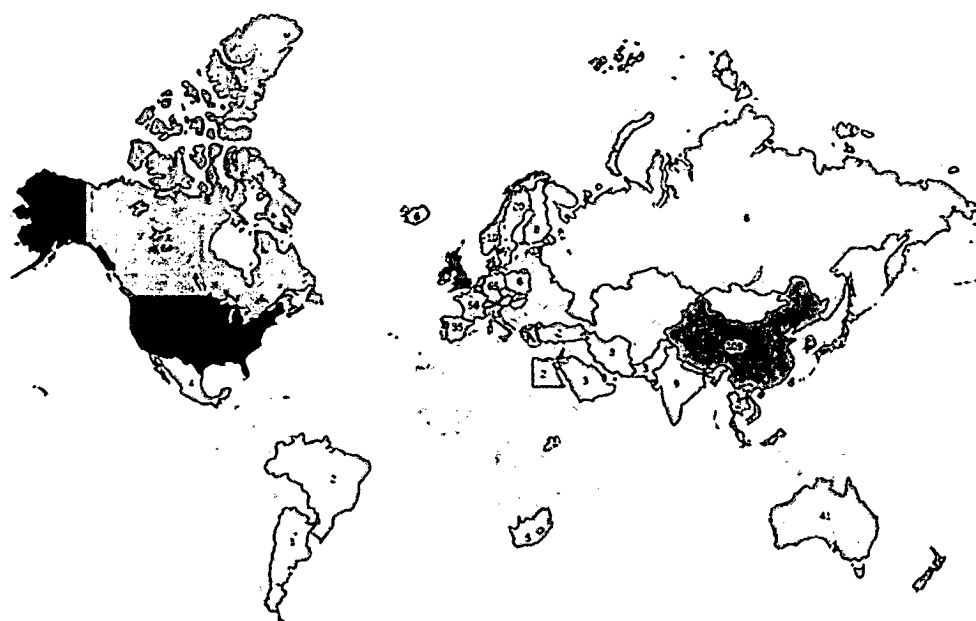
The Graduate Programme aims to inspire and train the next generation of leaders in genomic research. It is affiliated with the University of Cambridge, and our students graduate with a Cambridge degree, a globally recognised mark of excellence.

Specifically we operate a four-year PhD programme which accepts 12-13 graduate students each year from

Bibliometric analysis

Metric	Year Ended 31 Dec 2019	Year Ended 31 Dec 2018
Field-Weighted Citation Impact*	3.60	3.54
Scholarly Output	602	601
Citations per Publication (mean average #)	12.8	28.1
Output in Top 5% Citation Percentiles (field-weighted)	27.4%	26.1%
Output in Top 1% Citation Percentiles (field-weighted)	9.6%	9.7%

*Ratio of citations compared to global average in field of genomics. 1= global average.



DAA's per country
since 2015

across the world. We are also part of the University of Cambridge three-year clinical PhD programme (jointly funded by ourselves and Wellcome), and usually accept 2-3 registrar-level clinicians per year through this. We also accept a small number of students each year from several other University of Cambridge-based PhD programmes. In addition, we have recently established an MPhil Programme which aims to recruit three students per year from low- and middle-income countries.

Including those funded by third parties, we currently have 66 PhD students and 3 MPhil students from 28 countries.

Since we began collecting submission data, 11 years ago, our PhD students have maintained an average four-year submission rate of 89% (2019: 89%), far exceeding the 70% threshold expected by the Research Councils.

Scientific Operations

We deliver high-throughput, large-scale biological research, which is a defining characteristic distinguishing our science from that of most research institutes and universities. Conducting science at this scale is critically dependent upon major core facilities and high-throughput processes organised into complex platforms and pipelines. These require substantial

infrastructure, subject matter experts and professional organisation and management.

The Institute currently has four core platforms:

- Sequencing facility
- Cellular Biology facility
- Animal facility (closing in September 2021)
- IT

In May 2019, the Institute announced the strategic decision to close the animal facility and mouse pipelines, and to deliver future animal work, outsourced, through partnership with other organisations. The closure is on track to complete by September 2021.

COVID-19 Genomics UK (COG-UK) Consortium

The COG-UK Consortium is an innovative partnership of NHS organisations, the four Public Health Agencies of the UK, the Wellcome Sanger Institute and more than 12 academic institutions providing sequencing and analysis capability. Virus genome data are combined with clinical and epidemiological datasets in order to help to guide UK public health interventions and policies. Subsequent analyses will enable evaluation of novel treatments and

non-pharmaceutical interventions on SARS-CoV-2 virus populations and spread, and provide information on introductions versus community transmissions and outbreaks.

These data will also allow researchers to identify and evaluate emerging genetic changes and understand how they affect the ability of the virus to transmit from person to person, and cause severe forms of the disease. The Sanger Institute is providing a centralised service for large-scale genome sequencing of samples from the 'Lighthouse Lab' National Testing Centres, as well as providing support to the regional sequencing labs and areas not covered by regional labs. Since March 2020, when the project was initiated, Sanger has sequenced 51,000 SARS-CoV-2 samples to the end of September 2020 and has committed to sequence a further 129,000.

UK Biobank Projects

The Scientific Operations team is helping to produce 500,000 whole genome sequences from UK Biobank volunteers, along with DeCODE genetics. This £200 million partnership will sequence the participants' genomes and link this with comprehensive clinical characterisation to help provide unique insight into why some people develop particular diseases.

The project was put on hold during the

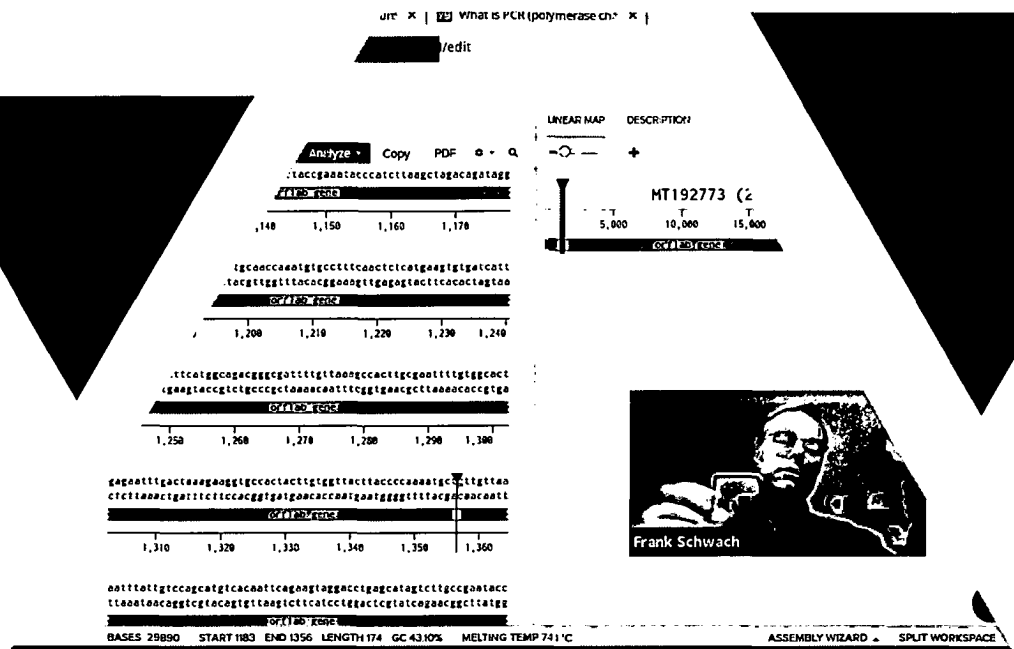
campus closure, when we could only safely undertake COVID-19 research; however the project is still expected to be completed by September 2021 as planned. It is expected that sequencing data for this entire cohort will be generally accessible by early 2023.

Resources for the research community

In addition to their contribution to the UK Biobank and COG UK projects, Sanger Institute scientists generate a wide range of biological resources to support research conducted by our Faculty or collaborators. All are subsequently released for the wider research community to use, together with relevant and appropriate metadata. Biological resources include normal and cancer organoids and human iPS (induced Pluripotent Stem) cells.

Genomic science generates vast volumes of biological data and, in order to curate, organise and present data, we established publicly accessible databases and organised data resources. These include Decipher, COSMIC and others.

To deliver truly seamless sharing of genomic and clinical data, we actively support the work of the Global Alliance for Genomics and Health ("GA4GH") to create the protocols and frameworks needed to open up the world's genomic databases to the global scientific community. Through innovations such as GA4GH



Passports and Data Use Ontology, the process to gain access to much-needed data will now take a matter of days instead of weeks.

ii) Connecting Science

An overview of some of our work over the past year can be found at <https://connectingscience.wellcomegenomecampus.org/what-we-do/>. Although we remained active across our key thematic areas of Training and Learning, and Engagement and Society, this year the coronavirus pandemic has had a significant impact on what we do and how we do it.

Training and Learning: The Advanced Courses and Scientific Conferences team developed and delivered over 20 (2019: 60+) training and learning events in the early part of the year, which took place both on the Campus and in low and middle-income countries.

The coronavirus pandemic and subsequent lockdown in the UK resulted in the suspension of the face-to-face programme. However, the release of a new online training course on *Disease Outbreaks and Antimicrobial Resistance* proved timely, with 30,000 learners registering from around 150 different countries. During the shutdown of the Campus, the team worked hard to convert their scheduled face-to-face events into virtual ones. While this was challenging, particularly for training courses based on laboratory methods and extensive interactions with expert researchers, it also provided an opportunity for innovation and creativity. The first virtual course on Next Generation Sequencing, combining filmed segments, online material and interactive online

classrooms, took place in September. Conferences resumed virtually in August, exploring new approaches to live Q&As, delegate networking and posters sessions.

Engagement and Society: The Society and Ethics Research team produced the first global study on public attitudes to genomic data and privacy. Translated into a range of different languages from Spanish to Hindi and focussed on who participants would be willing to share their personal DNA data with, the *Your DNA, Your Say* project has analysed responses from over 35,000 people across the globe. The study has shown that trust in governments and healthcare professionals differs significantly between populations – attitudes that need to be considered when developing policy frameworks for national and international genomics projects involving data sharing. The team have also commenced the SPACE study, exploring the social and ethical questions associated with the use of AI in healthcare and biomedical research. It focusses on the assessment of cognitive change and dementia, where data about behaviour from different sources might make a valuable contribution to understanding and treating illness, but which presents ethical challenges associated with an older and potentially vulnerable population.

The Public Engagement team delivered a regular programme of public and schools events prior to the pandemic, and have now pivoted many of these activities to digital delivery. They have developed teaching resource kits on DNA and genomics for home schooling, enabled many Campus scientists to

be involved in Disease Detectives zone of the *I'm a Scientist, Stay At Home* interactive online engagement event series and are producing a virtual tour of the Wellcome Genome Campus to enable public access while the site is closed. They also launched a new online series of conversation events in the summer to mark the 20th anniversary of the completion of the first draft of the human genome sequence.

iii) Enterprise and Innovation

The Sanger Institute's Technology Translation team identifies, nurtures and de-risks novel research ideas that have the potential for societal impact beyond publication. Its goal is to attract partners with the resources and capabilities to then deliver products and services.

The Institute has a culture and history of scaling technologies in a manner that supports innovation. Some of these capabilities have become spin-out companies that are making a positive impact in the healthcare sector. We currently have the following spin-outs, held as programme investments:

- Congenica
- Kymab
- VHSquared
- Microbiotica.

Despite a challenging financing environment all of our spin outs have secured funding necessary to continue their development. Most excitingly Kymab has reported positive Phase 2a results for its lead therapeutic entity in moderate to severe atopic dermatitis, thereby presenting a significant opportunity for a Sanger company to deliver a novel intervention to a significant unmet health need.

Additionally, we have secured Innovate UK support for a £1m pilot programme through a newly established company, Mosaic Therapeutics ("Mosaic"). Incorporated in July 2020, Mosaic will leverage Sanger's expertise in generating and analysing large datasets from the manipulation of tumour models in order to identify

new approaches to targeting difficult to treat cancers.

Licensing of our technologies and industry collaboration continues to support global research and development. Examples in the past year include:

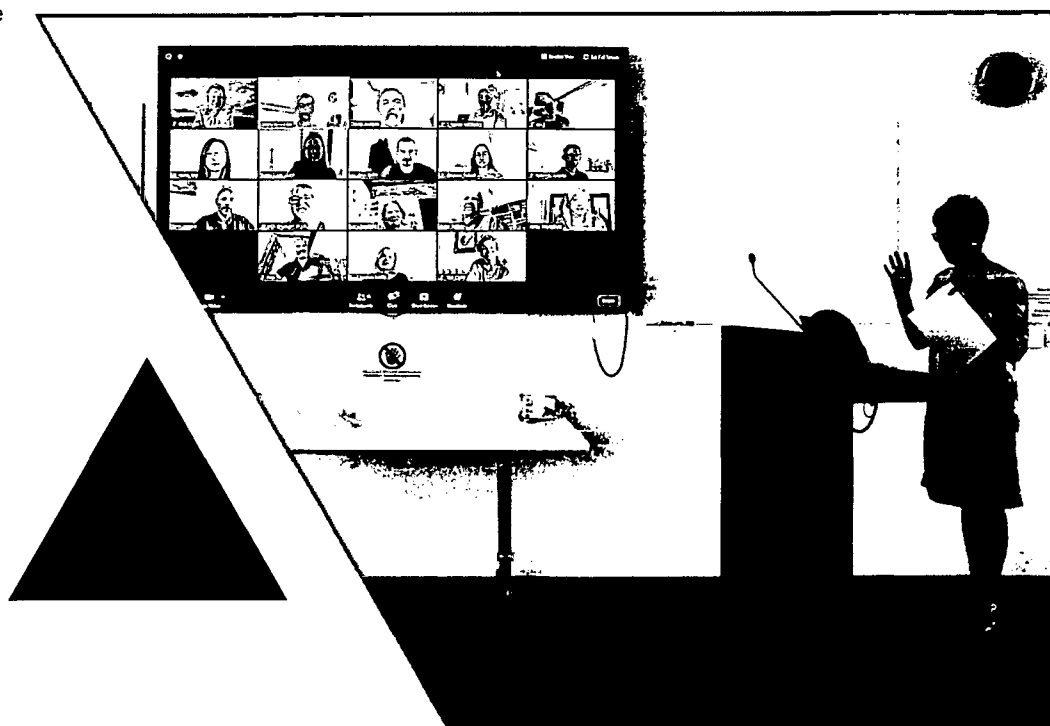
- COSMIC – We have continued to see strong licensing growth of our COSMIC database with revenues exceeding £1.5m in the year.
- PetMedix – Sanger have licensed the core intellectual property into PetMedix – a company formed by Sanger alumni that aims to develop novel antibody therapeutics for companion animal diseases.
- Sanger have entered into an exciting multi-year collaboration to explore the biology of a new cancer target that was originally identified through an Open Targets programme. This collaboration will underpin a larger drug discovery programme that aims to develop first-in-class molecules to inhibit the activity of this cancer target.

In order to support innovation from all sources, we are pro-actively engaging and integrating with the Sanger science base – at the faculty, post-doc and student levels. One of the challenges presented by COVID is how we will continue to proactively integrate into the Sanger research base in order to identify new translational opportunities whilst working remotely. We are trialling

increased virtual engagement at research team meetings and via 1:1 Zoom calls with faculty together with greater involvement in translational seminars and virtual panel events.

Interest from Genome and BioData companies seeking to co-locate on Campus and be part of our growing community of innovative businesses in this space continues to exceed expectations with competitive applications for the one space which became available this year. The Biodata Innovation Centre (BIC) remains at 100% capacity with nine organisations from the private and public sector. Our tenants, from Campus spin-out companies, through Genomics England Limited activities, to organisations from mainland Europe, Asia and Silicon Valley in the United States, represent diverse aspects of the genomics value chain. Feedback continues to be exceptionally positive, however we are aware that companies may review their working arrangements as a result of COVID-19 so moving forwards the space required by individual companies may be reduced; providing opportunities to other companies.

We have continued our focus on building a sense of community within the BIC and stimulating engagement with the wider Campus and this year have recruited an experienced Events Co-ordinator to lead this activity. Despite working remotely for much of 2020, we have established virtual



special interest groups for BIC Leaders and HR Leads which meet regularly. This builds upon a study conducted last year on our community by the Cambridge Judge Business School which highlighted that types of knowledge exchanged between companies in our Community include market and managerial knowledge as well as scientific.

Broader efforts to inspire Campus entrepreneurship are continuing



through joint events with relevant network groups including accelerator programmes and scientific researchers and through the launch of a new webinar series BIODATAalks. Our digital events have attracted global audiences, but have highlighted that we should now focus on engaging more of our research scientists on Campus.

Statement by the trustees in performance of their statutory duties in accordance with s172(1) Companies Act 2006

The Board of Directors of Genome Research Limited consider, in good faith, that they have acted in a way that would most likely promote the success of the Charitable Company, for the benefit of its member, and in doing so have regard (amongst other matters) to –

- (a) the likely consequences of any decision in the long term,
- (b) the interests of the Charitable Company's employees,
- (c) the need to foster the Charitable

Company's business relationships with suppliers, customers and others,

(d) the impact of the Charitable Company's operations on the community and the environment,

(e) the desirability of the Charitable Company maintaining a reputation for high standards of business conduct, and

(f) the need to act fairly as between members of the Charitable Company.

As part of their induction, Trustees are briefed on their duties, either through the Charitable Company, or if they judge it necessary, through an independent advisor. Further details on how the Board fulfils its duties can be found in the governance, structure and management section on page 20. The Board receive regular updates on each of the areas below, and request presentations from management as required.

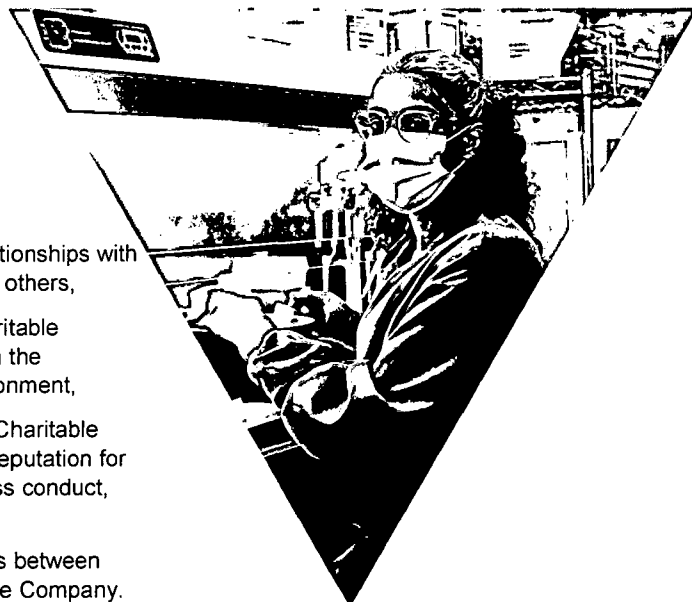
The Charitable Company has many stakeholders, however the Board consider the most significant to be its



employees, its collaborators, the community and the Wellcome Trust.

Consideration of the consequences of decisions for the long term

GRL's vision is underpinned by a long term strategy for the Wellcome Genome Campus to become an international centre for scientific, business, cultural and educational activities emanating from Genomes and Biodata. The Board are required to approve the 5 year funding envelope, the annual budgets, any large or strategic projects, or significant diversions from the budget,



such as the COG UK collaboration (page 11). In doing so they consider this in the context of Wellcome and GRL's long term strategy.

Engaging with our employees

The Sanger Institute's success is founded on the expertise and knowledge of its people. Our employee engagement strategy is based on four principles – that employees have a voice, employees receive recognition, employees have a sense of purpose and employees are supported to grow and feel successful.

GRL have actively sought new ways for the Board to improve their engagement with employees during the year, and this is a key part of the Governance strategy. In July 2020, the Chair, a member of the government's Scientific Advisory Group for Emergencies, attended one of several all staff Town Hall video meetings, designed to ensure employees remain updated and engaged throughout the campus closure. Monthly surveys have been introduced to understand the impact of working from home and how the organisation could further support employees, and the Employee Partnership forum, of elected representatives, has continued remotely. As a result of feedback from employees we have improved access to homeworking equipment and improved our mental health support programme. During the year, the Board received a full Culture Development Programme report, including feedback from these surveys.

Refer to People Development and Engagement (page 23) for further details of how we have engaged with our employees during the year, and Health and Safety (page 22) for more about our Wellness@work scheme.

The Charitable Company has not

participated in any government funded COVID-19 support schemes, including the Coronavirus Job Retention Scheme.

Engaging with our suppliers and scientific partners

Collaborating with genomic scientists and researchers worldwide is fundamental to the scientific strategy of the Charitable Company. We work closely with our suppliers to share new discoveries and techniques. In establishing the COG-UK Consortium (page 11) we worked closely with suppliers, government bodies and academic institutions to develop new technology and networks at pace. Our procurement policy is governed by our Purchasing Code of Ethics and we aim to ensure that our suppliers are treated fairly and impartially.

Engaging with the Wellcome Trust

GRL's sole member is the Wellcome Trust Limited, as corporate trustee of the Wellcome Trust which approves the GRL Board of Directors. Wellcome Trust are represented on the Board, which is chaired by their Director, Sir Jeremy Farrar. GRL receive funding from the Wellcome Trust via a 5 year funding envelope which is aligned to Wellcome's long term scientific strategy. GRL provide regular reporting, both financial and non-financial, to Wellcome, directly and through the GRL Board of Directors. GRL work collaboratively with the Wellcome Trust, sharing both scientific and operational expertise.

GRL staff played a significant role in helping Wellcome secure provisional planning permission for the expansion of the campus, which was granted in

October 2019.

The impact of the Charitable Company's operations on the community and the environment

We engage closely with our neighbouring communities on environmental issues including:

- Permissive path for local residents to enjoy the Wetlands Nature Reserve on site
- Local residents sit on the Wetlands Community Conservation Group that meets at least twice a year
- Liaise with local residents on parking and transport issues

Refer to the Environmental Statement on page 22 for further details.

Connecting Science works with both professional and public communities, linking these together to enable everyone to benefit from genomic science. We have established strong links with a number of community groups and a schools programme supporting around 600 students from areas of low social mobility or high deprivation in the East of England. Our outreach programme would usually visit a further 2,000 students from these target areas, and we would usually expect to host around 3,500 schools and public visitors on the Campus each year. Due to the

pandemic, this year we have only hosted 600 on site. However we are developing digital and virtual options for public engagement which may ultimately extend our reach into new communities.

Maintaining a reputation for high standards of business conduct

Sanger Institute's Research Policies are designed to provide guidance to help researchers navigate the legislation relating to their research and to ensure that research is ethical and legal. Our research should embody the core values of the Institute and Wellcome. Researchers at the Sanger Institute have the responsibility to be aware of which Research Policies apply to their research and to ensure they and their teams are compliant with them. In October 2020, mandatory training was introduced for all employees, including Good Research Practice for all scientific staff. Further information regarding our research policies can be found on our website.

During the year, the Board commissioned an independent review of the Charitable Company's governance structure. The actions arising from this cover alignment of structures and processes, effectiveness of meetings, improving knowledge and engagement and development of compliance activities. These are currently under review and will be implemented, as appropriate, throughout the upcoming year.



Financial review

Results

This is the fourth year of the 2016-2021 quinquennium award from Wellcome which GRL can draw down as required to meet its objectives as set out in the 2016-2021 scientific plan.

The net surplus for the year, after other recognised gains of £16.3 million (2019: £80.7 million losses) was £0.8 million (2019: £94.2 million deficit). Other recognised gains have arisen due to the accounting requirements of the defined benefit pension scheme.

Income for the year totalled £156.4 million (2019: £152.4 million) of which 60% (2019: 64%) was provided by Wellcome. The closure of the campus and cessation of all but essential operations has resulted in a reduction of income from third party grant funding, however this has been offset by work performed on the UK Biobank projects (page 11). Resources expended in furtherance of its activities totalled £171.9 million (2019: £164.3 million). Net expenditure for the year was £15.5 million (2019: £13.5 million), arising as a result of expenditure incurred on grants for which the corresponding income was recognised in earlier periods and losses on unquoted investments. Income recognised in advance of expenditure primarily relates to capital expenditure, which is depreciated over a number of years, and third party awards for which there are no performance related conditions.

The defined benefit pension scheme deficit of £198.8 million (2019: £203.0 million) representing the year-end funding position of the scheme is recognised in the financial statements as a 'pension liability' on an FRS 102 basis. This deficit represents the difference between an assessment of the liabilities of the pension funds and the current value of their underlying assets. The amount of the deficit is subject to considerable variability because it depends on a valuation of assets at the year-end date and a range of actuarial assumptions impacting the liabilities.

In 2020 there has been a 0.1% decrease in the discount rate assumption reflecting the decrease in long-dated corporate bond yields.

FRS102 requires discount rates to be based on corporate bond rates of an appropriate duration, regardless of actual investment strategy and actual investment returns expected. The major assumptions used by the actuary are shown in note 8.

A full triennial actuarial valuation of the Genome Research Limited Pension Plan was carried out as at 31 December 2018. This valuation showed that the plan had a deficit of £3.3 million. Additional contributions of £5 million were made in the year ended 31 December 2019 which aimed to eliminate the funding deficit.

Wellcome and GRL previously agreed with the GRL Pension Plan Trustee to put in place a Deed of Guarantee. The obligations of the Deed, guaranteed by Wellcome, are that GRL pays the necessary contribution as agreed with the Trustee and the Plan Actuary and that any deficit in the funding identified by a full actuarial valuation will be repaid over a period of five years or less. The Deed provides security to the pension scheme and allows the Pension Trustees to take a longer-term view when deciding their investment strategy.

Reserves policy

The total net liability at the end of the year was £37.8 million (2019: £38.6 million net liability), arising largely as a result of the pension deficit of £198.8 million (2019: £203.0 million). As referred to above in the results section, this is due to the FRS 102 valuation of the defined benefit pension scheme. Total funds (excluding the pension deficit) at the end of the year were £161.0 million (2019: £164.4 million).

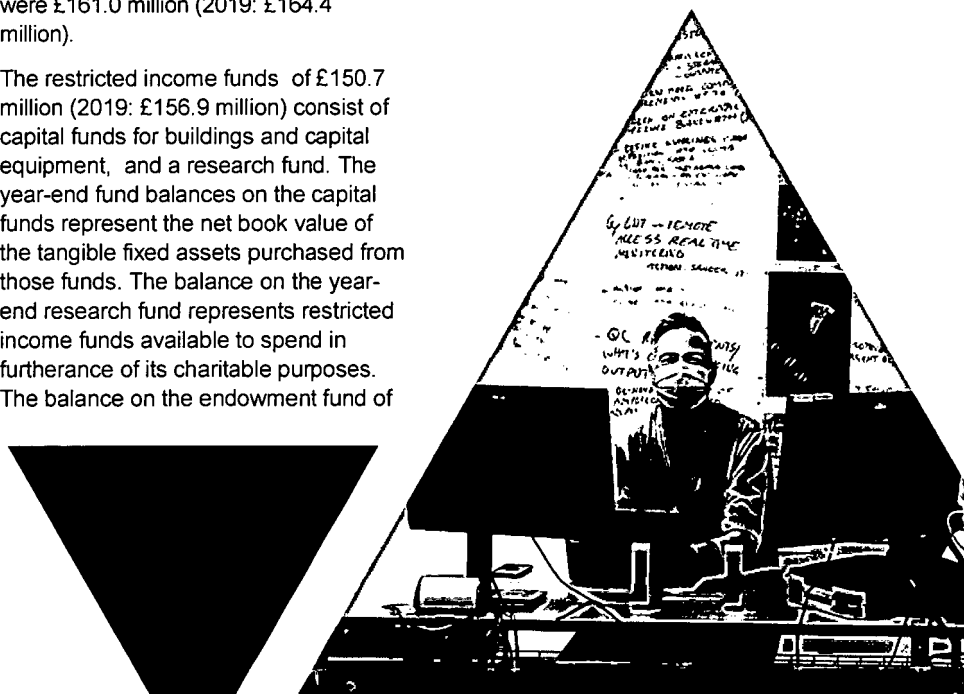
The restricted income funds of £150.7 million (2019: £156.9 million) consist of capital funds for buildings and capital equipment, and a research fund. The year-end fund balances on the capital funds represent the net book value of the tangible fixed assets purchased from those funds. The balance on the year-end research fund represents restricted income funds available to spend in furtherance of its charitable purposes. The balance on the endowment fund of

£0.7 million (2019: £0.6 million) represents funds for activities specified by the donor. The movement on reserves is shown in note 20 to the financial statements.

Unrestricted investment funds of £1.7 million (2019: £1.7 million) relate to gains on unquoted investments less amounts owing to staff and inventors in relation to these gains. Investments are measured at fair value and as such are subject to variability.

The unrestricted income funds of £7.9 million (2019: £5.1 million) represent funds generated from external sources that can be allocated at the discretion of the directors, including sequencing as a service, licence fees, royalties, tenant services and exchange gains and losses.

As the Campus activities develop, more activities will generate, and be supported through, unrestricted funds, although those activities have been limited in the year due to the coronavirus pandemic, and the extent to which these activities will be impacted in the future is not yet clear. As a result Directors consider that a low level of unrestricted funds is acceptable. As activities develop, Directors will establish a more detailed target. Wellcome provides sufficient funding to enable the Charitable Company to finance its general activities and meet its obligations as they fall due. This funding structure is reviewed every five years.

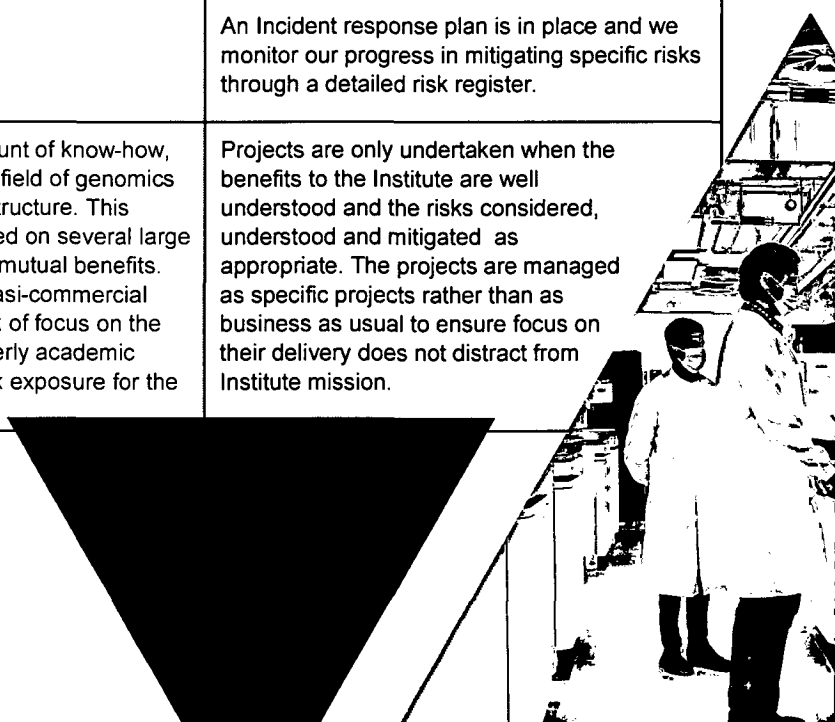


Strategic Risks

Risk	Nature of risk	Management of risk
Delivery of our Science Strategy	The reduction in scientific productivity as a result of the COVID-19 outbreak, and related shutdown of the Wellcome Genome Campus, directly hinders GRL from fulfilling its purpose and obligation to its funders and partners, including UK Biobank, and may adversely impact scientific advances and individual careers	Short term prioritisation of onsite work will favour existing research and newly approved research relating to COVID-19. Introduction of safety measures such as one way systems, occupancy caps and face coverings to mitigate the risk of those working on campus. Phased re-introduction of existing scientific projects based on priorities established by each programme.
People	Cutting edge science requires GRL to attract, retain and develop a diverse range of talented people, including the finest scientific brains with interests in new areas of science within the genomics field. The absence of the necessary supportive, inclusive and collaborative culture; an inappropriate faculty model or PhD programme; inadequate communication or a deficiency in reward structure could negatively impact recruitment, retention and development. There are specific risks associated with recruitment from overseas from Brexit and the impact of the COVID-19 Pandemic.	Management have focused on creating and maintaining the right culture within the organisation, with recognition for diversity and inclusion achievements recognised through the Athena SWAN silver status achieved this year, which helps organisations achieve their gender equality goals through a self-assessment framework. The organisation has also implemented a behavioural competency framework for all staff during the year and continues to promote research excellence. The Board receives regular updates on progress. We have increased our staff VISA and residency application support and continue to monitor emerging requirements as regulations change.
Funding	The Institute is highly dependent on its funding from the Wellcome Trust. Divergence in strategies between the two organisations could negatively impact our funding and our ability to remain a world leading Research Institution. In addition, inflation, an ageing physical asset base and a changing grant funding landscape, heightened by the economic impact of the COVID-19 outbreak, could restrict the amount of certain types of funding available, which have similar impact on the ability of the Institute to operate at scale. Brexit may result in reduced funding opportunities, and reduce value for money due to increased costs of procurement.	Continue to deliver world leading science at scale that will impact on health in the future, to enhance reputation and attract investment. Ensure that we obtain value for money in our supply arrangements and capital investment decisions. With Wellcome, influence UK funding bodies, to create EU equivalent funding post Brexit. Assess financial impact of COVID pandemic, including availability of grants, to feed into any long term review of science. Review of third party grant strategy to ensure all opportunities aligning with our strategy are fully taken. Monitor the impact of inflation and overheads on funding and ensure appropriate terms are built into our contracts.
Reputation and Attitudes to Genomics	The Institute's reputation is central to its ability to attract and retain talent; collaborate extensively with other researchers, funders and suppliers; receive funding for, and achieve, our research aims. Failure to adhere to the highest levels of ethical behaviour or good research practice; failure to comply with legislation; or a poor working culture would all pose risks to GRL's reputation. Failure to build awareness with the public of the benefit of research into genomics could limit its impact or adoption and so undermine GRL's mission.	All staff within the organisation receive training in appropriate behaviour, including conflicts of interest and good research practice. GRL continues to proactively engage with health professionals and the general public through the Connecting Science division and influence the positive perception of genomics through publicising scientific breakthroughs in multiple forums including those accessible to the general public such as the press.

Strategic Risks (continued)

Risk	Nature of risk	Management of risk
Innovation	Since both science and the technologies used within GRL are constantly evolving, we need to ensure that we remain at the forefront of new technologies to maintain the novelty of our research. Failing to embrace new technologies could inhibit our relevance in the future.	Continue to scan the markets serving our technology requirements for new technologies and adopt them when they become available, and build on close links with suppliers who may be able to develop technologies with us that will meet our future requirements. Take advice from our International Scientific Advisory Board and collaborate with other Institutes and bodies to ensure we remain at the forefront of science. With support from our scientists, perform an research and development review to define future strategy and develop new ideas, areas of research and governance structure.
Collaboration	GRL is a world leading Research Institute in genomics and aspires to build a close infrastructure of connected organisations to create a world leading hub of knowledge exchange and support. One key enabler for this will be the campus expansion, which passed an important milestone this year and is designed to provide facilities for new activities, research and commercial endeavours. Misalignment of this Campus Vision with GRL's scientific strategy and goals could reduce opportunities for discovery, research and translation around genomes and biodata.	A project Board will be put in place to support the project team on delivery of the Campus master plan. Preliminary planning permission for the expansion was granted to Wellcome in October 2019. The research gateway policy for allowing new entities to be part of the Campus will ensure support for the scientific theme of 'genomes and biodata', this was embedded into the section 106 agreement which supported the planning application. Regular consultation and communication activities with surrounding communities will continue.
Data & Cyber Security	The complex nature of the relationship between requirements, systems and policies leaves GRL vulnerable to issues with the confidentiality, integrity and availability of data. The increase in home working increases this complexity by introducing greater use of non-Sanger devices, increased exposure to external threats and more stress points on our infrastructure by incorporating staff home networks.	In light of the constantly evolving threat landscape, we will adopt an approach of continual improvement in all aspects from system tools and training to incident response. A key part of this approach involves monitoring and reporting activities. Perform regular testing for threats and establish and regularly update our prevention plan which includes user education as well as specific protections. An Incident response plan is in place and we monitor our progress in mitigating specific risks through a detailed risk register.
Commercialisation	GRL has built a large amount of know-how, skill and experience in the field of genomics using its large-scale infrastructure. This learning has been employed on several large scale projects which have mutual benefits. There is a risk that this quasi-commercial activity could lead to a lack of focus on the core mission or that an overly academic approach could lead to risk exposure for the organisation.	Projects are only undertaken when the benefits to the Institute are well understood and the risks considered, understood and mitigated as appropriate. The projects are managed as specific projects rather than as business as usual to ensure focus on their delivery does not distract from Institute mission.



Expenditure policy

For planning purposes an annual budget is agreed with Wellcome. The GRL Board monitors the expenditure of GRL and provides oversight of the internal budgetary and financial control mechanisms in place.

Programme Related Investment Policy

GRL invests in spin-out companies, held as programme related unquoted investments, the objective of which is to maximise opportunities for scientific growth, over and above maximising financial gain on investment.

Pensions policy

GRL operates a funded defined benefit scheme and a defined contribution scheme into which both employee and employer contributions are paid. There is further disclosure in note 8 to the Financial Statements and in the results above.

Grant making policy

GRL works collaboratively with scientific organisations all over the world. As a result, we may sub-award funds to partner organisations who have the scientific expertise to help us deliver our research. These awards are only made with the explicit consent of the funding body.

Going Concern

GRL's total net liability at the end of the year was £37.8 million (2019: £38.6 million net liability); however, as described above, this has arisen due to the accounting requirements of the defined benefit pension scheme. The latest full funding valuation of the scheme indicates that GRL's current schedule of contributions is sufficient to meet the requirements of the scheme. Total reserves before the pension

deficit were £161.0 million net assets (2019: £164.4 million). The Charitable Company had net current assets at the end of the year of £18.7 million (2019: £18.7 million).

As the 2021-26 quinquennial funding review has not been able to be completed, Wellcome have awarded Sanger £232.8 million interim funding for the 2 years from October 2021. The award was made after considering Sanger's committed costs, cash flow forecasts and proposed budgets for that period.

Committed costs to the end of September 2021 are within the core award from Wellcome and management have sufficient discretion over the spend in other areas to ensure expenditure remains within budget.

There has been significantly reduced activity in relation to COVID restrictions; however GRL are able to carry forward and reallocate underspend of the Wellcome core award, which covers underlying running costs. We do not commit to set levels of activity on third party awards. In the event that we wished to support a study beyond the terms of the grant, we would only do so if there were sufficient budget in the core award. Where trading agreements relate to services which have been suspended, there is sufficient capacity to ensure that the contracts do not become loss making; however it is anticipated that all trading obligations will be fulfilled.

In assessing whether the going concern assumption is appropriate, management takes into account all available information which is at least, but is not limited to, twelve months from the date when the financial statements are authorised for issue. After considering the 2020-21 budget and strategic plan for 2016-2021, income under trading contracts and the interim award from Wellcome for 2021-2023, the Directors are satisfied that it is appropriate to adopt the going concern basis in preparing the financial statements of GRL.

Plans for future periods

GRL and partner organisations at the Wellcome Genome Campus will continue to provide a foundation of genomic activity in the UK to maximise scientific, health, economic and other benefits from Genomes and Biodata.

The immediate priority of the Sanger Institute is the safe phased return to work for staff and the subsequent ramping up of genomic data generation, data interpretation and data analysis which enables the science at scale that Sanger Institute is famous for. We are continuing to work to build capacity to bring scientific operations close to pre-lockdown levels, though prolonged COVID related restrictions may impact our ability to deliver all of our planned work for 20-21, and impact funding opportunities. However, due to our funding model, a reduction in activity can be beneficial in that budget becomes available for other activities.

The Campus has been converted to a 'COVID secure' workplace and as such, there was no further reduction of science as a result of the second lockdown announced in November 2020.

In 2021 we anticipate hosting the delayed quinquennial review site visit in order to secure future 2021-2026 funding.

The Sanger Institute's science will further explore genome variation, naturally occurring and engineered, which will enable us to:

- understand rare and common genetic diseases
- understand how humans and pathogens evolve
- chart the processes of human development and ageing
- link genome variation to their phenotypic and functional consequences, from the single cell to the whole organism
- discover the molecular interactions between pathogens and hosts
- produce reference genomes for all species of complex organisms found in Britain.

Connecting Science will continue to deliver a full programme, though in a different way, which addresses its key strategic objectives:

- work with diverse communities to transform engagement with genomics
- impact policy, practice and careers

- establish the Wellcome Genome Campus as the recognised centre of excellence for learning and engagement with genomics.

In the coming year, while COVID restrictions remain in place, we will continue to develop an expanded digital engagement, training and learning offer, however, it is likely that our revenues will continue to be reduced while the Conference Centre remains closed. When the Campus and other locations re-open to public audiences, we will explore new ways to support public interactions with genomics, including creating a new visitor space in Hinxton Hall, alongside our new digital platforms.

The Entrepreneurship and Innovation team will extend their efforts to integrate the Campus' diverse activities, in order to realise new collaborations and translational opportunities created by co-location, taking into account changes in working preferences arising from the pandemic. Based on learnings from the BIC they will support development of the Campus Vision and strategy development around growth of the innovation and entrepreneurship on the Campus. They will continue to explore how best to work with Wellcome to better deliver impact from the Institute's flagship science.

Principal risks and uncertainties

The Directors have implemented a formal risk management process to assess financial and business risk and implement risk management strategies. They have identified the main risks

GRL faces, prioritised them in terms of potential impact and likelihood of occurrence, and have identified means of managing and mitigating the risks. The Directors have reviewed the adequacy of GRL's current internal controls, including the ongoing improvement programme.

The Audit and Risk Committee reviews the risk management policy, risk processes and the Institute Risk Register throughout the year. It monitors progress against actions arising to address the risks identified. It reviews internal audit's own assessment of risk as part of the review and approval process of the annual risk-based internal audit plan. It also monitors the reports from internal audit and progress against the audit plan and the closure of management actions arising from its reports.

The Internal Audit opinion on the GRL 2018/19 control environment was that Internal Audit was only able to provide limited assurance. However, Internal Audit observed a concerted effort by management to improve the internal control environment. This was evidenced, for example, by a dedicated controls improvement project put in place to coordinate, review and monitor control improvement activities. The 2019/20 internal opinion on the control environment will be reported in March 2021.

The major strategic risks currently facing GRL are detailed in the table on pages 17 and 18.

Structure, governance and management

GRL is a registered company, a registered charity and is governed by its memorandum and articles of

association. GRL is considered to be a wholly-owned subsidiary of Wellcome Trust for accounting purposes. Its sole member is the Wellcome Trust Limited, as corporate trustee of the Wellcome Trust which approves the GRL Board of Directors. All Directors receive an induction. The performance of the Directors is monitored by the Wellcome Trust and any additional development and training will be advised and managed by the Wellcome Trust as necessary.

Genome Research Trading Limited is a 100% subsidiary of GRL. Hinxton Hall Limited is a charitable company, and has only two members: the Wellcome Trust Limited as Trustee of Wellcome Trust and GRL.

GRL Board of Directors

The GRL Board has overall legal responsibility and accountability for all activities of the Sanger Institute and for all other GRL activity at the Wellcome Genome Campus. It approves the management structure and operating budgets of the Sanger Institute and Wellcome Genome Campus and approves major policies such as on intellectual property. During 2019/20 the GRL Board met on six occasions.

A list of Directors, including details of 7 appointments and 2 resignations in the year, is shown on page 47.

The Nominations Committee has delegated responsibility from the GRL Board to review the structure, size and composition of the GRL Board, taking account of relevant skills, experience and diversity and to make recommendations to the GRL Board regarding the appointment of its members, and members of the Audit and Risk Committee.

GRL Executive Board

The GRL Executive Board (chaired by the Director of the Institute who is also Chief Executive Officer of GRL) has delegated responsibility from the GRL Board to oversee the implementation of GRL's strategy. The GRL Executive Board includes representatives from each of the main themes of GRL's strategy: Sanger Institute, Connecting Science, and Enterprise and Innovation.

The management of each part of the strategy is delegated as follows:

- The Sanger Board of Management



(BoM), chaired by the Director of the Institute, is responsible for the delivery of our scientific strategy.

- The Connecting Science Management Board chaired by the Director of Connecting Science is responsible for delivery of our education and public engagement activities.
- The Campus Management Board (chaired by the Associate Chief Operating Officer) is responsible for the development and management of the buildings and infrastructure of the Wellcome Genome Campus and for oversight of the Enterprise and Innovation strategy.

Reporting and internal control

The GRL Board receives reports from the BoM and the Campus Management Board on the following specific matters:

- risk management policies and robustness of the internal control environment;
- conflicts of interest policy;
- any serious issue affecting the staff of GRL, including health and safety, HR policies and employment disputes; and
- financial budgeting and reporting.

Management are responsible for the design and implementation of the systems of internal control, which are designed to provide reasonable assurance against material misstatement or loss. They include:

- a five-year strategic plan and an annual budget approved by the directors;
- regular consideration by the Directors of financial results;
- regular review of key processes by internal audit;
- delegation of authority and segregation of duties; and
- identification and management of business and financial risks.

Audit and Risk Committee

The Audit and Risk Committee reports to the Board on how it has discharged

its responsibilities with regard to reviewing:

- the governance structure;
- the effectiveness of financial systems, processes and finance function;
- the systems of internal control;
- the integrity and transparency of the financial statements;
- compliance with legal and regulatory requirements;
- policies and procedures relating to fraud or misappropriation;
- the external and internal auditors' qualifications, independence and performance; and
- financial budgeting and reporting

- risk management (see page 20).

The members of the Committee were appointed by the Board and are independent of GRL staff. During the year, membership of the Committee has been renewed. Members are as follows:

- Daniel Abrams (Chair)
- Nicole Mather
- Karen Chadwick (Wellcome Trust)
- Daniel Mahony.

Richard Eales (Wellcome Trust) resigned during the year. The Committee has met four times during the year.

Remuneration

The Board of Directors ensures that remuneration arrangements support the strategic aims of GRL, including approving senior staff salaries.

Responsibilities of the Board in respect of remuneration are:

- Approving the reward strategy and policies for the remuneration of staff, including the Executive Board;
- Determining individual remuneration packages and terms and conditions of employment above an agreed salary level;
- Exercising any powers of, and approving any decisions required by, the Trust in respect of the Genome

Research Limited Pension Plan; and

- Ensuring remuneration practices and policies facilitate the employment and retention of talented people.

Conflicts of interest

GRL has a policy on conflicts of interest, which applies to directors and employees. The policy requires disclosure of relevant interests covering commercial and academic interests. The policy defines those financial interests, consultancies and external appointments that should be disclosed. Outside activities need prior approval and the policy acts out the process for establishing measures to mitigate the impact of potential conflicts.

Key Management Personnel

The Key Management Personnel of GRL have been defined as members of the Executive Board to whom the Board of Directors have delegated responsibilities for the day-to-day running of the organisation. These are: the Chief Executive, the Chief Operating Officer and the Director of Connecting Science.

The total consideration given to Key Management Personnel is summarised in note 7 to the accounts.

The remuneration of the Board of Directors is governed by the Articles of Association. The remuneration of members of the Executive Board who are considered Key Management Personnel is determined by the Board of Directors as described above, by benchmarking against equivalent positions within the sector.

Auditor

The auditor, Deloitte LLP, have indicated their willingness to continue in office and a resolution concerning their re-appointment was approved at the Annual General Meeting.

Public benefit

GRL reviews its aims each year to ensure that those aims remain focused on its charitable objects. GRL has referred to the guidance contained in the Charity Commission's general guidance on

public benefit when reviewing its aims and objectives and in planning its future activities.

The Directors are satisfied that due regard has been given to the public benefit guidance published by the Charity Commission as required by section 17 of the Charities Act 2011.

In the opinion of the directors all of GRL's charitable activities are focused on the objects and aims set out above and are undertaken to further GRL's charitable objects for the public benefit.

Health and safety

The Wellcome Genome Campus management recognise that proactive, well-managed health and safety is directly linked to its growth and success.

The Wellness@Work stress and mental wellbeing initiative with the HR Learning and Engagement team has continued its roll out. During the year new training for managers and employees was introduced on recognising the symptoms and preventing stress and mental ill health in the workplace. This has been enhanced by additional activities for employees to support personal resilience, as well as continuing to provide the external Employee Assistance Programme and counselling services.

A significant improvement in facilities and construction health and safety has been introduced by the recently appointed Director of Estates,

including prioritising capital projects required for improving health and safety, an intensive training programme for the team members on construction safety and a focus on fire safety measures.

Many of the buildings on campus are now 15-25 years old. To improve and prioritise essential works, an external fire safety engineer has been recruited to review all buildings on campus and identify the original fire strategy and deviations that may have occurred since construction. This will give rise to a building improvement action plan.

In March with the COVID-19 pandemic lockdown, the Campus closed in a very short period of time. As part of a multi-team effort, the Health and Safety Team has played a key role in supporting the Campus Incident Management Team (CIMT) in managing the Campus.

CIMT established some key principles of operation:

- Minimise the virus transmission risk from coming to work
- Minimise the potential for transmission of the virus on campus
- Support employee welfare on & off campus
- Follow central Government guidance
- Be responsive & dynamic to change

Under the central themes of "Looking after one another. Keeping our science going", a wide range of mitigations, such as social distancing, a one-way system around the buildings and hygiene campaigns have been put in place to create a "COVID-secure" workplace, as well as assisting individuals with safe home working arrangements.

Environmental Statement

In 2019 the Campus became ISO 50001:2018 certified, the latest Energy Management Standard. Our target is to reduce our energy consumption by 5%

against floor area from 2018 to 2022.

Key environmental achievements over the last year have been:

- Crisp packet recycling in place, and reviewing general waste and recycling streams
- Continued management and diversion of hazardous waste to offensive waste to ensure the best disposal route for labs

Key environmental initiatives planned over the coming year are:

- Launching and drafting the Campus Environmental Sustainability Strategy
- Continuing our programme of energy efficient and energy saving projects
- Investigating alternative, low-carbon and green options for onsite electrical generation
- Automating and increasing the number of gas, electric and water sub metering across site to analyse use
- Using technology to reduce unused capacity on the Campus Bus Service
- Reviewing our Campus Transport in light of COVID-19 and potential changes to how staff wish to work in the future, this will impact our 40% single occupancy target due this year

Streamlined Energy and Carbon Reporting

In compliance with the Streamlined Energy and Carbon Reporting (2019) Framework, our energy split is shown in the table on page 23.

The Wellcome Genome Campus is supplied and billed on its total main incoming utilities supplies. Energy consumption is measured by building, and allocated to individual organisations by reference to floor space. Shared spaces have been apportioned in line with management charges, which are primarily calculated based on headcount.

The temporary closure of the Campus to all but essential staff has resulted in a reduction in electricity usage compared to the equivalent period in the prior year; however as

WELLCOME
GENOME
CAMPUS

Single occupancy only



the closure happened after the colder Winter period, and high usage facilities, such as the Data Centre and sequencing operations, have remained in use, there has not been a fall in overall energy consumption year on year.

Energy efficient actions

While the campus strives to improve its energy efficiency, there have been no new efficiency actions implemented in the year; however the Campus closure period has been used as an opportunity to identify improvements to be implemented in 2020-21 (see Environmental Statement).

Employee Engagement Statement

Refer to the Section 172 Statement on page 14 for details of how Directors have regard for employee interests and engage with employees.

Employment and diversity

GRL is committed to employment practices, systems and policies that

go above legislative compliance and follow best practice, while promoting a working environment that supports the realisation of the Organisation's scientific purpose.

People Development & Engagement

We continue to identify and implement projects that increase employee engagement and our brand. This has proved to be important in response to the impacts of the global pandemic, with the majority of staff working remotely.

Our services have needed to be delivered to a dispersed workforce, with an emphasis on engagement initiatives that support mental health and wellbeing during this time of stress and uncertainty. Monthly surveys have given employees the opportunity to register with their support requirements and whilst the feedback has mostly been positive, this process has provided areas of focus to target our services to meet personal needs.

The move to isolated working has significantly challenged our development programmes, traditionally

delivered classroom style – we have transferred much of our delivery on-line and have partnered with LinkedIn learning, to provide remote access to all areas of personal development content.

We have refreshed the induction experience for all new starters and have moved delivery on-line, which, whilst not how we originally planned it, provides a professional, flexible and interactive event.

Developing an inclusive, transparent Culture

We have launched a Culture Development programme that seeks to integrate and embed our commitment to inclusivity and people values in all we do, through clear and defined standards of behaviour. Our programme aims to support staff reach the highest professional standards of performance, whilst maintaining an environment of transparency – we have delivered a wide range of outputs to support this:

- Our **Code of Conduct** sets out the standards expected from all GRL staff. Core to this commitment is building and supporting an inclusive community where all people are respected, heard and supported.
- **Behavioural Competency Framework** – This defines the behavioural expectations at every grade of the organisation and applies to all roles. It has been embedded into all processes in the people life-cycle (recruitment, promotion, performance review etc.).
- **Leadership Inclusiveness training** – The Board of Management and GRL Board are completing a training programme that involves group and individual work. This training is an opportunity to catalyse meaningful strategic inclusive engagement from our senior leaders.
- **Reverse Mentoring** – We will be rolling out a structured approach to reverse mentoring, which will initially be used to support our work on racial equity.
- **Mandatory Training** – Providing a suite of core training that all employees need to complete, this training has a heavy emphasis on equipping people with the skills to

UK Greenhouse gas emissions and energy use data for the period 1 October to 30 September

	2020	2019
Energy Consumption used to calculate emissions [kWh]:	48,565,399	48,042,044
Scope 1 emissions [tCO₂e]		
Total Scope 1	4,571	5,522
Gas consumption	3,843	3,497
On-site generation [CCHP]	600	1,815
Owned transport and LV Generators	7	9
Generation	121	201
Biodiesel—ground vehicles	-	-
Scope 2 emissions [tCO₂e]		
Total Scope 2	6,223	5,846
Purchased electricity	6,223	5,846
Scope 3 emissions [tCO₂e]		
Total Scope 3	9	14
Business travel in employee owned vehicles	9	14
Total gross emissions [tCO₂e]	10,803	11,382
Intensity ration [tCO₂e/floor area m²]	0.119	0.125

build a culture of respect and inclusion. By example, the Active Bystander training encourages people to call out occasions when they witness unacceptable behaviours.

- **'Speak up' employee reporting/ advice line** - To support staff seeking to raise concerns, and enhance our whistleblowing process, this provides the option of independent, external advice, should someone feel unable to approach line management, HR or Employee Partners.
- **Good Research Practice** – GRL will be running a series of training interventions to keep our scientific community focused on the high standards expected of them with respect to scientific processes and protocols.

Our **Equality, Diversity and Inclusion (EDI)** programme continues and we have a strategy that covers four principal aims:

- A diverse, representative workforce at all levels
- Managers taking ownership of EDI and demonstrating effective inclusive leadership
- An inclusive working environment where staff and students respect and value each other
- Services that are delivered in a manner that promotes equality and respects diversity and inclusion

Our accreditation to the Athena SWAN charter, which assesses practices and processes towards the advancement of gender equality, has successfully been upgraded to Silver.

We see a steady positive increase of women within our highest pay band (currently 42% women (2018: 40% women)) and are committed to maintaining gender balance within reasonable tolerances.

Our 2019 GRL-wide gender pay gap is lower than national averages and the percentage of women in the upper quartile is continuing to increase. We have committed to reducing our gender pay gap to within 5% by grade, by the end of 2022.

Our full [Gender Pay Report 2019](#) can be found on our website.

We continue to lead Campus-wide EDI activities in collaboration with the EBI through the 'Equality in Science' programme. The LGBT+, Parent/ Carers' and BAME Engagement networks are well established and we have used these mechanisms during lockdown to provide specific community support, such as peer-to-peer mentoring, targeted workshops and talks.

Recent events have provided a spotlight on the 'Black Lives Matter' movement and entrenched systemic and structural racism, which emphasise the need for more targeted, impactful strategies that grow our support in this area. We have taken this opportunity to reflect on the need for more proactive direct interventions to improve BAME representation across the organisation and particularly within research roles as part of the wider requirement for more balanced race representation within STEM, and we will have a strategy in place by the end of this year, incorporating collaboration with our staff and leadership. Initial activity includes signing up to the Race at Work Charter, sponsoring an international coaching podcast series and working with an external organisation to ensure an impartial and robust approach to examining our ethnicity pay gap.

In order to further reinforce our commitment to being a fully inclusive workplace we have also signed up as Stonewall Diversity Champions in 2020 and are progressing our links with Stonewall to support LGBT+ inclusion. A Trans Inclusion policy and guidance is due to be launched, and we have signed up to the Disability Confident scheme and are developing approaches to support staff and line-managers in the area of neurodiversity.

Our [equal opportunities policy](#) mandates that GRL does not discriminate against any job applicant or employee on the grounds of age, disability, sex, gender reassignment, pregnancy, maternity, race, sexual orientation, marital status, religion or belief, and that decisions on employment, training, promotion and career progressions are made on the basis of their individual performance. We have created and promoted a Disability Awareness in Recruitment guide and introduced Reasonable Adjustments guidance within the recruitment process, to ensure that applicants won't be

excluded on the basis of disability, and support is provided when required. Should any employee become disabled during their time with us, where possible we will make adjustments to ensure they can remain an employee of the Charitable Company.

We are continually reviewing how we can further establish ourselves as a fully inclusive employer and in acknowledging our efforts and achievements made to date specifically regarding gender equality, we also recognise that these efforts can expand further to encompass all forms of equality by broadening our commitment with positive interventions and collaboration.

This Trustees' report, incorporating the Strategic report, is approved by order of the Board of Directors.



Sir Jeremy Farrar,
Chair of the Board of Directors,
1 December 2020

Statement of Directors' responsibilities

The Directors are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 102 "the Financial Reporting Standard applicable in the UK and the Republic of Ireland".

Company law requires the Directors to prepare Financial Statements for each financial year which give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that year. In preparing these Financial Statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable UK

Accounting Standards have been followed, subject to any material departures disclosed and explained in the Financial Statements; and

- prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue its activities.

The Directors are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the Financial Statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Disclosure of information to auditor

As far as the Directors are aware:

- there is no relevant audit information of which the charitable company's auditor is unaware; and
- the Directors have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of S414 of the Companies Act 2006.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.



Independent Auditor's report to the Directors/Trustees of Genome Research Limited

Report on the audit of the financial statements

Opinion

In our opinion the financial statements of Genome Research Limited (the 'charitable company'):

- give a true and fair view of the state of the charitable company's affairs as at 30 September 2020 and of its incoming resources and application of resources, including its income and expenditure, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice including Financial Reporting Standard 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland"; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of which comprise:

- the statement of financial activities;
- the balance sheet; and
- the related notes 1 to 22.

The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" (United Kingdom Generally Accepted Accounting Practice).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit

of the financial statements section of our report.

We are independent of the charitable company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We are required by ISAs (UK) to report in respect of the following matters where:

- the trustees' use of the going concern basis of accounting in preparation of the financial statements is not appropriate; or
- the trustees have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the charitable company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of these matters.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

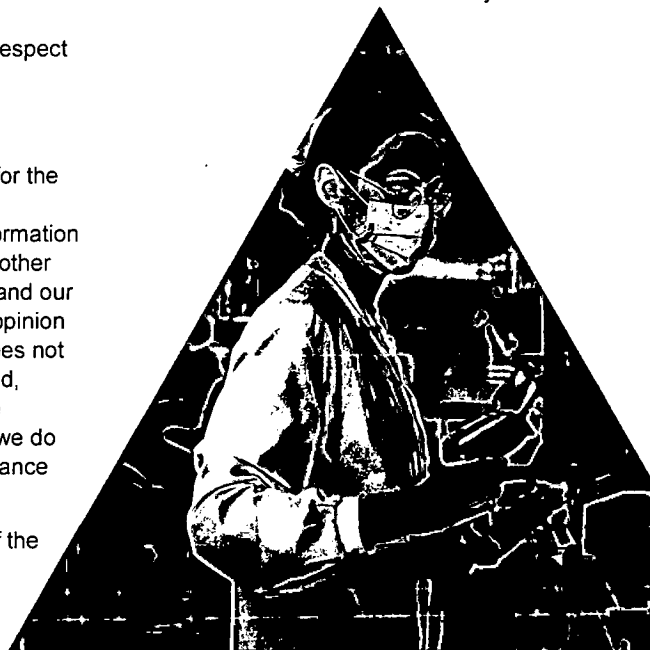
In connection with our audit of the

financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in respect of these matters.

Responsibilities of trustees

As explained more fully in the Statement of Directors' Responsibilities, the trustees (who are also the directors of the charitable company for the purpose of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to



enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the charitable company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charitable company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Report on other legal and



regulatory requirements

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the trustees' report, which includes the strategic report and the directors' report prepared for the purposes of company law for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report included within the trustees' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report included within the trustees' report.

Matters on which we are required to report by exception

Under the Companies Act 2006 we are required to report in respect of the following matters if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of trustees' remuneration specified by law are

not made; or

- we have not received all the information and explanations we require for our audit.

We have nothing to report in respect of these matters.

Use of our report

This report is made solely to the charitable company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the charitable company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charitable company and the charitable company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Terri Fielding

Terri Fielding ACA (Senior statutory auditor)

For and on behalf of Deloitte LLP

Statutory Auditor

London, UK

01 December 2020

Financial Statements

Statement of Financial Activities (incorporating an Income and Expenditure Account) for the year ended 30 September 2020

		2020 £'000	2020 £'000	2020 £'000	2020 £'000	2019 £'000
	Note	Unrestricted	Endowment	Restricted	Total funds	Total funds
INCOME						
Income from charitable activities	3	-	-	112,581	112,581	118,007
Income from other trading activities		31,653	-	12,053	43,706	34,332
Interest		-	16	91	107	34
Total income		31,653	16	124,725	156,394	152,373
EXPENDITURE						
Charitable activities	4	(28,863)	-	(143,014)	(171,877)	(164,274)
Total expenditure		(28,863)	-	(143,014)	(171,877)	(164,274)
Unrealised loss on investments	10	-	-	-	-	(1,590)
Net income (expenditure)		2,790	16	(18,289)	(15,483)	(13,491)
Other recognised gains (losses)						
Actuarial gains (losses) on defined benefit pension scheme	8	-	-	16,300	16,300	(80,700)
Net movement in funds		2,790	16	(1,989)	817	(94,191)
Total funds (deficit) brought forward at 1 October	20	6,818	638	(46,092)	(38,636)	55,555
Total funds (deficit) carried forward at 30 September		9,608	654	(48,081)	(37,819)	(38,636)

The Statement of Financial Activities includes all gains and losses recognised in the year.

All income and expenditure derive from continuing activities.

2019 comparatives are given in note 21.

The notes on pages 30 to 46 form part of these financial statements.

Balance Sheet

as at 30 September 2020

	Note	Total funds 2020 £'000	Total funds 2019 £'000
Fixed assets			
Tangible fixed assets	9	160,627	165,945
Investments	10	4,331	4,331
Total fixed assets		164,958	170,276
Current assets			
Stocks	12	10,894	9,472
Debtors	13	46,826	36,905
Cash at bank and in hand		10,461	27,180
Total current assets		68,181	73,557
Creditors: amounts falling due within one year	14	(49,473)	(54,892)
Net current assets		18,708	18,665
Total assets less current liabilities		183,666	188,941
Creditors: Amounts falling due after one year	15	(17,165)	(17,698)
Provisions	16	(5,520)	(6,879)
Net assets excluding pension liability		160,981	164,364
Defined benefit pension scheme deficit	8	(198,800)	(203,000)
Total net liabilities		(37,819)	(38,636)
The Funds of the Charity			
Restricted income funds	20	150,719	156,908
Endowment fund	20	654	638
Pension deficit	8	(198,800)	(203,000)
Total restricted deficit		(47,427)	(45,454)
Unrestricted funds	20	9,608	6,818
Total Charity deficit		(37,819)	(38,636)

The notes on pages 28 to 44 form part of these financial statements. The financial statements on pages 28 to 46 were approved and authorised for issue by the Board of Directors on 1 December 2020 and were signed on its behalf by:



Sir Jeremy Farrar

Chair

Registered company number: 2742969

1. Accounting policies

Basis of preparation and statement of compliance

The financial statements of Genome Research Ltd ("GRL") have been prepared on a going concern basis in accordance with Financial Reporting Standard 102 and with the Statement of Recommended Practice 'Accounting and Reporting by Charities FRS 102 as published in 2019' ("the SORP 2019") together with the Companies Act 2006 and the Charities Act 2011. Further analysis of the going concern conclusion is set out in the Trustees' Report (page 19).

GRL meets the definition of public benefit entity under FRS 102.

The Financial Statements have been prepared under the historical cost convention, as modified by the revaluation of investments and on a basis consistent with prior years.

The Charitable Company meets the definition of a qualifying entity under FRS 102 and has therefore taken advantage of the disclosure exemptions available to it in respect of its separate financial statements. The financial statements of GRL and its subsidiaries (Hinxton Hall Limited and Genome Research Trading Limited) are consolidated within the financial statements of its parent entity, the Wellcome Trust. As such, GRL has applied the disclosure exemption from preparing consolidated financial statements. Exemptions have been taken in relation to presentation of a Statement of Cash Flows, Financial Instruments and Related Party Transactions. The equivalent disclosures relating to the exemptions have been included in the Consolidated Financial Statements of the Wellcome Trust, its parent. Related party transactions with Trustees and key management are included in note 7.

The principle accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

The preparation of financial statements in conformity with FRS 102 requires the use of certain accounting estimates. It also requires management to exercise its judgement in the process of applying the Charitable Company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 2.

Fund accounting

The Charitable Company's funds consist of restricted and endowment funds which are subject to specific conditions imposed by the donors, and unrestricted funds which may be spent at the discretion of the Directors. The endowment fund is an expendable endowment. Further analysis of funds is detailed in note 20.

Income

Income is recognised in line with the SORP requirements for entitlement, probability and measurement. The Charitable Company's core funding from the Wellcome Trust is in the form of a multi-period grant which is subject to annual approval based on a review of science and the agreement of annual budgets. The income for core funding is recognised when the conditions for grant recognition have been satisfied. Entitlement is when the expenditure has been committed.

Other research grants fall largely into two categories: those which are performance related and specify a level of service, and those with no conditions attaching. Income for performance-related grants is recognised when the expenditure is incurred as this reflects the service levels. Income for non-performance-related grants is recognised when awarded as this represents entitlement.

Capital grants with no performance related conditions are recognised when the Charitable Company is entitled, the receipt is probable and the amount is measureable which is when the award letter is received.

Other income is recognised under the same criteria of entitlement, probability and measurement. Judgement is required to determine the point at which these conditions are met. Income received in advance of meeting the recognition criteria is deferred and income earned but not received is accrued. Other income relates to tenant services, licensing, royalties and service contracts.

Income in relation to service contracts, including the contract to deliver sequenced genomes to UK Biobank, is recognised by reference to the stage of completion of the contract activity as at the balance sheet date. This is normally measured by the proportion of contract costs incurred for work performed to date compared to the estimated total contract costs once the final outcome can be assessed with reasonable certainty. All income is recognised net of Value Added Tax ('VAT'). Where payments are received from customers in advance of services provided, the amounts are recorded as deferred income and included as part of creditors due within one year. Where income is recognised in advance of invoicing, the amounts are recorded as accrued income.

Expenditure

Liabilities are recognised as expenditure as soon as there is a legal or constructive obligation committing the Charitable Company to that expenditure, it is probable that settlement will be required and the amount of the obligation can be measured reliably. All expenditure is recognised on an accruals basis. All grants awarded are subject to performance conditions and as such the grant is

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

recognised in line with the work performed by the sub-grantee. The Charitable Company has three activities: Sanger Institute, Connecting Science and Enterprise and Innovation. Where possible, expenditure that relates to more than one activity is apportioned. Apportionment is in proportion to direct costs. Governance costs represent expenditure incurred in compliance with constitutional and statutory requirements including internal and external audit and are included within support costs.

The costs of pension related expenditure is allocated on the basis of the staff to which the costs relate.

Tangible fixed assets and depreciation

Tangible fixed assets are measured initially on the balance sheet at their historical cost. Tangible fixed assets costing more than £10,000 are capitalised together with any incidental costs of acquisition. Costs related to building projects are capitalised from the date the building project becomes viable. Prior to that date costs are written off as incurred. During the construction phase, buildings are classified as being in the course of construction until the date of practical completion when they are transferred to leasehold buildings.

Depreciation is calculated so as to write off the cost of the tangible fixed assets, less their estimated residual values, on a straight-line basis over the expected useful economic lives of the assets concerned. Impairment reviews are undertaken when, in the opinion of the directors, events or circumstances have arisen that indicate that the carrying value of an asset is impaired. They are reviewed annually and any impairment is recognised in the year in which it occurs. No depreciation is charged during the year on the assets in the course of construction. Where an asset has been purchased for use on a third-party funded activity, it is written off over the period of the funding.

The principal annual rates used for this purpose are:

Short leasehold buildings	Over the lease term
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Laboratory equipment fixtures and fittings

General laboratory equipment, fixtures and fittings	Over 5 years
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Sequencing instruments	Over 3 years
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Computing equipment	Over 3 years
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All the Charitable Company's tangible fixed assets are used for direct charitable purposes. The short leasehold buildings are held under leases from the Wellcome Trust, at £nil cost p.a., which expire in February 2055.

Financial Instruments

The Charitable Company has chosen to adopt Sections 11 and 12 of FRS 102 in respect of financial instruments. Financial assets and financial liabilities are recognised when the Charitable Company becomes a party to the contractual provisions of the instrument.

i) Financial assets

Basic financial assets including trade and other receivables, cash and bank balances, and intercompany loans are initially measured at transaction price (including transaction costs), except for those financial assets classified as at fair value through profit or loss, which are initially measured at fair value (normally the transaction price excluding transaction costs).

Financial assets and liabilities are only offset in the Balance Sheet when, and only when, there exists a legally enforceable right to set off the recognised amounts and the Charitable Company intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Investments — see policy below

Cash at bank and in hand has maturity of less than 3 months.

Financial assets are derecognised when (a) the contractual rights to the cash flows from the asset expire or are settled, or (b) substantially all the risks and rewards of the ownership of the asset are transferred to another party or (c) control of the asset has been transferred to another party who has the practical ability to unilaterally sell the asset to an unrelated party without imposing additional restrictions.

ii) Financial liabilities

Basic financial liabilities, including trade and other payables and loans from fellow group companies are recognised at transaction price.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are normally recognised at settlement amount after allowing for any trade discounts due.

Stock

Stock is stated at the lower of cost and net realisable value less costs to complete and sell. Cost is determined on a first-in first-out basis. Stock takes are conducted on a cycle basis. Where necessary, obsolete, slow moving and defective stock is written off or provided for when identified.

Foreign currencies

Transactions denominated in foreign currencies are translated into sterling at the rates ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are retranslated at the rates ruling at that date. All differences are recognised in the Statement of Financial Activities.

The Charitable Company's parent has provided the Charitable Company with an open-ended facility to convert currency at a favourable rate. The Charitable Company considers this service to be a donation-in-kind to which no value is attributed. The Charitable Company recognises exchange gains arising on these transactions in the statement of financial activities.

Investments

Unquoted programme related investments are held at management's best estimate of fair value, if this can be reliably measured, or if fair value cannot be measured reliably, at cost less impairment. Changes in fair value are recognised in income and expenditure.

Investments in subsidiaries are measured at cost less impairment.

Defined benefit pension plan

The Charitable Company operates a defined benefit plan for certain employees. A defined benefit plan defines the pension benefit that the employee will receive on retirement, usually dependent upon several factors including age, length of service and remuneration.

The liability recognised in the balance sheet in respect of a defined benefit plan is the present value of the defined benefit obligation at the end of the reporting date less the fair value of plan assets at the reporting date. The defined benefit obligation is calculated using the projected unit credit method. Annually the Charitable Company engages independent actuaries to calculate the obligation. The present value is determined by discounting the estimated future payments using market yields on high-quality corporate bonds that are denominated in sterling and that have terms approximating the estimated period of the future payments ('discount rate').

The fair value of plan assets is measured in accordance with the FRS 102 fair value hierarchy and in accordance with the Charitable Company's policy for similarly held assets. This includes the use of appropriate valuation techniques.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to "Actuarial gains and losses on defined benefit pension plans" in the Statement of Financial Activities.

The net interest cost is calculated by applying the discount rate to the net balance of defined benefit obligation and the fair value of plan assets. This cost is recognised as part of resources expended.

Defined contribution pension plan

The Charitable Company operates a defined contribution plan for certain employees. A defined contribution plan is a pension plan under which the Charitable Company pays fixed contributions. Once the contributions have been paid the Charitable Company has no further payment obligations. The contributions are recognised as an expense when they are due. Amounts not paid are shown in accruals in the balance sheet. The assets of the plan are held separately from the Charitable Company in independently administered funds.

Provisions and contingencies

Provisions are recognised when the Charitable Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated. Provisions are discounted to present value where the effect is material.

The Charitable Company recognises provisions in relation to faculty members continuing their research at other institutions and amounts due to employees under redundancy and retention agreements in relation to the closure of the Research Support Facility (RSF).

Contingent liabilities are potential future cash outflows, where the likelihood of payment is considered more than remote, but is not considered probable or cannot be measured reliably. These are not recognised but are disclosed in the financial statements.

Contingent assets are potential future inflows of economic benefits where the likelihood of receipt is considered more than remote, but is not considered probable or cannot be measured reliably. These are not recognised but are disclosed in the financial statements.

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

Taxation

The Charitable Company is exempt from taxation on its income and gains falling within Part 11 of the Corporation Tax Act 2010 or section 256 of the Taxation of Chargeable Gains Act 1992 to the extent that they are applied to their charitable purposes.

In common with many other charities, the charity is unable to recover the majority of VAT incurred on expenditure. The amount of VAT that cannot be recovered is included within the underlying cost to which it relates.

2. Significant accounting judgements and key sources of estimation uncertainty

In application of the Charitable Company's accounting policies which are described in note 1, the directors are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision only affects that period, or in the period of the revision and future periods if the revision affects both current and future periods.

2.1 Significant judgements in applying the entity's accounting policies

The following are the significant judgements, apart from those involving estimations (which are dealt with separately below), that management has made in the process of applying the charity's accounting policies and that have the most significant effect on the amounts recognised in the financial statements.

Recognition of charitable income

Trading income earned under significant long term service contracts is recognised based on stage of completion. Judgement is required to determine the most appropriate method of calculating the stage of completion.

2.2 Significant accounting estimates and assumptions

The Charitable Company makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

Assumptions used to determine the carrying amount of the Charitable Company's defined benefit pension obligation

The Charitable Company has an obligation to pay pension benefits to certain employees. The cost of these benefits and the present value of the obligation depend on a number of factors, including; life expectancy, salary increases, asset valuations and the discount rate used. The scheme is most sensitive to changes in the discount rate and rate of inflation applied. Management estimates these factors in determining the net pension obligation in the balance sheet. The discount rate is set by reference to market yields at the end of the reporting period on high-quality corporate bonds. See note 8 for the disclosures relating to the defined benefit pension scheme including an analysis of the sensitivity to the principal assumptions of the value of the plan's liabilities. We discuss the critical assumptions relating to the defined benefit pension scheme in the Financial Review section on page 16.

Long term service contracts

Income in relation to the long term service contracts to deliver sequenced genomes to UK Biobank, is recognised by reference to the stage of completion of the contract activity as at the balance sheet date. Management estimates the stage of completion by comparing costs incurred as of the balance sheet date to total expected costs. Total expected costs are forecast by reference to a per sample cost card of which 86% are fixed price contracts for certain volumes. A 1.0% increase in total contract costs would result in a 1.5% decrease in income recognised in the year ended 30 September 2020 and a 2.1% increase in deferred income as at 30 September 2020.

Fair value measurement and valuation processes

Some of the Charitable Company's assets and liabilities are measured at fair value for financial reporting purposes. The Charitable Company considers the appropriate valuation techniques for calculating the best estimate of fair value for reporting purposes. The Charitable Company holds unquoted programme related investments. Fair value is estimated by reference to the price of recent investment, where available. The price may be adjusted if there are indicators that this price is not a good estimate of fair value.

3. TOTAL INCOME

The Charitable Company has three main activities: Sanger Institute, Connecting Science and Enterprise and Innovation.

Detailed analysis follows:

	2020	2019
	£'000	£'000
Sanger Institute	105,592	110,074
Connecting Science	3,984	4,989
Enterprise and Innovation (Campus)	3,005	2,944
Total income from charitable activities	112,581	118,007
Core grants from Wellcome	89,564	89,896
Other grants from Wellcome	4,494	7,163
Grants from other funders	18,523	20,948
Total grants from charitable activities	112,581	118,007
Income from other trading activities	43,706	34,332
Interest	107	34
Total income	156,394	152,373

Income includes grant funding for both capital and operating expenditure. Grants from other funders includes £4.0 million government research grants (2019: £5.7 million). Other trading income includes income from sequencing services, of which £35.7 million relates to the UK Biobank projects to sequence whole genomes, as described on page 11 (2019: £24.8 million); as well as tenant services and utilities, salary recharges, rental income, licences, the release of deferred income from EBI, and other immaterial income streams. Other trading income of £31.7 million (2019: £8.2 million) relates to unrestricted funds. Interest income of £107,000 (2019: £34,000) has been recognised in the year, of which £16,000 (2019: £17,000) relates to the endowment fund.

4a. EXPENDITURE

The Charity has three activities. Expenditure relating to each activity comprises operating expenditure, including depreciation.

	2020			2019		
	Direct	Support	Total	Direct	Support	Total
	£'000	£'000	£'000	£'000	£'000	£'000
Sanger Institute	146,575	14,632	161,207	139,370	13,861	153,231
Connecting Science	5,531	552	6,083	6,316	628	6,944
Enterprise and Innovation	4,171	416	4,587	3,728	371	4,099
	156,277	15,600	171,877	149,414	14,860	164,274

Support costs have been allocated in proportion to direct costs. Support costs include staff costs of £10.0 million (2019: £9.4 million), depreciation of £0.7 million (2019: £0.6 million), premises costs of £1.7 million (2019: £1.7 million) and other costs of £3.2 million (2019: £3.2 million). Support costs include governance costs.

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

4b. GOVERNANCE COSTS

	2020	2019
	£'000	£'000
External audit costs	96	76
Internal audit costs	180	120
Directors' remuneration and expenses (see note 7)	10	20
	286	216

Governance costs have been allocated in proportion to direct costs.

5. GRANTS AWARDED

Expenditure related to grants awarded is as follows:

	2020	2019
	£'000	£'000
Grants to Institutions		
University of Cambridge	1,115	801
The Broad Institute	591	-
London School of Hygiene and Tropical Medicine - MRC unit, The Gambia	568	-
University of Oxford	300	41
University of Ghent	285	-
Kerala Institute of Medical Sciences	219	23
Weizmann Institute of Science	156	-
CDC Foundation	178	-
Harvard University	57	218
Colombian Corporation for Agricultural Research	41	599
University of Ibadan	-	245
University of Ghana	-	241
Grants to other Institutions	107	444
	3,617	2,612

All grants awarded are for the field of genomic research, either through collaborative programmes or to build capacity in lower-middle income countries.

Grants are generally awarded to a particular individual, although the actual award is made to the host institution.

Included within Sanger Institute support costs (see note 4a) is an amount of £0.2 million (2019: £0.2 million) allocated to grant making activities.

All grants awarded are subject to performance conditions and as such the grant is recognised in line with the work performed by the sub-grantee. There are no outstanding liabilities for grants not paid other than those recognised as accruals for grants payable in note 14 (Creditors: amounts falling due within one year).

6. NET EXPENDITURE BEFORE OTHER RECOGNISED GAINS AND LOSSES

Net expenditure before other recognised gains and losses is stated after charging (crediting):

	2020	2019
	£'000	£'000
Foreign exchange gains	(640)	(4,402)
Depreciation	14,091	11,952
Gain on disposal of fixed assets	(52)	(102)
Internal audit	180	120
Fees payable to the company's auditor for the audit of:		
Statutory financial statements	89	69
Pension Fund	7	7

7. EMPLOYEE INFORMATION

Number of employees

The average headcount of employees analysed by activity and function area, was:

	2020 Number	2019 Number
Sanger Institute	809	798
Connecting Science	55	50
Enterprise and Innovation	7	8
Administrative	184	166
	1,055	1,022

Analysed by Sanger Institute

Cancer	124	122
Cellular Genetics	53	55
Human Genetics	58	64
Parasites and Microbes	90	104
Tree of Life	22	-
Open Targets	40	28
Science Platforms	282	277
Science Strategy	42	52
Science Support	25	26
IT Platforms	69	65
Translation	4	5
Total	809	798
Connecting Science	55	50
Enterprise and Innovation	7	8
Administrative	184	166
Total Employees	1,055	1,022

PhD Students	53	51
Total Headcount	1,108	1,073

PhD students are not employed by the Charitable Company but provide a significant contribution to the scientific research. Only those students who receive a stipend directly from GRL are included within the above total.

The Tree of Life programme opened in March 2019. The first employee to work exclusively for this programme commenced in July 2019.

	2020 £'000	2019 £'000
Employment costs		
Wages and salaries	47,067	44,886
Social security costs	4,810	4,385
Short term benefits	968	859
Pension costs	22,142	21,347
	74,987	71,477

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

The number of employees whose emoluments amounted to £60,000 or more (excluding employer's National Insurance Contributions, benefits in kind and employer's pension contributions) during the year was as follows:

	2020 Number	2019 Number
£60,000 to £69,999	46	36
£70,000 to £79,999	22	16
£80,000 to £89,999	11	11
£90,000 to £99,999	9	10
£100,000 to £109,999	3	4
£110,000 to £119,999	3	2
£120,000 to £129,999	3	1
£130,000 to £139,999	1	3
£140,000 to £149,999	4	2
£150,000 to £159,999	1	1
£170,000 to £179,999	-	1
£180,000 to £189,999	1	1
£190,000 to £199,999	2	-
£200,000 to £209,999	-	1
£360,000 to £369,999	-	1
£370,000 to £379,999	1	1

All employees earning more than £60,000 participated in one of the charitable company's pension schemes.

The emoluments of the Director of the Wellcome Sanger Institute included in the table above totalled £372,970 (2019: £360,454).

Redundancy and termination payments

	2020 £'000	2019 £'000
Redundancy and termination costs	70	442

Directors' remuneration

The Directors of GRL received remuneration totalling £10,250 (2019: £17,750) and 6 Directors received travel and accommodation expenses totalling £2,573 (2019: £2,591, 4 Directors) in relation to their duties as Directors. No other benefits or expenses were reimbursed to the directors of the Charitable Company. All but three of the Directors are either salaried employees of Wellcome or Governors (Directors) of The Wellcome Trust Limited (the corporate trustee of the Wellcome Trust) and do not receive any additional emoluments for their role as Directors of the charitable company. None of these amounts are recharged to the Charitable Company.

Four directors work at, or are directors of, organisations that either received funding from the Wellcome Trust, GRL's parent, or directly from GRL. The Charitable Company has procedures in place to manage conflicts declared.

Directors' indemnity policy

The charitable company is party to a group-wide directors and officers insurance policy which includes all of its current directors. This is not a Qualifying Third Party Indemnity Provision for the purpose of the Companies Act 2006.

Key management personnel remuneration and benefits

Key management personnel includes members of senior management and directors as described on page 21 of the Directors' report. The employee benefits paid or payable, including pension contributions, to key management for employee services is shown below:

	2020 £'000	2019 £'000
Salaries and other short-term benefits	641	664

8. PENSION SCHEME

The Charitable Company operates a funded defined benefit scheme and a defined contribution scheme for its employees.

All contributions to the defined benefit scheme are held in trustee-administered funds (The Genome Research Limited Pension Plan) which is independent of the Charitable Company's finances. A full actuarial valuation of this scheme was carried out at 31 December 2018 and has been updated to 30 September 2020 by a qualified actuary, independent of the scheme's sponsoring employer. The major assumptions used by the actuary are shown below:

	30 September 2020 per annum	30 September 2019 per annum	30 September 2018 per annum
Inflation (RPI)	3.05%	3.15%	3.40%
Inflation (CPI)	2.70%	2.15%	2.40%
Salary Growth	3.55%	3.65%	3.90%
Discount Rate	1.75%	1.85%	2.85%
Allowance for revaluation of deferred pensions of RPI of 5% p.a. if less	3.05%	3.15%	3.40%
Allowance for pension in payment increases of RPI or 5% p.a. if less	2.95%	3.05%	3.25%
Allowance for pension in payment increases of CPI or 3% p.a. if less	2.15%	1.90%	2.00%
Commutation of pension to cash at retirement	90% of Post A Day	90% of Post A Day	90% of Post A Day

Mortality assumptions adopted imply the following life expectancies at age 60:

	30 September 2020	30 September 2019
Male retiring in 2020 (2019)	26.5 years	27.4 years
Female retiring in 2020 (2019)	28.4 years	28.4 years
Male retiring in 2040 (2039)	28.0 years	28.5 years
Female retiring in 2040 (2039)	30.0 years	29.7 years

Announcements by HM Treasury and the UK Statistics Authority on 4 September 2019 propose changes to the calculation of the Retail Prices Index (RPI) to match the Consumer Price Index including Housing (CPIH) at some time from 2025 to 2030.

This could reduce RPI-linked pension benefits by as much as 1% p.a. if or when CPIH is used instead of RPI, which would lead to a reduction in RPI-linked pension liabilities, or Defined Benefit Obligation. The formal consultation on the proposed changes to RPI was launched on 11 March 2020 and the outcome of this was announced on 25 November 2020. This announcement confirmed that RPI will increase in line with CPIH from 2030. The assumptions adopted to calculate the Defined Benefit Obligation as at 30 September 2020 were derived based on the expectation that RPI will increase in line with CPIH from 2030 and therefore, although the exact impact on the Charitable Company's scheme will depend on how markets settle after this announcement, no adjustments have been made for this proposed change within the assumption for RPI used to calculate the Defined Benefit Obligation as at 30 September 2020 or 2019. Further consideration will be given to this during the course of the 2020/21 financial year.

The scheme funding valuation as at 31 December 2018 showed a deficit of £3.3m. Additional contributions of £5.0 million were made in the year ended 31 December 2019 with an aim to eliminate the funding deficit.

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

(i) Charge to the Statement of Financial Activities and Other Comprehensive Income over the financial year:

	2020 £m	2019 £m
Operating charge		
Current service cost	16.0	16.0
Expenses**	0.4	0.5
Net interest cost	3.9	3.3
Losses due to benefit changes	-	0.2
Net charge to Statement of Financial Activities prior to actuarial loss	20.3	20.0
Actuarial (gain) loss	(16.3)	80.7
Total charge to Statement of Financial Activities	4.0	100.7

** These figures exclude insurance premiums for death in service benefits and PPF levies.

(ii) Defined benefit costs recognised in other comprehensive income:

	2020 £m	2019 £m
Return on plan assets (excluding amounts included in net interest cost) -gain	11.0	6.0
Experience gains (losses) arising on the plan liabilities	1.5	(0.7)
Effects of changes in the demographic and financial assumption underlying the present value of the plan liabilities -gain (loss)	3.8	(86.0)
Total amount recognised in other comprehensive income - gain (loss)	16.3	(80.7)

(iii) Reconciliation of opening and closing balances of fair value of scheme assets

	2020 £m	2019 £m
Fair value of scheme assets at start of year	252.9	231.0
Expected return on scheme assets	4.7	6.7
Actuarial gains	11.0	6.0
Contributions by employer	8.2	11.6
Benefits paid & death in service insurance premiums	(2.1)	(2.4)
Fair value of scheme assets at end of year	274.7	252.9

Analysis of the sensitivity to the principal assumptions of the value of the plan's liabilities:

Assumption	Change in assumption	Impact on liabilities
Discount rate	Increase/decrease of 0.5% p.a	Decrease/increase by 15.3%
Rate of inflation	Increase/decrease of 0.5% p.a	Increase/decrease by 15.1%
Rate of salary growth	Increase/decrease of 0.5% p.a	Increase/decrease by 3.5%
Probability of death in any year after retirement	Increase/decrease of 10%	Increase/decrease by 2.6%
Long-term rate of mortality improvement	Increase/decrease of 0.25% p.a	Increase/decrease by 1.4%

Contributions payable to the defined benefit scheme during the year amounted to £8.2 million (2019: £11.6 million). In addition £0.5 million (2019: £0.5 million) was paid in respect of scheme administration expenses and insurance premiums for death in service benefits. The actual return on the plan assets over the period ended 30 September 2020 was £15.7m (2019: £12.7m).

The best estimate of contributions to be paid by the employer to the scheme for the year beginning after 30 September 2020 is £7.9 million (2019: £12.7 million).

Scheme Assets

	30 September 2020	30 September 2019	30 September 2018
Equity	273.6	252.2	230.4
Other (Property, Cash, etc.)	1.1	0.7	0.6
Total Assets	274.7	252.9	231.0

(iv) Reconciliation of opening and closing balances of the fair value of the defined benefit obligation

	2020 £m	2019 £m
Scheme liabilities at start of year	455.9	344.9
Current service cost	16.0	16.0
Expenses	0.4	0.5
Interest cost	8.6	10.0
Actuarial (gains) losses	(5.3)	86.7
Benefits paid & death in service insurance premiums	(2.1)	(2.4)
Losses due to benefit changes	-	0.2
Scheme liabilities at end of year	473.5	455.9

(v) Amounts for the current and previous four years:

	2020 £m	2019 £m	2018 £m	2017 £m	2016 £m
Fair value of assets	274.7	252.9	231.0	197.6	152.4
Present value of scheme liabilities	(473.5)	(455.9)	(344.9)	(332.6)	(355.4)
Deficit in scheme	(198.8)	(203.0)	(113.9)	(135.0)	(203.0)
Return on scheme assets	11.0	6.0	15.2	29.4	(9.0)
Experience gains (losses) on scheme liabilities	1.5	(0.7)	(0.5)	0.6	0.5
Effects of changes in the demographic and financial assumptions underlying the present value of the scheme liabilities	3.8	(86.0)	11.7	48.7	(6.9)

Defined contribution scheme

The charitable company provides a defined contribution Group Personal Pension Plan.

The amount recognised as an expense for the defined contribution scheme was:

	2020 £'000	2019 £'000
Current period contributions	2,609	1,952

Contributions paid to the defined contribution scheme during the year amounted to £2.6 million (2019: £2.0 million).

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

9. TANGIBLE FIXED ASSETS

	Assets in the course of construction £'000	Short leasehold buildings £'000	Laboratory equipment, fixtures and fittings £'000	Total £'000
Cost				
As at 1 October 2019	839	194,318	133,295	328,452
Additions	1,061	1,619	6,112	8,792
Transfers	(839)	210	629	-
Disposals	-	-	(1,928)	(1,928)
As at 30 September 2020	1,061	196,147	138,108	335,316
Accumulated depreciation				
As at 1 October 2019	-	48,447	114,060	162,507
Charge for the year	-	4,169	9,922	14,091
Disposals	-	-	(1,910)	(1,910)
As at 30 September 2020	-	52,617	122,072	174,689
Net book value at 30 September 2020	1,061	143,530	16,036	160,627
Net book value at 30 September 2019	839	145,871	19,235	165,945

10. PROGRAMME RELATED INVESTMENTS

	2020 £'000	2019 £'000
Unquoted programme related investments		
At 1 October	4,331	5,921
Unrealised losses	-	(1,590)
At 30 September	4,331	4,331

Unquoted programme related investments represent the fair value of the Institute's holding of ordinary share capital of Kymab Limited (1%), VHSquared Limited (5%), Microbotica Ltd (8%) and Congenica Ltd (3%).

Investments in subsidiaries as at 30 September 2020 and 2019 were held at £1 (see note 19).

11. TAXATION

The Company is a registered charity, and as such is entitled to certain tax exemptions on income and profits from investments, and surpluses on any trading activities carried on in furtherance of the charity's primary objectives, if these profits and surpluses are applied solely for charitable purposes.

The estimated cost of irrecoverable VAT suffered by the charitable company was £3.0 million (2019: £3.3 million). This amount is charged in the accounts with its related expenditure.

The Charitable Company has previously recorded as income claims made for Research and Development Expenditure Credits for relevant expenditure incurred in the years 30 September 2013, 2014 and 2015. The legislation was amended with effect from 1 August 2015 preventing further claims.

HM Revenue and Customs paid the claimed amounts for 2013 and 2014 (£2,319,028 and £4,875,474 respectively); however, HMRC subsequently raised assessments to protect its position in relation to the 2013 and 2014 claims, which had been formally appealed. HMRC has now accepted that the company is carrying on a trade and as such is eligible for the relief on qualifying expenditure, and following a review of additional information to support the value of the claim of £4,162,271 for the year ended 30 September 2015. A settlement of £4,092,341 has been agreed, and received in October 2020, in relation to the outstanding claim for all 3 periods, after adjusting for ineligible items of £69,930, which have been recognised as an expense in the year ended 30 September 2020. The assessments have now been closed.

12. STOCKS & WORK IN PROGRESS

	2020	2019
	£'000	£'000
Raw materials and consumables	10,894	9,472

In the opinion of the Directors, replacement costs of stocks would not differ materially from that stated above.

13. DEBTORS

	2020	2019
	£'000	£'000
Trade debtors	3,987	2,844
Amounts owed by parent and group undertakings	24,584	14,820
Prepayments	7,807	7,593
Accrued income	5,455	7,370
Other debtors	4,993	4,278
	46,826	36,905

Prepayments relate to annual service and maintenance contracts paid in advance. Accrued income relates to work undertaken on third party grants in advance of funding being received. Other debtors in 2020 includes £4.1 million (2019: £4.2 million) relating to RDEC claim referred to in note 11. Amounts owed by parent and group undertakings are unsecured, interest free, have no fixed date of repayment and are repayable on demand.

14. CREDITORS: amounts falling due within one year

	2020	2019
	£'000	£'000
Trade creditors	3,545	14,685
Taxation and social security	1,296	2,703
Other creditors	1,108	1,108
Payroll creditors	257	172
Accruals for grants payable	450	139
Other accruals	4,298	3,408
Deferred income	38,519	32,677
	49,473	54,892

15. CREDITORS: amounts falling due after one year

	2020	2019*
	£'000	£'000
Between one and five years - deferred lease premium	2,130	2,130
More than five years - deferred lease premium	15,035	15,568
	17,165	17,698

*The employee share of investment gain of £2.6 million (2019: £2.6 million) has been reclassified from long term creditors to provisions for the year ended 30 September 2019, due to uncertainty regarding the timing and amount of the liability.

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Notes to the Financial Statements for Year Ended 30 September 2020

Deferred income	Lease premium	Grant income	Trading contracts	2020 £'000
At 1 October	18,230	10,617	21,528	50,375
Received during the year	-	17,652	31,624	49,276
Released to income during for the year	(532)	(7,386)	(36,049)	(43,967)
At 30 September	17,698	20,883	17,103	55,684

The deferred lease premium of £17.7 million (2019: £18.2 million), including a short term element of £0.5 million (2019: £0.5 million), relates to a lease premium received from the European Bioinformatics Institute. The deferred grant income of £20.9 million (2019: £10.6 million) relates to cash received in advance from third party grantors. Deferred income on trading contracts relates to amounts invoiced in advance of services performed, of which £16.0 million (2019: £20.3 million) relates to the UK Biobank consortium contract to sequence whole genomes.

16. PROVISIONS

	2020 £'000	2019* £'000
Amounts owed in respect of transferring faculty members	1,545	2,248
Amounts owed in respect of the closure of the Research Support Facility	1,377	2,033
Amounts owed in respect of employee share of investment gain	2,598	2,598
	5,520	6,879

	Investments	Faculty	RSF	2020 £'000	2019* £'000
At 1 October	2,598	2,248	2,033	6,879	7,018
Charge during the year	-	536	134	670	2,639
Released during the year	-	-	(445)	(445)	(1,096)
Utilised during the year	-	(1,239)	(345)	(1,584)	(1,682)
At 30 September	2,598	1,545	1,377	5,520	6,879

*The employee share of investment gain of £2.6 million (2019: £2.6 million) has been reclassified from long term creditors to provisions for the year ended 30 September 2019, due to uncertainty regarding the timing and amount of the liability. Under the terms of the translation policies in place at the time of the investments incorporation, employees are entitled to a share of any crystallised gains made in relation to certain of the programme related investments listed in note 10.

Certain members of faculty are awarded a transition allowance to continue their existing research outside of the Institute. The provision for faculty member transfers represents amounts committed to furthering this research at another institution. The timing and amount payable are uncertain as these are yet to be finalised with the receiving institutions.

In May 2019, GRL announced the decision to close the Research Support Facility (RSF) and mouse pipelines. The RSF provision represents redundancy and retention costs arising as a result of that announcement, which are dependent on how long an individual stays in employment. The release during the year represents individuals who left employment prior to the closure of the facility or who have taken up new positions within the organisation. The first milestone for retention payments was reached during the year. The facility is expected to close by 30 September 2021.

17. COMMITMENTS

As at 30 September 2020 there were £0.8 million capital commitments contracted but not accrued relating to the West Pavilion redevelopment (2019: £2.7 million relating to the West Pavilion redevelopment and Campus frost coils). This represents the proportion of the development work that is yet to be carried out.

The Charitable Company has made available a facility for its trading subsidiary, Genome Research Trading Limited, to draw down cash in the form of a loan up to the value of £0.7 million, in order to provide working capital through the period of Campus closure as a result of the COVID-19 pandemic and until the Conference Centre can become fully operational again.

18. ULTIMATE PARENT UNDERTAKING & CONTROLLING PARTY

The directors regard the Wellcome Trust as the ultimate parent company and controlling party, which is the smallest and largest group to consolidate these Financial Statements. Copies of the Wellcome Trust Annual Report and Financial Statements can be viewed on its website – <https://wellcome.ac.uk/what-we-do/reports>. Alternatively, they may be obtained from the Company Secretary. The registered address for Wellcome Trust is 215 Euston Road, London, NW1 2BE. The Wellcome Trust's principle activities are to protect, preserve and advance health and welfare and to advance and promote knowledge of biosciences. Further information can be found in the Constitution section on page 47.

19. RELATED PARTY TRANSACTIONS

The Charitable Company is wholly-owned by the Wellcome Trust and has applied the exemption in paragraph 33.1A of FRS 102 "Related Party Transactions". The exemption permits the non-disclosure of transactions entered into between two or more members of a group, provided that any subsidiary undertaking which is a party to the transaction is wholly-owned by a member of that group.

Related party transactions with Trustees are disclosed in note 7. Details of the Company's subsidiaries as at 30 September 2020 are as follows:

Name of subsidiary and company number	Proportion of ownership interest	Proportion of voting power held	Principal Activity
Genome Research Trading Limited (10058101)	100%	100%	Facilities management
Hinxton Hall Limited* (03062160)	50%	50%	Education / Facilities Management
Genome Research Pension Trustee Limited (09186099)	100%	100%	Dormant
Mosaic Therapeutics Limited (12780154)	100%	100%	Dormant
GRL Construction Limited (09280062)	100%	100%	Dormant

*The remaining 50% is held by the Wellcome Trust.

All of the Company's subsidiaries are registered in England and Wales. Their registered address is 215 Euston Road, London, NW1 2BE.

The Wellcome Trust provide the Company with an open-ended facility to exchange dollars at a favourable rate. The Company recognised a gain in relation to this arrangement in the year ended 30 September 2020 of £1.9m (2019: £3.7m).

20. MOVEMENT IN FUNDS

	1 October 2019 £'000	Incoming £'000	Outgoing £'000	Gains £'000	30 September 2020 £'000
Building development	127,130	2,620	(4,169)	-	125,581
Capital equipment	14,705	4,767	(9,852)	-	9,620
Research fund	15,073	117,338	(116,893)	-	15,518
Restricted income funds	156,908	124,725	(130,914)	-	150,719
Endowment fund	638	16	-	-	654
Pension deficit	(203,000)	-	(12,100)	16,300	(198,800)
Total Restricted Funds	(45,454)	124,741	(143,014)	16,300	(47,427)
Investment fund	1,733	-	-	-	1,733
Unrestricted fund	5,085	31,653	(28,863)	-	7,875
Total Unrestricted funds	6,818	31,653	(28,863)	-	9,608
Total Charity Funds	(38,636)	156,394	(171,877)	16,300	(37,819)

Genome Research Limited

Notes to the Financial Statements for Year Ended 30 September 2020

	1 October			30 September	
	2018	Incoming	Outgoing	Losses	2019
	£'000	£'000	£'000	£'000	£'000
Building development	130,909	346	(4,125)	-	127,130
Capital equipment	16,392	6,000	(7,687)	-	14,705
Research fund	15,456	137,773	(138,156)	-	15,073
Restricted income funds	162,757	144,119	(149,968)	-	156,908
Endowment fund	666	17	(45)	-	638
Pension deficit	(113,900)	-	(8,400)	(80,700)	(203,000)
Total Restricted Funds	49,523	144,136	(158,413)	(80,700)	(45,454)
Investment fund	2,229	-	1,094	(1,590)	1,733
Unrestricted fund	3,803	8,237	(6,955)	-	5,085
Total Unrestricted funds	6,032	8,237	(5,861)	(1,590)	6,818
Total Charity Funds	55,555	152,373	(164,274)	(82,290)	(38,636)

The building development fund relates to expenditure on leasehold buildings. The capital equipment fund relates to funding for other fixed assets. The research fund represents net income relating to non-asset expenditure incurred in running the Charitable Company during the year. The investment fund represents the increase in fair value of the Charitable Company's investments in unquoted securities, net of amounts owing to inventors and employees. The endowment fund is an expendable endowment. Research, capital and building funds are subject to conditions set by grantors and are therefore restricted. The unrestricted reserves represent net income generated from non-grant funded activities that can be allocated at the discretion of the Directors.

The assets and liabilities of each category of funds are as follows as of 30 September 2020:

	Restricted	Endowment	Pension	Unrestricted	Total
	£'000	£'000	£'000	£'000	£'000
Fixed assets	160,627	-	-	-	160,627
Investments	-	-	-	4,331	4,331
Current assets	42,686	654	-	24,841	68,181
Current liabilities	(32,507)	-	-	(16,966)	(49,473)
Long term creditors	(17,165)	-	-	-	(17,165)
Provisions	(2,922)	-	-	(2,598)	(5,520)
Pensions	-	-	(198,800)	-	(198,800)
	150,719	654	(198,800)	9,608	(37,819)

The assets and liabilities of each category of funds are as follows as of 30 September 2019*:

	Restricted	Endowment	Pension	Unrestricted	Total
	£'000	£'000	£'000	£'000	£'000
Fixed assets	165,945	-	-	-	165,945
Investments	-	-	-	4,331	4,331
Current assets	46,885	638	-	26,034	73,557
Current liabilities	(33,943)	-	-	(20,949)	(54,892)
Long term creditors	(17,698)	-	-	0	(17,698)
Provisions	(4,281)	-	-	(2,598)	(6,879)
Pensions	-	-	(203,000)	-	(203,000)
	156,908	638	(203,000)	6,818	(38,636)

*The employee share of the of the investment gain of £2.6 million has been reclassified in the prior year from long term creditors to provisions due to uncertainty in the timing and amount of the liability (see note 16).

21. COMPARATIVE STATEMENT OF FINANCIAL ACTIVITIES

		2019 £'000	2019 £'000	2019 £'000	2019 £'000
	Note	Unrestricted	Endowment	Restricted	Total funds
INCOME					
Income from charitable activities	3	-	-	118,007	118,007
Income from other trading activities		8,237	-	26,095	34,332
Interest		-	17	17	34
Total income		8,237	17	144,119	152,373
EXPENDITURE					
Charitable activities	4	(5,861)	(45)	(158,368)	(164,274)
Total expenditure		(5,861)	(45)	(158,368)	(164,274)
Unrealised loss on investments	10	(1,590)	-	-	(1,590)
Net income (expenditure)		786	(28)	(14,249)	(13,491)
Other recognised losses					
Actuarial losses on defined benefit pension scheme	8	-	-	(80,700)	(80,700)
Net movement in funds		786	(28)	(94,949)	(94,191)
Total funds brought forward at 1 October	20	6,032	666	48,857	55,555
Total funds (deficit) carried forward at 30 September		6,818	638	(46,092)	(38,636)

22. POST BALANCE SHEET EVENTS

On 17 November 2020, the Wellcome Trust awarded the Institute with a further £232.8 million, as an extension of the 2016 quinquennial award, with a revised end date of 30 September 2023.

Reference and administrative information

Constitution

The Company is a charity registered in England with the Charity Commission under the Charities Act 1993, as amended by the Charities Act 2011 (Charity registration number 1021457) and is a company limited by guarantee and registered in England (Company number 2742969). The sole member of the charitable company is The Wellcome Trust Limited (Company number 2711000, incorporated in the UK), as trustee of the Wellcome Trust (Charity registration number 210183, registered in England and Wales). In the event of the charitable company being wound up, the liability in respect of the guarantee is limited to £1.

Directors

The Directors of the Charitable Company who were in office during the year and up to the date of signing the financial statements were:

Sir Jeremy Farrar (Appointed 1 January 2020)	Dr Nicole Mather
Dame Kay Davies	Sir James Smith (Wellcome Trust)
Dr Paul Schreier (Wellcome Trust) (Appointed 29 October 2019)	Mr Daniel Abrams (Appointed 2 December 2019)
Dr Daniel Mahony (Appointed 27 March 2020)	Professor Gilean McVean (Appointed 27 March 2020)
Ms Cheryl Moore (Appointed 27 March 2020)	Professor Rolf-Dieter Heuer (Resigned 13 February 2020)
Dame Cilla Snowball (Appointed 1 January 2020)	Lord David Willetts (Resigned 31 December 2019)

Company Secretary

Nadia Meliti

Registered Office

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Statutory Auditor
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EC4A 3HQ

Bankers

National Westminster Bank plc
King's Parade Branch
Bene't Street
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CB2 3PU

Solicitors

CMS Cameron McKenna
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Cambridge Employment Law
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Actuary

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Charity Registration: 1021457
Company No: 2742969