



Medical Research Scotland
64th Annual Report and Financial
Statements
2017-18

*Medical Research Scotland is the operational name
of the Scottish Hospital Endowments Research Trust (SHERT)
Recognised in Scotland as a charity with Scottish Charity No. SC014959*

Medical Research Scotland

As Scotland's largest independent charity funder of medical research, Medical Research Scotland is committed to:

- supporting people in the early stages of their careers in biomedical research in Scotland
- supporting only the highest-quality clinical and laboratory-based research, which is aimed at improving understanding of the basic mechanisms of disease processes; or the diagnosis, treatment or prevention of disease; or the advancement of medical technology.

PATRON

HRH The Princess Royal

MEMBERS

The following served as Members during the year:

Professor Philip Winn, BA, PhD, FRSB, FAPS, SRPharmS

Professor Andrew H Baker, BSc, PhD, FAHA, FESC, FRSE (retired 12th June 2017)

*Professor John R Brown, CBE, BSc, PhD, MBA, FRSE

Professor Bernard A Conway, BSc, PhD

*Mr Brian Duffin, MA, FFA, CCMI (retired 27th November 2017)

Mr Scott Johnstone, BEng(Hons), MBA, CEng, FIET FIMechE

*Mr Graham Paterson, MBA, FCCA

Professor Jennifer M Woof BSc, PhD, FHEA, FRSB

Professor Andrea Nolan OBE, FRSE, MRCS

*Mr Barry Rose, BSc

*Mr Alasdair G K Gill Beng, FIA -(from 9th June 2017)

Professor Heather M Wallace BSc, PhD, FRCPath, FBTS, FRSC, FRSB, FBPhS (appointed 16th March 2018)

** Denotes membership of the Audit & Investment Sub-Committee*

PRINCIPAL ADDRESS

Princes Exchange, 1 Earl Grey Street, Edinburgh EH3 9EE

SECRETARIES

Turcan Connell, Princes Exchange, 1 Earl Grey Street, Edinburgh EH3 9EE

SCIENTIFIC ADVISER

Dr Alex M Graham, PhD

AUDITOR

Scott-Moncrieff, Exchange Place 3, Sempie Street, Edinburgh EH3 8BL

INVESTMENT MANAGER

Martin Currie Investment Management Ltd, Saltire Court, 20 Castle Terrace, Edinburgh EH1 2ES

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BUCKINGHAM PALACE

As Patron, I am delighted to see the continued impact of Medical Research Scotland, impact that happens in different ways: firstly on scientists in the early stages of their careers helping them decide on future paths; support for students in secondary education, showing them the variety of career paths that they can take through biomedical sciences; support for undergraduate students, letting them do full time research in their summer vacations; and finally support for postgraduate students working for their doctorates, the critical last step in full time education that will ready them for careers in academia, industry or wherever they choose. On top of all this, I am pleased that Medical Research Scotland continues to work with the excellent Daphne Jackson Trust, supporting scientists returning to the laboratory after a career break.

I am also aware of the influence Medical Research Scotland has by having all its postgraduate students work on projects that involve collaboration between Universities and industry, which helps drive the discovery and development of new drugs, medical devices and diagnostic tools.

I am pleased to note that the Board of Medical Research Scotland remains alert to the need to grow and improve, and to seek better ways of effective working. I am confident that Medical Research Scotland will successfully continue its work to develop the careers of talented scientists and to create research that will improve healthcare around the world.

HRH The Princess Royal

Chair's Report

Medical Research Scotland remains focused on helping scientists early in their career to develop in ways that bring benefit to themselves, their institutions and to Scotland's commercial life science sector.

We support students studying for doctoral degrees, through interactive research between Universities and industry. As well as this, because we know that for many scientists a career break is often necessary – we remain totally supportive of the work of the Daphne Jackson Trust, to help get people back into careers after a break. We help undergraduates too, giving Vacation Scholarships to let them have a go at full time research over the summer, to get a feel for what it's like being a day-in-day-out researcher. To dig even deeper into career paths, we have “Meet the Researcher” showcase events – this year, like last, at Dundee and Glasgow Science Centres – where our students talk face-to-face with secondary school students. Our Medical Research Scotland students are outstanding role models, able to show school pupils what they could become in just a few years.

We are Scotland's largest independent medical research charity but our budget is not without limits. It is critically important that we use the money to the best effect and I believe that we do that. Our strategy for developing careers represents excellent value for money: the scale of our support for PhD studentships in particular makes us competitive with any other agency in this field, wherever they are based.

Financially, we remain secure, with strong forward projections. Nevertheless, receiving income is always welcome and during the year, funds were received through donations from individuals, legacies and trust giving. All donations are acknowledged individually and highlighted on our website.

As I approach a second term as Chair it's important to ask what can we do to improve. Our strategy is set and will not change, but we can look for lean efficiencies in our operations. The roll out of our new website and online application management systems will do this, and create a much better platform for analysis of our funding patterns. Constant awareness of our processes and their effectiveness is essential. We must never get into the position of being good enough, of relying on what it is we've always done. And we must get more onto the front foot in advertising ourselves to the academic and industrial communities, as well as the public at large. We do great work and should not be shy in letting people know about it.

Confident in our mission, confident in our ability to do ever better, confident in the scientists we fund and ourselves – confident, but we can still strive to do ever better.

Professor Philip Winn
Chair

Trustees' Report

The Trustees present their report along with the Financial Statements of the Trust for the year ended 31st March 2018. The Financial Statements have been prepared in accordance with the accounting policies set out in Note 1 to the Financial Statements and comply with the Trust's constitutive legislation the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and the Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their financial statements in accordance with the Financial Reporting Standard 102 applicable in the UK and Republic of Ireland (FRS 102).

Objectives and Activities

The objectives of the Trust are to:

- Receive and hold endowments, donations and bequests;
- Award funding from these to promote medical research in Scotland;
- Engage in fundraising activities for the purposes of the Trust;
- Develop and exploit ideas and exploit intellectual property.

The Trust aims to improve health standards by funding research of the highest quality into the cause, diagnosis, treatment and prevention of all forms of illness and genetic disorders, and into the advancement of medical technology.

The Trust fulfils its objectives by providing a range of opportunities to support and encourage research-minded individuals to pursue high-calibre research in biomedicine, independently or in collaboration with colleagues in their own or other universities, major hospitals and research units in Scotland, or with trading companies operating in healthcare-related fields. Through its short Undergraduate Vacation Scholarships, commercially-linked PhD Studentships and its support of part-time Daphne Jackson Trust Fellowships, the Trust offers provision for biomedical researchers. The awards help to prepare the recipient researchers for a career, or return to a career, in academia or the health-related commercial sector.

Grant-making Policy

The Trust aims to support research of the highest quality. It has a rigorous system of assessment of funding applications before they reach Trustees.

Funding decisions for the PhD Studentship awards are taken in a two-stage process. Applications, detailing a defined research project, are subject to expert peer review by members of the specially-appointed PhD Studentship Panel, who are first provided (by the Scientific Adviser) with sufficient information about each to enable them to declare any possible conflict of interest in any application. The Panel members then review the applications independently and their reports are subsequently considered by all the Panel members meeting in committee. Recommendations for funding are then made to the Trustees, who take the final decisions. Those accepting the offer of funding then select appropriately highly-motivated and qualified students following advertisement and interview by a group comprising the academic institution and representatives from both the company and the Trust. Following appointment of suitable students, recipients of PhD awards must submit annual reports providing information about progress on both the academic and company aspects of the award. These are scored by the scientific Trustees to ensure that the work is progressing satisfactorily before payment of subsequent years' fees is made.

Trustees' Report (continued)

Vacation Scholarship applications are reviewed separately and independently by external peer reviewers and scientific and medical Trustees, who make recommendations to the Trustees. The final funding decisions are taken by all the Trustees in light of those recommendations and available funds. After completion of the Vacation Scholarship, a short report is required from the award holder and the student. These reports are reviewed by all the Trustees.

All continuing project award holders are required to submit progress and final reports and also a post-completion report. Progress and final reports are scored by the scientific trustees and any found to be unsatisfactory are followed up. The purpose of the post-completion check is to assess the award holder's subsequent progress and what publications and possible intellectual property exploitation may flow from a project which the Trust has supported. An annual report is also received from the Intellectual Property Manager of each administering institution in respect of each project awarded.

The Trust also sponsors a number of Daphne Jackson Trust Fellowships with Trustees participating in the funding decisions taken by the Daphne Jackson Trust. Progress reports are received by the Trust from recipients of these Fellowships on a six monthly basis.

Funding Awarded

During the 2017-18 Financial Year the Trustees awarded a total of 13 PhD Studentships (11 in 2016-17) and 60 Undergraduate Vacation Research Scholarships (75 in 2016-17). The topics of the PhD Studentships cover a wide range including multiple sclerosis, cancer, rheumatoid arthritis, gastrointestinal disease, heart disease and bone augmentation, many having drug development as their primary focus. Vacation Scholarships were held at the following universities:- Aberdeen, Dundee, Edinburgh, Glasgow, Glasgow Caledonian, Heriot-Watt, St Andrews, Strathclyde and West of Scotland. Further information about all the awards formally accepted can be found on the Trust's website: www.medicalresearchscotland.org.uk. The total value of the funding awarded amounted to £1,992,760.

Achievements and Performance – A&I Committee to discuss

The Trust's **Annual Plan** for 2017/18 and performance against it are summarised as follows:

1. To make up to 15 PhD Studentship Awards for suitably high-quality, relevant projects submitted by university/industry collaborations, to make funds available for up to 100 Undergraduate Vacation Research Scholarships and also to seek to appoint up to three Daphne Jackson Fellowships for those seeking to return to biomedical research following a career break.

13 PhD Studentships and 60 Undergraduate Vacation Research Scholarships were awarded and 59 were paid out. The Trustees agreed to support three Daphne Jackson Trust Fellowship awards (three were offered and one was awarded).

2. To continue to raise awareness of the Trust and particularly its new funding strategy within the academic and business communities in Scotland, seeking to ensure appropriately high quality applications and bearing in mind the possible impact of the UK leaving the European Union on applications received.

Trustees' Report (continued)

The availability of the PhD Studentships and Vacation Scholarships was widely circulated among the academic and commercial biomedical sectors. The number and quality of the applications received suggest these continue to be increasingly popular and competitive.

The Trustees have been working towards updating the Trust website in order raise the Trust's online profile.

3. To develop opportunities in relation to outreach events.

Two successful Meet the Researcher Showcase events were held at Glasgow Science Centre and Dundee Science Centre on 13th March and 14th March 2018 respectively.

The number of pupils and teachers attending increased by 40%, since the 2017 events with over two hundred pupils and teachers from 17 schools enthusiastically taking part in the hands-on exhibits; chatting with the participants and poster presenters about their research and career path; and listening to career talks from those who have established themselves in academic or industry related careers.

The career talks were delivered by Professor Sue Barnett (Professor of Neuroscience, University of Glasgow), Dr Mike Capaldi (Director of Innovation for the College of Medicine and Veterinary Medicine, University of Edinburgh), Professor Nicola Stanley-Wall (Professor of Microbiology, University of Dundee) and Dr Audrey Vardy (Operations Manager and Lead Principal Scientist, Concept Life Sciences Ltd).

As well as an increase in the number of pupils attending the event, double the number of exhibitor stands volunteered their time to engage the pupils with their interactive hands-on exhibits. These covered a wide range of topics, including drug design, viruses, cancer, heart disease, genetic analysis, endoscopes, the immune system and snack portion sizing, with the exhibitors coming from the Universities of Aberdeen, Dundee, Edinburgh, Glasgow and St Andrews; Cancer Research UK Beatson Institute and the Scottish Health Research Register.

Medical Research Scotland awardees were well represented with 6 PhD Students, 6 Vacation Scholars and 1 MRS-sponsored Daphne Jackson Fellow presenting a poster about their work, as well as providing exhibits to further illustrate their research. Amongst other educational activities, the pupils were encouraged to use pipettes in simulated research techniques; build models of viruses, take part in a virtual reality simulation being used in Alzheimer's disease research and build models of drugs.

Feedback from the pupils, teachers, presenters and exhibitors was resoundingly positive; with strong indications being given that they would like to attend future similar events organised by Medical Research Scotland. A number of PhD Students have also expressed interest in taking part in the 2019 event.

4. To continue to keep under close review the Trust's investment portfolio and, in particular, its income.

The Audit & Investment Committee continued to review in detail the portfolio performance and agreed a new asset allocation during the year, aimed at improving the diversification of the portfolio on a global basis.

Trustees' Report (continued)

5. To have the Trust's Annual Report & Financial Statements printed and available from its website during 2017.

The Annual Report & Financial Statements was printed on 27th October 2017 and is available on the Trust's website.

6. To review the Trust's website and work to produce an online application system to streamline applications and capture data.

The Trustees' continued to work with the website and online application system developer.

7. To review work with industrial partners.

It remains fundamental to our strategy that all PhD Studentships must have a commercial trading company as a partner. There has been no active review of this during the year but it is expected that with better data collection through the online application management system and more time available to MRS staff, analytic surveys of our funding patterns will be undertaken.

8. To review the PhD Studentship and Undergraduate Vacation Scholarship Award process and criteria.

The award process for the PhD Studentship application is to be reviewed for the 2018 award call and the Vacation Scholarship award criteria underwent refinement.

9. To keep under review the membership of the Trust in light of retirements and resignations and the need to ensure that there is the appropriate breadth of expertise needed for the continued good governance of the Trust.

During the period, two Trustees retired, one being the Chair of the Audit & Investment Committee. Two new Trustees were appointed, one of which is also to sit on the Audit & Investment Committee.

10. To review the Trust's services in line with the agreed timetable.

The Trustees undertook to review the timetable of services and appointments dates for all the Trust services.

Financial Review

The Trust can only spend income and it is therefore reliant on the income from its investments, and also on legacies, donations and royalties. The annual investment income is supplemented by an Income Investment Fund which was created at a time when there was a surplus of income. Income generated on the investment portfolio and related cash deposits was £1,416,991 during the year which includes accumulated income, compared with £1,122,847 in 2016-17 and royalties were £146,114 compared with £133,958.