



We make a difference to
scientific progress



We support medical
research in Scotland



We help early career
researchers

50th Annual Review 2017/18

One of Scotland's leading
medical research charities
providing vital funds for early stage
medical research in Scotland

Today's research ~ Tomorrow's health



BUCKINGHAM PALACE

Sir Charles Illingworth and his original committee of ten would have been extremely gratified by your achievements over the last fifty years. By supporting medical research across the full range of medicine and healthcare in Scotland, you have made a significant difference to scientific progress and helped many early career researchers.

I am particularly encouraged by the achievements of The Princess Royal Tenovus Scotland Medical Research Scholarship programme. Launched in 2014, there are now four scholars pursuing PhD qualifications across Scotland with prospects of additional students in the near future.

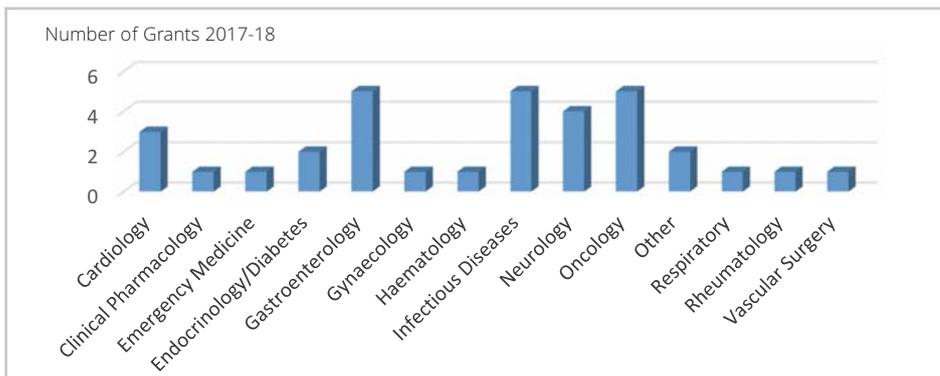
Earlier this year I was pleased to offer my best wishes on the occasion of your Golden Jubilee Gala Concerts which the Royal Scottish National Orchestra most generously agreed to recognise as Tenovus Scotland events. Their excellent performances were enhanced by the wonderful playing of your new Honorary Vice President Nicola Benedetti MBE, and I am sure the concerts will be long remembered as a fitting celebration of your half century.

As Patron, I would like to thank all trustees and committee members who have given their time so generously to further your aims over the last 50 years. I am sure their continued enthusiasm and commitment in attracting and funding researchers of ability in many areas of medical research will ensure the charity will continue to flourish over the next half century.



2017/18 at a Glance

- Grants of £0.7m were awarded
 - 29 Small Pilot grants
 - 3 Large Pilot grants
 - 1 PhD scholarship (a total of 6 scholarships are currently in progress)
- Grants were across a wide range of medicine and healthcare



- Administration costs were only 6% of Income for the year and 4% over the last 6 years
- Ms Antonia Mentel was awarded The Sir Roddy MacSween Medal for the medical student with exceptional performance in pathology in the Glasgow University medical school.
- Dr Li Kang (University of Dundee) was awarded The Sir Robin MacLellan Travel Award for the most outstanding Final Report received in the year

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Chairman's Comments

“ Nicola Benedetti's own commitment and track record in encouraging and supporting young musicians harmonises beautifully with the ethos of our charity in doing the same for early career scientists and clinical researchers ”



The big birthday in 2017 which was the 50th anniversary of the founding of Tenovus Scotland was the occasion of a quite wonderful and memorable celebration. The Golden Jubilee Gala Concerts which the Royal Scottish National Orchestra most generously agreed to recognise and badge as Tenovus Scotland events will live long in the memories of our faithful supporters and the newly acquired friends who attended them.

The first concert in a three-night marathon for the Orchestra, its Principal Conductor Peter Oundjian and the wonderful soloist Nicola Benedetti, took place on Thursday 5th October in the Caird Hall in Dundee. The City supported the event with a Civic Reception which testifies to the special place Tenovus Scotland has established within the Dundee and Tayside community, and the enthusiastic support it continues to enjoy from the local population.

The show moved on to Edinburgh on the Friday evening where the Usher Hall was packed with numerous friends of Tenovus. For many others the concert provided an opportunity to be made aware of the work of the charity.

On then to Glasgow for the Grand Finale in the Royal Concert Hall on the Saturday evening.

The playing of the orchestra and the wonderful Nicola Benedetti could not have been surpassed. Despite having just performed the highly demanding Elgar Violin Concerto, Nicola came directly to the interval receptions at all three venues where she spoke with the guests about the work of Tenovus Scotland. At the Glasgow event she presented Calum McMullen with his Princess Royal Tenovus Scotland

Medical Research Scholarship and then spoke quite beautifully about how delighted she was to be our Honorary Vice President, and her willingness to do whatever she can to support the aims and activities of our charity. She has a most demanding schedule of performances around the world but will, I'm sure, attend events in our regions when her diary allows. In particular we hope she may be in Aberdeen sometime soon since the Granite City missed out on the Gala Concerts. Her own commitment and track record in encouraging and supporting young musicians harmonises beautifully with the ethos of our charity in doing the same for early career scientists and clinical researchers.

Now that the dust has settled from the excitement of our Golden Jubilee it is back to the routine business for our regional committees in raising funds to support medical research in their localities. In spite of all the extra effort entailed in the Jubilee celebrations they were not diverted from this core purpose, and continued to raise impressive financial support. Fund raising activities are very hard work and often produce frustratingly meagre returns for all the effort expended. That said, it all adds up and, as the annual accounts demonstrate, the overall total of funds raised for research continues at the remarkable level achieved in recent years. Every so often we have news of legacies which come as a welcome boost. Some of these come out of the blue from benefactors of whose identity we have no prior knowledge nor do we often know what prompted them in their bequests. What this highlights is that the efforts of the regional committees don't just raise funds but also raise awareness of what we are about and what we aim to achieve.

The Princess Royal Tenovus Scotland Medical Research Scholarship programme has gone from strength to strength such that there are now four scholars pursuing PhD qualifications across Scotland, two in Glasgow, one in Dundee and one in Aberdeen, and there are prospects of additional awards in Dundee, Aberdeen and Edinburgh in the near future.

A highlight this year was the first award of the Sir Roddy MacSween Medal, commemorating our past National Chairman, to Antonia Mentel. This has been

made possible by the generous donations at the time of Roddy's funeral and subsequent memorial service, and the wonderful generosity of Lady Marjory and the MacSween family. In a new departure for Tenovus Scotland this is a prize to an undergraduate, specifically a medical student with exceptional performance in pathology in the Glasgow University medical school. The award will consist of a prize medal and a significant monetary award.

Dr Li Kang (University of Dundee) was awarded The Sir Robin MacLellan Travel Award for the most outstanding Final Report on research work for the year. Her subject was 'Targeting Cardiac Fibrosis and Insulin Resistance to Treat Heart Failure'.

As always the backbone of the organisation is the General Secretary, Iain McFadzean, the National Treasurer, Francis McCrossin and the Regional Secretaries whose tireless efforts support the National and Regional Committees but all the trustees and committee members give of their time so generously, and this reflects their belief that the aims of Tenovus Scotland and its impact are hugely important to the people of Scotland and their future health.

The National Scientific Advisory Committee works tirelessly to ensure that the projects the regions wish to support are scientifically robust. Professor Allan Struthers has completed a remarkable twelve years chairing and guiding that Committee. We thank him very warmly for this vital contribution and we welcome Dr Marie Freeland to the chair of the NSAC.

Finally, as always, we are immensely indebted to the Royal College of Physicians and Surgeons of Glasgow and their President Professor David Galloway for so generously providing accommodation for our office.

Professor Andrew Calder National Chair

Donors

Our sincere thanks to all our donors

Anonymous
Mr & Mrs M Cochrane
Mr & Mrs D Lawson
In memory of Mr E Read
Mr AL Tannahill
The Ian Sunter Charitable Trust

Research Grants and Awards 2017/18

Pilot Grants

(up to £17,000)

Edinburgh

Dr Vicky MacRae Endocrinology/Diabetes Regulation of Type 2 diabetes by bone.
Dr Emily Gwyer Findlay Neurology Understanding the role of neutrophils in the development of Multiple Sclerosis

Grampian

Professor Stefan Hoppler Cardiology Identifying new regulators of heart muscle formation using a mouse embryonic stem cell model

Dr Fiona Murray Cardiology Identification of new drug targets for stress-induced heart disease

Dr Nicola J Mutch Emergency Medicine Stopping the flow: a comparison of treatments to prevent blood loss in trauma patients

Dr Mirela Delibegovic Endocrinology/Diabetes Potential novel therapy for diabetic wound healing

Dr Gabriella Aviello Gastroenterology A novel approach to understand how the brain regulates chronic gut inflammation

Dr Giovanna Bermano Gastroenterology A non-invasive imaging system for early disease detection and monitoring of liver damage in a mouse model of non-alcoholic fatty liver disease (NAFLD)

Dr Silvia Gratz Gastroenterology Human 'mini-guts' to study inflammatory bowel disease

Dr David McLernon Gynaecology A population-based matching study to estimate the benefit of in-vitro fertilisation (IVF) for infertility

Dr Alexander Lorenz Infectious Diseases Characterizing the genetic diversity of the newly emerging multi-drug resistant fungal pathogen *Candida auris* using special gel-electrophoretic equipment

Dr Anca Sandu-Giuraniuc Neurology Can changes in maps of brain activity warn us of the early signs of dementia?

Professor Simon H Parson Neurology Using state of the art molecular techniques to identify new targets for therapy in Spinal Muscular Atrophy

Dr Frank J Ward Oncology Determining whether an immunosuppressive molecule, called sCTLA-4, is made by cancer cells to avoid the immune response

Strathclyde

Dr Claire Crossan Gastroenterology An investigation into possible complications of multiple viral infections of the liver and the development of cancer of the liver

Dr Michael J Ormsby Gastroenterology Understanding how toxic particles from bacteria can exacerbate the intestinal problems associated with Crohn's disease

Dr Mark Thomas Shaw Williams Haematology Investigating the role of bone marrow environment in resistance to therapy in acute myeloid leukaemia

Dr Damion Corrigan Infectious Diseases Rapidly diagnosing meningitis and septicaemia in critical care facilities

Dr David France Infectious Diseases Bacterial hari-kari - new strategies to combat antibiotic resistance using chemical biology

Dr Nicolás Suárez Infectious Diseases High through-put sequencing studies of the effects of antiviral drugs on human transplant patients

Dr Joseph D Symonds Neurology Why do patients who have mutations in genes that alter the expression of other genes have severe epilepsy? Using gene expression techniques to investigate the downstream effects.

“ As a newly independent researcher, my award of a Tenovus Scotland grant has been instrumental in allowing me to develop novel ideas of interest to Multiple Sclerosis, build up my own lab and generate a set of preliminary data which will form the foundation of my research for years to come ”

Dr Emily Gwyer Findlay

“ This project will allow us to search for an early biomarker for those at greatest risk of dementia and to increase the chances for a future fellowship application ”

Dr Anca Sandu-Giuraniuc

“ Tenovus Scotland has provided me with vital support which has allowed me to develop new research ideas, achieve collaborations and generate evidence to funders of its feasibility ”

Dr Fiona Murray

“ The Tenovus Scotland award offers support and confidence to allow early career researchers to develop their ideas and genera future project grants. This grant has provided a critical starting platform towards establishing myself as an independent researcher ”

Dr Michael J Ormsby

Dr Florian Bock	Oncology	An improved way to kill cancer cells
Dr Seth B Coffelt	Oncology	Investigation of immune cells during cancer spread to optimize immunotherapy
Dr Joelle Prunet	Oncology	Novel drug delivery system for treating breast cancer
Dr Arnaud Javelle	Other	Functional implications of mutations in the rhesus and Slc26A cellular uptake systems involved in diastrophic dysplasia
Dr Vicky Morrison	Rheumatology	Attachment of aggressive immune cells to their surroundings - could this be the key to treating rheumatoid arthritis?

Tayside

Dr Ify Mordi	Clinical Pharmacology	Estimating the increased risk of death in patients given macrolide antibiotics for chest infections
Dr Harunori Yoshikawa	Oncology	Can ribosome be a new target for cancer treatment?
Dr Amelia Shoemark	Respiratory	A laboratory model of the lung condition bronchiectasis

Large Grants (up to £100,000)

Tayside

Dr Albenka Tinkova-Kostova	Other	Method development for visualising the fate of proteins in live cells, with a focus on proteins which are often dysregulated in neurological conditions and cancer
Dr Helge C Dorfmüller	Infectious Diseases	Exploration of engineered sugar molecules as vaccine candidates to protect mankind from severe infections by <i>Streptococcus pyogenes</i> .
Dr Ify Mordi	Vascular Surgery	Development and validation of a simple blood test to determine risk in patients with abdominal aortic aneurysm

The Princess Royal Tenovus Scotland Medical Research Scholarship (3 year PhD scholarship)

Strathclyde

Mr Calum McMullen	Cardiology	Investigating a role for CaMKII as a novel therapeutic target mediating the cardiotoxic effects of anti-cancer drugs
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The Sir Robin MacLellan Travel Award

National

Dr Li Kang (University of Dundee)	Awarded annually for the most outstanding Final Report on research work for the year. Dr Kang's research was 'Targeting Cardiac Fibrosis and Insulin Resistance to Treat Heart Failure'.
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The Sir Roddy MacSween Medal

Strathclyde

Ms Antonia Mentel (University of Glasgow)	Awarded annually to an undergraduate, specifically a medical student with exceptional performance in pathology in the University of Glasgow Medical School
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“ The value of the Tenovus Scotland Award for me was that it showed I could successfully apply for grant funding in my own right. I have since gone on to secure larger grants and the Tenovus award was invaluable in terms of both applying for new funds and allowing me to kick start research activities in my newly formed lab ”

Dr Damion Corrigan

“ Tenovus Scotland is filling a really important role in helping to pump prime new projects at the initial concept phase ”

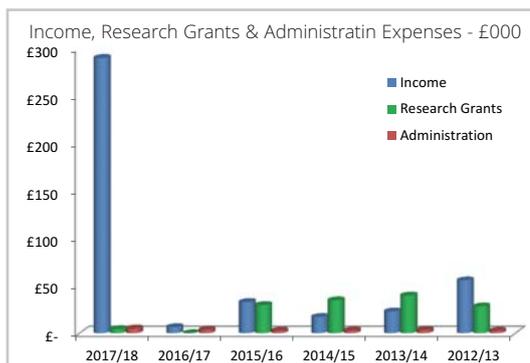
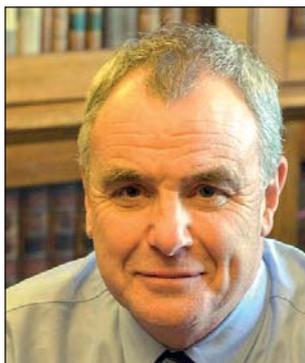
Dr David France

“ The Tenovus Scotland award is making a tremendous impact in my scientific career as it is allowing me to acquire a greater level of independence and to generate relevant data on human cytomegalovirus resistance mutations that will prime future grant applications ”

Dr Nicolás Suárez

“ As an early career researcher, the award from Tenovus Scotland has been very important for my academic progress and has led to further success, including nomination as a finalist for the best abstract in category at the British Society of Cardiology Annual Conference ”

Dr Ify Mordi



This is my first Chairman's report for Tenovus Scotland Edinburgh and I am pleased to say that I now have a better understanding of the role of Tenovus Scotland and its structure. As Mr James Watson said in his report last year, one of the main concerns has been a dearth of funds but we have fortunately been in receipt of a significant legacy from Miss Lillian Jarvis.

In this last year we received a total of six Grant Applications and, after peer review, agreed to support two of these projects. One of the chosen projects will be funded through the generosity of the Nancie Massey Charitable Trust which has been very supportive over the years.

Project Reports

In the current year, the Committee received two Interim Reports from successful applicants, both of which were considered satisfactory.

Income Generation and Events

Edinburgh contributed to the Golden Jubilee Concert given by the Royal Scottish National Orchestra in the Usher Hall with the solo violinist Nicola Benedetti. This event was well attended and we achieved the ticket sales that we had originally predicted. To some extent this was supported by the Senior Fellows' Club of The Royal College of Physicians of Edinburgh who were delighted to attend and support this event. Overall feedback was extremely supportive. In addition, we are discussing with the Royal Scots Club the potential for us to host a Young Musicians' evening to raise further funds for the Edinburgh region.

Committee and Thanks

I should like to thank all members of the

Committee for their hard work this year and for tolerating my learning over this period. It would have been impossible to have managed this without support from Mrs Kay Rich and all the other members of the group.

Professor Derek Bell OBE Chair

Edinburgh Committee

AS AT 31 MARCH 2018

Chair Professor D Bell

Hon Treasurer Mr JD Watson

Committee

Professor AA Calder, Dr D Davidson, Miss FVN Din, Dr S Farrington, Mrs HA Finlayson, Dr T Mackay

Edinburgh LSAC

Professor D Bell, Professor AA Calder, Dr D Davidson, Ms FVN Din, Dr S Farrington, Dr T Mackay. Mr JD Watson

Donors

Our sincere thanks to all our donors

The Nancie Massey Charitable Trust
W J Underwood Charitable Trust
Professor IAD Bouchier
Professor Hilary Critchley
Mr RS Ford in memory of Mr WF Watt
Anon
Mr WG Geddes
Mr J Hendry
Mr AR Henstock
Mrs KE McAulay
Mrs AH Neale
Mr & Mrs CMA Pearson
Mr & Mrs I Quigley
Mrs R Stewart
Miss JSC Stuart

Legacies

We are grateful for the following legacies

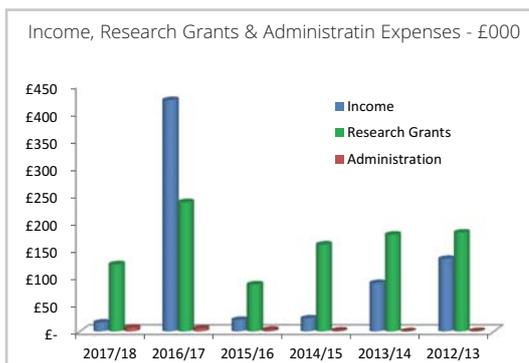
Ms GL Jarvis

Edinburgh Regional Secretary

MRS K RICH Regional Secretary

Tel: 0131 332 8502

Email: edinburgh.secy@tenovus-scotland.org.uk



Tenovus Scotland Grampian is privileged to be able to fund innovative pilot studies conducted by early career researchers in the Universities of the North East of Scotland. We remain enormously indebted to our very generous benefactors who have bequeathed and donated the funds to support our critical endeavours.

Applications Received and Project Reports

During the last year, two cycles of applications have been invited. Of the first group of 13 applications in late summer 2017, the Grampian Committee elected to fund all the eleven selected for onward transmission to the National Scientific Advisory Committee (NSAC), all being highly scored. The second cycle of 14 applications is due for appraisal in May and June.

We are delighted that one of our early career researchers has been able to continue her research activities upon securing a two million Euro grant from the European Union, emphasizing the importance of Tenovus Scotland pump-priming support.

Our second Moulton-Barratt scholar is in the completion stage of his PhD scholarship, and the Grampian Committee have decided to fund a further PhD scholarship from the Moulton-Barratt Fund. Thus the Grampian complement of PhD scholars will remain at four, three funded by The Moulton-Barratt Trust and one Princess Royal Tenovus Scotland Research Scholarship made possible by generous bequest of the John Shivas Trust.

Interim and final reports have been received for 2017/18, and our PhD researchers continue to deliver fascinating updates of their research progress at our quarterly committee meetings. It is hoped that a local symposium can be organized to encourage all of our scholars to present their work and offer an opportunity to

network while raising the public and academic profile of the charity.

Income Generation and Events

Our now annual Lawyers' Evening was held in January 2018, when we hosted a Continuing Professional Development event for local solicitors, addressed by the Aberdeen University Professor of Scots Law, Professor Roddy Paisley, who delivered an entertaining and educational talk about Real and Personal Rights entitled "A Little Latin for Lawyers".

The PhD students once again organized a sponsored run/walk around Loch Morlich and continue to discuss other fund raising ventures.

The 25th reunion of the Aberdeen Medical Graduates of 1992 donated £600 collected at their celebration.

In March, Tenovus Scotland Grampian was chosen to be the beneficiaries of monies raised for charity and social responsibility at the Aberdeen and Highland Curry Awards, a now annual celebration of Indian and Eastern cuisine; several members of the Grampian Committee and their guests attended the celebratory dinner at which the prizes in various categories were awarded.

Committee and Thanks

The Grampian Committee membership has remained stable over the last year. The Chair wishes to record his considerable gratitude to the Hon Secretary, the Hon Treasurer, the Vice Chair and all the other members of the Committee for their tireless efforts on behalf of Tenovus Scotland locally and nationally, and also to Ms Marilene Walker for her administrative support.

Professor Jamie Grieve
Chair

Grampian Committee

AS AT 31 MARCH 2018

Chair Professor J Grieve
Vice Chairman Professor C Wainwright
Hon Treasurer Mr D Fraser

Committee

Mr G Benvie, Professor B Connolly, Dr S Duncan
Mr F McLennan, Mr A Marshall, Professor J Maxwell, Mrs S Mackie

Grampian LSAC

Dr S Duncan, Professor J Maxwell,
Professor J Grieve

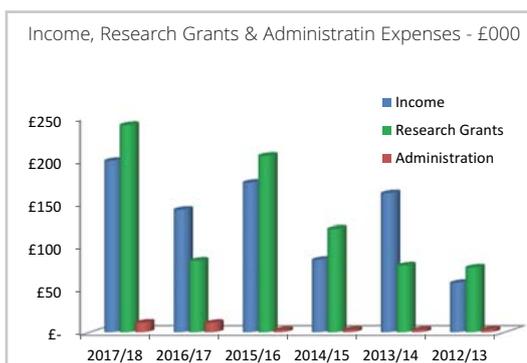
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Our sincere thanks to all our donors

Class of 92 Aberdeen University
Ms G McIlwaine
Professor P Morgan
Mr M Santoro and supporters
Mr D Yule

Grampian Hon Regional Secretary

MR J F S YOUNG Hon Regional Secretary
Tel: 01467 681380
Email: grampian.secy@tenovus-scotland.org.uk



The Tenovus Scotland Strathclyde Committee celebrated its 50 years in existence by having another successful year, meeting on four occasions to make new grant awards, review ongoing and past awards and conduct other relevant Committee business, including absorbing the impact of changes in Data Protection regulation.

Applications Received and Project Reports

The Committee received 26 applications for small project grants and noted the high standard of the applications. Almost all were 'fundable' so our ability to fund projects was limited only by the funds available. Following review and scoring by our Local Scientific Advisory Committee, and subsequent discussion at the full Strathclyde Committee, 12 projects were recommended for funding. National Scientific Advisory Committee review led to all projects being approved, and a total of £241,092 was allocated.

The Committee was delighted to receive further funds from the Ian Sunter Charitable Trust to allow the appointment of a second HRH Princess Royal Tenovus Scotland Medical Research Scholar in Strathclyde. Following a competitive process, the award was made to Calum McMullen to allow him to study the cardiac toxicity of anti-cancer medicines at the University of Strathclyde.

Final reports of projects funded in earlier years were reviewed at each meeting. Most projects achieved their aims and the majority are seeking, or have already achieved, ongoing funding, very much in the spirit of Tenovus Scotland grant awards.

Income Generation and Events

Given the major events undertaken as part of the Tenovus Scotland Golden Jubilee, it was not felt appropriate to try to undertake event-related fund-raising locally. The annual Golf Day was again a great success in raising

both the Tenovus Scotland profile and funds.

Monies from charitable trusts and legacies remain our major source of funds. We are particularly grateful to those trusts which are regular supporters, and remain happy to offer them specific projects with which they can be associated, including opportunities to meet with researchers, photo opportunities, etc.

Sadly, many of our legacies come from individuals with whom Tenovus Scotland appears to have had no previous direct contact. We are delighted to be the beneficiaries of their generosity, but it is a pity that we usually know little of the background of the donor or the motivation for their bequest. We put the funds to good use nonetheless.

Committee and Thanks

Both the Strathclyde Committee and our Local Scientific Advisory Committee have been strengthened in the last year. The former has new medical members and is seeking to recruit other skills as we aim to expand income-generating efforts, while the latter has enlarged to six members with an expanded range of expertise.

I am personally grateful to all Committee members for their support, ideas, advice and involvement in the work of Tenovus Scotland Strathclyde. We are blessed with committed and skilled individuals willing to give of their time and talents. As ever, our Committee relies heavily on the work of our Secretary, Sue Ogden, to whom should go all thanks for her organisational and IT skills. Thanks are also due to the Medical and Dental Defence Union of Scotland for their generosity in allowing us to use its premises in Glasgow for our meetings.

Professor Ken Paterson
Chair

Strathclyde Committee

AS AT 31 MARCH 2018

Chair Professor KR Paterson

Vice Chair Professor A Foulis

Hon Treasurer Mr D MacLucas

Committee

Mrs C Donald, Mr J Drury, Professor D Galloway, Professor D Hamblen, Mr I MacDonald, Mrs S Tolmie

Strathclyde LSAC

Dr H Carswell, Dr V Helgason, Professor I McInnes, Professor S Pyne, Professor P Shiels, Dr J Spencer

Donors

Our sincere thanks to all our donors

Robert Barr Charitable Trust
The WA Cargill Fund
Martin Connell Charitable Trust
MV Hillhouse Trust
The Jeffrey Charitable Trust
The Martin Charitable Trust
MEB Charitable Trust
The Ronald Miller Foundation
Helen A Reid Charitable Trust
The Ian Sunter Charitable Trust
The Templeton Goodwill Trust
The Tennant Southpark Charitable Trust
The Iris and Alexander Walker-Naddell Trust
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Mrs I Hay
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Mrs E Sinclair
Mr J Sinclair
Mr AA Stuart

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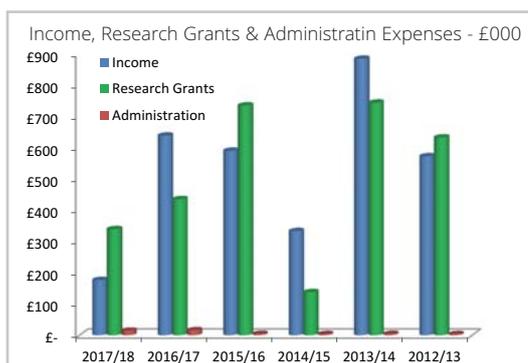
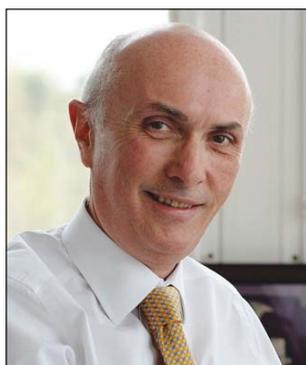
Mrs I Phillips

Strathclyde Regional Secretary

MRS S OGDEN Regional Secretary

Tel: 0141 221 6268

Email: strathclyde.secy@tenovus-scotland.org.uk



Tenovus Scotland Tayside region has had a successful year, supporting a number of very exciting research studies.

Applications Received and Project Reports

During the year a cycle of applications was considered by the Local Scientific Advisory Committee (LSAC) from the University of Dundee, Ninewells Hospital and Medical School, Abertay University and the University of St Andrews. Twenty proposals were reviewed and a further five new projects were approved, in principle, for funding, to a total value of £329,690. These included two small grants (both for less than £20,000). One was for work on mechanisms that give rise to cancer and the other for research on chronic chest infections. Three larger awards (up to £100,000) were approved. These covered a major clinical study on abdominal aortic aneurysms, a laboratory investigation into mechanisms that cause damage in chronic neurological disorders, and a project that aims to develop work towards creating a vaccine against common bacterial infections. As always, priority is given to pilot studies or new investigators who will benefit from early career support.

Eight Final Reports describing very satisfactory outcomes from grants awarded in earlier rounds were received during the year.

Income Generation and Events

Income during the year included £145,927 from donations and legacies, and £4256 from fundraising events. As always, we are indebted to supporters for their generosity in providing the financial support that allows us to nurture rising research talent in Tayside.

The major fundraising highlight of the year was the RSNO concert in the Caird Hall, at which the Honorary Vice President of Tenovus Scotland, Nicola Benedetti, gave an outstanding performance, and graciously met Tenovus supporters; I am very grateful to Dundee City Council, who held a civic reception prior to the concert. This event raised a net total of £1342.

The annual dinner was held in the Invercarse Hotel, and raised a total sum of £2875. The guest speaker was the Rev Dr Joe Morrow; 86 supporters attended, and I am indebted to Mrs Gloria Burns for her superb organisational skills in making arrangements for the event.

Committee and Thanks

As always I must express thanks to the LSAC, chaired by Prof Tim Hales, which carefully considered all of the projects submitted for funding. Mr James Wilson stepped down from the local Tenovus Scotland committee, having supervised the finances for many years; we owe him a major debt of thanks. I am delighted that Mr Bryant Paterson has taken over this role in a very effective manner. I would also like to acknowledge the very hard work of Ms Victoria Borthwick, who has coordinated the work of the LSAC and ensured effective liaison with the National Committee; she is moving to a new post in April 2018, and we are very sorry to lose her highly professional support. During the year the Committee was joined by Professor Jill Belch whose expertise will be invaluable in our deliberations.

Professor John Connell Chair

Tayside Committee

AS AT 31 MARCH 2018

Hon President Lady Fiona Fraser
Hon Vice Mrs P Dunn
Presidents Mr N J Robertson
Chair Professor JM Connell
Vice Chair Mr AF McDonald
Treasurer Mr B Paterson

Committee

Professor J Belch, Mrs G Burns, Mr M Etherington, Mrs L Fotheringham, Professor T Hales, Professor PW Howie, Mr DJ Smith, Mr DJ Young

Tayside LSAC

Professor T Hales, Dr H Dorfmüller, Professor C Lang, Dr S Pitt, Dr A Saurin

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 Mr & Mrs F McManus
 Mrs EA Mussen
 Lord & Lady Patel
 Mrs L Scott
 Mr M Watkin
 Professor & Mrs JA Wildsmith
 Dowager Countess of Strathmore in memory of
 Mr M Strathmore

Legacies

We are grateful for the following legacies

Miss AM Aitken
 Mr D Carrington
 Mr WS Durham
 Miss T Gourlay
 Miss Joyce
 Mr ACC Kelly
 Mr G Noonan
 Miss SM Sturrock

Tayside Regional Secretary

(to 31 March 2018)

MS V BORTHWICK Regional Secretary

Tel: 01382 383964

Email: tayside.secy@tenovus-scotland.org.uk

The National Scientific Advisory Committee

“ The role of the NSAC is to provide additional scrutiny of projects already approved by each Local Scientific Advisory Committee and the Regional Committee ”



I am delighted to take over from Professor Allan Struthers as Chair of the National Scientific Advisory Committee (NSAC). I have to begin by acknowledging his immense contribution to the smooth running of the NSAC and all of his hard work in support of Tenovus Scotland over many years. He will be a hard act to follow!

There have been a few further changes to the NSAC membership in recent months. I am delighted to welcome Dr Patricia Roxburgh (Strathclyde) and Dr Mairi McLean (Grampian) and I would like to thank them and the remaining members of the NSAC (Dr Fiona Denison of Edinburgh and Prof Douglas Steele of Tayside) for their endeavours.

The role of the NSAC is to provide additional scrutiny of projects already approved by each Local Scientific Advisory Committee and the Regional Committee. In doing so, we aim to maintain the high quality research funded and approved by Tenovus Scotland and ensure that all funds remain within the region providing the best opportunity to ensure local benefits of high quality research with demonstrable clinical benefit.

Over 30 small research projects were funded in the past year. As ever, priority has been given to newly established clinical researchers so we can remain true to our aim of providing funding to generate pilot data to help with further, larger scale funding and research. It is too early to know whether these newly funded projects have been successful but, judging by our previous track record in furthering careers and research knowledge, we remain very confident that they will be.

The projects funded this year cover a wide array of important medical topics and include inflammatory bowel disease, diabetes, haematological malignancy, neurodegenerative disease, cardiovascular disease and cancer. It is this ability to consider and support such a wide variety of research areas as well as our drive to encourage and support young, new researchers that make the Tenovus Scotland small grants schemes such a popular and competitive funding source for many clinical scientists.

In the interests of brevity, I will outline just a few of the projects funded this year, focusing on those which were awarded the highest scores by the NSAC. These proposals are reflective of new trends and priorities in clinical research, most notably the role of inflammation and the immune system in a variety of disease processes.

Diabetic foot ulceration is a common complication that occurs in 20% of patients with diabetes which carries considerable mortality and morbidity as well as cost to the NHS (estimated to be 5% of the total NHS budget). It was this background which led to Dr Mirela Delibegovic from the University of Aberdeen to submit a proposal to explore the use of novel therapeutic agents in promoting macrophage function and wound healing in diabetic foot ulcers. They are testing the effects of commercially available drugs such as MSI-1436 in human macrophages and testing its effects on wound healing. If the data are positive and considering that this drug is being tested for a number of other conditions, this may suggest that this drug and drugs similar to this one, could be repurposed for the management of diabetic complications.

In Lothian, a newly established independent researcher, Dr Emily Gwyer Findlay, will be further exploring the mechanistic basis of multiple sclerosis (MS). This is of particular relevance here in Scotland which has the highest recorded incidence of MS, and which affects around 100,000 people in the UK. Dr Findlay will use novel proteomic and molecular biological methods to explore the mechanism which activates T cells in order to play a central role in the pathophysiology

of disease. The use of a proteomic screen can generate a database of relevant information to immune driven disease and will be made available to other researchers in time and so broadening this work to other immune-driven diseases.

Continuing on the theme of immunity and infection, bacterial meningitis is a serious, life-threatening disease that carries a high mortality rate. It is a common cause of sepsis which has been the focus of a recent public health campaign to increase recognition and awareness. Together, these two conditions affect in excess of 4000 people per year in the UK leading to one death per day on average. It is timely, therefore, that Dr Damon Corrigan from Strathclyde is undertaking work aimed at developing a rapid diagnostic test for the common causative organisms of meningitis leading to earlier diagnosis and implementation of effective treatment. The approach, which involves rapid DNA profiling by hybridisation, could lead to a device identifying culprit organisms as well as antibiotic sensitivity as quickly as 15 minutes to 3 hours from the blood and cerebrospinal fluid samples taken from affected patients. Given that current laboratory techniques often require 24-72 hours for such information, this could provide obvious, potentially life saving, clinical benefits.

The above are just a few of the many applications we funded this year and provide a flavour of the cutting edge clinical research being undertaken throughout Scotland. The strong expectation is that positive results will be seen in many of these new ideas, leading ultimately to advances in medical treatments.

Dr Marie Freel Chair

Consultant Physician and Endocrinologist
Honorary Associate Clinical Professor
Queen Elizabeth University Hospital
Glasgow

The National Scientific Advisory Committee

AS AT 31 MARCH 2018

Chair Dr M Freel
Committee

Dr F Denison, Dr M McLean, Dr P Roxburgh,
Professor D Steele

Financial Review

“ Administration costs expressed as a percentage of income over the last six years are 4.25% ”



This has been a satisfactory financial year for Tenovus Scotland.

Income is a little lower than the average of the last few years, principally due to changes in timing of some donations.

Research grants, too, are lower this year, partly due to fewer projects passing the stringent standards set by the Local and National Scientific Advisory Committees.

Administration costs expressed as a percentage of income over the last six years are 4.25%. But the last two years show increases in absolute terms due to essential additional computer services necessary to cope with GDPR and our obligation to protect data and personal data securely.

Funds held on deposit (pending settlement of grant obligations) are beginning to attract marginally higher rates of interest.

Mr Francis McCrossin
National Treasurer

Survey

Carried out annually to determine the achievements of pilot grants which were awarded 5 years previously

Results of last six surveys
(2006/07 to 2012/13)

- Nearly **50%** of all pilot grants received further external funding
- External funding was **12** times the total of all grants awarded
- Small pilot grants of **£1.9m** contributed to further external funding of **£34m**
- Large pilot grants of **£1.2m** contributed to further external funding of **£3.9m**

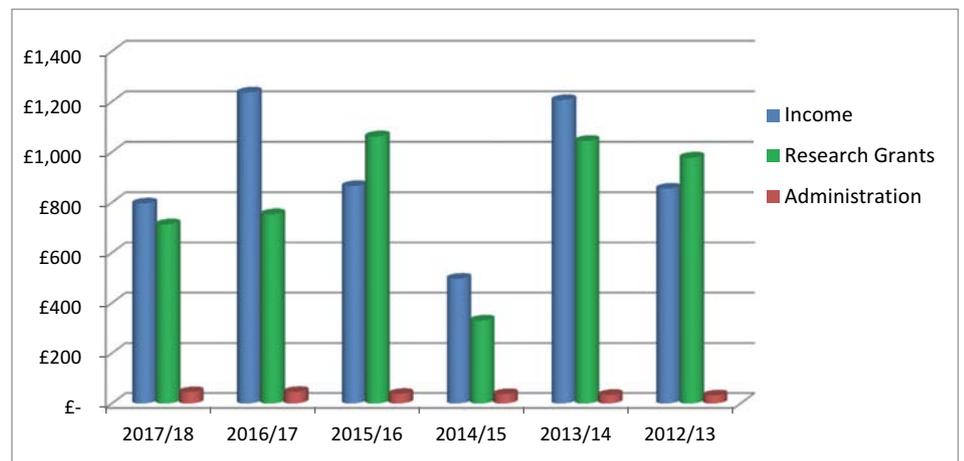
Set out below are the accounts for this and the preceding five years

Income & Expenditure Accounts - £000

YEAR TO 31 MARCH 2018

	2017/18	2016/17	2015/16	2014/15	2013/14	2012/13
DONATIONS	238	589	754	321	618	598
LEGACIES	462	560	5	73	476	140
FUND RAISING	13	10	16	15	20	26
INTEREST & DIVIDENDS	83	77	90	88	92	91
TOTAL INCOME	796	1,236	865	497	1,206	855
RESEARCH GRANTS	713	753	1,062	330	1,044	978
ADMINISTRATION	45	46	38	37	34	32
TOTAL EXPENDITURE	758	799	1,100	367	1,078	1,010
SURPLUS/DEFICIT	38	437	-235	130	128	-155
ADMIN AS % OF INCOME	5.7%	3.7%	4.4%	7.4%	2.8%	3.7%

Income, Research Grants & Administration Expenses - £000

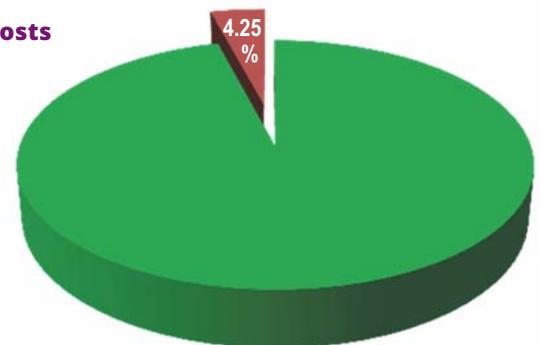


Income and Administration Costs

6 YEARS TO 31 MARCH 2018

This pie chart illustrates our extremely low administration costs

■ Income
■ Administration



The financial information above is extracted from the full audited Annual Report and Accounts for the 6 years ended 31 March 2018.

Copy of the most recent audited Annual Report and Accounts is available on request from the General Secretary.

Finance Committee

AS AT 31 MARCH 2018

Chair Mr FEJ McCrossin

Committee

Professor D Bell, Professor AA Calder, Professor J Connell, Mr D Fraser, Professor J Grieve, Mr M McIver OBE, Mr D MacLucas, Mr B Paterson, Professor K Paterson, Mr GM Philips, Mr J Watson

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HON PRESIDENT
Sir Kenneth Calman

HON VICE PRESIDENT
Lady Arbuthnott
Ms Nicola Benedetti MBE

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Mr Colin J Black
Professor Derek Bell OBE
Professor John Connell
Professor James Grieve
Miss Mary Marquis MBE
Mr Francis E J McCrossin (Hon Treasurer)
Mr Malcolm Mclver OBE
Professor Kenneth Paterson
Mr Graham M Philips (Hon Secretary)
Dr Heather Reid OBE

GENERAL SECRETARY
Mr Iain McFadzean

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STOCKBROKERS
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