



The
Physiological
Society



IMPACT REPORT
2018

WELCOME

This report celebrates our achievements and successes during 2018. We would like to highlight a few examples that illustrate how The Society both shares world-class physiological research and also promotes more widely the importance and understanding of physiology to everyday life.

We further strengthened our international links with Europhysiology 2018, a joint meeting with The Physiological Society, The Deutsche Physiologische Gesellschaft, the Scandinavian Physiology Society and Federation of European Physiological Societies. This was a very successful conference with over 1,400 delegates and a celebration of some of the best and most exciting physiological research.

In 2018 we launched our new five-year strategy with a vision to make physiology flourish. We also began a governance review to begin the process of reviewing our structure, decision-making processes, cultures and behaviours to ensure we are suitably equipped for the delivery of the strategy.

As part of our Member Insight Project, we conducted an in-depth membership survey to gain a greater understanding of our Members, potential Members and the membership benefits we offer to support them. We received a large number of responses and are very grateful to those who took time to complete the survey and to those who have also contributed to focus groups. These findings will now feed into a larger Membership Categories and Journey review.

We continue to ensure our journals remain flagships for physiology, where any researcher is proud to publish. Through our journals we are able to disseminate high-quality physiological research; the journals also provide valuable income which we are able to reinvest directly back into physiology through, for example, our grants, conferences and engagement work.

We would like to thank The Society's Trustees, staff and Members for their support which enables The Society to remain such a successful and vibrant community. Throughout 2019, we look forward to meeting our Members and the wider community at Society events and activities across the UK, Ireland and further afield.

Bridget Lumb
President

Dariel Burdass
Chief Executive

“ We would like to thank The Society's Trustees, staff and Members for their support which enables The Society to remain such a successful and vibrant community. ”



OUR 2018 IMPACT IN NUMBERS



£500k

ISSUED IN GRANTS TO SUPPORT EDUCATION, CAREERS AND RESEARCH



OVER 60,000

FOLLOWERS ON SOCIAL MEDIA ACCOUNTS



98%

WOULD RECOMMEND OUR CONFERENCE EUROPHYSIOLOGY 2018



EXPERIMENTAL PHYSIOLOGY DOWNLOADS:

OVER 600,000



OVER 4,200

MENTIONS IN THE PRESS



THE JOURNAL OF PHYSIOLOGY DOWNLOADS:

OVER 4.5 MILLION

RECOGNISING EXCELLENCE

The Society awards Honorary Membership to persons of distinction in science who have contributed to the advancement of physiology.

2018 HONORARY MEMBERS



Graham Burton
University
of Cambridge, UK



Michael W. Young
The Rockefeller
University, USA



2018 PRIZE LECTURE WINNERS

We award a number of prize lectures each year in recognition of outstanding contributions to physiology. These prize lectures play an important role in our commitment to advancing and promoting the physiological sciences.



Annual Public Lecture:
Daniel Martin
University College London, UK



Michael De Burgh Daly Prize Lecture:
Katrin Schröder
Goethe University, Frankfurt, Germany



Annual Review Prize Lecture:
Juleen Zierath
Karolinska Institutet, Stockholm, Sweden



Otto Hutter Physiology Teaching Prize:
Julia Choate
Monash University, Melbourne, Australia



Bayliss-Starling Prize Lecture:
Patrick Lewis
University of Reading, UK



R Jean Banister Prize Lecture:
Nathalie Rochefort
University of Edinburgh, UK



GL Brown Prize Lecture:
Andrew J Parker
University of Oxford, UK



Paton Prize Lecture:
Josephine Arendt
University of Surrey, Guildford, UK

REPRESENTING OUR COMMUNITY

Members are at the heart of The Society's activities. There are lots of opportunities for Members to get involved: for example, by becoming a Trustee or joining a committee, contributing to our magazine *Physiology News*, or mentoring the next generation of physiologists.

Keith Siew

University of Cambridge, UK
Scientific Editor, *Physiology News*



“My classmates and I attended a symposium with our lecturers at Physiology 2009 in Dublin. As undergraduate students it was our first real exposure to how science is conducted and communicated, and it was truly exciting! I've always felt a desire to give back to the organisation which has given me so many opportunities. Now as a Full Member I am the Scientific Editor of *Physiology News* and hope through my ongoing contributions to The Society it will continue to grow and improve.”

Sarah Hall

Cardiff University, UK
Chair of Education and Outreach Committee



“I first got involved with The Society as an opportunity to become an active part of the wider community of physiologists. I was encouraged to stand for Council as a new junior lecturer, and I seem to have been involved with The Society in different ways ever since! The Society has been important to me throughout my career, and I am keen to help maintain and foster an environment in which other physiologists, and physiology more generally, can thrive.

As Chair of the Education and Outreach Committee (now Education, Public Engagement and Policy), I am fortunate to lead on Society initiatives to support early career physiologists and to promote the discipline of physiology more widely. I am particularly keen to develop activities that nurture the next generation of physiologists, and to provide opportunities for our Members to engage in raising the profile of physiology in schools and universities, as well as to policy makers and the general public.”

Peter Aldiss

University of Nottingham, UK
Chair of the Affiliate Working Group



“Through The Society I've been exposed to a number of areas which have enabled me to grow as an early career physiologist. The advice and support from more established, senior Members has been invaluable. I was elected to the Affiliate Working Group where, as a collective, we have tried to advance opportunities for current and future young physiologists. By organising Future Physiology and other international symposia we have given opportunities to many young physiologists to present their work on the international stage. I firmly believe that having early career researchers actively involved in how The Society works is important, and The Physiological Society is leading the way here.”

Gladys Pearson

Manchester Metropolitan University, UK
Society Mentor



“There is decidedly a friendly and supportive environment at The Society's conferences compared with other scientific meetings. I felt that giving my time and support to enable the continuation of this culture is the least I could do. I have taken the opportunity to become a mentor through The Society, to chair oral presentation sessions, assess poster presentations, organise the content of programmes at Annual Conferences, and organise and present at Satellite Meetings. These activities are all in the name of maintaining a buoyant atmosphere for physiology, helping maintain its relevance and inspiring early career researchers to follow suit.”

For more information about opportunities open to Society Members email membership@physoc.org

PUBLICATIONS

Our strategy: Making our journals flagships for physiology, where any researcher is proud to publish. Our three journals lead the discipline, promoting best practice and pushing the boundaries of scientific endeavour.

THE JOURNAL OF PHYSIOLOGY EDITORIAL BOARD FELLOWSHIP

The Journal of Physiology (JP) is committed to encouraging 'rising stars' in the field of physiology to understand more about the way in which the journal operates and the rigorous peer review we offer to our submitting authors. The Editorial Board Fellowship is an opportunity for junior faculty to be directly engaged in the editorial process under the guidance of a Senior Editor.

Hear from 2018 Fellows in their own words...

Melanie Gareau, UC Davis, USA



“The Editorial Board Fellowship has been an excellent opportunity so far. I have provided editorial assistance on a limited number of papers, found reviewers, helped make final decisions and written decision letters under the guidance of a very helpful and patient

Senior Editor. Attending the Board meeting was very informative and I really enjoyed it – it gave me the opportunity to meet numerous people from different areas of physiology and all editorial staff (who are all awesome!). I would highly recommend applying to this scheme!”

Javier Gonzalez, University of Bath, UK



“I have already learned a great deal from this opportunity. I have found the support from Senior Editors and editorial staff very helpful. The opportunity to be an Editorial Board Fellow for *The Journal of Physiology* provided more insight into

the publication processes than I could have imagined, and it is also a privilege to serve *The Journal*.”

Christopher West,

The University of British Columbia, Canada

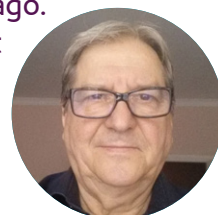


“I was delighted to become one of the 2018 Editorial Board Fellows for *The Journal of Physiology*. The opportunity to learn the 'other side' of the peer review process has not only provided me with valuable insight into how manuscript decisions

are made, but has undoubtedly enabled me to improve my own manuscript writing. Working alongside Senior Editors and a very supportive group of staff provides an invaluable learning experience. I would encourage any aspiring academic physiologist to apply to this excellent programme.”

“This is my 19th paper published in *The Journal of Physiology*, but this afternoon I had the same emotion I had when I published my first twin papers in *The Journal of Physiology* nearly thirty years ago. I have great respect and admiration for your journal.”

Emilio Carbone,
University of Turin, Italy



Top stories – the most covered stories from our journals in 2018



Don't sweat it: Bikram yoga is no more effective than yoga practised at room temperature.



Exercise to stay young: 4–5 days a week to slow down your heart's ageing.



Eat high fibre foods to reduce effects of stress on gut and behaviour.



Cigarette smoke directly damages muscles in the body.



Can we turn back time? Muscles' own protective systems could help reduce frailty.



Oxygen therapy could help combat dementia in individuals with lung disease.

REFLECTIONS OF OUR EDITORS

The Journal of Physiology



Editor-in-chief:
Kim Barrett,
UC San Diego, USA

90%
satisfied with
publication process.

98% likely
to submit another
article to JP based on
their experience.

“The reviewers did a great job and the manuscript improved significantly.”

The leading general research journal in the discipline

“We launched our Editorial Board Fellowship scheme designed to give researchers in the first few years of their independent careers a “peek behind the curtain” of the editorial decision-making process. Our first cohort of Fellows has been doing an outstanding job serving as Reviewing Editors in a mentored capacity, and has also provided the Editorial Board with insights into the evolving needs of early career researchers. We also worked hard to develop a new policy on data reporting and the use of statistics that should improve the rigour with which work is reported in our pages, to be launched in 2019. Finally, despite the ever-growing number of venues for physiologists to publish their work, submissions remained steady and we saw growth in areas that traditionally have not attracted large numbers of manuscripts, such as renal and endocrine physiology.”

Experimental Physiology



Editor-in-chief:
Mike Tipton,
University of Portsmouth, UK

100%
satisfied with
submission process.

92% likely
to submit another
article to EP based on
their experience.

“The reviewers provided very informative and valuable feedback.”

Advancing our knowledge of health and disease mechanisms

“We have continued our upward trend in submissions, exceeding 500 for the first time. We have seen the first “Case Studies” and “Myths & Methodology” papers published and been well received. Our new occasional series of invited editorial reviews on related topics was initiated by Christopher Van Tulleken, scientist and TV presenter, on the subject of Physiology and Television. The Editorial Board are considering the introduction of an *Experimental Physiology* (EP) student/journal club and the opportunity to register protocols and have them “light-touch” reviewed. Both of these initiatives grow out of a desire to support early career researchers and are enabled because EP is not simply a “for profit” enterprise, it is a long-established journal embedded within The Physiological Society.”

Physiological Reports

Open Access



Editor-in-chief:
Thomas Kleyman,
University of Pittsburgh, USA



Over 780,000
downloads. That's
an increase of over
55% in 2018.

International, open access journal

“*Physiological Reports* is an open access journal supported by The Physiological Society and the American Physiological Society. In 2018, the authors of 1,683 manuscripts received an invitation to submit their manuscript to *Physiological Reports*. Of these referred manuscripts 18% were eventually transferred to *Physiological Reports*. Direct submissions have remained stable, with 131 submissions in 2018. There were 780,000 manuscript downloads in 2018, which is a 55% increase over previous years.”

CONFERENCES

Our strategy: Advancing physiology through our meetings: excellent science, wide and active participation, lasting impact.

Our international conferences, high-profile lectures and cutting-edge research symposia provide an environment in which physiology can thrive.

EUROPHYSIOLOGY 2018 SEPTEMBER 2018, LONDON

The Physiological Society, the Scandinavian Physiological Society, the Deutsche Physiologische Gesellschaft and the Federation of European Physiological Societies held the first ever Europhysiology conference in the series. This series brings together the broader European physiology community and promotes collaboration among scientists. In this climate of interdisciplinary research, these conferences increase the capacity to tackle complex problems by promoting new research collaborations.

The conference was a huge success, with over 1,400 delegates. The scientific programme was a celebration of some of the best and most exciting physiological research and provided an excellent opportunity for networking and collaborations within an international arena. It received glowing feedback from delegates, with 82% rating it as excellent, and 98% saying they would recommend the conference to a colleague.

“I think that what made the meeting so excellent for me, was that there were several symposia about teaching physiology, and I picked up so many new ideas.”

Britt Fuglesteig, University of Tromsø, Norway


Europhysiology in numbers:





No. of attendees:

- | | |
|----------------------|----------------------|
| 1 Europe – 1,090 | 4 Africa – 46 |
| 2 Asia – 123 | 5 Australia – 23 |
| 3 North America – 48 | 6 South America – 20 |

 **4 in 5**
delegates rated the meeting excellent.

98% 
would recommend the meeting.

36% of
delegates were 'early career researchers'.



“Europhysiology was excellent. Very well organised and well located. The research subjects presented were very broad and yet specialised. This is a must-see for physiologists specialised in all fields. Poster presentations and lunchtime were excellent occasions to meet scientists from every part of the world.”

Pierre Delaroche, University of Manchester, UK (delegate)

“A highly organised meeting with participants from all the corners of the globe. The popularity of physiology was felt heartily and feeling proud to witness the various disciplines of physiology being discussed under the same roof.”

Rupsa Ghosh, University of Calcutta, India (delegate)



CARER'S GRANT

We are proud to ensure our activities are inclusive and have established a Carer's Fund to support Members with caring responsibilities, as well as those that need carers. This year's recipient attended our Europhysiology 2018 event in London.

“I received the carer's grant this year to attend Europhysiology 2018 in London. I applied for this grant to safely attend the conference with my son and my daughter to present a poster of my latest research. As a mother, I preferred to bring them to assure their safety, my tranquillity

and not feel loneliness. They consider me as a role model and they are proud to have a mother working as an active scientist. It was, also, a good chance for them to identify an event of great scientific impact like Europhysiology 2018 at their young age. Also, it was an opportunity for all of us to be in direct contact with many physiologists worldwide. I am grateful for The Physiological Society considering unlimited support for the women scientists.”

Noha Lasheen, Ain Shams University, Egypt (delegate)





Experimental Models in Physiology



27–29 June 2018,
University of Exeter, UK

“ The Experimental Models in Physiology meeting at the University of Exeter was a truly unique event. Over the course of these few days I learned not only from speakers within my field but from many other physiologists investigating models and mechanisms that were thought-provoking and entertaining, sometimes giving me cause to ponder my own research questions with a fresh perspective. ”

Robert Menzies,
University of
Edinburgh, UK
(delegate)





Delegates at Experimental Models in Physiology conference

From Lab to Clinic: Pathways to Translational Brain Machine Interfaces for Rehabilitation

7 September 2018, University of Reading, UK

“This symposium streamlined the translation of Brain Machine Interfaces (BMI), developed by researchers, into clinical interventions. Joined by clinical experts and academics who have successfully translated their BMIs to the clinic, participants discussed pathways available for researchers to advance their BMI research to a clinical setting. This fostered new collaborations between clinicians and researchers at the early stages of BMI development, formed long-lasting collaborations and a subsequent increase in clinical trials and adoption of BMIs in clinics. This topic is highly relevant in today’s physiological research landscape, as a critical mass of research on BMIs for rehabilitation is likely to revolutionise the outcome of currently debilitating conditions and to provide unique insights into the physiology of neural mechanisms.”

Ioannis Zoulias and Orla Fannon,
University of Reading, UK (organisers)



Chrononutrition: From Epidemiology to Molecular Mechanism



13 November 2018, etc.venues, London, UK

“In this one-day symposium, we gathered together some of the leading researchers in the field of chrononutrition from the UK, Europe and the USA, to share their latest research from human studies and animal models, and from epidemiology to molecular mechanisms.”

Perry Barrett and Julian Mercer, University of
Aberdeen, UK (organisers)



Sleep and Circadian Rhythms: From Mechanism to Function

5–6 December 2018, Barbican, London, UK

“This conference highlighted the current trends and major research directions occurring globally in the sleep field. The programme of speakers and seminars was chosen to elucidate the exciting science and wider societal implications of sleep and circadian rhythms.”

Connor Qiu, Imperial College
London, UK (delegate)



ENGAGEMENT

Our strategy: Engage for success – improving our two-way commitment and communication to increase recognition of the importance of physiology.

NURTURING OUR COMMUNITY

Our Members are at the heart of The Society's activities. Together, we form the largest network of physiologists in Europe. From early career researchers to Nobel Prize winners, our Members are the lifeblood of our science. We are focused on supporting their professional development and enhancing their career.



Networking session with Society Representatives

Postdoc workshop

This tailored workshop aimed to provide advice to postdocs on securing their first permanent academic position, as well as fostering discussion and future peer support between attendees.

“The workshop really helped me to identify my career goals and realise that I needed to be more proactive towards achieving them. The workshop gave me the motivation (and courage) I needed to apply for a small grant – which I won! I would highly recommend this event to any postdoc who, like me, would like to have an academic career but is a bit unsure how to achieve it.”

Elizabeth Haythorne, University of Oxford, UK



DEPARTMENTAL SEMINAR SCHEME

Our Departmental Seminar Scheme helps with the costs of attracting visiting speakers. By contributing to the costs of travel and accommodation, we aim to support Members hosting seminars on a physiological research area.

“I was fortunate enough to receive a Departmental Seminar Scheme grant for 2017/18. Together with the Society Representatives from University of Manchester, Manchester Metropolitan University and University of Salford, we invited speakers from the three institutions. The plan was to showcase research from physiologists at different stages of their careers, and to bring together scientists who were perhaps unaware of the work going on just a few miles away from their labs. Nearly 100 enthusiastic physiologists from across Greater Manchester came together to hear about Andrew Loudon’s 40 years of research into body clocks, Jess Caldwell’s PhD research into heart failure and many other interesting stories.”

Tristan Pocock,
University of Manchester, UK



Travel grants

Our travel grants support physiologists to attend conferences, present their research, visit another laboratory, or attend a training course.



“I am a PhD student in the field of cardiac physiology. I was very grateful to be awarded a travel grant to attend The Society’s Europhysiology conference in London. I was able to present my work and speak to physiologists from around the globe, who provided useful feedback on my work. The satellite meeting prior to the main event was a fascinating start to the weekend covering interesting topics such as comparative physiology which I would otherwise not have been able to attend as an early career researcher. As a scientist who likes to keep up-to-date with other research in my field, I especially enjoyed the keynote lectures and cardiac-based seminars.”

Natasha Hadgraft,
University of Salford, UK



SPOTLIGHT ON SOCIETY REPRESENTATIVES

Society Representatives play an invaluable role in promoting our activities to both current and prospective Members. Coordinating the Departmental Seminar Scheme, promoting the Summer Studentship Scheme, and nominating students for the Undergraduate Prize are just some ways they help build the physiology community and encourage the next generation.

“We are The Physiological Society Representatives at Liverpool John Moores University (LJMU). At LJMU we are both completing a PhD in Exercise Physiology. Mark’s area of research explores the cellular and molecular mechanisms and adaptations of skeletal muscle in response to hypertrophy, atrophy and regeneration. My PhD is concerned with the application of high intensity interval training in the real world in order to improve

health and prevent disease. As a part of our role, we promote The Society by encouraging LJMU students to become Members, attend meetings and support applications to the Summer Studentship Scheme. The Society also provides a grant for the Departmental Seminar Scheme. We can use this grant to attract guest speakers who we would not have the opportunity to hear speak otherwise. I have loved making students aware of The Society and its benefits; many could not believe that the membership is free for undergraduate students!”



Society Representatives Katie Hesketh and Mark Viggars,
Liverpool John Moores University, UK

EMPOWERING THE NEXT GENERATION

SUMMER STUDENTSHIP

Summer Studentships offer undergraduates the opportunity to undertake a research project on an area of physiology over their summer break. Working under an academic supervisor, they can complete any kind of research project: traditional lab-based research, data analysis projects or education/science communication research.

Hear from a 2018 student and supervisor:

Ann Rajnicek

University of Aberdeen, UK (supervisor)

“I found it inspiring to work with Sheya, who brought fresh eyes to the scientific question. It was a joy to work with her and it provided the impetus to consolidate a new collaboration. Sheya’s studentship provided pilot data for an undergraduate honours lab project, therefore benefiting two students and moving the project forward. Sheya joined me at our local Physiology Friday public engagement event to enthuse about her project too. So the studentship was mutually beneficial in a variety of ways, some unanticipated.”



Sheya Ihalainen

University of Aberdeen, UK (student)

“Participating in the studentship provided a shaping experience for me. After completing my summer research project, on regenerative powers of planaria flatworms, I can safely say research is something that I am considering more and more. Originally, I was only going to apply to taught Masters programmes, but after the positive experience I had this summer, I have now applied to research programmes as well. I had the opportunity to get first-hand experience and learn useful skills in a laboratory. After completing an undergraduate degree, there are so many potential avenues to go down career-wise; the studentship helped me to narrow down the career choices I want to make.”



Undergraduate Prize for Physiology

This prize recognises the excellence of final year undergraduate students of physiology.

“I was honoured with the Undergraduate Prize for my results in physiology modules and my final year dissertation project. I have always been fascinated with processes too complex to understand by looking at a single mechanism. The first time I learned about such phenomena was during my physiology courses in the first two years of my degree. Understanding these required zooming into the cell to explore its genetics and biochemistry, and then zooming out on the intercellular interactions making up a tissue’s local microenvironment, which would then influence the functioning of a whole system.”



Paulina Lukow, 2018 winner,
University of Surrey, UK/
King’s College London, UK

TOWER HAMLETS FESTIVAL OF COMMUNITIES

The Society took part in the annual Tower Hamlets Festival of Communities in June. This festival has a range of family-focused activities, and was created by Queen Mary University of London in collaboration with Tower Hamlets community groups and organisations.

“With a keen interest in raising aspirations within STEM areas and increasing awareness of research with the general public, I attended the Public Engagement Workshop held by The Physiological Society. This was a great event that taught me how to set up an activity, making it creative as well as understanding the importance of evaluation. I was then provided an opportunity to try out some of our own activities at the Tower Hamlets Community Festival, promoting healthy habits and wellbeing. We had a great day engaging with the public, testing handgrip strength and peak flows, and I look forward to participating in many more events!”

Jessica Cegielski,
University of Nottingham, UK



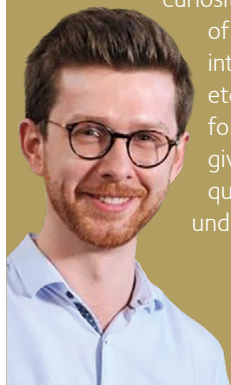
Tower Hamlets Festival of Communities

ROB CLARKE AWARDS



This award recognises excellence in undergraduate physiology projects.

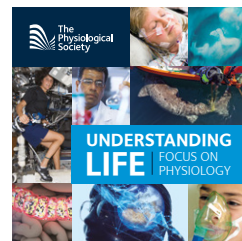
“The Rob Clarke awards most definitely started my postgraduate career with a bang! The awards not only gave me the opportunity to travel to my first major conference, but also gave me a testing ground for presenting my work to others. I was lucky enough to be one of the five chosen for the Gold presentation award, it was all a bit much to take in. I can honestly say that having the experience from the Rob Clarke programme was crucial in my securing of my PhD Studentship. Yes an accolade helps, but facing the curiosity/scrutiny of a whole conference of world subject leaders puts an interview panel in perspective. I am eternally grateful to The Society for the opportunities they have given me, and look forward to quizzing the next batch of lucky undergraduates in the near future!”



Michael Vaughan,
University College Cork, Ireland
2018 gold award winner

Understanding Life booklet

Aimed at undergraduates and 16 to 19-year-olds, our *Understanding Life* careers booklet showcases some of the latest and most exciting areas of physiological research, reflecting the evolving nature of this discipline and why we study it. Over the course of 2018 we sent thousands of copies to school students and undergraduates across the country.



“Before reading *Understanding Life*, I had no idea that there were so many different aspects to physiology. The personal experiences also helped me to understand the motivations and skills required for each aspect. The guide was easy to understand and looks fantastic.”

Caitlin Klein, A-level student at Beaulieu Convent School, Jersey



“I think that this guide had quite a big impact on Caitlin as she has had an aspiration of becoming a vet for quite some time. We followed this up by looking at entry requirements for physiology courses around the UK.”

Jon Hale, Head of Science at Beaulieu Convent School, Jersey



PHYSIOLOGY FRIDAY

Every October, we ask physiologists to unite in celebration of Physiology Friday. Our Members showcase the amazing science of human and animal physiology through outreach and public engagement activities by holding open days in their lab, putting on an exhibition or organising a public lecture.

PJ Ruchaya, University of Surrey, UK

“We positioned our stand in central Guildford city centre with a constant flow of members of the public passing by. Most of the people stopping were between 14 and 17 years old. The younger participants were incredibly enthusiastic and interested as some of the activities, including the reaction test, enabled friends to compare their times. They were eager to understand why their reaction times varied from each other and even took some Society rulers home where participants wanted to teach their siblings about the activity. Participants positively engaged in the introduction of the importance of the musculoskeletal system and the “glow in the dark” painting activity.”



University of Surrey, UK



Trinity College Dublin, Ireland

Mikel Egaña, Trinity College Dublin, UK

“We hosted an open outreach day to celebrate physiology. The staff, postgraduate and undergraduate students of the department ran experimental interactive demonstrations throughout the day. Demonstrations covered the following topics: “How much air/oxygen does your body need to cycle up a hill?”, “Check out how your heart and muscles are working when you grip something” or “What is your body made of? Look down the microscope and find out”. In addition we carried out a research image competition and some research Blitz sessions, where our postgrads displayed and presented the research highlights of the Department of Physiology in lay terms. This event was open to all, with a focus on primary and secondary school pupils and also on first and second year undergraduate science students.”



Physiology Friday at King’s College London, UK

“With the help from the Department of Physiology, we set up a new KCL Physiology Society at King’s College London, and the best way to start promoting physiology was to join in the celebration of Physiology Friday. Our goal was to share our passion for physiology and get students and university staff involved by contributing to our cycling challenge and taking part in the physiology-based pub quiz. We met a lot of enthusiastic students who exercised and joined us later for the quiz. It was a great experience. Not only did we grab attention of the undergraduate students, but also postdocs and lecturers. Because the event received very positive feedback from the attendees, we would like to make it an annual celebration at King’s College London.”

KCL – Physiology Society Committee



King’s College London, UK

INTERNATIONAL REACH

In 2018, the Department of Physiology of the School of Health and Health Technology, Federal University of Technology, Akure (FUTA), Nigeria, participated for the first time in celebrating Physiology Friday.



The programme commenced with a brief introduction by the Principal of the host school, then short talks were given by physiology students on the different branches of physiology, research, careers in physiology and their personal experiences in the discipline.

The Society Representative then had a brief presentation on the activities of The Physiological Society and benefits of being a Member. The guest speaker then gave a short talk on career options in physiology. After this, the host school students were divided into groups and encouraged by physiology students to go to different practical demonstration points to participate in a number of different demonstrations. These included an ECG stand, blood pressure measurement stands, among many others.

After a while, the students were directed to game stands, where The Race to Sleep, The Circadian Body Clock, and Cheetah Cootie Catcher, were all on display. Students were particularly interested in the Race to Sleep, and they had a whole lot of fun under the directions of physiology students trained to coordinate each group and fill out questionnaires along the way. They did not want to leave. We gave out prizes of a complete game with game cards to the winners of each round of play.

“Students were particularly interested in the Race to Sleep, and they had a whole lot of fun under the directions of physiology students trained to coordinate each group and fill out questionnaires along the way.”



Temitope Adedeji,
FUTA, Nigeria



Physiology Friday at FUTA, Nigeria

FOCUSING ON LIFELONG HEALTH

A major achievement of modern science is that people around the world are living longer than ever before.

However, our ageing population also presents one of the key challenges of the modern age: ratios of workers to retirees are reducing, while healthcare costs are being driven up by a longer proportion of their lives in ill health and a greater prevalence of comorbidities.

Physiological research is playing a vital role in easing the difficulties caused by an ageing population. Understanding the causes of age-related diseases and frailty can result in lifestyle and medical interventions to allow older people to keep contributing longer into their lifespan. This will both increase quality of life in older age and ease the burden on health and care systems.

To ensure that physiology is at the heart of national decision-making around healthy ageing and lifelong health, The Society has initiated a major policy project bringing together experts from physiology, research funding bodies, wider scientific research, the charitable sector and executive agencies to develop a strategy that will inform The Society's advocacy.

We have established an Expert Group to coordinate The Society's project on lifelong health, chaired by Paul Greenhaff. In 2018 we held a series of workshops and fact-finding sessions. The project will culminate in a lifelong health report to be launched towards the end of 2019.

Lifelong health expert group (2018):

Paul Greenhaff (Chair), School of Life Sciences, University of Nottingham, UK

Ceri Lyn-Adams, Interim Head of Strategy – Bioscience for Health, BBSRC

Sarah Allport, Grants and Research Director, Dunhill Medical Trust

Steve Harridge, Director, Centre of Human & Aerospace Physiological Sciences, King's College London, UK

Malcolm Jackson, Associate Pro-Vice Chancellor for Research and Impact, Faculty of Health and Life Sciences, University of Liverpool, UK

Diana Kuh, Founding Director of the MRC Unit for Lifelong Health and Ageing, UCL, UK

Janet Lord, Director of the Institute of Inflammation and Ageing, University of Birmingham

Susan Mitchell, Policy Advisor, Alzheimer's Research UK

Academy of Medical Sciences (Observer)

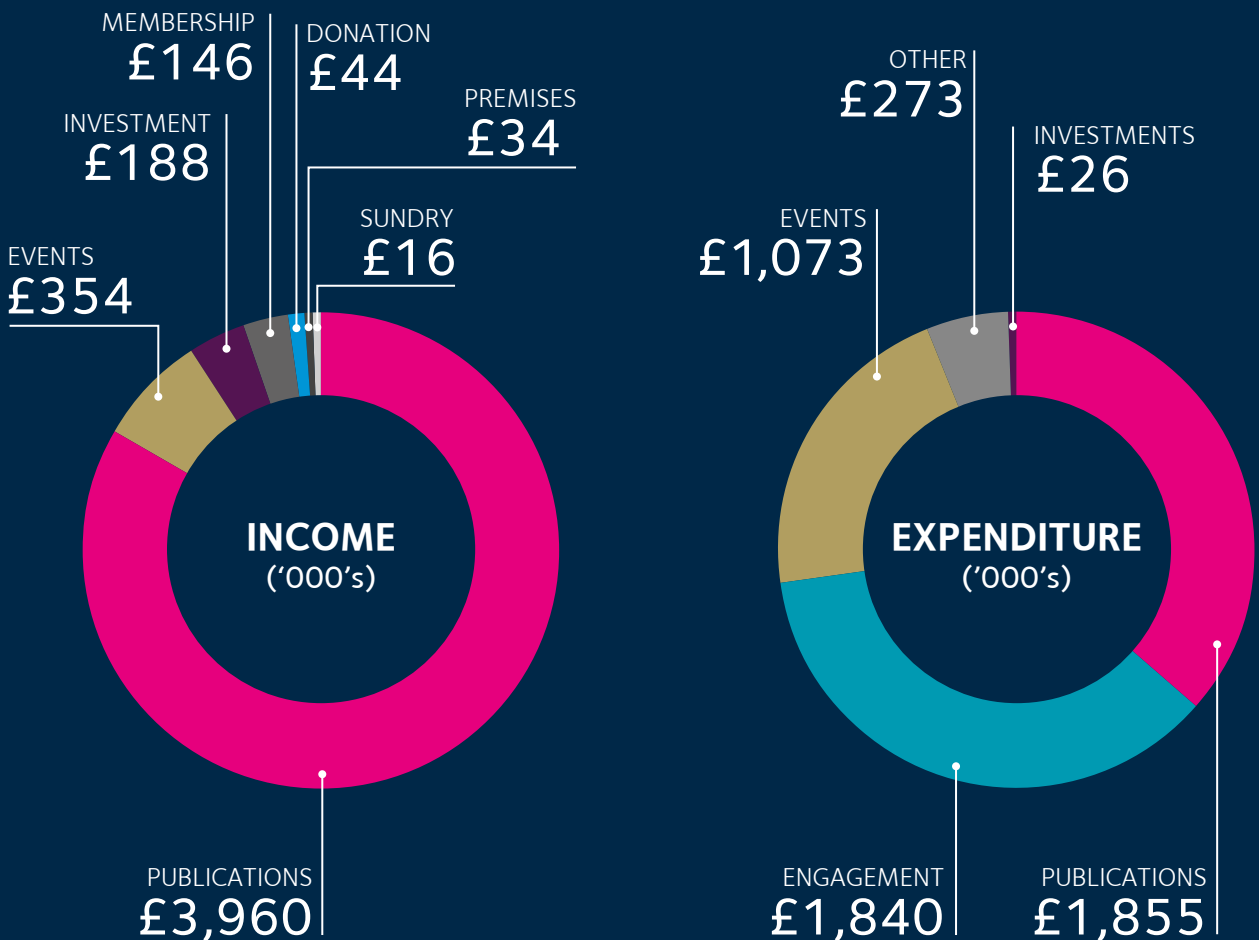


FINANCIAL SUMMARY

Our principal funding sources were from publications (£3,960,000), events (£354,000), investments (£188,000) and membership subscriptions (£146,000).

The Society can look back at another good year in financial terms. Events income increased by £310,000 following the successful Europhysiology 2018 meeting in London, which exceeded our expectations in terms of registered delegates as well as being highly successful scientifically.

Our journals continue to provide by far the largest income stream for The Society, and like last year we have benefited from a favourable exchange rate. Our "free reserves" now stand at £8,866,000, which represents an operating capacity of 21 months at current levels of expenditure.



ABOUT US

The Physiological Society brings together over **4,000 scientists from over 60 countries**. Since its foundation in 1876, our Members have included over 60 Nobel Prize winners from Ivan Pavlov to John O'Keefe. They have made significant contributions to our knowledge of biological systems and the treatment of disease.

We promote physiology and support those working in the field by organising world-class scientific meetings, offering grants for research, collaboration and international travel, and by publishing the latest developments in our leading scientific journals, *The Journal of Physiology*, *Experimental Physiology* and *Physiological Reports*.

OUR TRUSTEES

Philip Aaronson (until Sept 2018)
Deborah Baines
Guy Bewick
Sue Deuchars
Lucy Donaldson (until Dec 2018)
David Eisner (until Sept 2018)
Federico Formenti
Charlotte Haigh
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