Diabetes Research & Wellness Foundation

Staying well until a cure is found

ANNUAL REVIEW 2024

Registered with FUNDRAISING REGULATOR

Celebrating 25 Years

amrc ASSOCIATION OF MEDICAL RESEARCH CHARITIES

Contents

DRWF Annual Review 2024

Message from the DRWF **Co-Founder and Chairman John Alahouzos**

I would like to dedicate this message to DRWF Co-Founder and Chairman, and my best friend, Walter Michael (Mike) Gretschel who passed away peacefully in early December 2024.

Mike was born and raised in the Washington DC area and had a long and successful career in advertising and marketing. We worked together at the same agency and eventually started our own agency. In 1978 shortly after his son, Christian, was diagnosed with type 1 diabetes, we devoted all our pro bono efforts to raising funds to find a cure for diabetes, as volunteers and board members of several diabetes charities.

In 1993, Mike's passion to fund and find a cure for diabetes inspired us to co-found the Diabetes Research & Wellness Foundation (DRWF) in Washington DC, with DRWF (UK) being set up just 5 years later in 1998. Mike's mission to fund diabetes research and support projects that had potential to fast-track to a cure, never wavered. He envisioned a future where people living with diabetes received the ongoing education and support needed to stay well and enjoy the best quality of life. Hence the DRWF strapline of 'Staying well until a cure is found…'

This vision underpins all the DRWF Diabetes Wellness activities, such as our annual programme of Wellness Events, delivery of our quarterly newsletter Diabetes Wellness News, and the research we fund in the UK and around the world.

DRWF UK has raised more than £80 million since inception in 1998 and funded some of the most innovative and impactful research that the diabetes community has benefitted from in the last 25 years, such as the DRWF Islet Isolation Facility at the Churchill Hospital in Oxford, which is pivotal to delivering insulin producing cells for human transplant across the UK.

Under Mike's leadership, DRWF went on to open affiliates in France, Germany, Sweden, Finland, and Norway. All of whom provide diabetes awareness, information and support to their respective diabetes communities, whilst providing essential research funding for young and established scientists pursuing innovative research studies. Our motivation is the ever-increasing and staggering global diabetes statistics and the belief that we must make a difference across nations.

Mike was an adventurous world traveler and outdoor enthusiast and took great pride in hiking to the bottom of the Grand Canyon (and back to the top) six times. He was also an enthusiastic fisherman. He is survived by his beloved wife of 54 years, four children, and 14 grandchildren, who lovingly refer to him as "Big Mike".

DRWF was incredibly lucky to have had such a passionate and committed professional steering the charity's vision, mission and values. Mike's energy was felt throughout DRWF with a strong relationship with the charity's Chief Executive and the wider team which was often fondly likened to that of a 'family'.

Mike's passing is a big loss, but our commitment to the diabetes community remains unwavering. We will continue to forge ahead with Mike's vision and dream of a cure, to imagine a day without diabetes.

Our work, together, stays focused on keeping people with diabetes well until a cure is found and your support makes all the difference.

Thank you,

John Alahouzos
Co-Founder and Chairman

Trustees

DRWF was born from a very personal connection with type 1 diabetes. Having two children diagnosed with the condition made for a commitment and dedication to the cause from Mike Gretschel and co-founder of DRWF, John Alahouzos, that has never wavered and remains true to its original desire – to find a cure for diabetes. The DRWF network of charities and not-for-profit organisations was established in the US in 1993 with the UK charity incorporated as a registered charity in 1998. Over the last 25 years, DRWF in the UK has become recognised as a leading provider of awareness, award-winning educational support programmes, and research funding. The DRWF Board of Trustees is an engaged and committed group of individuals who bring a significant level of expertise to the governance of the charity in the fields of business strategy and development, international fundraising, healthcare and diabetes research.

John Alahouzos

Co-Founder and Chairman of the Board

John Alahouzos is a marketing executive by profession and a volunteer fundraiser for the 'Diabetes Cure' by choice. For over 40 years he has worked to raise awareness and funds for the need to cure diabetes. John is chairman of DRWF UK and serves as a board member of DRWF Inc, as well as affiliates in France, Sweden, Finland and Norway.

Steve Jones

Business coach, public speaker, trainer and consultant

Steve is an expert in creating ideas and strategies that build businesses, drive revenue and improve business position and performance. He has a passion for making companies and their products the best in their product category. Steve's unique understanding of leadership and management, team building and motivation in business, coupled with his understanding, drive and enthusiasm, clearly set him aside as an expert.

Christian Gretschel

Non-profit fundraising professional

Chris has been a board member of the DRWF Inc. (US) since its inception in 1993 and joined the DRWF Board of Trustees in the UK in 2023. He was diagnosed with type 1 diabetes when he was two years old, and his eldest son, Jack, was diagnosed in 2023. Chris is passionate about helping the diabetes community stay healthy as we pursue our long-awaited cure.

Adrian Durelli

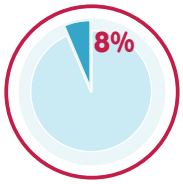
Non-profit fundraising professional

Adrian joined the DRWF board of Trustees in 2023. He is keenly interested in patient access and customer support, specialising in operations, sales & marketing strategy and leadership and has been a healthcare consultant to various health systems. Adrian's dedicated interest in healthcare and expert knowledge in business development helps to drive DRWF's purpose – to help those living with diabetes stay well until a cure is found.

Diabetes – the scale of the problem

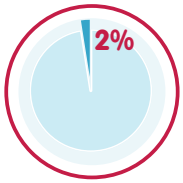
5.8+ million people
in the UK with diabetes

Approx 1 in 12
people living with diabetes



Around 8% of people
with diabetes have type 1 diabetes which cannot be prevented

Around 90% of people
with diabetes have type 2 diabetes which can often be prevented, or it's onset delayed



Other, rarer, forms of diabetes make up the **remaining 2%**

Estimated that as many as
6.3 million people
are at an increased risk of type 2 diabetes in the UK

People of Asian (including Indian, Pakistani, Bangladeshi) Chinese, Black African and Black Caribbean ethnicities are reported to be **two to four times more likely** to have diabetes than White populations

Estimated that on a weekly basis, diabetes leads to as many as **184** amputations, more than **770** strokes, around **590** heart attacks and about **2,300** cases of heart failure

The NHS spends at least
£10 billion a year on diabetes which is about 10% of its entire budget

Around **80% of this spend** is on treating associated complications, some of which could be prevented

Diabetes in all its forms, is a complex, chronic condition that can lead to serious complications without the proper care, treatment and support. The number of people living with diabetes continues to rise rapidly and whilst technological breakthroughs are improving quality of daily life for many, there is not yet a cure.

This is why our work is more important than ever...

Our purpose, aims & activities:

- To assist in the relief of persons with diabetes and any similar or related diseases or conditions.
- To raise public awareness about diabetes and any similar or related diseases or conditions, their incidence, causes, treatment, avoidance, and relief.

The focus of our work

To that end, our work in 2024 focused on -

- Redefining our health care professional strategy to understand how we can best support diabetes and related healthcare professionals in delivering quality information and support to the diabetes community.
- Delivering a stand-out United Through Diabetes event, a wonderful concept that brings the diabetes community together with healthcare professionals, public health officials, research teams, third sector organisations and industry partners. All of whom are invested and intent on creating a brighter future for people with diabetes.
- Raising visibility of DRWF through demonstrating the impactful research that we have funded.
- Developing meaningful partnerships with organisations working in diabetes and related health.
- Increasing our reach of the public with awareness raising materials on prevention of type 2 diabetes.
- Delivering Patient Information Forum (PiF) accredited health and social care resources through multiple channels.
- Diversifying our income generating activities alongside creating cost efficiencies – an ongoing process with a focus on navigating the continuing financial challenges that charities face whilst endeavouring to create sustainable income streams and a charity that is fit for the future.

Editorial Advisory Board

Healthcare Professionals

Dr Sarah Brewer

GP, Health Journalist and Specialist in Nutritional Medicine

Dr Sarah Brewer MSc (Nutr Med), MA (Cantab), MB, BChir, RNutr, MBANT qualified from Cambridge University with degrees in Natural Sciences, Medicine and Surgery. After working in general practice, she gained a master's degree in nutritional medicine from the University of Surrey. As well as being a licensed doctor, Sarah is now also a Registered Nutritionist, a Registered Nutritional Therapist and an award-winning health writer. Sarah is the author of over 50 popular self-help books, including Overcoming Diabetes (Duncan Baird) and Natural Approaches to Diabetes (Piatkus). Her latest books are Live Longer Look Younger, and Eat Well, Stay Well, published by Connections. Sarah is the editor of YourWellness magazine www.yourwellness.com. Follow her occasional nutritional Tweets at www.twitter.com/DrSarahB.

Andrea Cameron

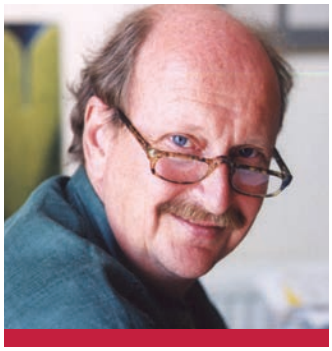
Head of the School of Social and Health Sciences, Abertay University

Andrea has worked in healthcare since 1982. After qualifying as a nurse she specialised in Coronary Care Nursing before becoming a Nurse Teacher. She then moved to teaching Sports Science, but remains a registered nurse and qualified exercise instructor. She has undertaken doctoral studies examining the information given to patients with diabetes by health professionals in the primary care sector and has published in the area of volunteering and employment skills. Andrea has also run for Scotland at international veteran events, and has been a contributor for DRWF since 2004.

Professor Edzard Ernst

Professor in Complementary Medicine, Exeter

Professor Edzard Ernst is Chair in Complementary Medicine and Director of Complementary Medicine at Peninsula Medical School in Exeter. His expertise lies in acupuncture, autogenic training, herbalism, homeopathy, massage and spinal manipulation. He has published more than 1,000 articles in peer-reviewed medical literature, 500 original research papers and has written, or been editor, of more than 40 books. Edzard is Editor-in-Chief and founder of two medical journals, and sits on the editorial board for 20 other journals, including DRWF's Diabetes Wellness News.



Azmina Govindji

Registered Dietitian and TV Nutritionist

Azmina Govindji is a registered dietitian, consultant nutritionist, broadcaster and best-selling author. Azmina is director of Azmina Nutrition **www.azminanutrition.com** and shares daily dietary tips at: **twitter.com/AzminaNutrition.** Azmina has written 15 books including the Gi Plan with Nina Puddefoot and The Diabetes Weight Loss Diet with Antony Worrall Thompson. She was Chief Dietitian to Diabetes UK from 1987–1995 and is currently a media spokesperson for the British Dietetic Association.

Emma Howard

Community Diabetes Lead Podiatrist, Oxford Health NHS Foundation Trust

Emma qualified with a BSC Hons Podiatry from the University of Brighton in 1997 and began working as a community podiatrist for the NHS in Shropshire. During this time she completed the Society of Chiropodists and Podiatrist Diabetic Foot Module and began working in acute diabetic foot clinics in Telford and Shrewsbury. After nearly ten years she moved to work at Knowsley PCT on Merseyside as a Diabetes Team Leader in a community trust. In 2009 she accepted a position for Oxford Health NHS Foundation Trust where she works as a Community Diabetes Lead Podiatrist. She specialises in the care of the diabetic foot and high-risk wound care. The clinics run across community settings and within OCDEM (Oxford Centre for Diabetes, Endocrinology and Metabolism). She has worked with DRWF since 2007 developing the foot care advice leaflet and has attended the walking holidays and Wellness Weekends to give presentations and informal advice on foot care in diabetes.

Dr Alison Kirk

Lecturer in Physical Activity for Health, University of Strathclyde, Glasgow

Alison was appointed in January 2009 as a Lecturer in Physical Activity for Health at Strathclyde University, Glasgow. She completed a BSc in Physiology and Sports Science at the University of Glasgow (1998) before undertaking a PhD through the same university (completed 2003). She was then appointed as Lecturer at Dundee University before moving to Strathclyde University. Alison currently teaches on the BSc Sport and Physical Activity degree course. She teaches various aspects of physical activity and health and clinical exercise science. Alison's specialist research area is in behaviour change of physical activity and sedentary behaviour with emphasis towards prevention and management of chronic disease. She has particular focus towards diabetes but with past and current funded research in breast and colon cancer, respiratory and cardiovascular disease. Alison has a drive towards implementation of research findings and knowledge exchange within community and clinical practice and has worked with a number of community and clinical groups on related projects and guidelines.

Bethany Kelly

Development Clinical Lead Diabetes Specialist Nurse, Wiltshire Health and Care

Bethany now works across Wiltshire as the Lead Diabetes Specialist Nurse. Bethany has been involved with diabetes care for the last 12 years of her career, working across primary and secondary care. She completed her MSc in Diabetes Practice with Swansea University, gaining a distinction in 2021. Bethany became Co-Chair and Director of the Diabetes Specialist Nursing Forum UK and, as part of this team, received the 'Healthcare Professional of the Year 2018' at the Quality in Care Diabetes Awards. The team were also finalists for the Health Service Journal award for Diabetes Initiative of the Year in 2019. Bethany was part of the multidisciplinary-focused Forum for Injection Technique (FIT) as a board member in October 2018 and went on to publish the 2020 5th Edition international FIT guidelines. She has also worked on multiple national projects with NHS England. Her interests lay in working with younger adults, type 1 diabetes, hypoglycaemia, social media, pregnancy and technology.

Dr Alastair Leckie

MBChB DRCOG MRCGP FFOM, Consultant in Occupational Medicine, OHSAS

Alastair is a Consultant in occupational medicine and director of OHSAS, an NHS-based service provider for occupational health. He graduated from Edinburgh University in 1986 and initially trained and worked as a general practitioner. He trained in occupational medicine at the Institute of Occupational Medicine before moving into his current role. Alastair is involved in postgraduate training for GPs, specialist trainees and occupational health colleagues. He is an honorary senior clinical lecturer at the University of Glasgow. He frequently sees people in his clinic with diabetes to advise them and their employer regarding any work issues or work-based assistance that may be required. Alastair is currently President of the Society of Occupational Medicine.

Henrietta Mulnier

RGN MSc PhD RNT, Lead Diabetes Nurse, Royal Surrey County Hospital and Primary Care

Henrietta Mulnier RGN MSc PhD is a Lecturer in Diabetes Nursing at the Florence Nightingale School of Nursing and Midwifery, King's College London. She also works clinically as an Honorary Diabetes Specialist Nurse at St Thomas' Hospital London. She has been nursing for nearly 30 years; specialising in diabetes since 1995. Having completed a Doctorate in 2008, her current focus is on research to benefit patient care for those with diabetes. Henri has published widely and is a reviewer for several journals. She is a member of the current National Institute for Health and Clinical Excellence Guidance Development Group for type 1 diabetes and is also on the editorial board for Diabetes & Primary Care.

Dr Mayank Patel

Consultant Physician in Diabetes, University Hospital Southampton NHS Foundation Trust

Dr Mayank Patel has worked as a Consultant Physician in Diabetes and Acute Medicine at University Hospital Southampton since 2008. Since starting as a Consultant, he has overhauled and developed the trust's adult inpatient diabetes service and worked with commissioners to bring new adult multidisciplinary insulin pump and diabetic foot services to the trust. He co-developed 'DiAppBetes', the smartphone application to help healthcare professionals manage inpatients with diabetes. He also contributes to medical undergraduate and postgraduate diabetes training, as well as regularly delivering diabetes education to patients, public and other healthcare professionals in primary and secondary care.

Professor Philip Preshaw

Specialist in Periodontics, Visiting Professor, Newcastle University

Philip Preshaw is Professor of Periodontology and Consultant in Restorative Dentistry at Newcastle University, UK. He received his Dental Degree from the University of Newcastle in 1991 and his PhD in 1997. He is a registered specialist in Periodontics and is a Fellow of the Royal College of Surgeons of Edinburgh. His main research interests are investigations of the pathogenesis of periodontal disease, and links between diabetes and periodontal disease. Professor Preshaw lectures frequently, and has numerous publications in peer-reviewed scientific journals. He has been awarded a UK NIHR National Clinician Scientist Fellowship, a Distinguished Scientist Award from the International Association of Dental Research, and a King James IV Professorship from the Royal College of Surgeons of Edinburgh for his contributions to research.

Activities & Achievements in 2024

In the spirit of our strapline, 'staying well until a cure is found…' our work is focused on two clear strands:

- The delivery of awareness, information and support programmes
- And the funding of diabetes research

Awareness, information & support

Information Reach

In 2024, we:

- Distributed 109,419 campaigns to existing supporters through direct mail.
- Reached a further 142,510 prospective beneficiaries and supporters with new awareness campaigns, a 13.5% increase in volume on 2023.

These appeals are dual purpose, raising awareness and providing information about the charity's activities and funding whilst seeking financial support. They also act as a stewardship tool, helping us to stay connected with long-standing supporters of the charity.

We had an average campaign response rate of 12.5% across 2 streams, resulting in over 30,496 responses from across the country. We know from experience that it is likely that many more opened and read the appeal but chose not to make direct contact with us at that time, but we have seen numbers of people respond to communications that have been distributed many months, or even years, before as they have held onto the information provided for future reference.

WEBSITE:

Total number of visits to our website in 2024 was 311,000, up 13% from 275,000 in 2023. Active users (unique) visiting the site was 185,000, up 35% on 2023. Our United Through Diabetes Digital Hub received 9619 views from 6716 active users. Engagement on our website, such as likes, downloads, video views or link clicks, reached 1 million in 2024 which is an increase of 23% on 2023.

PATIENT INFORMATION FORUM (PiF) TICK:

As members of the Patient Information Forum, we hold PiF Tick accreditation on our adult health and social care resources. The PiF Tick kite mark is displayed on our information resources. This demonstrates that we are a 'trusted information creator' which is an important way in which people seeking our help can recognise that our information is relevant, up-to-date, clinically referenced and peer reviewed.

INFORMATION/ACCESSIBILITY:

There were 10,972 pdf downloads from our website in 2024, 82% of which were copies of our diabetes information leaflets. Additionally, there were also 221 audio downloads of these resources. Further, there were 316 'listens' to our Living with Diabetes podcast sessions, a channel that we are working hard to develop.

We increased the volume of video content available to visitors in 2024 to ensure choice of channel and accessibility of our information. There were 1936 video views in the year, the majority of which was related to educational content via our UTD Digital Hub.

SOCIAL MEDIA CHANNELS:

Social media channels are a great way to reach a wider audience, quickly, with messages about our activities. Whilst we use multiple social media channels, we get greatest engagement in posts about our community activities via Facebook. Our Facebook reach in 2024 was 2.6 million an increase of 25.8% on reach in 2023.

DIABETES WELLNESS NETWORK:

The network is a core group of subscribers who receive a quarterly edition of the Diabetes Wellness News which is a 16-page magazine containing specially commissioned articles on all aspects of diabetes self-management, as well as advances in research and general diabetes news. These are predominantly people with type 1 and type 2 diabetes and health care professionals working in diabetes and related health.

Diabetes Wellness Events – QiC award winning educational events:

Self-management is the cornerstone of diabetes care, with good self-management skills essential to achieve positive health outcomes and reduce the risk of associated health complications.

For the past 26 years, DRWF has been providing an annual programme of Diabetes Wellness events that are focused on enabling people to access relevant, evidence-based health information throughout the lifetime of their long-term condition. Whilst providing a wide range of diabetes and related-health workshops, interactive sessions and talks, the core principle on which this programme is built is 'peer support.'

Peer support is a valuable resource for people living with diabetes, their family, friends and carers and our Wellness events provide an opportunity to make new contacts and build new relationships through mutual acceptance and understanding, in a safe and inclusive environment.

Our events inform, inspire and empower people to take ownership of and have more control over their health and wellbeing. The diverse learning programme on offer helps people to develop knowledge, skills and confidence to address issues that are affecting their health and diabetes self-management. This is especially beneficial to people who are lonely or isolated and don't have an immediate support network around them.

We believe that this holistic approach supports all round wellbeing and increases learning capacity and resilience, and it is wonderful to see people return to our events year-on-year.

Diabetes Wellness Family Camp

75

Family Camp took place 10-12th May at Whitemoor Lakes in Staffordshire. We received 35 family applications (138 individuals), and while our aim was to accommodate 20 families (70 individuals), following triage and withdrawals we accommodated 19 families (75 individuals). There is a robust triage process in place for Family Camp given that many children are living with complex health needs beyond type 1 diabetes.

All those that did not meet the criteria for Family Camp were offered places at our Autumn virtual ***Camp in the Cloud.***

The aim of Camp is to bring families of children with Type 1 diabetes together in a fun, safe and welcoming environment. The emphasis is on providing fun for the children and a little respite for the parents/guardians and perhaps most importantly, providing a platform for meeting families to share similar experiences of life with diabetes so as to build relationships based on mutual understanding and acceptance.

There was a full programme of activity for the families to enjoy over the duration of the weekend with a diet and nutrition talk from Lisa Poole, HCP registered dietitian with specialist experience in working with children.

"We would like to say what an amazing weekend we all had at camp last week!! Our daughter wanted to come to meet other young people her age with type 1 diabetes, which she did!! Numbers & snaps exchanged. The camp was absolutely fantastic & fun for all the family!!! Our daughter has begged us to apply to come back again for next time/next year. Camp & the format was great & very well balanced."

United Through Diabetes – the BIG Diabetes Wellness Day

395

On Saturday 21st September, we hosted the second ***United Through Diabetes*** in-person event which saw 395 delegates in attendance. The event was supported by Industry partners, and prominent speakers, such as the National Specialty Advisory for Diabetes (NHS England), Professor Partha Kar. The event reached a wide and diverse segment of the diabetes community, including families of children with type 1 diabetes, people with type 1, type 2 and other types of diabetes, as well as people working in diabetes and related healthcare.

Attendees were able to engage with DRWF funded researchers, past and present, to understand how the work we have invested in over the past 26 years has delivered impact/benefit for people with diabetes. Feedback on the quality and variety of workshops and talks on offer was extremely positive and the UTD Digital Hub extended our reach post-event to enable people who couldn't attend the event in-person to benefit from the programme content.

Watch Our
Diabetes Research Matters Film

26

Virtual Camp in the Cloud

Virtual Camp in the Cloud was introduced during the pandemic period when in-person activities were curtailed. Due to its ease of access, we have continued to offer this fun, online 'Camp' in addition to our residential activity in the year.

A full programme of online activities was offered, with a box of arts and crafts, and other materials, supplied beforehand to make the day as interactive and fun as possible. DRWF hosted a 'Talking Type1' session for the parents/guardians where they could raise important questions and share their experiences with each other in a safe and inclusive space.

"An opportunity to experience something fun that's related to my child's diagnosis, feeling special, having a unique day we've never had before."

"Seeing other families on the call. How warm and engaging the staff were. That my little warrior felt so appreciated sporting his t-shirt, having his face painting and building stronger bonds with his sister."

FEELINGS BEFORE ATTENDING CAMP IN THE CLOUD ...

FEELINGS AFTER ATTENDING CAMP IN THE CLOUD ...

81

Diabetes Wellness Morning - Hartlepool

The Diabetes Wellness Morning in Hartlepool was hosted on behalf of DRWF by longtime volunteer, Hayley Hakansson, and coincided with World Diabetes Day.

81 people attended the event, held at the National Museum of the Royal Navy. The aim of the morning was to support people living with diabetes, their family, and carers, to provide practical information, tools and tips to improve self-management and understanding of the condition whilst providing an opportunity to spend time with diabetes healthcare professionals. It was organised with the support of the Hartlepool Diabetes Support Group and colleagues at the North Tees and Hartlepool NHS Foundation Trust.

Attendees enjoyed a busy morning featuring talks and presentations on all aspects of diabetes and related health. Peer support is at the core of this event, which provides the opportunity to meet new people living with diabetes in the local area whilst refreshing existing knowledge and learning new ways in which to optimise self-management. Hayley said:

"Everyone attending the event said how warm and welcoming the Wellness Morning was and they felt they had learned something new, in addition to refreshing their knowledge of helpful tips for living with diabetes."

Our Research Advisory Board

Our research advisory board comprises experts in a wide variety of research disciplines to ensure that all applications are assessed knowledgeably and fairly. As a member of the Association of Medical Research Charities, we are committed to maintaining a rigorous peer review process for the assessment of research applications, for which the Advisory Board are responsible. This process, carried out in a fair and transparent way, ensures that only the highest quality of research at the best of institutions receives DRWF funding. The Board and our review process operate within the parameters of a Conflict-of-Interest Policy which seeks to minimise the potential for conflicts to affect our decision-making process. People with diabetes are at the heart of what we do, and their views steer our wellness education programme as well as our research funding strategy.

Professor Angela Shore

Professor Angela Shore is the inaugural Vice-Dean Research for the University of Exeter Medical School, and was previously Interim Vice-Dean Research for the Peninsula College of Medicine and Dentistry since 2009. She is the Scientific Director of the NIHR Exeter Clinical Research Facility for Experimental Medicine and Associate Director for Experimental Medicine for the UKCRN diabetes research network.

Professor Shore graduated in Physiology from the University of Newcastle and was awarded her PhD for an investigation of the vascular mechanisms underlying fluid homeostasis in patients with Liver Disease. Following postdoctoral positions at the University of London where she expanded her research into the vascular aspects of hypertension, Professor Shore moved to the Postgraduate Medical School Exeter in 1987 to establish the clinical microvascular research unit funded by the Wellcome Trust. Currently Professor Shore's work which is funded by the British Heart Foundation, Diabetes UK, European Union IMI JU and NIHR investigates novel approaches to the identification of early vascular complications and patient stratification for cardiovascular risk.

She was appointed Professor of Cardiovascular Science in 2000. As the Interim Vice Dean for Research and previously the Director for the Institute of Biomedical and Clinical Science, Professor Shore played a central role in the research success of the Peninsula College of Medicine and Dentistry, driving the research strategy, the appointment of new staff and the development of state of the art facilities. She also led the last three successful RAE submissions.

Professor Shore is committed to interdisciplinary research and was instrumental in the establishment of the University of Exeter Science Strategy Theme "Translational Medicine, Personalised Medicine and Public Health" to drive forward this approach. Professor Shore is actively involved in Microcirculation research worldwide. She is Treasurer of the European Society for Microcirculation, and represents Europe on the International Liaison Committee.

Dr Mark Evans, University of Cambridge

Mark Evans is a University Lecturer in the Institute of Metabolic Science and Department of Medicine, University of Cambridge and an Honorary Consultant Physician in Medicine and diabetes at the Addenbrookes teaching hospital in Cambridge (Cambridge University Hospitals NHS FT). He qualified in Medicine at St Bartholomews Hospital in 1988 and then subsequently worked and trained as a junior doctor at a number of hospitals in London and South East.

He completed an MD at University of London and then spent 3 years at Yale University in USA (1999 to 2002) in the laboratory of Professor Robert Sherwin before returning to his current UK post in 2002. His particular interests are in type 1 diabetes, structured education, devices and technology including insulin pumps, continuous glucose monitors and automated insulin delivery, hypoglycaemia and brain nutrient sensing.

Dr Katharine Owen

Katharine Owen is an Associate Professor and Consultant Physician at the Oxford Centre for Diabetes, Endocrinology and Metabolism (OCDEM). Her interests are in the areas of investigation of genetic aetiology of diabetes in young adults, identification, characterisation and clinical management of rare kinds of diabetes and building an assessment of aetiology into care pathways for newly-diagnosed young adults with diabetes. She is also involved in clinical trials in OCDEM for newly diagnosed type 1 diabetes through the UK Type 1 diabetes Immunotherapy Consortium.

Dr Kash Patel

Kash Patel is a Wellcome Trust Career Development Fellow and Consultant Physician in Diabetes and Endocrinology. His main area of research includes understanding the genetics of diabetes with a focus on Monogenic and Type 1 diabetes. His research uses next-generation sequencing technology and large data sets to improve diagnosis and understanding of monogenic diabetes in humans.

He was a Wellcome Trust PhD Research Fellow in prestigious MRC Protein Phosphorylation Unit in Dundee where he was awarded his PhD studying the glucose metabolism in the liver. After his PhD, he obtained Wellcome Trust Postdoctoral Fellowship to study monogenic diabetes in Exeter with Professor Andrew Hattersley and Professor Sian Ellard.

James Bowe, Reader in Endocrinology and Diabetes, King's College London.

James Bowe is Reader in Endocrinology and Diabetes at King's College London. After completing a BSc in Biochemistry at the University of York, James completed his PhD at King's College London studying the role of CGRP in the hypothalamic interaction between stress and the reproductive system. Following his PhD he remained at King's College London, but moved into the field of diabetes research as part of his postdoctoral studies to study the effects of kisspeptin on the pancreatic islets of Langerhans.

In 2009 James was awarded a Diabetes Research and Wellness Foundation non-clinical fellowship to continue his research in this field and he took up a position as Lecturer in Physiology at King's College London in 2012. Since establishing his own research group James has focused on understanding the signals underlying the adaptation of the pancreatic islets to pregnancy and why this adaptation is impaired in some women, resulting in gestational diabetes.

Professor Robert Semple, University of Edinburgh

Prof Semple is a is a diabetologist and endocrinologist based at the Centre for Cardiovascular Science at the University of Edinburgh. He is a Wellcome Trust Senior Research Fellow in Clinical Science, and Dean of Postgraduate Research at the University of Edinburgh. He trained in Biochemistry and then Medicine in Cambridge, with clinical postgraduate training in London and Cambridge, including a PhD in the laboratory of Prof. Sir Stephen O'Rahilly.

Over the past 15 years his clinical and research interests have centred on severely insulin resistant diabetes, lipodystrophy and hypoglycaemia, both genetic and acquired. Key interests are use of such rare human conditions to improve understanding of pandemic "insulin resistance" and the mechanisms linking it to disease, and on translating findings from the research laboratory into clinical benefits for patients. Approaches in his group span clinical trials, experimental medicine, and disease modelling in cells and animals.

Victoria Salem

Victoria is a Senior Clinical Lecturer in Bioengineering at Imperial College London and Honorary Consultant in Diabetes, Endocrinology and General Internal Medicine. Her research interests are in neuroendocrinology and the gut brain axis as applied to the treatment of obesity and Type 2 Diabetes. She was the recipient of the first Diabetes UK Harry Keen fellowship. Her lab has established longitudinal imaging of pancreatic islets, which has led to ground breaking insights into the coordinated behaviour of the islet as a functional unit.

She has also studied the physiological effects of combination gut hormones and bariatric surgery on food reward processing (fMRI), glucose metabolism and energy expenditure in humans. She has developed novel imaging techniques to investigate brown adipose tissue physiology and is working on complex vagal deafferentation models to investigate gut-brain signalling, with a view to discoverig novel drug targets for obesity and diabetes.

She is committed to making clinical academia more inclusive and has won the Julia Higgins award for her "powerful advocacy for female academic staff, and her formal and informal mentorship of junior academics."

Professor Ketan Dhatariya

Professor Ketan Dhatariya graduated from the University of London in 1991 and did his diabetes and endocrinology training in and around London. For 2 years during his training he was also a part time General Practitioner in the evenings. He took some time out of his training to spend a year doing intensive care medicine and anaesthetics. After he finished his diabetes training in 2001 he went to do a 2 year research fellowship in endocrinology at Mayo Clinic in Minnesota, USA. He was appointed as a consultant in diabetes, endocrinology and general medicine at the Norfolk & Norwich University Hospital in 2004, and Honorary Professor of Medicine at the University of East Anglia in 2019.

He is a full time NHS clinician and his predominant areas of interest are inpatient diabetes – in particular peri-operative diabetes care, the management of diabetes related emergencies, and the 'diabetic foot'. He leads one of the largest foot clinics in the East of England. He has several national roles in the UK. He is currently the Chair of the Joint British Diabetes Societies Inpatient Care Group where he has led or co-authored several national guidelines on the management of various aspects of inpatient diabetes care including the guideline on peri-operative diabetes care. He is the Chair of the Examining Board for the UK Specialist Clinical Exam in Diabetes and Endocrinology, as well as Chair of the newly developed European Board Examination in Endocrinology, Diabetes and Metabolism.

He is the President of the Diabetes and Endocrine section of the Royal Society of Medicine. He is the Section Co-editor for diabetes for www.endotext.org. He is an Associate Editor of Diabetic Medicine and BMJ Open Diabetes Research & Care. Dr Dhatariya has over 150 peer reviewed publications, and has published over a dozen book chapters on inpatient diabetes, peri-operative diabetes care or on the diabetic foot. You can find more by visiting www.norfolkdiabetes.com

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Susan Ozanne

Susan Ozanne is Professor of Developmental Endocrinology at the University of Cambridge Institute of Metabolic Science Metabolic Research Laboratories and the MRC Metabolic Diseases Unit. She obtained a first class honours degree in Biochemistry from the University of Edinburgh, in 1990. She then obtained her PhD from the University of Cambridge in 1994. Prior to her current appointment she was a British Heart Foundation Senior Fellow. Previously she also held a Diabetes UK RD Lawrence Fellowship and a Wellcome Trust Career Development Fellowship.

Her research interests are focused on understanding the mechanistic basis of the relationship between suboptimal early nutrition and later risk of diseases such as type 2 diabetes, obesity and cardiovascular disease. Professor Ozanne is the author of over 250 papers on the early origins of health and disease and is an elected member of the council of the Society for the Developmental Origins of Health and Disease.

Professor Mirela Delibegovic

Professor Mirela Delibegovic is currently the Dean for Industrial Engagement in Research and Knowledge Transfer at the University of Aberdeen and the Director (Diabetes) of the Aberdeen Cardiovascular and Diabetes Centre. She obtained her BSc Honours Pharmacology degree from the University of Edinburgh, in 1999, and PhD in Biochemistry at the University of Dundee, MRC Protein Phosphorylation Unit (MRC PPU), under the supervision of Prof Patricia Cohen in 2003. She then moved to the States to Harvard Medical School for her postdoctoral research and received the American Heart Association fellowship for her work on protein tyrosine phosphatases in obesity and diabetes.

In 2007, she returned to UK on the RCUK tenure-track fellowship at the University of Aberdeen. Prof Delibegovic sits on several national funding committees, including Diabetes UK and the British Heart Foundation and is passionate about career development of staff and students, public engagement in research, academia/industry collaborations and knowledge transfer. Professor Delibegovic's research for the past 20 years has focused on the causes and consequences of development of diabetes and the complications associated with diabetes.

Her laboratory is particularly interested in co-morbidities such as atherosclerosis and cardiovascular disease, diabetic nephropathy and retinopathy, diabetic foot ulcers as well as non-alcoholic fatty liver disease and NASH. In recent years, she has been investigating the molecular link between diabetes and Alzheimer's disease and how these may be affected by different nutritional interventions.

Mr John Casey

Mr John Casey (MB ChB, PhD, FRCS(Glasg), FRCS(Ed), FRCS(Gen Surg), FRCP Edin) is a Consultant Transplant Surgeon at the Royal Infirmary of Edinburgh and Honorary Reader at the University of Edinburgh. He is Director of the Scottish National Islet Transplant Service and Lead Clinician for Organ Transplantation in Scotland.He is also Chair of the UK Islet Steering Group and Advisor to the Scottish Government on organ transplantation. Mr Casey co-chairs the Scottish Donation and Transplant Group and is Vice Chair of the European Pancreas and Islet Tranplant Registry.

His research background is in transplant immunology, in particular immune modulation using monoclonal antibodies. His principal research focus is now on islet transplantation encompassing islet and beta cell regeneration, immune modulation and enhanced engraftment of human islets using both co cellular transplantation and encapsulation techniques.

He has a close collaboration with the bioengineering department at Strathclyde University into bioprinting/encapsulation and imaging of human islets and also bioprinting of other cell types in particular hepatocytes and cholangiocytes (in collaboration with the Department of Surgery at Cambridge University and the Sanger Institute). In addition to abdominal organ transplantation, he has a clinical interest in advanced laparoscopic surgery.

Royal Society of Medicine – Medicine & Me Partnership

On Monday 30th September, DRWF partnered with the Royal Society of Medicine to deliver an online event for healthcare professionals and people living with diabetes under the banner of '***Engaging Communities – tackling health inequalities in diabetes'.***

The event explored 3 key areas: environment, culture and language. With a platform for sharing experience, we hoped to develop our understanding of how stigma, socio economic factors and inequalities in healthcare can impact on the lives of people with diabetes, helping us to consider the barriers and challenges to effective community engagement.

The Welcome address was given by Sarah Tutton, Chief Executive of DRWF with Sanjay Gohil as Chair. Speakers were Dr Sue Jones, Consultant Diabetologist (Newcastle); Dr Faye Ruddock, Chair of the Caribbean and African Health Network (CAHN); Dr Mayank Patel, Consultant in adult diabetes (Southampton).

There were 222 event registrations with around 30% attrition on the day. This is typical of an online event, particularly where healthcare professionals are registering their space to participate on and around their working day. Post-event feedback was very good with some very encouraging comments about the speakers and subject matter:

- Over **93%** of survey respondents said that the subject matter/content was good-very good
- **85%** saying that they would recommend to a colleague
- **82%** of healthcare professional attendees said the information gleaned during the webinar would positively impact on their clinical practice.

Global consensus statement endorsement

In 2023, we were asked to endorse a Global Consensus Statement ***Towards standardization of person-reported outcomes (PRO's) in diabetes research.*** This project was to address the lack of standardization/harmonization of PRO's (person reported outcomes), limiting the comparability of findings across studies in a space where too often, patient's perspectives of their lived experience with diabetes are lacking as primary or even secondary outcomes in clinical trials.

We considered this to be an interesting and important piece of work given that clinical outcomes in diabetes are intimately tied to how the person living with diabetes reacts to and implements treatment recommendations. It was on this basis that DRWF endorsed the global consensus statement project.

This global endeavour resulted in two final manuscripts, for adult and paediatric care, being delivered for publication in March and July, respectively in Diabetic Medicine and Behavioral Diabetes Institute.

Pump Priming Awards

Calls for applications were issued in September 2023 for Pump Priming Awards to be taken up in 2024. A total of 20 applications were received from which six research awards were made with a total value of £119,982.

The DRWF research programme is designed to support bright young researchers, as well as established institutions, as they strive to make the kind of life-changing breakthrough our diabetes community is hoping for.

Pump Priming awards considered 'proof of concept' and are either Clinical or Non-Clinical in nature. Successful projects are funded for up to two year's duration, to the value of £20,000. No-cost extensions to the term may be considered.

Since 1998 we have provided over **£13.5 million** of funding for medical research programmes, with the aim of finding a cure for all types of diabetes.

Research Funding Programme

Each year, we issue Calls for Applications in respect of our 3-year Clinical, Non-Clinical and Pump Priming awards.

DRWF Fellowships provide the necessary funding to support Early Career Researchers (ECR), which is vital to ensure that clinical and scientific talent stays and develops within the diabetes medical research community.

ECR's represent a young and diverse research population and provide a constant flow of talent, new ideas and new skills. Some of them will go on to be the senior diabetes researchers of the future, so with very few funding awards available to this community, the DRWF awards are lucrative and well positioned to attract the best and brightest young researchers, to take the research to the next level.

The DRWF annual funding round is offered through open competition and enables funded researchers to access support for both direct and indirect costs of research via the Charity Research Support Fund (CRSF) and NIHR Clinical Research Networks AcoRD agreement. Institutional and discretionary awards are available when funds allow. Contract funding of key personnel within the DRWF Human Islet Isolation Facility at the Churchill Hospital, Oxford is subject to proposal and reviewed on a multi-year rolling contract basis. Central to this review, is the continuation of the facility's pivotal role in the UK Islet Transplant Programme and ongoing NHS clinical funding availability/plant for future years.

DRWF is a member of the Association of Medical Research Charities (AMRC), a membership body representing the leading medical and health research charities who deliver high-quality research that saves and improves lives. Working with member charities and partners, AMRC aims to support voluntary sector effectiveness and advance medical research by developing best practice, providing information and guidance, improving public dialogue about research and science, and influencing government.

As a member, we subscribe to AMRC's criteria for the use of peer review for allocating funding and support AMRC position statements on the payment of indirect costs in universities and the use of animals in medical research which seeks to replace, refine and reduce the use of animals (3Rs) in research.

We operate a rigorous peer review process by which our Research Advisory Board (RAB), clinical and scientific experts in the field of diabetes and related health, assess applications and reports to ensure that only the highest quality and most effective research, carried out using good or best practice methodologies, receives DRWF funding.

Islet Cell Research & Transplant

DRWF has made a considerable contribution to the funding of islet cell research and transplant in the UK and around the world. The DRWF Human Islet Isolation Facility at Churchill Hospital, Oxford plays a pivotal role in providing islets for research and transplant as part of a national treatment programme, the clinical element of which is funded by the NHS.

Three personnel are funded within the facility (around 30% of facility staff):

- Lab Manager
- Deputy Facility Manager (post doc researcher)
- Islet Transplant Administrator

We maintained our contract funding awards at the DRWF Islet Isolation Facility, Churchill Hospital, Oxford. These posts are funded for between 3-5 years, giving continuity and stability to the individual post holders and wider facility/teams. This is vitally important to ensure sustainability of expertise within the research group, given that this facility works on rotation to isolate islet cells for human transplant, as well as supply islets for research across the UK and Europe.

Impact report from the Director of the DRWF Islet Isolation Facility Churchill Hospital, Oxford

Introduction

2024 was the 18th year since the opening of the DRWF Oxford Human Islet Isolation Facility. It continues to be one of the key islet isolation facilities in Europe providing clinical islets for both allo- and auto-transplantation, as well as distributing research islets for a network of basic and clinical researchers around the UK. It also continues to be active in research and development in the fields of islet isolation and islet transplantation. This report gives a brief overview of the main areas of activity during 2024.

Islet Allo-transplantation

Our allo-isolation programme had a successful year overall. We continued to provide human islets for the UK Islet Transplant Consortium, maintaining the clinical service despite our partner isolation facility at Kings in London having to close between June 2023 and October 2024 due to a contamination issue. This unexpected and prolonged closure increased the pressure on the Oxford and Edinburgh Islet Isolation Facilities, but between January 2024 and December 2024, the DRWF Oxford Islet Isolation Facility performed 22 clinical islet isolations for allogenic use, 9 of which met the UK agreed release criteria for transplantation. This is a conversion rate of 41% (international average conversion is about 30%). On the clinical side, the Oxford programme continued to cover a wide catchment area in the UK and the satellite clinics in Birmingham and Leicester continued to be fruitful, offering a quaternary service closer to the patients' homes. We continued to champion a patient-centric integrated beta-cell replacement model, and because of this our Simultaneous Islet Kidney (SIK) and Islet After Kidney (IAK) transplant referrals increased considerably and these now reflect on our islet transplant waiting list. Indeed, with the routine use of closed loop insulin delivery, the previous primary indication of life-threatening hypoglycaemia is becoming a much less common indication for islet transplantation worldwide.

Islet Auto-transplantation

Our NHS-commissioned programme for total pancreatectomy with islet auto-transplantation (TPIAT) for chronic pancreatitis, continued to thrive with increasing referral numbers and excellent outcomes. In 2024, the DRWF Islet Isolation Facility performed 8 clinical islet isolations for autologous use. 7 of these 8 preparations were transplanted. We have now undertaken 3 TPIATs in the under 18 age group and our paediatric referrals for TPIAT are increasing. As a result, we have applied for NHS-commissioning to be able to routinely undertake TPIAT in children, something that we believe our expertise in Oxford makes us ideally placed to do. Ultimately, we hope that this will be the next step to our long-term goal of performing islet transplantation in children with type 1 diabetes soon after diagnosis.

Research Islet Provision

The DRWF Isolation Facility in Oxford continues to be the UK Islet Resource Centre providing human islets for research to a network of type 1 and type 2 diabetes researchers. In 2024, our team distributed 1.8 million islet equivalents (IEQ - the international standardised way of counting islets) from 8 islet preparations. In addition, the Oxford DRWF Islet Isolation team continued to lead the 'Islet Platform' for the related Quality in Organ Donation (QUOD) with responsibility for isolating and distributing islets for research from these rare pancreases. We are also part of two collaborative research projects under the Diabetes UK Type 1 Diabetes Grand Challenge, something that we believe is of enormous benefit to DRWF within the current landscape of diabetes research in the UK.

Vertex Stem-Cell Derived Islet Trials

As stated in last year's report, in 2023, Oxford was opened as the first site in the UK (and one of only a handful in Europe) for the Vertex 880 and Vertex 264 stem-cell derived islet transplant trials. We continued to actively recruit for these studies. The publicly available international data for the VX 880 trial is looking very encouraging. The fact that the Oxford DRWF Isolation Facility team are playing such a key role in these landmark studies again demonstrates the wider impact that DRWF are having in the islet transplant field internationally.

DRWF Islet Facility Staff

Our DRWF-funded staff - Rebecca Spiers, Louise Stile, and Ahmad Kobiita - continued to be key to the day to day running of the Islet Facility and the Islet Isolation Programme. Indeed, I remain extremely grateful to each one of them for their essential contributions.

Biennial HTA Inspection and Licensing

In July 2024, we underwent our biennial inspection from the Human Tissue Authority. Rebecca Spiers and the team spent hours preparing all the documentation and data. The inspection went well, and we were delighted to receive our most successful report yet. This reflects Rebecca's meticulous regulatory management and the hard work and cohesion of the whole isolation team.

Finally, I would like to reiterate my gratitude to DRWF for their generosity in funding the Oxford Programme, and my team's total commitment to maintaining our close partnership with DRWF for many years to come. We are also committed to championing the wonderful work of DRWF in every way we can.

Professor Paul Johnson
Professor of Paediatric Surgery, University of Oxford
Director of the Oxford Islet Transplant Program & DRWF Human Islet Isolation Facility.

Research Impact

Each year, our funded researchers deliver interim and annual reports to demonstrate that their work aligns with the award criteria and progress updates are provided throughout the term of funding. These reports are reviewed by the Research Advisory Board, from which we publish articles in our quarterly Diabetes Wellness News to update our beneficiaries and supporters on the impact that our funding is having for people with diabetes.

Here are two such examples published in 2024 –

Unravelling the mystery of diabetic pain

An exciting breakthrough in neuropathy research

Introduction to the Pioneering Research

In the quest to enhance the quality of life for millions affected by diabetes, a recent study sponsored by the Diabetes Research and Wellness Foundation has delivered groundbreaking insights into the mechanisms of diabetic neuropathic pain. This extensive investigation, led by Dr Richard Hulse at Nottingham Trent University, not only deepens our understanding of a prevalent complication associated with diabetes but also opens the door to potentially revolutionary treatments.

By exploring the underlying causes of neuropathic pain, which many patients experience as debilitating and persistent discomfort, the research holds the promise of developing therapeutic strategies that could significantly alleviate, or even completely eradicate, this often-intractable pain.

The significance of this research lies in its potential to transform the current approach to diabetes management. Neuropathic pain can severely impact an individual's functionality and overall well-being, making everyday activities challenging and diminishing life quality. This detailed study could pave the way for innovative treatments that target the root causes of neuropathic pain rather than merely managing symptoms.

Such advancements might not only improve care outcomes but also reduce the long-term economic costs on healthcare systems caused by chronic pain management in diabetic patients. By providing a new pathway for treatment, the findings from this study are a beacon of hope for those who suffer from the continuous struggle against diabetic pain.

Innovative Research Methods

The scientific team utilized several advanced, cutting-edge techniques to conduct their research:

- **Genetic Modifications:** Using a specialised virus, they were able to specifically delete the HIF1⍰ gene in targeted neurons, observing how this genetic alteration affected diabetic pain.
- **Behavioural Assays:** These tests were crucial for evaluating the pain response in genetically modified mice, helping to establish a behavioural baseline and assess the effectiveness of the genetic modifications.
- **Proteomic and Histological Analysis:** By analysing proteins and cellular structures in the spinal cord, researchers could identify changes associated with pain pathways, providing a deeper understanding of the underlying mechanisms.

Key Findings: A Link Between Hypoxia and Pain

The experiments provided illuminating results, showing that hypoxia—a state of low oxygen levels in the tissues–in spinal neurons could directly initiate the experience of pain sensations. The scientists discovered that by strategically blocking the activity of HIF1a, they could effectively prevent the onset of neuropathic pain in the spinal cords of their diabetic mouse models. This critical finding suggests that the HIF1a pathway plays a significant role in mediating pain, and that inhibiting this pathway could significantly reduce or even eliminate neuropathic pain in patients with diabetes.

Why This Is Important

This research offers hope for better pain management in diabetes. By potentially eliminating a root cause of neuropathic pain, future treatments could lessen the reliance on traditional painkillers, which often come with side effects and limited efficacy in chronic conditions. If these findings can be translated into human treatments, it could mean:

- **Enhanced Pain Management:** More effective treatments could directly reduce the frequency and severity of neuropathic pain episodes.
- **Improved Overall Well-being:** Effective pain relief significantly contributes to better mobility, mood, and quality of life.

Looking ahead, the research team at Nottingham Trent University are excited to further explore this promising avenue, with further studies aimed at understanding and eventually interrupting the pain signals caused by hypoxia in patients with diabetes. The aim is to translate these findings into therapies that can be tested in clinical settings.

Conclusion: Towards a Pain-Free Future

This promising research offers more than just insights—it provides hope. As scientists continue to decode the complexity of diabetic pain, their findings could lead to revolutionary treatments. The journey from bench to bedside is long and complex, but the potential to improve the lives of those with diabetes is a powerful motivator.

In summary, the dedication of researchers at Nottingham Trent University, coupled with innovative genetic and molecular techniques, is setting the stage for significant advancements in the treatment of diabetic neuropathy. By directly targeting the newly uncovered mechanisms of disease, they are not only shedding light on previously obscure aspects of diabetic pain but also working towards a future where diabetes can be managed without pain.

Praising the quality of the study, DRWF Research Advisory Board member, Professor Ketan Dhatariya recognises that it's challenging the prevailing understanding of neuropathic pain as being caused by nerve damage from high blood sugar levels. The diabetes consultant and current chair of the Association of British Clinical Diabetologists said:

"This is the first step to developing new models of pain. As the research team state, the next step is to develop HIF knockout mice to determine if their hypothesis and preliminary results are correct. If they are, then the next step would be to investigate potential agents to do the same and ultimately to develop therapeutic agents to treat diabetic neuropathic pain." He adds "Congratulations on the work, I think this is an understudied area".

Unlocking Hope: Enhancing Islet Transplantation for Type 1 Diabetes

Revolutionising treatment through MSC-secreted molecules

A groundbreaking study, funded by the Diabetes Research & Wellness Foundation, could significantly enhance the lives of those living with type 1 diabetes. Scientists in London and Exeter have discovered a method to improve the survival and function of transplanted islet cells, the insulin-producing cells often lost in this condition. Type 1 diabetes is a challenging illness where the body's immune system mistakenly attacks these vital cells, leading to a dependency on insulin injections. Islet transplantation offers a beacon of hope for patients, yet its effectiveness is hampered by the rapid loss of transplanted islet cells shortly after the procedure. This new research, however, shines a light on a promising solution.

Exploring the Healing Potential of Mesenchymal Stromal Cells

At the core of this scientific breakthrough are mesenchymal stromal cells (MSCs), which are known for their tissue-repairing abilities. These cells secrete a range of molecules that have been found to significantly enhance the survival and function of transplanted islet cells in mouse models. The researchers set their sights on whether this success could be replicated with human islet cells, using a meticulously crafted cocktail of MSC-secreted peptides.

Enhancing Islet Survival and Function Through MSC-Secreted Molecules

The study involved treating human islet cells, sourced from nine donors, with this special cocktail before transplanting them into diabetic mice. The results were compelling. Not only did the pre-treated islet cells demonstrate an improved ability to produce insulin in response to glucose, but they also showed a remarkable resistance to apoptosis, a form of programmed cell death induced by inflammatory cytokines, which are often present in high levels in transplant environments.

What stands out in this research is not just the in vitro success but also the remarkable in vivo outcomes. Diabetic mice that received the MSC-treated human islet transplants maintained normal blood glucose levels for an extended period, highlighting the enhanced survival and functional capability of the treated islets. This was in stark contrast to mice that did not receive transplants and suffered from elevated blood glucose levels.

Expanding the Possibilities of Islet Transplantation for Type 1 Diabetes

The study underscores the potential of using a defined cocktail of MSC-secreted molecules to precondition human islet cells before transplantation. This approach could significantly improve the longevity and efficacy of islet transplants, offering a more durable solution for managing type 1 diabetes. By increasing the functional survival of transplanted islets, this method could potentially expand the pool of viable islet donors, making the treatment accessible to a broader range of patients.

The implications of this research are profound. By addressing one of the critical challenges in islet transplantation — the rapid loss of transplanted cells — this approach paves the way for more successful diabetes treatments. It not only promises to enhance the quality of life for those living with type 1 diabetes but also signifies a step forward in the quest for a cure.

In essence, this study illuminates a path toward improving the outcomes of human islet transplantation through a novel, cell-free strategy. By leveraging the healing powers of MSC-secreted molecules, scientists are on the brink of making islet transplantation a more effective, reliable treatment for type 1 diabetes. This research not only highlights the innovative intersections of cellular biology and medical treatment but also offers hope for a future where managing diabetes could be less about daily struggles and more about long-term recovery.

Our Community Fundraising Activities

RAISED OVER **£25,619**

TCS London Marathon 2024

We were very lucky to receive 8 gifted places in the 2024 London Marathon from a corporate partner. This enabled us to issue a call for applications. Following a thorough review process, the places were allocated to 8 amazing runners who raised over £25,619 for DRWF.

LONDON MARATHON
OUR CLASS OF 2024

"My journey with diabetes inspired me to join the marathon team and raise funds for the Diabetes Research & Wellness Foundation. Since my diagnosis in 2018, I've been enthused by efforts to advance care and find a cure for this condition. What drives me even more is the stigma associated with diabetes, fuelled by a lack of understanding and misconceptions in society. I've encountered ignorance and negativity, which only emphasise the urgent need for education and increased awareness.

Whilst aiming to achieve a great time, I also wanted to challenge this stigma in the process. I believe that with increased understanding, we can change perceptions and support others affected by diabetes."

Lyle Pentith – DRWF London Marathon 2024.

Dance for Diabetes

RAISED OVER **£27,629**

Dance for Diabetes saw impressive growth in 2024. We connected with more families and made a bigger impact through educational resources, school assemblies, and fundraising incentives.

Fifteen schools across Hampshire took part, with 4,431 children raising an incredible £27,629.
This was a 56% increase in funds compared to 2023 and a 64% rise in the number of participants.

Since 2022, we've given back over £20,000 to the schools involved in the program, thanks to our commitment to share 40p of every £1 raised at each school. This support has helped schools purchase items like playground benches, sensory gardens, outdoor gym equipment, and musical instruments.

Looking ahead, we aim to expand this event in 2025 with a goal of reaching 5,000 students and raising an ambitious £35,000. This model demonstrates a community partnership that benefits everyone involved, raising awareness of diabetes amongst schools, families and children through our healthy lunchbox literature whilst raising income that is split 60% to DRWF and 40% to participating schools.

"New Horizons Primary School relished the opportunity to be involved with Dance for Diabetes. Combining the learning of this dance within PE lessons and children practising at home, it was a fantastic way to encourage children to get moving in a fun environment. The atmosphere in school was incredible, we ran the event as a multi-coloured dress down day and we decorated the playgrounds with multicolour bunting so there really was a party atmosphere. Not only did all our children love being involved in the event, but it also meant as a school we generated an income of £1,785.96 (40%) which was an amazing result".

Mr Jones Headteacher, New Horizons Primary School Thinking Schools Academy Trust

Cardiff Half-Marathon 2024

RAISED OVER **£8,303**

We managed to secure 15 spots for the 2024 Cardiff Half Marathon and to our amazement, the event sold out to the public in no time which helped us to quickly allocate our own places. Before long, we were collaborating with an amazing group of enthusiastic and dedicated runners.

Thanks to their efforts we exceeded our initial fundraising goal, raising an impressive £8,303.75.

"In September last year I sadly lost a special family member. A man that I was proud to call my grandfather. For the majority of his life, he suffered with ill health mainly caused by Diabetes. Watching him battle through all that he did with no fear or complaints has made me realise what a true fighter meant in my eyes. He was a kind, loving and a very hardworking man that would always prioritise others, even if his health had the best of him some days. He loved being in his family's company that he cherished and adored dearly. Watching him succeed in life has taught me that hard work does pay off! Therefore, in memory of his life, I decided to participate in running the Cardiff Half Marathon in 2024 with a target of supporting all that are living with Diabetes."

Maddison Rae Evans – Cardiff Half Marathon 2024. Trust

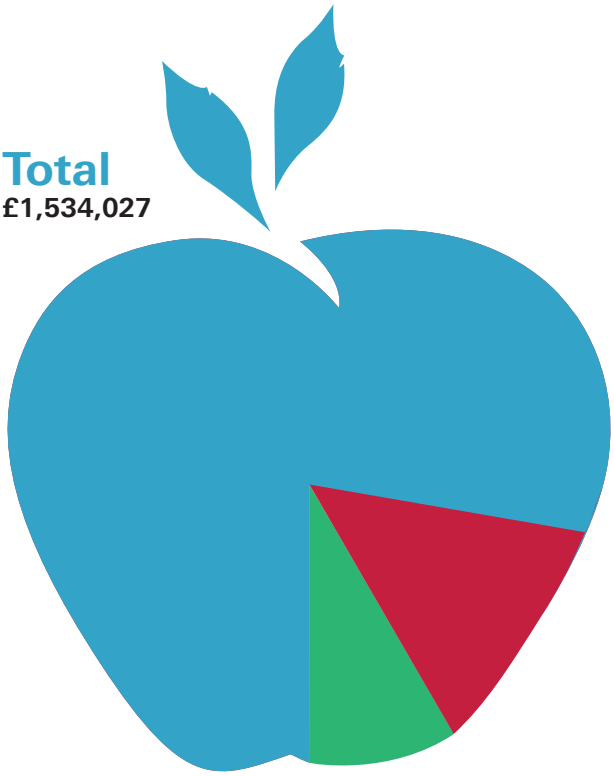
Our incredible donors make it possible to support people living with diabetes across the UK and drive vital research.

Income Expenditure Profile 2024

The information presented here is not the full statutory accounts but a summary of the information which appears in the full accounts for financial year ending 2024. This summary information may not contain sufficient information to allow for a full understanding of the financial affairs of the Diabetes Research & Wellness Foundation (DRWF). The full statutory accounts can be supplied on request or accessed via the Charity Commission website by entering the charity registration number 1070607 in the 'find a charity' search box.

Income

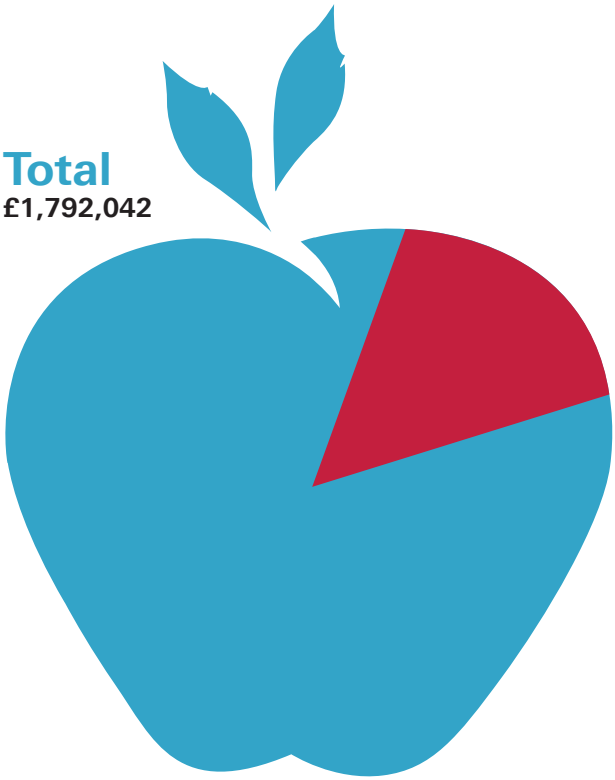
Total
£1,534,027



77%	14%	9%
Donations & Legacies	Charitable Activities	Other

Expenditure

Total
£1,792,042



85%	15%
Charitable Activities (Awareness, educational support, research funding)	Raising Funds

85p in every £1 spent on delivering our charitable objectives of raising awareness, delivering information and educational support programmes, as well as funding the research that we believe will make a difference to the lives of people living with diabetes. #stayingwelluntilacureisfound

Your support makes all the difference

YOUR GENEROSITY HELPS OUR DREAMS BECOME A REALITY!

Alarmingly, diabetes continues to grow in pandemic proportions around the world and with more than 5 million people now living with diabetes in the UK, our work is increasingly important.

Did you know that individual donations and legacies make up much of our income?

Your gifts enable us to fund vital awareness campaigns, and educational programmes that support self-management of diabetes, whilst the research we fund seeks to improve understanding, treatment, management and cure of diabetes.

Contact us and get involved

YOU can do any one of these things and so much more to support our work. We are investing in a brighter future for people with diabetes, WILL YOU

Visit our website and see how you can GET INVOLVED https://www.drwf.org.uk/get-involved/

Email enquiries@drwf.org.uk to request further information OR Call us on 023 9263 7808

Will you make a difference? You could -

VOLUNTEER

Become a volunteer supporting the delivery of our campaigns and Wellness educational events – we are a small team and volunteer help is vital to ensure we can deliver our award-winning activities across the country.

DONATE

Make a regular donation by direct debit to support all our work by becoming a Partner for the Cure – regular giving means that we can plan effectively for future activities and more of your donation goes straight to the cause!

PLAY OUR LOTTERY

Play our lottery. This is a great way to support our work whilst having the opportunity to win a cash prize – you can sign up to play online by monthly direct debit.

FUNDRAISE

You can take part in numerous thrilling events throughout the year, across the country, putting the FUN into fundraising! This is a great way to get actively involved in supporting the charity, creating awareness and funds to support the cause.

GIVE A GIFT OF HOPE

Leaving a gift in your Will, is a powerful and easy way of supporting our work and leaving a legacy for future generations. A significant percentage of our income each year comes through legacy bequests. It's surprisingly simple to set up and supports our commitment to multi-year research projects that might just generate the next big breakthrough.

2024 Charitable Trusts and Grants Received

We are very grateful to the charitable trusts and foundations who have so generously invested in the DRWF, facilitating the expansion and continued development of our education and research programmes.

- **Shyama Shyam Trust**
- **The Wiseman Foundation**
- **Tonge Family Trust**
- **Jake Memorial Charitable Trust**

Legacy notifications received in 2024

Leaving a gift in your Will, is to leave a gift of hope for future generations. Legacies are vital to every charity as they provide the bedrock financial support that we rely upon to look ahead and progress effectively. A legacy bequest to DRWF enables us to continue supporting world-class research whilst the educational programmes that we provide ensure that people with diabetes are 'staying well until a cure is found…' A legacy to DRWF is an investment in a brighter future for people with diabetes. In 2024 we received legacies from the following estates:

- Norman Barrie Cooper
- Kathleen May Luff
- Prudence Gertrude Thomas
- Joan Thys
- John Blair Potter
- Patricia Elizabeth Bennett
- Jan Smejkal
- Patricia Anthea Terry
- Beryl Doreen Griffiths
- William James White
- Brenda Mckinnon Fox
- Constance Stevenson Kendrick
- Phyllis Lillian Bocarro
- Annie Constance Love
- Michael Cedric Gleed
- Valerie Taylor-Price
- Roger Victor Swain
- Jeanne Gladys Apperley
- Mardelle Letitia Jordan
- Christine Karen Marson
- Moira Graham
- Mary Eleanor Noar
- Barbara Ann Taylor
- Eleanor Louise Maude Rushby
- Margaret Loraine
- Patricia Anthea Terry
- Brian Peter Sanders
- Evelyn M Renton
- Miss P M Edwards
- John Bolwell
- John Swain
- Ian Wylie Anderson
- William Richard Edwards
- Esther Dorothy May Oxley
- John Bernard Farrell
- Michael Hansford
- Valmai Eluned Cross
- Christine Jean Holdaway
- Sheila Alma Smith
- Geoffrey Skellington
- Clarence Frost
- Joyce Ann Appleton
- John Milne Potter
- William Boyle Knox
- Rita Winifred Jones
- Dinah Mary Boulter
- Janet Rosemary Weeks
- Jessie Wallace
- Joan Wyatt
- John James Campbell
- Doreen Rose Kendall
- Doris Mary Phillips
- Lois Marjorie Oldfield
- Hilary Midgeley
- William Richard Gibson
- Nelson James Smith
- Ronald Sutherland
- Enid Dorothy Woods

Giving in memory of a loved one

In memory giving is a special way of remembering a loved one, and the causes that were important to them. We are honoured to be nominated to benefit from donations after a person passes away. Donations given in memory are a positive way of celebrating life which helps us to continue funding the research and educational programmes that improve quality of life for people with diabetes. In partnership with 'Much Loved', the memorial tribute charity, you can set up a tribute page in memory of a loved one which can be shared with family and friends – www.drwf.org.uk/get-involved/giving-in-memory.

much loved

In 2024, we received gifts in memory of the following –

- Alan Adams
- Shiela Aitken
- Edward Avis
- Yvonne Barlow
- Steve Bell
- Pamela Benford
- Rakhmat Bibi
- Millicent & Stanley Blackwell
- John Briscall
- John Cooper
- Marcus Corr
- Jamie Cronin
- Tessa Dare
- Anuka Das
- Tina Dennis
- Mary Dunn
- Keith Edgson
- Douglas Elliott
- James Fell
- Steven Foster
- Jean Furnell
- Angela Galbraith
- Pamela Gerring
- Karen Grove
- Michael Hansford
- Jeffrey Hodge
- David Howell
- Mazhar Iqbal
- Stewart Jamieson
- Lorna Jeffrey
- Morton Johnston
- Donald Kaiser
- Marjorie Kalesnikovs
- Willam Kenyon
- Susan Lord
- Paul Markham
- Kenneth Mathews
- Peter Millar
- Ishwari Mirpuri
- Michael Mosley
- Padi Nadarajah
- Ian Osborne
- Nadarajah Padikalingam
- Dan Parker
- Shirley Pash
- Pauline Pickard
- Robert Prothero
- Debbie Quinn
- Colin Ralph
- Colette Ray
- Alyson Rickman
- Lorraine Seal
- Sheena Simpson
- Margaret Smith
- Brian Smith
- Sandra Soffe
- Phil Stone
- Paul Summerfield
- Hilda Tate
- Graham Tranter
- Pamela U'ren
- P Vaz
- Thomas Wallace
- Lois Ward
- Michael Weeks
- Harry Wells
- D E Whitfield
- Howard Wilson
- Roy Winchcombe
- Martin Wright

Our work is made possible only through our supporters' commitment and generosity, for which we say a heartfelt **THANK YOU!**

Our focus in 2025 and beyond

Our focus for 2025 is very much on ensuring that we have the necessary funds to build a resilient and sustainable organisation that can meet the ongoing, and ever-changing, needs of our beneficiaries.

Whilst we recognise that the charity sector continues to be a challenging space, industry reports do offer some little nuggets of hope. Take up of mass participation events and community fundraising activities appear to be on the increase especially with younger people, a community that we are working hard to reach. At the end of 2024 we secured a debenture for 20 TCS London Marathon places for the next 4 years. This was a big win for our small community fundraising team of 2 who are intent on maximising this opportunity alongside a growing schedule of home-grown and third-party activities.

With investment in individual and sustainable giving programmes, as well as a focus on securing appropriate partnerships and sponsorships, we are intent on reversing the negative impact that both the pandemic and the economic climate have had on our ability to diversify and develop our fundraising portfolio and ultimately deliver Research and Wellness programmes that meet the needs of the diabetes community today and in the future.

To do this effectively, we plan to –

- Broaden skill base in the Board of Trustees and diversify representation of the community that we serve.
- Review current operations, processes and procedures to ensure that we are maximising opportunity to create sustainable income streams and delivering relevant beneficiary services.
- Increase visibility of DRWF as an organisation that packs a punch above its weight in delivering benefit for our diabetes community by developing meaningful partnerships that align with our mission, vision and values and help us to extend our reach of target audiences.
- Elevate credibility of DRWF programme activities through clear and concise impact assessment, and consistent marketing messages that enable us to 'cut through the noise' in a competitive third sector.
- Continue to identify ways in which to create cost-efficiencies and effect organisational change within the charity to make for an organisation that can navigate an ever-changing landscape and is robust and fit for the future.

BECAUSE OF YOU...

THANK YOU FOR SUPPORTING DRWF

Our aims are threefold

- Raise awareness of the different types of diabetes, their risks and symptoms.
- Provide the information and practical tools to support a robust self-care approach to diabetes management.
- Fund the diabetes research that we believe will improve our understanding; develop new management strategies; develop new treatments and ultimately, find a cure.

Diabetes, whatever the type, is a complex long-term condition but from diagnosis, with the right treatment and support, it can be managed effectively.

Our programmes are designed to ...
inform, inspire, empower and support.

Don't let diabetes prevent you from living a full and healthy life. Don't let diabetes control you!

We fund some of the best and brightest diabetes researchers in the UK and around the world. We award Clinical and Non-Clinical Fellowships; fund Pump Priming (proof of concept) projects; and contribute to long-standing programmes through institutional and contract funding. We are members of the Association of Medical Research Charities (AMRC) and operate a robust peer review process on all applications for funding, so that you can be assured we are spending donations wisely and funding the work most likely to deliver positive results.

Together, we are investing in a brighter future for people with diabetes and ensuring that those living with diabetes are *'staying well until a cure is found...'*

THANK YOU

To find out more about out work, to join our Diabetes Wellness Network, or to donate

www.drwf.org.uk

Diabetes Research & Wellness Foundation (DRWF)
Building 1000 Langstone Park
Havant PO9 1SA
Hampshire

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Company Limited by Guarantee, Company no: 03496304
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Diabetes Research & Wellness Foundation