# DIABETES UK RESEARCH 2022 FUNDING OUTCOMES AND SUCCESS RATES

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# OUR PORTFOLIO

# Our portfolio in 2022

Our current research portfolio comprises of 134 grants worth over £35 million.

In 2022, we funded 34 new research projects funded in 2022. These can be divided into:

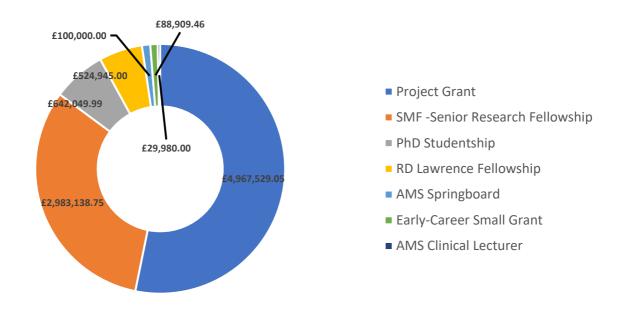
### Awards funded by Diabetes UK

- 1 Fellowship (£524,945.00)
- 6 PhD studentships (£642,050.00)
- 6 early career small grants (£88,909.46)
- 17 research projects (£4,967,529.00)

### Awards funded in partnership

- 1 AMS Clinical Lecturer Starter Grant (£29,980.00)
- 1 AMS Springboard Grant for Basic Scientists (£100,000.00)
- 2 Steve Morgan Foundation Research Fellowships (£2,983,138.75)

Figure 1. The total cost of Diabetes UK research awards 2022, divided by type.



### Success rates

In 2022, we funded new research (lifetime costs) totalling £9,336,552.25. This is comprised of £6,165,933.50 and £3,170,618.75 leveraged through partnership.

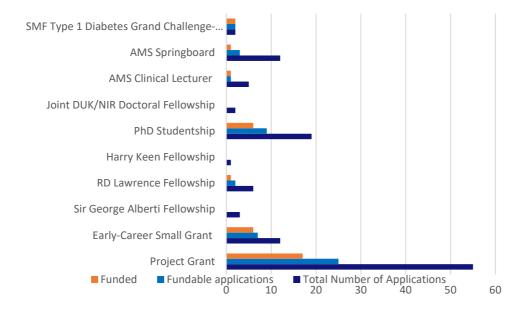
Of the 117 applications submitted across all funding schemes, including those through partnership, 49 applications scored were scored as fundable by our Scientific Research Committee and Grants Advisory Panel. Of these, we were able to fund 34 applications, which is 69% of applications that were deemed to be high quality by our Committees and Panels. Our award success rate for applications submitted to all funding schemes was 29%. This is similar to that in 2021, when our success rate was 28%. Figure 2 shows the number of applications submitted, fundable and funded.

These figures include four awards made through partnerships with the Academy of Medical Sciences (AMS), Great Foundations and Fight for Sight. We also awarded two Fellowships through our exciting new partnership with JDRF and the Steve Morgan Foundation (SMF).

Of the 17 Project Grants we funded in 2022, three were grants submitted through our highlight notices (18%). Highlight notices are calls for projects to answer a specific research question that has been identified by our Diabetes Research Steering Groups. In 2022, we had three highlight notices:

- Understanding the clinical relevance of C-peptide concentrations in type 1 diabetes
- Diabetes and foot care
- Understanding the pathogenesis of diabetes that develops atypically, or in minority groups

Figure 2: The number of applications submitted across all Diabetes UK funding schemes in 2022 (including those in partnership).



## Research area & type

Figures 3, 4 and 5 provide a breakdown of the awards made based on the type of diabetes, type of research and mapped against the Diabetes UK strategic outcomes. Diabetes UK funds research for all forms of diabetes and both basic and clinical research.

Figures 3 & 4: Diabetes UK research projects diabetes type and area

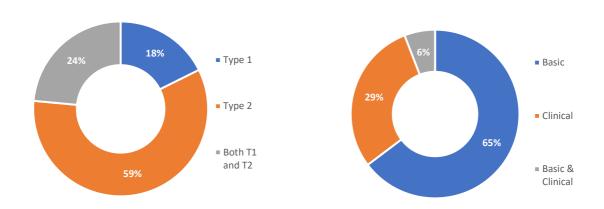
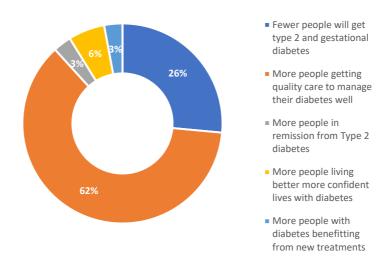


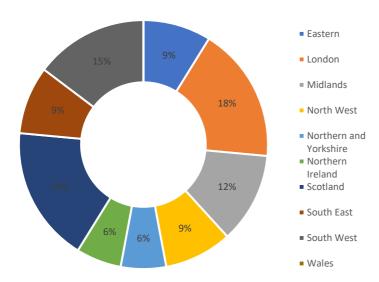
Figure 5: Diabetes UK organisational strategic outcomes



### Locations

Figure 6 shows the location of the research projects we have funded in each UK region in 2022. No applications were funded in Wales in 2022.

Figure 6. Diabetes UK 2022 awards by UK region



### 2022 Awards

Here you can see the list of our 2022 grant awardees.

(Note: The list does not include the grant by the Academy of Medical Sciences Springboard Biomedical Science grant which falls as part of a funding consortium)

### **Project Grants**

Longevity protein therapy to protect the heart from diabetes

Professor Paolo Madeddu, University of Bristol

GC-globulin as a novel regulator of alpha cell function and glucagon secretion during type 2 diabetes

Professor David Hodson, University of Oxford

Does insulin resistance in oxytocin signalling systems drive detrimental food choices? Dr John Menzies, University of Edinburgh

Understanding how sNogo-B protects blood vessels in diabetic kidney disease.

Professor Luigi Gnudi, King's College London

RGD-therapeutics for cardio-metabolic disease

Professor Stephen Wheatcroft, University of Leeds

Role of median eminence oligodendrocytes in the anti-diabetic action of FGF1

Dr Clemence Blouet, University of Cambridge

Rational optimisation of agonistic INSR antibodies for the treatment of severe insulin resistance

Dr Gemma Brierley, Anglia Ruskin University

UNBIASED: Understanding Inequalities and Barriers to Accessing Diabetes Technology in Children and Young People with Type 1 Diabetes.

Professor May Ng, Southport and Ormskirk Hospital NHS Trust

Understanding sex differences in beta cell responses to metabolic stress.

Dr Aileen King, King's College London

Resting beta-cells to reduce their metabolic demand and improve enduring glycaemic control Professor Nigel Irwin, University of Ulster

Investigating the outcomes of pregnancy after metabolic surgery: is sleeve gastrectomy better than gastric bypass?

Professor Tricia Tan, Imperial College London

The role of cation-dependent mannose-6-phosphate receptor (M6PR) in  $\beta$ -cells and its potential as the rapeutic target for the treatment of diabetes

Dr Aida Martinez-Sanchez, Imperial College London

Humoral responses to epitopes of GAD65: the effects of age

Professor Kathleen Gillespie, University of Bristol

Tackling type 2 diabetes by reducing the chronic release of toxic amounts of fatty acids from adipocytes

Professor Robin Klemm, University of Oxford

### Project Grants related to our Highlight Notices

C-peptide trajectory in type 1 diabetes pregnancy: a new tool for precision medicine for mothers and babies?

Dr Claire Meek, University of Cambridge

Rational optimisation of agonistic INSR antibodies for the treatment of severe insulin resistance

Dr Gemma Brierley, Anglia Ruskin University

REAL PRETECTION - Preventing diabetic foot ulcers using real-time foot pressure monitoring and alert technologies- *funded in partnership with The Great Foundations* 

Professor Neil Reeves, Manchester Metropolitan University

### Early-Career Small Grants

Oncometabolite regulation of the PHD3/CPT1B/VDAC1 axis in diabetic cardiomyocytes Assistant Professor Michael Dodd, Coventry University

Microglia circadian disruption in progression of diabetic retinopathy – funded in partnership with Fight for Sight

Dr Eleni Beli, Queen's University Belfast

An investigation of insulin action in human SH-SY5Y neuronal cells to develop neuronal markers of insulin sensitivity

Dr Nicola Morrice, University of Dundee

Myeloperoxidase as therapeutic target for enhancing wound healing in people with diabetes Dr Irundika Dias, Aston University

Antipsychotics and Type 2 Diabetes in Children and Young People: A Long-Term Follow-up Population-based Study

Dr Wallis Lau, University College London

### Blood-Flow Restriction Exercise to Manage Type-II Diabetes

Dr Lewis Macgregor, University of Stirling

### RD Lawrence Fellowship

Age at diagnosis matter. What can the pancreas teach us about Type 1 diabetes?

Dr Pia Leete, University of Exeter

### PhD Studentships

Understanding how Vitamin C enters human fat cells and whether reduced entry promotes type 2 diabetes

Professor Jon Whitehead, University of Lincoln

The role of RNA-binding proteins in determining beta cell fate in response to ER stress Professor Terence Herbert, University of Lincoln

Brain penetration of metformin: friend or foe in diabetes?

Dr Craig Beall, University of Exeter

MItigating the Risk of developing type 2 diabetes Associated with GEstational diabetes (MIRAGE)

Dr Nerys Astbury, University of Oxford

Targeting the hyaluronan-CD44/RHAMM pathway in obesity-related kidney damage Dr Li Kang, University of Dundee

The role of iron homeostasis and ferroptosis in skeletal muscle dysfunction in type 2 diabetes Professor Lee Roberts, University of Leeds

### Academy of Medical Sciences Clinical Lecturer (partnership)

Patient preferences for the delivery of the non-alcoholic fatty liver disease clinical pathway: let's move towards patient-centered care

Dr Theresa Hydes, University of Liverpool

### Academy of Medical Sciences Springboard for Biomedical Sciences (partnership)

Targeting p53 to suppress non-alcoholic steatohepatitis comorbid with type 2 diabetes mellitus

Dr Timothy Humpton, Glasgow Caledonian University

Steve Morgan Foundation Type 1 Diabetes Grand Challenge- Senior Research Fellowship

Development of Therapeutic Strategies to Regenerate Pancreatic Beta Cells: Towards a Disease-Modifying Treatment for Type 1 Diabetes

Dr James Cantley, University of Dundee

Leveraging new knowledge from the human pancreas to advance and improve understanding and treatment of Type 1 diabetes

Professor Sarah Richardson, University of Exeter