



Detect early. Treat better. Save lives.

Research strategy 2023 – 2028



# Research saves lives

Pancreatic cancer is the deadliest common cancer. It's unacceptable that more than half of people diagnosed die within 3 months. For too long, pancreatic cancer has been left behind.

**Now is the time to change this.**

Your support is helping us lead the way in pancreatic cancer research. The millions of pounds we invest in world-class research each year is thanks to our incredible supporters.

**Thanks to you, over the past five years we have seen unrivalled progress** in our understanding of how to detect and treat this devastating disease, bringing us closer to the breakthroughs that will save thousands of lives. It is vital that we maintain this momentum to accelerate the pace of discoveries that we so urgently need.

This research strategy sets out our ambition to ensure that the next five years see the transformational advances in pancreatic cancer research that have been sorely lacking over the last 50 years. We will focus on two key areas; early detection and better treatment, where breakthroughs are desperately needed in order to double survival rates. Crucially, **this strategy represents the most significant commitment to research investment that we have ever made**, with a promise to ensure our funds have the biggest impact possible for our community.

Our researchers are pushing the boundaries of what's possible. This strategy will drive forward the research breakthroughs that will enable us to detect earlier, treat better and save thousands of lives every year.

"The scale of the challenge we face in pancreatic cancer requires a bold approach. Research is the answer, progress is coming, but it's time to step up our investment so we can accelerate the breakthroughs so badly needed for people facing this devastating disease and save lives. Over the next five years, we'll be investing more into ground-breaking research than ever before – but we can't do it alone. We need your help. The transformation starts right here. There's no time to wait."



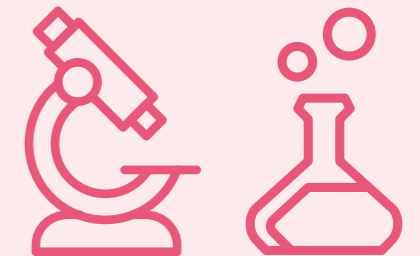
**Diana Jupp**, Chief Executive

"As the leading pancreatic cancer research charity in the UK, we have a proud track record of funding world-class research that catalyses progress, whether that's through better biological understanding, treatment discovery work or early detection programmes. This new strategy illustrates our ambitious commitment to progress over the next five years, and is a blueprint for how we will continue to support the pancreatic cancer research community to improve outcomes for people diagnosed with pancreatic cancer."



**Professor Michelle Garrett**,  
Chair of Scientific Advisory Board

To date we have invested over  
**£12 million**  
into cutting-edge research



# Our vision



**Our vision is a world where everyone with pancreatic cancer survives to live long and well.**

Over the next five years we're aiming to **double survival rates**. It's a huge challenge, but we have ambitious goals to make this a reality.

Ambitious goals require transformational investment. We will invest more than ever before into pancreatic cancer research to help us achieve our two strategic objectives:

1.



## **Detect early.**

Creating a world in which as many people as possible are diagnosed at an early stage

2.



## **Treat better.**

Providing effective treatment options to everyone affected by pancreatic cancer

We know more now than ever before about pancreatic cancer. However, we need to expand our knowledge even further in order to achieve our aim of doubling survival rates.

We will strive to gain an even deeper understanding of pancreatic cancer as well as a clear appreciation of how doctors in the real-world diagnose and treat people with pancreatic cancer, so that laboratory breakthroughs can quickly and seamlessly be moved to the clinic where they will benefit patients.

Underpinning our objectives, **it is crucial that we foster a world-leading research environment to support rapid progress.**

We will develop and support the pancreatic cancer community, encouraging meaningful collaboration and innovation, and provide the tools researchers need to make advances and find breakthroughs quickly.

**And we will do all of this side-by-side with people affected by pancreatic cancer,** listening to their experiences and challenges, and funding the research that truly addresses what matters most to them.



If you don't understand something that's broken, you can't fix it. Every day we are working to improve our understanding of pancreatic cancer. This will lead to better prevention, better detection and better treatment. That is the future for pancreatic cancer."

**Professor Gerard Evan,**  
The Francis Crick Institute



I received an early diagnosis, had surgery and here I am 14 years later. I know I am an exception but I got a chance – a chance that I think everyone must get.”

**Lynne Walker,**  
Pancreatic cancer survivor

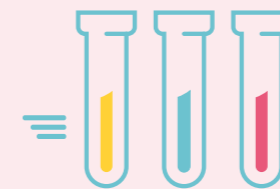


The five-year survival rate of pancreatic cancer  
**is just 7%,**  
making it the deadliest common cancer



## Pancreatic cancer needs to be a research priority

For decades, pancreatic cancer has been left behind, receiving just 3% of the UK cancer research budget.



We're calling for at least  
**£35 million a year**  
to be invested into pancreatic cancer research

**We know that the right level of funding can change everything.** There's been incredible progress in other cancers like breast, prostate and leukaemia thanks to significant and consistent investment. In the last 20 years alone, leukaemia has received over £522 million of funding – which is four times the amount invested in pancreatic cancer research over the same period. This sustained research funding has led to a quadrupling of the five-year survival rate for leukaemia over the past 50 years.

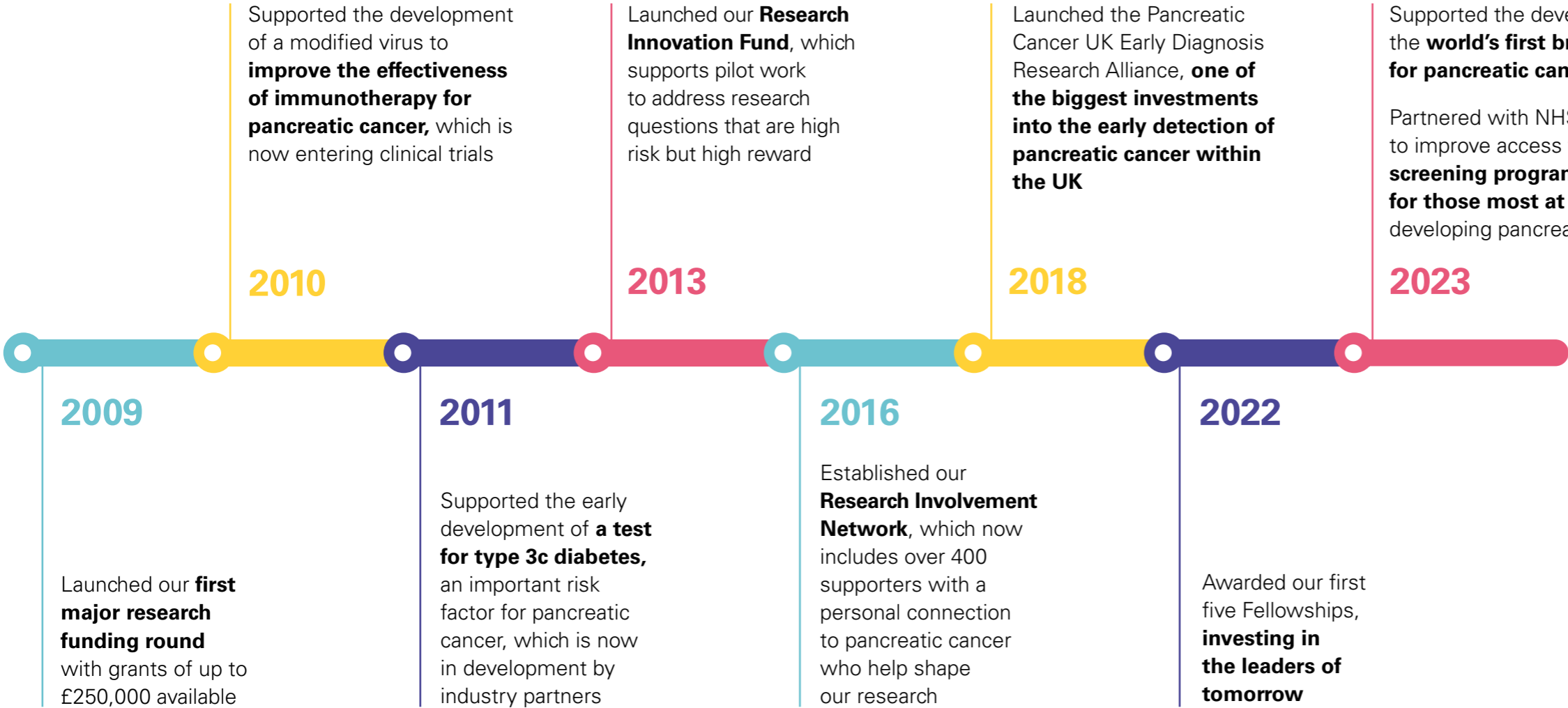
**With an increased, long term investment in pancreatic cancer research, we believe survival rates can be transformed.**

By investing more than ever before in research, we are doing everything we can to reverse this, but increased government funding remains essential.

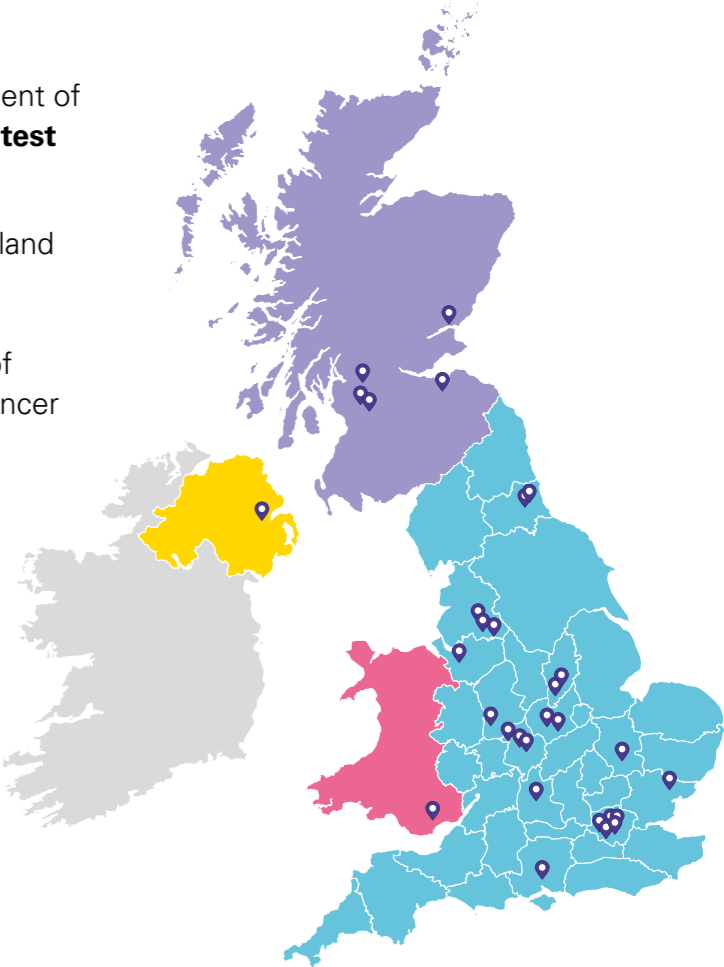
**We will be working with the government and other funders towards achieving a sustained investment of at least £35 million a year into pancreatic cancer research.**

# Laying the vital groundwork

Over the past 14 years, we have invested over £12 million into research. Here are just a few examples of those investments which have provided the foundations for our bold new strategy:



We support research across the UK



Map shows location of all research grants that have been awarded as of June 2023

# Our progress so far

## Early detection

As a result of funding from us and others, there are now multiple promising tests in development which focus on blood, breath and urine. Our early detection researchers have already achieved some significant results including:

### Developing the very first blood test for pancreatic cancer



which is now undergoing further development commercially in the USA. Early trial results show that this test has an accuracy of over

# 95%

### Establishing valuable sample collections



now being used by research teams in the UK and internationally to refine new approaches to pancreatic cancer detection

### Identifying new markers of type 3c diabetes



which is associated with a higher risk of pancreatic cancer



### Helping GPs diagnose

pancreatic cancer by refining clinical decision-making tools

## Treatment

Our research teams across the UK are getting closer to understanding what makes pancreatic cancer so difficult to treat and developing approaches to overcome this. This includes:

### Generating new therapeutic tools

for pancreatic cancer, including CAR T-cells and cancer-destroying viruses



### Showing how pancreatic cancer cells switch fuel source

in challenging environments, providing a new target to explore in treatment development



### Exploring how to make radiotherapy more effective

for pancreatic cancer, and which drugs to use in combination with radiotherapy for the best results



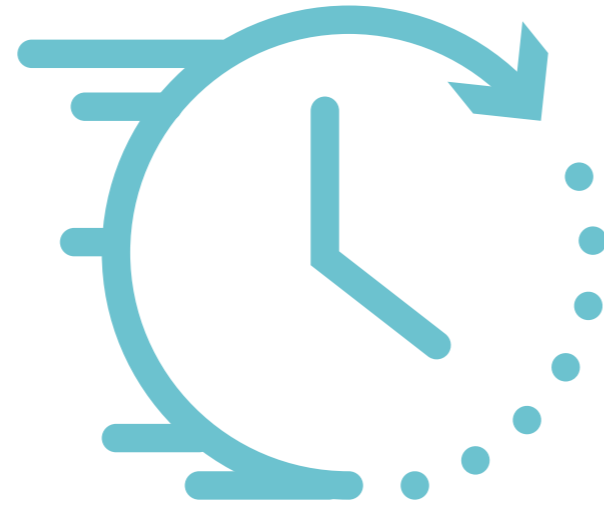
### Applying focused ultrasound

to selectively destroy tumour cells and boost the ability of the immune system to recognise and remove them

### Using bioengineering

to reduce side effects of therapy and increase treatment benefit





# Detect early

## Objective one

Early detection saves lives. But the statistics remain stark. Over 80% of people with pancreatic cancer are diagnosed late. Almost half of people receive their diagnosis as emergency cases, often in A&E.

Driving earlier detection is essential if more people are to have their cancer diagnosed at a stage where they are still eligible for life-saving or life-extending treatment.

Recent advances have laid the vital groundwork for the development of new tests, as well as improving our understanding of how to better identify, assess and monitor people at increased risk. **The coming years have the potential to be transformational for the early detection of pancreatic cancer**, but it is vital that we maintain this momentum and continue to invest in this potentially revolutionary area of research.

We will invest in cutting-edge research that will:

### 1. Develop ways to identify and monitor those at risk

Whilst we don't fully understand exactly what causes pancreatic cancer, we do know some risk factors, including a family history of the disease, hereditary pancreatitis and new-onset diabetes. **It is critical that we are able to better identify and monitor those people most at risk of developing pancreatic cancer** and increase our knowledge of the very first subtle biological changes that signify disease, so that they can be identified and treated even before symptoms develop.

### 2. Generate tests and tools to identify people with symptoms at the earliest possible stage

Over 90% of people with pancreatic cancer visit their GP with relevant symptoms in the two years before their diagnosis, providing a significant window of opportunity for earlier detection. The challenge is that these symptoms are often vague and common to many different health conditions. **We must drive the development, refinement and adoption of new detection tools** to help GPs quickly identify patients who need further investigation and treatment.



Although my pancreatic cancer tumour was detected early, many people's aren't detected until very late. Having a way to detect the tumour as early as possible would make a big difference and give a person like myself a longer time to live, and have a better quality of life."

**Charles Czajkowski,**  
Supporter living with  
pancreatic cancer



A few years ago, we knew a little bit about early detection of pancreatic cancer, but finally people are realising how important it is. The future is really exciting.”

**Dr Pilar Acedo,**  
University College London



### By 2028 we will have:

1. Used our improved understanding of how pancreatic cancer starts and progresses to identify **new biological markers for the very earliest detection**
2. Developed pioneering ways **to identify, assess and monitor those people at increased risk** of developing pancreatic cancer
3. Helped generate a **number of tests and tools to quickly identify early symptomatic patients** presenting at the GP, so that they can be referred for further investigations

### This will mean that:

- More people with pancreatic cancer are diagnosed at stages 1 and 2, where treatment or surgery is possible
- Fewer people will be diagnosed in emergency settings, where survival rates are lower
- More people will be able to get treatment for pancreatic cancer, allowing them to survive for longer



## Project spotlight

### Developing the world's first pancreatic cancer breath test.

We are funding a new clinical study to develop a breath test that could detect pancreatic cancer early enough to save thousands of lives a year. In a **world-first for the disease**, a research team at Imperial College London led by Professor George Hanna, are studying how breath samples taken in a GP surgery could ensure people with early pancreatic cancer symptoms, which are often mistaken for other less serious health conditions, are **rapidly referred for scans and lifesaving treatment**.



When we start a research programme, we start from where other people finish, we don't start from point zero. Our programme of work to develop a breath test builds on work that has already been done by Pancreatic Cancer UK.”

**Professor George Hanna,**  
Imperial College London

# Treat better

## Objective two

Early detection alone is not enough, it is vital that we also learn how to treat pancreatic cancer better. Current treatments are limited and highly toxic – and people with pancreatic cancer are often too unwell to tolerate the challenging side-effects they cause. This means that over 70% of people receive no active treatment at all.

Developing new treatments for a disease like pancreatic cancer is very challenging. We have improved our understanding of some of the challenges. For example we

know that pancreatic cancer tumours are adept at hiding from the immune system, meaning that cutting-edge treatments such as immunotherapy which have transformed the treatment of other cancers do not work as well. However, **we need to increase our knowledge further**, and understand more about the microenvironment which surrounds pancreatic tumours and the interactions that take place in and around the tumour, to help us **improve current treatments and find new drug targets**.



We also need to support oncologists, physiotherapists, dieticians and psychologists to do the research that helps us to understand how best to use the treatment tools we have available currently, so that while we are waiting for new breakthroughs, **thousands of people can be treated holistically in a way that could maximise their chances of survival**.

We will invest in cutting-edge research which aims to:

### 1. Develop and discover new treatments

We will focus on building our knowledge of the unique underlying biology of pancreatic cancer tumours and the surrounding cells to help us improve current therapies and ultimately **develop the world's first treatments specifically designed to target pancreatic cancer**. We will support innovative research that will help us to understand how pancreatic cancer cells grow and spread so aggressively and how they influence nearby healthy cells to protect them.

### 2. Enhance current treatments

There are a number of treatments available now that could improve the quality of life and survival of people with pancreatic cancer, but these are not always used routinely or effectively. We will learn how current treatments, like chemotherapy, radiation and immunotherapy, that have proven to be revolutionary in other cancers, can be made **more effective in targeting and destroying**

**pancreatic cancer. We will also dedicate resource and investment to help clinical researchers** build the comprehensive research evidence that we need to define how nutritional, psychological and physical support can be combined. This will then be used to **enhance the outcomes of surgery and chemotherapy, giving people with pancreatic cancer the maximum benefit** from treatments that will help them to live well for longer, extending and saving lives.





We have a duty to start developing new treatments now or else when we achieve breakthroughs in earlier detection, we still won't be able to treat people. We need to find novel ways to better understand tumours to identify effective treatments and change the outcomes for patients."

**Dr Giulia Biffi,**  
University of Cambridge

### By 2028 we will have:

1. **Discovered new ways to target the tumour** and its surrounding environment based on our advanced knowledge of pancreatic cancer biology and genetics
2. **Helped to develop brand new treatments** for pancreatic cancer that are entering clinical trials in the UK
3. Built the knowledge needed to enable **holistic treatment approaches** to be delivered routinely and effectively to all people with pancreatic cancer

### This will mean that:

- More people access and receive life-saving treatment
- More people access high quality supportive care interventions
- Rates of pancreatic cancer recurring will reduce
- Patient quality of life will increase



## Project spotlight

### Improving immunotherapy for pancreatic cancer

Immunotherapy is a novel class of treatments which harness the power of the immune system to target and destroy cancer cells. Viruses which selectively infect cancer cells and also trigger an immune response have shown promise in some cancers. However they are not currently very effective against pancreatic cancer. We funded Professor Yaohe Wang at Barts Cancer Institute, London, to create modified viruses which work better against pancreatic cancer cells. This work was highly successful and led to the development of a new therapy, which is now entering clinical trials. If shown to be effective, these viruses could provide an effective new treatment option for people with pancreatic cancer.



# Enabling us to accelerate change

To achieve transformation in pancreatic cancer research, we need to foster a research culture that accelerates progress. We will do this by **collaborating closely with the research community as well as with people affected by pancreatic cancer**. Only together can we drive forward the change we need to achieve the breakthroughs that will save lives.

We will:



## 1. Attract the brightest minds to pancreatic cancer research

We have a small and dedicated research community, but the scale of the challenge is significant. The **more expertise** we can attract and retain in this field of research, the faster progress will be.



## 2. Embed the voice of people with lived experience

People affected by pancreatic cancer have been the **driving force** behind our new research strategy, and will be critical to its delivery.



## 3. Support innovative research

We will expand our support for **cutting-edge research** and provide opportunities for researchers from all backgrounds and diverse disciplines to think creatively to find new, innovative ways to detect and treat pancreatic cancer.



## 4. Facilitate collaboration

We will continue to facilitate the building of collaborations and work in partnership with others to allow researchers **to share knowledge, avoid duplication of activity** and maximise the impact of our investment.



Our work looks at how radiation therapy affects the immune system. Other funders do not support research like this; research with huge promise but that is yet unproven. If we can't innovate then we are not feeding the pipeline that ends in new treatments in the clinic. Freedom to innovate is essential to make progress and Pancreatic Cancer UK uniquely enables this."

**Professor Jen Morton,**  
Beatson Institute for  
Cancer Research, Glasgow

# Steering our research investment



Over 400  
people



with lived experience are helping us, and the researchers we support, shape research activities. From developing and reviewing research proposals to informing this strategy, these people are at the heart of everything we do.



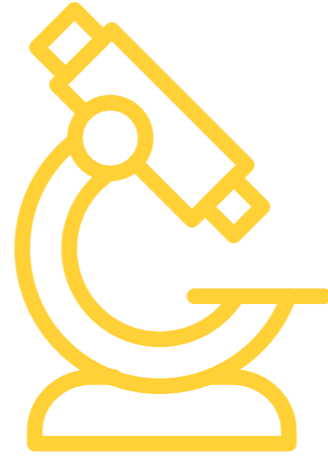
## Research governance: Our International Scientific Advisory Board

In our bid to support **research and researchers of the highest quality**, we have a robust and rigorous review process for each project that we fund. Funding decisions are overseen by our Scientific Advisory Board (SAB), comprising world-leading pancreatic cancer researchers from across the globe, with a diverse range of expertise.



Sitting on Pancreatic Cancer UK's Scientific Advisory Board I see first-hand the world-class research that charity invests in. It is clear that these researchers will play a fundamental role in transforming the detection and treatment of this disease, which is so desperately needed to save the lives of people affected. I am really hopeful for the next five years and excited about supporting the charity to maximise the impact of this strategy"

**Dr Gina DeNicola,**  
Moffitt Cancer Centre,  
Florida and Scientific  
Advisory Board member

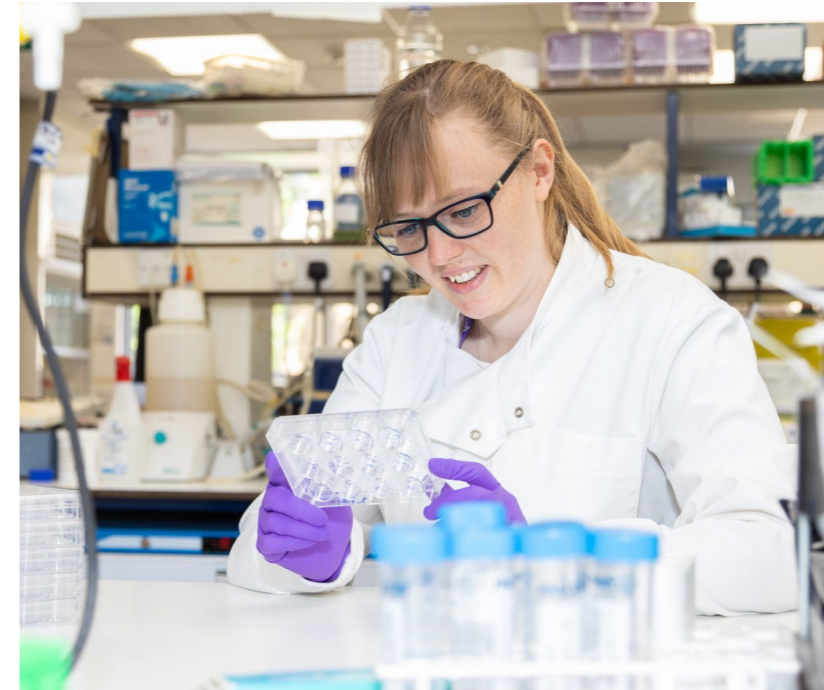


# Research saves lives. But we need your help.

This is our most ambitious research strategy to date, and **we can't achieve it alone**. Together, we can continue the momentum we have achieved to make the next five years truly transformational for people with pancreatic cancer.

Help us to detect early, treat better and save lives.

[pancreaticcancer.org.uk/donate](https://pancreaticcancer.org.uk/donate)



## Support vital research with a philanthropic gift

Individual philanthropists and grant-making trusts and foundations play a pivotal role in funding our vital research. If you are interested in making a gift, please contact the Philanthropy and Partnerships team: [philanthropyandpartnerships@pancreaticcancer.org.uk](mailto:philanthropyandpartnerships@pancreaticcancer.org.uk)



My father died of pancreatic cancer and I wanted to make a meaningful difference to an area of cancer research that had been overlooked and underfunded for so long. I really believe we are at a pivotal moment for early detection and treatment discoveries and the next five years are really exciting. Pancreatic Cancer UK has a clear commitment to funding the very best research and takes great care in ensuring we understand the difference our gift is making."

**Stuart Fletcher,**  
Philanthropist



Whilst I am fortunate not to have a close personal connection to pancreatic cancer, I was shocked to hear about the lack of funding and attention this disease gets. That is why I feel compelled to support the charity and their world-leading research to push forward the progress we need.”

**Robin Phillips,**  
Philanthropist

**Every £1**



that we invest in innovative research generates another

**£7** of support from other funders

To date, our research investments have contributed to

**166**



research collaborations in 17 countries



## Acknowledgements

We developed this strategy by consulting widely across the pancreatic cancer research community and with people affected by pancreatic cancer. We are extremely grateful for the time and insight from everyone who has been involved in shaping our research strategy and ambition.

**Thank you to everyone who has contributed.**



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Registered charity number 1112708 (England and Wales), and SC046392 (Scotland)