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Fundraising for Medical Research in 2022

It is a basic human instinct to help those in need and we British are pretty generous in this respect, particularly for those in trouble with their health. Appeals to alleviate the suffering of patients such as those needing hospice care, heart condition, motor neurone disease, multiple sclerosis, prostate cancer, leukaemia, childhood illness, etc. all pull at our heart strings – and so they should. After all, it motivates doctors, nurses and countless other professionals to devote their working lives to help patients. The funding of equipment, facilities and comforts from generous donors will always be important supplements to the care our NHS provides.

But underneath all this, often going unnoticed and under acknowledged, lies the work of researchers who work doggedly and quietly to produce the next generation of treatments for these horrible conditions. They work long hours for modest stipends. They comprise some of the brightest and the best minds. For the most part theirs is not the satisfaction of working directly with patients. But it is their work for which we should be equally if not more grateful as it is they who produce the new treatments and cures which are delivered by others.

Where would we have been without the research work into Covid which, through vaccination, saved countless millions of lives world-wide? Smallpox? Polio? Bone marrow and kidney transplantation? New antibiotics have been discovered by local researchers in Plymouth. Local brain tumour research is delivering huge benefits for patients. Similarly, liver research, Parkinson's disease and so on. It is not an either/or choice, but for those

who would like to support local medical research, the PMF is here to help you do so. Please consider joining us in one or other of the ways outlined below. Your help is sorely needed.

Denis Wilkins FRCS, Trustee

Gala Ball raises £20,000 for local Parkinson's Research

Our social editor writes:

Thanks to those stalwart supporters who braved dreadful weather on the 26th November, and the sponsorship of many donors, the PMF Annual Gala Ball at Plymouth's New Continental Hotel made nearly £20,000.



Ros James and Mike Plant present a cheque for the sum of £1,100.00 from the Plymouth Breakfast Club to Professor Carroll.



Chris Kallis, Master of Ceremonies, takes a break between duties.



Peter Vosper collects raffle money from willing (?) victims

Kicking off proceedings before dinner, Consultant Neurologist Professor Camille Carroll who leads the University Parkinson's Research team outlined the increasing number of sufferers from this most disabling of conditions. There are 140,000 afflicted in the UK and it is the fastest growing neurological condition across the world. It was pointed out that at least four people in the room would die with the disease. Her research team is using smart-watch-like technology developed by Associate Professor Ed Meinert to monitor the condition of patients in the community, thereby relieving them of the burden of regular hospital appointment. Any deterioration is immediately detected and prompts an urgent hospital or GP visit. This ground-breaking work is an outstanding example of applied local research in action. Funds raised will be used to support the research conducted by Ms Katie Bounsall and to secure her doctorate.



Chris Kallis: "What am I bid for this tin of magic beans?"



Tony Kallis: "Are you sure they are magic?"

Denis Wilkins: "Absolutely guaranteed, mate"

Tony: "Here's 500 quid, then"

Formal proceedings over, fun commenced. The table magic of Robin Fox confused and confounded; the spirits lifted by stirring arias rendered by our tenor, Russell Painter. One hundred and eighty guests dined, danced and bid generously for an array of prizes donated by local individuals and businesses and auctioned by Leon Theisinger. Local jazz band Jessica and the Rabbits kept the dance floor packed through to midnight. This was the third and final PMF annual event generously sponsored by Chris Kallis Solicitors. Chris has been a magnificent supporter and his efforts have led directly to over £60,000 being raised for medical research in Plymouth. Take a well-earned bow, Chris and many thanks to all who helped make this a success.



Terence Lewis and Michael Powers clearly amused. Michael was esteemed photographer for the evening.



Dr. Edward Meinert puts in his (winning bid) for the lovely Georg Jensen Bracelet donated by Michael Spiers.

The PMF Trustees would like to thank everyone who made the gala such a success. The following people and organisations generously donated auction and raffle prizes:

- *Ocean BMW*
- *Terence and Jill Lewis*
- *Mike, Di, and Christian Hockin*
- *Michael Spiers*
- *Denis and Susan Wilkins*
- *Frances Bettison*
- *Clare Coplestone*
- *Theresa Roach*
- *Bistrot Pierre*
- *Chris Kallis*
- *Barry and Anna Oxinou*
- *Geoff and Wendy Beak*
- *Porsche Exeter*
- *Newton Abbot Racecourse*
- *Nick Buckland*
- *Ros James and Mike Plant*
- *Peter Tracey*
- *Lewtrenchard Manor*

Vospers Golf Day

On 9th November 2022, Denis Wilkins and I visited the fabulous Trevoze Golf and Country Club in Constantine, to receive a cheque for £2,100 raised at the Vospers Golf Day. The cheque was presented by Peter Vosper and in attendance were also Jon Tremain, Vospers, Sales Director and Nick Gammon, Managing Director of the Trevoze Club. This is an annual competition which raises money for charities, including PMF, St Lukes and Cornwall Hospice Care.

Adrian Coplestone, Chair



Vosper's Golf Day raised £2,100 for Brain Tumour Research

Student Research into Brain Tumours

Introduction by Professor Adrian Copplesstone

The PMF has for many years supported Brain Tumour Research conducted in the Medical School. The research article below describes the work of one of the PhD students the charity funds. The description is quite technical, but that is the nature of science and shows the molecular detail that modern research is undertaking.

Meningioma is a slow growing cancer of the lining cells around the brain. As it swells, it presses into the brain and disrupts its functions. Because it is not rapidly growing, chemotherapy (which interferes with dividing cells) doesn't work. Radiation can kill cells but the path of the rays through the brain kills normal cells too. The overall survival of those suffering from malignant meningioma is poor. Anything which increases its sensitivity is to the good and will reduce the amount of radiation and thus the damage to normal brain function.

Juri Na (Senior Postdoctoral Researcher) writes:

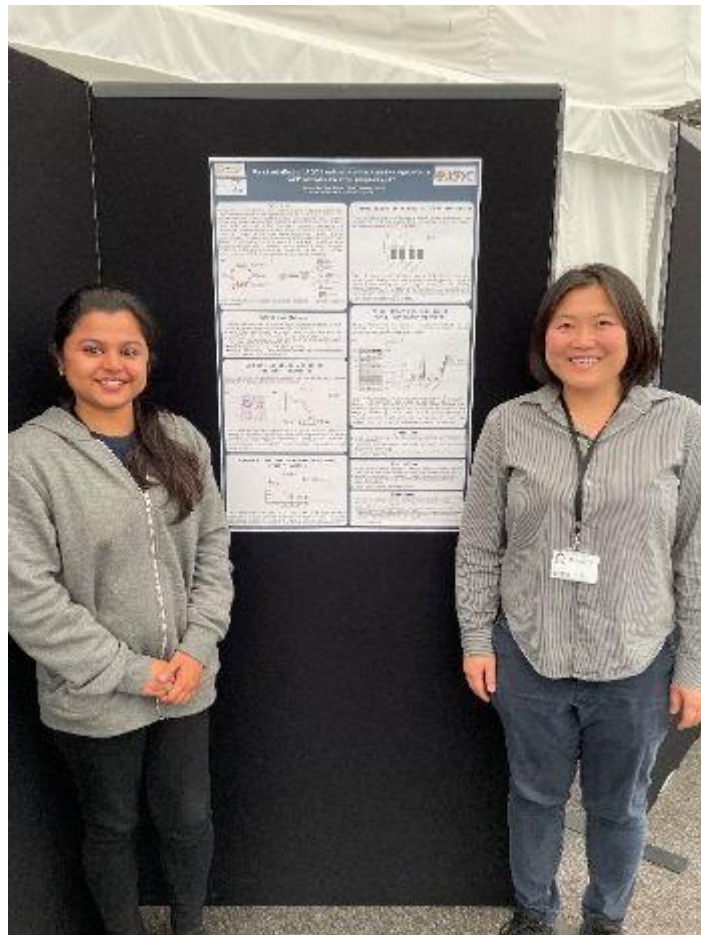
We know that, left to its own devices and without receiving a signal to 'carry on working', every cell in our body will wither and die. It is a neat way of ensuring that old or damaged cells fade away with the minimum of fuss and is known as 'Apoptosis'. If a cell which should fade away refuses to do so and instead goes on to 'breed' uncontrollably it is a cancer. The trick to controlling such delinquency is to target the rogue cells with drugs which will kill

them while sparing their surrounding, well-behaved, fellows. One of the times these rogue cells are vulnerable is when they are busily engaged in reproducing and making the cancer grows.

In order to reproduce the now cancerous cells must follow a set sequence. If this can be disrupted, reproduction is knocked on the head and the tumour withers. Radiotherapy is particularly good at this and our work aims to make rogue cancer cells even more susceptible to those deadly (for them) rays.

Something called HDAC is one of the key components in cell metabolism and reproduction. Blocking it should weaken the rogue cell's ability to work - and breed. This can be achieved by introducing a substance which will smother the HDAC, stop it working to protect the cell- thereby make the dividing and reproducing cell vulnerable to killing agents such as radiotherapy. A little like a soldier being left exposed without cover. That magic bullet is LAQ824 and hence the title of our project is:

"HDAC inhibitor, LAQ824, sensitizes meningioma cells to radiation"



Shahana Shaji and Juri Na (Senior Postdoctoral Researcher)

There is currently limited evidence on the use of 'radiosensitizers' in the treatment of meningioma, and more research is needed to fully understand their potential benefits and risks.

Our study aims to sensitize the meningioma cells to radiation using an HDAC inhibitor, LAQ824 to increase the effectiveness of radiation therapy. In the research labs we have the ability to 'grow' malignant meningioma cells taken from patients undergoing treatment in Derriford. These were then given radiotherapy - again using Derriford facilities. We found that if we applied the blocking/smothering agent LAQ824 before radiotherapy, it was much more effective in stopping malignant cells breeding.

We are now investigating in more depth exactly how it does this. Moreover, it may add to the overall knowledge of how cell division is controlled and the process of apoptosis.

Our work has been 50% funded by the PMF Without the funding provided by PMF and its donors, none of this research would have been possible. PMF funding helped me cover my overseas fees, living expenses, and to take advantage of this great learning opportunity. A part of this study was also presented in the prestigious FoH, Post Graduate Research Showcase 2022. Thank you.

Introducing the new Head of Peninsula Medical School



Professor Laura Bowater MBE

I arrived in Plymouth to take up my new role as Head of the Medical School in early October. My decision to take up this exciting role has meant moving from Norwich Medical School nestled in the most eastern region of England to P Medical School that is the furthest west! Nevertheless, these two medical schools share significant commonalities.

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They were both established as part of the expansion in medical school places that took part at the turn of the 21st century. These medical schools represented a government commitment to expand the number of doctors to meet the needs of less well served communities across the nation and to increase the workforce. Both medical schools, Norwich, and Plymouth, navigate the particular challenges of rural, and coastal communities where transport links and access to health care are not always straightforward. This means that we have a real opportunity to make a positive difference to our local region; we can be a civic organisation. I am delighted to have the opportunity to work at a medical school that is addressing the needs of our local region.

I was lucky enough to spend my early childhood in Uganda, and this experience set me on my future career path. I was exposed to the concept that life forms, invisible to the naked eye, could have a profound impact on lives and livelihoods. My family lived on a rural, agricultural research station and I noticed how crops were decimated, animals failed to thrive, and people lived with the acute and chronic impact of neglected tropical diseases. Our time in Uganda ended abruptly with the arrival of Idi Amin, a forced evacuation from the country and a return to Scotland. I realise that my own lived experience sparked my fascination for this secret, microbial world that has such a profound impact on every aspect of life on earth. I studied Microbiology and Biochemistry at St Andrews University, followed by an MSc and PhD at the University of Dundee, picking up additional life science education along the way.

My current research interest is Antimicrobial Resistance. This began when I started a new job as a research assistant at the John Innes Centre, a world-renowned Research Institute with a focus on plant and microbial science. I was assigned to a project that set out to characterise new antimicrobial compounds from *Streptomyces*, a genus of soil bacteria that are adept at producing natural products. By the turn of the 21st century, scientists and health care providers had noticed a significant problem: antibiotics that had seemed so reliable were becoming less dependable and antibiotic resistance infections started to emerge. To many scientists and all microbiologists, this didn't come as a huge surprise; we had expected it thanks to a clear warning provided by Alexander Fleming in 1945, and our deepening understanding of bacterial evolution. What we were more surprised about was how difficult it was to find effective, new antibiotics, a problem that we still contend with today.

Without a doubt raising awareness of this issue and addressing this problem must be a global priority and it is one that I take very seriously. One of the key attractions that influenced my move to Plymouth was the excellent research focused on combating antimicrobial resistance that is currently being undertaken. This is an excellent example of Plymouth University research, that is addressing real world issues. As I bed down into my new role, one of the things that I am really looking forward to is learning more about the research and expertise that we have in the School, the Faculty, and the University. I am

genuinely delighted to have come on board at a time when we are poised to consolidate and influence our research reputation and impact.

Professor Laura Bowater

Supporting PMF and local Medical Research

You can support the work of the PMF and its beneficiaries in several ways:

- A regular donation by Standing Order to our unrestricted funds. This provides the Trustees with maximum flexibility to dispense within its charitable purposes.
- A single or regular donation to a designated fund (for example, Parkinson's Research, Roger Harris Fund for Brain Tumour Research, Student Bursaries).
- Making provision in your will for a donation from your estate.
- **Running a sponsored charitable event of your own choosing.**

Ways to donate:

- By BACS. Please email me at: admin@peninsulamedicalfoundation.org.uk and I will send you the bank details. (If you wish your donation to go to a specific fund please mark accordingly, otherwise it will be treated as 'unrestricted')
- If you would like to set up a standing order, please do so through the same BACS portal and again it would be much preferred if this could be left unrestricted.
- You can send a cheque made out to Peninsula Medical Foundation to the PMF Treasurer, Metherell Gard, The Old Memorial Hall, Looe, PL13 1PN.
- Just Giving <https://www.justgiving.com/peninsulamedicalfoundation>
- If you are a UK taxpayer, please don't forget to submit the [Gift Aid form which is attached.](#)
- I can be contacted on 07531 898272 or by sending an email to admin@peninsulamedicalfoundation.org.uk.

You can read more about PMF and medical research [here.](#)

Thank you on behalf of the Trustees and beneficiaries.

Louisa Gillett – PMF Administrator

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