

Chairman's Message

Registered Charity No. 257131

I am pleased to report that we are at last, starting to see the numbers of grant applications increasing. We have benefited from some very generous bequests this year and our funding position is very favourable, applications for our travel bursary are also increasing. Additionally the committee have agreed to investigate the provision of funding for PHD students wishing to undertake projects on asthma and allergy.



Steve, Sunita Patel from Leicester Hospitals Charity and Dr Gary Stiefel pictured above at LRI

We have also had a funding request this year for something a little more out of the ordinary. We were approached by Dr Gary Stiefel, who has been a recipient of MAARA funding in the past, to work with Leicester Hospitals charity. The project is set to support the provision of auto injectors for adrenaline (Epi-pens) to be provided to schools in Leicestershire and Leicester City. These are to be used in an emergency rather than using prescribed auto injectors stored by the school for individual pupils. It will also provide inhalers for schools to use for the treatment of Asthma. The challenge now is to obtain funding for the initiative on an ongoing basis.

There have been a few changes to the membership of the Executive committee recently:-

For personal reasons, our Treasurer Peter Teasdale, decided earlier this year to resign from his post. Keen to ensure continuity, Peter has continued in post until we have found a replacement. The process has taken many months and we have had a number of false starts, but I am happy to report that an ex-committee member, Andrew Lewis, has agreed to rejoin the Executive committee and take over the post of Treasurer. I am grateful to Andrew for volunteering to take over the post and I look forward to working with him in the future. I would like to thank Peter for his many years of service and his expertise, always delivered in a self-effacing way. We wish Peter and his wife Christine well for the future.

Our Medical Advice Committee (MAC) is crucial to the operation of the charity, as it examines all applications for funding and makes recommendations to the executive committee on those which should be supported. Dr David Luyt has been chair of the MAC for over 10 years and has recently decided to resign from his position. I would like to thank David for his time and efforts as chairman of the MAC particularly around streamlining and documenting the processes for grant applications. We were happy to accept his recommendation for his replacement, Professor David Cousins, Head of the Department of Respiratory Sciences at the University of Leicester.

I would like to welcome David Lo to the Executive committee, as Associate Professor at University of Leicester, his clinical and research interests are in the treatment of childhood respiratory diseases, focussing on difficult asthma and preschool wheezing, making him a valuable committee member.

Finally, my thanks go to all of the committee members who give their time and expertise to operate the charity.

Steve Watson - Chairman

THIS ISSUE:

Chairman's Message | Treasurer's Report | Dear Member | Meet the Committee
Donations | MAARA Funded Projects | Aerobiology | HMB Travel Fellowship



maARA

Funded Projects

Investigations into the role of TGFβ1 in induction of senescence in airway smooth muscle cells

—

Studying gene expression in bronchial biopsies from people with severe asthma

—

Spare Adrenaline pens and Salbutamol in schools' project

—

Harry Morrow-Brown Travel Fellowship
Five Awards

Officers

Chairman

Mr Steve Watson

Vice Chairman

Dr Nasreen Khan

Honorary Secretary

Mrs Lisa Bacon

Honorary Treasurer

Mr Andrew Lewis

Committee

Dr Will Carroll

Dr Erol Gaillard

Dr David Luyt

Dr David Lo

Dr Martin Stern

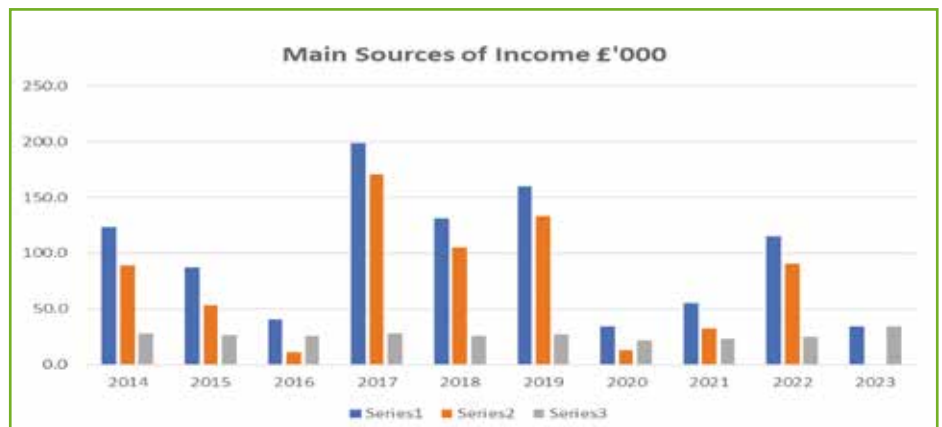
Mr Stuart Mills

Mrs Olive Green

Treasurer's Report

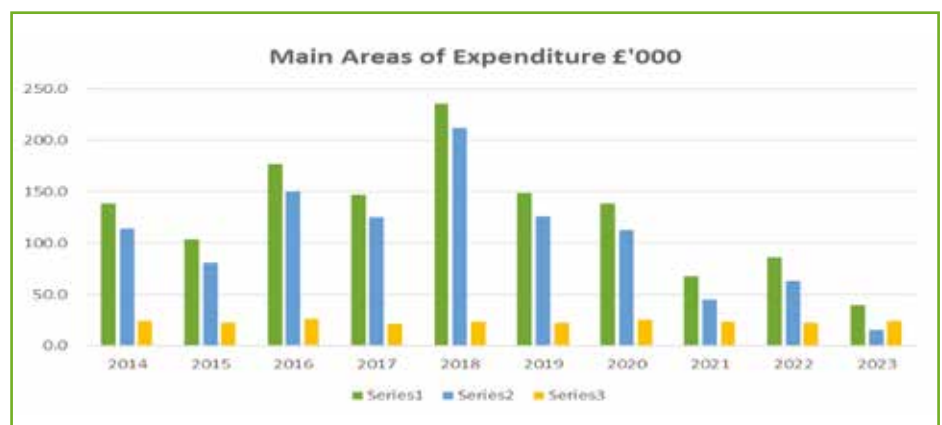
Financing our Activities, and Research Funding From our Treasurer Peter Teasdale

I am pleased to report that, despite continuing uncertainty in the financial markets, MAARA has been able to continue its funding of not only existing but also new research projects in 2023. As usual, income is very dependent on the level of legacies, which by its nature fluctuates from year to year. To underly this point, last year saw the lowest level of legacies this century, yet 2024 has started very well. Our investments grew modestly in the year following the general market trend, reversing that of recent years, with a low net outflow to support ongoing projects. Higher interest rates and increased yields contributed to an increase in investment income to £29,497, which covered all our running costs in the year. As ever, we are grateful to individual MAARA members and the wider public who undertake to support our charity. Their various fundraising events and donations contributed £4,629 this year. Total income at £34,669 was very low compared to recent years, primarily due to the level of legacies.



The graph shows the continuing significance of legacy income in relation to total income.

MAARA devotes the majority of its funds to important research projects, which is a core activity of the Association. Most of these involve asthma and allergy specialists at the University Hospitals of Leicester NHS Trust, with some existing projects continuing over the coming years. The after-effects of the Covid-related constraints on the workplace saw a continued much-reduced level of expenditure of £15,461 (£63,338 in 2022), with a commitment to funding grants with a total value over £200,000. Although the level of new projects was again low in the year, we continue to look for opportunities to fund new research. MAARA's emphasis on funding important research projects whilst containing administration costs is highlighted in the next graph.



Thank you again for all your support which allows MAARA to continue its research funding programmes.

Dear Member/Donor

This year I will have worked for MAARA for 35 years, I can hardly believe it. This represents approximately half of my life and I know many of you have been members or donors before I joined MAARA. Presently we have 52 members.

In my spare time I like to garden and have been opening our garden for the last 10 years for National Garden Scheme. We will be opening on Sunday 6th July 2025. I would be delighted to see anyone who is into gardens.

Contact me for further details.

With best wishes

Eva Day



What's it like living with Asthma & Allergies for Life



Andrew & James

I'm now in my late 50's and have been suffering with Asthma & allergies since the age of 2. I wish there was a cure, but I have learnt to adapt and live with my conditions.

I have had an association with MAARA for around 40 years. I first met Dr Martin Stern as a consultant in clinic, then I fundraised through completing a cycle expedition, then I became a MAARA committee member for about 25 years.

In the early 70's Asthma treatments were very basic, having injections twice a week as inhalers were only just being developed. The first inhalers prescribed were Intal & Becotide, I would also have a nebuliser which would administer a fine mist via a face mask. It was thought that this was a better way of inhaling medicines. If I had a bad episode of asthma, I would be put on Prednisolone starting with a high dose and dropping down day by day.

I also suffered badly with eczema and allergies (Nuts, Fish & Eggs). I was even allergic to the smell of fish and could not be in the same room as my eyes would swell up. At primary school I would need to sit in a corridor and have my food brought to me.

During my childhood I had constant problems with Chronic Asthma and eczema with admissions to hospital in my teenage years. The Eczema treatments would involve my body being wrapped in smelly bandages for days. My school friends were particularly good to me even though I was the smallest, even now I am only 5 foot tall. I definitely stood my ground!

My asthma caused what they called pigeon chest where your rib cage sticks out from struggling to breathe. They would say that I had crocodile skin and at night I would shed so much skin.

I also developed eye problems which I found out were allergy related which caused keratoconus (steep corneas). My nose continues to cause me problems with allergic rhinitis with constant irritation and runny nose.

In my 20's the skin specialist I was under at the time was doing trials on a drug ciclosporin for eczema, and I trialled that drug. The test involved alternating between the placebo and actual drug. The drug proved successful in treating severe eczema. Unfortunately, you have to be checked closely on the drug due to the possible toxicity.

Also, during a hospital admission as an adult, I was given a drug for my face as this often flared up. This was a drug Photopic which is an immune suppression drug. At the time it was not licensed in the UK, it was found to be highly effective and so is now widely used.

I married late in life, and we had a baby through IVF. During the pregnancy, my wife was recommended to ensure she ate nuts & fish to hopefully avoiding the issue of allergies in our son. This was successful and now we are extremely fortunate that our 6-year-old has no allergies.

I am still taking asthma inhalers today, albeit on a lower dose, as I cannot manage to be without them. Occasionally I will get minor flare ups, often caused by thunderstorms or being exposed to dust, so I slightly increase the dose when this happens.

Asthma & allergy treatments have come an extraordinarily long way over the last 50 years and, although still no cure has been found, this has improved lives and fortunately now causes fewer deaths.

Andrew Lewis
MAARA Member



New Committee Member - Dr David Lo

I am delighted to join MAARA as a new committee member, having previously received support from MAARA to complete my doctoral project. I currently work as an Associate Professor at the University of Leicester (funded through an NIHR Advanced Research Fellowship), and as an Honorary Consultant Respiratory Paediatrician at the Leicester Children's Hospital. My clinical and research interests are in children's airway diseases, including asthma and preschool wheezing. I look forward to working with MAARA to support early career researchers in Asthma and Allergy to understand and develop ways to improve how we care for people with these extremely common and troublesome conditions.

Dr David Lo

The Benedict Blythe Foundation

The prevalence and impact of allergy is on the rise. In less than half a century, allergy, originally perceived as a rare disease, has become a major public health threat. It currently affects more than 680,000 children in England and close to one billion people worldwide, heavily impacting their daily lives.

For our family, the impact has been felt more acutely than most. My two children, Benedict and Etta, both developed allergies before the age of one. In 2021, Benedict set off for school happy and healthy, but he did not come home again. He collapsed and died from anaphylaxis aged 5 years old.

Almost three years on, an inquest hasn't taken place to give our family answers about what happened that day. In those years though, we became a place where parents would share their worries, their pain, and their successes when it came to managing their child's allergies at school. Their stories of hope and sadness, and the wildly varying experiences had by pupils across the country, prompted us to found Benedict Blythe Foundation in 2022 and to explore exactly what was going on in allergy management in UK schools – and what could be done better.

In research carried out by the Benedict Blythe Foundation and Sheffield Hallam University a parent reported the following incident regarding her daughter. "In June I got the call which is every parent's nightmare, it makes me tear up thinking about it every time. I was told the Autoinjector (AAI) had been given and the ambulance was on its way. I didn't know whether she was dead or alive. I arrived and the ambulance was outside. I got into the ambulance and was told that the first aider had held the AAI upside down and injected herself. There was no report or record of this anaphylaxis incident. These stories are hard to read but became typical as lived experience research was carried out.



Benedict Blythe



Pete, Helen and Etta

Alongside this, Benedict Blythe Foundation pulled together research into legislation, good practice, and the current management of allergies in English schools. The REACT report, published in April 2024 followed a freedom of information request to 20,000 English schools, with analysis of 1 in 10 providing the most comprehensive view of exactly how children with allergies were being protected. The findings showed that 69% did not have the four recommended safeguards in place. Half didn't hold spare autoinjectors, and 1 in 3 didn't have an allergy policy. This combines with a 2023 survey of 250 teachers carried out by Benedict Blythe Foundation that found 40% of teachers didn't feel confident to respond to a child having an allergic reaction.

It was clear that several things needed to change at all levels. At a government, legislative level the Foundation has campaigned to make the four safeguards of spare AAIs in every school, individual healthcare plans for all pupils with allergies, allergy training for all school staff, and an allergy policy in every school, mandatory and fully funded. These asks have been backed by organisations across the allergy, health and education sectors. An open letter to Secretary of State for Education signed by 40 organisations was delivered to 10 Downing Street by Benedict's younger sister, his family, and Professor Adam Fox, Chair of the National Allergy Strategy Group and the issue was raised to the Prime Minister in Prime Ministers Questions.

While legislation would be the key to unlocking wider improvements, there's also a need for parents and schools to have clear guidance available. The Schools Allergy Code was co-developed by Benedict Blythe Foundation, The Allergy Team and ISBA in 2023 and is now part of the listed guidance on Department for Education's allergy webpage. Schools can use a checklist to measure see how they measure up and several local authorities have passed motions to recommend its adoption across all their schools.

While there is a long way to go to ensure pupils with allergies are protected in school, the last 18 months has seen the topic rising up the agenda and experiences becoming better for families and teachers who have to collectively ensure a child with allergy is kept safe.



The group photo is of a debate at Westminster Hall in December 2023, it shows various MPs including previous under secretary of state for education, the now Minister of State for School Catherine McKinnell.

Spare Adrenaline pens and Salbutamol in schools' project

The children's allergy service in Leicester has been trying to implement spare adrenaline pens in schools as well as Salbutamol in schools within the region. In 2025 we plan to try to achieve this in every school in Leicester City and Leicester County council with a spare adrenaline autoinjector and salbutamol device. This project has been funded by Leicester Hospitals Charity. Due to cost increases of adrenaline devices, MAARA has stepped in to support the shortfall and has been extremely generous in providing £18000 towards the project.

In September 2023, 213 schools (62 secondary and 151 primary) benefitted from the project. We have been endorsed by the public health consultants from Leicester City and Leicestershire County council and continue to try find a long term funding solution. Our intention is to achieve funding through health budgets by demonstrating cost effectiveness but also have the cost offset by schools contributing to cost and doing fundraising.



Dr Gary Stiefel



Furthermore, we are aware of at least four Adrenaline pens being used in an emergency in schools. One Adrenaline pen has been used on a teacher and one has been used on a student experiencing anaphylaxis to a wasp sting. Having access to an Adrenaline pen has been potentially life-saving as without the project they would not have had access to one. At least eight schools have used the generic Salbutamol inhalers at least once.

We hope this will continue to raise the profile of allergy and asthma within schools as well as make schools safer both for those children and staff with a diagnosed allergy but also for those who may have anaphylaxis for the first time in school.

Dr Gary Stiefel
Consultant in Paediatric Allergy

Meet the MAARA Committee

As a charity, MAARA needs to be run in accordance with rules from the Charity Commission, who recommend that a committee be used to regulate a Charity's operations. The MAARA Executive Committee is responsible for decisions regarding our day to day running and for ratifying major financial decisions. Without their input the charity could not function.

We are fortunate to have committee members from all backgrounds, medical specialists, business-people, technical experts and those who have experience of asthma and allergy either personally or from a family member.

The photographs below allow names to be put to the faces of our Committee!



Steve Watson
Chairman



Dr Nasreen Khan
Vice Chairman



Andrew Lewis
Treasurer



Lisa Bacon
Secretary



Dr Will Carroll
Consultant Paediatrician



Dr David Luyt
Consultant Paediatrician



Dr Erol Gaillard
Consultant Paediatrician



Dr David Lo
Consultant Paediatrician



Dr Martin Stern
Committee Member



Stuart Mills
Committee Member



Olive Green
Committee Member



Eva Day
Administrator

Aerobiology at the University of Leicester

This year has been a success for the aerobiology team, with the launch of the new Swisens Poleno Jupiter automatic sampler on our new outdoor research space on the George Davis Centre. This will enhance our bioaerosol monitoring at the University of Leicester and ensure we can collaborate with a growing network of Swisens Poleno samplers in the UK and internationally. In the meantime, we have had an article accepted for publication in the journal *Allergy*: "A Fungal Spore Calendar for England: Analysis of 13 years of Daily Concentrations".

Please follow us @UoL_Aerobiology on X (formally known as Twitter) or <https://le.ac.uk/cehs/hpru/pollen-and-spore-counts>, to find details on the article's publication and our pollen and spore reports which are updated daily in the grass season and weekly outside of this.



Fiona Symon



Jack Satchwell

Pollen Season

The tree pollen season has generally seen lower levels especially for early season pollens such as hazel, birch, alder and ash (Fig 1). The season start for many tree pollens was also late resulting in a shorter season length. The subdued season may be due to the wetter weather in late winter/spring. Pine, sweet chestnut and yew type continue their trend of increasing levels across years likely unaffected by the wet start as they release pollen over a longer later season.

The grass and weed season have seen grass pollen reach its second highest year after 2022. Nettle pollen reached its highest recorded year to date, following a trend of increasing levels across years. Rape pollen levels continue to follow a trend for decreasing levels across years, likely due to changes in agricultural practices as a result of challenging weather conditions.

Fungal Spore Season

A milder drier summer this year has led to fewer high release days than recent years (Fig 2). Cladosporium and Alternaria however still surpassed their allergenic levels this year with Cladosporium surpassing 3000 spores per cubic metre of air on 62 days and Alternaria surpassing 100 spores per cubic metre of air on 46 days. Cladosporium peaked at 23545 spores on the 06/09/2024 and Alternaria peaked with 1331 spores on the 19/07/2024.

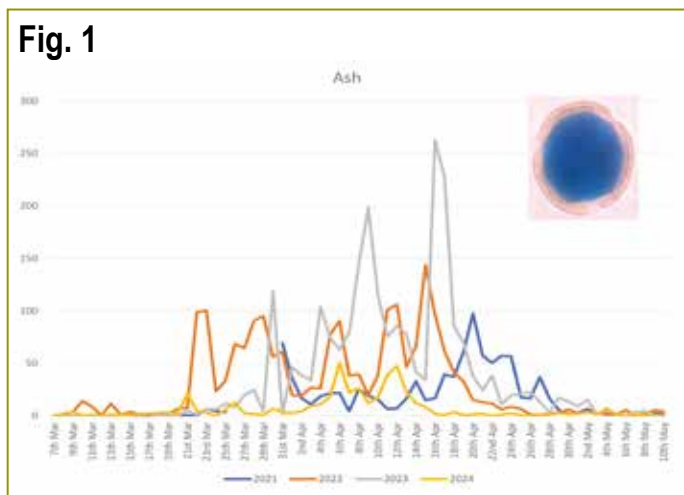


Fig 1. Graph showing levels of grass pollen over the last three years and a photo showing what grass pollen looks like under the microscope.

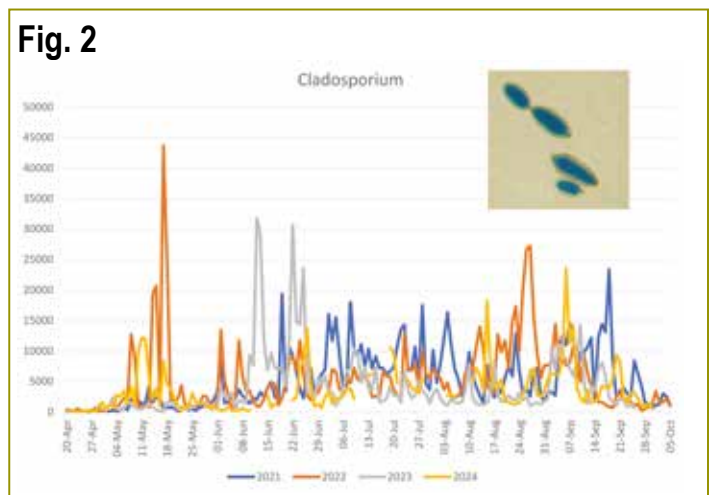


Fig 2. Graph showing levels of Alternaria over the last four years and a photo showing Alternaria spores photographed under the microscope.

LEICESTER & LEICESTERSHIRE CAN BREATHE EASY AS UNIVERSITY UNVEILS POLLEN MONITOR

Professor Anna Hansell from the NIHR Leicester Biomedical Research Centre at the University of Leicester welcomed researchers past and present including to the roof of the George Davies Building, for the official opening of its Poleno machine by BBC East Midlands Today weather reporter, Anna Church, and Pro-Vice Chancellor of the University of Leicester, Sarah Davies.

Guests included: Prof Andrew Wardlaw, Dr Leah Cuthbertson, Jack Satchwell, Dr Fiona Symon, Dr Sarah Diver, Dr Martin Stern (MAARA) and Dr John Baily.

As hayfever sufferers feel the first symptoms of their seasonal condition this spring, researchers in Leicester have switched on a state-of-the-art air sampler which will allow them to monitor pollen circulating in the city's air in real-time. The Swisens Poleno sampler was 'switched on' by Anna Church from BBC East Midlands Today on 24 April 2024 and is now up-and-running 20 metres high on the roof of the University of Leicester's George Davies Centre.

The sampler is now providing researchers at the National Institute for Health and Care Research (NIHR) Leicester Biomedical Research Centre (BRC) with real time monitoring of pollen levels in the outdoor air. The levels will be shared with the public on social media platform X, at www.twitter.com/UoL_Aerobiology every day from mid-May.



Dr Hayley King, Anna Church, Prof Sarah Davies, Prof Anna Hansell, Jack Satchwell, Dr John Baily, Prof Andrew Wardlaw, Dr Martin Stern, Dr Fiona Symon, Dr Sarah Diver, Dr Leah Cuthbertson.



BBC East Midlands Today weather reporter Anna Church

Professor of Environmental Epidemiology at the University of Leicester, and lead of the NIHR Leicester BRC's Environment theme, Anna Hansell, said: "Improving our ability to monitor biological particles, such as pollen, in the air will complement our current research into air pollutants, and the effects they have on human health. Prior to the Poleno, the data we had was from the previous day, at best.

"The Leicester machine is part of a growing national and international network of Swisens Poleno samplers, which will allow us to work together with other institutions around the world to observe trends and patterns of air quality, pollen types and levels. It will allow real time advice to be given to asthma and hay fever sufferers."

Professor Sarah Davies, Pro Vice-Chancellor and Head of the College of Science and Engineering at Leicester, added: "Researching how our changing environment impacts human health is at the heart of the University's guiding principles. I am delighted we are investing in instrumentation that will enable continued research into pollen and fungal spore exposure and their role in allergies and respiratory disease in a rapidly changing world. This translational scientific research will lead to changes in practice to improve public health."

Peter's Retirement

Before COVID, Peter, Eva and myself used to meet up for a pre-AGM meeting to ensure that everything was in place. The meetings were always held at Peter's house and inevitably involved tea, coffee and cake provided by Peter's wife Christine.

I mentioned in the 2022 newsletter how nice it was to be able to return to our face-to-face meetings, albeit socially distant.

Now that Peter has handed over his post of Treasurer, I thought it would be a good idea to have one final meeting, but this time in Peter's local pub. Eva and I were delighted to present him with some garden vouchers and we wish him and Christine well for the future, hoping that he can find good use for the vouchers in his garden and allotment. Thanks again for all the sterling work you have carried out for the charity. We are delighted that Peter remains a MAARA member.



Steve, Eva and Peter

Harry Morrow-Brown Travel Fellowships

During 2024 a total of £5,834.18 was awarded to five applicants from the HMB Travel Fellowship. The Midlands Asthma and Allergy Research Association (MAARA) supports research into asthma and allergy in Derby and Leicester.

The Harry Morrow-Brown travel fellowship was launched in 2014 in memory of the founder of MAARA. This fellowship will offer researchers an opportunity to travel to a national or international allergy or asthma conference to present their original work. The fellowship is awarded annually, and successful applicants can apply for support for travel, accommodation and conference registration fees to a maximum of £5,000. For full details of eligibility contact enquiries@maara.org

Dr Ali Hakizimana

HM-B Lung Sciences Conference



I would like to express my gratitude for being awarded the Harry Morrow-Brown Travel Fellowship. It is a tremendous honour to receive this recognition, and I am deeply appreciative of the support provided by the fellowship.

Thanks to the generous support of the Harry Morrow-Brown Travel Fellowship, I had the invaluable opportunity to attend the Lung Sciences Conference in Estoril, Portugal. The experience was profoundly enriching, offering me the chance to engage with leading experts in the field, gain new insights into cutting-edge research, and broaden my understanding of lung sciences.

I presented work completed in my role as an Honorary Fellow at the University of Leicester as part of my Academic Foundation training at the Lung Sciences Conference. I presented a poster on our preliminary data from our longitudinal study which aims to assess the long-term trends in spirometry in children with severe asthma as well as identify factors influencing the decline in lung function. Currently, we have found that severe paediatric asthma is associated with a long-term decline in lung function and that obstructed lung function occurs early in some children however we are still undergoing further work to establish the factors associated with early obstructive airway disease. The discussion from the presentation provided me with further ideas and insight on techniques and tools that could be used to guide our data analysis.

The knowledge and connections I gained at the conference have significantly contributed to my professional development and research endeavours. I was inspired by the innovative discussions and presentations, which have sparked new ideas and directions for my own work. Additionally, the networking opportunities provided me with insight into the various opportunities available in the world of Respiratory Medicine which I found very useful as I am still early in my career. This fellowship has not only supported my attendance at the conference but has also motivated me to strive for excellence in my work.

Rebecca Dale

HM-B European Respiratory Society Congress



I am a final year PhD student at the University of Leicester, based at the Clinical Sciences Wing at Glenfield Hospital. The generous award of the Harry Morrow-Brown Travel Fellowship allowed me to travel to the European Respiratory Society (ERS) Congress in Vienna, Austria, in September 2024 to present the poster 'Blood Leukocyte Characterisation in Eosinophilic Granulomatosis with Polyangiitis (EGPA).'

EGPA is a rare autoimmune condition, whereby patients with Severe Eosinophilic Asthma and/or chronic rhinosinusitis present with increased eosinophil numbers in their blood and tissues. These immune cells wrongly attack blood vessels and organs, causing many comorbidities. There are few treatments specifically for EGPA, with the treatments that are available focusing on suppressing eosinophil numbers and their activity, to varying degrees of success. My work addressed the involvement of immune cells in the maintenance of EGPA, which was previously understudied, and could potentially help guide the development of new EGPA-specific treatments.

I am extremely grateful to MAARA, as without this award, I would not have been able to travel internationally to present my work at a conference attended by over 20,000 healthcare and research professionals. Whilst there, I was able to learn about new and exciting research into asthma and EGPA, through attending lectures, seminars and networking with delegates presenting their work. The highlight of the conference was being able to discuss my poster with other attendees. I received a lot of interest in my work, especially from scientists who were masters in the field of immunology and EGPA. They gave me a lot to think about, which will be especially beneficial for the writing up of my thesis. This experience was especially rewarding, as very few scientists study EGPA, so it was really exciting to talk to others who understood what this work could mean for patients. On a more personal note, talking to peers about my work made me feel more integrated into the scientific community, with a definite sense of working together for the greater good of society. I will never forget this experience, and I will ensure that the skills I have learnt whilst at my first international conference will influence and shape my career as a researcher going forward. Thank you very much for this opportunity MAARA!

Dr Pooja Devani

HM-B European Respiratory Society (ERS)



I am a paediatric trainee and an academic clinical fellow based at University of Leicester. My main research focus is monitoring asthma medication adherence using digital smart inhalers, and asthma diagnosis. Asthma preventer medication adherence in children is often poor leading to uncontrolled asthma (Engelkes 2015). A previous randomised trial showed adherence monitoring using DSI reduces asthma attacks (Morton Thorax 2017). There is much less data on reductions in reliever inhaler use. Implementation issues are poorly reported and should be addressed before DSI monitoring can be widely adopted.

I am grateful to receive the Harry Marry-Brown (HMB) Travel Fellowship which allowed me to present my data at the Annual European Respiratory Society (ERS) Congress in Vienna, 2024. I was able to share the outcomes of this cohort study with leading experts in the field of asthma care. Furthermore, I was also able to engage in discussions around the latest developments in asthma diagnosis and management and I aim to use this knowledge to benefit my clinical practice and research outputs.

The HMB Travel Fellowship has been instrumental in supporting early career researchers like me to attend and further enhance my professional development whilst contributing new insights to the field. Thank you very much to MAARA for providing this travel fellowship.

Dr Hnin Aung

HM-B European Respiratory Society (ERS) Conference



I sincerely thank MAARA for granting me the Harry Marry-Brown travel fellowship, which enabled me to attend the European Respiratory Society (ERS) conference in Vienna this year. As a PhD student and respiratory speciality registrar, this opportunity allowed me to engage with global leaders in respiratory care and present my research to an international audience.

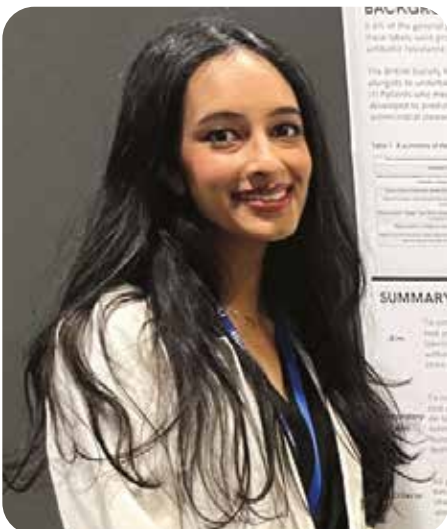
At the conference, I was honoured to present my project titled "Digital Inhaler Adherence Monitoring and Intervention Strategies in COPD". Inhaled therapy plays a fundamental role in the management of chronic airway disease. Digital tools are increasingly integrated into our healthcare sector nowadays. My project explores the effectiveness and acceptability of digital tools in improving inhaler use among patients with chronic airway disease. Our meta-analysis involving over 1500 patients with chronic obstructive airway disease, demonstrated the potential of electronic inhaler adherence monitoring systems, particularly those utilising features from digital inhaler platforms. We also found that around 90% of patients were receptive to using digital tools to bridge gaps in their clinical care. The findings also highlighted the need for more personalised approaches and simpler user interfaces to enhance clinical outcomes.

In addition to sharing my work, I attended many insightful presentations, which expanded my understanding of the latest advances in COPD management and digital healthcare.

Discussions on the long-term potential of tele-healthcare have inspired new directions for my future research. I am grateful for the support from MAARA and look forward to applying the knowledge gained to benefit my team and patients at the Glenfield Hospital, Leicester. Thank you once again for this transformative experience.

Raeesa Shah

HM-B American Academy of Asthma, Allergy and Immunology (AAAAI)



I am a fourth-year medical student, studying at the University of Leicester. MAARA very kindly granted me the Harry-Morrow-Brown Fellowship to attend the American Academy of Asthma, Allergy & Immunology (AAAAI) Annual Meeting 2024 in Washington DC.

I was very fortunate to present my poster on the "Real world comparison of PEN-FAST and BSACI penicillin de-labelling guidance in an Adult Allergy Service in the UK." I was taken aback by the interest in my project, which encouraged many discussions on the benefits and drawbacks of both the BSACI and PEN-FAST tools; and how penicillin de-labelling differs in the US, where they seem to be de-labelling on a much larger scale, including in primary care.

I worked on this audit as part of my degree with the Adult Allergy Service at University Hospitals of Leicester NHS Trust. My brilliant supervisor Dr Nasreen Khan encouraged me to submit an abstract to the AAAAI Annual Meeting. I am so grateful for both Nasreen and Dr Leyla Pur Ozyigit, whose support and mentorship has made all of this possible.

Amongst many wonderful educational talks, I had the privilege of witnessing some revolutionary research, which explores the use of Omalizumab to treat food allergy, and has just been FDA approved. I look forward to seeing how the OutMATCH study continues to transform the world of food allergy, a particular interest of mine.

I began my degree with the hope of becoming an allergist one day and attending the meeting has truly brought me one step closer to my dream. I did not anticipate that at the age of 21, I would present my research in the USA, or have an abstract published in the Journal of Allergy and Clinical Immunology. I would like to thank MAARA for their support throughout this wonderful opportunity.

Bronchial Biopsies in People with Severe Asthma

Studying gene expression in bronchial biopsies from people with severe asthma £93,701

Spatial transcriptomics refers to a group of novel technologies that enable scientists to quantify thousands of genes simultaneously and directly within tissue samples. Visualising the activity of all known genes in the intact spatial context of a tissue is a ground-breaking approach, which transforming both research and diagnostics. Thanks to this exceptional capability, spatial transcriptomics was awarded technology of the year 2020 by Nature Methods magazine.

In a previous MAARA-funded feasibility study, our team demonstrated the power of spatial transcriptomics to quantify thousands of genes in small bronchial biopsies collected from healthy people and people with severe asthma. We were able to characterise the gene activity of distinct mast cell and airway smooth muscle cell populations within the airways. Mast cells

are immune cells living in all tissues across the body. When activated they release various mediators, including histamine, proteases, and cytokines, which together trigger inflammation, bronchoconstriction and airway remodelling, thus contributing to asthma. Patients with severe asthma do not respond well to corticosteroid medicines. Reasons for this resistance are still unclear but the presence of airway subpopulations of inflammatory cells that do not respond to corticosteroids is a current hypothesis. In our new MAARA-funded project, we will build upon our initial feasibility study and use spatial transcriptomics to characterise a variety of cell populations (eosinophils, mast cells, neutrophils, airway epithelium and smooth muscle) in a larger population of people with severe asthma. We will use bronchial biopsies from the RASP-UK bronchial biopsy biobank, a unique biobank of well characterised asthma patients from a previous MRC-funded precision medicine programme. Applying a cutting-edge spatial technology on a large cohort of patients is a fantastic opportunity to explore the airway architecture in asthma patients at high resolution and with strong statistical power.

The support from MAARA is essential to reach this ambitious goal. It enables us to implement spatial transcriptomic technologies, which will enhance the respiratory research in Leicester and allow us to stay at the forefront of the extremely fast-developing and highly competitive spatial 'omics field.

This project is a collaborative effort between Prof Peter Bradding, Dr Nicolas Sylvius, Dr Dawn Smallwood, Dr Haresh Selvaskandan and Prof Jonathan Barratt.



Dr Nicolas Sylvius & Prof Peter Bradding



Dr Ruth Saunders

Investigations into the role of TGF β 1 in induction of senescence in airway smooth muscle cells £76,412

I am a senior researcher in Prof Chris Brightling's research group at the University of Leicester. My research interests are focused around finding out what is different about the spirals of muscle that surround the airways in people with asthma. Compared to healthy people there is more of this airway muscle surrounding the airways in asthma, and it is also more likely to contract following exposure to irritants. As a consequence of these differences these features result in greater airway narrowing both during an asthma attack and on a more persistent basis in people with more severe asthma to contribute to asthma symptoms. Research in this area is still important because asthma prevalence continues to rise and although a number of novel treatments have recently been developed for asthma, these treatments are not effective/suitable for all patients, suggesting other mechanisms are at play. In addition, current treatments targeting the increased contraction of this airway muscle have limitations and only one licensed therapy, bronchial thermoplasty, is available for reducing the amount of muscle around the airways.

Recently, the airway muscle from elderly with asthma has been shown to show advanced signs of a process seen in aging, called senescence, compared to airway muscle from elderly without asthma. During senescence cells exhibit a number of features that could contribute to the airway muscle malfunction in asthma. We have preliminary evidence that a key protein produced by the body in greater amounts in asthma; TGF β 1, may be involved in triggering senescence in airway muscle cells. We are extremely grateful to MAARA for providing us with funding to enable us to fully explore this theory. If successful the information gained will provide us with a toolkit for assessing the ability of other asthma relevant proteins to induce senescence in airway muscles cells, and will pave the way for seeking further funding to explore how this senescence contributes to the airway muscle malfunction observed in asthma, as well as assessing the ability of medicines currently licensed for other conditions to counteract this senescence and its functional consequences in laboratory studies. These studies could identify potential novel therapeutic targets or novel therapeutic uses of existing medicines which could help to reduce the consequences of airway muscle malfunction in asthma.

Dr Ruth Saunders

Graeme Scott PhD Hon FICR

I joined MAARA in the Spring of 1991 as Clinical Trials Manager at the then base at Leicester General Hospital. In my early 30s, by now I had switched from being a statistician with Boots, Nottingham to their clinical research group to work on developments of their NSAIDs drugs for treating pain and inflammation. A spell at Fisons in Loughborough followed working on developments of asthma treatments. I was ready for an exciting new challenge. MAARA provided me with a dream job, although that was hardly obvious when I took the post.

Dr Martin Stern was the central figure, a clever clinical immunologist who enjoyed research and doing his own thing more than kow-towing to authority. Martin, and then Chairman Don Pearson were the two who hired me. Don was driven to help MAARA through his own challenges of having experienced medicine from the patient's side. A genuine, straightforward leader, Don had rescued MAARA from earlier financial woes. When I arrived MAARA was already engaged in raising significant funds through the conduct of clinical trials - helping pharmaceutical companies evaluate and better understand the benefits, and risks, of the treatments they wanted to licence. Drug companies pay for that service. Don and particularly Martin wanted to do more trials, bigger, better, more efficient.

The core of a great team was already established: Liz Emmerson, Martin Judd, Eva Day and Marie Chenevert-Spikings. Don engaged Trevor Wright to keep the accounts under good control. I am not sure how easy a sell I was to the team for Martin and Don. Would I be their line manager? Whatever, by the time I started I had been named 'The Thin Controller' by Liz, an 'affection' my wife uses even yet, usually when I am over-stepping my boundaries in the house. We set about upgrading our procedures with documentation to show the regulation-conscious pharmaceutical industry that we were serious. This helped us to secure big name companies to bring their new products to us to trial: asthma, perennial rhinitis treatments, and most especially treatments for seasonal rhinitis: hayfever.

Hayfever trials were a massive undertaking. Hundreds of local folk were screened over a short few weeks, treated, assessed and in a few cases 'nursed' through the troublesome weeks of the grass pollen season. And tens of thousands of pounds were raised. MAARA became without doubt the go-to research establishment for new, and even established, hayfever treatments. By early 1994, it was time for me to move on. My wife and I hankered to return to Scotland and I secured a post in Stirling for a couple of years before setting out on my own as a consultant. The opportunity MAARA gave me enabled me to grow from being a small cog in a large machine to being a more independent, self-assured, well-connected and better-regarded person in the field of clinical trials management. Had it not been for my time at MAARA, I perhaps would not have been so active in our professional body and maybe not become a consultant to a wide range of companies in my late 30s. I like to think when I look back at those lovely days in Leicester in the early 90s that we each benefited from my stint at MAARA, but perhaps it was I who gained the most. Thank you MAARA.



Graeme Scott

Graeme Scott - PhD Hon FICR



Web • Print • Marketing • Services

My name is Attila Ajtai. I am the founder of Green Forest Design, which I have been running for nearly 20 years. In my capacity of lead developer, I have met every single client and helped them on their journeys of bringing their ideas and passions to life. I have a special place in my heart for medicine and health related projects, in large part because I have witnessed the long years of loving labour and dedication to this vocation of my wife, who is a Paediatric Allergy Consultant in the Sheffield Children's Hospital. I meet many professionals working in the health sector and I am always in awe of their passion. MAARA and I crossed paths 15 years ago when I was given the privilege to develop a new website for the organisation. I have fond memories discussing the vision and details of the project with Steve, Roger, Eva and Prof Wardlaw. To this day I'm still adding new pages and announcements to the website and hosting it on our dedicated server.

I created and host the North West Midlands Cystic Fibrosis Centre (www.nwmcfc.nhs.uk) website, who were kindly referred by MAARA. I also did a project for Dr Cecilia Akrisie Anim CBE, the former president of the Royal College of Nursing (www.ceciliaanim.co.uk) to promote her fantastic new book. I designed and manage the website for the Yorkshire and the Humber Paediatric Allergy Group (www.yhpag.org.uk).



Attila Ajtai.

If you are looking for creative ways to augment the online visibility of your project with diverse range of functionalities, feel free to email me to atti@gfdesign.co.uk or call me on 07833 495616.

Dates for Your Diary

The MAARA AGM will be posted on the Website in 2025

If you would like more information please contact:

0116 247 9888.

or email enquiries@maara.org

In Memoriam

Keith Austin
Michael & Carmel Fitzpatrick
S. Klak
Barbara Fuller

Legacies

Julia Foster
Colin Bower
Edward Hickey
Pauline Redmile
Brenda Wilson-Wills
Marion Rainbird

CONTACTS

ALL ENQUIRIES TO: Eva Day
MAARA

PO Box 1057

Leicester LE2 3GZ

Tel: 0116 247 9888

E-mail: enquiries@maara.org

Web: www.maara.org

REGISTERED OFFICE:

47A Queen Street
Derby DE1 3DE

DONATIONS - A Big Thank you

A Big Thank you to everyone who made a donation and continues to support MAARA.

How Gift Aid Works - Gift aid donations are treated as having basic rate tax deducted which MAARA can reclaim. So for every £10.00 you give, MAARA will receive another £2.50 from the Government. If you would like a gift aid form please contact Eva Day or download a copy from our website.

Payroll Giving - If your employer operates a payroll giving scheme you can make a donation through your salary. For further details go to www.hmrc.gov.uk/charities/payroll

DONATIONS

Miss S. O. Richardson

Mrs O. Green

Mr J. Rapley

A. P. Spier

J. Orrell

I. F. Milward

M. Howard

S. Watson

Amazon

Paypal

Mr Thakrar Moments Card & Gift Shop

Bourne & Co

Burkard Manufacturing

ADA06 Architects

Become a Member

By joining MAARA you will be supporting research work that MAARA funds and you will be supporting people with asthma and allergic disease.

It only costs £10 for one year or £20 for five years.

Would you like to fundraise for MAARA by holding a virtual or other event like a Sponsored Run or Coffee Morning.

No event is too small we are grateful for all donations