MANCHESTER 1824
The University of Manchester

Lydia Becker Institute of Immunology and Inflammation

NEWSLETTER

Issue 15 December 2024

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MANCHESTER 1824
The University of Manchester

Newsletter

Lydia Becker Institute of Immunology and Inflammation

Issue 15

December 2024

HARNESSING IMMUNE COMPLEXITY

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End

Director's Update

Can you believe that the first students from the 2020 Wellcome Trust Immuno-matrix in Complex Disease cohort are doing their PhD defences? It doesn't seem possible that four years have passed. We are extremely proud of them all. Due to people moving on, there are slots available on the women's football team. We have just welcomed the last 2024 cohort who are now busy developing their projects.

Thanks to the efforts of Becker Research Fellows Matthew Sinton and Juan Quintana we were treated to the fabulous inaugural STEM Village Immunology Symposium that was very well attended.

There have been many successes, but I particularly wanted to highlight Juan Quintana's Wellcome Trust Career Development Award and Jonathan Worboys' FBMH Research Staff of the Year 2024 Award win.

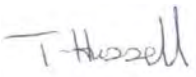
The interview for the MRC CoRE grant MOXIE (Manchester Oxford Immunology of the Exposome) is approaching that is joint with Oxford university. Thanks to Judi Allen, et al for helming this on our behalf.

In addition to the fundamental science, the Becker is now firmly established as a Translational Immunology hub. We have many clinical collaborations with The Christie hospital, MCRC, the Geoffrey Jefferson Brain Research Centre, Respiratory Medicine and also with the surgical teams at multiple sites. Immunology is embedded within Manchester's NIHR Biomedical Research Centre and being incorporated into highly novel areas - including the analysis in people who have experienced early life trauma or stroke. Thanks to John Grainger and Nick Scott for spearheading this initiative.

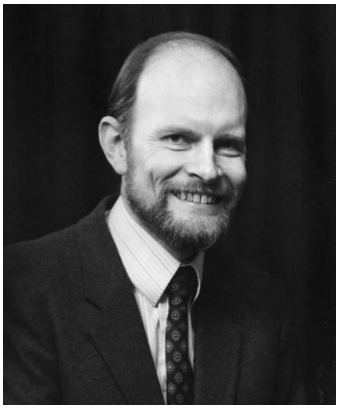
The DIIIRM Social Committee also pulled out all the stops this year on our Christmas party - a bumper turnout and fantastic event.

Have a great Christmas break - see you in 2025.

Professor Tracy Hussell



Bill Ford Food (BFF)



In honour of Professor Ford, the Bill Ford Chair of Cellular Immunology was created at the University. The role was recently held by Professor Werner Muller, prior to his retirement, and is currently held by Professor Richard Grencis. Bill Ford started the first immunology seminar series in Manchester and so it is fitting that our weekly lunchtime meeting for scientific discussions on anything immunological is named after him –Bill Ford Food (BFF). The group meet each Thursday for lunch at 1 pm in Room 4.005 in the AV Hill Building.

Previous discussions have ranged from what are the next emerging fields in immunology, global health opportunities in Manchester.

If any PIs would like to join, please contact Mr Ameur Bayar via ameur.bayar@manchester.ac.uk to be added to the list of BFF members.

Congratulations

Dr Juan Quintana awarded Wellcome Trust Career Development Award

Dr Juan Quintana has been awarded an **8-year Career Development Award** from the **Wellcome Trust** worth **£2.4m** to conduct cutting-edge research on the role B cells play in controlling circadian behaviour and sleep during chronic infection, with potential implications for improving sleep quality and immunity during infections.

With this new study, funded by the Wellcome Trust, Juan and his team aim to delve deeper into the origins and mechanisms of these B cells during infection. By exploring the intricate interactions between the immune system, the brain, and sleep during chronic infection-induced neuroinflammation, the study seeks to uncover why sleep quality deteriorates during infections and the subsequent impact on immunity. This groundbreaking research could lead to new insights and potential therapies for improving sleep and immune function in individuals suffering from chronic infections.

Commenting on the award Juan said “I am beyond delighted to continue to receive support from the Wellcome Trust to pursue curiosity-driven research in various aspects of neuroimmunology, while having the intellectual freedom to take my research into new and exciting directions, including autoimmunity and sleep biology. This 8-year award will enable me to build my research team in Manchester, where I plan to bring together neuroscientists and immunologists to work together on novel questions about sleep regulation during brain inflammation. This work will synergise with colleagues at the Lydia Becker Institute of Immunology and Inflammation and also with partners at the Geoffrey Jefferson Brain Research Centre and the NHS. I am really looking forward to developing this research programme in Manchester!”

Professor Tracy Hussell and Dr Rob Metcalf awarded additional funding to research Adenoid Cystic Carcinoma

Our Director **Professor Tracy Hussell and Dr Rob Metcalf** have been awarded an **additional £0.5m by The Christie** as part of **The Ella Project** to understand the special immunology of **Adenoid Cystic Carcinoma (ACC)**, which is a rare head and neck cancer. As it is rare, very little is known about it. ACC is difficult to treat with limited treatment options. The Ella Project is named after Christie patient Ella, who tragically died with ACC in December 2021.

The project will use spatial transcriptomics and flow cytometry to map dominant immune components and their interactions with the tissue matrix to identify multiple points of potential intervention.

Professor Judi Allen awarded Discovery Award by the Wellcome Trust to investigate immune regulation of the hyaluronan matrix

Professor Judi Allen has been awarded **£2m** by the **Wellcome Trust** via their prestigious **Discovery Award** scheme to investigate the immune regulation of the hyaluronan (HA) matrix during lung infection, injury and repair.

Previous research found that IL-13 triggers the production of HA in the lungs during viral infections, chronic asthma, and after worm infections. However, it isn't fully understood what these HA structures look like in different situations or how they help in healing or contribute to disease.

Judi's research will use disease models to study how IL-13 influences the formation and function of HA in the lungs.

Dr Jonathan Worboys receives FBMH Research Staff of the Year 2024 Award

Congratulations to Dr Jonathan Worboys who received the '**FBMH Research Staff of the Year Award 2024**' at this year's University of Manchester Research Staff Excellence Awards. Jonathan received the award for his ground-breaking research on how receptors on the surface of T cells arrange themselves to control their function.

Commenting on Jonathan's award Becker Executive Committee member/DIIIRM Head of Division Professor Mark Travis said *"I am delighted that Jonathan has been recognised with the FBMH Research Staff of the Year Award for 2024. Jonathan's work leading up to this award showed that a specific receptor (called TIGIT) can rearrange itself into large clusters on the surface of T cells, leading to inhibition of T cell activity. This appears especially important within tumours, highlighting a new important therapeutic target to turn on the activity of T cells to kill cancer cells, and leading to a field-leading first-author publication in Nature Communications.*

Based on these findings, Jonathan has just been awarded a prestigious Wellcome Trust Career Development Award, aiming to identify how other receptors clustering on T cells can inhibit their function, and how best to therapeutically target these pathways in cancer (worth almost £1.5 million over 8 years).

We are delighted that Jonathan will be pursuing his independent research career in Manchester, and the Research Staff of the Year Award is a perfect reward for his hard work as a post-doc leading up to this."

Dr Peter Arkwright awarded National BSACI 2024 William Frankland Award

Congratulations to the Becker's Life course Immunology Branch Lead **Dr Peter Arkwright** (pictured above right) who received the William Frankland Award 2024 from the British Society for Allergy & Clinical Immunology (BSACI) in October for his outstanding contributions to clinical allergy in the UK.

Dr Gurdeep Singh promoted to Technical Specialist, Biomaterials Group, Henry Royce Institute,

Congratulations to **Dr Gurdeep Singh**, former Postdoc in the Arkwright/Pennock Lab, who has been has been promoted to Technical Specialist, Biomaterials Group, at the Henry Royce Institute

Congratulations – PhD and Undergraduate students

Congratulations to;

- **Ms Sneha Saji**, 4th year medical student APEP, selected for oral presentation on *"Outcome and pathways of cow's milk protein allergy in the North West and North Wales"* in main auditorium at National BSACI 2024 meeting, Harrogate, October 2024.

- **Megan Priestley** (Dyer/Hussell Lab) for passing her PhD viva in October

- **Katy Dodd** (Menon Lab) for passing her PhD viva in October

- **Nabina Punn** (Dyer Lab) for passing her PhD viva in September.

- **Joshua Hughes** (MacDonald Lab) (center) for passing his PhD viva in December.

- Congratulations to **Erin Pallott** and **Olatz Niembro Vivanco** from the Becker for their work on the Research Hive, a science communication platform run by early-career researchers, which due to its success has now expanded to include international team members and authors and has received funding from the Doctoral Academy and the Social Responsibility Fund.
Erin leads the Research Hive project and Olatz is Sc-Comm Editor.

https://research-hive.com @ResHiveBlog (X, Instagram, BlueSky).

Welcome to our new MSc Clinical Immunology students!

MSc students presenting posters to their peers, facilitated by colleagues from the Lydia Becker Institute.

In September, we welcomed a new cohort of nearly 30 full-time postgraduate students to study MSc Clinical Immunology for the next 12 months. Colleagues from across the Lydia Becker Institute will be contributing their specialist knowledge on immune function and disorders, culminating in research projects next summer.

Over the first 5 weeks of their course, students have been getting to grips with the fundamentals of the immune system, the main categories of immune dysfunction, and understanding analytical techniques that underpin the assessment of diagnostic biomarkers.

To encourage students to get to know each other and form their new community, we have developed new Teams-Based Learning sessions this year. First impressions are that students have found this style of teaching engaging and useful and form a welcome addition to the course.

Their first block of teaching culminated in a poster session at the end of October. Groups of students produced posters on an immune cell of their choice, covering function, diagnostic assessment and contribution to immune-related disorders. Their presentations were helpfully facilitated by several colleagues from the Lydia Becker Institute.

In the run-up to Christmas, our students will be joined in their next teaching block by trainees on the Clinical and Transplant Immunology pathways of the NHS Scientist Training Programme. The University of Manchester is NHS England's only accredited provider of the academic component of their training.

We are always open to volunteers who wish to contribute to teaching, and we are especially keen to hear from Research Fellows and PDRAs who want to start developing their teaching portfolio. Application for AdvanceHE fellowships is encouraged – please get in touch!

Nicholas Barnes – Programme Director (MSc Clinical Immunology)

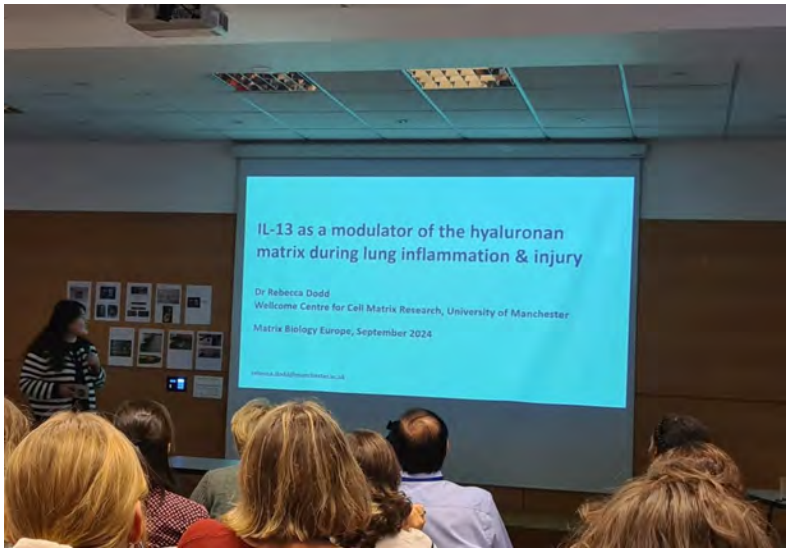
Invited Seminars and Presentations

Professor Judi Allen and **Dr Amanda Ridley** attended the Cytokine-2024 in Seoul, Korea where Amanda received the "2024 Pfizer-Amanda Proudfoot tribute award for advances in Chemokine Biology" and Judi was the keynote speaker.

Becker Deputy Director [Dr John Grainger] attended the BSI Clinical Immunology Professional Network Conference in Birmingham in December and presented work from the Becker/Manchester BRC 'Human Immunology Accelerator and standardised flow cytometry panels for clinical studies.

Dr Jonathan Worboys gave a talk at the **Manchester Immuno-oncology Network (MION) meeting** held in October entitled "The nanoscale dimensions that govern immune checkpoint function and their blockade".

Dr Juan Quintana gave a talk online at the first **ParaFrap Next Generation in Parasitology Workshop** held in September entitled "Neuroimmunological basis of sleeping sickness - A tale of two B cells"



Dr Rebecca Dodd (Allen Lab) gave a talk at the Matrix Biology Europe 2024 conference in Lyon France entitled “IL-13 as a modulator of the hyaluronan matrix during lung inflammation & injury”.

Dr Katy Dodd (Menon Lab) presented some of her immune profiling work at the Neuromuscular Study Group 2024 conference held in New York in September.

Dr Matthew Sinton has been invited by The Festival of Genomics and Biodata to give a talk at their event next year, about using single cell and spatial transcriptomics to study the immune response to infection. The event will take place at ExCeL in London, in January and is the UK’s biggest annual life sciences event.

WT ICD PhD student Erin Pallott was invited to present her article on bullying in academia at the Teams Research's Reading Group and lead the discussions. The reading group focuses on publications surrounding research culture and collaborative research.

Full article: "I Don't Want to Cause Trouble": Acceptance of Bullying in Academia – Research Hive

Events

The STEM Village Immunology Symposium

On the 18th of November The STEM Village held their first in-person event at the Michael Smith Building supported by the Lydia Becker Institute. Founders Dr Matthew Sinton and Dr Juan Quintana write below about the purpose of The STEM Village and why they felt Manchester was the perfect place to host the event.

We founded The STEM Village to provide a platform to increase visibility of and inclusion for LGBTQ+ people across STEM, whilst also challenging heteronormative stereotypes. Many marginalised communities become less represented in STEM at more senior levels, but it is important for people to see themselves represented at all levels of the career track that they are planning to pursue. Moreover, it is important for people outside of STEM to see that the STEM community is populated by more than a single demographic, and that they are, in fact, serious scientists too. By platforming LGBTQ+ scientists to share their work, we can help to make this community more visible.

Having hosted many online events over the past 5 years, spanning all areas of STEM, we decided to start focusing more on immunology due to our own time constraints. We also decided that it was time to host an in-person event, and that Manchester was the place to host it, given that we're based here and also with how famous the city is for LGBTQ+ events and culture. The goal of this event was to provide a platform for LGBTQ+ immunologists to share their work, but also to provide networking opportunities with the wider immunology community. Hence, we invited predominantly LGBTQ+ immunologists to give talks but provided a platform for everyone to present posters and to network.

The day itself was wonderful. We had researchers joining us in person from across the UK, the Republic of Ireland, Portugal and Algeria, making it a truly international event. From The University of Manchester, we had fantastic participation and attendance from ECRs and leadership. Talks spanned topics from basic cellular immunology to the effects of gender-affirming healthcare on the immune system, making for an exciting and stimulating scientific programme.

Within these talks, speakers such as Fred Sheedy (Trinity College Dublin) also shared their experiences of being LGBTQ+ in STEM, which was incredibly valuable. Beyond the science, we also incorporated non-scientific talks on topics ranging from research culture to the queer history of Manchester.

We have received incredible feedback from participants at the event. LGBTQ+ participants have said that it was very special to be in such a safe and welcoming space to present their work, whilst allies have also commented that it helped them see things from angles that they hadn't previously considered. For example, one point we made was that for many LGBTQ+ people, coming out about their identity can be a traumatic event, but it's not a one-time thing. At work, we continuously come out to our colleagues without knowing what the response will be, which can be extremely difficult, and we were able to convey that message on the day. Together, we hope that all of the participants at the event enjoyed the science and networking opportunities, but also learned more about the importance of creating the space for these events and conversations to take place.

WT ICD PhD Programme Student Away Day

On Wednesday 31st July PhD students from the Becker's **Wellcome Trust Immuno-Matrix in Complex Disease PhD programme** attended an **away day** at Shrigley Hall, a Victorian manor house located in the countryside of Macclesfield.

The away day included workshops on how to excel at job applications by taking on the role of a recruiter and how to work more effectively with supervisors to overcome barriers together and optimise the supervisor/student relationship.

These workshops were delivered by **Sarah Ashworth** (pictured above, far right) from the university's Researcher Development team.

During a break students took part in a competitive, but friendly, game of 'footgolf' for some teambuilding in the beautiful summer weather.

To finish the day **Julia Schoonover** (Engaged and Inclusive Research Manager – pictured far right) delivered a workshop on Research Culture where students were asked to define what they understood by the term 'research culture', to identify examples of positive research culture at the Becker and to brainstorm ideas about what changes they would make to the PhD programme and university more broadly to help improve research culture further.

Organiser and Lydia Becker Institute Manager **Ameur Bayar** said, "I'm glad the away day was so positively received by students and that they played an active role in helping to shape the programme and select the venue.

The workshops on job applications and working with supervisors gave students practical skills which will serve them well both during their time on the WT ICD PhD programme and in their future careers.

I also look forward to helping develop their ideas on research culture improvements further and it's encouraging to see their passion and enthusiasm to help build a better research culture at the Becker and university."

Manchester Mayor Andy Burnham visits Ardwick Green Route site

On October 3rd Manchester Mayor Andy Burnham visited the Kale Street site of the Ardwick Green Route, created by Ardwick Climate Action in partnership with the local community and researchers from the Lydia Becker Institute at the University of Manchester.

The green route was launched on the 12th of March and helps local residents avoid excessive pollution caused by motor vehicles. The route is based on research conducted by Becker scientists on air pollution levels, barriers to active travel, and how to encourage walking in the area.

The Becker's Deputy Eco-immunology Branch Lead Professor Sheena Cruickshank met with the Mayor and said: "We were delighted to host Andy Burnham at the Kale Street site of the Ardwick Green Route to discuss our findings on air quality and the challenges for children's health and safety.

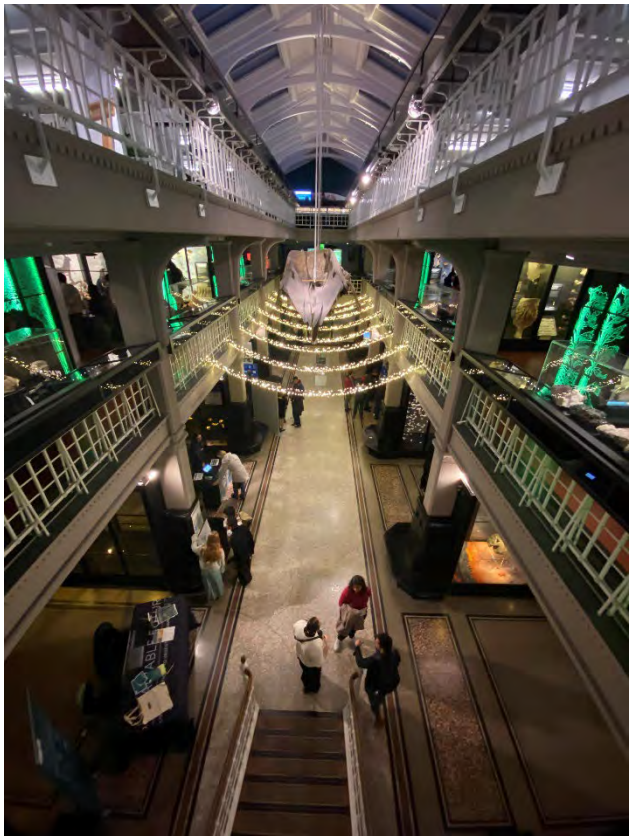
The Mayor also visited Co-op Medlock Academy and listened to the children talk about air quality. He made some brilliant suggestions, which if enacted could transform accessibility for accessing the green route and encourage more active travel."

Ardwick Climate Action is a campaign group formed to protect the local environment via grassroots advocacy that engages the local community. Their work encompasses the renewal of green spaces, monitoring pollution levels, and climate advocacy within Ardwick, which is one of the most deprived areas in Manchester.

You can read more about the green route and the benefits of community-focused research in a piece by Sheena published here.

'Wild Researchers Night' at Manchester Museum

On Wednesday 25th September Manchester Museum held an event entitled 'Wild Researchers Night' to celebrate the 60th anniversary of their Vivarium, 25 years of conservation work and their Wild exhibition. The evening showcased 'wild research' happening in Manchester.



Professor Sheena Cruickshank was in attendance for a discussion on community research partnerships and how civic collaboration can positively inform science and data – which highlighted the work Sheena has been doing in partnership with Ardwick Climate Action and the local community on air pollution and health and the creation of the Ardwick Green Walking Route.

'Class of 2024' Becker PhD Student Joint Leaving Do

On the **2nd October** we held a **leaving do for Becker PhD students** who started together during the pandemic back in 2020 at The Rat and Pigeon located in the Northern Quarter of Manchester.

Pictured above (left to right) are **Megan Priestley, Joshua Hughes, Rachel Finlay, Nabina Punn, Katie Lowles, William Zammit and Hannah Tompkins**.

Congratulations to all of them and we wish them all the best in their future endeavours!

‘Entangled Stories’ – Eco-immunology ArtScience Project

A chance meeting on the Isle of May between **Becker Eco-immunology Branch Lead Professor Kathryn Else, Dr Iris Mair from The University of Edinburgh and artist Alice Angus** resulted in conversations about drawing, research and field work which led, a year later, to Alice returning to the island as an artist in residence with the team of ecoimmunologists to work on an ArtScience project supported by the BBSRC and BSI entitled ‘Entangled Stories’.

Kathryn said “the environment impacts the immune system throughout life. We work in the interdisciplinary area of ‘eco-immunology’, bridging the gap between laboratory immunology and the real world by studying the immune system of a wild mouse population on the Isle of May.” A National Nature Reserve, managed by NatureScot staff and volunteers, the Isle of May is an important safe haven for avian and sea life and receives thousands of visitors each year.

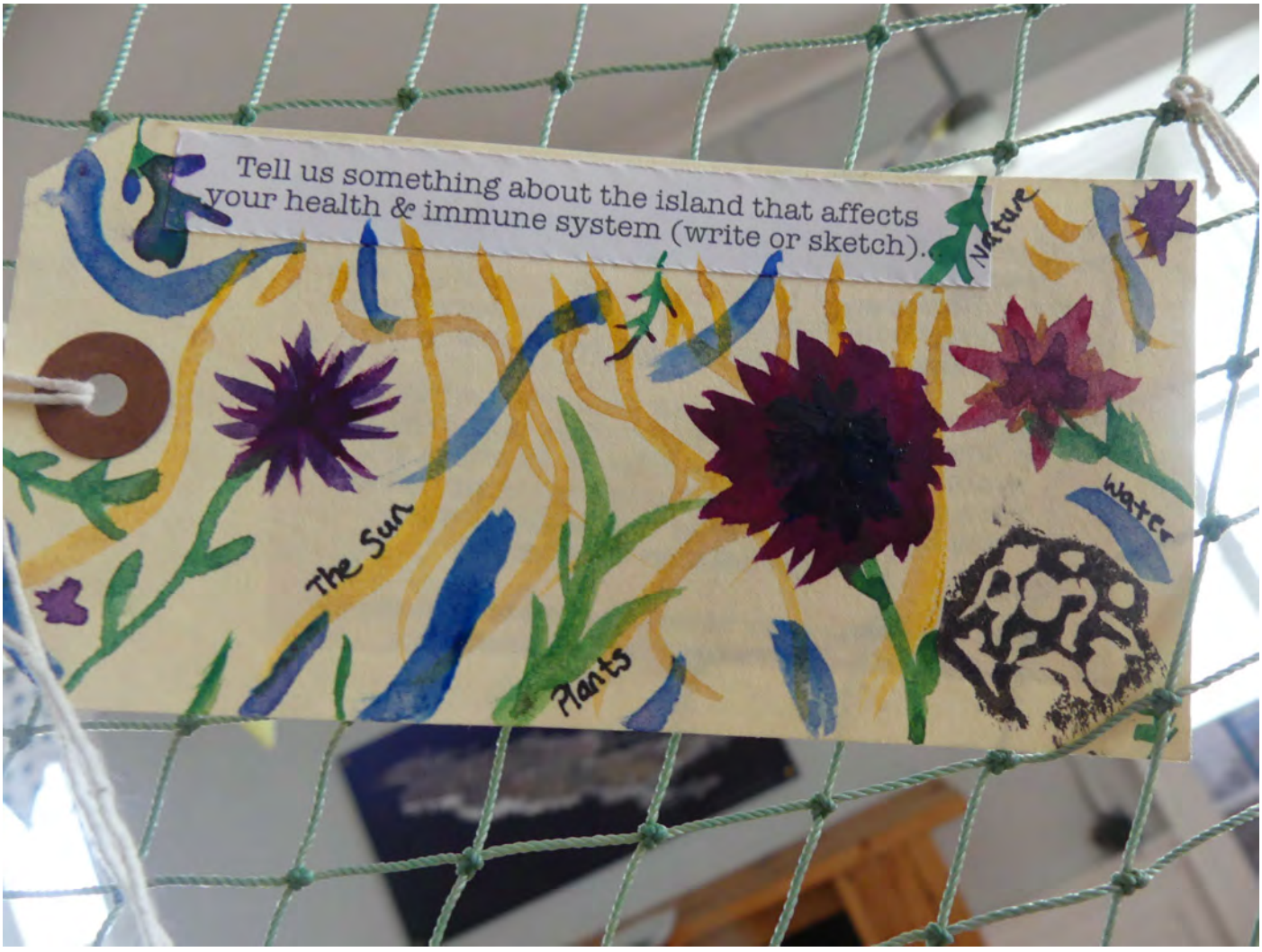
The ArtScience project was motivated by a desire amongst the team to build understanding and conversation around how the environment influences the immune system and thus health, and to reveal unseen aspects of ecoimmunological research being done on the Isle of May via the medium of art as a means to increase research transparency.

Alice said “I followed and drew the team during their fieldwork living and working on the island, in all kinds of weather, as well as sketching the wildlife, landscapes and other people on the island. I led drawing workshops with the researchers, in sun, wind, fog and rain, sharing methods to observe, discover and represent unseen, unexpected and unforeseen details, dynamics and relationships through mark making and the team created a lovely series of concertina books and net of stories for visitors to add to.”

Historically sketching and drawing had an important place in the sciences as a method of discovery, understanding and communication, for hundreds of years and so Alice was very excited to work with the team of ecoimmunologists to (re)connect their current methods of observation to practices rooted in drawing and fine art.

Alice said “Sketching is an excellent tool of discovery and analysis but often drawing is only used to represent the findings of research. My work explores how drawing can be an active part of a research process and a catalyst for new observations, discoveries, discussions and findings. Drawing is both a fast process to capture fleeting moments, a slow process of study that reveals things and an abstract way to explore sensory atmospheres like sound, touch and smell.”

Alice's process of drawing works as kind of field observation; being in a place listening, observing and participating and it involves patience, time and experimentation. It's a time-based process that reveals unexpected and unseen things. Alice explains "I draw from life, observing surroundings through sight, sound, smell and touch, often waiting for the right moment, (drawing similarities with scientific observation). Drawing is a powerful way to get to know people, who see me drawing and talk about the drawings and their work and suggest other things or places to draw. In this way I see and hear stories, details, workings, routines and rhythms."



Kathryn and the ecoimmunologists found that working with Alice helped foster reflective conversations within the research team around the nature and processes of immunological research being done in the wild and it allowed them to connect with their environment and study system beyond the scientific content of the study. Using observational and sensory drawing as a method of enquiry, observation and analysis gave them, as eco-immunology field researchers, methods to explore, reveal and represent unseen dynamics and relationships.

Work from the project pictured above was shown at an exhibit at the historic Main Lighthouse on the Isle of May in September.

Commenting on the impact made by the project Kathryn said, “we have created a lasting ArtScience resource highlighting field researcher realities, and the area of eco-immunology, to immunologists and the wider public.”

Upcoming Seminars, Meetings and Events

Becker Research Culture Chats

We are now hosting monthly meetings with Becker affiliated staff and students on the topic of research culture. This includes informal conversations on aspects essential for researchers and that extend beyond lab work, such as building resilience, imposter syndrome, and neurodiversity, to networking, reproducibility, career progression.

These informal chats allow Becker researchers to learn from their colleagues, share perspectives on challenges and ultimately help to shape a more positive research culture at the Becker.

Full details are circulated via the Becker mailing list, so keep an eye on your inbox and we hope you'll join us.

MIG Seminar Series

The 24/25 MIG Seminar Series is currently underway. The seminars are hybrid and details are circulated weekly.

Please contact Andy Greenhalgh andrew.greenhalgh@manchester.ac.uk or the DIIIRM PS Team diiirm@manchester.ac.uk if you would like to be added to the MIG seminar mailing list.

British Society for immunology

Lydia Becker Institute of Immunology and Inflammation

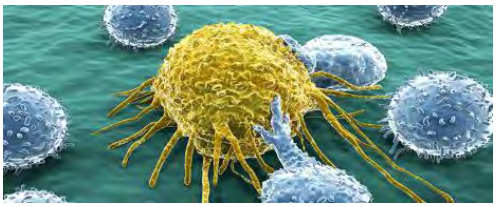
Greater Manchester Immunology Group Seminar Series 2024-2025

All seminars at 12-1pm unless otherwise stated

Contact: andrew.greenhalgh@manchester.ac.uk, douglas.dyer@manchester.ac.uk, diiirm@manchester.ac.uk

Date	Speaker	Institute
Thursday 5 December	Sarah Dimelow	University of Birmingham
Thursday 16 January	Gerard Graham	University of Glasgow
Thursday 23 January	Cecile Benezech	The University of Edinburgh
Thursday 30 January	Molly Ingersoll	Paris
Thursday 6 February	Tamara Girbl	University of Wuerzburg
Thursday 13 February	David Bending	University of Birmingham
Thursday 27 February	Japp van Buul	Amsterdam
Thursday 6 March	Andreas Diefenbach	Charité – Universitätsmedizin Berlin
Thursday 13 March	Megan MacLeod	University of Glasgow
Thursday 20 March	Danilia Ferreira	University of Oxford
Thursday 27 March	Chris Hunter	University of Pennsylvania
Thursday 3 April	Francesca Ronchi	Berlin
Thursday 10 April	Damina Perez Mazliah	University of York
Thursday 24 April	Christoph Schneider	Zurich
Thursday 1 May	Melissa Conroy	Trinity College Dublin
Thursday 8 May	Jonathan Cavanagh	University of Glasgow
Thursday 15 May	Naomi McGovern	University of Cambridge
Thursday 22 May	Sara Valpione	The Christie NHS Foundation Trust
Thursday 12 June	Carlos Minutti	Champalimaud Foundation, Lisbon

MION Network



The Manchester Immuno-Oncology Network (MION) fosters interactions between Clinicians and Scientists with an interest in immuno-oncology within Manchester, with an aim to bring people together to maximise collaborations and provide educational opportunities.

MION hosts quarterly interactive workshops covering topics such as:

•T cell immuno-oncology

•Pre-clinical models

•Immuno-oncology biomarkers

•Moving from pre-clinical data to clinical trial development

If you would like to join the Network and hear about our future events and opportunities for collaboration please email the-christie.Mcr-IOnetwork@nhs.net.

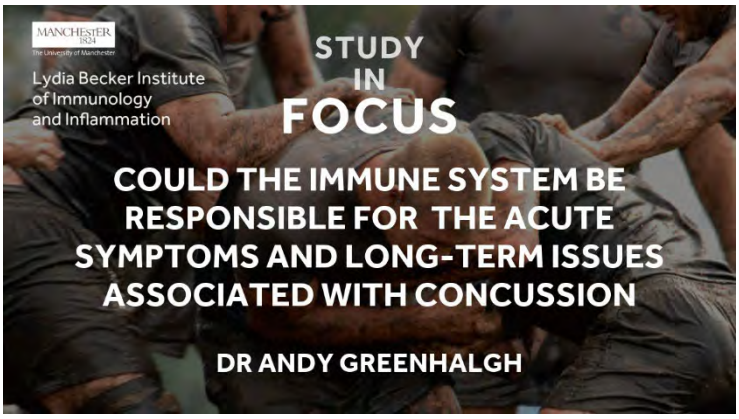
Becker Profiles

Find out more about the fantastic Research Fellows, Postdocs, Research Assistants, Technicians and PhD students affiliated with the Lydia Becker Institute by taking a look at our 'Becker Profiles' series.

More profiles to come in the new year, so keep an eye on our website

Photos: Brian Chan

Study in Focus

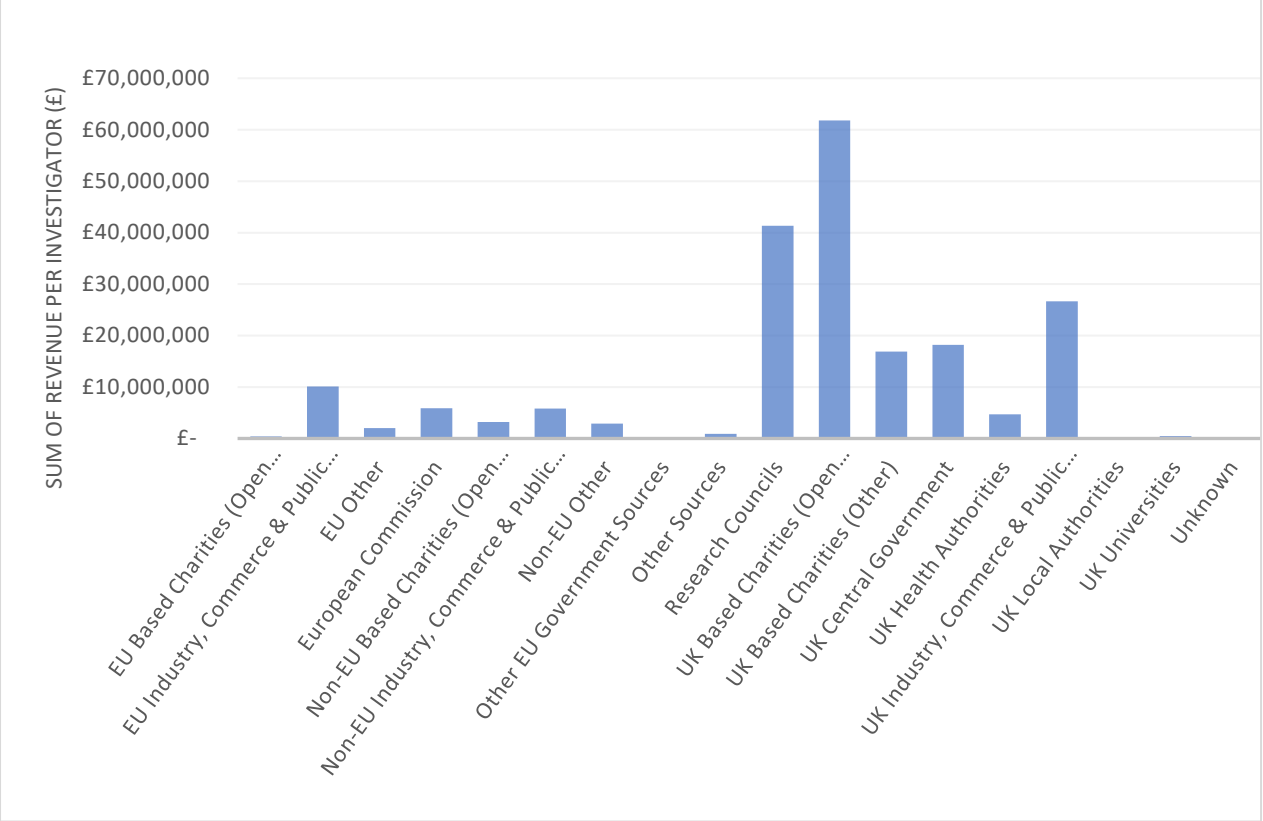


To take a closer look at the fascinating work conducted by Becker researchers and communicate this to a broader audience we launched a series called 'Study in Focus', where our researchers discuss a recent study conducted by their lab, provide an overview of the current research landscape and give their view on what the future might hold for further research and clinical treatments for patients.

Our latest entry, written by our Neuro-immunology Branch Lead **Dr Andy Greenhalgh**, looks at his lab's research on concussion and the role the immune system might play in those suffering from acute symptoms and long-term issues. You can read it here.

Grants

Since its inception PIs in the Lydia Becker Institute have been awarded over £201M in grants.



Publications

Selected publications from Lydia Becker Institute affiliated researchers

August 2024

Wellens R, Tapia VS, Seoane PI, Bennett H, Adamson A, Coutts G, Rivers-Auty J, Lowe M, Green JP, Lopez-Castejon G, Brough D, Hoyle C. Proximity labelling of pro-interleukin-1Î± reveals evolutionary conserved nuclear interactions.
Nat Commun. 2024 Aug 8;15(1):6750.
PMID: 39117622 https://doi.org/10.1038/s41467-024-50901-0

Bai S, Martin-Sanchez F, Brough D, Lopez-Castejon G. Pyroptosis leads to loss of centrosomal integrity in macrophages.
Cell Death Discov. 2024 Aug 8;10(1):354.
PMID: 39117604 https://doi.org/10.1038/s41420-024-02093-1

Dodd RJ, Blundell CD, Sattelle BM, Enghild JJ, Milner CM, Day AJ. Chemical modification of hyaluronan oligosaccharides differentially modulates hyaluronan-hyaladherin interactions.
J Biol Chem. 2024 Aug 9;:107668. [Epub ahead of print]
PMID: 39128716 https://doi.org/10.1016/j.jbc.2024.107668

Bessell E, Finlay RE, James LK, Ludewig B, Harris NL, Krebs P, Hepworth MR, Dubey LK. Stromal cell and B cell dialogue potentiates IL-33-enriched lymphoid niches to support eosinophil recruitment and function during type 2 immunity.
Cell Rep. 2024 Aug 13;43(8):114620. [Epub ahead of print]
PMID: 39141517 https://doi.org/10.1016/j.celrep.2024.114620

Mouat IC, Zhu L, Aslan A, McColl BW, Allan SM, Smith CJ, Buckwalter MS, McCulloch L. Evidence of aberrant anti-epstein-barr virus antibody response, though no viral reactivation, in people with post-stroke fatigue.
J Inflamm (Lond). 2024 Aug 12;21(1):30.
PMID: 39135051 https://doi.org/10.1186/s12950-024-00402-0

Lunj S, Smith TAD, Reeves KJ, Currell F, Honeychurch J, Hoskin P, Choudhury A. Immune effects of α and β radionuclides in metastatic prostate cancer.
Nat Rev Urol. 2024 Aug 27;. [Epub ahead of print]
PMID: 39192074 https://doi.org/10.1038/s41585-024-00924-5

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Roberts LB, Neves JF, Lee DCH, Valpione S, Tachó-Piñot R, Howard JK, Hepworth MR, Lord GM. MicroRNA-142 regulates gut associated lymphoid tissues and group 3 innate lymphoid cells.
Mucosal Immunol. 2024 Sep 6;. [Epub ahead of print]
PMID: 39245145 https://doi.org/10.1016/j.mucimm.2024.09.001

Nakkazi A, Forster D, Whitfield GA, Dyer DP, Dickie BR. A systematic review of normal tissue neurovascular unit damage following brain irradiation-Factors affecting damage severity and timing of effects.
Neurooncol Adv. 2024 Jan-Dec;6(1):vdae098.
PMID: 39239570 https://doi.org/10.1093/noajnl/vdae098

Bognanni A, Firmino RT, Arasi S, Chu DK, Chu AWL, Waffenschmidt S, Agarwal A, Dziechciarz P, Horvath A, Mihara H, Roldan Y, Terracciano L, Martelli A, Starok A, Said M, Shamir R, Ansotegui IJ, Dahdah L, Ebisawa M, Galli E, Kamenwa R, Lack G, Li H, Pawankar R, Warner A, Wong GWK, Bozzola M, Assa'Ad A, Dupont C, Bahna S, Spergel J, Venter C, Szajewska H, Nowak-Wegrzyn AH, Vandenplas Y, Papadopoulos NG, Waserman S, Fiocchi A, Schünemann HJ, Brożek JL. World Allergy Organization (WAO) Diagnosis and Rationale for Action against Cow's Milk Allergy (DRACMA) guideline update - XI - Milk supplement/replacement formulas for infants and toddlers with CMA - Systematic review.
World Allergy Organ J. 2024 Sep;17(9):100947.
PMID: 39310372 https://doi.org/10.1016/j.waojou.2024.100947

Dookie RS, Villegas-Mendez A, Cheeseman A, Jones AP, Barroso R, Barrett JR, Draper SJ, Janse CJ, Grogan JL, MacDonald AS, Couper KN. Synergistic blockade of TIGIT and PD-L1 increases type-1 inflammation and improves parasite control during murine blood-stage Plasmodium yoelii non-lethal infection.
Infect Immun. 2024 Sep 26;:e0034524. [Epub ahead of print]
PMID: 39324794 https://doi.org/10.1128/iai.00345-24

Paller AS, Silverberg JI, Simpson EL, Cork MJ, Arkwright PD, Chen Z, Bansal A, Prescilla R, Wang Z, Marco AR. The effect of dupilumab on caregiver- and patient-reported outcomes in young children with moderate-to-severe atopic dermatitis: results from a placebo-controlled, phase 3 study.
J Am Acad Dermatol. 2024 Sep 28;. [Epub ahead of print]
PMID: 39349183 https://doi.org/10.1016/j.jaad.2024.09.039

October 2024

Torta F, Hoffmann N, Burla B, Alecu I, Arita M, Bamba T, Bennett SAL, Bertrand-Michel J, Brügger B, Cala MP, Camacho-Muñoz D, Checa A, Chen M, Chocholoušková M, Cinel M, Chu-Van E, Colsch B, Coman C, Connell L, Sousa BC, Dickens AM, Fedorova M, Eiríksson FF, Gallart-Ayala H, Ghorasaini M, Giera M, Guan XL, Haid M, Hankemeier T, Harms A, Höring M, Holčapek M, Hornemann T, Hu C, Hülsmeier AJ, Huynh K, Jones CM, Ivanisevic J, Izumi Y, Köfeler HC, Lam SM, Lange M, Lee JC, Liebisch G, Lippa K, Lopez-Clavijo AF, Manzi M, Martinefski MR, Math RGH, Mayor S, Meikle PJ, Monge ME, Moon MH, Muralidharan S, Nicolaou A, Nguyen-Tran T, O'Donnell VB, Orešič M, Ramanathan A, Riols F, Saigusa D, Schock TB, Schwartz-Zimmermann H, Shui G, Singh M, Takahashi M, Thorsteinsdóttir M, Tomiyasu N, Tournadre A, Tsugawa H, Tyrrell VJ, van der Gugten G, Wakelam MO, Wheelock CE, Wolrab D, Xu G, Xu T, Bowden JA, Ekroos K, Ahrends R, Wenk MR. Concordant inter-laboratory derived concentrations of ceramides in human plasma reference materials via authentic standards.
Nat Commun. 2024 Oct 3;15(1):8562.
PMID: 39362843 https://doi.org/10.1038/s41467-024-52087-x

Sim M, Sharma V, Li K, Gowland MH, Garcez T, Shilladay C, Pumphrey R, Patel N, Turner PJ, Boyle RJ. Adrenaline Auto-Injectors for Preventing Fatal Anaphylaxis.
Clin Exp Allergy. 2024 Oct 9;. [Epub ahead of print]
PMID: 39383344 https://doi.org/10.1111/cea.14565

October 2024 continued

Sim M, Sharma V, Li K, Gowland MH, Garcez T, Shilladay C, Pumphrey R, Patel N, Turner PJ, Boyle RJ. Adrenaline Auto-Injectors for Preventing Fatal Anaphylaxis.
Clin Exp Allergy. 2024 Oct 9;. [Epub ahead of print]
PMID: 39383344 https://doi.org/10.1111/cea.14565

Guha A, Diaz-Pino R, Fagbemi A, Hughes SM, Wynn RF, Lopez-Castejon G, Arkwright PD. Very Early-Onset IBD-Associated IL-18opathy Treated with an Anti-IL-18 Antibody.
J Clin Med. 2024 Oct 11;13(20).
PMID: 39458007 https://doi.org/10.3390/jcm13206058

Dubaissi E, Hilton EN, Lilley S, Collins R, Holt C, March P, Danahay H, Gosling M, Grencis RK, Roberts IS, Thornton DJ. The Tmem16a chloride channel is required for mucin maturation after secretion from goblet-like cells in the Xenopus tropicalis tadpole skin.
Sci Rep. 2024 Oct 26;14(1):25555.
PMID: 39461969 https://doi.org/10.1038/s41598-024-76482-y

El-Sayed S, McMahon E, Musleh S, Freeman S, Brough D, Kasher PR, Bryce RA. Virtual screening-led design of inhibitor scaffolds for the NLRP3 inflammasome.
Bioorg Chem. 2024 Oct 22;153:107909. [Epub ahead of print]
PMID: 39467507 https://doi.org/10.1016/j.bioorg.2024.107909

Buso H, Adam E, Arkwright PD, Bhattad S, Hamidieh AA, Behfar M, Belot A, Benezech S, Chan AY, Crow YJ, Dvorak CC, Flinn AM, Kapoor U, Lankester A, Kobayashi M, Matsumura R, Mottaghipisheh H, Okada S, Ouachee M, Parvaneh N, Ramprakash S, Satwani P, Sharafian S, Triaille C, Wynn RF, Movahedi N, Ziaee V, Williams E, Slatter M, Gennery AR. Hematopoietic Stem Cell Transplantation for C1q Deficiency: A Study on Behalf of the EBMT Inborn Errors Working Party.
J Clin Immunol. 2024 Oct 29;45(1):35.
PMID: 39470951 https://doi.org/10.1007/s10875-024-01819-1

Boguniewicz M, Sher LD, Paller AS, Arkwright PD, Yoshihara S, Chen Z, Shah P, Marco AR. Dupilumab is Efficacious in Young Children with Atopic Dermatitis Regardless of Type 2 Comorbidities
Adv Ther. 2024 Oct 29;. [Epub ahead of print]
PMID: 39470878 https://doi.org/10.1007/s12325-024-02998-4

Santos AF, Riggioni C, Agache I, Akdis CA, Akdis M, Alvarez-Perea A, Alvaro-Lozano M, Ballmer-Weber B, Barni S, Beyer K, Bindslev-Jensen C, Brough HA, Buyuktiryaki B, Chu D, Del Giacco S, Dunn-Galvin A, Eberlein B, Ebisawa M, Eigenmann P, Eiwegger T, Feeney M, Fernandez-Rivas M, Fiocchi A, Fisher HR, Fleischer DM, Giovannini M, Gray C, Hoffmann-Sommergruber K, Halken S, O'B Hourihane J, Jones CJ, Jutel M, Knol EF, Konstantinou GN, Lack G, Lau S, Mejias AM, Marchisotto MJ, Meyer R, Mortz CG, Moya B, Muraro A, Nilsson C, de Oliveira LCL, O'Mahony L, Papadopoulos NG, Perrett KP, Peters R, Podesta M, Poulsen LK, Roberts G, Sampson H, Schwarze J, Smith P, Tham E, Untersmayr E, Van Ree R, Venter C, Vickery B, Vlieg-Boerstra B, Werfel T, Worm M, Du Toit G, Skypala I. EAACI guidelines on the management of IgE-mediated food allergy.
Allergy. 2024 Oct 30;. [Epub ahead of print]
PMID: 39473345 https://doi.org/10.1111/all.16345

November 2024

Mair I, Bennett AR, Forman R, Othman AA, Logunova L, Smith H, Lowe AE, Bradley JE, Thornton DJ, Else KJ. T. Muris Infection Dynamics of a Fresh, Wild Isolate: Is the Established E Isolate Still Relevant?
Parasite Immunol. 2024 Nov;46(11):e13072.
PMID: 39480064 https://doi.org/10.1111/pim.13072

Cruickshank SM, Else KJ, Mair I, Shiels H, Shultz S. How (Eco)immunology can augment global EcoHealth programmes: opportunities, needs, and challenges.
Discov Immunol. 2024;3(1):kyae015.
PMID: 39498473 https://doi.org/10.1093/discim/kyae015

Kleeblatt E, Lazki-Hagenbach P, Nabet E, Cohen R, Bahri R, Rogers N, Langton A, Bulfone-Paus S, Frenkel D, Sagi-Eisenberg R. p16(Ink4a)-induced senescence in cultured mast cells as a model for ageing reveals significant morphological and functional changes.
Immun Ageing. 2024 Nov 11;21(1):77.
PMID: 39529115 https://doi.org/10.1186/s12979-024-00478-5

Khaleva E, Brightling C, Eiwegger T, Altraja A, Bégin P, Blumchen K, Bossios A, Bourdin A, Ten Brinke A, Brusselle G, Silvia Bumbacea R, Bush A, Casale TB, Clarke GW, Chaudhuri R, Fan Chung K, Coleman C, Corren J, Dahlén SE, Deschildre A, Djukanovic R, Eger K, Exley A, Fleming L, Fowler SJ, Gaillard EA, Gappa M, Gupta A, Michael Haitchi H, Hashimoto S, Heaney LG, Hedlin G, Henderson M, Hua W, Jackson DJ, Karadag B, Helen Katelaris C, Koh MS, Volkmar Kopp M, Koppelman GH, Kull I, Kurukulaaratchy RJ, Lee JH, Mahler V, Mäkelä M, Masoli M, Mathioudakis AG, Mazon A, Melén E, Milger K, Moeller A, Murray CS, Nagakumar P, Nair P, Negus J, Nieto A, Papadopoulos NG, Paton J, Pijnenburg MW, Pike KC, Porsbjerg C, Rattu A, Rupani H, Rusconi F, Rutjes NW, Saglani S, Seddon P, Siddiqui S, Singer F, Tajiri T, Turner S, Upham JW, Vijverberg SJH, Wa rk PAB, Wechsler ME, Yasinska V, Roberts G. Patient-centred composite scores as tools for assesment of response to biological therapy for paediatric and adult severe asthma.
Eur Respir J. 2024 Nov 7;. [Epub ahead of print]
PMID: 39510551 https://doi.org/10.1183/13993003.00691-2024

Kang J, Park J, Jo H, Lee H, Lee K, Kim S, Kang J, Lee JH, Papadopoulos NG, Smith L, Shin JY, Rahmati M, Cho SH, Cho JK, Lee S, Pizzol D, Yeo SG, Lee H, Jin SP, Yon DK. Global Burden of Vaccine-Associated Chronic Urticaria, 2010-2023: From the Global Pharmacovigilance Database.
Allergy Asthma Immunol Res. 2024 Nov;16(6):613-625.
PMID: 39622686 https://doi.org/10.4168/aair.2024.16.6.613

Li R, Strobl J, Poyner EFM, Balbaa A, Torabi F, Mazin PV, Chipampe NJ, Stephenson E, Ramírez-Suástegi C, Shanmugiah VBM, Gardner L, Olabi B, Coulthard R, Botting RA, Zila N, Prigmore E, Gopee NH, Chroscik MA, Kritikaki E, Engelbert J, Goh I, Chan HM, Johnson HF, Ellis J, Rowe V, Tun W, Reynolds G, Yang D, Foster AR, Gambardella L, Winheim E, Admane C, Rumney B, Steele L, Jardine L, Nenonen J, Pickard K, Lumley J, Hampton P, Hu S, Liu F, Liu X, Horsfall D, Basurto-Lozada D, Grimble L, Bacon CM, Weatherhead SC, Brauner H, Wang Y, Bai F, Reynolds NJ, Allen JE, Jonak C, Brunner PM, Teichmann SA, Haniffa M. Cutaneous T cell lymphoma atlas reveals malignant T(H)2 cells supported by a B cell-rich tumor microenvironment.
Nat Immunol. 2024 Nov 18;.
PMID: 39558094 https://doi.org/10.1038/s41590-024-02018-1

Dodd RJ, Allen JE, Day AJ. Hyaluronan in COVID-19: a matrix for understanding lung disease.
mBio. 2024 Nov 18;:e0260924. [Epub ahead of print]
PMID: 39555923 https://doi.org/10.1128/mbio.02609-24

November 2024 continued

Houlder EL, Gago S, Vere G, Furlong-Silva J, Conn DP, Hickey E, Khan S, Thomson D, Shepherd MW, Lebedinec R, Brown GD, Horsnell W, Bromley M, MacDonald AS, Cook PC. Aspergillus-mediated allergic airway inflammation is triggered by dendritic cell recognition of a defined spore morphotype.
J Allergy Clin Immunol. 2024 Nov 22;. [Epub ahead of print]
PMID: 39581297 https://doi.org/10.1016/j.jaci.2024.10.040

Rao G, Mack CD, Nguyen T, Wong N, Payne K, Worley L, Gray PE, Wong M, Hsu P, Stormon MO, Preece K, Suan D, O'Sullivan M, Blincoe AK, Sinclair J, Okada S, Hambleton S, Arkwright PD, Boztug K, Stepensky P, Cooper MA, Bezrodnik L, Nadeau KC, Abolhassani H, Abraham RS, Seppänen MRJ, Béziat V, Bustamante J, Forbes Satter LR, Leiding JW, Meyts I, Jouanguy E, Boisson-Dupuis S, Uzel G, Puel A, Casanova JL, Tangye SG, Ma CS. Inborn errors of immunity reveal the molecular requirements for the generation and maintenance of human IL-9 expressing cells.
J Allergy Clin Immunol. 2024 Nov 30;. [Epub ahead of print]
PMID: 39622295 https://doi.org/10.1016/j.jaci.2024.11.031

December 2024

Dodd RJ, Moffatt D, Vachiteva M, Parkinson JE, Chan BHK, Day AJ, Allen JE, Sutherland TE. Injury From Nematode Lung Migration Induces an IL-13-Dependent Hyaluronan Matrix.
Proteoglycan Res. 2024 Oct-Dec;2(4):e70012.
PMID: https://doi.org/10.1002/pgr2.70012

Gregory GE, Haley MJ, Jones AP, Hannan CJ, Evans DG, King AT, Paszek P, Pathmanaban ON, Couper KN, Brough D. Alternatively activated macrophages are associated with faster growth rate in vestibular schwannoma.
Brain Commun. 2024;6(6):fcae400.
PMID: 39611183 https://doi.org/10.1093/braincomms/fcae400

Crow YJ, Briggs TA, Eleftheriou D, Parida A, Battison C, Giddings A, Kennel T, Parker RA. Reverse transcriptase inhibitors in Aicardi-Goutières syndrome: A crossover clinical trial
Dev Med Child Neurol. 2024 Dec 4;. [Epub ahead of print]
PMID: 39630935 https://doi.org/10.1111/dmcn.16199

Miligkos M, Oh J, Kwon R, Konstantinou G, Kim S, Yon DK, Papadopoulos NG. Epidemiology of asthma across the ages.
Ann Allergy Asthma Immunol. 2024 Dec 12;. [Epub ahead of print]
PMID: 39674277 https://doi.org/10.1016/j.anai.2024.12.004

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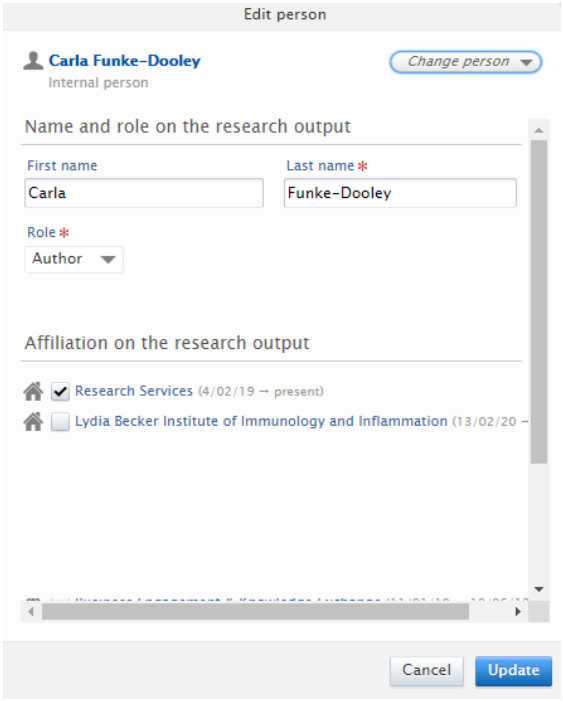

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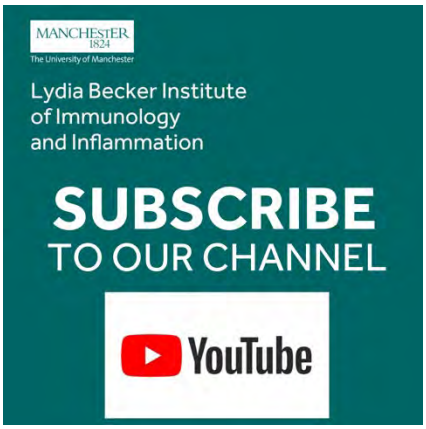

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