

Connective Issues:

BSMB Newsletter



Committee:

Prof John Couchman (Chair), Prof Kim Midwood (Secretary),
Dr Tom van Agtmael (Treasurer), Ms. Laura Collins (Student rep),
Dr Michal Dudek (Post doc rep), Prof Steph Dakin, Prof Jerry Turnbull,
Dr Kasia Pirog, Dr Blandine Poulet, Dr Maria Fragiadaki and Dr Anna
Maria Piccinini

Registered Charity no. 281399

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Editorial

Welcome to the 98th Connective Issues. For us all in the UK this newsletter comes to you in the depth of lockdown 3.0, with the associated challenges that are now sadly all too familiar. Whilst this pandemic continues to affect us all in different ways, we should take heart that there is hope of a path out this time, and the chances of a new normality, including being able to attend a BSMB meeting in person, which we all eagerly await, appear closer as we start this new year.

In the meantime, building on the fantastic success of the Glasgow online BSMB meeting, which really expanded our capability to hear excellent science from first class speakers from all over the world (for more details please see the meeting report later on this issue) the **BSMB Spring 2021 meeting** will also be held online. Registration and abstract submission is now open: <https://bsmb.ac.uk>.

In this meeting we'll be expanding the poster sessions and there will be the usual prizes available for poster presentation, as well as the opportunity for selected abstracts to be given as oral presentations at this meeting. We are also awarding **three BSMB reporter bursaries** for this meeting - for application details please see below or go online.

Although we won't be together in person by Spring 2021, we look forward to seeing you online in April!

Kim Midwood, Honorary Secretary

Chair's Letter

After a year like no other, I would like to start by hoping that all our members are well and have managed to combat all the difficulties and disruptions that have been so evident and pervasive. We hope for much better

times in 2021. As you will be aware, the BSMB was not able to host a face-to-face meeting this year. Our Surrey meeting has been postponed and we hope to organise that for 2022. In the autumn, our Glasgow meeting was held by Zoom and turned out to be highly successful with a very large registration and excellent science. Thanks again to Tom van Agtmael, Rachel Lennon and Fabio Quondamatteo for all their hard work. The meeting demonstrated clearly that a virtual format can be effective, but many of us miss the interactions and discussions that can only be had when meeting in person.

All this raises the issue, addressed previously by the BSMB committee and in discussion with our members, of whether in the future we should have one annual meeting or two. There are arguments that can be made for either scenario. There are issues of costs to attend meetings, although by comparison across biomedical fields and internationally, ours are very economical. The BSMB committee discussed this issue again in September, and came down in favour of two meetings per year, as we have in the past. While not an easy decision, the major factor was a desire to offer opportunities for early career researchers to meet their peers and colleagues, network and present their data, all in a collegial environment. This, for me, is a key part of our mission. We are acutely aware that such opportunities were scant in 2020 and therefore hope that when we next have the chance to meet in person, as many of you as possible will come to support the science and our Society.

We have made the decision to have an online format for our spring, Oxford, meeting and details can be found in this newsletter. Many thanks to Steph Dakin for organising a very interesting programme. Our hope is to meet face-to-face at our September meeting in Newcastle. We should have celebrated our

40th anniversary in 2020, but aim to make amends at the Newcastle meeting.

Thanks are due to colleagues who completed their terms of office on our Committee this year. First, many thanks to Stephen Robinson (UEA) for all of his contributions and an excellent Norwich meeting in 2019. Giovanna Nalesso also completed her term, but as indicated above, the Surrey meeting was a casualty of the pandemic. Giovanna has kindly agreed to stay on in an ex officio capacity with the aim of organising her meeting in spring 2022. James Whiteford also completed his term but fortunately has agreed to stay on as an ex officio member of the Committee, and will continue to take care of our website. We are grateful to all for their efforts on our behalf. In addition, we welcome our new Committee member, Anna Piccinini from the University of Nottingham. We look forward to working with Anna over the next few years.

It remains for me to wish all our members a healthy and successful New Year. I very much look forward to a more normal future where we can meet and celebrate the BSMB and our science.

Very best wishes to all members.
John Couchman, Chair

Mark your diary

BSMB Spring 2021 Meeting

Online via the University of Oxford
Inflammation, fibrosis,
resolution and the matrix
April 12-13 2021

BSMB Autumn 2021 Meeting

University of Newcastle
Extracellular matrix in rare disease
September 6-7 2021

BSMB News

BSMB Spring 2021 meeting:

Inflammation, fibrosis, resolution and the matrix, April 12-13 2021

It is our great pleasure to invite you to attend this online meeting. The conference will be held over two days in the usual BSMB format and will include sessions covering all aspects of inflammation and fibrosis, together with the Fell-Muir Award and lecture given by Andy Pitsillides.

Selected abstracts will also be awarded presentation slots in each session to encourage younger investigators to participate. There will be up to 12 talks awarded to submitted abstracts. Please see details below for confirmed speakers and the programme.

Chair: Prof Stephanie Dakin

Key dates:

- Registration opens 18th December 2020
- Registration closes 31st March 2021
- Abstract submission opened on 18th December 2020 and will close on 15th February 2021
- Oral presentation notification 15th March 2021

For further information and to register, please visit: <https://bsmb.ac.uk>.

You can also follow us on...

Instagram: [@matrixbiologyuk](#)

Twitter: [@BSMB1](#)

Facebook: [@BritishSocietyForMatrixBiology](#)

WELCOME TO NEW BSMB MEMBERS!

Full members

Ellen LeMosy (Augusta USA)
Lisa Hill (Birmingham)
Marion Baraban (Paris)
Jianqing Zhang (Oxford)
Elham Khosrowabadi (Oulu, Finland)

Student Members

William Hotham (Cambridge)
Rual Fulea (Newcastle)
Rafaella Konstantinou (Manchester)

OBITUARY: Professor Bryan Sykes.

Former BCTS/BSMB member, Professor Bryan Sykes died after a period of ill health on December 10th 2020.

Bryan was a member of the Collagen Club that in 1980 amalgamated with the Mucopolysaccharide Club to form the British Connective Tissue Society (BCTS) which became the British Society for Matrix Biology (BSMB) in 1998. Bryan was a regular contributor to the Collagen Club meetings and was on the initial committee of the newly formed BCTS. He organised a meeting with Ellen Solomon on "Collagen research and recombinant DNA technology" in 1982 reflecting his growing interest in molecular genetics of connective tissue diseases. Typical of Bryan, he broke with the usual convention that you organised a meeting at your host institution. He organised this meeting in York because he thought it would be an interesting place to gather.

Bryan was born in London on September 9th 1947 and was educated at Eltham College. He

studied biochemistry at the University of Liverpool before studying for a PhD at the University of Bristol. He undertook these studies on the matrix protein elastin at the Agricultural and Food Research Council funded Meat Research Institute at Langford, supervised by Miles (Sam) Partridge, FRS. He also undertook work on collagen with Allen Bailey. After obtaining his PhD in 1973 he moved to the Nuffield Department of Orthopaedic Surgery at the University of Oxford, continuing his studies on elastin and collagen.

In the 1980s Bryan's interest in molecular genetics led to him identifying the chromosomal location of the type I collagen genes. His work then increasingly extended to investigate the inherited diseases associated with collagen and other matrix protein genes. He became a lecturer on molecular pathology in 1987 and established his Collagen Genetics Group, which moved to the new Institute of Molecular Medicine, headed by Professor Sir David Weatherall, on the John Radcliffe Hospital site in Oxford. Bryan was awarded a personal chair in 1997. Through the 1980s and 1990s he published widely on the genetics of many connective tissue diseases but principally osteogenesis imperfecta (brittle bone disease), Marfan's Syndrome, osteoarthritis and various chondrodysplasias. Apart from his excellent science he was also an inventor, developing and marketing his own water-based PCR machine which was used throughout his lab in the early 1990s.

From his interest in bone in the late 1980s he started to work with archaeologists on extracted DNA from ancient bone samples. He focussed on mitochondrial DNA which is

passed on through the maternal line as a way of tracing human ancestry. His studies traced the movement of numerous human populations including Polynesians, Vikings and Europeans. Such studies led to his book *The Seven Daughters of Eve* (2001) in which he proposed that every living European could trace his or her ancestry to one of seven women living between 8,500 and 45,000 years ago and would share descent from a single Eve who lived in Africa even earlier. Using these techniques Bryan founded the University spin-out, Oxford Ancestors, which helps individuals explore their genetic roots using DNA.

Bryan was an excellent communicator. In 1987 he won a British Association for the Advancement of Science media fellowship that enabled him to spend seven weeks working with Channel 4 News. The lessons he learned about what makes a good story came to the fore in *Seven Daughters of Eve* and his subsequent books.

Bryan enjoyed bird watching and fishing. He excelled at cross-country running and rugby at school but his most significant athletic achievements were on the croquet lawn. Bryan captained Oxford University in the Varsity match and with his wife Sue won the Croquet Association mixed doubles championship in 1981.

Bryan was an inspirational supervisor and mentor, and always had champagne in the lab when anyone published a paper. We should all raise a glass to honour his contribution to matrix biology and to the Society.

Vic Duance & John Loughlin

Further information on Bryan's life can be found in the Guardian Obituary:

<https://www.theguardian.com/science/2020/dec/18/bryan-sykes-obituary>

In print!

In print: Abstracts from the Norwich BSMB Autumn meeting 2019 are currently in print online in the International Journal of Experimental Pathology.

In prep: Abstracts from the Glasgow BSMB Autumn meeting 2020 will be in print soon in the International Journal of Experimental Pathology.

BSMB Committee news

Welcome to our new committee member



Dr Anna Maria Piccinini

I graduated in Pharmaceutical Sciences from the University of Trieste in Italy in 2003. I was awarded an ERASMUS grant to complete my undergraduate studies at the Karl Franzens University, Graz, Austria. I then trained as a biochemist and molecular biologist in the laboratory of Professor Andreas J. Kungl at the Karl Franzens University (PhD 2007), where I

developed novel anti-inflammatory biologic drugs targeting chemokine-GAG interactions that have contributed to the spin-out of a biotech (ProtAffin Biotechnologie AG), and filed the first of a number of patents. In 2008 I moved to the UK to join the laboratory of Professor Kim Midwood at Imperial College London first and the University of Oxford later. As a young post-doctoral scientist, I studied the impact of the extracellular matrix on macrophage phenotype and behaviour, and researched extracellular matrix components including tenascin-C. Notably, I found a link between extracellular matrix signalling and posttranscriptional regulation of microRNAs that has been recognized with the BSMB Young Investigator Award (2013). I presented my work widely, including at the Parliamentary & Scientific Committee's STEM for BRITAIN in the House of Commons, London (2010).

In 2015 I joined the Gene Regulation and RNA Biology Group, at the University of Nottingham, to unravel the molecular mechanisms by which extracellular matrix proteins control microRNA biogenesis, regulating inflammatory gene networks. This work was recognized by the award of the Anne McLaren University of Nottingham Fellowship in 2015. This tenure track award has allowed me to join the academic staff of the School of Pharmacy while focusing on research for the first 3 years of my academic career. In 2019 I was promoted to Assistant Professor in Inflammation Biology in the Division of Biomolecular Science, at the School of Pharmacy, University of Nottingham.

Motivated to understand how protective inflammatory signalling in innate immune defences becomes uncontrolled in disease, my research journey started outside the cell - in the extracellular matrix - and took me inside the cell

- in the nucleus. My research focuses on investigating how the extracellular matrix signals gene regulation, with a particular interest in posttranscriptional events. Combining cellular and molecular biology techniques, including 3D cell culture, RNA-Seq and CRISPR-Cas9 genome editing, my lab investigates how sentinel cells such as macrophages quickly respond to extracellular matrix cues at steady-state and during infection, and how this affects the immune response, but also their local microenvironment.

I am really looking forward to working together with the committee members of the BSMB and meeting everyone at the upcoming meetings.

Contact Details: anna.piccinini@nottingham.ac.uk

Seeking the next BSMB Chair

The current BSMB Chairman, Professor John Couchman, completes his term of office at the Autumn 2021 meeting of our Society. Therefore, we are beginning the search for a successor.

The Chair is responsible for the organisation and running of the BSMB, and together with the Committee formulates policy, represents the Society as appropriate in interactions with other bodies, and promotes the mission and objectives of the BSMB.

The Chair shall not normally hold that office for a term of more than three years. In any case, the Chair shall not hold that office for more than six consecutive years, but they shall be eligible for election to any other office in the Society. The term of office will begin at the Autumn 2021 BSMB meeting. It is an expectation that

the Chair will be available to attend a very high proportion of BSMB Committee meetings and conferences through his/her term of office.

Nominations for Chair of the BSMB can be made by any 2 members of the BSMB, or members of the current BSMB Committee. The committee has unanimously nominated Prof Andy Pitsillides for this position.

Any further nominations, together with the written consent of the proposed nominee should be forwarded to the Honorary Secretary, Professor Kim Midwood, by midnight Friday March 5th 2021. These can be sent by e-mail to kim.midwood@kennedy.ox.ac.uk.

In the event of more than one nomination, a ballot of the membership by e-mail will be held. To this end, it would be helpful if nominees can send a brief (one page) CV together with a short statement outlining their aspirations for the Society should they be elected. In the event of no nominations, the Committee may elect to nominate and appoint a person to the Chair.

BSMB SPRING 2021 MEETING

Inflammation, Fibrosis, Resolution and the Matrix

**12th & 13th April 2021
ONLINE MEETING**

Chair: Prof Stephanie Dakin

<https://bsmb.ac.uk/meetings/inflammation-fibrosis-resolution-and-matrix/>

The conference will be held online, fees are £30 for members, £20 for students and £40 for non-members. The meeting will take place over 2 afternoons and will include sessions covering diverse topics, spanning how the matrix is implicated in inflammatory, fibrotic and resolution processes, finishing with translational solutions, together with the Fell-Muir Award Lecture.

Selected abstracts will also be awarded presentation slots in each session to encourage our younger members to engage with the meeting. There will be up to 12 talks awarded to submitted abstracts. Abstracts can be on any topic on inflammation, fibrosis, resolution and the matrix to be selected for an oral presentation. The selection panel will make decisions based upon the quality of the science.

Our host of internationally renowned speakers are already confirmed. This will be a fantastic opportunity to catch up with colleagues and find out the latest cutting-edge developments in this field.

Key dates:

- Registration opens 18th December 2020
- Registration closes 31st March 2021
- Abstract submission opened on 18th December 2020 and will close on 15th February 2021
- Oral presentation notification 15th March 2021

For further information and to register please visit <https://bsmb.ac.uk>

PROGRAMME

Celebrating 40 years of BSMB Online Spring meeting April 12-13th 2021 University of Oxford 'Inflammation, Fibrosis, Resolution & the Matrix'

Monday 12th April 2021

13.00-13.10	Opening remarks - Welcome and Introduction Associate Professor Stephanie Dakin

SESSION 1: INFLAMMATION AND THE MATRIX		
Chairs:		
13.10-13.40	Inflammation or damage: Fibroblasts decide	Prof Christopher Buckley Universities of Oxford & Birmingham
13.40	Abstract	
13.55	Abstract	
14.10-14.40	Inflammatory cues from the matrix	Prof Kim Midwood University of Oxford

Tea, coffee and poster break out rooms 14.40-15.30

SESSION 2: FIBROSIS AND THE MATRIX		
Chairs:		
15.30-16.00	Defining ECM signatures of normal and fibrotic tissues using proteomics	Dr Alexandra Naba (Illinois)
16.00-16.15	Abstract	
16.15-16.30	Abstract	
16.30-16.45	TBC	Prof Fiona Watt (KCL)

FELL-MUIR LECTURE AWARD		
16.45-17.30	Prof Andy Pitsillides	Royal Veterinary College

Tuesday 13th April 2021

SESSION 3: RESOLUTION OF INFLAMMATION AND FIBROSIS IN THE MATRIX		
12.00-12.30	TBC	Dr Lucy Norling Versus Arthritis Senior Fellow, QMUL
12.30-12.45	Abstract	
12.45-13.00	Abstract	
13.00-13.30	TBC	Prof Derek Gilroy (Head of Experimental Therapeutics, UCL)

Lunch break & and poster break out rooms 13.30-14.15

SESSION 4: HOT TOPICS		
14.15-14.30	Abstract	
14.30-14.45	Abstract	
14.45-15.00	Abstract	
15.00-15.15	Abstract	

Coffee break 15.15-15.45

SESSION 5: INFLAMMATION & FIBROSIS IN THE MATRIX: TRANSLATIONAL SOLUTIONS		
15.45-16.15	A critical role of the extracellular protein SPARC in tendon tissue maturation and homeostasis	Prof Andreas Traweger (Salzburg, Austria)
16.15-16.30	Abstract	
16.30-16.45	Abstract	
16.45-17.15	TBC	Prof Derek Mann (Newcastle)

17.15 Presentation of Prizes & Close of Meeting
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BSMB Meetings in 2021

Autumn 2021 Meeting
University of Newcastle

Extracellular matrix in
rare disease

6th-7th September

Organised by Kasia Pirog

BSMB Bursaries

Bursaries for the BSMB Spring meeting in Oxford

Applications are invited for reporter bursaries to attend the BSMB Spring meeting to be held in Oxford, 2021. Up to £250 can be claimed. Please note, due to the meeting being moved to an online format, the Bursary entitlement can be postponed to attendance of a future in person BSMB meeting.

For more details, please follow the link below: <https://bsmb.ac.uk/page/reporter-bursaries/>

Qing-Jun Meng

Chair of the BSMB Bursary Committee

Meeting Reports

BSMB Autumn 2020 Meeting Glasgow Online Forum: September 1st-3rd 2020

“Basement membranes in health and disease” Report by Richard Naylor, Erin Boland and Louise Hopkinson

The 2020 BSMB Autumn meeting was planned as an in-person get-together of matrix biologists with a focus on the important role of basement membranes in health and disease. Covid-19 put paid to the “in-person” part of proceedings, but thanks to the fantastic organising committee of Dr. Tom Van Agtmael (Glasgow), Professor Rachel Lennon (Manchester) and Dr. Fabio Quadamatteo (Dublin), a 3-day online format was arranged. The 2020 BSMB Autumn meeting had many interesting talks from established researchers and up-and-coming young PIs, to early career postdocs and students. These results were disseminated to over 250 attendees around the world.

Day 1

The webinar was opened by Florence Ruggiero (Lyon), Christos Kyprinanou (Cambridge) and Sally Horne-Badovinac (Chicago). Florence has used the optical transparency of zebrafish embryos to demonstrate a role for collagen XV-B in neuron axonal guidance during myofiber innervation. The Ruggiero lab findings suggest that tenascin-C regulates deposition of collagen XV-B, which in turn creates a less stiff microenvironment that neural axons can migrate through. This work is important as collagenopathies are associated with neuromuscular diseases, yet mechanisms for

how motor function is precluded in the myotome are lacking. Next up was Christos, who gave an excellent presentation of his recent *Nature* article that outlined the importance of basement membranes in tissue sculpting, cell polarisation and morphogenesis in pre- and post-implantation stage mouse embryos. Christos explained how Nodal, an important morphogen in early embryogenesis, stimulates MMP2 and MMP14 activity to create a thinner, and so weakened, basement membrane to permit mesoderm ingression at the start of gastrulation. His work highlights the importance of the matrix in shaping tissues to enable proper embryogenesis. The final speaker of the first session was Sally Horne-Badovinac, who showed unpublished data suggesting that stress fibers in the epithelial cells that surround the *Drosophila* egg chamber integrate into the basement membrane through focal adhesions that form at the front of the cell and then “treadmill” towards the back before the adhesion is removed. This particular focal adhesion dynamic may help to polarise the basement membrane.

After a short break where posters on matrix production in *E. coli* and the role of laminin subunit accumulation in a fruit fly model of Alzheimer’s Disease were shown, the afternoon session was started by David Stephens (Bristol). Giantin is a large protein that is anchored to the cytoplasmic face of the Golgi and is likely to have a role in trafficking of matrix components to the extracellular space. In a CRISPR generated giantin knockout RPE1 cell line, David showed results from his lab that suggest cells lacking giantin are unable to process the N-terminal propeptide from collagen, thereby

leading to defects in polymerisation in the extracellular space. This talk was followed by five short presentations chosen from submitted abstracts. The exciting work shown included the first vertebrate tagging (with Dendra2) of a matrix molecule (Lamb1), a role for TTBK2 in regulating ADAMTS-5 mediated aggrecan degradation, an analysis of missense variants in *COL4A1* and *COL4A2* in patients with sporadic intracerebral haemorrhages, the use of atomic force microscopy to demonstrate the flexibility that interruption sequences provide type IV collagen, and an immuno-matrix talk describing the recruitment of macrophage into kidney disease models. The penultimate talk of the day was given by Brian Stramer whose mathematical modelling and pulse-chase experiments suggest a half-life of type IV collagen of 12-14 hours. Brian also used genetic deletions to show the importance of laminins and type IV collagen to ventral neural cord shape in *Drosophila*. The first day was completed by David Sherwood, who presented his lab’s latest insights into basement membrane-to-basement membrane fusions/linkages (B-LINKs) and the role of hemicentin in anchoring two opposing basement membranes prior to their linkage.

Day 2

Our second day of talks commenced with Lydia Sorokin (Münster), who shared her groups’ research aimed at understanding the various mechanisms of leukocyte penetration of endothelial basement membranes. Lydia described how the interactions between endothelial laminins and distinct populations of integrin $\beta 1$ receptors facilitates the pathogenicity and migration of leukocytes during the inflammatory response in a model of experimental autoimmune

encephalomyelitis (EAE). This work will decipher the mechanisms involved in EAE disease progression. In keeping with this sessions theme of understanding the role of basement membranes in various pathologies and diseases, we then heard five short presentations from selected abstracts. The first of which discussed work that utilised the benefits of *C. elegans* as an experimental model to identify potential genetic modifiers of collagen type IV disorders. Also focussing on collagen mutations and disease was an investigation into identifying the disease mechanisms of Vascular Ehlers Danlos Syndrome. We also heard about work investigating the basement membrane-associated protein *Tinagl1* and how its disruption affects cilia-dependant processes during embryogenesis in zebrafish. The molecular and skeletal characterisations of mice with fibrillin-1 mutations was also presented, and the short-talk session ended with a description of how peroxynitrite contributes to the phenotypic changes to vascular smooth muscle cells induced by extracellular matrix modification during atherosclerosis.

Following on from these talks, our next invited speaker Ambra Pozzi (Vanderbilt), who introduced us to fused in sarcoma (FUS) and its relevance to kidney fibrosis. FUS nuclear translocation was found by the Pozzi group to regulate Collagen IV, shedding light on the mechanisms that control ECM synthesis and degradation. This research is important because it is an exciting insight into the molecular mechanisms underpinning pathological fibrosis, and identifies possible novel targets of pro-fibrotic signalling. After a short break and poster session, we then kicked off the second session of the day with

a focus on matrix secretion, assembly, and turnover. Kevin Hamill (Liverpool) was the first speaker of the session who spoke to us about the exciting group of laminin derived protein fragments called netrins, specifically LaNt $\alpha 31$. Work is currently ongoing into characterising the role of LaNt $\alpha 31$ in organogenesis and the mechanisms which are responsible for the defects observed when this netrin is mutated.

This session also featured five short talks from selected abstracts. Several of these talks described the hierarchical assembly and remodelling of basement membrane components during embryonic development. We were also shown how laminins are key regulators of cardiac growth and looping during early organogenesis, and the role of the basement membrane and the basal cells in the regulation of skin integrity in the zebrafish embryo. A model to investigate the role of perlecan in cardiac fibrosis using CRISPR/Cas9 edited human induced pluripotent stem cells was also presented. Finally, an investigation into how hyaluronan derived from the limbus regulates corneal lymphangiogenesis was described.

The day concluded with a final talk from Karl Kadler (Manchester). Karl explained the fascinating nature of collagen fibrils and the dynamic regulation of their secretion and turnover along with the elegant work that has determined the circadian control of pro-collagen type I fibrils. These studies have utilised several fluorescent tagging strategies such as Dendra2 and Nanoluciferase labelling in order to visualise the synthesis, transportation, and secretion of collagen fibrils and how this is perturbed in tendon specific circadian clock knockout mice.

Day 3

The final day of BSMB 2020 involved four invited speakers and three short presentations. The introduction to the session saw John Couchman (Chair of the BSMB) present the John Scott Young Investigator Award to Douglas Dyer (Manchester) for his work on glycosaminoglycans and their involvement in chemokine induced immune cell recruitment during inflammatory disease. Doug gave an excellent talk on his recent advances with a particular focus on CXCL4. Next, Alex Nyström (Frieburg) presented his work on the discovery of potential therapeutic targets in epidermolysis bullosa, which is caused by mutations in *COL7A1*. Further to these Paul Potter (Oxford) presented his latest work on *Lama5* point mutations in a novel model of nephrotic syndrome and Keerthi Harikrishnan (South Carolina) presented her work on Fibulin-1 and its role during aortic and pulmonary valve morphogenesis. Eileen Gentleman (Kings College) described her latest developments in TGF- β induced epithelial and matrix remodelling in gastrointestinal organoids and Taina Pihlajaniemi (Oulu) showed her groups advances in collagen XVIII and their implications in homeostasis and pathology. Jeffrey Miner (St Louis) concluded the proceedings with his latest work on mutations in matrix genes including *COL4A5*, which are implicated in Alport syndrome. His work highlighted the exciting potential of a new exon skipping therapy.

The meeting close saw three awards for best short talks, sponsored by the International Journal of Experimental pathology, awarded by the committee to Alaa Al-Shaer (Vancouver) for her work on analysing the

flexibility of collagen IV interruption sequences, Chris Derrick (Sheffield) for his talk on the regulation of cardiac growth by laminins and Christine Chew (Manchester) for her presentation on kidney macrophage heterogeneity and the contribution to matrix homeostasis.

The organisers did an outstanding job to deliver the meeting virtually without notable technical hitch. The meeting provided a prime opportunity to interact with the wider matrix community and engage with new research in the isolating times of the COVID-19 pandemic. A virtual conference was an excellent alternative to a meeting that otherwise would have been postponed but we all look forward in hope of meeting in-person in 2021 for more captivating research into matrix biology.



Photo by Rachel Lennon on the final day of meeting of the organising team, from left to right, top to bottom: Tom Van Agtmael, Rachel Lennon, Richard Naylor, Louise Hopkinson, Malak Ammar, Anna Fildes, Adam Wolowczyk, Fabio Quondamatteo. Schematic by Adam Wolowczyk made to illustrate the CO₂ savings thanks to the meeting being online.

Current BSMB Committee

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SEE YOU ONLINE IN APRIL!



Celebrating 40 years of B SMB
**Inflammation, Fibrosis,
Resolution & the Matrix**

Confirmed Speakers

Prof. Christopher Buckley (Oxford & Birmingham, UK)

Prof. Kim Midwood (Oxford, UK)

Dr. Alexandra Naba (Illinois, USA)

Prof. Fiona Watt (KCL, UK)

Dr. Lucy Norling (QMUL, UK)

Prof. Derek Gilroy (UCL, UK)

Prof. Andreas Traweger (Salzberg, Austria)

Prof. Derek Mann (Newcastle, UK)

Fell-Muir Award: Prof. Andy Pitsillides (RVC, UK)

Registration opens December 2020



Illustration: Daisy Leeson

**REGISTRATION and ABSTRACT SUBMISSION
IS OPEN NOW...**