Connective Issues

BSMB Newsletter

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Editorial

By John Couchman

Welcome to the 70th edition of Connective Issues, my first as Honorary Secretary. Many thanks to Prof. Anthony Hollander for so ably serving as the previous Secretary, I have much to live up to.

We have a busy newsletter this time, thanks to contributions concerning BSMB meetings, bursaries and our first Fell-Muir award, made in April 2007. We also have an amusing commentary from a past –president on page 4. Please enjoy the newsletter, and register for the Keele meeting now!

Chairman's Report

By Bruce Caterson

The "UK summer?" (i.e. post-April meeting) marks the completion of another exciting and successful year of meetings and events undertaken by the BSMB and its members. The Society continues to thrive and expand its remit to its members with several new initiatives and changes. This past year saw our presentation of the first Fell-Muir Award to Professor Michael Grant in recognition for his outstanding contributions to both Matrix Biology research and its recognition and acceptance as an area of excellence and importance in biomedicine and biology worldwide. This coming year will provide us an opportunity to make the first BSMB Young Investigator Award that recognises up-and-coming new Matrix Biology researchers through their significant contributions to the field. We have also increased our membership fees (for the first time in many long years) to keep up with natural inflation changes and as in the past we will use these additional monies to 'give it back' to our members by increasing the quality of our meetings, the number of associated workshops, mechanisms of communicating information to our membership and the provision of travel bursaries and awards. To this extent I would like to emphasise to our more senior members that they encourage their student and postdoctoral researchers to make sure that they become members of the BSMB and continue to renew their membership as their career progresses. Becoming a member and continuing this by standing order or credit/debit card payment will become possible via our soon to be upgraded Website. Being a BSMB member is an important requirement of eligibility for receiving bursaries and awards from the Society. We are also using these extra-revenues to support a full-time (half day per week) Secretarial Support position (for Mrs Jane Lohmann) based in Bristol to facilitate our new Secretary's administration of BSMB Society matters. Finally, I would like to thank on behalf of the Society the outgoing members of our Executive Committee, Drew Rowan, Ray Boot-Handford and student member Elizabeth Crawford, for their dedicated commitment of time and effort to the BSMB remit to its members and I welcome the new Executive Committee members, Ann Canfield and David Young, as well as the appointment of two new ad hoc student (Yashithra Mahalingam) and post-doctoral (Darren Plumb) members of our management committee. As in the past, we look to them to provide us with feedback on membership needs and concerns as well as instigating new BSMB Society initiatives.

Current BSMB Committee

Officers:
Chairman, Prof. Bruce Caterson (University of Cardiff; Caterson@Cardiff.ac.uk)
Honorary Secretary, Prof. John Couchman (University of Copenhagen; john.couchman@bric.dk)
Honorary Treasurer, Dr. Graham Riley (Addenbrooke's Hospital, Cambridge; gpr1003@cam.ac.uk)

Elected and Seconded Members:
Dr. Philippa Parsons (Smith-Nephew); philippa.parsons@smith-nephew.com)
Dr. David Buttle (University of Sheffield; d.j.Buttle@Sheffield.ac.uk)
Dr. John Wardale (AstraZeneca; john.wardale@astrazeneca.com)
Dr. Nikki Kuiper (Keele University;

n.j.kuiper@biol.keele.ac.uk)
Dr Andy Pitsillides (The Royal Veterinary College; apitsill@rvc.ac.uk)
Dr Jelena Gavrilovic (University of East Anglia;j.gavrilovic@uea.ac.uk)
Dr Ann Canfield (University of Manchester; ann.canfield@man.ac.uk)
Dr David Young, (Newcastle University; d.a.young@ncl.ac.uk)

Co-opted Members:
Dr. Robert Lauder (Lancaster University; r.lauder@lancaster.ac.uk)
Prof. Anthony Hollander (University of Bristol; A.Hollander@bristol.ac.uk)

Professor Mike Grant, First Fell-Muir Prize Awardee

Prof. Mike Grant (left) receives the prize at the Spring 2007 Sheffield meeting from Prof. Bruce Caterson, BSMB Chairman (centre) and Prof. Anthony Hollander (right). The Prize is awarded for outstanding contributions to Matrix Biology and the BSMB.

Abstracts from the **Spring 2007 Sheffield meeting** will be published later this year in the International Journal of Experimental Pathology, who are gratefully acknowledged for their support of the Fell-Muir Prize. The **meeting report** can be accessed on the BSMB website (http://www.bsmb.ac.uk)

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Forthcoming BSMB Meetings

BSMB Autumn 2007 Meeting

"Shaping and Sensing the Extracellular Matrix"

Keele University - organised by Nikki Kuiper, Alicia El Haj and John Wardale.

September 3-4th 2007.

This meeting will focus on two specific topics relating to the extracellular matrix (ECM); how it is shaped and how it is sensed. In terms of shaping, we will have two sessions covering the '*influence of the physical environment*' and '*regeneration*' of the ECM. In terms of sensing, we will have two sessions covering '*biomarkers of tissue metabolism*' and the *awareness and sensation of pain*'. We have an impressive line up of national and international speakers!

The meeting will feature a presentation by the 2007 Young Investigator. We encourage the submission of abstracts for posters. Several abstracts will be selected for short talks within the four sessions. In addition, there will be a separate BSMB Society theme-free session. Six short talks will be selected from the abstracts which can be on **ANY** aspect of matrix biology.

There will be four 'conference presentation' bursaries and three 'conference reporter' bursaries for eligible members of the society. The bursaries (of up to £125) will cover conference costs and a contribution toward travel costs.

On line registration for this meeting is available **NOW** through the BSMB website.

Abstract submission deadline: Fri Aug 10
Early registration deadline: Fri Aug 10
Bursary deadline (see below): Fri July 20

BSMB Spring 2008 Meeting

"Where, When and How did my Cartilage Go?"

York University – organised by Philippa Parsons. April 7-8th 2008.

BSMB Autumn 2008 Meeting

"Cartilage Metabolism and Cell-Based Therapies for Tissue Regeneration"

Cardiff University – organised by Prof. Bruce Caterson Professor Vic Duance, Dr. Clare Hughes and Dr. Emma Blain

September 8-9th 2008

BSMB Conference Bursaries

Members of BSMB are encouraged to apply for bursaries to assist in expenses associated with attending the Spring or Autumn BSMB meetings or other selected meetings such as those organized by the Federation of the European Connective Tissues Societies (FECTS). Applicants should be at an early stage of their career and for this reason emphasis is given to young researchers such as graduate students and early post-docs. The BSMB bursary scheme has two distinct application routes:

Conference Presentation Bursaries
The BSMB will offer 4 'Conference Presentation' bursaries for young researchers wishing to present their research at BSMB meetings. The research topic must be relevant to BSMB **but need not be on the 'theme' of the meeting**. Applications for a bursary must be accompanied by the abstract of the research to be presented. In the case of application numbers exceeding available bursaries, the quality and impact of the science to be presented together with previous bursary support will be taken into account.

Conference Reporter Bursaries
The BSMB will offer 3 'Conference Reporter' bursaries for BSMB meetings. Applicants simply need to undertake to write a report on the talks at the conference for publication in the Society Newsletter 'Connective Issues', and subsequently in the International Journal of Experimental Pathology. This is an excellent opportunity for individuals wishing to develop their scientific writing and reporting skills. If desired, reports on each talk can be attributed to the individual reporter responsible, enabling the resulting issue of 'Connective Issues' to be used by authors as examples of their output within their Professional Skills Development Portfolio. Applicants need not be presenting a poster at the meeting. In the case of application numbers exceeding bursaries available, previous bursary support will be taken into consideration.

The bursaries (of up to £125) will cover conference expenses (e.g. registration, accommodation, conference dinner) and a contribution towards travel costs. In exceptional circumstances, a request for further assistance with travel costs may be considered by the committee.

Qualification criteria
To qualify for a bursary, applicants need to have been members **at least 3 months prior to the opening of registration** for the meeting.

Application procedure
- All applications must be sent by e-mail to Dr Ann Canfield (ann.canfield@manchester.ac.uk)
- Closing date for the BSMB Autumn Meeting: July 20th 2007, with decisions by July 24th 2007
- Full details and application forms are available at http://www.bsmb.ac.uk/ under 'Bursaries'

Commentary - from Roger Mason, a former Chairman of BSMB

"How about writing a few words for the Newsletter, Roger", said a member of the BSMB Committee. It was more of a command than a request and, conscious of the fact that this same Committee member had organised a superb BSMB meeting on the "Molecular Basis of Fibrosis" in 2003, to mark my retirement, I heard myself agreeing that I would try to write something. Since that memorable meeting I've continued in research on a part time basis, which has been a lot of fun. However I remember Helen Muir's words of wisdom when she worked as an Emeritus Professor in my old department. A scientist's career she said was punctuated by appearances in front of ones colleagues. In the early stages, as a graduate student or young post-doc, one applied to meetings to be given a ten minute slot for a podium presentation, to be followed by difficult questions. After a while, when one became more established, one was invited to give twenty minute presentations, still followed by difficult questions. At a later stage, now having achieved the cherished "international reputation" in one's field of research, one was

invited to deliver plenary lectures of thirty minutes, with no questions allowed afterwards. Finally, after retirement, one was invited to open new laboratory buildings and, whatever was said, it was forgotten by those present as soon as the ribbon was cut! Never having attained Helen's scientific distinction, I have no experience of opening buildings. However I think the story illustrates nicely the pitfalls of trying to communicate anything other than hard scientific data to colleagues once one has retired! So dear reader, if at this point you decide that time would be better spent looking over that new research paper, I shall not be disappointed!

I had the good fortune to have the comic actress Janet Brown as my next door neighbour for some years. She was the one who took off Mrs Thatcher so brilliantly on stage and television, and she was as funny when having a cup of tea with a neighbour as she was in front of an audience. Comparing notes about what gave us satisfaction in our respective jobs, she was amazed to learn from me that, after giving a fifty minute lecture to a class of undergraduates, one merely closed down the session by answering any questions, and then left the lecture theatre without any applause from the audience. Applause was the life blood of any actor, she said, and without receiving a daily dose of it, an actor simply could not continue to give performances. The reward for a good performance was enthusiastic applause. So what makes us want to be scientists and what reward does science bring? You may get a little polite applause after delivering a research paper – but then come those difficult questions! Hardly a rewarding experience, even when things go well, to compare with the actors standing ovation after giving a fantastic performance! And in any case, most of the time, a researcher works in the laboratory carrying out experiments, and only occasionally presents the results of his or her endeavours in front of colleagues. I would argue that science brings two great rewards to its practitioners. The first is, of course, the excitement of making a new discovery, of observing something in the natural world which no other mortal has seen before. It does not necessarily have to be a big discovery – even little ones fire you up. And it's something that you never tire of! Each time it happens, you are fired up with equal intensity and this drives you to further efforts. The second reward is less tangible but, I think, just as important. Being a scientist allows you to passionately follow your own ideas – a privilege not generally afforded to many other people in other jobs. John Ziman FRS, formerly professor of theoretical physics at Bristol, has drawn attention to this in his book Real Science [University Press Cambridge, 2000] and to the point that such autonomy of thinking is in contradiction to the general concept that scientists are humble, impersonal and disinterested in their pursuit of knowledge. He argues that it is only the accepted style and approach of scientific communication, oral or written, which engenders the view that scientists are humble, disinterested, etc. In fact, in contrast, at an individual level, scientists enjoy, and are rewarded by the sense of, "doing their own thing" – sometimes to the point of vanity. So, all of you who have a secret longing to be a super rock star – relax, you are already behaving like one!

Where do we stand currently as scientists researching extracellular matrix biology? Others have pointed out that "ECM biology rests on a solid historical foundation of macromolecular chemistry and structural investigations of matrix components as parts of a sophisticated scaffold for cell attachment, migration and differentiation. Given this history, it is understandable that the regulatory roles of extracellular matrix molecules were recognized only slowly and not without some initial resistance" [From the Editors Desk, Matrix Biology (2006) 25, 269-270]. I contend enthusiastically that our present horizons are distant and wide – in other words there is a lot of room for those who are interested in this field to follow their own ideas and to make original and important discoveries – as long as you embrace the ideas and technology of modern biology as a whole! It's still clearly important to have structural biologists who unravel the mysteries of the structure of a particular extracellular protein. However most of us will need to be take on board such things as cell signalling, the control of gene transcription, translational modification, cellular pathways of secretion, interaction between the cell surface and the ECM, outside-in signalling

and inside-out signalling, – to name but a few processes – if we are to make rapid progress with understanding the importance of the ECM and the disorders which affect it. Clearly one cannot be an expert in all these and other necessary technical fields such as contemporary molecular imaging. Thus whilst the matrix biologist must, of course, have a good overall biological background knowledge, the way forward in research in this field is to think in terms of collaborating with those who can contribute the expertise required to solve a particular question.

Remember also the importance of *in vivo* studies to advance our knowledge of the ECM. Today it is common practice to knock-out or over express genes in mice, or to study naturally occurring mutations, to test whether their function *in vivo* really corresponds to that suggested by all those tightly controlled *in vitro* experiments. Interestingly this is not really a novel concept! William Harvey (1578-1657), discoverer of the circulation, advised us that "Nature is nowhere more accustomed more openly to display her secret mysteries than in cases where she shows traces of her workings apart from the beaten path". He continued "nor is there any better way to advance the proper practice of medicine than to give our minds to the discovery of the usual law of Nature than by careful investigation of cases of the rarer forms of disease" – the equivalent of our mutant mice today. This is some of the best advice to a biological investigator that I know – and perhaps an example of the fact that what goes around in one era, surfaces, and comes around in another!

Website upgrade – images required!

Over the coming months, there will be an upgrade of the BSMB website. It is planned to have a section where members can deposit an interesting, unusual or eye-catching image. If you have such an image, that will enhance the website and bring a little attention to your laboratory, please send it for consideration, with caption, to Jane Lohmann (J.M.Lohmann@bristol.ac.uk). Thank you.

IMPORTANT NOTICE TO MEMBERS – SUBSCRIPTION CHANGE

All BSMB members should now be aware that changes in the BSMB membership subscription rates were decided at the spring 2007 AGM.

The new rates are £30 for full members and £10 for students.

As a result of this change, **all** BSMB members who pay their membership by standing order (the majority) are requested to notify their bank of the change in annual payment.

Please note that this change has to be made by the individual member.

A standing order is not the same as a direct debit, and the society cannot request an increase in the amount to be paid. Many members will be able to change the standing order via on-line banking over the internet.

Alternatively, members should write to their banks cancelling their old standing order and making a new standing order for the correct amount. There is a standing order form enclosed with this newsletter which could be used by each member who wishes to continue to pay by this method. Please remember that this form must go forward to your bank, **not** the BSMB.

It is very important that all of you who wish to continue your membership should fill in this form, making sure to enter your full bank account details **and** your BSMB membership number.

If you have any questions about this form or need more information, please contact me, the treasurer, for further advice.

Graham Riley, Honorary Treasurer

STANDING ORDER FORM

To: (name and address of your bank including postcode)

Please pay on or soon after the **1st January** to NatWest Bank plc, City of London Branch, PO Box 12258, 1 Princess Street, London, WC2R 8PA
Sort Code: 60-00-01

The sum of £ * POUNDS for credit to the account of the British Society for Matrix Biology , Account Number 09670343 quoting my BSMB membership number * (**enter your BSMB membership number**) and make similar payments annually on the **1st January** until this order is cancelled, charging payments to:

My account (name or title of account):*
Account number: *
Sort code: *

Signature:……..Date:……

*** please make sure to insert appropriate details here**

I want to be inspired

One of the world's leading pharmaceutical companies, AstraZeneca is focused on discovering exciting new treatments in areas of unmet clinical need. Our strong research base includes activities in a wide range of therapeutic and technological areas – and at the heart of the complex drug discovery process is the work of the Research Bioscientist.

AstraZeneca Bioscience in Drug Discovery Workshop

Alderley Park,
South Manchester,
Cheshire

Sunday 6th to
Wednesday 9th
January 2008

The Research Bioscientist plays a crucial role, from the identification of novel drug targets through to the exploration of human disease required to support clinical trial design. Research Bioscientists are also actively engaged with colleagues in a range of disciplines, including biochemistry, medicinal chemistry, structural biology and bioinformatics. For this reason, the ability to communicate and work multidisciplinary project teams is an important skill. You will also need to be able to drive your own research, to make decisions and to think clearly and creatively.

This AstraZeneca workshop, intended for final-year PhD students in the bioscience field, will follow a similar format to the first, highly-successful event held in January 2007. The course includes case studies, presentations, group exercises and a visit to Alderley Park Research Laboratories. The feedback from last year's participants included the following quotes:

"Great to see how academia and industry can collaborate."

"Made me think and approach problems in a different way."

"An extremely rewarding experience."

If you would like to apply to the workshop, please send your CV, a one-page summary of your current research work, and a covering letter explaining why you are interested in taking part to the below email address. Travel and accommodation expenses for EU residents will be supported by AstraZeneca.

For more information and to appy, please email:
workshop@astrazeneca.com

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