

# Connective Issues



## BSMB Newsletter

### Committee:

Prof. Ray Boot-Handford (Chairman), Prof. Andrew Pitsillides (Secretary),  
Dr. David Young (Treasurer), Prof Jo Adams, Dr Sophie Gilbert,  
Dr Kim Midwood, Rhiannon Morgan (Student member),  
Dr Giovanna Nalesso (PD representative), Dr Simon Tew, DR Linda Troeberg,  
and Dr Tom Van Agtmael

Registered Charity no. 281399

No. 85, Jan 2015

## Contents

- 2 Editorial** ..... *Andy Pitsillides*
- 2 Chairman's letter** ..... *Ray Boot-Handford*
- 3 BSMB News**
  - Registration open**
  - 'Twitter and Facebook'** ..... *Rhiannon Morgan & Giovanna Nalesso*  
*with Graham Riley*
  - Welcome to New Members** ..... *David Young*
  - New Committee member**
- 4 Mark your diary!**
  - Request for Nominations**
  - Good News**
- 5 Upcoming BSMB Meetings**
- 7 BSMB Conference Bursaries** ..... *Tom Van Agtmael*
- 8 Meeting Reports**
- 9 Current BSMB committee**
- 11 Flyer. BSMB Oxford meeting** ..... *Register now*

## Editorial

*Dear BSMB Member*

Happy 2015 - welcome to the 85<sup>th</sup> Connective Issues. This New Year heralds an important change for our Society. A new Chairman will be appointed in 2015. Ray Boot-Handford's term of office will finish at our Spring meeting. On your behalf, I would like to thank him for all his work and many contributions over the past six years. Ray's cool - 'Keep Calm and Carry On' - style characterised our Society over this time and his mark, his humour and tireless effort for Matrix Biology will, I hope, remain with BSMB into the future.

We are also grateful to our outgoing Committee member, Tonia Vincent who created a great meeting in UEA last autumn, with her colleagues from the British Society for Developmental Biology. Congratulations to Tonia to the other organisers for this outstanding meeting. If you are a full member of the BSMB and would like to get involved, please consider putting your name forward to join the Committee.

As ever, I urge you to get registered for the forthcoming BSMB Spring Meeting organised by Kim Midwood; its specially-themed programme will be sure to offer attendees many unique insights into Matrix Biology.

We are always looking for opinion, member news or other topical issues of interest to the membership. If you are inclined to write a short piece for the newsletter, please contact me. The next deadline for material will be 20<sup>th</sup> June, 2009.

*By Andrew Pitsillides  
Honorary Secretary*

---

## Chairman's Letter

Dear Fellow Matrix Biologists,

Firstly, let me wish you all a productive and successful 2015.

The first matter on the 2015 BSMB agenda is the election of a new Chairman as my term ends at the Spring AGM in Oxford. It has been an honour and a pleasure to Chair the Society for the past 6 years. I thank the Officers (Dave Young, Treasurer and Andy Pitsillides, Secretary) and all of the committee

for the support they have given throughout my term of office. It is entirely through the hard work of the past and present committee members that the Society continues to flourish despite the tough economic times since 2007. Secondly, the committee will be looking for two new members to be elected in the Spring for 3 year terms of service - during which each member has the opportunity to organise one of our 2 Society meetings held each year. Please do not hesitate to nominate yourself (or a close colleague with their permission) for these positions.

As usual, we will be holding 2 meetings in 2015, the first of which is in Oxford (30-31<sup>st</sup> March) organised by Kim Midwood entitled 'Location, location, location: the matrix and the microenvironment'. Registration is now open and details of how to submit abstracts, apply for bursaries or book places can be found at: <http://www.bsmb.ac.uk/meetings-index/meetingslocation/>. Please note that this meeting also includes the 2015 Fell Muir Lecture address given by Bjorn Olsen. The September (1st-3rd) 2015 meeting, organised by Tom van Agtmael is a joint meeting with the Bone Research Society in Edinburgh. This marks the first time for many years that the Society will meet in Scotland and I hope this meeting will prove popular because of the mix of science on offer and allow us to recruit more members from 'north of the border'.

Another important decision that the Society committee will need to make in 2015 will be where to hold the 2018 MBE (FECTS) meeting. MBE2018 will mark the 50th Anniversary of the 1st Federation of European Connective Tissue Societies meeting and the BSMB have agreed to organise the conference in the UK. BSMB members wishing to propose a venue for the 2018 MBE (FECTS) meeting, which needs to be held over a 4 day period (usually Saturday evening-Wednesday lunchtime) in the second half of either June or July 2018 should prepare a preliminary bid outlining conference facilities and accommodation available to host a meeting for 250 (min) to 450 (max) delegates during the specified dates with approximate costings. Further details of what would be required in a preliminary bid can be obtained from Andy Pitsillides, the Honorary Secretary. Bids will be considered at the committee meeting held

on 31st March 2015 immediately following the Oxford spring BSMB conference.

Finally, I would like to wish the BSMB every success in the future. The formula of a twice yearly low cost one-and-a-half day meeting with good science, good opportunities for young researchers to present and discuss their work, and plenty of time to interact socially with one's colleagues over a pleasant meal and a late bar is the backbone of the BSMB and long may it continue! Hope to see you in Oxford.

*Ray Boot-Handford, Chairman BSMB*

## **BSMB News**

### **Registration open:**

On-line registration is open for the:

BSMB 2015 Spring Meeting held at St. Catherine's College, Oxford on Monday March 30th and Tuesday March 31st 2015. Entitled 'Location, Location, Location; the matrix and the microenvironment', this meeting has been organised by Kim Midwood and will focus on how the extracellular matrix creates distinct niches that provide specific environmental cues to control cell behaviour.

The deadline for abstract submission and bursary application for the Oxford meeting is just 2 weeks away, on February 20th.

To register, submit your abstract and to apply for bursaries please visit the meeting website:

<http://www.bsmb.ac.uk/meetings-index/meetingslocation/>

*Please see below for more details.*

**Visit** our growing BSMB twitter site, which has gained many followers.

Tweets are useful reminders for important deadlines; can help ensure abstracts are submitted and conferences registration completed in a timely – and cheaper – manner. Interesting research and conference highlights are also tweeted regularly. To follow, search @BSMB1 to find us on twitter.

...and of course you can find out about BSMB on Facebook too! If you are already a follower, spread the word and invite visits.



<https://www.facebook.com/BritishSociety>

Sharing buttons are installed at the bottom of every BSMB web page for Facebook, Twitter, Linked-in, Google+ page, or even via email

*Rhiannon Morgan, Andrew Hellewell and Graham Riley*

### **Welcome to New Members!**

The following new and returning members are welcomed:

Saima Ahmed (Sheffield), Sophia Akbareian (UEA), Alina Akhbanbetova (Cardiff), Mohammed Aida Al-obaidi (Bristol), Susan Aungier (Oxford), David Barrett (QMUL, London), Alison Cartwright (Oxford), Vivien Coulson-Thomas (Cambridge), Ella Dennis (Newcastle), Richard Farndale (Cambridge), Margaret Fegen (W. Scotland), John Garcia (Oswestry), Despoina Gavriilidou (ICL, London), Sean Giblin (Oxford), Marta Godinho (QMUL, London), Alan Godwin (Manchester), Jade Gumbs (Liverpool), Malin Hewins (Sheffield), Hannah Heywood (QMUL, London), Amy Horwell and Valentina Iorio (Liverpool), Robert Jackson (Newcastle), Alan Kerby (Manchester), Nibras Khamees (Bristol), Mohammad Khan (RVC, London), Katie Lee and Ian Li (Liverpool), Sarah Lindsay (Sheffield), Michael Lockhart, Qing-Jun Meng and Puwapong Nimkingratana (Manchester), Victor Njom (Sheffield), Oleksandr Nychyk (UCL, London), Taiwo Oguntona (Sheffield), Sandeep Pakideeri Karat (Denmark), Akshita Patil (Manchester), Irene Pla-Navarro (UEA), Ewan Ramsay (Manchester), Stephen Robinson (UEA), Wipawee Saengsoi and Takao Sakai (Liverpool), Adil Sarhan (Birmingham), Anja Schwenzer (Oxford), Urvashi Sharma (France), Joe Swift (Manchester), Anne-Sophie Thorup (QMUL, London), Jordan Wragg (Manchester) and Kazuhiro Yamamoto (Oxford).

### **New Committee Member**

Andrew Hellewell will join our Committee as Postdoctoral Representative at our meeting in Oxford, 2013 and here is our opportunity to allow Andrew to introduce himself.

I'm a postdoctoral research assistant at the University of Bristol, investigating the role of thrombospondins in ECM organisation. I'm relatively new to the matrix field, however I'm excited to be a part of the BSMB community and I am keen to establish a career in matrix biology. With this post I aim to promote and support the needs of the post-doctoral members of the society. If any post-doctoral members have any ideas/issues about BSMB they wish to discuss, please contact me at Andrew.Hellewell@Bristol.ac.uk."



Andrew Hellewell, Postdoc Representative

---

## Mark your diary

Gordon Research Conference (GRC) on  
Cartilage Biology & Pathology  
March 22-27, 2015  
Galveston, TX

Chairs: Veronique Lefebvre & Danny Chan

Osteoarthritis Research Society International  
(OARSI) meeting in Seattle, Washington,  
April 30 – May 3, 2015

BSMB Joint meeting with the  
Bone Research Society  
September 1<sup>st</sup> - 3<sup>rd</sup>, 2015, Edinburgh  
Organised by Vicky MacRae, Stuart Ralston  
and Tom Van Agtmael

5th FEBS Advanced Lecture Course: Matrix  
Pathobiology, Signaling and Molecular  
Targets, Rhodes, Greece,  
24th-29th September 2015.  
Nikos Karamanos, Committee Chairman

2nd MBE, Athens Greece  
10<sup>th</sup> – 15<sup>th</sup> June 2016.  
Organised by Nikos Karamanos

---

## Request for Nominations

### BSMB Chairman

Our current Chairman, Professor Ray Boot-Handford, completes his term of office at the BSMB's March 2015 meeting. Therefore, we are beginning the search for a successor.

The Chairman 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 BSMB's mission and objectives.

The Chairman shall not normally hold office for a term of more than 3 years. In any case, the Chair shall not hold that office for more than 6 consecutive years, but shall be eligible for election to any other office in the Society. Term of office will begin at the Spring 2015 BSMB meeting. It is an expectation that the Chairman will be available to attend a very high proportion of Committee meetings and conferences through his/her term of office. It is anticipated that the new BSMB Chair will attend the March 2015 meeting to take office.

Nominations for Chairman of the BSMB can be made by any 2 members of the BSMB, or members of the current BSMB Committee. Nominations, together with written consent of the proposed nominee should be forwarded to the Honorary Secretary, Professor Andy Pitsillides, by Saturday 14th March 2015. These can be sent by e-mail to apitsillides@rvc.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.

Andy Pitsillides, BSMB. January 2015.

### Two BSMB Committee members

Any current member in good standing is eligible. Committee members formulate policy and have a major responsibility for organising BSMB meetings. It is expected that each Committee member will take a major part in planning and organising one BSMB meeting

during their tenure, be available to attend most Committee meetings, but also to attend occasional further meetings. Should more nominations than vacancies be received, an election may be held. Nominees should send a CV and supporting statement to the BSMB Secretary, Andy Pitsillides. Appointees become BSMB Trustees. It is recommended that those interested read BSMB Constitution and trustee status ([www.bsmb.ac.uk](http://www.bsmb.ac.uk)).

Closing date for nominations: 14th March 2015. Enquiries to Honorary Secretary ([apitsillides@rvc.ac.uk](mailto:apitsillides@rvc.ac.uk) or 207 468 5245).

## Proposals to host MBE 2018

Preliminary proposals to host MBE2018 are sought from BSMB Society members. The prelim bids will need to identify location, address availability on desired dates (in the second half of either June or July 2018), facilities, accommodation (for 250-450 delegates) and approximate costs. The prelim bids will be discussed and decisions made about those that might progress specified at the spring committee meeting

**Closing date: 21st March 2015.** Informal enquiries to Andy Pitsillides by phone (0207 468 5245) or e-mail ([apitsill@rvc.ac.uk](mailto:apitsill@rvc.ac.uk)).

Andy Pitsillides, BSMB Secretary.

---

## 'Good news'

BSMB bursaries are still available to graduate student and post-doctoral researchers to participate in 2015 meetings (please contact Tom Van Agtmael for details).

To share more good news please contact *Kim Midwood*.

---

## *Upcoming BSMB Meetings*

### *BSMB Spring 2015 Meeting – Oxford March 30th-31st 2015*

#### *'LOCATION, LOCATION, LOCATION: the matrix and the microenvironment'*

*Organised by Kim Midwood*

The BSMB Spring 2015 meeting will be held at St. Catherine's College, Oxford on Monday March 30th and Tuesday March 31st 2015. Entitled "Location, Location, Location; the matrix and the microenvironment", the meeting will focus on how the extracellular matrix creates distinct niches that provide specific environmental cues to control cell behaviour, and cover broad themes including regulation of development, inflammation and tumorigenesis, as well as implications of targeting cellular environments to treat inflammatory diseases and cancer. Further information and to register please see: [www.bsmb.ac.uk/forthcoming-meetings/](http://www.bsmb.ac.uk/forthcoming-meetings/)

#### **Keynote speakers include:**

**Bjorn Olsen** (Harvard) – recipient of 2015 Fell Muir Award

#### **Session 1: Cancer, the metastatic niche and the cancer stem cell**

Janine Eler (Copenhagen): Lysyl oxidases in cancer progression

Giulia Tarabozetti (Italy): Thrombospondin-1 type 3 repeats in tumor angiogenesis and response to therapy

#### **Session 2: Development**

Frank Zaucke (Cologne): Role of matricellular proteins in skeletal development and disease

Kurt Hankenson (Michigan): R-spondins, novel matricellular regulators of Wnt-signaling and bone formation

#### **Session 3: Inflammation and Immunity**

Stephane Heymans (Maastricht): Osteoglycin and SPARC modulate cardiac inflammation and fibrosis in the failing heart

Dave Thornton (Manchester) The neglected matrix: mucins in immunity in lung & intestine.

#### Session 4: BSMB open session

(Junior Investigators and Postdocs)

5 slots are available for short talks selected from submitted abstracts and will feature hot topics from any area of matrix biology.

#### Session 5: Targeting the extracellular niche in disease

Jack Lawler (Harvard): Effect of thrombospondin-1 on VEGF in endothelial cells and epithelial ovarian cancer cells

Dario Neri (Zurich): Engineering therapeutic agents to target the ECM

**Bursaries and Prizes:** A number of BSMB presenter and reporter bursaries are available, as well as prizes for poster and oral presentations.

#### Social Events:

Wine Reception & Poster Viewing, Monday 30<sup>th</sup> March. Wine, beer and nibbles on Monday evening (6.15pm -7pm) with posters.

#### Conference Dinner, Monday 30th March

There will be a 3 course dinner at St Catherine's College Hall on Monday evening at 7pm, the cost of which is included in the registration fee. After dinner the ever popular St Catz bar will be open for business....

#### Important Deadlines:

Registration opens: January 2<sup>nd</sup> 2015

'Early bird' registration ends: March 9<sup>th</sup> 2015

Registration closes: March 23<sup>rd</sup> 2015

Abstract deadline and Reporter/Presenter bursary deadline: February 20<sup>th</sup> 2015

Notification of abstracts that are selected for short talk presentations will be made to presenters by March 2<sup>nd</sup> 2015

Bursary decisions made by March 2<sup>nd</sup> 2015

#### Registration Fees

Fees:	Pre 9/03/15	Post 9/03/15
	Early Bird	Late Fee
Member	£190	£220
Non-member	£240	£270
Student	£150	£180
Non-member students	£180	£210

Registration fee includes refreshments, the poster reception and conference dinner plus one night's accommodation in St. Catherine's College on Monday 30<sup>th</sup> March, and breakfast, refreshments and lunch on Tuesday 31<sup>st</sup> March.

For more information on any of the above and to register and submit an abstract please visit: [www.bsmb.ac.uk/forthcoming-meetings/](http://www.bsmb.ac.uk/forthcoming-meetings/)



THEMES: how do ECM derived niches drive CANCER, DEVELOPMENT & INFLAMMATION AND IMMUNITY plus TARGETING THE ECM IN DISEASE and the BSMB OPEN SESSION. INFO: [www.bsmb.ac.uk](http://www.bsmb.ac.uk)

### **BSMB Joint meeting with the Bone Research Society September 1<sup>st</sup> – 3<sup>rd</sup>, 2015 University of Edinburgh**

**Organised by Vicky MacRae, Stuart Ralston and Tom Van Agtmael**

BSMB's Autumn 2015 meeting (University of Edinburgh), will be our 3rd joint meeting with the Bone Research Society (BRS). Similar to previous combined meetings, this meeting will extend over 3 days (Tuesday lunch-time to Thursday afternoon). The meeting will cover a range of aspects of matrix biology including disease mechanism, regenerative medicine, scaffolds, genetics of disease and mineralisation. Other highlights include the BSMB John Scott Young Investigator Award lecture and the plenary lecture of the BSMB open session by Liliana Schaeffer (Germany)

The meeting will be held in the John McIntyre Conference Centre at Pollock Halls on the South side of Edinburgh city. Accommodation and all meals will be on site. The conference dinner on Wednesday night will be followed by Scottish ceilidh dancing.

Preliminary programme and invited speakers

### **Tuesday 1st Sept, 2015**

Session: Genetics of bone disease

Wim Van Hul (Antwerp, Belgium)

### **Wednesday 2nd Sept, 2015**

Session: Stem cells & regenerative medicine

Antonella Forlino (Pavia, Italy)

Session: Targeting intracellular pathways for matrix diseases

Mike Briggs (Newcastle, UK)

Paolo Bonaldo (Padova, Italy)

Session: Scaffolds

Molly Stevens (Imperial College, UK)

Manuel Salmeron-Sanchez (Glasgow, UK)

Session: John Scott YIA Award lecture

### **Wednesday 3rd Sept, 2015**

Session: BSMB and BRS open session

Liliana Schaeffer (Frankfurt, Germany)

Session: Mineralisation

Colin Farquharson (Edinburgh, UK)

Catherine Shanahan (Kings College, UK)

## ***BSMB Satellite Meeting London, 7th-8th September, 2015***

### ***Advances in tendon research: From bench to bedside***

***Organised by Hazel Screen, Graham Riley, Peter Clegg, Helen Birch, Dylan Morrissey & Chavaunne Thorpe***

A BSMB satellite meeting 'Advances in tendon research – from bench to bedside' will be held in London in September 2015. This meeting will bring together leading scientists and clinicians from across the tendon and musculoskeletal research fields, providing a forum for clinicians, engineers, modellers, industry and biomedical scientists to interact. The conference will begin with workshops to help individuals from different fields develop a basic understanding of the techniques and concepts used in other fields, and subsequent conference sessions will cover cross cutting themes.

An exciting programme of internationally renowned speakers has been confirmed, including Helen Birch (UCL), Michael Kjaer (Copenhagen), Jeff Weiss (Utah) and Jess Snedeker (Zurich). There are also many slots available for short talks and posters. Abstracts on any area of tendon research are encouraged, and all submitted abstracts will be accepted for poster presentations. Abstract deadline is the 24<sup>th</sup> July 2015.

BSMB members will benefit from reduced registration fee, and presenter bursaries are available for eligible BSMB members. The registration deadline is 31<sup>st</sup> August 2015. Please see conference website for details: [www.bsmb.ac.uk/meetings-index/tendon-qmul-2015/](http://www.bsmb.ac.uk/meetings-index/tendon-qmul-2015/)

---

## **BSMB Conference Bursaries**

***Tom Van Agtmael***

Awarded July 2014 - February 2015

### **BSMB Autumn meeting**

Pradeep Sacitharan (Reporter, Oxford) and Frances Jones (Glasgow), Matthew Mayhew (UEA), Rhiannon Morgan (Liverpool), Wipawee Saengosi (Liverpool) and Victor Njom (Sheffield).

### **Other Meetings**

Katherine Staines (Edinburgh) to attend American Society for Bone & Mineral Research (ASBMR, 2014) and Ian Garner (UCL) to attend Colloquium On Lung And Airway Fibrosis (ICLAF 2014).

BSMB has also already committed to supporting Mandy Peffers and Rhiannon Morgan (both Liverpool) and Stephen Thorpe (QMUL) to attend the Orthopaedic Research Society Meetings, 2015.

Dr Tom Van Agtmael,  
[tom.vanagtmael@glasgow.ac.uk](mailto:tom.vanagtmael@glasgow.ac.uk)

---

## Meeting reports

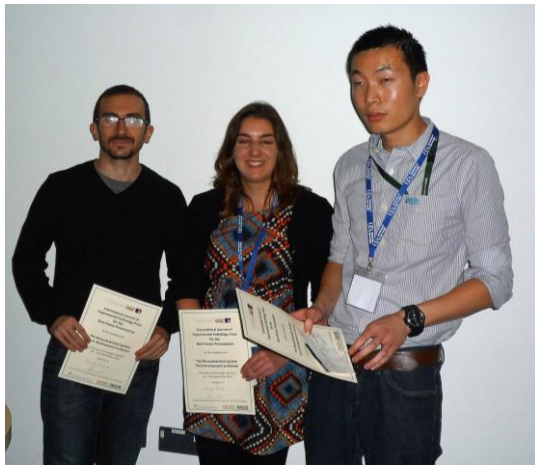
### **1st Joint meeting of British Societies for Matrix Biology and Developmental Biology**

#### **Report, Pradeep Sacitharan (Oxford)**

This inaugural meeting was held from the 1st-3rd of September 2014 at University of East Anglia (Norwich) and was attended by some 130 delegates. This report will highlight some of the key findings which were conveyed during the meeting in four main sessions: signalling and development, mechanobiology and anatomy, human genetics and pathology and transcriptional and epigenetic regulation.

#### **Signalling and development**

Thomas Rando (Stanford) outlined a novel form of long lasting cellular memory in stem cells coined the GAlert state in which a past stimulus results in the cell response being heightened. This state allows stem cells to respond and adapt more rapidly and efficiently to newer challenges. He also



demonstrated the existence of signals which communicate from an injured tissue to stem cell compartments across an organism.

Gabrielle Kardon (Utah) described her group's work in determining pleuroperitoneal folds being the original source of connective tissue in the diaphragm and how mutations of *Gata4* in these folds caused congenital diaphragmatic hernias. Thereafter, Dylan Sweetman (Nottingham) showed that retinoic acid inhibited early myoblast differentiation. However, retinoic acid signalling reduces as the limb grows and *FGF18* then induces myoblast differentiation. Afterwards, Claire

Thompson (London) demonstrated Lithium chloride stimulation of primary cilia elongation and inhibition of hedgehog signalling in articular chondrocytes. Finally, Sue Kimber (Manchester) explained a new protocol to induce differentiation of pluripotent stem cells towards chondrocytes, which were shown to repair osteochondral defects in rats.



#### **Mechanobiology and anatomy**

In the first short talk of day two, Cornelia Stein (Cologne) showed hemicentin proteins are required at the sites of mechanical forces. Using novel zebrafish and murine models she outlined the presence of hemicentin proteins in myotendinous junctions and increases in their expression during wound healing. Cheuk Ting Yiu (London) then explained the importance of the Fat-Hippo signalling cascade in bone development. She showed increased Yap activity in *Fat4*<sup>-/-</sup> and *Dchs1*<sup>-/-</sup> calvaria and limb osteoblasts and suggested that Yap activity is downstream to *Fat4*<sup>-/-</sup> and contributes to osteoblast differentiation leading to the skeletal phenotypic defect in these mice. Paula Murphy (Dublin) outlined 84 key genes linked with the cytoskeleton and involved in converting a mechanical stimulus into a transcriptional response.

Among these, the WNT signalling pathway was particularly important. Herbert Tempfer (Salzburg) using transgenic mice then showed elegantly that murine tendon cells express neuron-associated markers consistent with a potential neural crest origin.

#### **Human genetics and pathology**

Quing-Jung Meng (Manchester) gave an insightful talk on his group's work which has identified hundreds of circadian rhythmic genes in cartilage and tendon tissue. Global or conditional knockout models of these clock



genes resulted in pathologies such as cartilage degeneration and calcification of tendons. Madeleine Durbeej (Lund) presented data which shed light on the elusive pathogenesis of congenital muscular dystrophy type 1A. Using dy3k/dy3k mouse models she demonstrated the role of the autophagy and ubiquitin-protease systems in promoting the disease. Moreover, mice displayed an less dystrophic phenotype when these cellular systems were inhibited. Thereafter, Carole Proctor (Newcastle) using computer simulation models showed the overall contribution of negative feedback loops in controlling increases in the number of TGF $\beta$  type 1 and ALK1/5 receptors during aging in cartilage, which increased MMP-13 expression and collagen degeneration. Veronique Lefebvre (Cleveland) closed the day by showing the SoxC trio (Sox4/11/12) stabilised beta-catenin and repressed Sox9 expression which secures non-chondrocytic fate of mesenchymal progenitor stem cells; opposite effect to the chondrogenic Sox5/6/9 trio. Thus, these sets of trios decide the fate of mesenchymal progenitor stem cells and aid in developing a full mature skeleton.

### **Pathology & transcriptional & epigenetic regulation**

The last day of the meeting started with Cay Kielty (Manchester) presenting new insights into fibrillinopathies and microfibril biology. ADAMTS-10 and not ADAMTS-6 was shown to regulate microfibril assembly by molecular interactions with heparin/heparan sulphate and other molecules including LTBP-1. Afterwards, Simon Tew (Liverpool) gave an informative talk on post-transcriptional regulation in chondrocytes, highlighting 395 mRNAs with different decay rates in OA and non-OA chondrocytes; most differentially regulated genes were nuclear, involved in apoptosis and embryonic development.



This year's BSMB John Scott lecture was given by Blandine Poulet (London). She outlined her work on deducing the mechanisms which control osteoarthritis progression using the mechanical post traumatic model she developed and a spontaneous model of OA. Overall the data suggested OA progression is dependent on the initiating factor hence the importance of using different models to study the process.

The meeting was concluded by David Glass (Novartis) describing signalling pathways involved in skeletal muscle atrophy. Muscle RING finger 1 and Atrogin were shown to be transcriptionally upregulated in atrophy. Data was also presented using a novel human anti-activin receptor II antibody, bimagrumab, which increased muscle mass in mice and protected muscles from glucocorticoid-induced atrophy and weakness.

I would like to thank BSMB for the reporter award which gave me the wonderful opportunity to attend the meeting, present my work, network with my peers and learn new and exciting science.

---

## **Current BSMB Committee**

### **Officers:**

Chairman, Prof. Ray Boot-Handford (University of Manchester; [Ray.Boot-Handford@manchester.ac.uk](mailto:Ray.Boot-Handford@manchester.ac.uk))  
Honorary Secretary, Prof. Andrew Pitsillides (Royal Veterinary College, University of London; [apitsill@rvc.ac.uk](mailto:apitsill@rvc.ac.uk))  
Honorary Treasurer, Dr. David Young (Newcastle University; [d.a.young@ncl.ac.uk](mailto:d.a.young@ncl.ac.uk))

### **Elected and Seconded Members:**

Dr. Tom Van Agtmael (University of Glasgow; [tom.vanagtmael@glasgow.ac.uk](mailto:tom.vanagtmael@glasgow.ac.uk))  
Dr. Kim Midwood (Kennedy Institute of Rheumatology, University of Oxford; [kim.midwood@kennedy.ox.ac.uk](mailto:kim.midwood@kennedy.ox.ac.uk))  
Dr. Simon Tew (Institute of Ageing and Chronic Disease, Liverpool; [Simon.Tew@liverpool.ac.uk](mailto:Simon.Tew@liverpool.ac.uk))  
Dr. Sophie Gilbert (Cardiff University; [GilbertSJ1@cardiff.ac.uk](mailto:GilbertSJ1@cardiff.ac.uk))  
Dr. Linda Troeberg (Kennedy Institute of Rheumatology, University of Oxford; [linda.troeberg@kennedy.ox.ac.uk](mailto:linda.troeberg@kennedy.ox.ac.uk))

### **Co-opted Members:**

Prof. Jo C. Adams (University of Bristol;  
[jo.adams@bristol.ac.uk](mailto:jo.adams@bristol.ac.uk))

Dr. Graham Riley (University of East Anglia;  
[graham.riley@uea.ac.uk](mailto:graham.riley@uea.ac.uk))

Rhiannon Morgan (Student member,  
University of Liverpool)

---

**REGISTER NOW & SEE YOU IN  
NORWICH MARCH 2015!**

---

BSMB SPRING MEETING: March 30<sup>th</sup> and 31<sup>st</sup> 2015

# LOCATION, LOCATION, LOCATION: THE MATRIX AND THE MICROENVIRONMENT

Organizer: Kim Midwood

Location: St. Catherine's College, Oxford



Speakers: Janine Eler (Copenhagen), Giulia Taraboletti (Mario Negri, Italy),  
Frank Zaucke (Cologne), Kurt Hankenson (UPENN, USA),  
Stephane Heymanns (Maastricht), Dave Thornton (Manchester),  
Jack Lawler (Harvard, USA), Dario Neri (Zurich).



**THEMES: how do ECM derived niches drive CANCER, DEVELOPMENT & INFLAMMATION AND IMMUNITY plus TARGETING THE ECM IN DISEASE and the BSMB OPEN SESSION. INFO: [www.bsmb.ac.uk](http://www.bsmb.ac.uk)**