BSMB Spring Meeting 2011 – Programme:
Advances in Musculoskeletal Repair and Regeneration

Monday 11th April 2011

11 – 12.50	Registration & Coffee
12.50 – 1pm	*Introductory Remarks (Wael Kafienah and Anthony Hollander)*
1:00 – 2:30 pm	**Session 1 – Bone** Chairs: Andy Pitsillides and Simon Tew
1:00 – 1:30	***Gordana Vunjak-Novakovic*** *(Columbia University, USA)* Craniofacial tissue engineering [Sponsored by UKNSCN]
1:30 – 1:45	*Jos Malda (Utrecht University, The Netherlands)* Bioprinting approach for regenerative medicine; towards an osteochondral Implant?
1:45 – 2:00	*Blandine Poulet (The Royal Veterinary College, London)* Subchondral bone thickening, with or without articular cartilage lesions, in response to joint loading
2:00 – 2:30	***Molly Stevens*** *(Imperial College London)* New biomaterials strategies for orthopaedic tissue engineering
2.30 – 4.30 pm	**AGM (2:30-3:15) and Poster Session (including coffee)/ Trade Stands**
4.30 – 5.45 pm	**Session 2 – Cartilage** Chairs: Anthony Hollander and Emma Blain
4:30-5:00	***Michael Buschmann*** *(Ecole Polytechnique of Montreal, Canada)* Therapeutic technologies using natural polymers
5:00 – 5:15	*Steven Woods (Newcastle University)* miR324-5p in osteoarthritis and Indian hedgehog signalling
5:15 – 5:45	***Susan Chubinskaya*** *(Rush University, USA)* BMP-7 in cartilage repair

5:45 – 6:15	***Fell-Muir Award*** ***Bruce Caterson*** (Cardiff) - The Glycobiology of GAGs; fun for a few but a headache for some [Sponsored by the International Journal of Experimental Pathology]
6:15 – 8:00	**Poster Viewing with Wine and Cheese + optional Entrance to Museum for Exhibition viewing**
8:00 – 11:00	**Conference Dinner in Bristol City Museum**

Tuesday 12th April 2011

9:00 – 10.30 am	**Session 3 – Tendons and Ligaments** Chairs: Roger Smith and Hazel Screen
9:00 – 9:30	***David Butler*** *(University of Cincinnati, USA)* The Role of Matrix and Cell-Matrix Interactions in Tendon and Ligament Repair
9:30 – 9:45	*Eleanor Jones (University of East Anglia, Norwich)* Mechanical regulation of matrix turnover in Human Tenocytes
9:45 – 10:00	*Jay Dudhia (The Royal Veterinary College, London)* Fate of mesenchymal stem cells following different *in vivo* administration routes in repair of tendon injuries
10:00 – 10:30	***Karl Kadler*** *(University of Manchester)* Understanding how tendon precursor cells tension the extracellular matrix
10:30 – 11:00 am	**Coffee and biscuits** **Trade Stands & Posters**
11:00 – 1:00 pm	**Session 4 – BSMB Open Session** Chairs: Tim Hardingham and Che Connon
11:00 – 11:30	***Clemens A. Van BLITTERSWIJK*** *(University of Twente, The Netherlands)* Building complex tissue
11:30 – 11:45	*Cleo Bonnet (Cardiff University)* Intra-articular AMPA/kainate glutamate receptor antagonists alleviate inflammation, pain and pathology in rat antigen induced arthritis
11:45 – 12:00	*Ma'an Al-Abbasi (University of Bristol)* Changes in collagen cross-linking in human intervertebral disc: with advancing age and severe disc degeneration

12:00 – 12:15	*Jennifer Bara (Keele University)* Equine mesenchymal stem cells lose their angiogenic properties when differentiated toward chondrogenic and osteogenic lineages
12:15 – 12:30	*Philip Jones (Keele University)* Influence of small proteoglycans on nerve growth in the intervertebral disc
12:30 – 12:45	*Siyuan Li (Cardiff University)* Beta-xylosides inhibition of chondroitin sulphate substitution on matrix proteoglycans perturbs the differentiation of bone marrow stem cells into a chondrogenic lineage
12:45 – 1:00	**Arthritis Research UK - Fellowships & Funding Opportunities** Michael Patnick (Head of Research and Education)
1:00 – 2.15	**LUNCH** **Trade Stands & Posters**
2.15 – 3.45 pm	**Session 5 – Skeletal and cardiac muscle** Chairs: Philippa Hulley and Sarah Howat
2:15 -2:45	***Doris Taylor*** *(University of Minnesota, USA)* [Sponsored by UKNSCN] Building matrix based solutions for disease: an update
2:45 – 3:00	*Yuxin Cui (University of Bristol)* A new methodological sequence to expand and transdifferentiate *in vitro* human cord blood derived CD133+ cells into cells with a cardiomyocyte-like phenotype
3:00 – 3:15	*Stirling Yiin (University of Bristol)* Notch Signalling in human induced pluripotent stem cells
3:15 – 3:45	***Jennifer Morgan*** *(UCL Institute of Child Health, London)* Stem cells and skeletal muscle regeneration
3:45 – 4:00	**Poster Prize Awards and Close of Meeting (Afternoon Tea)**

Bios of Plenary Speakers:

Session 1: Bone
Prof. Gordana Vunjak-Novakovic - Department of Biomedical Engineering, Columbia University
http://www.bme.columbia.edu/gvnweb/

Prof. Molly Stevens – Institute of Biomedical Engineering, Imperial College London
http://www3.imperial.ac.uk/people/m.stevens

Session 2: Cartilage
Prof. Michael Buschmann - Ecole Polytechnique of Montreal
http://www.groupes.polymtl.ca/tissue/en/staff/buschmann.php

Prof. Susan Chubinskaya - Department of Biochemistry, Orthopedics and Section of Rheumatology, Rush University Medical Center, Chicago
http://www.rushu.rush.edu/servlet/Satellite?ProfileType=Detail&c=RushUnivFaculty&cid=1222703259549&pagename=Rush%2FRushUnivFaculty%2FFaculty_Staff_Profile_Detail_Page

Session 3: Ligaments and tendons
Prof. David Butler - School of Energy, Environmental, Biological and Medical Engineering, University of Cincinnati
http://seebme.ceas.uc.edu/programs/biomedical_engineering.html

Prof. Karl Kadler - Wellcome Trust Centre for Cell-Matrix Research, University of Manchester
http://www.manchester.ac.uk/research/Karl.kadler/

Session 4: BSMB Open Session
Prof. Clemens A. Van Blitterswijk - Department of Tissue Regeneration, Twente University
http://www.utwente.nl/tnw/tr/Staff/professors/Prof.dr.%20Clemens%20A.%20van%20Blitterswijk/

Session 5: Muscle
Prof. Doris Taylor - Center for Cardiovascular Repair, University of Minnesota
http://www.med.umn.edu/stemcell/faculty/Taylor_D/home.html

Dr. Jennifer Morgan - The Dubowitz Neuromuscular Centre, UCL Institute of Child Health
http://www.ucl.ac.uk/neuromuscular/CNMDOct2007/researchgroups/jennifermorgan