# anastomosis | november 2015

society newsletter for news, education, research, images, journals, events, meetings and reports. published monthly

## editor • raj ettarh

Welcome to the November issue of Anastomosis. In this issue, we bring you the latest news from our members and keep you updated on upcoming deadlines. We also highlight some interesting news articles from the past month.

#### **Deadlines**

Mark your diary!

The **Winter meeting of the Society** will take place at Magdalene College, University of Cambridge from **14-16 December 2015**. The theme is "Back to the Future" focusing on the past, present and future of the pursuit of anatomical knowledge, and there will be an Education Symposium on "Establishing a Para-Curriculum in Anatomy". Speakers at the meeting will include Stephen Barclay (University of Cambridge), Sarah Channon (Royal Veterinary College), Augusto Coppi (University of Surrey), Mick O'Dea (Royal Hibernian Academy Ireland) and Susan Standring MBE (King's College).

Members of the Anatomical Society to participate in a **ballot for Councillors** to begin a three-year term on Tuesday 15th December 2015. Instructions and Ballot Paper can be found at http://www.anatsoc.org.uk/AboutUs/CouncilandOfficers/Ballot2016.aspx. Members must be logged in to the Society website to access the ballot documents. The deadline for return of completed ballot forms is **5.00pm Tuesday 8 December 2015**.

#### Society's Annual General Meeting

The Annual General Meeting will be held on **Tuesday 15th December 2015** at 1pm to 2pm in the Cripps Auditorium, Cripps Court, Magdalene College, 1-3 Chesterton Road, Cambridge, CB4 3AD.

#### **People**

Journal of Anatomy: building with hydroxyapatite

Many thanks to **Professor Martin Collinson / Ms Zoe Ross** (Aberdeen University), **Professor Roger Keynes / Ms Eleanor Walder** (Cambridge University) for their outcomes reports for Undergraduate Student Vacation Research Scholarships 2013/14.

#### Research

## Journal of Anatomy: building with hydroxyapatite

For those who teach histology or biology of bone, the challenge is convey to learners how osteoblast facilitate a hydroxyapatite construct in bone. Alan Ryan and colleagues at the Royal College of Surgeons in Ireland and Trinity College Dublin describe their efforts at testing different hydroxyapatite-based scaffolds against mechanical property in their paper 'Effect of different hydroxyapatite incorporation methods on the structural and biological properties of porous collagen scaffolds for bone repair' in the December issue of the Journal of Anatomy at <a href="http://onlinelibrary.wiley.com/doi/10.1111/joa.12262/full">http://onlinelibrary.wiley.com/doi/10.1111/joa.12262/full</a>

#### Aging Cell: do you know your DNAm age?

We all know our own biological age but it appears that we also have a DNA methylation age (DNAm age). Lene Christiansen and colleagues at universities in Denmark, Germany and the US have shown that both ages correlate well ('DNA methylation age is associated with mortality in a longitudinal Danish twin study') in their study in the current issue of Aging Cell. You can read more about this at <a href="http://onlinelibrary.wiley.com/doi/10.1111/acel.12421/full">http://onlinelibrary.wiley.com/doi/10.1111/acel.12421/full</a>

#### Calendar December

S	М	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

# Best Image Prize Deadline May 31, 2016



The next deadline for the Society's Best Image Prize is 31 May 2016. The size limit for submitted images is 1.0MB.

## December Table of Contents Journal of Anatomy



The electronic table of contents of the December issue of the Journal of Anatomy is available in this issue of the newsletter.

#### **Royal Society Grants**

Dorothy Hodgkin Fellowship outstanding scientists in the UK at an early stage of their research career who require a flexible working pattern due to personal circumstances such as parenting or caring responsibilities or health issues Closes 12 January 2016.



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#### **Graduate Center**

#### **Support for Student Societies**

The Society provides up to 6 competitive awards to support Student Surgical Societies and Other Student Societies. Applications for maximum funding of £200 are considered on a rolling basis (1 October to 30 September). More details at <a href="https://www.anatsoc.org.uk">www.anatsoc.org.uk</a>

**British Council Newton Bhabha PhD placement program** will sponsor UK and Indian PhD students to spend a period of their study (3 to 6 months) in Indian and UK higher education institutions taking place between April and December 2016. Deadline for receipt of applications: **7 December 2015**. For more information visit <a href="www.britishcouncil.in">www.britishcouncil.in</a>

## **Opportunities**

### **Job Vacancies**

Applications are invited for a **Problem Based Learning Facilitator** at the **University of Nottingham**. The successful candidate will facilitate and mentor PBL groups, and provide student guidance, pastoral support and general administration in PBL course delivery. Closing date: **9 December 2015** 

The **University of Warwick** is inviting applications for a **Clinical Education Fellow** to get involved with teaching and progress along a clinical academic route. The successful candidate will teach, facilitate, supervise and assess first and second year graduate-entry medical students. Closing date: **13 December 2015** 

#### Training Opportunities: Royal Society of Biology Courses

The following Royal Society of Biology courses are available to staff and members of the Anatomical Society at discounts of up to 50%:

 Commercial awareness for life scientists, 03.02.16, Edinburgh,

For scientists working in industry and post-docs/PhD students considering a career in industry

Join the
Anatomical Society
today and receive
Anastomosis
every 4 weeks
electronically by
email

**Brian Mercer Feasibility Award** for scientists who wish to commercialise an aspect of their research. No deadline.

Cancer Research UK's Grand Challenge will be launched October 12, an innovative, £20 million international funding scheme which looks to accelerate progress using a collaborative, interdisciplinary and multinational approach. Applications are welcome from teams in any discipline and any country that are ready to tackle one of the toughest questions in cancer today. Call closes: 28 February 2016. More information on the CRUK website.

Grants for UK-Brazil Researcher Links workshops - bring together early-career researchers from the UK and a partner country to allow them to make international connections that can improve the quality of their research. Deadline: 11 December 2015. For more information visit www.britishcouncil.org.



Items should reach the editors a minimum of 30 days before the date that the event is scheduled to take place.

If you have any news, events or announcements that you would like to see published in the newsletter, send us an email

# Journal of Anatomy

Volume 227, Issue 6, Pages 705-790, December 2015

#### Introduction

705 Form and function in regenerative medicine: introduction *F.J. O'Brien and G.P. Duffy* 

## **Original Article**

707 Form and function of the intervertebral disc in health and disease: a morphological and stain comparison study

B.A. Walter, O.M. Torre, D. Laudier, T.P. Naidich, A.C. Hecht and J.C. latridis

#### Review Article

717 Mechanical regulation of mesenchymal stem cell differentiation A.J. Steward and D.J. Kelly

## **Original Article**

732 Effect of different hydroxyapatite incorporation methods on the structural and biological properties of porous collagen scaffolds for bone repair

A.J. Ryan, J.P. Gleeson, A. Matsiko, E.M. Thompson and F.J. O'Brien

#### **Review Article**

746 Advances in 3D cell culture technologies enabling tissue-like structures to be created in vitro

E. Knight and S. Przyborski

### **Original Articles**

757 Extracellular matrix production by nucleus pulposus and bone marrow stem cells in response to altered oxygen and glucose microenvironments S.M. Nagvi and C.T. Buckley

767 Investigating the effect of hypoxic culture on the endothelial differentiation of human amniotic fluid-derived stem cells

C. Lloyd-Griffith, G.P. Duffy and F.J. O'Brien

#### **Review Article**

781 Prospects for regenerative medicine approaches in women's health K. Schenke-Layland and S.Y. Brucker

#### **Book Review**

786 Testosterone G. Morriss-Kay

788 Referees

790 Erratum

Information on this journal can be accessed at: http://www.journalofanatomy.com

Cover image: Gomori's Trichrome staining of the bony endplate (top), cartilaginous endplate (middle), and nucleus pulposus (bottom) in a human 44-year-old male intervertebral disc (10X stitched mosaic). From B. Walter et al., 'Form and function of the intervertebral disc in health and disease: a morphological and stain comparison study.' (2015) 227:6, 707–716.



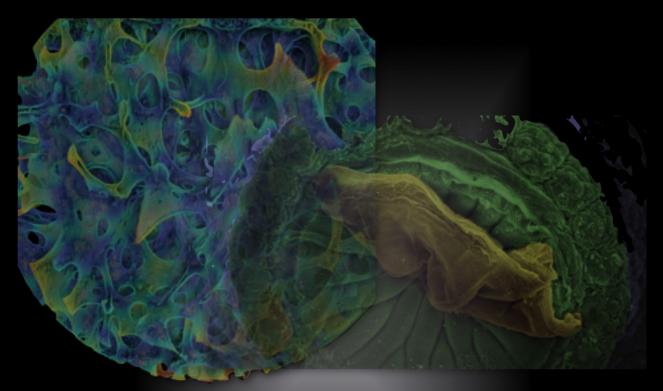




# **ANASTOMOSIS**

# Anatomical Society Best Image Prize

Open to Anatomical Society members, entries are adjudicated by the Website Committee and the £200 prize is awarded twice a year. Submit entries at <a href="https://www.anatsoc.org.uk">www.anatsoc.org.uk</a>



Images should be a single colorful graphical image minimum 75 dpi and a maximum size of 1.0MB for use on Society website/newsletter. Consent from people appearing in any photos is required. A title (no more than 3 words) and short 50-word narrative should accompany the image (for example: what it is; how it was produced; why it is special). An applicant may submit not more than 3 images for any one competition. Applicants submitting images must either own the copyright to the image or have gained the explicit permission of the copyright holder for the image to be submitted for this competition. A copyright statement must accompany each application. Images on this poster: Crispin Wiles, Tanya Shaw

# CALL FOR SUBMISSIONS

Next deadline May 31