

Maternal and Fetal Health Research Centre

Newsletter

Issue 28

July 2010

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STOP PRESS!!!

Hot off the press - graduation photo. – Page 1



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Maternal and Fetal Health Research Centre
part of the
Research School of Developmental Biomedicine *in the*
School of Medicine *within the*
Faculty of Medical and Human Sciences.

www.medicine.manchester.ac.uk/research/groups/maternalfetalhealth

Graduation
14 July 2010



(from left to right): **Drs** Christina Hayward, Jo Stanley, Jayne Fitzsimmons and Sam Smith collecting their PhD certificates.

Page 2: Successes, awards, invitations, presentations (continued)

TRIPLE SUCCESS FOR LYNDA

In May, Lynda Harris was awarded a David Phillips fellowship from the BBSRC to "Develop the use of vascular homing peptides as a drug delivery system in pregnancy". This award is for 5 years - the first year will be spent at the Vascular Mapping Centre in The Burnham Institute, Santa Barbara, California, then Lynda will return to Manchester for the remaining 4 years.

Lynda has also been selected to receive the Gabor Than award at the coming IFPA meeting in Chile. This award acknowledges an outstanding contribution to the field of placentology by an early career researcher.

AND

She also presented her work at the Manchester Phys Soc meeting in June!



Alex Hezell has been awarded the William Blair-Bell Memorial Lectureship from the Royal College of Obstetrics & Gynaecology. He will deliver his lecture to the College in the autumn.

Jo Glazier has accepted an invitation to join a National Forum comprising a multi-disciplinary group of scientists, clinicians, midwives, nutritionists and representatives of relevant organisations, aiming to promote scientific discussion around the use of folic acid and other, more bioavailable folate supplementation in pregnancy and preconception (sponsored by Seven Seas).

Page 3: Successes, awards presentations, invitations (continued)

SarahLee



Sarah Lee (MAPS Midwife) has been successful in acquiring a NIHR (National Institute for Health Research) funded studentship. In September 2010 she will commence a Master of Clinical Research (MClin Res) programme part time. This will mean studying for at least 2 days per week for 2 years. The University has been successful in securing a number of fully funded studentships for this programme for the next two years for intakes in September 2010 and September 2011. Supported by NIHR and the Chief Nursing Officer (CNO), they are part of the Clinical Academic Training Pathways (CATPs) initiative.

The course is only available for qualified UK registered Nurses, Midwives and Allied Health Professionals working in clinical practice. The programme is taught through on-line learning through the School of Nursing, Midwifery and Social Work. The MClin Res course is tailored to equip Nurses, Midwives, AHPs with essential skills to manage and deliver research in clinical and health and social care settings, and to develop careers in clinical research, clinical and academic practice, or academic research with a strong clinical practice component.

RUNNING FOR SANDS

Alex Heazell, Jenny Myers, Nathalie Robinson, Laura Hopkins, Fiona Mackie and Lucy Higgins took part in the Manchester 10K run in May and raised over £3,000 for SANDS.



Page 4: Successes, awards, invitations, presentations (continued)

Mais Aljunaidy was selected to give an Oral Presentation on the "changes in the spiral artery wall during pregnancy and the involvement of leukocytes in the vascular remodelling of myometrial segments" as part of the **Young Physiologist Symposium; Physiology and Disease: Advances and Perspectives Conference** – University of Manchester – June 2010.



On 30th June, in a public engagement role, **Paul Brownbill** gave a talk entitled "**The Man with the Perspex Womb - Finding Solutions to Pregnancy Problems**" to retired business women of Elland ProBus. Around 40 members attended and tea and fruit cake was served. There were lots of questions, including a great deal of interest from a retired midwife.

He has since been invited to repeat the talk for Huddersfield ProBus.

Karen Forbes has recently received the following awards:

- *Outstanding abstract award at ENDO 2010 (The Endocrine Society's annual meeting) in San Diego (June)*
- *Presidential poster prize at ENDO 2010 (The Endocrine Society's annual meeting) in San Diego (June)*
- *The Society for Endocrinology travel award for £750 to attend ENDO 2010*

and has been invited to present the following:

- *'The role of microRNAs in the developing human placenta' at: miRNAs, siRNAs and non-coding RNAs in health and disease - Manchester June 2010*
- *'Regulation of maternal growth factor signalling in the human placenta' at Department of Pathology, University of California, San Diego, June 2010*

Clare Tower won the presenters prize at the Macdonald Club for Obstetric Medicine Newcastle. She also gave the Blair bell Lecture at the British international Congress in Belfast.

Clare reports that we also had a good representation at the BMFMS.



Rebecca Jones gave an invited talk at the British Journal of Midwifery Conference in London on the 3rd June, entitled 'Teenage Pregnancy: 'About Teenage Eating' (ATE) Study'.

She has also been invited to join the Medical Advisory Board for www.babycentre.co.uk, to provide advice and feedback on nutritional information for pregnant women, particularly teenagers.



In May **Jean French** was awarded a long service 'medal' for completing 25 years continuous employment at the University (most of which have been in her current post as Secretary to Colin Sibley). The award took the form of £400 in shopping vouchers, most of which have been spent in Homebase on her garden (and not on wine as this photo may suggest!).

Mais Aljunaidy, MRes student, took part in a **Photography Exhibition 'What Does Manchester Mean To You?'**. Two of her photographs about Manchester were displayed in the exhibition which took place in Crawford House on 5th of May 2010 and she was awarded a camera as a prize. The photos in the exhibition will be published in a booklet for use throughout the University. For more details about the exhibition please see this website:

<http://www.flickr.com/photos/48419462@N03/4453374259/in/set-72157623670281652/>



Beth Holder won an award for Outstanding New Investigator, and so gave a talk at the American Society for Reproductive Immunology, held in Pennsylvania in the USA in May.

Sarah Coleman has been awarded a Loke Travel award for the IFPA meeting in Santiago, Chile, in September.

Colin Sibley gave the Dawes Lecture at the **Annual meeting of The Fetal and Neonatal Physiological Society in Winchester, UK on 4-7 July 2010.**

Page 7: Successes, awards, invitations, presentations

James Newham has been awarded a student bursary by the Society for Reproductive and Infant Psychology to give an oral presentation at their conference in Leuven, Belgium on 8 – 10 September.

Sam Smith's gorgeous baby boy, Jack Anthony, arrived on 13 May at 7.34pm weighing 9lb 5oz. Normal delivery, but she doesn't know anything about the placenta! :-)



Catherine Chmiel completed the midnight wander for Willow Wood Hospice in Tameside in support of its Cancer patients. Not only do the staff provide fantastic care to their patients but this care is extended to their families. Catherine participated in memory of her best friend's mum. The wander took place on Friday 9th July from midnight onwards and 1500 women participated. They completed the walk in under 3 hours and thoroughly enjoyed the very emotional but rewarding experience. Catherine, who raised a total of £200, would like to thank everyone who sponsored her.

CTR, Cambridge

John, Lynda and Carolyn enjoyed a stimulating 2 day meeting at the CTR in Cambridge. The meeting opened with a half-day session on vascular remodelling with contributions from all the major UK groups. Lynda gave her usual polished presentation and there was general agreement that the field is in an exciting phase. Molecular mediators of vascular transformation are now in sight which should at long last open avenues to therapy -- assuming of course that the at-risk patients can be identified.



Lynda and Carolyn outdoors with Guy Whitley and Judith Cartwright.



Carolyn enjoying dinner in Downing College with Graham Burton (meeting organiser and European editor of Placenta) and Ljiljana Vicovac, a former member of the research group, who's now in Belgrade. To Graham's right can be seen Fiona Lyall (Glasgow) Jay Cross (Calgary) and Magdalena Zernica-Goetz (Cambridge).

Page 9: Grants awarded/Arrivals

Medical Research Council Programme Grant - £2,409,019 (with Professor P Baker, Professor SDM Brown, Dr JM Constancia, Dr S Greenwood, Dr M Wareing) Assessment of Potential Therapies for Pre-eclampsia and Fetal Growth Restriction using Murine Models. 1/7/10-30/6/15. Ref. G0802770.

Working on the new MRC programme grant with Sue, Mark and Bo are new starters Lewis Renshall and Mark (I'm sure I've seen him somewhere before!) Dilworth.

Lewis



Mark

CMFT RfBP Award

Improving care of women with hypertension in pregnancy £18,500

Jenny Myers, Ed Johnstone & Ian Crocker

BRC Experimental Medicine Awards

Urinary podocytes in pre-eclampsia £19,500

Jenny Myers, Rachel Lennon & Mike Venning

Impact of folate deficiency on placental development and methylation status in teenage pregnancies £19,994

Rebecca Jones, Miguel Constanca (University of Cambridge), Melissa Whitworth

Feasibility of in vivo assessment of placental oxygenation using magnetic resonance imaging £19,461

Ed Johnstone & Jo Naish (Imaging Science and Biomedical Engineering, University of Manchester)

Page 11: Publication Successes



Please include: **Maternal and Fetal Health Research Centre, Manchester Academic Health Sciences Centre, University of Manchester** when papers are submitted. You should also acknowledge that the Group is supported by the NIHR Manchester Biomedical Research Centre and (if appropriate for your study) the Greater Manchester Local Comprehensive Research Network.

LK Harris, SD Smith, RJ Keogh, RL Jones, PN Baker, M Knöfler, JE Cartwright, G. StJ Whitley, JD Aplin (2010). Trophoblast- and vascular smooth muscle cell-derived MMP-12 mediates elastolysis during uterine spiral artery remodelling. *American Journal of Pathology*. In Press

M Desforges, SL Greenwood, JD Glazier, M Westwood, CP Sibley (2010). The contribution of SNAT1 to system A amino acid transporter activity in human placental trophoblast. *Biochem Biophys Res Comm*. In Press

K Forbes, M Westwood (2010). Maternal growth factor regulation of placental development and fetal growth. *Journal of Endocrinology*. In Press

E Tsitsiou, CP Sibley, SW D'Souza, O Catanescu, DW Jacobsen, JD Glazier. Homocysteine is transported by the microvillous plasma membrane of human placenta. *J Inherit Metab Dis* 2010 Jun 22. [Epub ahead of print]

AD Hazan, SD Smith, RL Jones, W Whittle, SJ Lye, CE Dunk. Vascular-leukocyte interactions. Mechanisms of human decidual spiral artery remodelling in vitro. *Am J Pathol*. 2010 Jun 17. [Epub ahead of print]

JE Myers, MW Seif. Global perspective of legal abortion – Trends analysis and accessibility. *Best Prac Res Clin Obstet Gynaecol* 2010 May 10 [Epub ahead of print]

DM Smith, M Whitworth, CP Sibley, W Taylor, J Gething, C Chmiel, T Lavender. The design of a community lifestyle programme to improve the physical and psychological well-being of pregnant women with a BMI of 30gk/m² or more. *BMC Public Health* 2010 10: 284

MF Kiernan, A Barrie, J Szkolar, TA Mills, M Wareing. Functional evidence for oxygen-sensitive voltage-gated potassium channels in human placental vasculature. *Placenta* 2010 31: 553-5.

M Whitworth, L Bricker, JP Neilson, T Dowswell. Ultrasound for fetal assessment in early pregnancy. *Cochrane Database Syst Rev* 2010 14: 4

AN Sharp, AE Heazell, IP Crocker, G Mor. Placental apoptosis in health and disease. *Am J Reprod Immunol* 2010 Mar 29 [Epub ahead of print]

If you have an abstract accepted for publication please email jean.french@manchester.ac.uk a copy of the publication for the newsletter, but also so that the information can be passed on to the Press Officer Aeron Howarth who will contact local/national press.

Page 12: Regular Meetings

Maternal and Fetal Health Research Group

Tuesday 'Work in Progress' Meetings

Seminar Room A/B
Research Floor
5th Floor
St Mary's Hospital

08:45 – 09:45

During the summer there will be no Tuesday morning meetings . They will restart on Tuesday 7th September. A schedule will be sent out nearer the time.

Maternal and Fetal Health Research Group Wednesday Lab Meetings

Seminar Room A
Research Floor
5th Floor
St Mary's Hospital

09:00 – 09:30

For more information email
jean.french@manchester.ac.uk

01/09/10- Caroline W

08/09/10- Paula (08.30 start)

15/09/10- Sarah C

22/09/10- Mark D

29/09/10- Andrea

06/10/10- Michelle

13/10/10- Melissa B

20/10/10- No meeting

27/10/10- No meeting

03/11/10- No meeting

10/11/10- No Meeting

17/11/10- Deirdre

24/11/10- Paul

01/12/10- Christina

08/12/10- Laura

15/12/10- Caroline W

22/12/10- Paula