

In this issue...

Page 1 – 8:	Successes, awards, invitations, presentations.
Page 9 - 10:	Arrivals – including new MRes students
Page 11:	Departures
Page 12 - 13:	Publications
Page 14:	Regular Meetings

STOP PRESS!!! Page 3

IFPA, Chile – Notes from October 2010 meeting



Produced by jean.french@manchester.ac.uk

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

h

Carolyn Jones has been invited by Elsevier to submit a page to their “Sci Topic” site on her work (similar to Wikipedia but science).

Lucian Nardo and colleagues from Central Manchester University Hospitals NHS Foundation Trust and the University of Manchester have recently set up the **Manchester Expert Research Group in Endometriosis and Endometrium (MERGE)**. **John Aplin** gave a talk on ‘Endometriosis – from models to molecules’ at their meeting on 27 September.

The group is a multi-disciplinary collaboration between basic scientists and clinical colleagues including gynaecologists, colorectal surgeons, urologists, pain specialists, radiologists and pathologists based in the North West of England. The priority of the group is to become a world-leader in endometriosis research with a focus on detailing the pathophysiology of the condition, improving the classification system and identifying novel diagnostic indicators with an ultimate goal of generating innovative treatment strategies for endometriosis. For more information please call 0161 701 6965 or email merge@cmft.nhs.uk.

Deirdre Thajam has had her abstract entitled ‘The Role of Placental Multi-Drug Resistance Proteins in Determining Fetal Susceptibility to Drugs of Misuse’ accepted for an oral presentation at the International Confederation of Midwives 29th Triennial Congress in Durban, SA in June 2011.

John Aplin was an invited plenary speaker at the SSR (US Society for the Study of Reproduction) in Milwaukee July 30th – August 3rd. His topic, Placental evolution and the glycode, covered work done with Carolyn Jones, Karen Forbes and Melissa Westwood as well as a recently published collaboration with Sarah Robertson’s lab in Adelaide.

The SSR, home of the journal *Biology of Reproduction*, moves its meeting around, aiming to visit every state in the USA – next year it is in Portland, Oregon. It is an outstanding and friendly meeting, one that both staff and students should seriously consider attending.

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

John Aplin visited Iran in September and gave three talks at the Royan International Twin Congress on Reproductive Biomedicine and Stem Cell Biology & Technology at the Royan Institute in Tehran. After the conference there was an opportunity to travel outside the capital, and John took these pictures of his tour group at the Shah mosque in Esfahan, one of the greatest monuments of Persian architecture. Also a rather nice lunch!



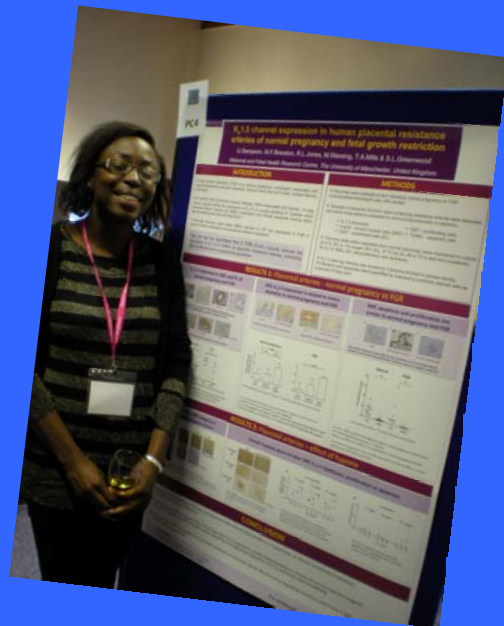
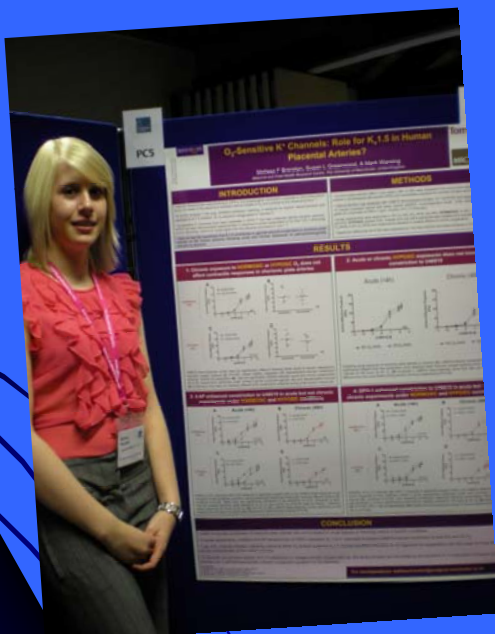
International Federation of Placenta Associations, October, 2010 – Santiago, Chile

Eight people from the Centre attended the International Federation of Placenta Associations Meeting in Santiago, Chile at the end of October. The science and the venue were superb and a great time was had by all. Lynda Harris received the Than Award and gave a superb plenary lecture, as did Alex Heazell and Mark Wareing. Sarah Coleman gave a great free oral communication, as did Paula Diaz in the workshop on ion channels. Rebecca Jones was a stalwart judge for the poster competition and Peter Sipos joined the presentation of some great posters. Colin swanned around being Presidential!



John Aplin gave a talk in London in early October on 'models of early implantation' at the meeting 'Reproductive Sciences in 2010'.

The Physiological Society hosted a Cardiac and Respiratory themed meeting at the University of Birmingham entitled; "Coping with hypoxaemia; strategies and solutions". **Melissa Brereton** and **Uzo Sampson** were selected to give both oral and poster presentations on the regulation of fetoplacental blood flow by oxygen-sensitive K^+ channels in normal and growth restricted pregnancies. **Sue Greenwood** and **Paula Diaz** also attended to provide moral support and learn about oxidative stress, oxygen sensing and the flight of the bear-headed goose over Mount Everest! Melissa won first prize for The Physiological Society Poster competition and both Melissa and Uzo received positive feedback on their presentations from many of the meeting delegates. It was an excellent meeting and more information can be found in the winter edition of The Physiological Society Magazine where Melissa writes a short meeting report and Uzo's work is highlighted by the event organisers.



RESEARCH MIDWIFE NEWS

Cara Taylor has extended her research role and now recruits to RAPID as well as TEENS. Cara, well done on excellent recruitment to both studies.

Welcome to the Preterm Labour Clinic....

We are pleased to welcome the Preterm Labour Clinic to the 5th floor research department this month. The consultant in charge of the clinic is Dr.Melissa Whitworth and the midwifery support will be provided by Sue Woods. It will take place every Wednesday morning in the clinical suite of the research department. This clinic will see women during their pregnancy who have previously experienced a late miscarriage (more than 16 weeks), had previous cervical surgery, have a uterine abnormality or have had a spontaneous delivery prior 32 weeks gestation or previous preterm rupture of membranes. They will be seen regularly throughout the second trimester of pregnancy and will receive a one to one hospital tour including the Neonatal Intensive Care Unit if they wish.

The baby skin care trail have reached their target recruitment level (PI Tina Lavender)! Well done all.

1ST ALLIANCE GROUP MEETING

Rebecca Lee Jones, Programme Director for the MRes was asked to provide team building exercises for the first meeting of the Alliance Group, organised by Dr Pam Vallely, Senior Lecturer in Medical Virology on 21 September in University Place. One of Rebecca's exercises at the meeting was to ask students to draw their idea of an ideal Supervisor. Various pictures were submitted, with supervisors possessing attributes such as a large watch so they could monitor their time more effectively and large pockets in their lab coats to store various forms of electronic and paper communication. This was a good opportunity for students newly embarking on their chosen postgraduate course to exchange information/ideas and form new relationships. The MRes Administrator, **Inez Phillips**, met up with other Programme Administrators including Joy Stewart (MRes in TERM and Postgraduate Administrator), Michael Pollitt, Postgraduate Administrator, Schools of Translational Medicine, Biomedicine & Manchester Medical School and Mrs Alison Howard, Graduate Manager. Students and staff remarked on their enjoyable and productive day.



Alison Cooke was an invited speaker at the British Journal of Midwifery Annual Conference in June 2010. She had a poster presentation at the British Maternal and Fetal Medicine Society Conference in June 2010 and gave an oral presentation at the 8th International Qualitative Research Conference in September 2010. She is giving an oral presentation at the Royal College of Midwives Annual Conference in November 2010 and also at the International Confederation of Midwives 29th Triennial Congress in Durban in June 2011. Abstract title "Exploring the older mother from different perspectives: the voices of women (an exploratory study of women's views and experiences of delayed childbearing)"



Congratulations to Ed and Liz Johnstone, whose new baby girl, Edith, arrived on Saturday 23rd October, weighing in at 3.46kg (7lbs 10oz in old money). All doing well.

Forthcoming events:

The MFH Christmas Meal will be held in the evening (starting at 5.00 pm) this year, on Wednesday 15 December at **Sweet Mandarin**, in the Northern Quarter. Mark Wareing will be organising a **Christmas Quiz** that afternoon (details to be announced nearer the time) and there will be another **Yankee Swap**. Those who would like to participate in the Yankee Swap should bring a wrapped gift (maximum value £10) on the day. Inez will be collecting remaining meal balances on 30 November.



*Manchester
Health
Academy
Artwork*



We recently played host to students of the Manchester Health Academy. The students worked with Ed, Suzanne, Ian, Caroline and Michelle to learn more about health research and the complications of pregnancy.

The students were given the task of producing a piece of artwork which represents the work of the Manchester Placenta Clinic. They rose to the challenge and produced some fantastic work, which is currently displayed in the visitors waiting area by reception on the 5th floor.

After voting for your favourite image in July, Andiswa Moyo, aged 15, was presented with a prize and a copy of his winning artwork by Ed on the 28th of September in a ceremony attended by his fellow students, teachers, Colin and members of the trust.

We are very pleased to welcome three new midwives to the Research Floor:

Fiona Prichard, CLRN portfolio midwife, currently working one day per week supporting various portfolio studies.

Lisa Horrocks, CLRN portfolio midwife, working 2 days per week recruiting to the MAPS study.

Carolyn Ekong, is working on a Trust RFPB grant: "Improving care in Hypertension" with Dr Jenny Myers.



Fiona and Lisa

Laura Goodfellow is an obstetrics and gynaecology ST1 on the ACF (academic clinical fellowship) programme. She has just started 3 months of research time (October to January), and will then go back to clinical practice as an Obs & Gynae SHO for 9 months. Laura will be working with Melissa and Ed looking into the association between IGFBP proteases and pregnancy outcome.



Carolyn



Phil Dutton



“Placental factors to predict poor pregnancy outcome in women with reduced fetal movements”

Supervisors: Alex Heazell, Rebecca Lee Jones
Degree: Intercalated 4th year medical student, University of Manchester

Emma Kellett



“Placental function in diabetic pregnancies: a systems biology approach”

Supervisors: Jenny Myers, Melissa Westwood, John Aplin
Degree: Intercalated 4th year medical student, University of Manchester

Farry Farrokhnia



“Establishing the role of microRNAs in the placenta”

Supervisors: Karen Forbes, Melissa Westwood
Degree: Biomedical Sciences, University of Manchester

Sammi Lean



“Effect of folate deficiency on placental development and methylation status in teenage pregnancies”

Supervisors: Rebecca Lee Jones, Melissa Whitworth
Degree: Biology, University of Manchester
Mres student rep

Chloe Hirst



“Could reduced taurine transport underlie abnormal syncytiotrophoblast renewal in pre-eclampsia?”

Supervisors: Sue Greenwood, Michelle Desforges.
Degree: Anatomy/Immunology, University of Manchester

Bonnie Lowndes



“The effects of the anti-TNF therapy Certolizumab on trophoblast behaviour”

Supervisors: Ed Johnstone, Ian Crocker
Degree: Intercalated 4th year medical student University of Manchester

Tolu Junaid



“Placental Vascular Abnormalities in IUGR”

Supervisors: John Aplin, Ed Johnstone, Tracey Mills
Degree: Medicine/Surgery, Olabisi Onabanjo University, Nigeria

Vicky Palin



“Does tetrahydrobiopterin (BH4) supplementation recover fetoplacental vascular compliance in fetal growth restricted pregnancies?”

Supervisors: Colin Sibley, Jo Glazier, Ed Johnstone, Paul Brownbill
Degree: Medical Sciences, University of Leeds

Alice Ridgway



“EPCs in IUGR”

Supervisors: Ian Crocker, Colin Sibley
Degree: Biology, University of Manchester

MRES STUDENTS 2010

Beth Holder left at the end of October to start a postdoc at King's College, London, investigating the role of regulatory T cells in autoimmune hepatitis. We wish her the best of luck in her new job.

Helen Miller is returning to her full-time clinical role at the end of November. A very big thank you to Helen for establishing the tissue bank from which many studies have benefited.

The 1st Viva for MRes students on the 23rd of September was a great success. Everybody was impressed by the amount of work done and a big celebration was held in the evening. Congratulations to all the graduated students and a big thank you to everyone who took part in this course. Uzo, Lynne, Laura and Fiona will go back to continue their studies in the medical school. Mais is moving to Canada to become specialized in Obstetric & Gynaecology and Nathalie is looking for a job :)

**Mais Al-Junaidy,
2009 MRes student,
working in the lab**





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 Biomedical Research Centre and (if appropriate for your study) the Greater Manchester Local Comprehensive Research Network.– **PLEASE REMIND YOURSELVES OF PUBLICATION AFFILIATIONS BEFORE SUBMITTING - FURTHER DETAILS CAN BE FOUND ON THE MFH SHARED DRIVE IN THE FILE 'RESEARCH GROUP ADMIN'**

Thajam D, Atkinson DE, Sibley CP, Lavender T. (2010) Is neonatal abstinence syndrome related to the amount of opiate used? *J Obstet Gynecol Neonatal Nurs.* Sep;39(5):503-9. Journal Impact Factor 0.952.

Nardo LG and Jones CJP. (2009) Endometrial changes in women with endometriosis. In "Endometriosis: current management and future trends" Eds: Garcia-Velasco JA and Rizk B. Jaypee Medical Publishers, New Delhi, India pp 84-90.

Jones CJP, Miller DL, Aplin JD, Nardo LG (2010) Heterogeneity of eutopic endometrium in endometriosis: implications for fertility. In ""Endometriosis: Symptoms, Diagnosis and Treatments." Nova Science Publishers, Inc., Hauppauge, USA , pp181-196

Jones CJP, Aplin JD, Burton GJ. (2010) First trimester histiotrophe shows altered sialylation compared with secretory phase glycoconjugates in human endometrium. *Placenta* 31:576-580. Journal Impact Factor 2.767

Cooke, A. Mills, TA & Lavender, T (2010) Informed and uninformed decision making. Women's reasoning, experiences and perceptions with regard to advanced maternal age and delayed childbearing: A meta-synthesis. *International Journal of Nursing Studies* 47, 1317-1329. Journal Impact Factor 1.910

LK Harris, IP Crocker, PN Baker, JD Aplin, M Westwood (2010) IGF2 actions on trophoblast in human placenta are regulated by the insulin-like growth factor 2 receptor, which can function as both a signalling and clearance receptor. *Biology of Reproduction.* In press. Journal Impact Factor 3.469

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.



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 Biomedical Research Centre and (if appropriate for your study) the Greater Manchester Local Comprehensive Research Network. **PLEASE REMIND YOURSELVES OF PUBLICATION AFFILIATIONS BEFORE SUBMITTING – FURTHER DETAILS CAN BE FOUND ON THE MFH SHARED DRIVE IN THE FILE ‘RESEARCH GROUP ADMIN’.**

Jasper MJ, Care AS, Sullivan B, Ingman WV, Aplin JD, Robertson SA. Macrophage-Derived LIF and IL1B Regulate alpha(1,2)Fucosyltransferase 2 (Fut2) Expression in Mouse Uterine Epithelial Cells During Early Pregnancy. *Biol Reprod.* 2010 Sep 23. [Epub ahead of print] PubMed PMID: 20864644. Journal Impact Factor 3.469

Diao H, Aplin JD, Xiao S, Chun J, Li Z, Chen S, Ye X. Altered Spatiotemporal Expression of Collagen Types I, III, IV, and VI in Lpar3-Deficient Peri-Implantation Mouse Uterus. *Biol Reprod.* 2010 Sep 23. [Epub ahead of print] PubMed PMID: 20864640.3. Journal Impact Factor 3.469

Tower CL, Lui S, Charlesworth NR, Smith SD, Aplin JD, Jones RL. Differential expression of angiotensin II type 1 and type 2 receptors at the maternal-fetal interface: potential roles in early placental development. *Reproduction.* 2010 Sep 13. [Epub ahead of print] PubMed PMID: 20837730. Journal Impact Factor 3.073

Harris LK, Smith SD, Keogh RJ, Jones RL, Baker PN, Knöfler M, Cartwright JE, Whitley GS, Aplin JD. Trophoblast- and vascular smooth muscle cell-derived MMP-12 mediates elastolysis during uterine spiral artery remodeling. *Am J Pathol.* 2010 Oct;177(4):2103-15. Epub 2010 Aug 27. PubMed PMID: 20802175; PubMed Central PMCID: PMC2947303. Journal Impact Factor 5.673

Soydemir, F., Kuruvilla, S., Brown, M., Dunn, W., Day, P., Crocker, I., Baker, P., Sibley, C., and Brownbill, P. (2010) Adapting in vitro dual perfusion of the human placenta to soluble oxygen tensions associated with normal and pre-eclamptic pregnancy. *Lab. Invest.* (e-published ahead of print. Journal Impact Factor 4.602

Giovannelli A, Greenwood SL, Desforges M, Sibley CP, Petraglia F. Corticotrophin-releasing factor and urocortin inhibit system A activity in term human placental villous explants. *Placenta*, in press. Journal Impact Factor 2.767

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.

Tuesday 'Work in Progress' Meetings

Seminar Room A/B
Research Floor
5th Floor, SMH
08:45 – 09:45

Date	Speakers	Chairs
02/11/2010	Peter Sipos and Paul Brownbill	Paul Brownbill & James Newham
09/11/2010	Alexandra Solomon & Andrea Ditchfield	Raja Nadif and Christal Fisher
16/11/2010	Suzanne Thomas and Paula Diaz	Alison Cooke and Melissa Brereton
23/11/2010	Christina Hayward and Sarah Coleman	Caroline Wright and Laura Kusinski
30/11/2010	Sue Woods and Andy Sharpe	Charlotte Jones & Alexandra Solomon
07/12/2010	Debbie Smith and Khiria Alsaghiri	Lois Stocks and Deirdre Thajam
14/12/2010	Lizzie Bonnie and Kim Hannam	Isaac Huen and Sarah Lee
21/12/2010	Christmas	Christmas
28/12/2010	Christmas	Christmas
04/01/2011	Christmas	Christmas
11/01/2011	Caroline Wright and Karen Forbes	Christina Hayward and Andrea Ditchfield
18/01/2011	Chloe Duval and Laura Kusinski	Youn-Jung Kang and Peter Sipos
25/01/2011	Youn-J Kang and L Stocks/C Jones	Karen Forbes and Zoe Darwin
01/02/2011	Melissa Brereton and Isaac Huen	Richard Blankley and Khiria Alsaghiri

Wednesday Lab Meetings

Seminar Room A/B
Research Floor
5th Floor, SMH
09:00 – 09:30

- 03/11/10- No meeting
- 10/11/10- No Meeting
- 17/11/10- Deirdre (change to usual start time - now 1.00 pm)
- 24/11/10- Paul
- 01/12/10- Christina
- 08/12/10- Laura
- 15/12/10- Caroline W
- 22/12/10- Paula