New clues about early humans

Researchers from HYMS and the University of Hull have played a key role in an international project to find out more about when our earliest ancestors arrived in Europe.

The research focuses on a fragment of jawbone found in Kent’s Cavern near Torquay in Devon in 1927. The bone was originally dated in Oxford in 1989 and was thought to be about 35,000 years old.

But in 2006, doubt was cast on the dating when it was established that modern glue had been used to conserve the bone after its discovery. Dr Flora Gröning, then a PhD student, and her supervisor, Paul O’Higgins, Professor of Anatomy at HYMS, worked with Michael Fagan, Professor of Medical and Biological Engineering, at the University of Hull to produce a microCT Scan of the fragment.

The scan confirmed that the fragment had been assembled incorrectly, and enabled researchers to construct an accurate 3D model of the jawbone. This work enabled the team, led by the University of Oxford and the Natural History Museum, in London, to prove that the bone is significantly older than first thought – pushing back the arrival of modern humans into northwest Europe by between 10,000 and 13,000 years.

It also offers new evidence supporting theories that early humans co-existed with Neanderthals in this part of the world, a fact which is often disputed by researchers.

Professor O’Higgins says: “The work carried out at HYMS demonstrates the value of a truly interdisciplinary approach to the study of human evolution and reflects the aims of our newly established York Centre for Human Palaeo-ecology and Evolutionary Origins (PALAEO).”

The world’s leading researchers and clinicians specialising in both deafness and autism recently met for the first time internationally to discuss this vastly under-researched area.

The conference was opened and chaired by HYMS consultant child psychiatrist Dr Barry Wright who gave an overview of the complex associations of deafness and autism, outlining characteristics of both conditions. He described research showing how clinicians frequently miss autism in deaf children, how some deaf children are misdiagnosed as autistic and how screening instruments and assessments used for autism are not useful or validated with deaf children. He also outlined planned future HYMS research.

This year’s Christmas card competition was won by HYMS Business Systems Project Lead Dan Parker with his photograph of a Northumbrian snowscene.

Advance notice
THE inaugural HYMS Postgraduate Research Conference will take place on Friday 1 June 2012 in the Presentation Theatre and Atrium in The Ron Cooke Hub, at the University of York.

The conference provides a great opportunity for HYMS students to share their research with a wider audience and to meet other postgraduates and researchers in their own fields and beyond.

All HYMS postgraduate research students and students supervised by HYMS members of academic staff are required to attend and present at this one-day conference. Supervisors, Thesis Advisory Panels and other members of HYMS are also very welcome to attend.

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New clues about early humans

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“It has shed new light on when modern humans first came to inhabit north-western Europe and helps explain previously puzzling aspects of the archaeological record.”

Professor Fagan adds: “We were approached because of our expertise in microCT imaging of bone, and were able to use the scan data to fully investigate the fragment and reconstruct it correctly in the computer, without damaging it or physically taking it apart.

“The University has a particular interest and expertise in understanding how bones, and skulls in particular, work and investigating their form and function. This is a fascinating research project, that moves us forward in our understanding of the origins of modern humans arriving in Europe and we’re very pleased to have played a part in it.”

The new dating evidence could solve the apparent discrepancy between the known dates of the Aurignacian period, in which artefacts and tools thought to be produced by the earliest modern humans in Europe had much older dates than their rare skeletal remains. Aurignacian tools and ornaments were dated as early as 44,000 years ago. Previous attempts to date relevant human remains resulted in dates that reached no further than between 41,000 and 39,000 years old, indicating a significant gap.

The team’s full research findings are published in the journal Nature.

Visit the PALAEO website to find out more about the Centre’s research and forthcoming events.

Deirdre’s presentation prize

Fifth year HYMS student Deirdre Walsh attended The International Conference for Healthcare and Medical Students (ICHAMS) in Dublin and received first prize for the overall oral presentation category.

“It was a lovely surprise and great to get HYMS known internationally as there were students from all over the world,” she said. “Overall, there were 160 delegates from 48 different countries around the world. 53 students performed an oral presentation whilst approximately 40 students presented their research on a poster.

“The conference provided a fantastic opportunity to meet medical students from other countries, to exchange knowledge and share exciting new developments in medical research.”

Following the success of the first conference, the committee announced that the ICHAMS conference would become an annual event.

Click on the link to read Deirdre’s full report on the conference.

In addition, congratulations to the following HYMS students for their recent successes at conferences:

Year 4 student Eleanor Swift was given a bursary by HYMS to attend the Glasgow Evidence Based Medicine Society Conference (GEMS) where she gave an oral presentation on the subject of “CT Pulmonary Angiography Contrast Transit Time in Patients with Pulmonary Embolism”. Read her conference report at this link.

Sophie Christopher, also a Year 4 student, attended the National Student Research Conference in London, hosted by the Acorn Medical Foundation. She gave both oral and poster presentations based on her recent SSC with the plastic surgery department at Castle Hill Hospital in Hull. With the help of colleagues in the department, Sophie completed a ten year case series review of patients who had undergone reconstruction following an anorectal carcinoma. Read her conference report at this link.

... and in publications:

Reza Mafi (Year 4), Daniel Ward (Year 5) and Shermin Merali (Year 5):


Daniel Ward, Stephen Leveson The good old days: Medical education in the United Kingdom 1800-50 Student BMJ 2011;20:D3471

Shermin Merali A tragic life Student BMJ 2011;19:C7345
HYMS students triumph

HYMS 4th and 5th year students triumphed over students from Leeds and Sheffield medical schools at the Yorkshire School of Paediatrics Annual Meeting in Sheffield.

This meeting is open to all consultants and junior staff from around Yorkshire and the Humber and HYMS was asked to nominate students to attend and a few to present.

Naomi Chinn, Year 5, won best student platform presentation with a talk on neonatal abdominal wall defects from an SSC in Hull paediatric surgery.

Matthew Buck, Hannah Wilson and Irene Hadjionnou, Year 4, won best poster for their SSC in a primary school in East Yorkshire, teaching basic science to children.

Two other students (both Year 5), Sandra Jost and Greg Chambers, also had excellent posters at the meeting.

In addition, Katy Rutter (Year 5) has been nominated by Guy Millman and one of the ACFs (Lauren Young) to represent HYMS at the RCPCH Annual Meeting in Glasgow next May. She submitted a summary of her excellent work in paediatric SSCs and her original research article in adolescent self harm.

End of life choice

UNIVERSITY of York researchers have received funding from Marie Curie Cancer Care to carry out a three-year study into place of care and death in patients with haematological cancers. The aim of the £270,000 study will be to discover why patients with haematological malignancies – diseases of the blood – are more than twice as likely to die in hospital compared with those suffering other forms of cancer.

“This study demonstrates what can happen when the University, the NHS and the people of York work together,” said Principal Investigator Professor Simon Gilbody, of HYMS and the University of York.

“It will follow a large group of babies and their parents from pregnancy onwards – the hospital began recruiting expectant parents in the summer and the first babies in the study are due to be born at Christmas.”

The study aims to find out as much as possible about the health and wellbeing of babies born in and around York, and their parents, during pregnancy, labour and after birth, as well as at intervals in the future.

BABY will also help the NHS and health researchers to investigate the health and wellbeing of children and adults in future, by building the necessary infrastructure now. Data will be collected on clinical outcomes including both mental and physical health and infant and child health and wellbeing.

Professor Gilbody said: “This is a very important development for the people of York. Only by recruiting large numbers of mothers and infants can we begin to learn about what keeps people healthy, and what causes important childhood and adult diseases.

“We aim to study physical and psychological wellbeing over a very long period of time. This study demonstrates what can happen when the University, the NHS and the people of York work together. We would like to thank in advance all those who give their time to this project. The study will enhance still further York’s reputation for health research, and will bring benefits for years to come.”

Women whose babies are due to be born in York and the surrounding area during the next 12 months are invited to take part. They will be given an information pack shortly after their first scan. It is likely to cover up to 3,500 mothers and babies. Women who join the study may also invite their partners to join.

NEW research led by Dr Camille Etteidaie of the University of Hull and Dr Anthony Maraveyas, consultant oncologist from Hull’s Castle Hill Hospital, suggests that the anti-coagulants known collectively as Low Molecular Weight Heparin (LMWH), routinely given to cancer patients to treat or lower the risk of thrombosis, may also suppress the growth and spread of tumours.

York study will track health and wellbeing of children and adults

An exciting new research project is being launched by York Teaching Hospital NHS Foundation Trust to track the health and wellbeing of children and adults.

The project christened BABY – Born and Bred in Yorkshire – is a partnership between midwives and doctors at York Hospital and researchers at HYMS and in the Department of Health Sciences, University of York.

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Staff news

Welcome to ...

Roxana Freeman.
PA to the Centre for Anatomical and Human Sciences, who will be based in York.

Congratulations to ...

Penny Crook, HYMS Student Liaison Phase II Teaching Coordinator and Team Supervisor at York Hospital on her recent wedding.

and thank you to ...

Jerry Booth, who is postponing his retirement to stay on as HYMS Quality and Standards Manager until March 2012.

SSC admin illuminated

HYMS SSC Programme Manager Richard Nicholson explains his role in the SSC administrative process:

“Managing the SSC process is perhaps more complex than people may think. With 560 students and over 300 SSC tutors spread across Hull, York, Scarborough, Scunthorpe and Grimsby it’s quite a task!

“As Programme manager, and working with Phase I and II coordinators Dr Mike Hardey and Prof Steve Kilkick and Phase I and II assistants Gill Pulpher and Tom Hammond, I have to ensure there are sufficient SSCs available three times a year for all Year 1-4 students.

“At the start of the process we work with tutors to prepare an appropriate proposal for an SSC that will meet with the SSC Approvals Committee and General Medical Council approval. This can be on all manner of topics from Anaesthesia to Yoga and Hill Walking to Japanese … but there is always room for one more SSC, so if you have an idea please get in touch.”

“Allocation of students to SSCs can be tricky: some SSCs are extremely popular and, for example, it isn’t unusual for a hundred students to apply for an SSC which can only accommodate four. In order to tackle this problem, students are asked to rank six of the offered SSCs in order of preference.”

Click on the link to read the complete report.
HYMS Prizegiving
Professor Maggie Pearson was the guest speaker at a prize-giving ceremony for HYMS students and their guests at the University of Hull.

The following prizes were presented by Professor Pearson, who is Academic and Training Programme Director of the Department of Health's Modernising Scientific Careers Programme:

• Intercalating student with the best performance in BSc (Hons) Medical Science (Biology):
  David Kelsey

• Best Performance in Year 1 Theme Cluster A:
  Craig Gouldthorpe

• Best Performance in Year 1 Theme Cluster B:
  Simon Hawkins

• Best Performance in Year 1 Theme Cluster C:
  Grace Duffy

• Best Performance in Year 11 SSC:
  Edward Miller and Joshua Shaw

• Best Overall Academic Performance in Year 1:
  Ruth Brand

Follow the link to see the complete list of awards.

If you have any contributions for this internal bulletin, please send them to val.parker@hyms.ac.uk

Stories with the mouse symbol have more information in the news section of the HYMS website, where you will also find breaking news, updates and images. www.hyms.ac.uk/news