

Report of Krakow Progress meeting – September 2009

The ninth progress meeting was held from 24th – 26th September, 2009 at Krakow in Poland and was very well organised by Piotr Socha and Darek Gruzfeld from Warsaw. The central location and warm early autumn sunshine made it very enjoyable to explore the city's squares, churches and castle during breaks from the meeting. The trip to the Wieliczka Salt Mines, with its cavernous halls hundreds of feet below the ground, was memorable for many reasons, not least being the possibility of seeing Margaret Ashwell being cut in half by the magician who entertained us after dinner. Luckily for Margaret, he cut his assistant in two instead.

The scientific content of the meeting was equally memorable. It began with a workshop on Critical Appraisal for Early Life Epidemiology which was led by Andy Ness, Sam Leary, Laura Howe and Alex Griffiths from Bristol, UK. The General Assembly, the following day, was a chance for each theme to update others on recent highlights. Rhonda Smith and Margaret Ashwell from Theme 7 described a couple of upcoming events which will provide an opportunity to influence policy and decision makers of the importance of research into the early life origins of disease. The first, in Brussels in November is a conference organised by Commnet, (the network of food safety projects communicators), for MEPs describing the potential impact of their research projects. The second in Milan in July is the EuroScience Open Forum which will provide an opportunity to engage journalists in some of the wider issues around early life programming. Earnest will host an interactive discussion which will debate the relative importance of effects in early life and current lifestyle interventions.

Richard Martin from Theme 1 then described some cohort analyses they had been doing on the PROBIT data looking at accelerated weight gain and blood pressure at 6.5 years. They have developed a multi-level model of weight gain which uses all 13 measures of growth up until age 5 years and calculated the growth velocities for 0-3 months, 3-12 months and 1-5 years and looked at the effects on blood pressure. Faster weight gain between 1-5 years had a greater effect on later blood pressure than that between 0-3 months or 3-12 months suggesting that the window for intervention was quite long.

Andy Ness from Theme 2 outlined the analyses they have been doing on the Avon Longitudinal Study of Parents and Children (ALSPAC), now that they have collected blood pressure at age 15 years. They looked at the association of modifiable maternal exposures such as age at childbirth, maternal diet and smoking to see whether changing these might have an impact on offspring blood pressure at age 15. Previously they had found little evidence of an association with blood pressure at age 7 years. He reported that there was no strong association between maternal age and blood pressure at 15. There was little evidence of associations with maternal diet, though more data on the association with maternal calcium were required. The association with maternal smoking was similar to that observed for paternal smoking suggesting that this was not an in utero effect. He said that for the exposures and outcome considered there was little evidence of programming in well-nourished populations. Studies of other exposures and outcomes in different populations would extend these findings.

Sylvain Sebert, Paul Taylor and Anne-Maj Samuelsson, all from Theme 3, described experiments they are doing looking at the development of appetite control and what affects this. Sylvain Sebert, using sheep as a model, has been investigating the role of ghrelin, and the effect of catch-up growth on ghrelin production while Paul Taylor and Anne-Maj Samuelsson have been looking at the effect of maternal obesity on lactation and subsequent obesity and blood pressure in their offspring. The offspring of the obese dams were ate more, became fatter and had a bigger and longer leptin surge than the offspring of the lean dams. Whether this has any relevance for obese mothers is not yet clear.

Monique Raats described progress on their survey of new mothers. They had achieved an 80% follow-up of the mothers at 8 months. She described the sources of information which mothers said had influenced them at birth and at 8 months. She pointed out that the "media" was quite low

down the list and there was some discussion on the difference between information-seeking behaviour and being presented with information. New mothers were more likely to go seeking helpful information.

The afternoon was set aside for individual theme meetings. The Dissemination and Exploitation Panel met the following morning to discuss how the various outcomes of the project would be relevant to different stakeholder groups. There was also a PhD training workshop and a meeting of the Childhood Obesity Project.