



Merck Serono and BSPED Award Winners 2009

Merck Serono BSPED Award (£25,000)

Professor Mehul Dattani, London

Kallmann syndrome and Congenital Hypopituitarism: an overlap in pathogenesis?

Congenital hypopituitarism is a condition characterized by the deficiency of one or more hormones produced by the pituitary. Kallmann syndrome is caused by lack of the pubertal hormones. The two conditions are related to faults occurring during the formation of brain structure in the developing baby.

We know that certain genes are implicated in this process but many questions are unanswered. We propose that the two conditions are linked, and may be caused by genetic changes (mutations) in the same genes. We plan to screen DNA from patients with either of the conditions for mutations in several genes.

BSPED Research Award (£15,000)

Dr Christina Wei, Bristol

Mechanism of Impaired glucose tolerance in survivors of childhood leukaemia treated with and without bone marrow transplantation (BMT) and total body irradiation (TBI)

With advances in cancer treatment, over 80% of children with leukaemia are cured, but they are at risk of long-term problems including obesity, raised blood sugar levels and diabetes. They represent a significant new population at risk of diabetes, and therefore increased risk of complications and reduced quality of life. We do not understand why these young people get diabetes, whether it is due to their previous treatment or subsequent changes in life style. This study will investigate whether diabetes is a result of damage to the pancreas, or related to obesity following their illness and its treatment. This will help us identify the best treatment options for these patients.

BSPED Research Award (£15,000)

Dr G. Ajayakumar Thankamony, Cambridge

Developmental origins of Type 2 Diabetes: Tolerance of Fasting and circulating IGF-I levels

Small for gestational age infants are at high risk of developing Type 2 Diabetes (T2D) in later life. Adverse fetal environment may permanently alter hormones which may have important roles in maintaining the function of pancreatic β -cells which produce insulin. Low blood levels of insulin like growth factor-I (IGF-I), a hormone produced by liver, have been noticed in SGA infants and are linked to reduced insulin production. Low levels of IGF-I in adults also predict later development of T2D. The main purpose of our study is to investigate whether IGF-I levels in healthy adults, are associated with alterations in insulin secretion.