

Report of 2000 award: Chris Kelnar

Chris Kelnar was awarded the first Edinburgh Sick Kids Friends Foundation Senior Research Fellowship and a European Society for Paediatric Endocrinology Sabbatical Grant which enabled him to carry out laboratory-based research from October 1999 to August 2000.

Chris spent the first phase at the Edinburgh Medical Research Council Human Reproductive Sciences Unit studying, with Dr Richard Sharpe, in a primate animal model (the marmoset monkey), the quiescent ('childhood') phase of the gonads and gonadal axis between infancy and puberty. He established in this species, as a surrogate for man, the developmental and functional status of the various cell types of the testis during this period by morphological and immunohistochemical techniques. These data will allow assessment of the safety of using GnRHa treatment in the marmoset, as a basis for future studies aimed at elucidating means of protecting the testis from the effects of chemotherapy in children with cancer.

Chris then spent 5 months as a Post Doctoral Fellow in Endocrinology at the Department of Pediatrics, Oregon Health Sciences University, Portland, Oregon, USA under the supervision of Professor Ron Rosenfeld. He learnt molecular and protein chemistry assay techniques and began to apply them to studies of the IGF binding proteins and the group of recently characterised mitogenic factors (IGFBP-related peptides) which are important modulators of cell metabolism, growth and differentiation. These techniques will be applied in future collaborative research focusing both on the development of the testis and childhood cancers – how they develop and their effects on growth, puberty and fertility.

Chris gave oral presentations of some of his initial data at two recent international meetings – Fertility 2000 [BAS/BFS/SSF Fertility Societies Meeting] in Edinburgh (August) and the European Society for Paediatric Endocrinology [ESPE], Brussels (September – Hormone Research 2000 53 (suppl 2) OR9-64 80.