Barts Pituitary Centre

Centre for Endocrinology
WHRI

Barts and the London School of Medicine and Dentistry
QMUL

Department of Endocrinology and Paediatric Endocrinology

Barts Health NHS Trust
Burden of pituitary disease

Rare disease - 7% of population

- Delayed puberty – 2%
- Pituitary adenomas – 1:1000
- Hypopituitarism – 1:4000
- Craniopharyngiomas – Most common intracranial paediatric tumour

Impact: high rate of morbidity & mortality

- 50% loss of quality-adjusted life-years in craniopharyngiomas
  Ali, J Neurosurg Pediatr 2014

Genetically determined
- 90% unknown cause

Ali, J Neurosurg Pediatr 2014
Research cycle

Patient & Family cohorts

Clinical question

Diagnostics, Management & Therapy

Deep phenotyping

Identification of Underlying Cause

Characterising Mechanisms
CLINICAL IMPACTS

- Early diagnosis and **precision medicine** for patients improving clinical outcomes
- Improved screening & detection protocols
- Generate novel therapeutic modalities
- National & International referral centre for pituitary disease

ACADEMIC OUTCOMES

- Ambitious externally funded grants: MRC, BBSRC European-Rare Disease Grants
- Maintain our success in competitive clinical training **fellowships**
- Increase our current **high impact** publications
- Benefits inter-SMD collaborations (Barts Cancer Institute, adult-paediatric endocrine research and clinical care)

**World-Leading Centre for Pituitary translational research**

- Novel genes
- NHS gene panel
- Medical treatment for cranio
- Neonatal mini-puberty management
- Sustainability
- Training
- REF
- Genomics England