ESPE CLINICAL FELLOWSHIP

Co-sponsored by MERCK

EXECUTIVE SUMMARY 2017-18 INTAKE

Clinical Fellowship Executive Summary 2017-18 intake

Introduction

Established in 1993 the Clinical Fellowship aims to promote the development of patient care, clinical management and clinical research in paediatric endocrinology through a training opportunity in a reputable European clinical centre selected for being a centre of excellence in paediatric endocrinology. The Clinical Fellowship helps to overcome significant disparities in the provision of high quality paediatric endocrine clinical care in different parts of Europe and to date 208 clinicians have benefitted from this specialist training.

The Fellowship is open to applicants who are fully trained in Paediatrics and/or have started training in Paediatric Endocrinology. All applicants should have the intention to pursue a career in Paediatric Endocrinology and they should be supported by a Promoter coming from their current Department (Home Centre) and from the Head of the Department.

The Clinical Fellowship is kindly supported by Merck by an educational grant.

Section 1 – Demographics

Geographical spread

Fellows are selected from countries lacking opportunities for training in specific skills or specific sub-specialty experience in their home country. With the globalization both of ESPE as a society, and of paediatric endocrinology as a recognised paediatric sub-specialty, the need for specialised training is increasing and getting more sophisticated. Therefore, the Clinical Fellowship programme welcomes applicants not only from Europe, but also from Africa, China, the Indian sub-continent, South America and the Middle East.

Fellowships are carried out at European Centres with a highly recognised reputation in clinical paediatric endocrinology. Host centres are selected by the fellowship committee. Applicants should be able both to understand and speak fluently the language of the population of the selected host centre country

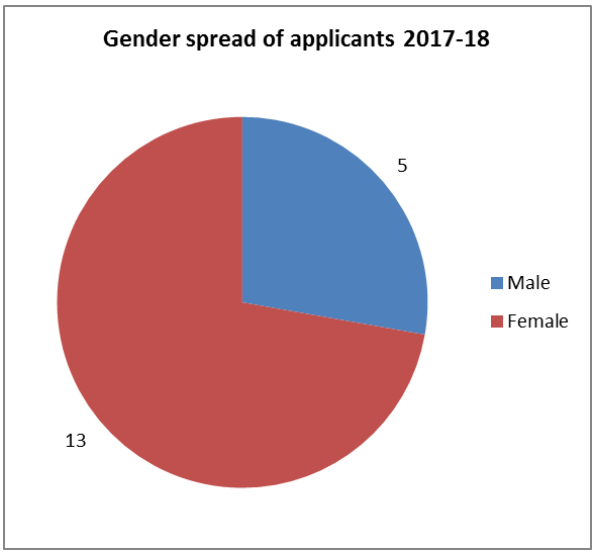
The application, confirming the candidate's training needs, readiness to use newly acquired knowledge, skills and experience, and a declaration to support the candidate's future career in paediatric endocrinology upon successful completion of the Clinical Fellowship is a vital part of this selection process. It is expected that the fellows will return to their home country at the end of the fellowship to promote paediatric endocrinology in their home centre/country.

Host Centres 2017-18

- Medical University of Silesia, Poland
- Ljubljana University Medical Centre, Slovenia
- Universität Oldenburg, Germany
- King's College Hospital, London
- Leipzig University, Germany
- Sheffield Children's NHS Foundation Trust, UK
- Centre Hospitalier Universitaire, France
- Alder Hey Children's Hospital, UK
- Cambridge University Hospitals, UK
- Istanbul University, Turkey
- Newcastle University, UK
- University Hospital Southampton, UK
- Leeds Teaching Hospitals, UK
- Nottingham University Hospitals, UK

Updated November 2019

Demographics



The average age of fellows from the 2017 – 18 intake is 35 years old.

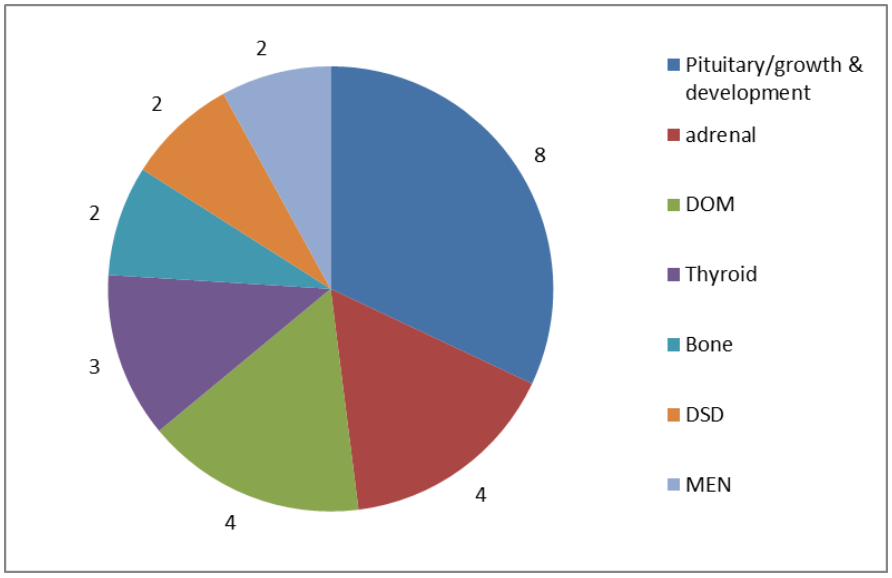
Section 2- Details of training on the Clinical Fellowship

Fellows attended different types of training including;

- Clinics in specified areas
- Ward rounds
- Outreach clinics
- Case presentations, discussions and seminars
- Academic paper reviews
- Genetic laboratories and diagnostics visits
- Team meetings
- Observations of examinations and home educational sessions from nurses

"After having seen the patients we discussed the case again and the consultant made sure I understood everything. In the case of some rare conditions we reviewed literature together"

The below table to the right shows the spread of conditions that fellows have highlighted as conditions they would not have otherwise seen in their home centres. On average, Fellows saw an average of 30-50 patients per week.



Updated November 2019

Clinical Fellowship Executive Summary 2017-18 intake

"I believe that I saw more than 300 patients with endocrine problems during my fellowship. Some cases I would not be able to see in my home center." – Elzbieta Niechcial, Poznan University of Medical Sciences, Poland

New techniques/treatment modalities/screening programmes learnt on the 2017/18 Clinical Fellowship that fellows will take back to their home centres

- Diabetes management: Patch insulin pumps, insulin pumps not usually seen in home centre, blood glucose sensors, continuous glucose monitors adaption of insulin doses
- Radiological tests
- Growth hormone treatment and dose adjustment
- Laboratory tests to diagnose and monitor congenital adrenal hyperplasia
- Thyroid illness- screening, interpretation and follow up of congenital hypothyroidism
- Improving search technique to solve uncommon problems.
- Orlistat for management of obesity
- Using estrogen patches in inducing puberty in girls with Turner syndrome/hypogonadism
- Screening of pituitary hormones in cases of Spina Bifida.
- Parathyroid hormone pumps
- Transition Endocrine outpatient department and Dose adjustment for normal eating (diabetes) provided to patients and attendants of Diabetes Mellitus
- Approach of communicating with/treating DSD patients (endocrinology, gynecology/urologyand psychology joint meetings)
- Burosumab in XLH
- IGFI for Larons Syndrome

"Now I am more aware of the symptoms of precocious puberty specifically how to distinguish between central and peripheral based on the clinical manifestation, how to carefully plan the diagnostic process, and which case requires immediate actions." Elzbieta Niechcial, Poznan University of Medical Sciences, Poland

Clinical/audit/research projects initiated or contributed to during 2017/18 fellowships

- Effect of Growth hormone treatment on final height in patients with GH deficiency and Turner syndrome – **A. Baibossynova**
- A thesis on Therapeutic outcomes in T2DM in adults diagnosed during childhood or adolescence – **B. Dijbril**
- A case series of five patients with SOX3 duplication – **G. Chawla**
- Sample study, on children and adolescents with type 1 diabetes measuring glycaemia variability and evaluating its association with blood DNA methylation, diabetic nephropathy and diabetic retinopathy – **J. Galhardo**
- Obesity Multi-OMCS study – **O. Al-Mutasim**
- DSD patients' AGD measurements– **O. Al-Mutasim**
- Analysis of clinical profile and outcome of children diagnosed with Ketotic Hypoglycemia – **R. Parikh**
- Life Child study – **T. Bizerea**

Clinical output of the 2017/18 Clinical Fellowship

Updated November 2019

All papers resulting from 2017/18 Clinical Fellowship (review/case report/original article/abstract)

- Case report of short stature in Jaffe–Campanacci syndrome – **A. Maheshwari**
- Evaluation of outcomes of T2DM management, in progress – **B Dijbril**
- SOX3 gene duplication associated with midline CNS malformations, hypopituitarism and neurodevelopmental abnormalities: 5 unrelated cases – **G. Chawla**
- Case reports: XY DSD with rapidly growing gonadal tumor, -2 cases of CAH with Nephrocalcinosis - **O. Al-Mutasim**
- Article review: childhood obesity and gut microbiome, alternative management of CAH cases with difficult control - **O. Al-Mutasim**
- Abstract accepted for Poster presentation at BSPED Meeting, Birmingham, 7-9th November 2018: "Novel HNF1A variant associated with Congenital Hyperinsulinism in Infancy and Maturity Onset Diabetes of Young (MODY 3) in later life." – **R Parikh**
- Ongoing case report preparation for journal publication: Novel HNF1A variant associated with Congenital Hyperinsulinism in Infancy and Maturity Onset Diabetes of Young (MODY 3) in later life – **R Parikh**
- Ongoing Case Image preparation for NEJM publication: Generalized Arterial Calcification of Infancy – **R Parikh**
- ABSTRACT presented at BSPED 2018: Pubertal induction among girls with Turner's syndrome: an audit of practice from 2008-2017 – H Elechi
- ABSRACT presented at BSPED 2018Clinical presentation, genetics, investigation and management: a 10 year review – H Elechi

Clinical courses, symposia, scientific conferences attended by 2017/18 fellows:

National Children & Young People's Diabetes Network

SFEDP

Section 3 – Post fellowship

All thirteen 2017/18 fellows wish to establish/continue paediatric endocrine services in their home centres following the fellowship and build their careers in paediatric endocrinology. All report better knowledge and experience which they will return with back to home centres and share with colleagues and trainees.

"After learning about the treatment benefits of Burosumab in Sheffield, I informed my home centre team which lead to the new treatment trial of an 8 month old boy diagnosed with XLH."- Małgorzata Wilk, Samodzielny Publiczny Szpital Kliniczny, Poland

How the knowledge/experience gained will help improve patient care in home centres

- It will benefit day-to-day clinical practices;the exchange of advice amongst healthcare professionals was a hallmark of the host centre practice and was something to emulate in the home centre
- Improved diagnosis and patient management

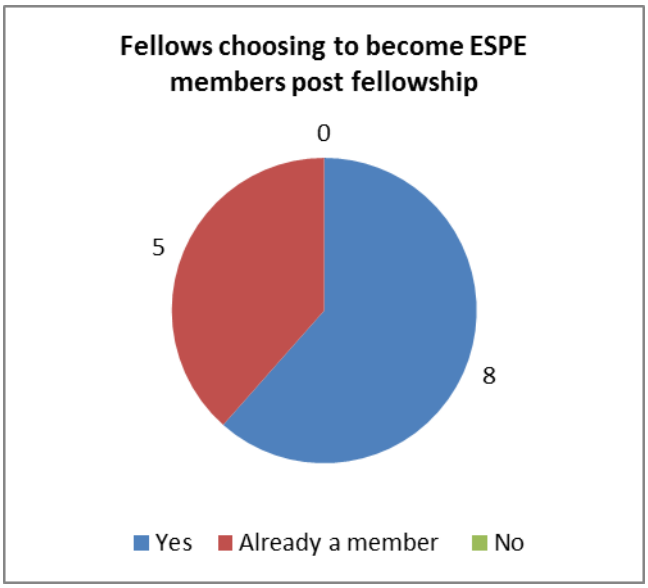
"The acquired knowledge will allow me to actively participate at developing pediatric endocrinology in Timisoara. I plan to take the opportunity to write and adapt the guidelines on treating paediatric conditions in my home center." -Bizerea Teofana Otilia, "Louis Tutcanu" Children's Clinical and Emergency'Hospital, Romania

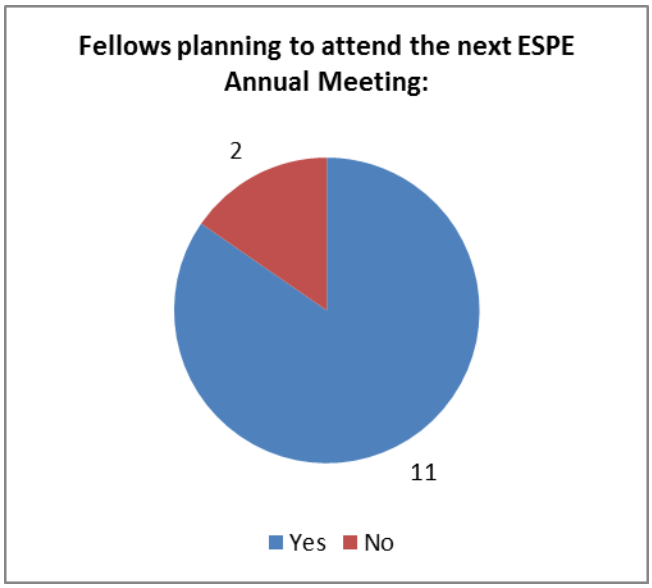
- Seeing rare and unusual cases and diagnostic tests not available in home country will help future diagnosis and treatment
- The fellowship is a good platform to begin exploring more of paediatric endocrinology in a clinical and research setting
- Service models in the host centres, and modalities of treatment such as joint clinics could be established at home centres
- The development of multidisciplinary and transition clinics attended gave insight into the advantages of a joint approach
- Opportunity to understand the basis of writing abstracts and articles for publications in journals
- Knowledge on how to develop paediatric endocrine departments in children's hospitals that the fellow is affiliated with
- Dijibril Boiro will initiate a project to implement screening for congenital adrenal hyperplasia and congenital hypothyroidism in Abass Ndao Hospital Centre in Dakar, Senegal and implement follow-up cohorts, mainly in diabetes, but also other endocrinopathies (depending on demand) as a specialist in paediatric endocrinology and diabetology.
- To set up a Bone Clinic in Szczecin, Poland, and forming a Bone Team (with orthopaedists, physiotherapists) and start to screen for patients with bone disorders among those with multiple fractures, family history or risk factors

Collaborations made during the 2017/18 fellowship

Fellows are encouraged to plan future collaborations (clinical/research/teaching/visits or exchange programs) with their host centre.

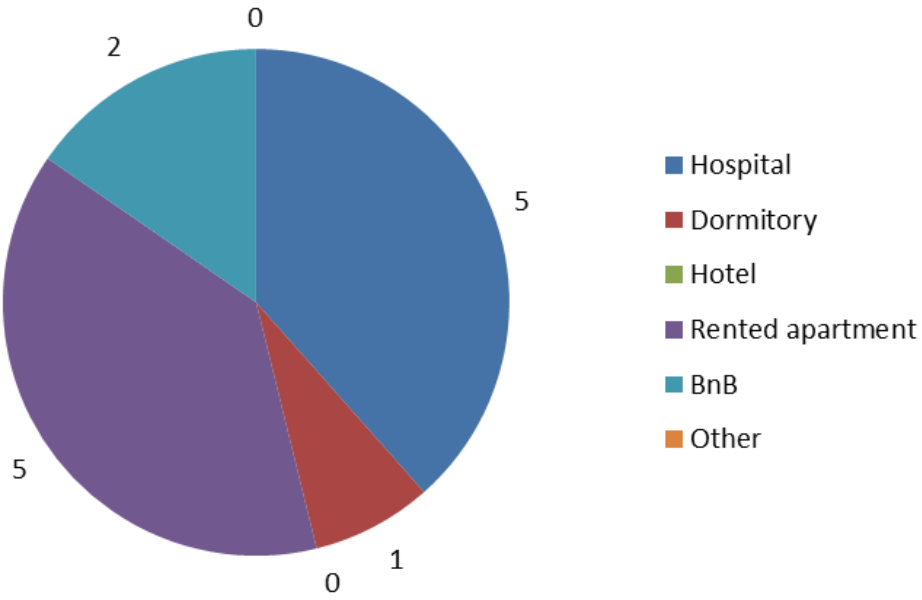
- The connections made with the host supervisor and centre facilitate communication on any future difficult cases encountered at the home centre
- Implementation of follow-up cohort studies and support for the development of paediatric endocrinology in Senegal
- Attending international meeting organised by host centre
- Applying for a grant with host supervisor to develop work started on the Clinical Fellowship
- Establishing an exchange program between the two centres allow fellows exposure to new conditions and practices
- Ruchi Parikh will initiate the organisation of a Paediatric Endocrine Meeting along with the Home and Host Centers in the near future, at Bai Jerbai Wadia Hospital for Children, SRCC Childrens Hospital, Surya Children Hospital and the Comprehensive Thalassemi Care Paediatric Hematology-Oncology and Bone Marrow Translant Centre, Mumbai, India. He plans to Plan to continue the existing Paediatric Endocrine services and work towards the development of multidisciplinary clinics for comprehensive care and management and develop an electronic medical record system in the corporate sector and a database in the home centre.
- Future plans include accessing European funds for research projects and organizing scientific meetings on paediatric endocrinology





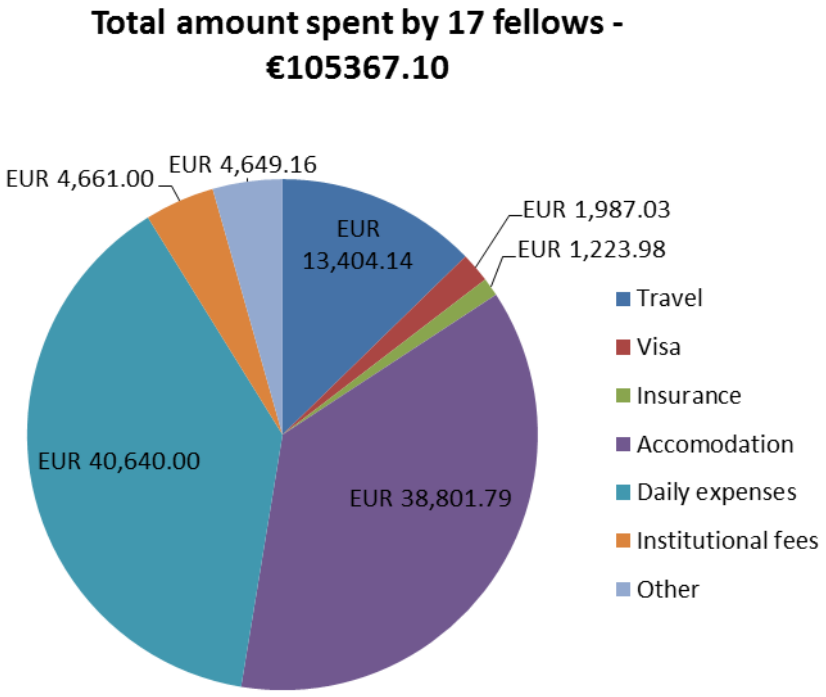
Section 4 – General and financial aspects of the fellowship

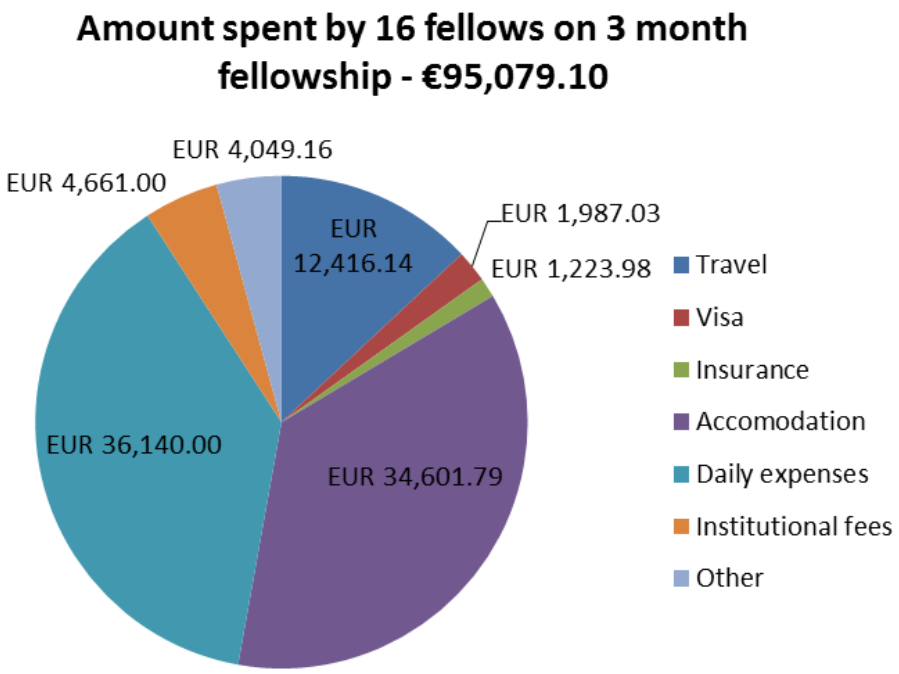
Accommodation used:

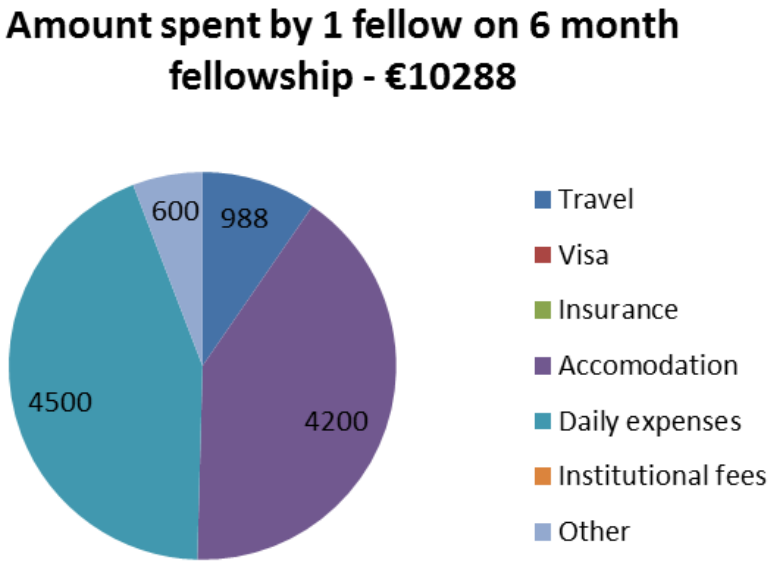


1. Adequate budget: **100%** of fellows thought the budget they received was adequate

2. Budget expenditure breakdown pie chart.
   - €40k given by Merck
   - €60k given by ESPE







Section 5 – Summary

The Clinical Fellowship continues to be a valuable and popular activity for early career paediatric endocrinologist and paediatricians interested in specialisation in the field. The application numbers in the 2017-18 intake was 48, the highest yet in the history of the programme. Sixteen international applicants were awarded and completed the fellowship. The completion reports consistently indicate high overall satisfaction with the content of the fellowships and the results summarised in section 3 show how this acquired knowledge will progress the discipline, enhance clinical practice and promote collaboration when the fellows return back to their home centres. A huge debt of gratitude is to be extended to Merck, without whom the programme would not be possible or as successful as it has become.