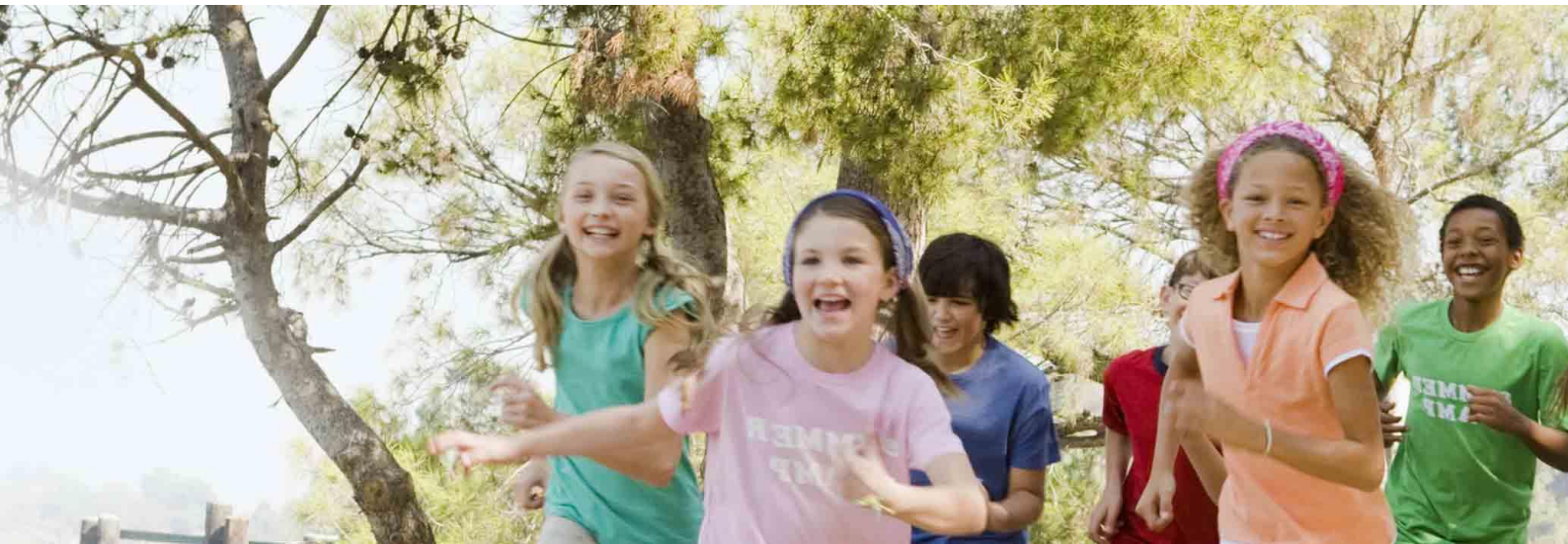


ESPE

CLINICAL FELLOWSHIP

Co-sponsored by **MERCK**

EXECUTIVE REPORT 2018-19 INTAKE



“The Clinical Fellowship has changed the way I think and practice”

– Sona Samvelyan, Paediatric Polyclinic Moscow, Russia

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 225 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 an educational grant from Merck.

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.



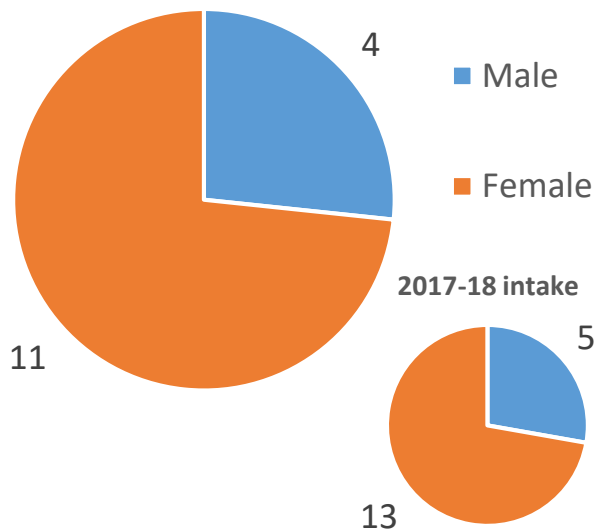
2018-19 Clinical Fellowship European host centres

Host Centres 2018-19

- Alder Hey Children's Hospital, UK
- Great Ormond Street Hospital, UK
- Umeå University, Sweden
- King's College Hospital, UK
- University Hospital of Geneva, Switzerland
- University of Chieti, Italy
- Istanbul University, Turkey
- Hospital Clínico Universitario de Santiago, Spain
- Schneider Children's Medical Centre, Israel
- Manchester University Hospital, UK
- Marmara University, Turkey
- Bristol Royal Hospital for Children, UK
- CHU Paris - Hôpital Robert Debré, France



Gender spread of 2018-19 intake



The average age of fellows from the 2018 – 19 intake is 36 years old.

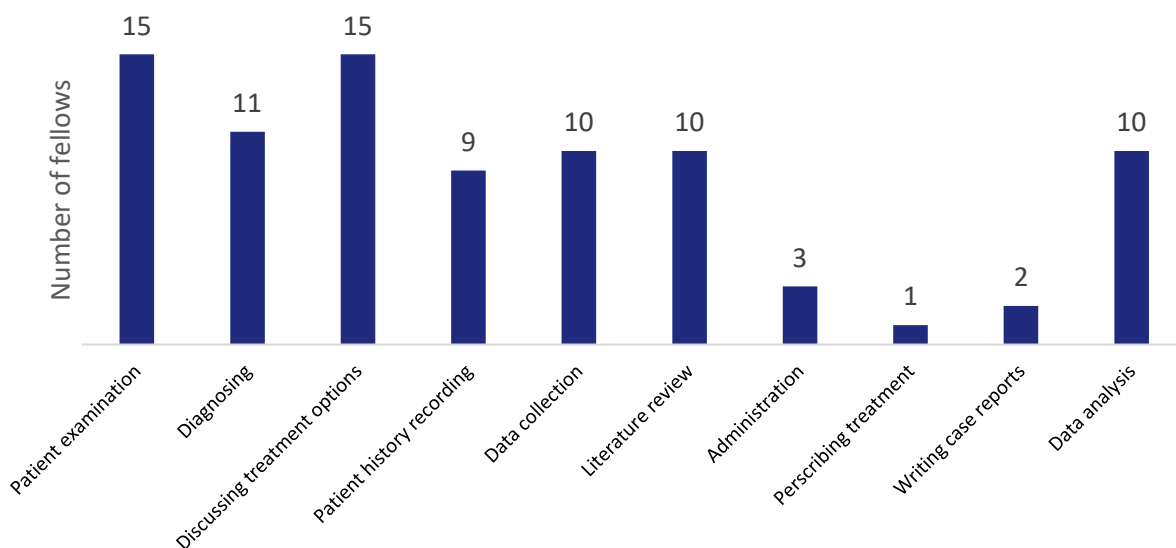
SECTION 2 – DETAILS OF TRAINING/ACTIVITIES UNDERTAKEN ON THE CLINICAL FELLOWSHIP

Fellows in this intake rated their clinical training at host centres as 9 out of 10 or above. Fellows underwent different types of training including:

- Daily ward rounds
- Daily outpatient/inpatient clinics (speciality and multi-disciplinary team clinics: CHI, calcium, DSD, andrology, gynaecological, obesity, diabetes, bone and skeletal dysplasia, oncology, endocrine nursing)
- Detailed patient related discussions
- Monthly/weekly multi-speciality team meetings (biochemistry, radiology, skeletal dysplasia, DSD, gender dysphoria)
- Case presentations and teaching sessions
- Ward referrals
- Research: data collection, lab visits
- Departmental teaching sessions
- General paediatric lectures for visiting doctors

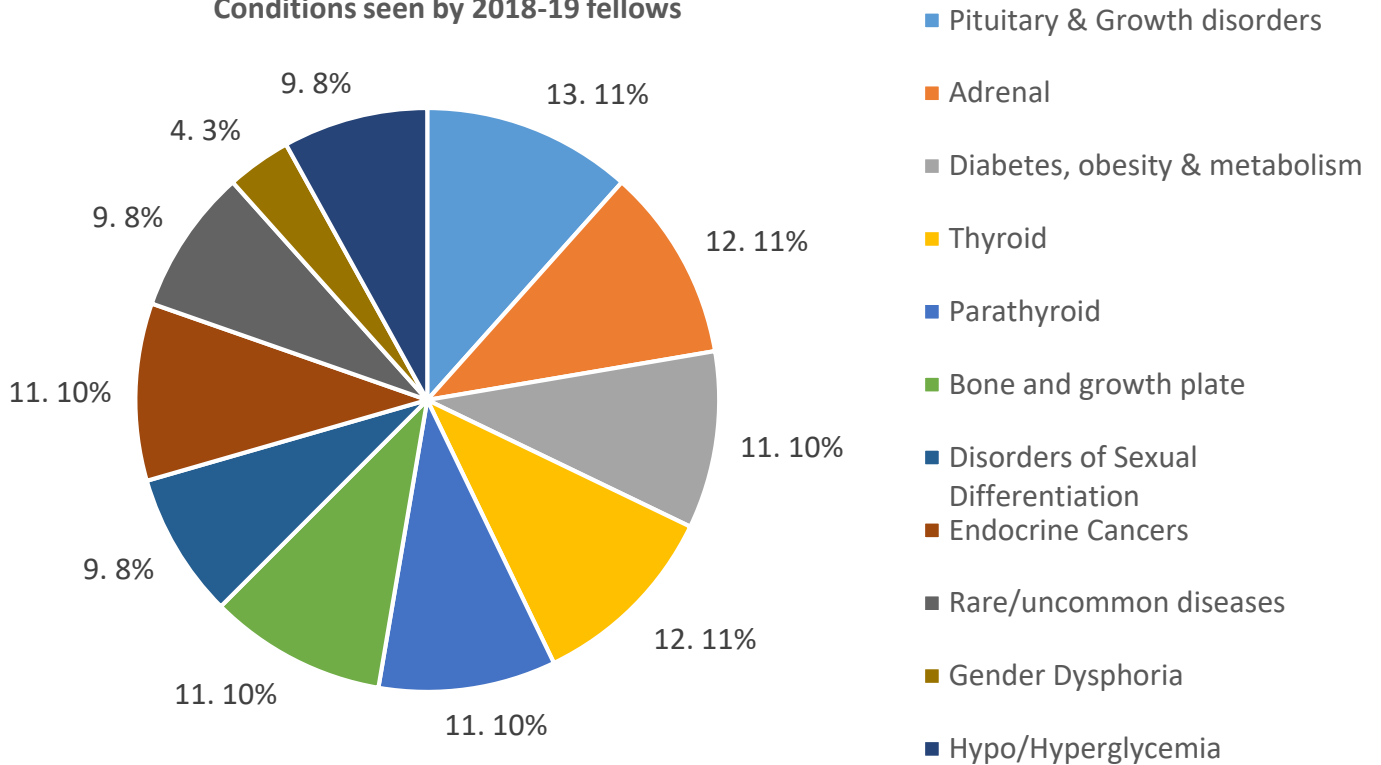
“The day started in the outpatient clinic taking history, examining patients and reporting the results to my supervisor. We would discuss a possible diagnosis and treatment plan for the patients and evaluate the results, eventually prescribing treatment. Any difficult cases were discussed with the consultant professors on the unit.” Nabat Aghayeva, Clinical Child Hospital № 6, Azerbaijan

Activities undertaken on the 2018-19 Clinical Fellowship

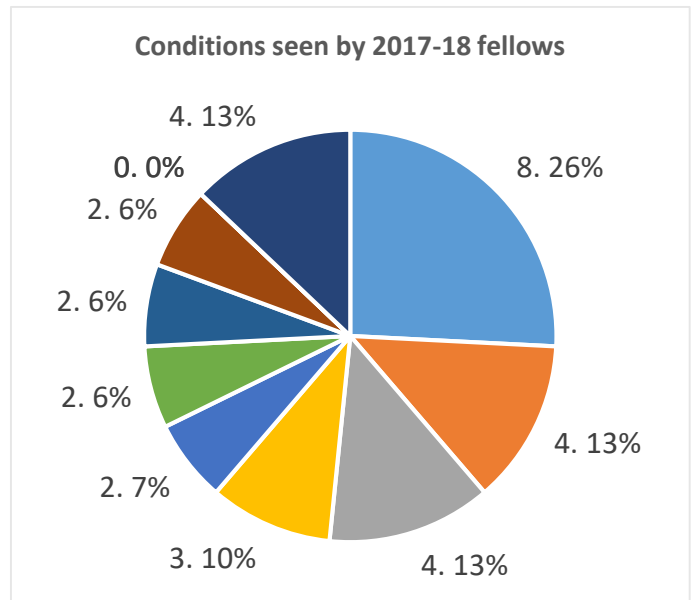


The chart below displays the percentage of conditions fellows encountered and were trained on, that they may not have otherwise seen in their home centres. On average fellows saw 70-80 patients per week. In the past two intakes the most common conditions seen were pituitary & growth disorders followed closely by adrenal conditions. The fellows have commented on the value of seeing rare conditions and the ways the experienced clinicians in the host centres managed them as well as new treatment methods for conditions such as gender dysphoria.

Conditions seen by 2018-19 fellows



Conditions seen by 2017-18 fellows



"I saw a wide variety of cases including growth and pubertal disorders, adrenal disorders, obesity, bariatric surgery follow up, type 1 and 2 diabetes, hypophosphatemic rickets, metabolic bone diseases, salt water imbalance, post-operative cases leading to endocrine abnormalities, congenital and childhood hypothyroidism and several genetic disorders leading to endocrine insufficiencies." Hüseyin Anıl Korkmaz, Manisa City Hospital, Turkey

New techniques/treatment modalities/screening programmes developed on the 2018/19 Clinical Fellowship that fellows will take back to their home centres

- Growth hormone treatment, dose adjustment and device usage
- Laboratory tests
- Thyroid screening
- Pituitary screening
- New diagnostic approaches
- DAFNE
- FGF23 antibody treatment
- Treatment and follow-up of hypophosphatasia
- Insulin pumps (different types and their operation)
- Screening congenital hypothyroidism
- Screening congenital adrenal hyperplasia
- Molecular diagnosis techniques
- Neonatal hypoglycaemia/Hyperinsulinism management
- Clinical genetics for HI, DSD, MODY, Neonatal diabetes etc.
- Treatment of IGF-1 deficiency with Increlex
- Management and treatment modalities of hypophosphatemic rickets
- Treatment of primary amenorrhea
- Newborn metabolic screening
- Continuous glucose monitoring
- Multiple dose insulin (MDI) therapy
- Radiological tests
- Adrenal screening
- Communicating with patients
- Dynamic stimulation testing

“The concept of a Transition Endocrine outpatient department (OPD) is something that I would like to incorporate into my own practice at my home centre. Transition care is of utmost importance so as to ensure a proper handover of the patient to the adult endocrine team.”

Hüseyin Anıl Korkmaz, Manisa City Hospital, Turkey

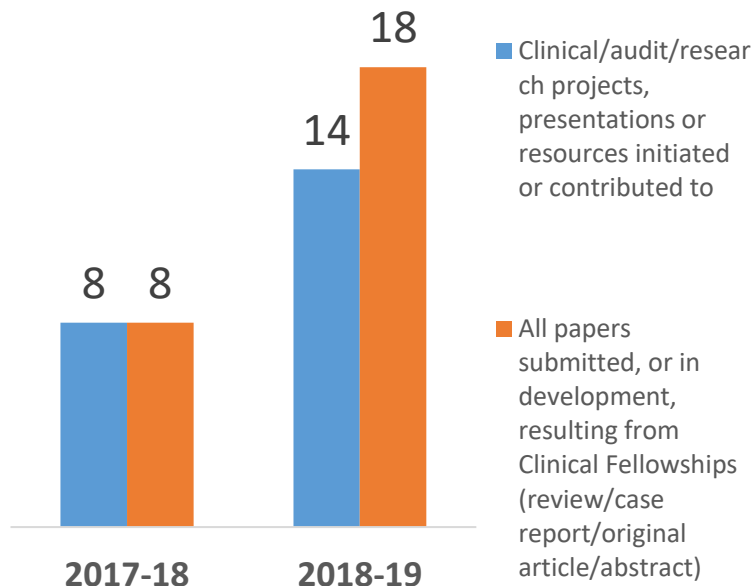
Clinical/audit/research projects, presentations or resources initiated or contributed to during 2018/19 fellowships

- ESPE e-Learning: A 5-year-old boy with prominent lips and sessile papules at the tongue (Beatriz Andres)
- Endo-ERN CPMS September 2019: MEN 2B syndrome diagnosis is still late (Beatriz Andres)
- Endo-ERN CPMS September 2019: Variable phenotypic presentation in in a family. (Beatriz Andres)
- MEN2B syndrome. (Beatriz Andres)
- Use of testosterone in various conditions at Alder Hey children hospital (Aashish Sethi)
- Evaluation of 155 children with central diabetes insipidus between 1993 and 2019 at Kings College Hospital (Anil Korkmaz)
- Oral presentation on monogenic diabetes prevalence in Lithuanian patients (Ingrida Stankute)
- Precocious puberty in Silver-Russell syndrome (Laman Sultanova)
- Causes of resistant TSH to L-thyroxine treatment in congenital hypothyroid children (Nabat Agayeva)
- SHOX deficiency/ Posaconazole induced Hypertension/ MODY/ Early Puberty in Prader-Willi Syndrome – presentations at Alder Hey Hospital (Neha Agarwal)
- Role of GH Retesting in patients with secondary GHD – Audit (Neha Agarwal)
- Tall Stature presentation (Sona Samvelyan)
- MerPENG Meeting presentation: A complex and intriguing case of electrolyte disturbance (Aashish Sethi)

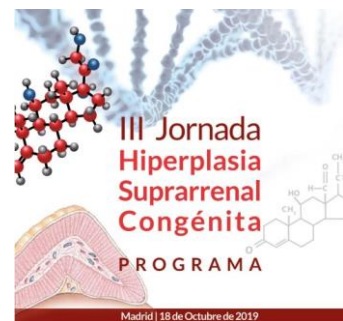
All papers submitted or in development resulting from 2018/19 Clinical Fellowship (review/case report/original article/abstract)

- Longitudinal study in children affected by Growth Hormone deficiency (Beatriz Andres)
- Use of growth hormone in SGA (Hari Mangtani)
- A case report of Autosomal Recessive Hypophosphatemic Rickets (Hari Mangtani)
- Utility of C-peptide in diagnosis of Hyperinsulinism (Hari Mangtani)
- The diagnostic and therapeutic approach to Septo Optic Dysplasia. What to do? - Case report (Maria Mallo)
- V804M mutation in the RET proto-oncogene associated with MEN2A. Study of a family (Maria Mallo) [link](#)
- Spontaneous resolution in HIHA syndrome – Case report (Neha Agarwal)
- Etidronate treatment in GACI – Case report (Neha Agarwal)
- Posaconazole induced hypertension – Case report (Neha Agarwal)
- IQ test in patients with diabetes (Reham Ebrhim)
- Effectiveness of multidisciplinary outpatient approach in the management of paediatric obesity – Abstract (Ruma Deshpande)
- Effectiveness of treating paediatric morbid obesity using the multidisciplinary intensive inpatient approach - Abstract (Ruma Deshpande)
- Beta-cell functions in monogenic diabetes- Abstract (Ingrida Stankute)
- Clinical Presentation, Management, and the Outcomes of Pituitary Adenomas in children (Aashish Sethi)
- Heterozygous Insulin Receptor (INSR) Mutation associated with Neonatal Hyperinsulinemic Hypoglycaemia and Familial Diabetes Mellitus (Aashish Sethi)
- Disruption of Hypothalamic regulation of Appetite associated with Proton Beam Therapy (Aashish Sethi)
- Etiological Diagnosis of Central Diabetes Insipidus in Children: A Single-Center Experience (Anil Korkmaz)
- Management of insulin resistance in children (Sona Samvelyan)

Clinical output during the Clinical Fellowship



Clinical courses, symposia, scientific conferences attended by 2018/19 fellows:



SECTION 3 – POST FELLOWSHIP

All fellows in this intake plan on establishing or improving paediatric endocrine services in their home centre and develop their careers in paediatric endocrinology following their Clinical Fellowships. This represents a key aspect in the programme’s purpose, and indeed ESPE’s wider purpose; to promote the development of patient care, clinical management and clinical research in paediatric endocrinology in Europe and, in the case of the Clinical Fellowship, in regions where paediatric endocrinology care is not as available. All have stated that the Clinical Fellowship will strongly shape their future career in medicine with the experience gained from highly qualified doctors in the field being an invaluable influence to their practice.

“I am going to serve our local people in paediatric endocrinology according to worldwide guidelines. I intend on sharing new approaches, which I obtained from my host centre, with my colleagues in my home centre and regional parts of my country where the medical care is less available in this field ”- Laman Sultanova, Therapeutic Clinic of Azerbaijan

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

- Improved diagnosis and treatment services in home centre and expanding the existing endocrine set up.
- A greater knowledge of many diseases and technologies to treat them has been obtained.
- Setting up a paediatric endocrine clinics with a multidisciplinary approach in home countries in regions where care is less available.
- Experience in treatment options not available in home countries e.g. bariatric surgery, FGF23 antibody treatment.
- Initiating teaching sessions to colleagues in home centres.
- Improved care and treatment of transgender patients.
- Mya Sandarthein is planning to develop diet leaflets/education books for T1 DM patients in Myanmar.
- Planning and executing clinical research projects.
- Training nurses to handle paediatric endocrine issues.
- Ruma Deshpande intends on setting up a transition clinic in Bharati Vidyapeeth Medical College and Hospital in India.
- Improving emotional post treatment care for patients.
- Giving a wider perspective on the different ways of running a medical centre though secretaries, nurses, dieticians, psychologists, research units, doctors and professors roles.
- Neha Agarwal would like to develop speciality clinics in obesity, CAH, DSD and type 1 diabetes in her home centre in Kanpur, India.

“The ESPE Clinical Fellowship was a wonderful learning experience for me. I was privileged to have spent my training period at a centre involved in commendable work in DSD, complex obesity, CHI, endocrine late effects and rare bone disorders. The Fellowship has enriched my clinical knowledge and enhanced my skills in paediatric endocrinology, which will be of great benefit to my clinical practice on patients at home in India.” – Ruma Deshpande, Bharati Vidyapeeth Medical College and Hospital, India

- Fellows have learned about the importance of timely and effective audits in the departments to ensure and improve the quality of care.

Collaborations made during the 2018/19 fellowship

Fellows are encouraged to plan future collaborations (clinical/research/teaching/visits or exchange programs) with their host centre. Many friendships can be forged, increasing global endocrine networks and care.

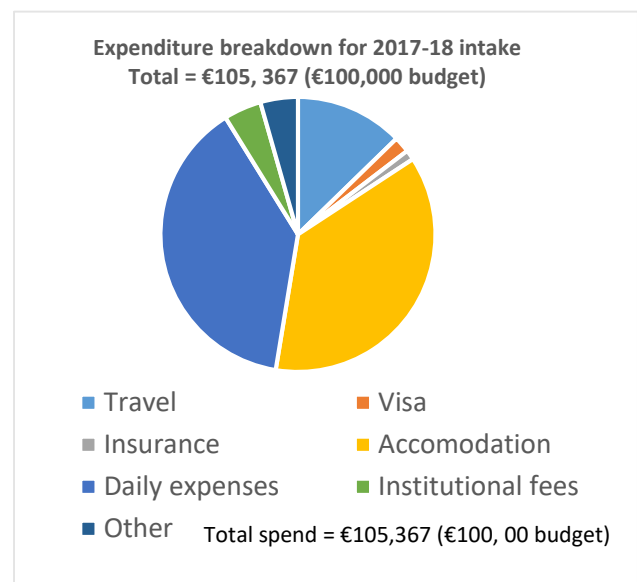
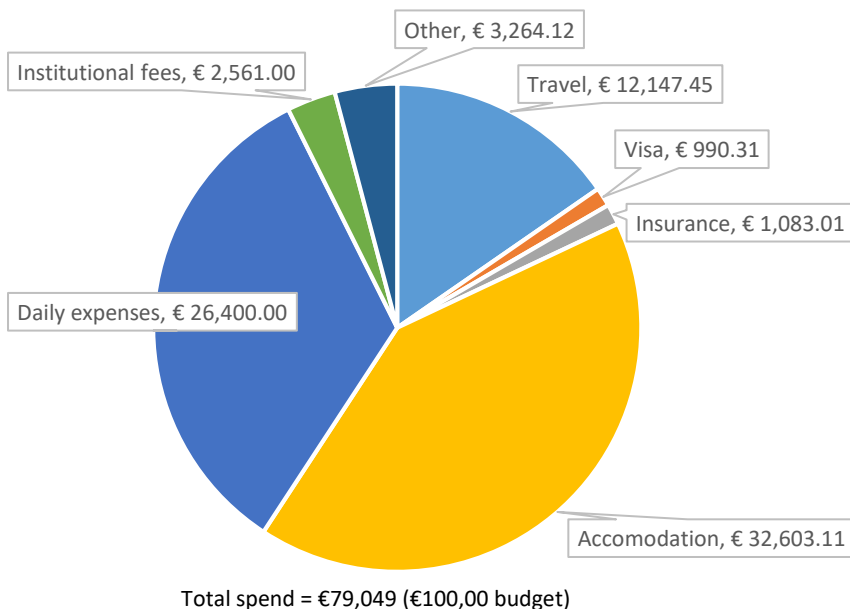
- Any questions arising in home centres that cannot be answered can be directed to the experienced colleagues in the host centre whom with a relationship was established.
- Learning from Endocrine specialist nurses, dietitians, and clinical psychologist.
- Collaborations made with paediatric urology surgeon.
- Beatriz Andres will continue her research in MEN 2B syndrome and GH deficiency in transition and adulthood with Dr Brain and Prof. Dattani from GOSH.
- Hari Mangtani is working on three papers with Prof. Jo Blair and Dr Senthil Senniappan that will be submitted for peer review in due course.

“I am planning to continue my research as a PhD student on monogenic diabetes in Lithuania and collaborate with the leaders of the field. As a clinical doctor I got outstanding opportunity to take part in one of the best health care systems in the world at the Hospital of Geneva, therefore I got some fresh ideas how to improve our health care for patients in Lithuania” –
 Ingrida Stankute, Hospital of Lithuanian University of Health Sciences, Lithuania

SECTION 4 – FINANCIAL ASPECTS OF THE CLINICAL FELLOWSHIP

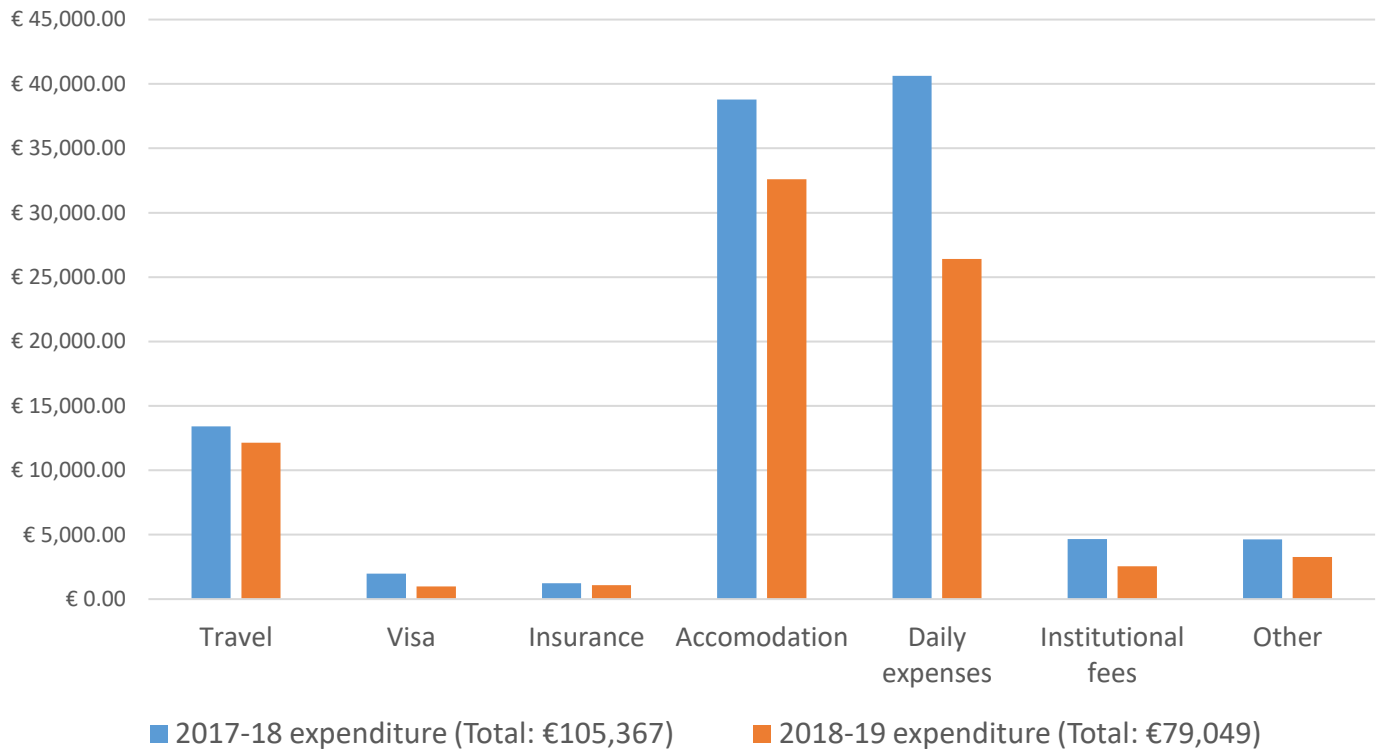
In the 2018-19 intake sixteen fellows were assigned to fellowships according to the budget of €100,000. Merck sponsored €40,000 of this and ESPE sponsored the other €60,000. Five fellows were assigned a six month fellowship but unfortunately one could not be conducted, and therefore four fellows were allocated €9000 each (€36,000 total). The other eleven fellows underwent a three month fellowship and were allocated a maximum of €5000 (€55,000 total). The total amount allocated to the 15 fellows was therefore €91,000. Fellows make an initial claim at the start of their fellowship and are paid 80% of the total claimed. After completion they make a final claim and are paid the final 20%, or whatever they spent in addition to the initial amount given up to the cap of allocated funds. Not all fellows use the full allocation of funding as indicated in the below budget chart.

Expenditure breakdown for 2018-19 intake



When comparing the usage of the allocated funds throughout the two intakes it is clear that accommodation costs, and the daily expenses (sustenance etc.) are the two biggest expenses for fellows, with travel costs following these. The below chart compares expenditure over the two intakes. The 2018-19 intake came in under budget, due in part to the one fellow who dropped out, as well as an overall reduction in expenditure in all areas. For 2020-2021 intake the CF Committee adopted lower limits for both 3 and 6 months fellowships.

Comparison of expenditure over the two intakes (2017-2019)



A more detailed breakdown of the budget expenditure is below. The 2017-18 sponsorship from Merck was signed in November 2018 and used in arrears for fellows carrying out their fellowships in 2017-18. The 2018-19 sponsorship from Merck was signed in December 2018 and used for the fellows carrying out fellowships in 2018-19. Both the full €40,000 amounts were used, with the additional funds being supplemented by ESPE. Merck have again generously agreed to sponsor the Clinical Fellowship for the 2019-20 intake to the sum of €60,000. These fellows carry out their fellowships throughout 2019-20.

| | 2017-18 intake | 2018-19 intake |
|---------------------------|---------------------|--------------------|
| Budget | €100,000.00 | €100,000.00 |
| Amount sponsored by Merck | € 40,000.00* | € 40,000.00** |
| Amount sponsored by ESPE | € 60,000.00 | € 60,000.00 |
| Expenditure | | |
| Travel | € 13,404.14 | € 12,147.45 |
| Visa | € 1,987.03 | € 990.31 |
| Insurance | € 1,223.98 | € 1,083.01 |
| Accommodation | € 38,801.79 | € 32,603.11 |
| Daily expenses | € 40,640.00 | € 26,400.00 |
| Institutional fees | € 4,661.00 | € 2,561.00 |
| Other | € 4,649.16 | € 3,264.12 |
| Total expenditure | € 105,367.10 | € 79,049.00 |

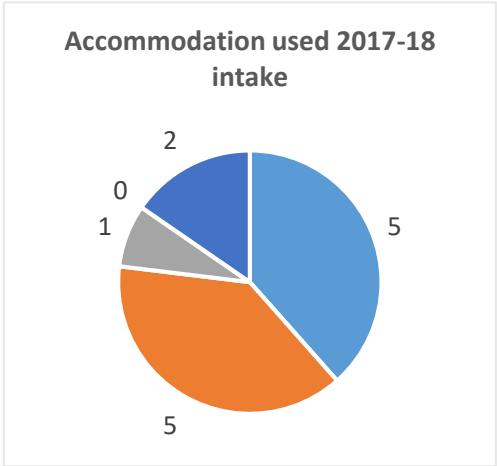
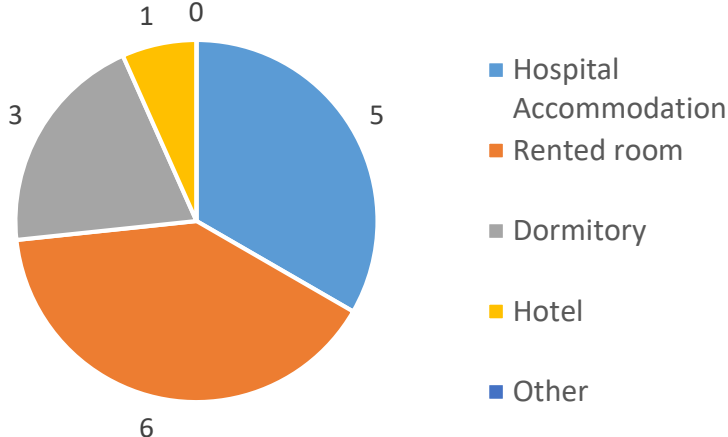
*Effective date August 2018 (applied February 2018)

**Effective date November 2018 (applied September 2018)

Accommodation

The accommodation costs on the 2018-19 intake were the highest expense. Most fellows use rented rooms/apartments or make use of hospital accommodation. The cost of rent is highly dependent on the host city in which the fellowship is taking place, and can vary greatly. Below is the breakdown of accommodation used.

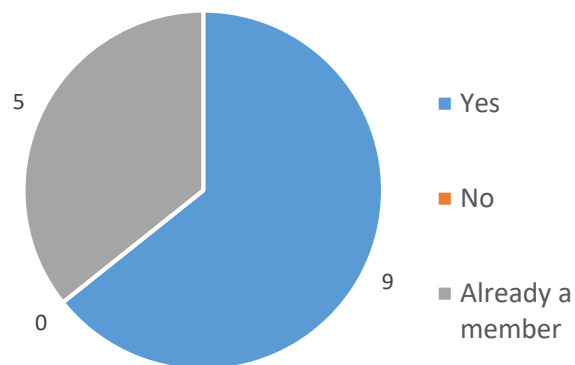
Accommodation used 2018-19 intake



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. Health care providers see every meeting with colleagues from abroad as an opportunity to gain valuable skills and knowledge and the Clinical Fellowship provides the perfect platform for this. It is a chance to communicate with highly experienced, and respected, specialists in the field and get acquainted with their methods and approaches to various medical issues. One fellow stated: “Nowadays medicine is developing at such a rapid pace. Throughout the world new scientific programmes and research projects are carried out. To limit oneself by ones country’s experience means to stagnate and not move forward”. As most fellows are from outside of Europe in areas where paediatric endocrinology is not as developed the programme offers an opportunity to join the society using the one year free membership offer and become part of the growing community that is ESPE. The chart indicates the desire of fellows to join the Society. All fellows in this intake stated that they intended to attend ESPE 2019 in Vienna.

2018-19 fellows choosing to become ESPE members post fellowship



The number of applications for the 2018-19 intake was 40 with 16 being selected to undertake 3 or 6 month fellowships at host centres of their choosing and one dropping out. All fellows rated their experience on the programme as an “extremely positive experience” with a number not only stating that the acquired knowledge will help their patients, but also their colleagues in their home centres. This ripple effect of education and collaboration with established centres in Europe will help to improve global care for you endocrine patients. The working relationships created with foreign colleagues will not only facilitate collaboration in research etc., but create a network of data, advice and other information sharing.