



Dr Allan L. Drash

INTERNSHIP REPORT

Prepared as part of:

ALLAN DRASH CLINICAL FELLOWSHIP

ISPAD

Presented by:

Dr Adèle Bodieu Chetcha

Pediatric endocrinologist

Central Hospital of Yaounde- Cameroon

Fellowship completed at

the Luxembourg Hospital Center (CHL)

Diabetology and Endocrinology Department

Supervised by:


Professor Carine de Beaufort

Dates: from June 1st to July 15th 2025

Acknowledgement

- I would like to express my sincere gratitude to **Professor Carine de Beaufort** for welcoming me into their unit and for taking all the necessary steps to make this fellowship possible.
- I would also like to thank Doctors **Ghaddhab Chiraz, Ulrike Schoerloh, Marianne Becker, Sylvie Bontemps, Nicolas Bonnet, Michael Witsch**, for their supervision, availability, and valuable knowledge they shared throughout my time in the Pediatric diabetology and endocrinology department of the Luxembourg Hospital Center (CHL).
- I also wish to thank all the nursing staff of the department, across all specialties, **Dominique Schaeffer** (nurse in charge of childhood obesity), **Mareva François, Yasmina Rayane, Cindy De Melo Dias, Muriel** (Nurses in charge of childhood diabetes), the dietitian Linda **Vandininit**, psychologist **Michele Schutz**, your expertise left me speechless, and I will do my best to install this motivation in my nurses. I sincerely thank you.
- Special thanks to the administrative staff of the department for their warm welcome, cooperation and team spirit, which greatly facilitated my integration and learning.

This internship was a valuable personal and professional experience for me, strengthening my theoretical knowledge and deepening my commitment to medical practice.

 I would like to sincerely thank you ISPAD for the trust you placed in me by awarding me this scholarship. It allowed me to explore new perspectives and to appreciate the scope of the challenges ahead. I have greatly benefited from this experience and am deeply grateful to you.

StagM05-PED

Étudiant(e) en médecine



Service Pédiatrie

BODIEU KENMEGNE EPOUSE CHETCHA ADELE

EXCELLENCE SOLIDARITÉ PARTAGE RESPECT INTÉGRITÉ

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CENTRE HOSPITALIER DE LUXEMBOURG



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1. Introduction

The Allan Drash Clinical Fellowship, established in partnership with Breakthrough T1D (formerly JDRF), is available to members of ISPAD seeking to deepen their clinical expertise in diabetes management. Allan Drash was a renowned pediatric endocrinologist and former president of the American Diabetes Association. He also served as the second president of ISPAD for two consecutive terms. Since 2006, ISPAD has annually awarded a six-week clinical fellowship in Dr. Drash's honor.

This fellowship is open to both physicians and non-physicians and involves spending approximately four to six weeks at an ISPAD-designated Drash host center. Depending on the host center, the fellowship may focus on program development, clinical care, program implementation, clinical research, or other research activities.

Applicants are required to select and rank three preferred host centers from the available options and justify their choices in a motivation letter. The ISPAD Fellowship Committee then assigns candidates to host centers according to these preferences.

I am honored that the Luxembourg Hospital Center (CHL) has agreed to host me during this fellowship.

Thus, two reports will be submitted:

- A first report within two months following the end of the fellowship;
- A second report twelve months after the end of the fellowship, detailing the outcomes and benefits gained from my participation in the Allan Drash Fellowship at my home center.



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Luxembourg, le Juillet 4 2024

Concerne : ATTESTATION DE STAGE

À qui de droit,

L'International Society for Pediatric and Adolescent Diabetes (ISPAD) a attribué le DRASH Fellowship 2020 à Dr Adele Chetcha. L'équipe DECCP, de la Clinique Pédiatrique a accepté de l'accueillir.

Par la présente nous confirmons que le Dr Adele BODIEU CHETCHA, née le 03 juillet 1975, effectuera son fellowship (stage d'observation non rémunéré) au Centre Hospitalier du Luxembourg pour l'approfondissement de ses compétences en diabetologie pédiatrique.

Voici le récapitulatif de ce stage :

- Dates : du 01/06/2025 au 15/07/2025
- Service : Pédiatrie- Diabetologie/Endocrinologie
- Maître de stage : Dr Carine De Beaufort

Dr. Frédéric DADOUN
Directeur délégué à l'Enseignement
Centre Hospitalier de Luxembourg

Cellule d'Enseignement Médical et de Recherche

2. Presentation of the host institution

2.1. Presentation of the Luxembourg Hospital Center



The Luxembourg Hospital Center (CHL) is the leading public hospital institution in the Grand Duchy of Luxembourg and plays a pivotal role within the national healthcare system. It provides a comprehensive range of medical, surgical, and specialized services tailored to meet the needs of both the local and regional populations.

Established to address these healthcare demands, CHL is distinguished by its state-of-the-art infrastructure, advanced technical capabilities, and the expertise of its multidisciplinary teams. It also serves as a prominent center for continuing medical education and clinical research, maintaining active collaborations with numerous national and international academic institutions.

The hospital encompasses multiple specialized departments, including internal medicine, surgery, pediatrics, gynecology-obstetrics, maternity, among others. CHL is widely recognized for its commitment to patient-centered care, medical innovation, and ongoing efforts to enhance service quality.

Through its strategic location and extensive network of partners, the Luxembourg Hospital Center makes a substantial contribution to public health and the well-being of the population in Luxembourg and surrounding regions.



THE PEDIATRIC CLINIC

2.2. Presentation of the pediatric diabetology and endocrinology department

The Pediatrics Department provides medical care for children from birth to adolescence, covering a wide range of conditions from common illnesses to chronic diseases and developmental disorders. It offers consultations,

hospitalizations, emergency care, prevention, and health education, often collaborating with other specialties for comprehensive care.

The Pediatric Diabetology and Endocrinology Department, a subspecialty of Pediatrics, focuses on metabolic and hormonal disorders such as type 1 diabetes, childhood obesity, growth and thyroid disorders, and puberty-related issues. It emphasizes therapeutic education to help children and families manage conditions like insulin therapy, improving quality of life and preventing complications.

The multidisciplinary team includes pediatric endocrinologists, specialized nurses, dietitians, and psychologists who support patients medically, nutritionally, and psychosocially.

2.3. Organization of the Diabetology and Endocrinology department



The Pediatric Diabetology and Endocrinology Department at the Luxembourg Hospital Center (CHL), referred to as DECCP (Diabetes Endocrinology Care Clinique Pédiatrique), is staffed by a dedicated multidisciplinary team including:

- Seven pediatric endocrinologists who provide specialized medical care and oversee clinical management of metabolic and endocrine disorders in children.
- One psychologist who offers psychological support and counseling to patients and their families, addressing the emotional and behavioral aspects of chronic illnesses.

- Two dietitians responsible for nutritional assessment and individualized dietary planning to support optimal health and disease management.
- One nurse specialist dedicated to managing childhood obesity, coordinating care and implementing therapeutic education focused on lifestyle modifications.
- Five specialized diabetes nurse educators who provide tailored education and support to children with diabetes and their families, helping them manage insulin therapy and daily disease management effectively.

This multidisciplinary approach ensures comprehensive care addressing the medical, nutritional, psychological, and educational needs of pediatric patients



The DECCP TEAM

Facilities and Services of the Department:

The department includes a shared waiting room, an administrative office with three secretaries, two nurse rooms for education, sample collection, sensor and insulin pump placement, and HbA1c testing, multiple consultation offices, a body composition analysis room, and dedicated offices for dietitians and a psychologist.

Services offered cover medical, nursing, dietary, and psychological consultations for children, adolescents, and young adults. The department provides 24/7 emergency phone support, patient and family training, school education programs, and organizes events such as marathons and youth activities. It collaborates closely with the Luxembourg Diabetes Association (ALD) and the parent group ParEnD, and actively participates in clinical research on diabetes and dyslipidemia.

Their mission is to :

- Provide regular medical follow-up
- Support children, adolescents, and their families in achieving autonomy in disease management
- Offer therapeutic education tailored to the needs of the child and family
- Prevent discrimination
- Deliver high-quality training for anyone involved in the care of a child with diabetes
- Stay at the forefront of scientific and technological advances in the treatment of diabetes and endocrine disorders.

3. Internship activities

3.1. Objectives

1. **Deepen clinical knowledge:** Gain an in-depth understanding of the management of diabetes and other endocrine disorders through observation and active participation in consultations and patient care.
2. **Develop practical skills:** Master clinical evaluation techniques, patient follow-up for diabetes, and the use of modern therapeutic tools in a real-world setting.
3. **Explore the implementation of specialized programs:** Understand the key steps involved in therapeutic education and multidisciplinary care coordination.
4. **Participate in clinical research activities:** Engage in studies or research projects related to diabetes to cultivate a critical and scientific approach to clinical practice.
5. **Strengthen professional exchange:** Promote dialogue and collaboration with field experts to enhance knowledge, share experiences, and expand professional networks.

3.2. Reception and integration

The clinical fellowship took place over a six-week period at the host institution, the Luxembourg Hospital Center (CHL), from June 1 to July 15, 2025. Upon arrival, I received a warm and well-organized welcome from the administrative staff. They provided me with a detailed weekly work schedule outlining my activities, as well as a personal identification badge granting secure access to the hospital's digital network and to various pediatric departments relevant to my training.

This initial orientation greatly facilitated my adaptation to the hospital environment and clarified the structure and expectations of the internship. Shortly afterward, I was introduced to the pediatric diabetology and endocrinology team and formally integrated into the multidisciplinary medical unit. This team included physicians, specialized nurses, dietitians, and psychologists, all of whom contributed to a collaborative and supportive learning atmosphere.

The integration process was smooth and progressive, allowing me to familiarize myself with the hospital's procedures, tools, and daily routines. From the first week, I was encouraged to observe consultations, participate in case discussions, and gradually take on more active roles in patient care under the supervision of experienced professionals. This structured onboarding played a key role in ensuring that I could make the most of my clinical experience.

3.3. Activities performed

I quickly became actively involved in the department's daily clinical activities, including outpatient consultations, patient rounds in the emergency department, individualized therapeutic education sessions, sensor and pumps placement, vital sign monitoring particularly body composition analysis (bioelectrical impedance) as well as the interpretation of glucose profiles generated by continuous glucose monitors and insulin pumps. I also participated in the management of complex cases and attended multidisciplinary meetings, which allowed me to observe and better understand the comprehensive care provided to patients with diabetes, obesity, and other endocrine disorders.

Throughout the fellowship, I received personalized supervision and regular feedback to support my learning and ensure that the activities aligned with my professional objectives. This hands-on training period was also an opportunity to

engage with experts, strengthen my clinical skills, and discover new therapeutic and technological approaches in pediatric diabetology and endocrinology.



TUESDAY DIABETES MORNING MEETING

On June 9, 2025, I took part in an ESPE e-learning Masterclass on “**Diabetes in Resource-Limited Countries**”. The session aimed to shed light on the realities, challenges, and future perspectives of diabetes management in low-resource settings. The initiative was led by Professor Carine De Beaufort. Together, we explored several key topics, including the general challenges of diabetes care, diabetes in youth, its management in schools and across age groups, the impact of physical activity, fertility issues, and the management of diabetic ketoacidosis (DKA) in resource-limited environments.

I also had the privilege of attending a training session for emergency physicians led by Dr. Ulrike Schoerloh, focusing on the initial management and emergency care of DKA in children. In addition, I participated in a presentation on “**screening for hypercholesterolemia in children**”, delivered by Dr. Marianne Becker and Professor De Beaufort under the sponsorship of the Luxembourg Ministry of Health. This screening is crucial given the rising rates of childhood obesity and the associated risk of premature mortality in adulthood.

Furthermore, I registered with the **SWEET registry**, a valuable tool that will enable me to efficiently track and monitor my diabetic patients over time, improving the quality of their care.

4. Tasks and skills developed

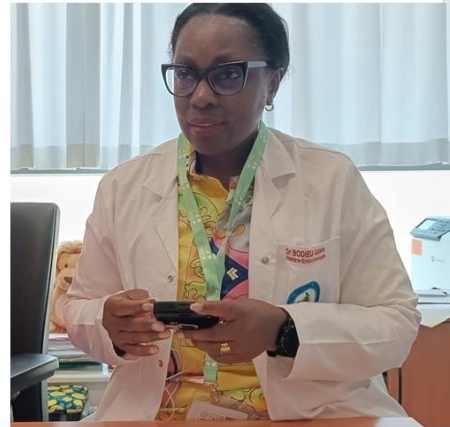
During this internship, I acquired both theoretical knowledge and practical skills, particularly in pediatric diabetology and the management of childhood obesity.

- **Use of Glucose Monitoring Devices:**

I learned how to apply continuous glucose monitoring (CGM) sensors and interpret glucose profiles generated by both CGM devices and insulin pumps. This task was especially challenging for me, coming from a resource-limited country where such devices are not yet available. These tools are essential, particularly for preventing severe hypoglycemia. They allow for optimal insulin dose adjustments when combined with carbohydrate counting.

I would like to humbly appeal to ISPAD to explore ways to make these devices more accessible and affordable in resource-limited countries, to better serve our populations.

This is a heartfelt advocacy addressed to ISPAD



- **Psychological approach in chronic diseases:**

This aspect is of paramount importance and has often been overlooked.

What I have learned is that special attention must be given to manage the psychosocial well-being of every child with a chronic illness, as it is essential dimension of comprehensive care.

- **Body Composition Analysis by Bioelectrical Impedance (INBODY):**

Interpreting the results from the bioimpedance device helped me better understand the difference between a high BMI due to excess fat and a high BMI resulting from increased muscle mass. Indeed, BMI can be elevated not only because of excess fat but also due to muscular development. This examination is therefore particularly useful for refining the assessment of obese patients and ensuring better monitoring of their weight progress. I also had the opportunity to gain hands-on experience with this tool.

- **Cardiovascular risk marker**

I learned the importance of routinely measure Lipoprotein (a) as a cardiovascular risk marker. A positive result allows for more proactive approach in managing and preventing CVD.

- **Therapeutic indications of GLP-1 and / or in combination with GIP:**

I gained knowledge about the use of GLP-1 and GIP analogues indicated for managing childhood obesity (above 12year of age), especially when obesity is severe and or associated with T2DM. This treatment enable weight loss or control, reduces CV risk provided that a healthy lifestyle habits are maintained with is not easily done.

These insights I hope will be applicable to my future practice, particularly in the follow-up of pediatric patients with obesity or diabetes where a multidisciplinary approach is essential. I understood the importance of communication and collaboration to ensure optimal patient care. Finally, this fellowship encouraged me to develop a continuous reflective attitude by analysing my practices, identifying strengths and areas for improvement. It strengthened my motivation to pursue advanced training and to constantly adapt to the demands of an evolving clinical environment.

5. Challenges encountered and solutions implemented

A major challenge during the internship was the language barrier.

Luxembourg's multilingual and diverse population made communication with patients complex at times. Mastering several languages is essential for clear exchanges, which required extra effort on my part. However, this challenge also helped me improve my language skills. I am grateful to those who assisted with translation when needed.

6. Critical an reflective analysis

This internship was a rewarding experience both professionally and personally. It allowed me to apply theoretical knowledge to clinical practice, deepen my practical skills, and broaden my understanding of diabetes and other endocrine disorders within a multidisciplinary setting. However, several points merit critical reflection. The language barrier sometimes hindered smooth communication, highlighting the need for better language preparation before joining a multilingual environment like Luxembourg. Additionally, I believe students should be more actively involved in consultations, even if the language differs, to avoid frustration. I also noticed differences in clinical procedures compared to my previous experience, which required an adjustment period. I am grateful to the staff for their patience throughout. This experience also raised my awareness of the challenges in coordinating care when multiple professionals are involved.

7. Conclusion

Immersion in a renowned clinical center with advanced and high-performance technical facilities provided me with a concrete and in-depth understanding, as well as the importance of multidisciplinary teamwork. Despite certain challenges, notably related to the language barrier, this experience strengthened my adaptability and determination to thrive in a multicultural and dynamic environment. It also gave me the opportunity to critically reflect on my practices and identify areas for improvement in my future career. I consider this internship to be a rich, educational, and motivating experience that forms a solid foundation for pursuing my professional goals in the management of diabetes and endocrine diseases.



*Dr Allan L. Drash and Dr Carine De Beaufort
behind him giving an interview*

