



PROFESSOR DR OTTO MEHLS

The Ira Greifer Award of the IPNA awarded every 3 years, recognizes individuals who exemplify IPNA's missions and goals and have demonstrated local/national leadership and have made significant contributions to IPNA.

In 2019, Professor Dr Otto Mehls was awarded the Ira Greifer Award.

1. You specialized in pediatric nephrology when it was a relatively new specialty. What inspired you to choose pediatric nephrology as your specialty?

My 1966 doctoral thesis (MD) focused on neurophysiological investigations into muscle reflex reinforcement in humans. Consequently, at the beginning of my professional career in 1968 I aimed at becoming a Pediatric Neurologist. I soon realized however, that clinical research in neurology was very limited. This was a time prior to the availability of the computing and modern imaging methods and understanding of genetics that we have today. I consequently took the opportunity to join Prof. Karl Schaerer when he entered the University Children's Hospital of Heidelberg in 1969 to establish a Pediatric Nephrology Unit. Karl, ten years older than I was trained in Paris/France with Profs Piere Royer, Michele Broyer and Renee Habib and in Chicago/USA with Prof. Jack Metcoff. Pediatric Nephrology indeed seemed to be a promising and fascinating new sub-specialty of Pediatrics.

At that time, Prof. Horst Bickel, who had worked with Prof. Guido Fanconi in Zurich/Switzerland was Chair of the Children's Hospital in Heidelberg. He had a major interest in kidney and metabolism and was Congress President of the 3rd ESPN meeting in Heidelberg in 1971. Chronic Hemodialysis and Renal Transplantation became available for treatment of end stage renal disease and there was a pioneering spirit amongst us all working on new treatment modalities.

2. What has kept you so passionate about pediatric nephrology throughout so many years?

It was an optimistic time. Throughout the sixties and seventies, science was expanding quickly partly due to increasing state investment. We had a very liberal head of department in Horst Bickel, he did not act purely out of professional self-interest but liberally accepted and supported the new initiatives of his colleagues. He created an atmosphere of commitment and loyalty, successfully implementing local as well as *international* cooperations. He hated selfishness and prized individuality. This atmosphere was highly productive and later, following Horst Bickel's retirement, I always tried to embrace his ideas both inside and outside our pediatric nephrology team. Quality of work, international

cooperation and making friends all over the world has remained a great source of satisfaction. Hiding results in order to prevent others publishing first was never my policy. This has kept me passionate about pediatric nephrology over now more than five decades.



3. You spent most of your professional career at the University Children's Hospital of Heidelberg. Can you share some of many satisfying times that you spent at the University Children's Hospital of Heidelberg?

Yes, having found myself at a wonderful place, I wanted to stay there as long as possible. Typically, you have to pass through multiple locations until you find a top position. However, this moving around can be a challenge, especially for families who often suffer from a lack of stability. I was lucky to be able to continue my research at a highly respected center without losing valuable time relocating. In addition, I have had multiple opportunities for experience and training in centers of excellence outside Heidelberg, for instance in Paris and Los Angeles - which was also quite attractive for the family!

Heidelberg was a great place for nephrology. I am grateful to Horst Bickel and Karl Schärer who always supported me and vice versa. I am also grateful to Prof. Eberhard Ritz, a giant in adult nephrology with whom I fruitfully cooperated in experimental and clinical studies. Prof Lars Röhl, head of the Urology Department was one of the very early pioneers in renal transplantation. Children had been dialyzed at the transplant unit before we established our own unit in 1974. The Home hemodialysis program started in the same year. The first child was transplanted in 1970. CAPD was started in 1980.

I must also mention Prof. Wilhelm Kritz who significantly contributed to nephrology through excellent anatomical studies of the kidney and the glomerulus. This was the period when all sub-specialties learned from each other to create one language for kidney disease, physiology and anatomy, completely different from what I experienced as a medical student. To learn from each other, and in order to perform common projects and to bring young students into the field, we applied in late 70ties for support of the Deutsche Forschungsgemeinschaft (DFG, the German equivalent to NIH). Luckily we received

funding for more than a decade not only with research money but more importantly with positions for research fellows. Out of this pool I always got three fellow positions at a time for 10 years! This was very lucky. Many of those fellows received staff positions after 2-3 years at our University Children Hospital, and remained in Pediatric Nephrology until today.

4. You were instrumental in setting up landmark studies on CKD in Children like the ESCAPE trial and growth hormone treatment in children with CKD. What were the challenges you faced? What advice would you give to young pediatricians and pediatric nephrologists who are thinking of clinical research?

In the 1970's and 1980's, the German Working Group of Pediatric Nephrology (APN) under the leadership of the distinguished Johannes Brodehl, performed several important controlled German multicenter treatment studies into patients with frequently relapsing or steroid-resistant NS. However, due to competition for leadership and a relatively low number of relevant patients, aspiring scientists found it difficult to initiate additional German multicenter studies covering different topics and questions. The situation was quite similar in other European countries and fueled wide-spread frustration and counterproductive rivalry.

In 1986, I decided to invite not the established leaders, but younger interested colleagues and friends from diverse Pediatric Nephrology centers all over Europe including the East for a meeting in Heidelberg. We discussed a possible cooperation in prospective randomized trials and we founded the **European Study Group of Nutritional Treatment of Chronic Renal Failure in Childhood**. The group name was later converted into **European Vit D Study Group and then into ESCAPE Trial Group**.

Our long-term, controlled, prospective clinical multicentre, multinational studies were extremely successful and funding became easier from study to study, because we could present important clinical results each time. It was of importance that none of the studies was underpowered due to low patient numbers. In my mind prospective intention-to-treat studies are much more important than observatory or registry studies which can never quantitatively and definitely define therapeutic success based on clinical concepts or strategies.

To keep a successful research group together over now more than 30 years was only possible by rewarding all participants by teaching, open discussions, publication, personal help, support for international connections, and last not least friendship and loyalty. I was always determined to create a study-family. And family members must be adequately valued and acknowledged, and their contributions must be recognized.

All my research studies even the experimental ones were primarily designed to solve major clinical questions. Growth failure in CKD was one of these. For many years, we tried to stimulate the growth of uremic rodents. We tried calorie supplements, Vitamin D treatment, blood pressure control, physical training (swimming) etc. All attempts were unsuccessful until we used growth hormone although serum GH levels were within the normal range in the uremic organism. In this way, we found out that resistance to GH and IGF is present in the uremic organism, which can be counterbalanced by giving supraphysiological doses of GH. In clinical studies, improvement of growth and final height are obvious. Nevertheless, GH is underused, even today, and improvement of growth is

tried by dietary intervention, although this is only of clinical value during the first 2-(3) years of life.

5. We understand that you are heavily involved in something close to your heart since your retirement. Can you share a little about this particular endeavor?

Close to my heart is indeed true. In 2005, I took over the clinical lead of a rehabilitation center in Stronach, near Lienz in Austria. This is a center for children with solid organ transplantation (kidney, liver and heart) and their families. The main aim of this initiative is psychosocial care, not only for the patients but also for their siblings and parents. We also developed special programs for adolescents who stay without family members and receive training over several weeks for self-management of their disease and for increased independence from their parents. The clinic is a case sui generis, it has 52 beds and is located in the beautiful Austrian Alps at an altitude of 1000m. I have loved the Alps since my childhood and I have enjoyed following my patients in a more comprehensive way than was possible during my time at university. Also, I am not acting alone but alongside several other retired pediatric nephrologists and a wonderful psychosocial team. The cost for patients and families are covered by Austrian and German insurance companies. But the positive feedback and gratitude from our clients are an important part of our payment, which keeps us active and interested in medicine, organ transplantation and in „la condition humaine“.

6. What was the reaction when you were told that you will be awarded with the Ira Greifer Award?

More than anything, I was surprised since I had never aspired to bring myself into the game. I was of course very grateful and pleased to receive such acknowledgment for my work in pediatric nephrology over several decades. And I really enjoyed preparing my farewell lecture as it was a wonderful opportunity to thank IPNA and ESPN, my mentors, teachers (whom I have already noted earlier) and co-workers who worked alongside me for so many years. These were Franz Schaefer, Burkhard Tönshoff, Dieter Haffner, Jun Oh, Uwe Querfeld, Evelyn Reichwald – Klugger, Claus-Peter Schmitt, Lutz Weber, Anne Margret Wingen, Elke Wühl, and so many others, especially the colleagues and friends who joined the multi center studies I mentioned before.

