

Meet Henriette Uhlenhaut, our 2023 European Journal of Endocrinology Awardee



Professor Nina Henriette Uhlenhaut from the Technical University of Munich (TUM) is our 2023 European Journal of Endocrinology Awardee and will be delivering a lecture in Istanbul for ECE 2023. Read on to learn more about her career highlights, her upcoming lecture at ECE 2023, and what advice she has for aspiring endocrinologists.

Tell us a little about your current position and research

I hold the Chair for Metabolic Programming at TUM and am the Director of the Institute for Diabetes and Endocrinology at Helmholtz Munich, in Germany. My lab studies the transcriptional mechanisms underlying glucocorticoid responses. We combine molecular techniques such as NGS genomics, proteomics, metabolomics, bioinformatics, genetics and biochemistry to understand how adrenal stress hormones or synthetic steroids control physiological pathways, including metabolism, inflammation and circadian rhythms.

Tell us about your career path so far, and what you're most proud of

After graduating with degrees in Biotechnology and Applied Biology from the Universities of Braunschweig, Germany, and Georgia Tech, Atlanta, USA, I moved to Heidelberg to obtain my PhD degree from the EMBL Heidelberg University joint international PhD program. I was already very interested in genome-wide analyses and transcriptomics, as well as physiology and preclinical disease models. During my time in Heidelberg, I started to focus on nuclear hormone receptors, which I then pursued during my postdoctoral research in the lab of Ron Evans at the Salk Institute in San Diego. European funding opportunities and support then drew me back to Germany, first to Berlin, and then to Munich, where I set up my own lab nearly ten years ago.

Personally, I'm most proud of my children and their growth and development. Professionally, I really enjoy mentoring grad students and watching them succeed. Scientifically, the time when I turned adult female mice into endocrinologically male animals, was the most fascinating discovery I made during my PhD.

What are you presenting at ECE 2023?

I will speak about hepatic glucocorticoid actions, which means I will tell the audience about what we learned when applying NGS techniques such as ChIP-Seq to map glucocorticoid receptor binding sites on liver chromatin. I will discuss how diurnal rhythms of corticosterone secretion control lipid, glucose and amino acid metabolism during feeding and fasting.

What are you looking forward to at ECE 2023?

I look forward to meeting everyone, colleagues from the field, basic scientists, clinicians, friends and new acquaintances!

Who has had the most impact on your career?

I could list my mentors and funding agencies, but really it's my husband. Raising a family together has had a huge impact on both our careers – in a good way.

What are the biggest challenges in your field right now?

There's many, it's so complicated and fascinating at the same time! With regards to nuclear receptors, I would say understanding transcriptional repression is still the biggest challenge. At the same time, new technologies like threedimensional chromatin assays, microscopy, single cell sequencing and bioinformatics enable novel insights. However, the major bottle necks are time and resources, to thoroughly dissect and study these molecular mechanisms in a dynamic, physiologically relevant systems approach.

Could you tell us what you most enjoy about your work?

The scientific discovery, of course! Looking at a new piece of data, analyzing profiles, discussing results and planning experiments. And, naturally, traveling to conferences and meeting my peers to talk about the latest approaches in our field!

Any words of wisdom for aspiring endocrinologists?

Sure: Don't give up! Determination might be your most important skill. Also, don't be afraid to ask challenging questions and to find creative ways of answering them.