

## Meet Li Chan, our 2024 *European Journal of Endocrinology* Awardee



Professor Li Chan, from London, UK, is our 2024 *European Journal of Endocrinology* Awardee. She will deliver her Award Lecture in Stockholm at ECE 2024. Read on to learn more about her career in endocrinology, her advice for future endocrinologists, and what you can look forward to hearing her talk about at the Congress.

### **Please tell us about your current role**

I am Professor of Molecular Endocrinology and Metabolism at Queen Mary University of London (QMUL), and an Honorary Paediatric Endocrinologist at Barts Health. I co-lead the QMUL life-long health multidisciplinary theme and also the UK Research and Innovation ageing network CELLO.

### **How were you inspired to work in endocrinology?**

I was a medical student at Cambridge and, during that time, I was inspired by Hal Dixon, a distinguished yet unassuming and humble biochemist and fellow of King's College, whose work contributed to the treatment of Wilson's disease. Understanding how science can lead to innovation and new therapies has stayed with me and undoubtedly driven my research/career. Throughout my career, many people have inspired me, for which I am very grateful. However, seeing endocrine patients remains a major inspiration and drives my science.

### **What will you discuss in your Award Lecture at ECE 2024?**

My talk will centre on the journey of discovery of the melanocortin receptor accessory proteins (MRAPs) and their importance in adrenal biology and metabolism.

The MRAPs (MRAP and MRAP2) are small, single transmembrane domain, accessory proteins. MRAP is an essential accessory factor for the functional expression of the melanocortin 2 receptor/adrenocorticotrophin (ACTH) receptor. The importance of MRAP in adrenal gland physiology is demonstrated by the clinical condition familial glucocorticoid

deficiency type 2. Its paralogue MRAP2 is predominantly expressed in the hypothalamus, including the paraventricular nucleus; it has been linked to mammalian obesity.

Understanding the action of these promiscuous accessory proteins, their interaction with a broad range of G protein-coupled receptors, and their role in adrenal and metabolic diseases continues to be the main focus of my laboratory. I will also present our work identifying and characterising small molecule MC2R (melanocortin 2 receptor) antagonists for treatment of conditions of ACTH excess.

**What is likely to be the next breakthrough in your area of interest?**

I believe we are at a very exciting time in endocrine research. There have been major breakthroughs in drug development for the treatment of obesity. I anticipate that this is just the start, and that the decades of understanding of molecular mechanisms will finally come to fruition with the development of new therapies and drugs.

**What are the biggest challenges in your field right now?**

I feel that the 'clinician scientist' is dying a death. It feels to me that clinicians are now often categorised as only being able to deal with clinical research and scientists do only basic research. Understanding both and doing both, whilst working with both basic and clinical colleagues, has been the most interesting and exciting part of my career. I hope that funders and universities continue to fund and support the development of clinician scientists.

**What are you most proud of in your career, and in life in general?**

I am proud to have got this far in academia and to have made a small contribution to scientific knowledge (albeit a tiny drop in a large ocean). My greatest achievements in life, however, are my children, who have kept me grounded in more ways than one!

**What is the most enjoyable aspect of your work?**

I like the ability to ask novel scientific questions and the possibility of discovering something new, along with the opportunity to work with some of the brightest minds at all levels.

**What are you most looking forward to at ECE 2024?**

I will enjoy joining one of the largest endocrine events in Europe, listening to some excellent science and seeing a bit of Sweden.

**Why should people join ESE?**

ESE and the annual Congresses offer a great opportunity to network and hear about the latest endocrine research. I'm looking forward to interacting with other female endocrinologists through EUWIN, European Women in Endocrinology.

**What words of wisdom do you have for aspiring endocrinologists?**

Endocrinology is the best subspeciality, hormones are everything! If this is what you want to do then keep going!

**Is there anything else you would like to add?**

I would like to thank ESE for this prestigious award.