Editorial

Neuroendocrine neoplasms

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It is with great pleasure to introduce Prof. Stephan Petersenn as the guest editor for two special issues on the topic neuroendocrine neoplasms (NEN) in this journal. I have known this top notch expert for the last 15 years after we first had some discussions on how to manage several of such patients with NEN and pursue some research projects. At that time, besides other pursuits, Prof. Petersenn investigated various tissues for the expression of somatostatin receptor subtypes [1, 2]. Prof. Petersenn has brought together a wonderful group of experts in the field NEN and we decided to split the articles into two guest issues of *Reviews in Endocrine & Metabolic Disorders*.

I myself came across neuroendocrinology and NEN during my internship in neurosurgery. Paraganglioma can even arise in the sellar region [3]. During residency in Internal Medicine at the Ohio State University in Columbus, Ohio, I met Prof. Thomas O'Dorisio who took care of many patients with NEN and collaborated closely with surgeon Prof. Christopher Ellison before moving to the University of Iowa. O'Dorisio's lab at OSU measured many unique hormone substances including pancreastatin. I reconnected with Prof. O'Dorisio when at Georgetown University encountering a woman with carcinoid syndrome caused by an atypical carcinoid of the uterine cervix [4]. This patient has taught me the “zebra” lesson regarding NEN and the fact that NEN can arise in many tissues. Furthermore, NEN can change their hormonal profile which I have also learned while caring for a woman with Cushing syndrome [5]. NEN can be the reason for

secondary forms of diabetes mellitus and a certain form of flushing [6–9]. Another challenge represents interpreting the measurement of an elevated hormone level and avoiding subsequent costly imaging and other investigations. For instance, serum gastrin can be up to 4000 pg/ml in some patients with pernicious anemia without the presence of a NEN [10]. Given the prevalence of thyroid nodules with the chance, although low, of the NEN medullary thyroid cancer, measuring serum calcitonin is important [11]. Elevated serum calcitonin may be seen with the intake of omeprazole and of fumaric acid, a drug used to treat psoriasis [12–14]. Establishing correct cutoff and reference ranges for various hormones and deciding when there is “humor” (secretion) from a neuroendocrine tumor remains an ongoing challenge, left alone that there probably are many yet undiscovered hormonal products of NEN [15]. No question, the field of NEN will leave room for more discoveries in the future and we hope you will enjoy this special guest issue in *Reviews in Endocrine & Metabolic Disorders*.

Compliance with ethical standards

Conflict of interest statement Christian Koch declares that he has received consulting fees for serving on Advisory Boards of Novartis and declares that he has no conflict of interest related to this article.

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Prof. Koch is presently the Head of the Medicover Oldenburg MVZ and affiliated with the Carl von Ossietzky University as well as the Technical University of Dresden, MK III (Chair: Prof. Stefan Bornstein). He also is Adjunct Professor at the University of Louisville, KY. Before June 2017, Koch had served as a tenured professor at the University of Mississippi Medical Center in Jackson, MS, and Staff Physician at the G.V. (Sonny) Montgomery VA Medical Center. Koch graduated from the Friedrich-Alexander University in Erlangen-Nuremberg, Germany, and trained in neurosurgery, neurology, and internal medicine in Germany, before completing a residency in Internal Medicine at the Ohio State University in Columbus, OH, USA, under the chairmanship of Prof. EL Mazzaferri, and clinical and research training in endocrinology at the National Institutes of Health in Bethesda, MD, under the guidance of Prof. George P. Chrousos and many collaborating colleagues. Prof. Koch's research focus has been the pathogenesis of endocrine tumors and endocrine hypertension. He remains interested in translational and multidisciplinary research with questions arising from patient encounters, trying to explain clinical observations by looking at "bench" results to further improve patient care. In May 2017, the American College of Endocrinology has awarded Professor Koch the "Master" title MACE (<https://www.umc.edu/news/Miscellaneous/2017/May/Endocrinologist-to-receive-prized-MACE-grad-students-fellows-earn-biology-honors.html>).