32nd Kharazmi International Award

Biotechnology & Basic Medical Sciences .Project Title _

Research & Development

Biology and medicine of stress and stress-related disorders

Researcher

Prof. George P Chrousos





Abstract

Prof. Chrousos' research program has mainly focused on the Biology and Medicine of Stress, the Physiology and Pathophysiology of the Hypothalamic-pituitary-adrenal (HPA) Axis and the molecular actions of the end-hormones of the latter, the glucocorticoids. He examined the key roles of stress mediators, not only in endocrine, behavioral and physical/energetic adaptations, but also as major pathogenic factors, responsible for the most important pathologies of today's societies, which account for the majority of morbidity and mortality plaguing contemporary societies. He has also made contributions to the understanding of the molecular actions of glucocorticoids and of their effects on the genome and epigenome. which underlie their involvement in human physiology and pathophysiology. On a practical level, Chrousos's studies have also contributed to the way we study, classify, diagnose, and treat classic endocrine disorders of the HPA axis, including Cushing syndrome and Addison disease. His experimental work have opened new horizons in our understanding of a wide spectrum of human complex disorders related to stress, beyond the classic non-communicable ones, including melancholic, seasonal and postpartum depression, the post-traumatic stress disorder, eating disorders, the very prevalent obesity/osteosarcopenia/metabolic syndrome, the psychosomatic diseases, sleep disorders, and the inflammatory/autoimmune and allergic diseases. His contributions to Biomedical Science and Medicine span and influence a broad range of medical disciplines, including Pediatrics, Internal Medicine, Psychiatry, Psychology, Rheumatology, Allergy, Sleep Medicine, Psychosomatic Medicine, Reproduction, Surgery, and Oncology.

He has authored or co-authored over 800 original scientific papers and over 600 journal reviews and book chapters. He is one of the 100 most cited scientists internationally.

Biography

Dr. George Chrousos is Professor of Pediatrics and Endocrinology Emeritus, Holder, UNESCO Chair on Adolescent Health, Director of the University Research Institute on Maternal and Child Health at the National and Kapodistrian University of Athens (NKUA) School of Medicine. Formerly, he was Chairman of the First Department of Pediatrics, NKUA, and Chief of the Pediatric and Reproductive Endocrinology Branch of the National Institute of Child Health and Human Development, NIH, Bethesda, Maryland. He has received numerous major awards, including the Fred Conrad Koch Award, the highest award of the US Endocrine Society. He is a member of the Academia Europaea and the US National Academy of Medicine.

