

1. Record Nr.	UNINA9910824416603321
Titolo	Molecular neuroendocrinology : from genome to physiology / / editors, David Murphy & Harold Gainer ; cover design by Dan Jubb
Pubbl/distr/stampa	Chichester, England : , : Wiley Blackwell, , 2016 ©2016
ISBN	1-118-76035-2 1-118-76033-6
Descrizione fisica	1 online resource (693 p.)
Collana	Masterclass in Neuroendocrinology Series
Classificazione	SCI089000
Disciplina	612.8
Soggetti	Neuroendocrinology - Molecular aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Title Page; Table of Contents; List of Contributors; Series Preface; About the Companion Website; Introduction; Part A: Genome and Genome Expression; CHAPTER 1: Evolutionary Aspects of Physiological Function and Molecular Diversity of the Oxytocin/Vasopressin Signaling System; 1.1 Evolution of peptidergic signaling; 1.2 The discovery of neuropeptide signaling components in the era of genomics; 1.3 Evolutionary aspects of OXT/AVP diversity; 1.4 Physiology of OXT and AVP signaling: from worm to man; 1.5 Perspectives; Acknowledgments; References; CHAPTER 2: The Neuroendocrine Genome: 2.1 The discovery of neuropeptides 2.2 Characteristics of neuropeptides; 2.3 Neuropeptide genes in the genome; 2.4 Perspectives; Acknowledgments; References; Further reading; CHAPTER 3: Transcriptome Dynamics; 3.1 Approaching transcriptome dynamics; 3.2 Transcriptome dynamics in neuroendocrine systems; 3.3 Transcriptome dynamics in the pineal gland: lessons from different approaches; 3.4 SN-NICHD transcriptome profiling web page; 3.5 Perspectives; References; CHAPTER 4: New Players in the Neuroendocrine System:; 4.1 Non-coding RNA contribution to gene regulation 4.2 Central role of the hypothalamus as a neuroendocrine organ 4.3 The pituitary gland and its central control of the peripheral endocrine

system; 4.4 The pineal gland - a connector between external environment and internal homeostasis; 4.5 Perspectives; References; CHAPTER 5: Transcription Factors Regulating Neuroendocrine Development, Function, and Oncogenesis; 5.1 The key players in transcriptional regulation; 5.2 Classes of neuroendocrine-associated TFs; 5.3 REST: a zinc finger TF with complex regulation and diverse function; 5.4 Cooperation of TFs in neuroendocrine phenotype and function

5.5 Perspectives References; CHAPTER 6: Epigenetics; 6.1 Introduction; 6.2 Early life adversity shapes the HPA axis; 6.3 Epigenetic mechanisms: changes in the regulation of gene activity and expression that are not dependent on gene sequence; 6.4 Methods of epigenetic analysis; 6.5 Alterations in epigenetic processes; 6.6 The epigenome and early life adversity; 6.7 Perspectives; References; Further reading; Part B: Proteins, Post translational Mechanisms, and Receptors; CHAPTER 7: Proteome and Peptidome Dynamics; 7.1 Introduction; 7.2 Classic neuropeptides and proteins in the RSP

7.3 Techniques used to study the rate of peptide biosynthesis 7.4 Dynamics of intracellular proteins and peptides; 7.5 Perspectives; References; CHAPTER 8: Neuropeptidomics; 8.1 Neuropeptides - one gene, multiple products; 8.2 Mining the neuropeptidome 21st-century style using mass spectrometry-based 'omics approaches; 8.3 What do all these peptides do? Follow-up functional studies; 8.4 Perspectives; Acknowledgments; References; Further reading; CHAPTER 9: Posttranslational Processing of Secretory Proteins; 9.1 Posttranslational modifications of secretory proteins

9.2 The family of proprotein convertases

Sommario/riassunto

"Discusses the mechanisms that enhance peptide and protein diversity beyond what is encoded in the genome through post-translational modification"--
