

1. Record Nr.	UNISA990006006930203316
Autore	EL-HALWAGI, Mahmoud M.
Titolo	Pollution prevention through process integration : systematic design tools / Mahmoud M. El-Halwagi
Pubbl/distr/stampa	San Diego [etc.] : Academic Press, copyr. 1997
ISBN	978-0-12-236845-5
Descrizione fisica	XV, 318 p. ; 24 cm
Disciplina	660.0286
Soggetti	Industria chimica - Effetti dannosi - Controllo Inquinamento atmosferico - Controllo
Collocazione	660.028 ELH 1
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr.	UNINA9910830322303321
Titolo	Model organisms in spinal cord regeneration [[electronic resource] /] / edited by Catherina G. Becker and Thomas Becker
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, c2007
ISBN	1-280-85464-2 9786610854646 3-527-61036-7 3-527-61035-9
Descrizione fisica	1 online resource (425 p.)
Altri autori (Persone)	BeckerCatherina G BeckerThomas
Disciplina	616.8 617.482
Soggetti	Spinal cord - Regeneration Regeneration (Biology)
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 and index.
Nota di contenuto	Model Organisms in Spinal Cord Regeneration; Contents; Preface; List of Contributors; Part I Mammalian Models of CNS Regeneration; 1 The Role of Inhibitory Molecules in Limiting Axonal Regeneration in the Mammalian Spinal Cord; 1.1 Introduction; 1.1.1 CNS Neurons Have Widely Differing Phenotypes; 1.2 Difficulties in Assessing Axonal Regeneration in the Mammalian Spinal Cord; 1.2.1 Experimental Lesions and Problems of Interpretation; 1.2.2 Tracing Regenerating Axons; 1.2.2.1 Regeneration of Corticospinal Axons is Difficult to Assess 1.2.2.2 Regeneration of Ascending Dorsal Column Axons Can Be Measured Simply and Accurately1.3 Myelin Proteins as Inhibitors of Axonal Regeneration; 1.3.1 Nogo; 1.3.2 OMgp; 1.3.3 MAG; 1.3.4 The Nogo-66 Receptor, NgR1, (RTN4R), and Related Molecules; 1.3.5 Co-Receptors: LINGO-1, p75 and TROY (TAJ); 1.3.6 Signal Transduction from Myelin-Derived Inhibitory Molecules; 1.3.7 The Role of Nogo-A in Axonal Regeneration in the Spinal Cord; 1.3.7.1 Variations in the Extent of Axonal Regeneration in Different Strains of Nogo Knockout Mice

1.3.7.2 Effects of Antibodies Against Nogo on Axonal Regeneration in Spinal Cord; 1.3.7.3 Neuronal Nogo-A; 1.3.8 The Role of NgR1, NgR2 and Their Co-Receptors in Axonal Regeneration Within the Spinal Cord; 1.3.8.1 The Distribution of NgR1 and NgR2 Does Not Suggest a General Regeneration-Inhibitory Function in the CNS; 1.3.8.2 Knockout Mice Do Not Provide a Clear Picture of the Role of NgR1 in Regeneration; 1.3.8.3 Pharmacological Blockade of NgR1 Enhances Axonal Sprouting and Regeneration; 1.3.8.4 The Pattern of Expression of LINGO-1 and p75 Does Not Suggest a General Role in Inhibiting Regeneration in Vivo; 1.3.8.5 LINGO-1, p75 and TROY Have Important Roles in Neurite Outgrowth in Vitro, But Their Significance for Axonal Regeneration in Vivo Has Not Yet Been Established; 1.3.9 Effects of MAG and OMgp on Axon Regeneration in the Mammalian CNS; 1.3.10 Strong Evidence That Myelin Proteins Are Not Always Effective Inhibitors of Axonal Regeneration in Vivo; 1.4 Inhibitors at the Lesion Site (Fig. 1.5); 1.4.1 CSPGs; 1.4.1.2 Relationship Between the Distribution of CSPGs and Failure of Axonal Regeneration; 1.4.1.3 Chondroitinase ABC and Axonal Regeneration; 1.4.1.4 Scar-Reducing and Growth-Promoting Effects of Decorin; 1.4.2 Axonal Guidance Molecules Are Present in the Spinal Cord and Their Receptors Are Expressed by Specific Classes of Neuron; 1.4.2.1 Semaphorins; 1.4.2.2 Ephrins; 1.4.2.3 Slits and Netrins in the Mammalian Spinal Cord; 1.5 The Most Consistent Effects of Interfering with Inhibitory Molecules or Their Signaling Are on Raphespinal Axons; 1.6 Interfering with Downstream Effectors of Inhibitory Signaling

---

## Sommario/riassunto

This handbook provides a comprehensive overview for students, clinicians and researchers planning to enter the field of neural regeneration, combining the latest knowledge with an understanding of all important model organisms in one handy volume. By covering the strengths and weaknesses as well as possible applications of different models it saves researchers both time and resources in their choice of the appropriate model organism. An equally valuable introduction for the novice planning to enter the field.

---