

1. Record Nr.	UNINA9910484940003321
Autore	Herwig Heinz
Titolo	Turbulente Strömungen : Einführung in die Physik eines Jahrhundertproblems / / von Heinz Herwig
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer Vieweg, , 2017
ISBN	3-658-18844-8
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (X, 39 S. 11 Abb.)
Collana	essentials, , 2197-6708
Disciplina	620.1064
Soggetti	Fluid mechanics Fluids Engineering Fluid Dynamics Fluid- and Aerodynamics
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Wann, wo und warum sind Strömungen turbulent? -- Wie können turbulente Strömungen theoretisch beschrieben werden? -- Die Zweischichtenstruktur wandnaher turbulenter Strömungen.
Sommario/riassunto	Heinz Herwig zeigt, dass turbulente Strömungen in Natur, Technik und im Alltag die Regel sind und nicht etwa die Ausnahme. Nicht zuletzt ist dies einer der Gründe, warum man sich mit der Physik turbulenter Strömungen befassen sollte. Dies geschieht hier anhand theoretischer und praktischer Fragestellungen. Turbulenz ist in diesem essential nicht als eigenständiges Phänomen gemeint, sondern tritt im Zusammenhang mit Strömungen von gasförmigen oder flüssigen Medien auf. Der Inhalt Wann, wo und warum sind Strömungen turbulent? Wie können turbulente Strömungen theoretisch beschrieben werden? Die Zweischichtenstruktur wandnaher turbulenter Strömungen Die Zielgruppen Dozierende und Studierende technischer Fächer wie Maschinenbau und Verfahrenstechnik sowie der Physik In der industriellen Praxis tätige Ingenieurinnen und Ingenieure oder Technikerinnen und Techniker, aber auch jede Person, die sich schon einmal über unerwartete Strömungsereignisse gewundert hat und diese verstehen möchte Der Autor Dr.-Ing. Heinz Herwig war bis 2016 Professor an der TU Hamburg-Harburg und leitete dort das Institut für

Thermofluidodynamik. Seine Forschungsschwerpunkte liegen in den Gebieten der Strömungsmechanik, Wärmeübertragung und Thermodynamik.

2. Record Nr.	UNINA9910971361403321
Autore	Taupin Philippe
Titolo	Stem cells and regenerative medicine . Volume 6 Molecular and cellular mechanisms / / Philippe Taupin
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2011
ISBN	1-61761-388-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (154 p.)
Collana	Cell biology research progress
Soggetti	Stem cells Regenerative medicine
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	Intro -- STEM CELLS AND REGENERATIVE MEDICINE. VOLUME 5. PATENTS AND CLINICAL TRIALS -- STEM CELLS AND REGENERATIVE MEDICINE. VOLUME 5. PATENTS AND CLINICAL TRIALS -- Contents -- Preface -- Introduction: Therapeutic Neuronal Stem Cells: Patents at the Forefront* -- Abstract -- 1. Background -- 2. Neural Stem Cells, Therapeutic Potential and Patents -- 3. Expert Opinion -- Acknowledgments -- References** -- Chapter I Adult Neurogenesis and Pharmacology in Alzheimer's Disease and Depression -- Abstract -- Introduction -- Adult Neurogenesis in Alzheimer's Disease -- Adult Neurogenesis in Depression -- Discussion -- Conclusion and Perspectives -- Acknowledgments -- References -- Chapter II Adult Neurogenesis in the Pathogenesis of Alzheimer's Disease -- Acknowledgments -- References -- Chapter III Therapeutic Potential of Adult Neural Stem Cells* -- Abstract -- Introduction -- Neural Progenitor and Stem Cells -- Neural Progenitor and Stem Cells in Vitro -- Origin of Newly Generated Neuronal Cells in the Adult Brain -- Therapeutic Potential of Adult NSCs -- Cellular Therapy -- Gene Therapy -- Current and Future Developments -- References** --

Chapter IV Human Neural Progenitor and Stem Cells* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Proliferation Medium -- 2.2 Culture of Human Fetal Neural Progenitor and Stem Cells -- 3. Biology and Action -- 3.1 Growth Rate -- 3.2 Immunocytofluorescence -- 3.3 Differentiation of Human Fetal Neural Progenitor and Stem Cells -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter V Cryopreservation of Early Postmitotic Neuronal Cells in Culture* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Defined Derivation Medium -- 2.1.1 Defined Derivation Medium #1 -- 2.1.2 Defined Medium #2 -- 2.1.3 Defined Medium #3 -- 2.2 Induction Medium -- 2.2.1 Induction Medium. 2.3 Production of Neural Progenitor Cells from Embryonic Stem Cells -- 2.4 Induction of Neural Progenitor Cells into Neuronal or Neural-Like Cells -- 2.5 Cryopreservation -- 2.6 Thawing Cryopreserved Cells -- 2.7 Cultivation -- 3. Biology and Action -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter VI Adult Neural Stem Cells for the Treatment of Neuroinflammation* -- Abstract -- 1. Introduction -- 2. Chemistry -- 3. Biology and Action -- 3.1 Relapsing-Remitting Model of Experimental Autoimmune Encephalomyelitis -- 3.2 Syngeneic Transplantation -- 3.3 In Situ Proliferation of Transplanted Anscs -- 3.4 Immunocytology and Immunohistology -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter VII Adult Periodontal-Derived Neural Progenitor and Stem Cells* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Periodontal Tissue -- 2.2 Cell Culture -- 2.3 Differentiation -- 2.4 Immunocytology -- 2.5 Organotypic Hippocampal Slice Cultures -- 2.6 Further Studies -- 3. Biology and Action -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter VIII Magnetic Resonance Imaging for Monitoring Neurogenesis in the Adult Hippocampus* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Experimental Study in Rats -- 2.2 MRI Scanning in Rats -- 2.3 Histology -- 2.4 Epidemiological Study -- 2.5 MRI Protocol in Human Subjects -- 3. Biology and Action -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter IX Apigenin and Related Compounds Stimulate Adult Neurogenesis* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Compounds and Derivatives -- 2.2 Synthesis -- 3. Biology and Action -- 3.1 Animal Studies -- 3.1.1 Intraperitoneal Administration of Apigenin -- 3.1.2 Oral Administration of Apigenin and Epicatechin -- 3.2 Immunohistology -- 3.3 Cell Culture -- 4. Expert Opinion -- Acknowledgments. References** -- Chapter X Nootropic Agents Stimulate Neurogenesis* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Cell Culture -- 2.2 Differentiation -- 2.3 Immunocytochemistry -- 2.4 Novel Object Recognition Task -- 3. Biology and Action -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter XI Fourteen Compounds and their Derivatives for the Treatment of Diseases and Injuries Characterized by Reduced Neurogenesis and Neurodegeneration* -- Abstract -- 1. Introduction -- 2. Chemistry -- 2.1 Compounds and Derivatives -- 2.2 Synthesis -- 3. Biology and Action -- 3.1 Cell Culture -- 3.2 Immunocytology -- 3.3 Apoptosis -- 3.4 Necrosis -- 3.5 Neuron Dysfunction -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter XII Brevetoxin Derivative Compounds for Stimulating Neuronal Growth* -- Abstract -- 1. Introduction -- 2. Chemistry -- 3. Biology and Action -- 3.1 Primary Cell Culture of Neocortical Neurons -- 4. Expert Opinion -- Acknowledgments -- References** -- Chapter XIII OTI-010 Osiris Therapeutics/JCR Pharmaceuticals* -- Summary -- Abstract -- Introduction -- Synthesis and SAR -- Preclinical Development -- In

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Transplantation in Cancer Patients -- Crohn's Disease -- Metabolism
and Pharmacokinetics -- Side Effects and Contraindications -- Patent
Summary -- Current Opinion -- Licensing -- JCR Pharmaceuticals Co
Ltd -- Acknowledgments -- References -- Chapter XIV ADA-
Transduced Hematopoietic Stem Cell Therapy for ADA-SCID --
Summary -- Abstract -- Introduction -- Synthesis and SAR --
Preclinical Development -- Metabolism and Pharmacokinetics --
Toxicity -- Clinical Development -- Phase I/II -- Side Effects and
Contraindications -- Patent Summary -- Current Opinion --
Acknowledgments -- References* -- Index.

Sommario/riassunto

Stem cells are the building blocks of the body. They can develop into any of the cells that make up our bodies. Stem cells carry a lot of hope for the treatment of a broad range of diseases and injuries, spanning from cancers, diabetes, genetic diseases, graft-versus-host disease, eye, heart and liver diseases, inflammatory and autoimmune disorders, to neurological diseases and injuries, particularly neurodegenerative diseases, like Alzheimer's and Parkinson's diseases, cerebral strokes, and traumatic brain and spinal cord injuries. Stem cell research is therefore as important for understanding the Physio- and pathology of the body as for development and therapy as well as for understanding the nervous system. This book provides an overview and in-depth analysis of recent developments in stem cell research and therapy.
