

1. Record Nr.	UNINA9910298287103321
Titolo	The Science of Reconstructive Transplantation // edited by Gerald Brandacher
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Humana, , 2015
ISBN	1-4939-2071-5
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (404 p.)
Collana	Stem Cell Biology and Regenerative Medicine, , 2196-8985
Disciplina	617.95
Soggetti	Stem cells Transplantation of organs, tissues, etc Transplantation immunology Surgery, Plastic Life sciences Tissue Transplantation Biological Science Disciplines Transplantation Immunology Transplantation Stem Cells Transplant Surgery Plastic Surgery
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	Introduction, History, and Clinical Impact -- Reconstructive Transplantation: From Scientific Dream to Clinical Reality / Gerald Brandacher, Saami Khalifian, W.P. Andrew Lee -- Clinical Pearls and Pitfalls in Reconstructive Transplantation / Huey Y. Tien, Yorell Manon-Matos, Tsu-Min Tsai, Christina L. Kaufman, Joseph E. Kutz -- Reconstructive Transplantation: What Can We Learn from Solid Organ Transplantation? / Philip S. Brazio, Eduardo D. Rodriguez, Stephen T. Bartlett, Rolf N. Barth -- The Daily Life of a Hand Transplant Recipient / Christopher Pollock -- Specific Areas of Research -- Small Animal Models for Reconstructive Transplantation / Barbara Kern, Robert

Sucher -- Use of Large-Animal and Nonhuman Primate Models for Reconstructive Transplantation / Bruce Swearingen, Jeff Chang, David W. Mathes -- Unique Immunological Features of Vascularized Composite Allografts / Kadiyala V. Ravindra -- Immunological Similarities and Differences Between Extremity and Face Transplants / Palmina Petruzzo, Lionel Badet -- Advances in Diagnosing Skin Rejection and Immune Monitoring / Emmanuel Morelon, Olivier Thauinat, Jean Kanitakis -- Bayesian Classifier and Molecular Marker Platforms for Immune Monitoring / Rahul M Jindal, Kristin A Stevens, Jonathan A. Forsberg, Eric A. Elster -- Migration and Communication Patterns in Skin Rejection / Johanna Grahammer, Theresa Hautz, Johann Pratschke, Stefan Schneeberger -- Antibody-Mediated Rejection in Reconstructive Transplantation / Luis Landin, Pedro Bolado, Cesar Casado-Sanchez -- Chronic Rejection in Reconstructive Transplantation / Christina L. Kaufman, Rosemary Ouseph, Joseph E. Kutz, Yorell Manon-Matos, Huey Y. Tien, Brenda Blair et al. -- Cell-Based Immunomodulatory Concepts and Tolerance Protocols for Reconstructive Transplantation / Angelo A. Leto Barone, Victor W. Wong -- Mixed Chimerism for Tolerance Induction of Vascularized Composite Allografts / David A. Leonard, Josef M. Kurtz, Curtis L. Cetrulo Jr. -- Bone Marrow-Derived Ex Vivo Created Hematopoietic Chimeric Cells to Support Engraftment and Maintain Long-Term Graft Survival in Reconstructive Transplantation / Maria Siemionow, Joanna Cwykiel, Maria Madajka -- Mesenchymal Stem Cells as Immune Modulators in VCA / Daniel J. Ceradini, Marc A. Soares -- Specific Areas of Research -- Strategies for Gene Transfer to Vascularized Composite Allografts / Denver Lough, Damon S. Cooney -- Experimental Models and Clinical Tools to Assess Nerve Regeneration and Functional Outcomes / Sami H. Tuffaha, Justin M. Broyles, Jaimie T. Shores -- Mesenchymal and Adipose Stem Cell Strategies for Peripheral Nerve Regeneration / Riccardo Schweizer, Sudheer K. Ravuri, Jan A. Plock, Kacey G. Marra, Vijay S. Gorantla -- Why Brain Science is Essential to the Success of Hand Allograft Transplantation / Scott H. Frey -- Ischemia-Reperfusion Injury in Reconstructive Transplantation: An Undefined Conundrum / Jerzy W. Kupiec-Weglinski, Kodi Azari -- Index.

---

### Sommario/riassunto

This volume presents a comprehensive overview of the latest advances in basic and translational research in the field of reconstructive transplantation and its potential therapeutic implications. Dr. Thomas E. Starzl and Dr. Raimund Margreiter, both pioneers in the field of transplantation, have written forewords for the book. The volume spans such topics as skin rejection, immune monitoring, stem cell-based immunomodulatory strategies, costimulatory blockade, tolerance induction, chronic rejection, ischemia reperfusion injury, nerve regeneration, cortical reintegration, and small and large animal models for reconstructive transplantation. The book is intended for biomedical researchers and basic scientists in the field of reconstructive transplantation, transplant immunology and regenerative medicine, as well as clinicians, surgeons and multidisciplinary specialists, who are practicing or interested in this novel and exciting field. Postgraduate fellows and students will also find it a valuable reference.

---