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SURGERY OF THE CHEST

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EDITION 8

VOLUME I

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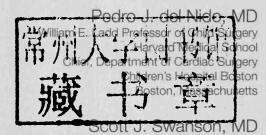
Eighth Edition

Sabiston & Spencer Surgery of the Chest

Volume 1

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To my wife, Amy, who gives me love, inspiration, and unwavering support and to our children, Michelle, Eric, Nicholas, and Amanda. They provide us with unlimited pleasure.

FWS

To Martha, Alexander, Sara, Daniel, and Elizabeth. Thank you.

PJD

To my wife, Donna, and our children, Kate, Whit, and Maggie, who make this all worthwhile.

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Transmyocardial Laser Revascularization

Jeffrey Phillip Jacobs, MD, FACS, FACC, FCCP

Clinical Professor in the Department of Surgery

University of South Florida

Surgical Director of Heart Transplantation and ECMO

The Congenital Heart Institute of Florida

All Children's Hospital

Saint Joseph's Hospital of Tampa

Saint Petersburg, Florida

Interrupted Aortic Arch; Quality Improvement and Risk

Stratification for Congenital Cardiac Surgery

Marshall L. Jacobs, MD

Consultant, Department of Pediatrics and Congenital Heart

Surgery

The Pediatrics Institute

Cleveland Clinic

Cleveland, Ohio

Interrupted Aortic Arch

Michael T. Jaklitsch, MD

Department of Thoracic Surgery

Brigham and Womens' Hospital

Boston, Massachusetts

Surgery of the Diaphragm: A Deductive Approach

Stuart W. Jamieson, MB, FRCS

Distinguished Professor of Surgery

Division of Cardiothoracic Surgery

University of California, San Diego, School of Medicine

La Jolla, California

Surgery for Pulmonary Embolism

Doraid Jarrar, MD

Staff Surgeon

Division of Cardiothoracic Surgery

Albert Einstein Medical Center

Philadelphia, Pennsylvania

Benign Lesions of the Lung

Douglas R. Johnston, MD

Staff Surgeon

Department of Thoracic and Cardiovascular Surgery

Cleveland Clinic

Cleveland, Ohio

Acquired Aortic Valve Disease

David R. Jones, MD

George R. Minor Professor of Surgery

University of Virginia School of Medicine

Chief, Division of Cardiothoracic Surgery

University of Virginia Medical Center

Charlottesville, Virginia

Other Primary Tumors of the Lung

Mark E. Josephson, MD

Department of Medicine, Cardiovascular Division

Beth Israel Deaconess Medical Center

Boston, Massachusetts

Catheter Ablation of Arrhythmias

Lilian P. Joventino, MD

Assistant Professor of Medicine

Brown University School of Medicine

Providence, Rhode Island

Staff Physician

Beth Israel Deaconess Hospital-Needham

Needham, Massachusetts

Cardiac Devices for the Treatment of Bradyamhythmias and Tachyamhythmias Amy L. Juraszek, MD, FAAP, FACC

Assistant Professor of Pathology and Pediatrics

Harvard Medical School

Director, Cardiac Registry

Associate in Cardiology

Children's Hospital Boston

Boston, Massachusetts

Cardiac Embryology and Genetics

Larry R. Kaiser, MD

Alkek Williams Distinguished Professor

Department of Cardiovascular and Thoracic Surgery

University of Texas Medical School at Houston

President and Chief Executive Officer

The University of Texas Health Sciences Center at Houston

Houston, Texas

The Posterior Mediastinum

Kirk R. Kanter, MD

Professor of Surgery

Department of Surgery, Division of Cardiothoracic Surgery

Emory University School of Medicine

Chief, Pediatric Cardiac Surgery

Children's Healthcare of Atlanta at Egleston

Atlanta, Georgia

Management of Single Ventricle and Cavopulmonary

Connections

Aditya K. Kaza, MD

Assistant Professor of Surgery

Section of Pediatric Cardiothoracic Surgery

Department of Surgery

University of Utah School of Medicine

Pediatric Cardiothoracic Surgeon

Primary Children's Medical Center

Congenital Cardiac Surgeon

University of Utah Hospitals

Salt Lake City, Utah

Atrioventricular Canal Defects

Steven M. Keller, MD

Chief, Department of Cardiothoracic Surgery

Montefiore Medical Center

Bronx, New York

Surgical Treatment of Hyperhidrosis

Clinton D. Kemp, MD

Senior General Surgery Resident

Department of Surgery

Johns Hopkins Medical Institutions

Baltimore, Maryland

Thoracic Trauma

Kemp H. Kernstine, MD, PhD

Clinical Professor of Surgery

University of California, San Diego, School of Medicine La Jolla

Chief, Division of Thoracic Surgery

Director, Lung Cancer and Thoracic Oncology Program

City of Hope National Medical Center and Beckman

Research Institute

Duarte, California
Congenital Lung Diseases

Shaf Keshavjee, MD, MSc, FRCSC, FACS

F.G. Pearson-R.J. Ginsberg Chair in Thoracic Surgery

Professor of Surgery

University of Toronto Faculty of Medicine

Head, Division of Thoracic Surgery

University Health Network

Toronto, Ontario

Canada

Lung Cancer: Surgical Treatment

Mark J. Krasna, MD, FACS

Medical Director

St. Joseph Medical Center-The Cancer Institute

Towson, Maryland

Neoadjuvant and Adjuvant Therapy for Esophageal Cancer

John C. Kucharczuk, MD

Assistant Professor of Surgery

University of Pennsylvania School of Medicine

Surgeon

University of Pennsylvania Health System

Philadelphia, Pennsylvania

Anterior Mediastinal Masses; Surgery for Emphysema

Alan P. Kypson, MD

Associate Professor of Surgery

Department of Cardiovascular Sciences

East Carolina Heart Institute at East Carolina

University

Greenville, North Carolina

Robotic Cardiac Surgery and Novel Visualization Systems

Roger J. Laham, MD

Associate Professor of Medicine

Harvard Medical School

Research Investigator

Cardio Vascular Institute

Beth Israel Deaconess Medical Center

Boston, Massachusetts

Nonatherosclerotic Coronary Heart Disease

Michael J. Landzberg, MBBS

Assistant in Cardiology

Department of Cardiology and Medicine

Harvard Medical School

Harvard University

Director

Boston Adult Congenital Heart and Pulmonary

Hypertension Group

Children's Hospital Boston

Brigham and Women's Hospital

Boston, Massachusetts

Adult Congenital Cardiac Surgery

Peter C. Laussen, MD

Professor

Department of Anesthesia

Harvard Medical School

Chief.

Division of Cardiovascular Critical Care

Department of Cardiology

Children's Hospital Boston

DD Hansen Chair in Pediatric Anesthesia

Department of Anesthesia

Children's Hospital Boston

Boston, Massachusetts

Surgical Approaches, Cardiopulmonary Bypass, and Mechanical Circulatory Support in Children; Pediatric

Anesthesia and Critical Care

Lawrence S. Lee, MD

Resident

Department of Surgery

Brigham and Women's Hospital

Boston, Massachusetts

Management of Native Valve Endocarditis

Scott A. LeMaire, MD

Associate Professor and Director of Research

Division of Cardiothoracic Surgery

Michael E. DeBakey Department of Surgery

Baylor College of Medicine

Cardiovascular Surgery Service

The Texas Heart Institute at St. Luke's Episcopal Hospital

Houston, Texas

Occlusive Disease of the Brachiocephalic Vessels and Surgical Management of Simultaneous Carotid and Coronary Artery Diseases

Sidney Levitsky, MD

David W. and David Cheever Professor of Surgery

Harvard Medical School

Director, Cardiothoracic Surgery Care Group

Senior Vice-Chairman

Department of Surgery

Beth Israel Deaconess Medical Center

Boston, Massachusetts

Myocardial Protection

Jerrold H. Levy, MD, FAHA

Professor and Deputy Chair For Research

Anesthesiology and Critical Care

Emory University School of Medicine

Director of Cardiothoracic Anesthesiology

Anesthesiology and Critical Care

Emory Healthcare

Atlanta, Georgia

Emory University Hosptial

Atlanta, Georgia

Blood Coagulation, Transfusion, and Conservation

John R. Liddicoat, MD

Vice President/General Manager

Structural Heart Disease

Medtronic, Inc.

Minneapolis, Minnesota

Tumors of the Heart

Peter H. Lin. MD

Associate Professor

Chief, Division of Vascular Surgery and Endovascular

Therapy

Michael E. DeBakey Department of Surgery

Baylor College of Medicine

Chief of Vascular Surgery

Michael E. DeBakey VA Medical Center

Houston, Texas

Occlusive Disease of the Brachiocephalic Vessels and Surgical Management of Simultaneous Carotid and Coronary Artery Diseases

Philip A. Linden, MD

Chief, Division of Thoracic and Esophageal Surgery

Case Medical Center

Cleveland, Ohio

Esophageal Resection and Replacement

John C. Lipham, MD

Assistant Professor of Surgery

Department of Surgery

University of Southern California

Keck School of Medicine

Los Angeles, California

Esophageal Anatomy and Function

Michael J. Liptay, MD

Associate Professor of Surgery

Department of Cardiovascular-Thoracic Surgery

Rush Medical College

Chief, Division of Thoracic Surgery

Rush University Medical Center

Chicago, Illinois

The Middle Mediastinum

Virginia R. Litle, MD

Assistant Professor of Surgery

Mount Sinai School of Medicine

Transplant Surgeon, Department of Cardiothoracic Surgery

Mount Sinai Medical Center

New York, New York

Staging Techniques for Carcinoma of the Esophagus

Bruce W. Lytle, MD

Chairman, Sydell and Arnold Miller Family Heart & Vascular

Staff Cardiac Surgeon, Department of Thoracic and

Cardiovascular Surgery

Cleveland Clinic

Cleveland, Ohio

Re-do Coronary Artery Bypass Surgery

James D. Luketich, MD

Professor of Surgery

Henry T. Bahnson Chair in Thoracic Oncology

Department of Surgery

University of Pittsburgh School of Medicine

Chief, Division of Thoracic and Foregut Surgery

Director, Thoracic Surgical Oncology

Co-Director, Lung Cancer Center

University of Pittsburgh Medical Center

Director, Heart, Lung and Esophageal Surgery Institute

UPMC Horizon

Pittsburgh, Pennsylvania

Endoscopic Therapies for Thoracic Diseases; Innovative Therapy and Technology

Michael M. Madani, MD

Associate Clinical Professor of Surgery

Division of Cardiothoracic Surgery

University of California, San Diego, School of Medicine

La Jolla, California

Surgery for Pulmonary Embolism

Michael A. Maddaus, MD

Professor of Surgery

University of Minnesota Medical School

Chief, Division of Thoracic and Foregut Surgery

Program Director, General Surgery

Co-Director, Minimally Invasive Surgery Center

Garamella Lynch Jensen Chair in Thoracic Cardiovascular Surgery

Department of Surgery

University of Minnesota Medical Center

Fairview Health Services

Minneapolis, Minnesota

The Use of Genetic Science in Thoracic Disease