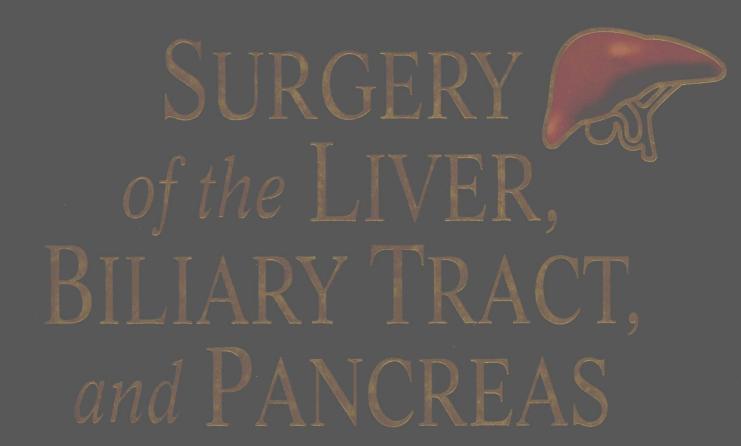
L.H. Blumgart

Belghiti • Jarnagin • DeMatteo • Chapman • Büchler • Hann • D'Angelica









Fourth Edition Volume 1

L. H. Minney

SERGERY ER.
BILIARY TRACT.
one PANCREAS



Fourth Edition

Surgery of the Liver, Biliary Tract, and Pancreas

Fourth Edition

EDITOR-IN-CHIEF

Leslie H. Blumgart, BDS, MD, DSc (Hon), FACS, FRCS (ENG, EDIN), FRCPS (GLAS)

ASSOCIATE EDITORS

Jacques Belghiti, MD

William R. Jarnagin, MD, FACS

Ronald P. DeMatteo, MD, FACS

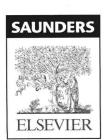
William C. Chapman, MD, FACS

Markus W. Büchler, MD

Lucy E. Hann, MD

Michael D'Angelica, MD

VOLUME 1





1600 John F. Kennedy Blvd. Ste 1800 Philadelphia, PA 19103-2899

SURGERY OF THE LIVER, BILIARY TRACT, AND PANCREAS Copyright © 2007, 2000, 1994, 1988 by Saunders, an imprint of Elsevier Inc.

ISBN-13: 978-1-4160-3256-4 ISBN-10: 1-4160-3256-8

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher. Permissions may be sought directly from Elsevier's Health Sciences Rights Department in Philadelphia, PA, USA: phone: (+1) 215 239 3804, fax: (+1) 215 239 3805, e-mail: healthpermissions@elsevier.com. You may also complete your request on-line via the Elsevier homepage (http://www.elsevier.com), by selecting 'Customer Support' and then 'Obtaining Permissions'.

Notice

Knowledge and best practice in this field are constantly changing. As new research and experience broaden our knowledge, changes in practice, treatment, and drug therapy may become necessary or appropriate. Readers are advised to check the most current information provided (i) on procedures featured or (ii) by the manufacturer of each product to be administered, to verify the recommended dose or formula, the method and duration of administration, and contraindications. It is the responsibility of the practitioner, relying on his or her own experience and knowledge of the patient, to make diagnoses, to determine dosages and the best treatment for each individual patient, and to take all appropriate safety precautions. To the fullest extent of the law, neither the Publisher nor the Editors assume any liability for any injury and/or damage to persons or property arising out of or related to any use of the material contained in this book.

The Publisher

Library of Congress Cataloging-in-Publication Data

Surgery of the liver, biliary tract, and pancreas / [edited by] Leslie H. Blumgart. —4th ed. p.; cm.

Rev. ed. of: Surgery of the liver and biliary tract. 3rd ed. 2000.

Includes bibliographical references and index.

ISBN 1-4160-3256-8

1. Liver—Surgery. 2. Biliary tract—Surgery. I. Blumgart, L. H. II. Surgery of the liver and biliary tract.

[DNLM: 1. Liver—surgery. 2. Biliary Tract Surgical Procedures. 3. Pancreas—surgery.

WI 770 S9617 2006]

RD669.S87 2006

617.5'56—dc22

2005052682

Acquisitions Editor: Judith Fletcher Developmental Editor: Deidre Simpson Publishing Services Manager: Tina Rebane Project Manager: Jodi Kaye Design Direction: Karen O'Keefe Owens

Working together to grow libraries in developing countries

www.elsevier.com | www.bookaid.org | www.sabre.org

ELSEVIER

BOOK AID

Sabre Foundation

This book is dedicated to the development of surgery of the liver, biliary tract, and pancreas as a specialty.

Editors

Leslie H. Blumgart, BDS, MD, DSc (Hon), FACS, FRCS (ENG, EDIN), FRCPS (GLAS)

Enid A. Haupt Chair in Surgery Chief, Hepatobiliary Service Department of Surgery Memorial Sloan-Kettering Cancer Center New York, New York

Jacques Belghiti, MD

Professor and Chairman Department of Digestive and Transplant Surgery Hospital Beaujon Paris, France

William R. Jarnagin, MD, FACS

Associate Professor of Surgery Weill Medical College of Cornell University Attending Surgeon Memorial Sloan-Kettering Cancer Center New York, New York

Ronald P. DeMatteo, MD, FACS

Associate Professor of Surgery Weill Medical College of Cornell University Associate Attending Surgeon Memorial Sloan-Kettering Cancer Center New York, New York

William C. Chapman, MD, FACS

Professor and Chief
Section of Transplantation
Department of Surgery
Washington University in St. Louis School of Medicine
St. Louis, Missouri

Markus W. Büchler, MD

Professor and Chairman Department of Surgery University of Heidelberg Heidelberg, Germany

Lucy E. Hann, MD

Professor of Radiology Weill Medical College of Cornell University Attending Radiologist Memorial Sloan-Kettering Cancer Center New York, New York

Michael D'Angelica, MD

Assistant Professor of Surgery Weill Medical College of Cornell University Assistant Attending Surgeon Memorial Sloan-Kettering Cancer Center New York, New York

Contributors

Eddie K. Abdalla, MD

Assistant Professor of Surgery
Department of Surgical Oncology
The University of Texas M.D. Anderson Cancer Center
Houston, Texas
Portal Vein Embolization: Preoperative Portal Vein
Embolization—A Western Perspective

Ghassan K. Abou-Alfa, MD

Instructor
Weill Medical College of Cornell University
Assistant Attending Physician
Memorial Sloan-Kettering Cancer Center
New York, New York
Chemotherapy of Liver Tumors: Systemic Therapy for
Hepatocellular Carcinoma; Chemotherapy of Liver

Reid B. Adams, MD

Associate Professor of Surgery
University of Virginia School of Medicine
Chief, Hepatobiliary and Pancreatic Surgery
University of Virginia Health System
Charlottesville, Virginia
Intraoperative Ultrasound of the Liver: Techniques for Liver
Resection and Transplantation

Tumors: Systemic Therapy for Metastatic Colorectal Cancer

N. Volkan Adsay, MD

Associate Professor of Pathology
Wayne State University School of Medicine
Pathologist
The Karmanos Cancer Institute
Harper University Hospital and Detroit Medical Center
Detroit, Michigan
Tumors of the Bile Ducts—Pathologic Aspects: Pathology and

Tumors of the Bile Ducts—Pathologic Aspects; Pathology and Classification of Pancreatic and Ampullary Tumors

Jatinder P. Ahluwalia, MD

Associate Professor of Internal Medicine–Gastroenterology Southern Illinois University School of Medicine Springfield, Illinois Management of Ascites in Cirrhosis and Portal Hypertension

Timothy Akhurst, MBBS, MD, FRACP

Assistant Professor of Radiology
Weill Medical College of Cornell University
Assistant Attending
Memorial Sloan-Kettering Cancer Center
New York, New York
The Role of Nuclear Medicine in the Diagnosis and Management
of Hepatobiliary and Pancreatic Diseases

Thomas D. Atwell, MD

Instructor of Radiology
Mayo Clinic College of Medicine
Consultant, Diagnostic Radiology
Mayo Clinic
Rochester, Minnesota
Metastatic Tumors: Hepatic Metastases from Primary
Neuroendocrine Tumors

Mary T. Austin, MD, MPH

Resident Physician Vanderbilt University School of Medicine Resident Physician Vanderbilt University Medical Center Nashville, Tennessee The Mesocaval Shunt: Technique

Claudio Bassi, MD

Associate Professor University of Verona Faculty of Medicine Verona, Italy Definition and Classification of Pancreatitis

Christoph D. Becker, MD

Professor of Radiology
University of Geneva Faculty of Medicine
Head of Abdominal Radiology and Acting Chairman
Department of Diagnostic and Interventional Radiology
Geneva University Hospital
Geneva, Switzerland
Percutaneous Approaches to the Treatment of Gallbladder Disease

Ian J. Beckingham, MD

Section of Surgery University Hospital, Queen's Medical Centre Nottingham, United Kingdom Postcholecystectomy Problems

Jacques Belghiti, MD

Professor and Chairman
Department of Digestive and Transplant Surgery
Hospital Beaujon
Paris, France
Benign Liver Lesions; Liver Resection for Benign Disease
and for Liver and Biliary Tumors (Liver Resection in

Thomas V. Berne, MD

Professor of Surgery
Keck School of Medicine of USC
Chief, Emergency (Non-Trauma) Surgery Service
Los Angeles County–USC Medical Center
Los Angeles, California
Liver, Biliary, and Pancreatic Injury: Liver and Bile
Duct Injury

Anton J. Bilchik, MD, PhD, FACS

Director, Gastrointestinal Surgical Oncology
Director, Gastrointestinal Program
Associate Director, Surgical Oncology
John Wayne Cancer Institute
Santa Monica, California
Ablation of Liver Tumors: Radiofrequency Thermal Ablation
of Liver Tumors

Kenneth F. Binmoeller, MD, FACG

Director Interventional Endoscopy Service California Pacific Medical Center San Francisco, California Interventional Endoscopy: Technical Aspects

Henri Bismuth

Professor and Head Department of Surgery Paul Brousse Hospital Villejuif, France

Liver Transplantation in Patients with Fulminant Hepatitis

Martin J. K. Blomley, MD[†]

Professor of Radiology
Imaging Sciences Department
Imperial College School of Medicine
London, United Kingdom
Ultrasound of the Liver, Biliary Tract, and Pancreas

Leslie H. Blumgart, BDS, MD, DSc (Hon), FACS, FRCS (ENG, EDIN), FRCPS (GLAS)

Enid A. Haupt Chair in Surgery Chief, Hepatobiliary Service Department of Surgery Memorial Sloan–Kettering Cancer Center New York, New York

Historical Perspective; Surgical and Radiologic Anatomy of the Liver, Biliary Tract, and Pancreas; Liver Blood Flow: Physiology, Measurement, and Clinical Relevance; Liver Hyperplasia, Hypertrophy, and Atrophy; Biliary-Enteric Anastomosis; Stones in the Common Bile Duct—Clinical Features and Open Surgical Approaches and Techniques; Biliary Stricture and Fistula: Benign Biliary Strictures; Biliary Stricture and Fistula: Biliary Fistula; Benign Tumors and Pseudotumors of the Biliary Tract; Intrahepatic and Extrahepatic Biliary Cancer; Hemobilia and Bilhemia; Liver Resection for Benign Disease and for Liver and Biliary Tumors; The Technique of Portacaval Shunt

P. C. Bornman, MBChB, MMed(Surg), FCS(SA), FRCS(Ed)

Professor of Surgery
University of Cape Town Health Sciences Faculty
Head and Chief Surgeon
Surgical Gastroenterology Unit
Groote Schuur Hospital
Cape Town, South Africa
Endoscopic Therapy in the Management of Esophageal Varices:
Injection Sclerotherapy and Variceal Ligation

Lynn Brody, MS, MD

Assistant Professor of Radiology Weill Medical College of Cornell University Assistant Clinical Radiologist Memorial Sloan-Kettering Cancer Center New York, New York Percutaneous Biopsy

Christoph E. Broelsch, MD, PhD, FACS Director of General Surgery and Transplantation

University of Duisburg-Essen
Duisburg, Germany
Liver Resection for Benign Disease and for Liver and Biliary
Tumors (Computer-Assisted Operation Planning and Virtual
Liver Resection)

Carlos V. R. Brown, MD

Assistant Professor of Surgery
Keck School of Medicine of USC
Los Angeles County–USC Medical Center
Los Angeles, California
Liver, Biliary, and Pancreatic Injury: Pancreatic Injury

Karen T. Brown, MD

Professor of Radiology Weill Medical College of Cornell University Member Memorial Sloan-Kettering Cancer Center New York, New York

Intrahepatic and Extrahepatic Biliary Cancer (Interventional Radiologic Techniques in Hilar and Intrahepatic Biliary Strictures)

Melissa L. Brown, MS, RD

Clinical Dietitian

University of Illinois at Chicago Medical Center Chicago, Illinois

Preoperative and Postoperative Nutrition in Hepatobiliary Surgery

Jordi Bruix, MD

Associate Professor of Medicine
University of Barcelona School of Medicine
Senior Consultant
Barcelona Clinic Liver Cancer Group
Liver Unit Hospital Clinic
Barcelona, Spain
Hepatocellular Carcinoma; Liver Transplantation for Tumors

Elizabeth M. Brunt, MD

Professor of Pathology

Saint Louis University School of Medicine

St. Louis, Missouri

Cirrhosis and Portal Hypertension: Pathologic Aspects

Markus W. Büchler, MD

Professor and Chairman

Department of Surgery

University of Heidelberg

Heidelberg, Germany

Management of Acute Pancreatitis and Complications;

Pancreaticoduodenectomy, Distal Pancreatectomy, Segmental Pancreatectomy, Total Pancreatectomy, and Transduodenal

Resection of the Papilla of Vater

Andrew K. Burroughs (Hon), ChB, MB, FRCP

Professor of Hepatology

Royal Free and University College Medical School

Consultant Physician and Hepatologist

Royal Free Hospital

London, United Kingdom

Medical Management of Bleeding Varices

Giovanni Butturini, MD, PhD

Consultant, General Surgery

Faculty of Medicine

University of Verona

Verona, Italy

Definition and Classification of Pancreatitis

Iain C. Cameron, MD, FRCS

Honorary Senior Clinical Lecturer

University of Sheffield Medical School

Consultant Hepatobiliary Surgeon

Royal Hallamshire Hospital

Sheffield, United Kingdom

Cholecystolithiasis and Stones in the Common Bile Duct:

Which Approach, When?

Alessio Carloni, MD

Clinic Assistant

Department of Digestive Surgery

University of Paris

Paris, France

Assistant Attending

Department of Digestive Surgery

Hospital Antoine Béclère

Paris, France

David L. Carr-Locke, MB, BCh, DRCOG, FRCP, **FACG**

Associate Professor of Medicine

Harvard Medical School

Director of Endoscopy

Brigham and Women's Hospital

Boston, Massachusetts

Stones in the Bile Duct: Endoscopic and Percutaneous Approaches

Charles Cha, MD, FACS

Assistant Professor

Departments of Gastrointestinal Surgery and Surgical Oncology

Yale University School of Medicine

New Haven, Connecticut

Liver Hyperplasia, Hypertrophy, and Atrophy

William C. Chapman, MD, FACS

Professor and Chief

Section of Transplantation

Department of Surgery

Washington University in St. Louis School of Medicine

St. Louis, Missouri

Orthotopic Liver Transplantation

Jin Wook Chung, MD, PhD

Professor of Radiology

Seoul National University College of Medicine

Seoul National University Hospital

Seoul, Korea

Embolization of Liver Tumors

Dania Cioni, MD

Assistant Professor of Radiology

Department of Oncology, Transplants, and Advanced

Technologies in Medicine

Pisa University School of Medicine

Pisa, Italy

Ablation of Liver Tumors: Percutaneous Methods for Ablation

of Hepatic Neoplasms

Kevin C. Conlon, MD

Professor of Surgery and Head, Department of Surgery

Trinity College School of Medicine

National Children's Hospital Tallaght,

Dublin, Ireland

Intraoperative Diagnosis of Liver, Biliary, and Pancreatic Disease

Mauro M. Correia, MD

Professor of Surgery

University of Rio Grand School of Medicine

Consultant Surgeon

National Institute of Cancer Praça da Cruz Vermelha

Rio de Janeiro, Brazil

Radiotherapy of Liver Tumors: Selective Internal Radiation

Therapy for Liver Tumors

Carlos U. Corvera, MD

Assistant Professor

Department of Surgery, Division of General Surgery

University of California, San Francisco, School of Medicine

Staff Surgeon

Division of General Surgery

San Francisco VA Medical Center

San Francisco, California

Biliary Stricture and Fistula: Biliary Fistula

x CONTRIBUTORS

David O. Cosgrove, MA, MSc, FRCR, FRCP

Emeritus Professor Imaging Sciences Department Imperial College School of Medicine Consultant Radiologist Hammersmith Hospital London, United Kingdom Ultrasound of the Liver, Biliary Tract, and Pancreas

Anne M. Covey, MD

Assistant Professor of Radiology Weill Medical College of Cornell University Assistant Professor of Radiology Memorial Sloan-Kettering Cancer Center New York, New York Percutaneous Biopsy

Weill Medical College of Cornell University

Michael D'Angelica, MD Associate Professor of Surgery

Assistant Attending Surgeon
Memorial Sloan-Kettering Cancer Center
New York, New York
Biliary-Enteric Anastomosis; Tumors of the Gallbladder;
Intrahepatic and Extrahepatic Biliary Cancer; Ablation of
Liver Tumors: Cryotherapy for Liver Tumors; Intra-arterial
Chemotherapy for Liver Tumors; Liver Resection for Benign
Disease and for Liver and Biliary Tumors (Addendum:
Laparoscopic Techniques)

Michael Darcy, MD

Professor of Radiology and Surgery Division of Diagnostic Radiology Chief, Interventional Radiology Section Washington University in St. Louis School of Medicine St. Louis, Missouri

Brian D. Davison, MD, MS

Instructor in Radiology
Harvard Medical School
Chief
Division of Vascular and Interventional Radiology
Children's Hospital Boston
Boston, Massachusetts
Radiologic Hepatobiliary Interventions

Douglas R. DeCorato, MD

Clinical Assistant Professor of Radiology
Weill Medical College of Cornell University
Radiologist
New York Hospital—Cornell Medical Center
New York, New York
Magnetic Resonance Imaging of the Liver, Biliary Tract,
and Pancreas

Ronald P. DeMatteo, MD, FACS

Associate Professor of Surgery
Weill Medical College of Cornell University
Vice Chair
Department of Surgery
Associate Attending Surgeon
Hepatobiliary Service
Memorial Sloan-Kettering Cancer Center
New York, New York
Liver Immunology; Metastatic Tumors: Noncol

Liver Immunology; Metastatic Tumors: Noncolorectal Non-neuroendocrine Metastases; Segment-Oriented Anatomic Liver Resections

Demetrios Demetriades, MD, PhD, FACS

Professor of Surgery Keck School of Medicine of USC Director of Trauma and Surgical Critical Care Los Angeles County–USC Medical Center Los Angeles, California

Liver, Biliary, and Pancreatic Injury: Liver and Bile Duct Injury; Liver, Biliary, and Pancreatic Injury: Pancreatic Injury

Achilles A. Demetriou, MD, PhD

Executive Vice President and Chief Operating Officer University Hospitals Health System Cleveland, Ohio Support of the Failing Liver

Niraj M. Desai, MD

Assistant Professor of Surgery
Washington University in St. Louis
School of Medicine
Director
Pancreas Transplant Program
Barnes-Jewish Hospital
St. Louis, Missouri
Whole Organ Pancreas and Pancreatic Islet Transplantation

Kiran K. Dhanireddy, MD

Senior Resident
Department of Surgery
Georgetown University Hospital
Washington, DC
Research Fellow, Transplantation Branch
National Institute of Diabetes and Digestive and
Kidney Diseases
National Institutes of Health
Bethesda, Maryland
Liver and Pancreatic Transplantation Immunobiology

Thomas Diamond, MD, FRCS

Consultant in Hepatobiliary and Pancreatic Surgery Mater Hospital The Queen's University of Belfast Belfast, Northern Ireland Aneurysm and Arteriovenous Fistula of the Liver and Pancreatic Vasculature

Fabio F. Di Mola, MD

Department of Surgery University of Heidelberg School of Medicine Heidelberg, Germany Specialist in General Surgery Department of Abdominal Surgery IRCCS Casa Sollievo Della Sofferenza

Foggia, Italy

Management of Chronic Pancreatitis: Conservative, Endoscopic, and Surgical

Pierluigi Di Sebastiano, MD

Privat-Docent of Surgery University of Heidelberg School of Medicine Heidelberg, Germany Head Department of Visceral Surgery IRCCS Casa Sollievo della Sofferenza Foggia, Italy

Management of Chronic Pancreatitis: Conservative, Endoscopic, and Surgical

Majella Doyle, MD

Clinical Fellow

Department of Surgery-Transplant Surgery, Washington University in St. Louis School of Medicine, St. Louis, Missouri Intraoperative Diagnosis of Liver, Biliary, and Pancreatic Disease

Robert J. Eckersley, PhD

Research Associate Imaging Sciences Department Imperial College School of Medicine Hammersmith Hospital London, United Kingdom Ultrasound of the Liver, Biliary Tract, and Pancreas

N. Joseph Espat, MD, MS

Associate Professor Department of Surgery-Hepatobiliary Surgery University of Illinois at Chicago Medical Center Chicago, Illinois Bile Secretion

Sheung-Tat Fan, MS, MD, PhD

Chair Professor The University of Hong Kong Chair Professor Queen Mary Hospital Hong Kong, China Recurrent Pyogenic Cholangitis; Liver Resection in Cirrhosis of the Liver

Olivier Farges, PhD, MD

Professor of Surgery Faculty of Medicine University of Paris VII Department of Surgery Hospital Beaujon Paris, France Nonparasitic Cystic Diseases of the Liver and Intrahepatic Carlos Fernández-Del Castillo, MD

Associate Professor of Surgery Harvard Medical School Visiting Surgeon Massachusetts General Hospital Boston, Massachusetts

Periampullary and Pancreatic Tumors: Cystic Neoplasms of the Pancreas

Mary Fischer, MD

Associate Professor of Clinical Anesthesiology Weill Medical College of Cornell University Clinical Member Memorial Sloan-Kettering Cancer Center Attending Anesthesiologist Memorial Hospital for Cancer and Allied Diseases New York, New York Anesthesia and Postoperative Intensive Care

Yuman Fong, MD

Professor of Surgery Weill Medical College of Cornell University Chief Gastric and Mixed Tumor Service Murray F. Brennan Chair in Surgery Memorial Sloan-Kettering Cancer Center New York, New York Preoperative and Postoperative Nutrition in Hepatobiliary Surgery; Metastatic Tumors: Surgical Treatment of Hepatic Metastases from Colorectal Cancer

Helmut Friess, MD

University of Heidelberg School of Medicine Heidelberg, Germany Management of Chronic Pancreatitis: Conservative, Endoscopic, and Surgical; Pancreaticoduodenectomy, Distal Pancreatectomy, Segmental Pancreatectomy, Total Pancreatectomy, and Transduodenal Resection of the Papilla of Vater

Josep Fuster

Associate Professor University of Barcelona School of Medicine Senior Consultant and Professor of Surgery Barcelona Clinic Liver Cancer Group Liver Unit Hospital Clinic Barcelona, Spain Liver Transplantation for Tumors

Professor of Surgery and Vice-Chairman

Department of Visceral Surgery

Nisha Garg, PhD

Associate Professor Department of Microbiology and Immunology University of Texas Medical Branch Galveston, Texas Amebiasis and Other Parasitic Infections

Biliary Tree。 此为民读,需要完整PDF请访问: www.ertongbook.com

Hans Gerdes, MD

Professor of Clinical Medicine Weill Medical College of Cornell University Attending Physician and Director GI Endoscopy Unit Memorial Hospital for Cancer and Allied Diseases New York, New York Endoscopic Ultrasound: Endoscopic Ultrasound of the Pancreas

Philippe Gertsch, MD, FRCS, ICSHK, IHKAM(Surg)

Professor of Surgery and Chief Department of Surgery Oncology Institute of Southern Switzerland Bellinzona, Switzerland The Technique of Cholecystectomy

George Getradjman, MD

Associate Professor of Clinical Radiology Weill Medical College of Cornell University Clinical Director Interventional Radiology Section Department of Radiology Memorial Sloan-Kettering Cancer Center New York, New York Direct Cholangiography

George K. Gittes, MD

Benjamin R. Fisher Chair of Pediatric Surgery and Surgeon-in-Chief Children's Hospital of Pittsburgh Pittsburgh, Pennsylvania Biliary Atresia

Sean C. Glasgow, MD

Resident Department of Surgery Washington University in St. Louis School of Medicine Barnes-Jewish Hospital St. Louis, Missouri Orthotopic Liver Transplantation

Gabriel E. Gondolesi, MD

Adjunct Associate Director Liver Unit Chief Nutrition Rehabilitation Favaloro Foundation Buenos Aires, Argentina Living Donor Liver Transplantation

John Goulis, MD

Lecturer in Medicine Thessaloniki University Faculty of Medicine Thessaloniki, Greece Medical Management of Bleeding Varices

Dirk J. Gouma, MD

Professor of Surgery Academic Medical Center University of Amsterdam Amsterdam, The Netherlands Palliation of Pancreatic and Periampullary Tumors

Neil A. Halpern, MD, FACP, FCCP, FCCM

Professor of Clinical Medicine and Professor of Medicine in Clinical Anesthesiology Weill Medical College of Cornell University Chief of Critical Care Medicine Service Attending Critical Care Medicine Physician and Medical Director, Respiratory Therapy Department of Anesthesiology and Critical Care Medicine Memorial Sloan-Kettering Cancer Center New York, New York Perioperative Critical Care in Hepatobiliary Surgery

Lucy E. Hann, MD

Associate Professor of Radiology Weill Medical College of Cornell University Associate Attending Radiologist Memorial Sloan-Kettering Cancer Center New York, New York Surgical and Radiologic Anatomy of the Liver, Biliary Tract, and Pancreas

Werner Hartwig, MD

Department of General and Visceral Surgery Ruprecht–Karls University University of Heidelberg Heidelberg, Germany Management of Acute Pancreatitis and Complications

Nancy Heffernan, RN, BSN

Clinical Research Nurse Hepatobiliary Service Chief of General Surgery Memorial Sloan-Kettering Cancer Center New York, New York Quality of Life and Hepatobiliary Tumors

William Scott Helton, MD

University of Illinois at Chicago Medical Center Chicago, Illinois Preoperative and Postoperative Nutrition in Hepatobiliary Surgery

Alan W. Hemming, MD, MSc

Professor of Surgery University of Florida College of Medicine Director of Hepatobiliary Surgery Shands Hospital at the University of Florida Gainesville, Florida Ex Vivo and In Situ Hypothermic Hepatic Resection

J. Michael Henderson, MD, FRCS

Professor of Surgery

Cleveland Clinic Lerner College of Medicine

Vice-Chairman

Division of Surgery

Cleveland Clinic Foundation

Cleveland, Ohio

The Place of Transjugular Intrahepatic Portosystemic Shunting; Distal Splenorenal Shunt

Choon-Kiat Ho, MD

Consultant Surgeon

Department of General Surgery

Tan Tock Seng Hospital

Singapore

Pancreaticoduodenectomy, Distal Pancreatectomy, Segmental Pancreatectomy, Total Pancreatectomy, and Transduodenal Resection of the Papilla of Vater

Philippe Ichai, MD

Paul Brousse Hospital

Villejuif, France

Liver Transplantation in Patients with Fulminant Hepatitis

Hiroshi Imamura, MD, PhD

Lecturer

Division of Hepato-Pancreatic-Biliary Surgery

Department of Surgery

Tokyo University Graduate School of Medicine

Tokyo, Japan

Portal Vein Embolization: Place of Portal Vein Embolization

C. W. Imrie, BSc, MBChB, FRCS

Professor of Upper Gastrointestinal Surgery and Consultant

Lister Department of Surgery

University of Glasgow

Consultant Surgeon

Royal Infirmary

Glasgow, United Kingdom

Etiology, Pathogenesis, and Diagnostic Assessment of Acute Pancreatitis

James Jackson, MBBS, MRCP, FRCR

Honorary Senior Lecturer Imperial College School of Medicine Consultant Radiologist Hammersmith Hospital London, United Kingdom

Angiography

Piotr K. Janicki, MD, PhD

Professor of Anesthesiology

Vice-Chair of Research

Department of Anesthesiology

Penn State College of Medicine

Director of Solid Organ Transplantation Anesthesia

Milton S. Hershey Medical Center

Hershey, Pennsylvania

Liver Transplantation: Anesthesia, Perioperative Management, and Postoperative Intensive Care

William R. Jarnagin, MD, FACS

Associate Professor of Surgery

Weill Medical College of Cornell University

Assistant Attending Surgeon

Memorial Sloan-Kettering Cancer Center

New York, New York

Intraoperative Diagnosis of Liver, Biliary, and Pancreatic Disease; Biliary-Enteric Anastomosis; Biliary Stricture and Fistula: Benign Biliary Strictures; Biliary Stricture and Fistula: Biliary Fistula; Benign Tumors and Pseudotumors of the Biliary Tract; Tumors of the Gallbladder; Intrahepatic and Extrahepatic Biliary Cancer

Roger L. Jenkins, MD

Professor of Surgery

Tufts Medical School

Boston

Chief of Surgery

Division of Hepatobiliary Surgery and Liver Transplantation

Lahey Clinic Medical Center

Burlington, Massachusetts

Early and Late Complications of Liver Transplantation

Stefan Kahl, MD

Associate Professor

Department of Gastroenterology

Otto Von Guericke Medical School

University of Magdeburg

Magdeburg, Germany

Etiology, Pathogenesis, and Diagnosis of Chronic Pancreatitis

Junichi Kamiya, MD

Chief

General Surgery

Aichiken Koseiren Kamo Hospital

Toyota, Japan

Intrahepatic Stones

Cuneyt Kayaalp, MD

Associate Professor of Surgery

Gastrointestinal Surgery Department

Turkey Yuksek Ihtisas Hospital

Ankara, Turkey

Hydatid Cyst of the Liver

Colleen R. Kelly, MD

Fellow in Gastroenterology

Brown Medical School and Rhode Island Hospital

Providence, Rhode Island

Molecular Biology of Liver Carcinogenesis and Hepatitis

Nancy E. Kemeny, MD

Professor of Medicine

Weill Medical College of Cornell University

Attending Physician

Solid Tumor-GI Division

Memorial Sloan-Kettering Cancer Center

New York, New York

Intra-arterial Chemotherapy for Liver Tumors

Allan D. Kirk, MD, PhD

Associate Professor of Surgery

Uniformed Services, University of Health Sciences

F. Edward Hébert School of Medicine

Senior Investigator and Chief

Transplantation Branch

National Institute of Diabetes and Digestive and Kidney

National Institutes of Health

Bethesda, Maryland

Liver and Pancreatic Transplantation Immunobiology

Yuichi Kitagawa, MD

Staff Specialist for Surgery National Center for Geriatrics and Gerontology Obu, Japan

Intrahepatic Stones

Jörg Kleeff, MD

Consultant Surgeon

Department of Surgery

University of Heidelberg School of Medicine

Heidelberg, Germany

Pancreaticoduodenectomy, Distal Pancreatectomy, Segmental Pancreatectomy, Total Pancreatectomy, and Transduodenal Resection of the Papilla of Vater

David S. Klimstra, MD

Professor of Pathology and Laboratory Medicine Weill Medical College of Cornell University

Attending Pathologist and Chief

Surgical Pathology

Memorial Sloan-Kettering Cancer Center

New York, New York

Tumors of the Bile Ducts—Pathologic Aspects; Pathology and Classification of Pancreatic and Ampullary Tumors

Stuart J. Knechtle, MD

Professor of Surgery and Ray D. Owen Professor of Transplantation

University of Wisconsin School of Medicine and Public Health Madison, Wisconsin

The Place of Portosystemic Shunting

Hiroyuki Kobayashi, MD, PhD

Associate Professor

Department of Pediatric Surgery

Juntendo University School of Medicine

Tokyo, Japan

Biliary Atresia

Anil Kotru, MD, MS, MRCS(UK), FRCS(UK)

Department of Organ Transplantation

Washington University in St. Louis School of Medicine

St. Louis, Missouri

Orthotopic Liver Transplantation; Liver Transplantation in Children and Segmental Transplantation

Jake E. J. Krige, MBChB, FACS, FCS(SA), FRCS(Ed)

Associate Professor of Surgery

University of Cape Town Health Sciences Faculty

Head and Prinicipal Surgeon HPB Surgery Unit

Groote Schuur Hospital

Cape Town, South Africa

Endoscopic Therapy in the Management of Esophageal Varices: Injection Sclerotherapy and Variceal Ligation

Yonson Ku, MD, PhD

Professor and Chairman

Department of Liver Surgery and Transplantation

Kobe University Graduate School of Medical Sciences

Kobe, Japan

Isolated Hepatic Perfusion for Extensive Liver Cancers

Robert C. Kurtz, MD

Professor of Clinical Medicine

Weill Medical College of Cornell University

Chief

Gastroenterology and Nutrition Service

Department of Medicine

Memorial Sloan-Kettering Cancer Center

New York, New York

Direct Cholangiography

Douglas R. LaBrecque

Professor of Internal Medicine

University of Iowa Roy J. and Lucille A. Carver College

of Medicine

Attending Surgeon

Department of Internal Medicine

Director of Liver Service

Division of Gastroenterology/Hepatology

University of Iowa Hospital and Clinics

Iowa City, Iowa

Management of Ascites in Cirrhosis and Portal Hypertension

Hauke Lang, MD

Professor of Surgery

University of Essen Medical School

Clinic for General, Gastrointestinal, and Transplantation

University of Essen Medical Center

Essen, Germany

Liver Resection for Benign Disease and for Liver and Biliary Tumors (Computer-Assisted Operation Planning and Virtual

Liver Resection)

Michael P. La Quaglia, MD

Professor of Surgery

Weill Medical College of Cornell University

Cheif, Pediatric Surgery

Memorial Sloan-Kettering Cancer Center

New York, New York

Hepatic Tumors in Childhood

Nicholas F. LaRusso, MD

Professor of Medicine and Professor of Biochemistry and Molecular Biology Mayo Clinic College of Medicine Distinguished Investigator Mayo Foundation Rochester, Minnesota Primary Sclerosing Cholangitis

K. N. Lazaridis, MD

Assistant Professor of Medicine Mayo Clinic College of Medicine Rochester, Minnesota Primary Sclerosing Cholangitis

L. S. Lee, MD

Instructor in Medicine
Harvard Medical School
Associate Physician and Director, Women's GI Health
Brigham and Women's Hospital
Boston, Massachusetts
Stones in the Bile Duct: Endoscopic and Percutaneous Approaches

Riccardo Lencioni, MD

Associate Professor of Radiology Department of Oncology, Transplants, and Advanced Technologies in Medicine Pisa University School of Medicine Pisa, Italy

Ablation of Liver Tumors: Percutaneous Methods for Ablation of Hepatic Neoplasms

Kui Hin Liau, MBBS, MMed(Surg), FRCS(Edin), FICS, FAMS(Surg), IHPBA, APHPBA

Clinical Lecturer

The National University of Singapore, Yong Loo Lin School of Medicine

Consultant Surgeon and Chief of Hepatobiliary and Pancreatic Surgery

Department of Surgery, Digestive Disease Centre Tan Tock Seng Medical Centre and Hospital Singapore

Segment-Oriented Anatomic Liver Resections

Charles J. Lightdale, MD

Professor of Clinical Medicine
Division of Digestive and Liver Diseases
Columbia University College of Physicians and Surgeons
Attending Physician
Department of Medicine New York–Presbyterian
Hospital/Columbia University Medical Center
New York, New York
Endoscopic Ultrasound: Endoscopic Ultrasound of the Biliary Tract

Keith D. Lillemoe, MD, FACS

Professor of Surgery
Indiana University School of Medicine
Attending Physician
University Hospital
Indianapolis, Indiana
Infections in Hepatic, Biliary, and Pancreatic Surgery

James Lin, MD

Resident
General Surgery
Mount Sinai Medical Center
New York, New York
Findocrine Tumors of the Payered

Endocrine Tumors of the Pancreas: Clinical Picture, Diagnosis, and Therapy

David C. Linehan, MD

Associate Professor of Surgery
Washington University in St. Louis School of Medicine
Attending Surgeon
Barnes-Jewish Hospital
St. Louis, Missouri
Benign Tumors and Pseudotumors of the Biliary Tract

Pamela A. Lipsett, MD

Program Director, General Surgery
Professor of Surgery, Anesthesia, Critical Care and Nursing
Johns Hopkins University School of Medicine
Co-Director, Surgical Intensive Care Units
Johns Hopkins Hospital
Baltimore, Maryland
Cholangitis

Josep M. Llovett, MD

Associate Professor Mount Sinai School of Medicine New York, New York ICREA Senior Researcher Barcelona Clinic Liver Cancer Group Liver Unit Hospital Clinic Barcelona, Spain Hepatocellular Carcinoma

Jeffrey A. Lowell, MD

Professor of Surgery and Pediatrics
Washington University in St. Louis School of Medicine
Chief
Pediatric Transplant Surgery
St. Louis Children's Hospital
Associate Director, Transplant Surgery
Barnes-Jewish Hospital
St. Louis, Missouri
Liver Transplantation in Children and Segmental
Transplantation

David C. Madoff, MD

Assistant Professor
Department of Diagnostic Imaging
Section of Interventional Radiology
The University of Texas M.D. Anderson Cancer
Houston, Texas
Portal Vein Embolization: Preoperative Portal Vein

Embolization—A Western Perspective

Anirban Maitra, MBBS

Associate Professor of Pathology and Oncology The Sol Goldman Pancreatic Cancer Research Center Johns Hopkins University School of Medicine Pathologist Johns Hopkins Hospital

Baltimore, Maryland

Genetics and Molecular Biology of Pancreatic and Biliary Cancers

Ali W. Majeed, MD, FRCS

Honorary Professor of Surgery, Sheffield Hallam University Consultant Surgeon Royal Hallamshire Hospital Sheffield, United Kingdom

Clinical Investigation of Hepatopancreatobiliary Disease; Cholecystolithiasis and Stones in the Common Bile Duct: Which Approach, When?

Masatoshi Makuuchi, MD, PhD

Professor and Chairman

Department of Surgery

Hepato-Biliary-Pancreatic Surgery Division and Artificial Organ and Transplantation Division

University of Tokyo Graduate School of Medicine Tokyo, Japan

Portal Vein Embolization: Place of Portal Vein Embolization

Peter Malfertheiner, MD

Professor of Medicine and Director

Department of Gastroenterology, Hepatology, and Infectious

Otto von Guericke Medical School

University of Magdeburg

Magdeburg, Germany

Etiology, Pathogenesis, and Diagnosis of Chronic Pancreatitis

Amadeo Marcos, MD

Professor of Surgery University of Pittsburgh Pittsburgh Chief Division of Transplant Surgery University of Pittsburgh Medical Center Pittsburgh, Pennsylvania Techniques of Liver Replacement

James F. Markmann, MD, PhD

Associate Professor of Surgery University of Pennsylvania School of Medicine Director Pancreas Transplant Program Hospital of the University of Pennsylvania Philadelphia, Pennsylvania Whole Organ Pancreas and Pancreatic Islet Transplantation

Robert T. Mathie, BSc, PhD

Senior Lecturer in Surgical Physiology Division of Surgery, Anaesthetics, and Intensive Care Imperial College School of Medicine Hammersmith Hospital London, United Kingdom Liver Blood Flow: Physiology, Measurement, and Clinical

Priscilla F. McAuliffe, MD, PhD

Resident General Surgery University of Florida College of Medicine Shands Hospital Gainesville, Florida Endotoxin and Cytokines in Liver and Biliary Tract Disease

Colin J. McKay, MD, FRCS

Senior Lecturer and Consultant Surgeon Lister Department of Surgery Royal Infirmary Glasgow, United Kingdom Etiology, Pathogenesis, and Diagnostic Assessment of Acute Pancreatitis

Jose A. Melendez, MD

Associate Chair of Anesthesiology and Associate Professor of Anesthesiology University of Colorado School of Medicine Senior Medical Director of Perioperative Services University of Colorado Hospital Denver, Colorado Anesthesia and Postoperative Intensive Care

Lyle L. Moldawer, PhD

Professor and Vice Chairman for Research Department of Surgery University of Florida College of Medicine Gainesville, Florida Endotoxin and Cytokines in Liver and Biliary Tract Disease

Damian J. Mole, BMedSc, MBChB, MRCS

Research Fellow and Specialist Registrar in General Surgery Department of Surgery The Queen's University of Belfast Belfast, Northern Ireland Aneurysm and Arteriovenous Fistula of the Liver and Pancreatic Vasculature

Klaus Mönkemüller, MD

Associate Professor Otto von Guericke Medical School University of Magdeburg Director, Molecular Endoscopy Magdeburg University Hospital Magdeburg, Germany Etiology, Pathogenesis, and Diagnosis of Chronic Pancreatitis

Masato Nagino, MD

Associate Professor

Division of Surgical Oncology, Department of Surgery Nagoya University Graduate School of Medicine

Nagoya, Japan

Intrahepatic and Extrahepatic Biliary Cancer (Perihilar Cholangiocarcinoma with Emphasis on Presurgical Management)

Alexander Nagle, MD

Associate Professor of Surgery
Division of Gastrointestinal/Endocrine Surgery
Northwestern University Feinberg School of Medicine
Chicago, Illinois
Laparoscopic Cholecystectomy and Choledocholithotomy

David M. Nagorney, MD

Professor of Surgery

Mayo Clinic and College of Medicine

Rochester, Minnesota

Bile Duct Cysts in Adults; Surgical Management of Cystic Disease of the Liver; Metastatic Tumors: Hepatic Metastases from Primary Neuroendocrine Tumors

Eric K. Nakakura, MD, PhD

Assistant Professor of Surgery
University of California, San Francisco, School of Medicine
Staff Surgeon
UCSF Comprehensive Cancer Center
San Francisco, California
Periampullary and Pancreatic Tumors: Periampullary and
Pancreatic Cancer

Attila Nakeeb, MD

Associate Professor of Surgery
Indiana University School of Medicine
Attending Surgeon
Indiana University Hospital
Indianapolis, Indiana
Biliary Tract Pathophysiology: Pathophysiology of
Biliary Tract Obstruction

James Neuberger, DM, FRCP

Honorary Professor of Medicine University of Birmingham School of Medicine Consultant Physician, Liver Unit Queen Elizabeth Hospital Birmingham, United Kingdom Liver Transplantation: Indications

Yuji Nimura, MD

Professor and Chairman

Division of Surgical Oncology, Department of Surgery Nagoya University Graduate School of Medicine

Nagoya, Japan

Intrahepatic Stones; Intrahepatic and Extrahepatic Biliary Cancer (Perihilar Cholangiocarcinoma with Emphasis on Presurgical Management); Liver Resection for Benign Disease and for Liver and Biliary Tumors (Extended Resection for Biliary Tumors—An Alternative Approach)

Quentin M. Nunes

Surgical Registrar University Hospital Queens Medical Centre Nottingham, United Kingdom Postcholecystectomy Problems

John G. O'Grady, MD, FRCPI

Consultant Hepatologist Institute of Liver Studies King's College Hospital London, United Kingdom Management of Liver Failure

Risteard O'Laoide, MD

Department of Radiology St. Vincent's University Hospital Dublin, Ireland Radiologic Hepatobiliary Interventions

Kim M. Olthoff, MD

Associate Professor of Surgery
University of Pennsylvania School of Medicine
Director
Liver Transplant Program
Hospital of the University of Pennsylvania
Philadelphia, Pennsylvania
Liver Regeneration

Evan S. Ong, MD, MS

Chief Surgical Resident University of Illinois at Chicago Medical Center Chicago, Illinois Bile Secretion

Marshall J. Orloff, MS, MD

Distinguished Professor of Surgery
University of California, San Diego, School of Medicine
La Jolla
Staff Surgeon
UCSD Medical Center
San Diego, California
Budd-Chiari Syndrome and Veno-occlusive Disease

Mark S. Orloff, MD

Professor of Surgery
University of Rochester School of Medicine
Staff Physician
Division of Organ Transplantation
University of Rochester Medical Center
Rochester, New York
Budd-Chiari Syndrome and Veno-occlusive Disease

Susan L. Orloff, MD

Professor of Surgery and Molecular Microbiology and Immunology Division of Liver and Pancreas Transplantation Oregon Health & Science University School of Medicine

Portland, Oregon Budd-Chiari Syndrome and Veno-occlusive Disease