

SOAP 2021

Annual Meeting

Building & Moving
Bridges & Forward

A Virtual Event

May 13-16

Program Guide



American Society of
Anesthesiologists™

SOAP 
Society for Obstetric
Anesthesia and Perinatology

Jointly provided by the American
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and the Society for Obstetric
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#SOAPAM2021

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SOAP 53rd Virtual Annual Meeting

Building Bridges & Moving Forward

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Additional educational Session Information and Abstracts can be found in the Meeting Syllabus. Visit **www.soap.org** to download.

Welcome!

On behalf of the SOAP Board of Directors and the 2020-2021 Annual Meeting and Live Events Committee, we are delighted to welcome you to the 2021 SOAP 53rd Virtual Annual Meeting.

The meeting theme of “**Building Bridges and Moving Forward**” could not be more appropriate for the times and our profession. As we look towards the future, we strive to find use cutting edge research, guidelines and the collective expertise of our specialty to provide our patients the highest level of care.

The virtual format has provided an opportunity for learner flexibility by bringing you education on your timeline. All the lectures presented during the 2021 meeting will be available on the virtual platform for 30 days to attendees.

We start our Thursday session with the much beloved “Best Case Report Session” lead by Dr. Klaus Kjaer. Join us to discuss some of this year’s most challenging clinical cases and hear discussion by our panelists on how to approach such patients. Next we move to the “**What’s New in Obstetrics?**” lecture given by invited lecturer Dr. Luis Pacheco, MD, from the Society of Maternal Fetal Medicine to hear about some of new concepts in the care of high risk parturients. Following these sessions, we will begin our **Clinical Track** which will be featured both Thursday and Friday night during the meeting. These sessions are 45 min clinical updates on a variety of topics that are important to the anesthesiologist providing care for OB patients. Some of the important topics covered include reviews of ERAC protocols, COVID and Sepsis in the Parturient, Non-obstetric surgery and a Patient Safety MOCA session on Airway Management in Pregnancy.

Friday Night our fellows will kick off the activities presenting some of their most challenging patient scenarios in the Fellow Case report session. Wondering where you will find the research posters? Don’t worry, a breadth of scientific research will be presented in moderated breakout rooms. We are also thrilled to present

a session entitled “Patient with Placenta Accreta Spectrum Disorder: Where do you Deliver and How do you Do It?” by Dr. Michaela Farber and Dr. Carolyn Weiniger. Finally, we will conclude the Friday session with the remainder of our clinical track lectures featuring important topics like obesity in the parturient, a lively panel on obstetric emergencies where we will look at real world considerations with time is of the essence, and state of the art labor analgesia practices.

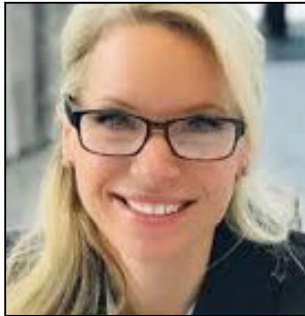
Saturday and Sunday feature some of our most anticipated lectures where Dr. Grace Lim will present the annual **Gerard W. Ostheimer Lecture – a review of the most important literature for the obstetric anesthesiologist in 2020**. Saturday will also feature the trainee **Gertie Marx Research Competition** and the **Best Paper Competitions**, where the most highly rated scientific abstracts are presented and the researchers vie for the title of Gertie Marx champion or Best Paper of the annual meeting. We are thrilled that Dr. May Pian-Smith was selected to present the **Fred Hehre Lecture** which recognizes outstanding members of the obstetric anesthesiology field and their reflections on practice and life.

Knowing that schedules are ever-changing, over 100 case reports will also be available in a pre-recorded on-demand format.

Just because we are virtual does not mean that we have to miss out on socializing! Be sure to join us on Saturday, May 15 for the Charcuterie Class and Reception, where you can learn how to prepare a charcuterie board for your next get-together. Link up with friends across the country and watch the event or compete with each other at home to see who can design the best plate.

If you are a Fellow, the Fellows Reception on Saturday, May 15 is where you can meet and get to know your fellow colleagues from around the world along with program directors and SOAP board of directors. Join us in this Zoom breakout room format with a favorite screen shot behind you (pets, travel pictures, hobbies, favorite entertainment). We will also close out the 2021 Annual Meeting with a Sunday, May 16 Closing Reception where we will announce the winners of the Gertie Marx Research Competition, Best Paper Competition and other awards.

Sincerely,
Heather C. Nixon, MD
Annual Meeting and Live Events Committee, Chair



On behalf of the SOAP Board of Directors and the 2021 Annual Meeting & Live Events Committee, we are delighted to welcome you to the Society for Obstetric Anesthesia and Perinatology (SOAP) virtual 53rd Annual Meeting, May 13-16, 2021.



Educational Program

This meeting is dedicated to Building Bridges and Moving Forward, acknowledging the challenges we have faced as a medical profession and as a global community, while continuing to provide the highest level of care for our patients.

Heather C. Nixon, M.D.

Annual Meeting /Live Events Chair

Ruth Landau, M.D.

SOAP President

Thank You Planning Committees

ANNUAL MEETING / LIVE EVENTS COMMITTEE

Heather C. Nixon, M.D.

Chair, Annual Meeting/Live Events Committee

University of Illinois Hospital and Health Sciences System

Department of Anesthesiology

Chicago, IL

Grace Lim, M.D. M.S.

Vice Chair, Annual Meeting/Live Events Committee

Magee-Women's Hospital of UPMC

Pittsburgh, PA

Rebecca D. Minehart, M.D., MSHPEd

Chair, Curriculum Subcommittee

Massachusetts General Hosp./ Harvard Medical School

Anesthesia Critical Care & Pain Medicine

Boston, MA

Thomas T. Klumpner, M.D.

Chair, Technology Subcommittee

University of Michigan Health System

Ann Arbor, MI

RESEARCH COMMITTEE

Philip Hess, M.D.

Chair, Research Committee

Beth Israel Deaconess Medical Center

Dept. of Anesthesiology

Boston, MA

Brian T. Bateman, M.D., M.Sc.

Vice Chair, Research Committee

Brigham and Women's Hospital

Concord, MA

Cynthia A. Wong, M.D.

University of Iowa

Iowa City, IA

Melissa E. Bauer, D.O.

University of Michigan Health System

Durham, NC

Pam Flood, M.D.

Stanford University

Stanford, CA

Faculty

Gillian Abir, MBChB, FCARCSI, FRCA
Department of Anesthesiology,
Perioperative and Pain Medicine
Stanford University School of Medicine
Stanford, California

Mohannad Abushora, MBBS
University of Florida Health-
Jacksonville
Jacksonville, Florida

Willie Agee, MD, PhD
Vanderbilt University Medical Center
Goodlettsville, Tennessee

**Megha Agrawal, MBBS, DA, DNB
Anaesthesiology**
Sir Ganga Ram Hospital, New Delhi,
India
Dwarka, Delhi

Tammar Al-Ani, MBChB FRCA EDRA
NHS Greater Glasgow and Clyde
Glasgow, Scotland

Miriam Alghothani
The Ohio State University
Columbus, Ohio

Yousif Ali, MB BCh BSc FRCA
BC Women's Hospital
Vancouver, British Columbia, Canada

Kazuo Ando, MD, PhD
Stanford University School of Medicine
Stanford, California

Ioannis Angelidis, MD, MSPH
Northwestern University, Feinberg
School of Medicine
Chicago, Illinois

Jessica Ansari, MD
Stanford University School of Medicine
Stanford, California

Mariam Ashraf, MD
New York Presbyterian Hospital,
Columbia University Campus
New York, New York

Mohamad Ayoub, MD
Cleveland Clinic Foundation
Mayfield Heights, Ohio

Kevin Barkley, MD
University of Arkansas for Medical
Sciences
Little Rock, Arkansas

Sarvesh Basavarajaiah, MBBS MD
Adichunchanagiri Institute of Medical
Sciences, BG Nagara, Mandya,
Karnataka
Mysore, Karnataka, India

Mariam Batakji, MD
Medical College of Wisconsin
Wauwatosa, Wisconsin

Karishma Batra, MD
VMMC & Safdarjung Hospital
New Delhi, India

Jeanette Bauchat, MD
Vanderbilt University Medical Center
Nashville, TN

Melissa E. Bauer, DO
Associate Professor of Anesthesiology
Duke University School of Medicine

Ali Bazzi, DO
Rush University Medical Center
Chicago, Illinois

Morganne Beard
University of Illinois at Chicago
Chicago, Illinois

Sarah Bell, BMBS FRCA
Cardiff and Vale UHB
Cardiff, Wales

Din Ben Hayoun, Med Student
TelAviv University Medical School
Yavne, HaMerkaz, Israel

Ahmad Ben Tareef, FCAI
Department of Anesthesia and Pain
Management
Mount Sinai Hospital
University of Toronto
Toronto, Canada

David Bennett, MD
UH Hospitals
University Heights, Ohio

Amnon Berger, MD, PhD
Beth Israel Deaconess Medical Center
Boston, Massachusetts

Michael Beshara, MD
Augusta University
Augusta, Georgia

Adithya Bhat, MD
Washington University in St. Louis
School of Medicine
Richmond Heights, Missouri

Cyrus Bhiladvala, BSc
BC Women's Hospital
Vancouver, British Columbia, Canada

Callan Bialorucki, MD
Anesthesiology
Columbus, Ohio

Yair Binyamin, M.D
Department of Anesthesiology
Soroka University Medical Center and
the Faculty of Health Sciences
Ben-Gurion University of the Negev
Beer-Sheva, Israel

Lauren Blake, MD
University of North Carolina at Chapel
Hill
Chapel Hill, North Carolina

Taylor Blalack, DO
Geisinger
Danville, Pennsylvania

Yveline Blot, BS
CUNY School of Medicine
New York, New York

Sara Boldt, DO
Rush University Medical Center
Chicago, Illinois

Laurent A. Bollag, MD
University of Washington
Seattle, WA

Maria Borrelli, D.O.
Beth Israel Deaconess Medical Center
Brookline, Massachusetts

Kaitlyn Brennan, DO MPH
Vanderbilt University Medical Center
Nashville, Tennessee

Kathleen Brookfield, MD, PhD, MPH
Oregon Health & Science University
Portland, Oregon

Alexander Butwick, MD
Stanford University Medical Center
Stanford, CA

Sabrina Burn, MD
University of Minnesota
Minneapolis, Minnesota

Bryna Capshew, MD
University of North Carolina
Chapel Hill, North Carolina

Ricardo Vieira Carlos, MD
Santa Casa de Misericórdia de São Paulo
São Paulo, Brazil

Louise Carlson-Hedges, MBBCh FRCA
Nottingham University Hospitals NHS Trust
Nottingham, England

Seung Choi, MD
University of Maryland School of Medicine
Baltimore, Maryland

Dhruv Choudhry, MD
Ochsner Health System
New Orleans, Louisiana

Annie Chow, MD, MC, USA
Department of Anesthesiology
San Antonio Uniformed Services Health Education Consortium
San Antonio, Texas

Arthur Chyan, DO
Brigham and Women's Hospital
Boston, Massachusetts

Erin Ciampa, MD, PhD
Beth Israel Deaconess Medical Center
Boston, Massachusetts

Randall M. Clark, M.D., FASA
President Elect, American Society of Anesthesiologists
Professor of Anesthesiology,
University of Colorado School of Medicine
Pediatric Cardiac Anesthesiologist,
Children's Hospital Colorado
Aurora, Colorado

Johanna Cobb, MD
Brigham and Women's Hospital
Scarborough, Maine

Jeremy Collins, MD
Emory University Hospital
Atlanta, GA

Collin Conrad
VCU Health System
Richmond, Virginia

Meghan Cook, MD
The Ohio State Wexner Medical Center
Westerville, Ohio

Christopher Cosden, MD
UCSF Medical Center
San Francisco, California

Candace Curtis, MD
Ochsner Clinic Foundation
Metairie, Louisiana

Veronica D'Ambra, MD
Vanderbilt University Medical Center
Nashville, Tennessee

James Damron, MD
Department of Anesthesiology and Perioperative Medicine
University of Alabama at Birmingham
Vestavia Hills, Alabama

Camille Davis, MD
Department of Anesthesiology & Perioperative Medicine
University of Alabama at Birmingham
Mountain Brook, Alabama

Kathryn Davis, MD
Yale University School of Medicine
Department of Anesthesiology
New Haven, Connecticut

Paul Davis, MD
Mayo Clinic
Rochester, Minnesota

Angelica M. Delgado, MD
New York Presbyterian/ Weill Cornell
New York, New York

Carlos Delgado, MD
University of Washington
Seattle, WA

Gustavo Diaz-Mercado, MD
Ochsner Medical Center
Jefferson, Louisiana

Monica DiLorenzo, MD
Mount Sinai Hospital
New York, New York

Olga Diomedes, MD, MS
Duke University Medical Center
Durham, North Carolina

Jennifer E. Dominguez, MD
Duke University Medical Center
Durham, NC

Anjali Doshi, BS
OSU College of Medicine
Columbus, Ohio

Sophia Dunworth, MD
Stanford School of Medicine
Stanford, California

Timothy Edmonds, MD
Montefiore Medical Center
Bronx, New York

Lindsey Efird, MD
Vanderbit University Medical Center
Nashville, Tennessee

Kevin Elaahi, MD
Montefiore Medical Center
New York, New York

Mohamed Elgamal, MBChB
Yale Medical School
New Haven, Connecticut

Ilhan Eli, MD
Mayo Clinic
Rochester, Minnesota

Stephen Ellwood, MD
Brigham and Women's Hospital
Boston, Massachusetts

Sherif Elsayed Ali Ali, MD
Montefiore Medical Center
Bronx, New York

Paula Escobar, DNP/CRNA
New York Presbyterian/Lower
Manhattan
Yonkers, New York

Logan Fairchild, MD
Maimonides Medical Center
Brooklyn, New York

Joshua Falescky, MD
Northwell Health
New York, New York

Michaela Farber, MD
Brigham & Women's Hospital
Boston, MA

**Robert French-O'Carroll, MB BCH BAO
MCAI, FCAI, MSc**
BC Women's Hospital
Vancouver, British Columbia, Canada

Marie Eve Fiset, MD
Department of Anesthesia and Pain
Management
Mount Sinai Hospital
University of Toronto
Lac-Beauport, Quebec, Canada

Elisheva Fiszer, MD
Tel Aviv Sourasky Medical Center,
Israel
Tel Aviv, Israel

Padraic Flahardy
Beth Israel Deaconess Medical Center
Boston, Massachusetts

Taylor Foster, MD
University of Alabama Birmingham
Birmingham, Alabama

Cedar Fowler, MD, PhD, MPH
Stanford University Medical School
Stanford, California

Emma Frank, MD
Baylor Scott & White Medical Center-
Temple
Temple, Texas

Anna Gabrielian, MD
Johns Hopkins School of Medicine
Baltimore, Maryland

Rofayda Gad, MD
University of Miami -Jackson
Memorial Hospital
Miami, Florida

Jackie Galvan, MD
Associate Professor of Clinical
Anesthesia
The University of Illinois College of
Medicine

Ishan Garg, DO
Thomas Jefferson University Hospital
Philadelphia, Pennsylvania
Mohit Garg, MBBS
Maimonides Medical Center
Rochester, New York

Lachance Geneviève
CHUM Université de Montréal
Montreal, Quebec, Canada

Aryeh Ginsburg, MD
Montefiore Medical Center - Albert
Einstein College of Medicine
Bronx, New York

Andrew Giordano, MS DO
UT Health San Antonio
San Antonio, Texas

Lana Glantz, MD
Maimonides Medical Center
Brooklyn, New York

Liliana Goelkel-Garcia, MD
University of Minnesota

Rudo Goto, MD
Vanderbilt University Medical Center
Nashville, Tennessee

Ashlee Gourdin, MD
University of Maryland School of
Medicine
Baltimore, Maryland

Stuart Grant, MD
University of North Carolina at Chapel
Hill
Chapel Hill, North Carolina

Jean Guglielminotti, MD, PHD
Columbia University Vagelos College
of Physicians and Surgeons
New York, New York

Carter Guice, MD
Ochsner Clinic Foundation
New Orleans, Louisiana

David Gutman, MD, MBA
Medical University of South Carolina
Charleston, South Carolina

Kathryn Hackett, MD
Northwestern Memorial Hospital
Chicago, Illinois

Ryan Hanson, MD
Cleveland Clinic Foundation
Chagrin Falls, Ohio

Achmad Hariyanto
Brawijaya University
Malang, Indonesia

Jakayla Harrell, M.D
Ochsner Clinic Foundation
Kenner, Louisiana

Joy Hawkins, MD
University of Colorado
Denver, CO

David He, MD, PhD
Department of Anesthesia and Pain
Management
Mount Sinai Hospital
University of Toronto, Canada

Derek He, MD
Massachusetts General Hospital
Boston, Massachusetts

Katherine Herbert, MD
Medical University of South Carolina
Charleston, South Carolina

Dan Hoang, DO
Stanford School of Medicine
Stanford, California

Jiaxin Huang, MD
Washington University in St. Louis
St. Louis, Missouri

Pamela Huang, MD
UCSF Medical Center
San Francisco, California

Eric Hunt, MD, PhD
Permanente Medical Group
Oakland, California

Nakia Hunter, MD
Loyola University Medical Center
Chicago, Illinois

Christian Hurst, MD
New York Presbyterian Hospital -
Columbia University Irving Medical
Center
New York, New York

Hanna Hussey, MD
Department of Anesthesiology &
Perioperative Medicine
University of Alabama at Birmingham
Birmingham, Alabama

Shunsuke Hyuga, MD
Department of Anesthesiology
Kitasato University, School of Medicine
Machida City, Tokyo, Japan

Andrew Iglesias, MD
Medical University of South Carolina
Charleston, South Carolina

Mary Im, MD, MPH
Stanford University School of Medicine
Palo Alto, California

Hebah Ismail, MD, JD
Wake Forest Baptist Medical Center
Winston Salem, North Carolina

Danish Jaffer, MD
Washington University in St. Louis
St. Louis, Missouri

Sanjeev Jain
Hamad Medical Corporation Qatar
Bin Omran, Al Rayyan, Qatar

Shuchi Jain, DO
Henry Ford Hospital
Detroit, Michigan

Anne-Sophie Janvier, MD
Columbia University
New York, New York

Amal Javaid, BS
University of Pittsburgh School of
Medicine
Pittsburgh, Pennsylvania

Deborah Jeon, MD
Stanford Hospital and Clinics
Stanford, California

Gudrun Jonsdottir
Yale School of Medicine
New Haven, Connecticut

Samuel Joseph, MD
Temple University Hospital
Philadelphia, Pennsylvania

Lana Joudeh, MD
Massachusetts General Hospital
Boston, Massachusetts

Francesca Jung, MD
UPMC
Pittsburgh, Pennsylvania

Rachel Kacmar, MD
University of Colorado Anschutz
Medical Campus
Denver, CO

Edward Kalaidjian, MD
Albert Einstein College of Medicine/
Montefiore Medical Center
New Milford, New Jersey

Kyle Kang, MD
Boston Medical Center
Boston, Massachusetts

Teshi Kaushik, MD
Emory University
Atlanta, Georgia

Paige Keasler, DO
Washington University in Saint Louis
Saint Louis, Missouri

Gus Kefalopoulos
Sharp Mary Birch Hospital, Anesthesia
Service Medical Group, San Diego
Rancho Santa Fe, California

Chloe Kern, BS
UCSF
San Francisco, California

Taimoor Khan, MD
Memorial Hospital System
Pembroke Pines, Florida

Nasir Khatri, MD
University of North Carolina
Chapel Hill, North Carolina

Alexandra Kiers, MD
Henry Ford Hospital
Detroit, Michigan

Christopher Kim, DO
Temple University Hospital
Philadelphia, Pennsylvania

Daniel Kim, MD
UC Irvine Department of
Anesthesiology
Anaheim, California

Jason Kim, MD
Maimonides Medical Center
New York, New York

Jinsoo Kim, MD
Montefiore Medical Center
Bronx, New York

Sung M. Kim, MD
Vanderbilt University Medical Center
Nashville, Tennessee

Klaus Kjaer, MD
Weill Cornell Medicine
New York, New York

Joseph Klaus, MD
Johns Hopkins School of Medicine
Baltimore, Maryland

Nicholas Knowland, MD
Loma Linda University Medical Center
Loma Linda, California

Ryu Komatsu, MD, MS
University of Washington
Seattle, Washington

**Bojan Korda, MBBCh (Wits), DA (SA),
DipPEC (SA)**
University of the Witwatersrand
Johannesburg, Gauteng, South Africa

Sarah Kroh, MD
University of Pittsburgh Medical
Center
University of Pittsburgh School of
Medicine
Pittsburgh, PA

Elena Lagon, MD

Massachusetts General Hospital
Department of Obstetrics &
Gynecology
Brookline, Massachusetts

Agnes Lamon, MD

Penn Medicine Princeton Health
Princeton, NJ

Seth Landa, MD

St. Joseph's University Medical Center
Paterson, New Jersey

Ruthi Landau, MD

Columbia University Vagelos College
of Physicians and Surgeons
New York, New York

Riley Landreth, D.O.

Division of Women's Anesthesiology
Duke University Hospital
Durham, North Carolina

Elizabeth Lange, MD

Northwestern University
Chicago, IL

Kristine Lane

UTMB School of Medicine
Galveston, Texas

Allison Lee, MD, MS

Columbia University
New York, New York

Alexandria Lehrmann

UTMB School of Medicine
Galveston, Texas

Lisa Leffert, MD

Massachusetts General
Boston, Massachusetts

Danielle Levin, MD

St. Elizabeth's Medical Center
Boston, Massachusetts

Yunping Li, MD

Beth Israel Deaconess Medical Center
Boston, Massachusetts

Geoffrey Liang, BSc

Faculty of Medicine, University of
British Columbia
Vancouver, British Columbia

Grace Lim, MD, MSc

UPMC Magee Womens, University of
Pittsburgh School of Medicine
Pittsburgh, Pennsylvania

Sherry Liou, MD

UCSF Medical Center
San Francisco, California

Mingchun Liu, MD

Washington University in St. Louis
St Louis, Missouri

Nathaniel Liu, DO

Hospital of the University of
Pennsylvania
Philadelphia, Pennsylvania

**Catherine Lloyd, BMedSci, BM BS,
FRCA**

Guy's and St Thomas' NHS Foundation
Trust
London, England

Whitney Loggins, MD

The Ohio State Wexner Medical Center
Columbia, Ohio

Christian Loubert, MD, FRCPC

University of Montreal - CEMTL
Maisonneuve-Rosemont Hospital
Montreal, Quebec, Canada

Chou Lu, DO

Temple University
Philadelphia, Pennsylvania

Samantha Lu, MD

Northwestern University Feinberg
School of Medicine
Chicago, Illinois

Nuala Lucas, MD

Consultant, Northwick Park Hospital
Harrow, England

**Mario Lumbreras-Marquez, MBBS,
MMSc**

Brigham and Women's Hospital
Boston, Massachusetts

Grant Lynde, MD

Emory University
Atlanta, GA

Ayumi Maeda, MD

Brigham and Women's Hospital and
Harvard Medical School
Boston, Massachusetts

Nora Martin, MD

Montefiore Medical Center
Bronx, New York

Eva Martinez, MD

University of Illinois at Chicago
Chicago, Illinois

Chawla LaToya Mason, MD, FASA

University of Mississippi Center
Jackson, Mississippi

Kody Massner, DO, MHA

University of Alabama Birmingham
Birmingham, Alabama

Gisha Mathew, DNB,DA

Hamad Medical Corporation
Doha, Ar Rayyan, Qatar

**Fergal McDonagh, MB BCh BAO BSc
FCAI FANZCA**

Mount Sinai Hospital, University of
Toronto
Toronto, Canada

Christine McKenzie, MD

University of North Carolina
Chapel Hill, North Carolina

Jessica Meister Berger, MD, JD

Wake Forest Baptist Health
Winston-Salem, North Carolina

Marie-Louise Meng, MD

Duke University Medical Center
Durham, North Carolina

Vasilije Mijovic, MD

Mount Sinai Hospital
New York, New York

Nikhil Mikkilineni, MD

Boston Medical Center
Warren, New Jersey

Ryan Militana, DO

Massachusetts General Hospital
Boston, Massachusetts

Sierra Camille Mims, MS
Duke University School of Medicine
Durham, North Carolina

Gianfranco Molfetto, DO
Memorial Healthcare System
Pembroke Pines, Florida

Aaron Montani, DO
Temple University Hospital
Philadelphia, Pennsylvania

Suzanne Mundhenke, DO
University of Missouri - Columbia
Columbia, Missouri

Jessian Munoz, MD, PhD, MPH
UTHSCSA
San Antonio, Texas

Mary Mushambi, MD
Leicester, Leicestershire
United Kingdom

Umar Mushtaq
Hamad Medical Corporation
Doha, Ar Rayyan, Qatar

Emmarie Myers, MD
University of Virginia Department of
Anesthesiology
Charlottesville, Virginia

Hyo-Seok Na, PhD
Seoul National University Bundang
Hospital
Seongnam, Kyonggi-do, South Korea

Claire Naus, MD
Columbia University
New York, New York

Samer Narouze, MD, PhD
Western Reserve Hospital
Cuyahoga Falls, Ohio

Preeti Nemade
Cambridge University Hospitals NHS
Foundation Trust
Bedford, England

Lakshmi Nemani, MD, MPH
McGaw Medical Center of
Northwestern University
Chicago, Illinois

Kaitlyn Neumann, MD
Northwestern University, Feinberg
School of Medicine
Chicago, Illinois

Justin Newman
Mount Sinai West Hospital -
Department of Anesthesiology,
Perioperative and Pain Medicine
New York, New York

Thong Nguyen, Doctor of Medicine
UTMB Medical School
Galveston, Texas

Shri Vidya Niranjana Kumar, MBBS, MD
Department of Anesthesia, McMaster
University
Hamilton, Ontario

Heather Nixon, MD
University of Illinois College of
Medicine
Chicago, IL

Leziga Obiyo, MD, MPH
Loyola University Medical Center
Chicago, Illinois

Taylor O'Neal, MD
University of Arkansas for Medical
Sciences
Little Rock, Arkansas

Daniel O'Reilly, MD
The Ohio State Wexner Medical Center
Columbus, Ohio

Luis Pacheco, MD
University of Texas Medical Branch
Galveston, TX

Cesar Padilla, MD
Stanford University School of Medicine
Stanford, CA

Arvind Palanisamy, MD
Washington University Physicians
St. Louis, MO

Greg T. Palleschi, MD
North Shore University Hospital
Dix Hills, NY

Sidhant Pamnani, MD
Montefiore Medical Center
Bronx, New York

Sue Panayiotou, MSN, CRNA
New York Presbyterian-Lower
Manhattan Hospital
Jersey City, New Jersey

Perman Pandal, MD
Stanford University
Stanford, California

Gabriel Paquin-Lanthier, MD, FRCPC
Université de Montréal, CHUM
Montréal, Quebec, Canada

Helen Parker, BM BS BMedSci FRCA
BC Women's Hospital + Health Centre
Vancouver, British Columbia

Samantha Parsons, BS
Columbia University
New York, New York

May Pian-Smith, MD, MS
Massachusetts General Hospital
Boston, MA

Miguel Plaza Lloret, MD
Augusta University
Augusta, Georgia
Javier Jose Polania Gutierrez, MD
Augusta University
Augusta, Georgia

Bethany Potere, MD, MSc
The Ohio State University Wexner
Medical Center
Columbus, Ohio

Charles Prior, MBChB FRCA
BC Women's Hospital
London, England

Borislava Pujic, MD, PhD
Clinical Center of Vojvodina,
Anesthesia, Intensive care and Pain
Therapy
Novi Sad, Vojvodina, Serbia

Lakshmi Ram, MD
UTMB Galveston School of Medicine
Galveston, Texas

Krishnan Ramanujan, MD
Vanderbilt University Medical Center
Nashville, Tennessee

Karunakaran Ramaswamy, FRCA, MBA
Sidra Medicine
Doha, Ar Rayyan, Qatar

Khadija Razzaq, B.A.
University of Virginia
Charlottesville, Virginia

Britany Raymond, MD
Vanderbilt University Medical Center
Nashville, TN

Laurence Ring, MD
Columbia University
New York, New York

Julian Rios, MD
Ochsner Medical Center
Jefferson, Louisiana

Mary Roberts, MD
University of Cincinnati
Cincinnati, Ohio

Rustin Roberts, MD
Ochsner Medical Center
New Orleans, Louisiana

Spencer Robichaux, MD, PhD
Ochsner Medical Center
New Orleans, Louisiana

Jonathan Rogerson, DO
University of Colorado Anschutz
Aurora, Colorado

Erik Romanelli, MD, MPH
Montefiore Medical Center
New York, New York

Susanne Rupert, MD
University of Minnesota
Minneapolis, Minnesota

Alam Saamia, MD
Stony Brook, New York

Anjan Saha
University of Michigan
Ann Arbor, Michigan

Nayema Salimi, MD
Yale New Haven Hospital
New Haven, Connecticut

Shirley Santos, MD, DESA, TSA
Hospital das Clínicas da Faculdade
de Medicina da Universidade de São
Paulo
São Paulo, Brazil

Watson Sarah, MD
University of Iowa Hospital and Clinics
Iowa City, Iowa

Max Schubert, MD
Emory Department of Anesthesiology
Atlanta, Georgia

Sara Seifert, MD
Brigham and Women's Hospital
Boston, Massachusetts

F. Arran Seiler, MD
University of Chicago
Chicago, Illinois

Marina Sharobeam, MD
NYU Grossman School of Medicine
New York, New York

Jessica Sheeran, MD
University of Virginia Department of
Anesthesiology
Charlottesville, Virginia

Maria Sheikh, MD, MPH
Columbia University Vagelos College
of Physicians and Surgeons
New York, New York

**Olivia Sherwood, BSc MBBS MRCP
FRCA**
St Thomas' Hospital
Nashville, Tennessee

Grace Shih, MD
Kansas University Health System
Leawood, Kansas

Marwa Sidani, MD
University of North Carolina
Chapelhill, North Carolina

Apoorva Singh, MBBS
Post Graduate Institute of Medical
Education and Research
Chandigarh, Chandigarh

Neha Singh, MD
Additional Professor
Bhubaneswar, Orissa, India

**Harikumar Sivakumar, M.B.B.S ,
D.N.B(Anaesthesia), Diplomate of Eur.
Society of Anaesthesiology**
Mid and South Essex NHS Foundation
Trust
Chelmsford, England

Richard Smiley, MD, PhD
Columbia University Dept of
Anesthesiology
New York, New York

Christopher Smith, MD
Northwestern University Feinberg
School of Medicine
Chicago, Illinois

Margaret Smith, MD
University of Chicago Medical Center
Chicago, Illinois

Jennifer Song-Andrews, DNP, CRNA
New York-Presbyterian Lower
Manhattan Hospital
Brooklyn, New York

Claire Spradling, MD
Vanderbilt University Medical Center
Nashville, Tennessee

Aidan Spring, MD
Department of Anesthesia and Pain
Management
Mount Sinai Hospital
University of Toronto
Toronto, Ontario, Canada

Yasmin Sritapan, DO
Department of Anesthesia &
Perioperative Medicine
University of Louisville
Louisville, Kentucky

Mellany Stanislaus, MD
The Ohio State Wexner Medical Center
Columbus, Ohio

Nathan Steiner, MD
Northwestern University, Feinberg
School of Medicine
Chicago, Illinois

Emily Stockert, MD, MBA

Stanford Health Care
Stanford, California

Shruti Sudhakar, MD

University of Maryland Medical Center
Baltimore, Maryland

Cameron Sumner, MD

University of Virginia Department of
Anesthesiology
Charlottesville, Virginia

Derek Sundermann, MD

University of Pennsylvania
Philadelphia, Pennsylvania

**Piranthini Suntharalingam,
MBBChBAO (MD)**

Anesthesiology/Dartmouth Hitchcock
Medical Center
Lebanon, New Hampshire

Caitlin Sutton, MD

Texas Children's Hospital, Baylor
College of Medicine
Houston, Texas

Hans Sviggum, MD

Mayo Clinic
Rochester, MN

Justin Swengel, MD

University of North Carolina
Chapel Hill, North Carolina

Erica Tafuro, MD

Montefiore Medical Center
Bbayville, New York

Patrick Tan, MBBS BMedSc FANZCA

Department of Anaesthesia, Royal
Women's Hospital (VIC)
Department of Obstetrics and
Gynaecology, The University of
Melbourne
Parkville, Victoria

Serabi Tanabe

Tokyo Metropolitan Tama Medical
Center
Fuchu City, Japan

Michael Taylor, MD

Vanderbilt University Medical Center
Nashville, Tennessee

Angeli Thawani, DO

The University of Vermont Medical
Center
Burlington, Vermont

Caroline Thomas, MD

University of Chicago Department of
Anesthesia and Critical Care
Chicago, Illinois

Julie-Ann Thompson, MD

Ochsner Clinic Foundation
New Orleans, Louisiana

Reade Tillman, MD

Department of Anesthesiology, Duke
University Hospital
Durham, North Carolina

Varsha Tipparaju, MD

Fernandez Hospital Foundation
Hyderabad, Telangana

Joseph Tipton, MD

University of Tennessee Medical
Center Knoxville
Knoxville, Tennessee

Brandon Togioka, MD

Oregon Health & Science University
Portland, Oregon

Paloma Toledo, MD, MPH

Northwestern Medicine
Chicago, Illinois

Roulhac D. Toledano, MD. PhD

NYU Grossman School of Medicine
Brooklyn, NY

William Trudo, MD

Emory University
Atlanta, Georgia

Natalie Tukan, MD

Brigham and Women's Hospital
Boston, Massachusetts

Nicholas Unkrich, MD

The Ohio State University Wexner
Medical Center
Grove City, Ohio

Vandana Vaishnav, FCARCSI, FRCPC

McMaster University
Oakville, Ontario, Canada

Olivia Valencia, MD

Vanderbilt University Medical Center
Nashville, Tennessee

Arjun Varadarajan, MD

Ochsner Medical Center
Jefferson, Louisiana

Ivan Velickovic, MD, FASA

SUNY Downstate Health Science
University
Tenaflly, New Jersey

Yuri Volnov, MD, MPH

UT Medical Branch
Galveston, Texas

Amy Walker, BS

The Ohio State University College of
Medicine
Columbus, Ohio

Anne Wanaselja, MD

University of Pittsburgh Medical
Center
University of Pittsburgh School of
Medicine
Pittsburgh, Pennsylvania

Syed Muhammad Waqar, MD

Henry Ford Health System
Detroit, Michigan

Gabriel Washington, MD

Massachusetts General Hospital
Boston, Massachusetts

Carolyn Weiniger, MD, MBChB

Tel Aviv Sourasky Medical Center,
Israel
TelAviv, Israel

Lawrence Weinstein, MD

University of California, San Diego
San Diego, California

Kelly West, MD

Baylor College of Medicine
Houston, Texas

Danielle White, MD

University of Texas at Houston Health
Science Center, McGovern Medical
School
Houston, Texas

Dylan Whitney, Medical Doctor
Faculty of Medicine, University of
Alberta
Burnaby, British Columbia, Canada

**James Wicker, MBBS BSc FRCA
PGCert (Med Ed)**
Department of Anesthesiology and
Pain Medicine
University of Toronto
Toronto, Canada

Meryl William, DO
Children's Hospital of Philadelphia
Anesthesiology and Critical Care
Medicine
Philadelphia, Pennsylvania

Michael Williams, MD
Brigham and Women's Hospital
Newton, Massachusetts

Andreas Willianto, IDI
RS Saiful Anwar
Malang, Jawa Timur, Indonesia

Mark Wise, DO
University of Kansas Medical Center
Kansas City, Kansas

Michael Wong, MD
University of Maryland School of
Medicine
Baltimore, Maryland

Stephanie Woodward, MD
Northwestern University Feinberg
School of Medicine
Chicago, Illinois

Ivana Wroblewski, DO
University of Texas at Houston Health
Science Center, McGovern Medical
School
Houston, Texas

Simon Wydall, MBBS
Guy's and St. Thomas' NHS Trust
London, England

Maggie Xiao, BSc
Faculty of Medicine, University of
Alberta
Alberta, Canada

Sichao Xu, MD
Beth Israel Deaconess Medical Center
Boston, Massachusetts

Patriot Yang, MD
Zucker School of Medicine at Hofstra/
Northwell Program
Department of Anesthesiology
Manhasset, New York

Michelle Yanik, MD
University of Pittsburgh Medical
Center
University of Pittsburgh School of
Medicine
Pittsburgh, Pennsylvania

Valerie Zaphiratos, MD
Hôpital Maisonneuve-Rosemont,
Université de Montréal
Montreal, Quebec
Canada

Jie Zhou, MD
Brigham and Women's Hospital
Boston, Massachusetts

Steven Zhou, MD
The Ohio State University
Columbus, Ohio

Taylor Ziga, MD
University of Washington
Seattle, Washington

Alix Zuleta Alarcon, MD
The Ohio State University
Columbus, Ohio

Program Information and Policies

Mission Statement

The Society for Obstetric Anesthesia and Perinatology (SOAP) was founded in 1968 to provide a forum for discussion of problems unique to the peripartum period. SOAP is comprised of anesthesiologists, obstetricians, pediatricians, and basic scientists from around the world who share an interest in the care of the pregnant patient and the newborn.

The mission of our society is to advance and advocate for the health of pregnant women and their babies through research, education, and best practices in obstetric anesthesia care. Our vision is safe and equitable care for women and newborns everywhere. Our mission, vision and core values are at the forefront of everything we do as a society.

Membership in SOAP is an opportunity to meet people who share your interests and to stimulate improvements in health care for pregnant patients. If you are a member, thank you! We are pleased to have you engaged in the society. If you are not currently a member, please join SOAP to become part of our growing community.

ACCME Accreditation and Designation Statements

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Society of Anesthesiologists and the Society for Obstetric Anesthesia and Perinatology. The American Society of Anesthesiologists is accredited by the ACCME to provide continuing medical education for physicians.

The American Society of Anesthesiologists designates this live activity for a maximum of 28.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Maintenance of Certification in Anesthesiology Program® and MOCA® are registered certification marks of The American Board of Anesthesiology®



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This activity contributes to the patient safety CME requirement for the CME component of the American Board of Anesthesiology's (ABA) redesigned Maintenance of Certification in Anesthesiology™ (MOCA®) program, known as MOCA 2.0®. Please consult the ABA website, www.theABA.org, for a list of all MOCA 2.0 requirements.

About This Meeting

Despite continued advances in medical technology, maternal morbidity and mortality continues to increase in the United States. The continued opioid crisis in the United States, its impact on postpartum analgesic and surgical modalities and the ongoing global pandemic provides a level of exigency to the current maternal morbidity and mortality rates.

Lack of knowledge of these emergent risk factors and improved anesthetic techniques can contribute to lower quality of care. The goal of this year's meeting is to congregate experts to teach evidence-based methods and techniques to actionably improve maternal outcomes.

Target Audience

This meeting is intended for Anesthesiologists, Anesthesiologists Assistants, CRNAs, Nurses, Resident/Fellows, and Medical Students interested in the recent advances in obstetric anesthesia and the application of these advances to their practice.

Mission of the SOAP Annual Meeting/Live Events Committee

The mission of the AM/LE committee is to provide anesthesiologists, obstetricians, and other physicians and members of related allied health specialties with the knowledge that will reinforce past learning as well as disseminate new concepts, practices, and skills involving anesthesia and analgesia for the pregnant woman.

Participation in the SOAP 53rd Annual Meeting

Attendance is open to all health practitioners, provided that they have registered for the meeting. CME credit will only be offered to those with an MD, DO or equivalent.

Educational Format

CME activities may include the following formats: plenary sessions, debates, lectures, poster discussions, oral abstracts, problem-based learning, and skill-set workshops.

Annual Meeting Objectives

At the completion of this conference the participants should be able to:

1. Improve the care of the parturient through better understanding of the physiology of pregnancy and the impact of maternal disease, improved knowledge of anesthetic techniques, and implementation of safe practices.
2. Utilize an evidence-based approach when caring for the pregnant patient with COVID and to plan for the anesthetic management of pregnant patients in future pandemics.
3. Implement practices in the anesthetic management of the parturient undergoing cesarean section that will enhance recovery and provide postpartum analgesia using minimal opioids.
4. Develop specific measures that increase safety in care of the obese pregnant patient, the patient with placenta accreta, and the patient requiring surgery in the postpartum period.
5. Incorporate recommendations in the management of the pregnant patient who requires analgesia/anesthesia and who has either a difficult airway or thrombocytopenia.

Special Needs Statement

The American Society of Anesthesiologists and the Society for Obstetric Anesthesia and Perinatology are committed to making its activities accessible to all individuals and fully comply with the legal requirements of the Americans with Disabilities Act and the rules and regulations thereof. If you are in need of an accommodation, please do not hesitate to submit a description of your needs in writing to membership@soap.org.

Disclosure Policy

The American Society of Anesthesiologists remains strongly committed to providing the best available evidence-based clinical information to participants of this educational activity and requires an open disclosure of any potential conflict of interest identified by our faculty members. It is not the intent of the American Society of Anesthesiologists to eliminate all situations of potential conflict of interest, but rather to enable those who are working with the American Society of Anesthesiologists to recognize situations that may be subject to question by others. All disclosed conflicts of interest are reviewed by the educational activity course director/chair to ensure that such situations are properly evaluated and, if necessary, resolved. The American Society of Anesthesiologists educational standards pertaining to conflict of interest are intended to maintain the professional autonomy of the clinical experts inherent in promoting a balanced presentation of science. Through our review process, all American Society of Anesthesiologists CME activities are ensured of independent, objective, scientifically balanced presentations of information. Disclosure of any or no relationships will be made available for all educational activities.

Instructions on How to Receive Credit

In order to receive credit, participants must sign-in to the ASA Education Center, review the meeting information and complete the evaluation. Further instructions will be emailed to each participant immediately prior to and after the activity.

Disclaimer Statement

The information provided at this accredited activity is for continuing education purposes only and is not meant to substitute for the independent medical judgment of a healthcare provider relative to diagnostic and treatment options of a specific patient's medical condition.

Anti-Harassment Policy

To abide by our new anti-harassment policy in all venues at the SOAP Annual Meeting, including ancillary events and official and unofficial social gatherings:

- Exercise consideration and respect in your speech and actions.
- Refrain from demeaning, discriminatory, or harassing behavior and speech.
- Be mindful of your surroundings and of your fellow participants.

Photo and Video Disclosure

Photos and video footage are periodically taken of people participating in a SOAP meeting. Please be aware that by registering for a SOAP meeting or participating in an activity or attending an event at a SOAP meeting, you authorize SOAP and its management company to use these photos and video footage for promotional purposes in SOAP publications, advertising, marketing materials, brochures, social media (including Facebook, YouTube, Instagram, Twitter, and other social media sites used by SOAP), and the SOAP website without additional prior notice or permission and without any compensation. All photos and videos are property of SOAP.

SESSION DESCRIPTIONS

Best Case Reports – Top 10

This live presentation highlights some of the most highly graded and interesting case reports submitted to the Annual Meeting. Cases were selected to represent a wide range of topics from various institutions and are sure to foster lively discussions among the panelists. There will be author and audience participation, via virtual chat function, to encourage interactive discussion. This session will be moderated by Dr. Klaus Kjaer, featuring panelists Dr. Jaime Daly, Dr. Bob Gaiser, and Dr. Emily Sharpe.

Best Paper Session

This curated session includes presentations from the top rated and most impactful research abstracts submitted this year. Presenters compete for the title of SOAP Annual Meeting Best Paper via presentations and a question-and-answer session. This competition will be moderated by Dr. Cynthia Wong, a highly distinguished researcher in the obstetric anesthesiology field.

Fellow Case Reports

These moderated sessions are designed to highlight educationally valuable case reports submitted and presented by obstetric anesthesiology fellows across the country. There will be opportunities to participate and ask questions regarding some of the most challenging clinical scenarios.

Research Poster Sessions

These moderated sessions, scheduled for both Friday and Sunday, showcase the state-of-the-art research being performed in obstetric anesthesia.

Oral Presentation Sessions

Oral presentations of diverse, high-quality and hand-selected peer-reviewed scientific research related to obstetric anesthesia will be presented, followed by a moderated question-and-answer session.

Case Reports – Live

These concurrent moderated sessions, presented on Saturday and Sunday morning, are designed to showcase interesting cases in various topic areas such as COVID, Practice Improvement, and Post Delivery Outcomes, among others. The sessions will feature engaging question-and-answer opportunities regarding these challenging clinical scenarios.

Case Reports – Pre-Recorded On-Demand

The amount of high-quality case reports was extraordinary this year, and the on-demand option allows attendees at your convenience access to pre-recorded case reports presented by the authors.

Fred Hehre Lecture

This session offers reflections from a renowned member of the obstetric anesthesia community, which bring insights into scope of practice changes over time and homes in on what matters most to the art and science of obstetric anesthesia practice. This year's Fred Hehre lecturer will be Dr. May Pian-Smith.

Gerard W. Osteheimer Lecture

Always a highlight and one of the most highly anticipated sessions of the meeting, the Gerard W. Osteheimer lecture is a review of important, relevant, and/or practice-changing literature related to obstetric anesthesia, obstetrics, perinatology, and allied medical disciplines that was published in the preceding calendar year (2020). This digestible synthesis of the literature analyzes the clinical impact of published works and latest evidence-based advances in the field of obstetric anesthesia. This year's Osteheimer lecturer will be Dr. Grace Lim.

Gertie Marx Research Paper Competition

Named in memory of obstetric anesthesia pioneer Gertie Marx, this research competition highlights the best quality research performed by our trainees (medical students, residents and fellows). Six presenters will compete in this judged competition, moderated by Dr. Richard Smiley.

Panel – Why do you Need an OB Anesthesia Fellowship?

This session—moderated by Dr. Bryan Mahoney and featuring panelists Dr. Agnes Lamon, Dr. Jackie Galvan and Dr. Greg Palleschi—will discuss the importance of an obstetric anesthesia fellowship as a critical element for institutions, advancing your professional skills, and obstetric anesthesia as a specialty.

Thrombocytopenia in the Laboring Patient

Dr. Melissa Bauer and Dr. Roulhac D. Toledano will review the common types of thrombocytopenia during pregnancy and how to perform a bleeding history assessment. They will also discuss how to apply the new SOAP consensus statement to a variety of clinical scenarios.

Panel – Disparities in Maternal Care: Providers, Patients and Outcomes

Dr. Allison Lee, Dr. Cesar Padilla, and Dr. Paloma Toledo will discuss the racial and ethnic disparities in maternal morbidity and mortality as well as inequities related to obstetric anesthesia care in the United States. They will share evidence for structural racism/provider bias in healthcare outcomes and the benefits of diversification of the anesthesia workforce, as well as how to develop a strategic framework for improving equity in maternal health outcomes.

Lessons Learned in Obstetric Anesthesia

In this innovative session, Dr. Joy Hawkins and Dr. Caitlin Sutton will share their reflections on learning the art and science of obstetric anesthesia from their unique perspectives and career paths.

CLINICAL TRACK**What's New in Obstetrics Lecture**

Dr. Luis Pacheco will present Tranexamic Acid and Obstetrical Hemorrhage, from the Maternal Fetal Medicine and Surgical Critical Care perspectives.

ERAC Update

Dr. Laurent Bollag and Dr. Carlos Delgado will outline the care elements that compose an enhanced recovery after cesarean (ERAC) delivery pathway and discuss the variances between different societal ERAC guidelines. Opportunities to improve elements of existing enhanced-recovery pathways and formulate strategies to address them will also be identified.

COVID/Sepsis Update

Dr. Emily Naoum and Dr. Arvind Palanisamy will review updates for treating sepsis in the peripartum period and share insights gained from research on COVID in pregnancy. They will share strategies for how, when, and for whom to escalate care, regardless of practice setting.

Non-Obstetric Surgery in Pregnancy and the Early Post-partum Period

Dr. Hans Sviggum and Dr. Valerie Zaphiratos will discuss how the pregnant state influences perioperative care as well as the impact of anesthesia and surgery on teratogenicity and fetal neurodevelopment. Techniques to evaluate both maternal and fetal outcomes following non-obstetric surgery will be reviewed along with how to formulate an anesthetic plan for the pregnant or post-partum woman undergoing non-obstetric surgery.

Patient with Placenta Accreta Spectrum Disorder: Where do You Deliver and How do You Do It?

Dr. Carolyn Weiniger and Dr. Michaela Farber will review managing patients with morbidly adherent placentation, including what types of resources and settings are safest for these patients.

The Obese Patient for Obstetric Anesthesia: Identifying Risk Factors in the Preoperative Clinic

Dr. C. LaToya Mason-Bolden and Dr. Jennifer Dominguez will share strategies to improve care of the obese parturient through a better understanding of associated comorbidities and complications. They will also review how to develop specific measures to increase patient safety and utilize effective communication practices.

When Time is of the Essence: Common Emergencies on the Labor & Delivery Floor

Dr. Alexander Butwick, Dr. Heather Nixon and Dr. Feyce Peralta take a case-based discussion approach to tackle some of the most common obstetric emergencies and the intricacies of system preparation and goal setting. The panelists will share guidelines and personal tips and strategies for system-based improvements for clinical situations involving eclamptic seizures, cord prolapse and postpartum hemorrhage. Be prepared for a lively debate.

Labor Analgesia: State of the Art

Dr. Jeanette Bauchat and Dr. Elizabeth Lange will describe the advantages and disadvantages of non-neuraxial labor analgesia techniques as well as how to delineate evidence-based practices and SOAP Center of Excellence best practices for neuraxial labor analgesia. There will be discussion of which recent articles have been most influential and most controversial in labor analgesia management.

PATIENT SAFETY MOCA LECTURES

Airway Management During Pregnancy

In this session, Dr. Jeremy Collins and Dr. Mary Mushambi will provide an update on airway-related morbidity and mortality during rapid sequence induction (RSI) in the pregnant woman. There will also be discussions on how to improve patient safety by addressing non-technical as well as technical skills.

A Unit in Crisis – How Do I Fix It? Patient Safety on Labor and Delivery

Dr. Rachel Kacmar and Dr. Grant Lynde will present sources of patient safety related metrics and initiatives related to obstetric anesthesia, discuss how to implement quality improvement activity and how attendees can critique their medical practice as it relates to national patient safety initiatives.

SOAP 2021 Annual Meeting Agenda

*all time are listed in CST

THURSDAY, MAY 13

3:30pm Access to the AccelEvents platform begins

4:00-4:15pm Welcome Remarks

Ruth Landau, MD – SOAP President

Heather C. Nixon, MD - Annual Meeting/Live Events Chair

4:15-5:15pm Best Case Reports – Top 10

Moderator: Klaus Kjaer, MD

Panelists: Jaime Daly, MD; Emily Sharpe, MD, Robert Gaiser, MD

Speakers:

1. Post-partum Veno-Venous Extracorporeal Membrane Oxygenation in a COVID-19 patient as a bridge to lung transplantation – *Ioannis Angelidis, MD*
2. Chloroprocaine Labor Epidural for Parturient with Local Anesthetic Resistance - *Michael Brule, MD*
3. Combined Craniotomy and Cesarean Section in an Acutely Neurologically Compromised Parturient - *Jose Andrew Iglesias, MD*
4. Anesthetic Management of a Parturient with Recurrent Pulmonary Artery Sarcoma and Severe Pulmonary Hypertension for Cesarean Section: A Case Report - *Benjamin Houseman, MD*
5. Management of a pregnant patient on dual anti-platelet therapy - *Jiaxin Huang, MD*
6. Urgent Cesarean Delivery of a COVID-19 Parturient in the Intensive Care Unit - *Daniel Kim, MD*
7. Diagnosis of Peripartum Cardiomyopathy Prompted by "Smart" Watch - *Chawla Mason, MD*
8. Acute Fatty Liver of Pregnancy Leading to a Delayed Hepatic Failure Necessitating Liver Transplantation: A Case Report - *Patty Yang, MD*
9. Management of the difficult airway in obstetric patients for cesarean delivery - *Olivia Valencia, MD*
10. Intraoperative POCUS in the management of dilated cardiomyopathy and pericardial effusion for cesarean delivery - *Danielle White, MD*

5:15-6:15pm What's New in Obstetrics Lecture

Luis Pacheco, MD

Society of Maternal-Fetal Medicine

Director, Maternal Critical Care Services

Professor, Obstetrics & Gynecology

Professor, Anesthesiology

University of Texas Medical Branch

Galveston, TX

6:15-6:30pm BREAK and view pre-recorded case reports

6:30-7:15pm ERAC Update

Laurent A. Bollag, MD

Chief, Obstetric Anesthesia

Associate Professor, Anesthesiology and Pain Medicine

University of Washington

Seattle, WA

Carlos Delgado, MD

Assistant Professor, Associate Director Obstetric Anesthesia Division

University of Washington

Seattle, WA

7:15-8:00pm COVID/Sepsis Update

Emily Naoum, MD
Massachusetts General Hospital
Boston, MD

Arvind Palanisamy, MD
Associate Professor, Anesthesiology
Washington University Physicians
St. Louis, MO

8:00-8:45pm Non-Obstetric Surgery in Pregnancy and the Early Post-partum Period

Hans Sviggum, MD
Medical Director of Obstetric Anesthesiology
Mayo Clinic
Rochester, MN

Valerie Zaphiratos, MD
Hôpital Maisonneuve-Rosemont, Université de Montréal
Montreal, Quebec
Canada

8:45-9:30pm Airway Management During Pregnancy – PATIENT SAFETY

Jeremy Collins, MD
Emory University Hospital
Atlanta, GA

Mary Mushambi, MD
DAS Professor of Anaesthesia and Airway management
Leicester, Leicestershire
United Kingdom

FRIDAY, MAY 14**3:00 – 4:20pm****Fellows Case Reports – Concurrent Breakout Rooms**

Moderators: Corrine Weinstein, MD; Mark Rollins, MD, PhD; Trish Dalby, MD;
 Laura Sorabella, MD; Joy Schabel, MD

Room 1: Corrine Weinstein, MD

1. Hazards Associated with Epidural Placement During Labor in Uncontrolled Seizure – *Mohannad Abushora, MD*
2. A Stress Test on the Eye: How Labour and Delivery Can Reveal Hidden Intracranial Pathology - *Yousif Ali, MD*
3. Intraoperative Medication Error and Mishap Mitigation: a Tale of Two Syringes - *Yousif Ali, MD*
4. Sonographic resolution of B-lines after diuresis in a pregnant patient with preeclampsia associated pulmonary edema – *Mohamad Ayoub, MD*
5. Cesarean Hysterectomy in a Patient with Squamous Cell Carcinoma of the Cervix – *Morganne Beard, MD*
6. Epidural Anesthesia for a Parturient with Associated Spina Bifida Occulta, Tethered Cord and Lipomyelomeningocele – *Maria Borrelli, MD*
7. Streptococcus intermedius Ventriculitis in Pregnancy - *Kaitlyn Brennan, MD*
8. Pregnancy Complications in Severe Ehlers Danlos Syndrome: The Issue is the Tissue – *Kaitlyn Brennan, MD*
9. Methamphetamine-associated cardiomyopathy with acute heart failure in the setting of pregnancy – *Sabrina Burn, MD*
10. Anesthetic Management of a patient with Goldenhar syndrome undergoing cesarean delivery and subsequent debridement of mandibular abscess – *Meghan Cook, MD*
11. Labor epidural analgesia in a patient with multifocal acquired demyelinating sensory and motor (MADSAM) neuropathy – *Christopher Cosden, MD*

Room 2: Mark Rollins, MD, PhD

12. Laser Division of Subglottic Stenosis in a 28-Year-Old Parturient – *Paul Davis, MD*
13. From Novice to Expert: Beside Echocardiography Using Artificial Intelligence Ultrasound Software for Perioperative Management of a Patient with Hypertrophic Cardiomyopathy – *Angelica Delgado, MD*
14. Volume Overload in a Pregnant Heart Transplant Patient – *Monica DiLorenzo, MD*
15. Neuraxial anesthesia for C-section in a patient with brain Arteriovenous malformation with history of rupture during pregnancy – *Sherif Elsayed Ali Ali, MD*
16. Peripartum Management of a Parturient with Ornithine Transcarbamylase Deficiency – *Robert Ffrench-O'Carroll, MD*
17. An Epidural Knot – *Anna Gabrielian, MD*
18. Puerperium Stroke and Subsequent Tissue Plasminogen Activator-Induced Hemorrhage: A Case Report – *Ryan Hanson, MD*
19. When Real Life Mimics Oral Boards: Massive Venous Air Embolism Detected by End-Tidal CO2 Decrease and Transthoracic Echocardiography During Cesarean Delivery in a Profoundly Thrombocytopenic Patient – *Dan Hoang, MD*
20. Management of Severe Maternal Cardiac Disease for Cesarean Section - *Hanna Hussey, MD*
21. Anesthetic management of a grand multiparous parturient with placenta percreta and severe asthma – *Hebah Ismail, MD*
22. Early Third Trimester Cesarean Delivery in COVID-19 Positive Patient on V-V Extracorporeal Membrane Oxygenation: Clinical and Ethical Considerations – *Paige Keasler, MD*

Room 3: Trish Dalby, MD

23. Electroconvulsive Therapy at Term Gestation: Successful Multidisciplinary Management with Unique Challenges – *Paige Keasler, MD*

24. New Diagnosis of Caval Leiomyosarcoma in the Third Trimester of Pregnancy – *Samantha Lu, MD*
25. Anesthetic Management of a Complex Parturient with Holt-Oram Syndrome, Covid-19 pneumonia and Endocarditis – *Jessica Meister Berger, MD*
26. Obstetric Management of a Patient with Osteogenesis Imperfecta Type III – *Jessica Meister Berger, MD*
27. Recurrent Dysautonomia and Pre-Eclampsia in a Grand Multipara – *Vasilije Mijovic, MD*
28. Headache and Facial Palsy in the Early Postpartum Period - *Vasilije Mijovic, MD*
29. Viridans streptococci Bacterial Meningitis Following Neuraxial Anesthesia, Labor and Cesarean Delivery – *Ryan Militana, MD*
30. Post Dural Puncture Headache: Four years review of a Tertiary Maternity Hospital in Qatar – *Umar Mushtaq, MD*
31. Anesthetic Considerations for Conjoined Twins – Separation as a Pediatric Anesthesia Fellow and Delivery as an Obstetric Anesthesia Fellow – *Claire Naus, MD*
32. Peripartum Diagnosis of Currarino Syndrome with Anterior Sacral Meningocele: A Case Report – *Kaitlyn Neumann, MD*
33. Management of pericardial effusion in a pregnant woman-A multi-disciplinary approach - *Shri Vidya Niranjana Kumar, MD*

Room 4: Laura Sorabella, MD

34. Spontaneous intracranial hypotension in pregnancy treated with a single epidural blood patch: A case report – *Helen Parker, MD*
35. Peripartum hysterectomy for placenta accreta in a patient with situs inversus and scoliosis under combined spinal-epidural anesthesia – *Iakshmi Ram, MD*
36. Stat Breech Delivery in a Patient with Undiagnosed Cardiac Pathology – *Jonathan Rogerson, MD*
37. Born from a Horn: Anesthetic Management of a Primary Cesarean Delivery for Unicornuate Uterine Pregnancy – *Erik Romanelli, MD*
38. Paralysis after a failed spinal: epidural hematoma or conversion syndrome? – *Nayema Salimi, MD*
39. Multimodal pain management for cesarean delivery in a patient with metastatic breast cancer – *Nayema Salimi, MD*
40. Using Shared Decision-Making to Navigate a Complex Obstetric Scenario in a Patient with Contraindications to Intubation and Neuraxial Anesthesia – *Francis Seiler, MD*
41. Mechanical Valve Thrombosis, Acute Myocardial Infarction, and Acute Heart Failure in Late Pregnancy: Pearls and Pitfalls – *Marwa Sidani, MD*
42. Multidisciplinary Management of a Parturient with a Hemorrhagic Renal Mass: A Rare Case of Wunderlich Syndrome in Pregnancy – *Christopher Smith, MD*
43. Management of a Parturient Patient for Urgent Cesarean Section with Acute Posterior Encephalopathy Syndrome – *Derek Sundermann, MD*
44. Cardiac sarcoid and acute worsening of heart block in the parturient, a case report – *Justin Swengel, MD*

Room 5: Joy Schabel, MD

45. Pharmacologic management of hemorrhage in a COVID positive parturient with HELLP syndrome and a breech twin vaginal delivery, a case report – *Justin Swengel, MD*
46. Grand Multiparous Mother with Phenylketonuria – *Anne Wanaselja, MD*
47. Chiari Conundrum: A Case Report and Literature Review – *Anne Wanaselja, MD*
48. Point of care ultrasound used in management on pulmonary edema in the setting of undiagnosed preeclampsia – *Danielle White, MD*
49. Anesthetic management of a parturient with Marfan Syndrome and scoliosis for cesarean delivery - *Danielle White, MD*
50. A Critical Role for Critical Care Obstetric Anesthesiologists – *Michael Williams, MD*

51. Emergent Cesarean Delivery Secondary to Non-conventional Presentation of Uterine Rupture in a Parturient with Systemic Lupus Erythematosus– *Mike Wong, MD*
52. Elective cesarean delivery in a patient with VACTERL - *Mike Wong, MD*
53. Labor Analgesia Management for a Patient with Gluteal Implant Migration – *Stephanie Woodward, MD*
54. A Case of Atrial Fibrillation Requiring Synchronized Cardioversion on Labor and Delivery - *Lakshmi Nemani, MD*
55. Management of Acute Type-B Aortic Dissection in a Pregnant Woman with Marfan Syndrome and Worsening Pre-eclampsia—A Case Report – *Taylor Ziga, MD*

4:20-4:30pm Distinguished Service Award Presentation

Introduction: Paloma Toledo, MD, MPH
 Assistant Professor
 Feinberg School of Medicine
 Chicago, IL

Recipient: Cynthia Wong, MD
 Chair and Department Executive Officer
 Professor of Anesthesia - Obstetrical Anesthesia
 Iowa City, IA

4:30 – 5:30pm Research Poster Session #1 – concurrent breakouts

Moderators: Gillian Abir, MD; Meredith Albrecht, MD; Katherine Arendt, MD; Emily McQuaid-Hanson, MD; Anton Chau, MD; Sharon Reale, MD; John Kowalczyk, MD; Emily Dinges, MD

Room 1 – COVID (Moderator: Meredith Albrecht, MD)

1. The unrecognized burden of "Persons under Investigation" on obstetric anesthesia services during the COVID-19 pandemic - *Aidan Spring, MD*
2. Obstetric Outcomes of SARS-Cov-2 Positive Parturients with Labor Analgesia - *Alexandria Lehrmann, MD*
3. Anaesthetic considerations and outcomes in 90 pregnant women with coronavirus disease 2019: a prospective observational study - *Olivia Sherwood, MD*
4. SARS-CoV-2 Infection Does not Affect the Incidence and Severity of Preeclampsia with Severe Features: A prospective observational study of 106 pregnant patients - *Yunping Li, MD*
5. Excess maternal deaths associated with coronavirus disease 19 (COVID-19) in Mexico during 2020 - *Mario Lumbreras-Marquez, MD*
6. Differences Between Neonatal Outcomes in Symptomatic and Asymptomatic COVID19 Positive Patients – *Kristine Spicer Lane*
7. Virtual compared to in-person obstetric anesthesiology trainee education during the COVID-19 pandemic - *Kelly Fedoruk, MD*

Room 2 – International (Moderator: Katherine Arendt, MD)

1. Anesthesia for cesarean delivery in Africa: a review of publications (2010-2021) – *Anjan Saha, MD*
2. Can epidural labor analgesia reduce the cesarean section rate? – *Karunakaran Ramaswamy, MD*
3. The Influence of a Kybele Teaching Program on the Use of Regional Anesthesia for Labor and Cesarean Delivery, During COVID-19 Pandemic, in Tuzla, Bosnia and Herzegovina – *Ivan Velickovic, MD*
4. Obstetric anesthesia practice and outcomes in low and middle-income countries: a review of publications – *Anjan Saha, MD*
5. A systematic review of patient-reported outcome measures used to assess global outpatient postpartum recovery using COSMIN guidelines – *Perman Pandai, MD*
6. A systematic review of patient-reported outcome measures used to assess sleep in postpartum women using COSMIN guidelines - *Perman Pandai, MD*

Room 3 – Hemoglobin, Hemorrhage and Transfusion (Moderator: Sharon Reale, MD)

1. Effect of Oral Iron Therapy on Hemoglobin Levels prior to Delivery in Pregnant Inpatients with Anemia – *Claire Spradling, MD*
2. Retrospective Review of Peripartum Blood Transfusion Practices – *Maria Borrelli, MD*
3. TOP MOM: Treatment and Optimisation of Iron Deficiency Anemia in Peripartum Women – *Anne Lavoie, MD*
4. Use of labor neuraxial analgesia and reduced risk of blood transfusion among women who delivered vaginally in the United States, 2017-2018 – *Jean Guglielminotti, MD*
5. Development of a Clinical Risk Prediction Model for Uterine Atony – *Katilyn Brennan, MD*
6. Uterine atony during intrapartum cesarean delivery: a retrospective cohort study – *Jessica Ansari, MD*

Room 4 – Post Delivery Outcomes (Moderator: Emily McQuaid-Hanson, MD)

1. Proposed domains for postpartum recovery: A concept elicitation study – *Perman Pandal, MD*
2. Long-Term Symptoms Following inadvertent dural puncture: A Systematic Review and Meta-analysis – *Sierra Mims, MD*
3. A High Incidence of Inadequate Anesthesia for Postpartum Tubal Ligation – *Maria Sheikh, MD*
4. Prospective study to assess relationship of a postpartum recovery survey (ObsQoR-10) within 24 hours and mode of delivery – *Din Ben Hayoun, MD*
5. Association of 24 hour postpartum recovery with depression and quality of life measures at 6 and 12 weeks: A prospective observational study – *Din Ben Hayoun, MD*
6. Acute Pain and Ambulation after Vaginal Delivery With or Without Neuraxial Analgesia: A Prospective Cohort Study – *Ayumi Maeda, MD*
7. Racial and ethnic disparities in epidural blood patch utilization for postdural puncture headache among obstetric patients – *Anne-Sophie Janvier, MD*

Room 5 – Hypertensive Disorders of Pregnancy (Moderator: Gillian Abir, MD)

1. Weight-related Disparities in Acute Treatment of Severe Hypertension in the Postpartum Period – *Amal Javaid, MD*
2. Understanding the Effect of Different Short Acting Anti-hypertensives on the Time to Resolution of Severe Sustained Postpartum Hypertension Stratified by BMI - *Amal Javaid, MD*
3. Trends in Eclampsia in the United States, 2009 to 2017: A population-based study – *Zixuan Xiao, MD*
4. Association between Intrapartum Magnesium Administration and Incidence of Maternal Fever in Preeclamptic Parturients: A Retrospective Study – *Samantha Lu, MD*
5. Racial Differences in Cardiovascular Complications Following Cesarean Delivery in Women with Preeclampsia in the United States – *Marie Louise Meng, MD*
6. Extracellular Vesicles from Women with Severe Pre-eclampsia Impair Vascular Endothelial Function – *Hanna Hussey, MD*
7. Extracellular vesicle VasoRin is a Vascular Protectant: Downregulation as a Mechanism for Pre-eclampsia Induced Vascular Dysfunction - *Hanna Hussey, MD*

Room 6 – Practice Improvement (Moderator: John Kowalczyk, MD)

1. Cesarean Section Under General Anesthesia: Why our Incidence Greater Than 5%? - *Mark Wise, MD*
2. Implementation of the oxytocin 'rule of threes' algorithm for cesarean section in a Japanese tertiary hospital: a retrospective cohort study using propensity score matching – *Serabi Tanabe, MD*
3. Neuraxial Ultrasound Educational Card for Preprocedural Ultrasound Use on Labor and Delivery – *Ryan Militana, MD*
4. Cost of Care of COVID-19 Positive Parturients Delivered with Labor Epidural Analgesia – *Iakshmi Ram, MD*
5. Candidate Gene Association Study of Severe Acute Pain Following Cesarean Section – *Johanna Cobb, MD*

6. Association of acute kidney injury and adverse maternal outcomes: a multistate analysis, 2007-2018 – *Angelica Delgado, MD*
7. *Time of greatest decisional conflict about labor analgesia in pregnancy: a survey study* – *Arthur Chyan, MD*

Room 7 – Placenta Accreta Spectrum (Moderator: Emily Dinges, MD)

1. Neuraxial to general anesthesia conversion has equitable intraoperative and improved postoperative outcomes compared to general anesthesia in cesarean hysterectomy for Placenta Accreta Spectrum (PAS) – *Jessian Munoz, MD*
2. Application of the Surgical APGAR Score (SAS) to predict intensive care unit admission and post-operative outcomes in cesarean hysterectomy for Placenta Accreta Spectrum (PAS) - *Jessian Munoz, MD*
3. Selection of general anesthesia negatively impacts neonatal outcomes in cesarean hysterectomies for placenta accreta spectrum - *Jessian Munoz, MD*
4. Carbetocin versus oxytocin following vaginal and cesarean delivery: a before-after study – *Ahmad Ben Tareef, MD*
5. Impact of oxytocin administration prior to cesarean hysterectomy for placenta accreta spectrum – *Sarah Watson, MD*
6. Comparison of Carbetocin administration as a Bolus or as an Infusion on maternal heart rate using a phenylephrine infusion for cesarean delivery under spinal anesthesia - *Christian Loubert, MD*
7. Cesarean Hysterectomy for Placenta Accreta Spectrum: Comparison of Two Management Strategies – *Laurence Ring, MD*

Room 8 – Epidural Analgesia (Moderator: Anton Chao, MD)

1. The Effects of Bolusing Fentanyl Through the Labor Epidural Upon Initiation of Labor Epidural Analgesia – *Joshua Younger, MD*
2. Evaluation of the Safety of Labor Analgesia Initiated with Low-Dose Local Anesthetic Injection Through Epidural Needle Prior to Epidural Catheter Placement – *Justin Newman, MD*
3. Labour Epidural Information cards in multiple languages – A survey for the necessity and ensuring availability – *Harikumar Sivakumar, MD*
4. To PIE (B) or not to PIE (B)? - A prospective audit of patient controlled epidural analgesia (PCEA) efficacy for labour at a large tertiary centre – *Catherine Lloyd, MD*
5. Gravity Flow Technique to Validate Proper Location of Epidural Needle Tip in High BMI Parturients – *Jeffery Bernstein, MD*
6. Timing of epidural catheter insertion and removal in laboring patients with thrombocytopenia – *David He, MD*

5:30-6:15pm Patient with Placenta Accreta Spectrum Disorder: Where do You Deliver and How do You Do It?

Michaela Farber, MD

Assistant Professor, Harvard Medical School
Fellowship Program Director and Associate Chief, Division of Obstetric Anesthesiology
Brigham & Women's Hospital
Boston, MA

Carolyn Weiniger, MD

Director, Obstetric Anesthesia Unit
Division of Anesthesia, Critical Care and Pain
Tel Aviv Sourasky Medical Center
Safed Area, Israel

6:15-6:30pm BREAK and view pre-recorded case reports

6:30-7:15pm The Obese Patient for OB Anesthesia: Identifying Risk Factors in the Preoperative Clinic

C. LaToya Mason-Bolden, MD, FASA
University of Mississippi Medical Center
Jackson, MS

Jennifer E. Dominguez, MD
Associate Professor of Anesthesiology
Program Director Obstetric Anesthesiology Fellowship Program
Duke University Medical Center
Durham, NC

7:15-8:00pm When Time is of the Essence: Common Emergencies on the Labor & Delivery Floor

Moderator: Feyce Peralta, MD

Speakers:

Alexander Butwick, MD
Professor of Anesthesiology, Perioperative and Pain Medicine (OB)
Stanford University Medical Center
Stanford, CA

Heather Nixon, MD
Associate Head of Education
University of Illinois College of Medicine
Chicago, IL

8:00-8:45pm Labor Analgesia: State of the Art

Jeanette Bauchat, MD
Chief , Obstetric Anesthesiology
Associate Professor , Obstetric Anesthesiology
Vanderbilt University Medical Center
Nashville, TN

Elizabeth Lange, MD
Assistant Professor
Northwestern University
Chicago, IL

SATURDAY, MAY 15

8:15 – 9:00am

Case Reports Session #1 – Concurrent Breakouts

Moderators: David Stahl, MD; Manny Vallejo, MD; Naida Cole, MD

Room 1: David Stahl, MD

1. Type A Aortic Intramural Hematoma in a Parturient with Marfan Syndrome – *Willie Agee, MD*
2. Holistic care of transgender patients on the Labor and Delivery Floor: a case report – *Miriam Alghothani, MD*
3. Neuraxial Anesthesia for Cesarean Section with Unrepaired Tetralogy of Fallot - *Karishma Batra, MD*
4. Anesthetic Management of Granulomatosis with Polyangiitis in Pregnancy – *Sara Boldt, MD*
5. Allergic to the cold? Cold urticaria in a parturient and implications for anesthetic management – *Anjali Doshi, MD*
6. Maternal Death due to Multi-organ Failure secondary to COVID infection in the second trimester - *Mohit Garg, MD*
7. Multiple Epidural Attempts and Placements in a Morbidly Obese Parturient with Normal Thrombocytes Levels Resulting in Emergent Spinal Epidural Hematoma Decompression – *Liliana Goelkel Garcia, MD*

Room 2: Manny Vallejo, MD

8. Unexpected Thrombocytopenia in a Parturient with Evans Syndrome Complicated by COVID-19 Infection -*Shuchi Jain, MD*
9. Management of Urgent Pre-Term Cesarean Delivery in a Parturient with Prior Lung Resection, Severe Progressive Peripartum Cardiomyopathy and Pulmonary Hypertension – *Taimoor Khan, MD*
10. Inhaled Tranexamic Acid for Management of Hemoptysis in a Parturient with Severe Cystic Fibrosis - *Sung Kim, MD*
11. Two Zebras in One: Management of a Parturient with Full-Term Submassive Pulmonary Embolism and Undiagnosed Placenta Accreta Spectrum – *Joseph Klaus, MD*
12. Obstructive, Non-Toxic Goiter in Morbidly Obese Parturient with an “Impossible-to-Intubate” Airway - *Eva Martinez, MD*
13. Bilateral Paraparesis After Cesarean Section Under Combined Spinal Epidural and Transversus Abdominus Plane Block – *Logan Fairchild, MD*
14. Anticoagulation During Labor Epidural in Patient with History of Transposition of the Great Arteries Status Post Mustard Procedure – *Daniel O'Reilly, MD*

Room 3: Naida Cole, MD

15. Pregnancy-related Spontaneous Coronary Artery Dissection: A Tale of Two Outcomes – *Max Schubert, MD*
16. Shared decision-making in the management of a medically complex parturient with CML and high thrombotic risk – *Margaret Smith, MD*
17. Suspected Case of Amniotic Fluid Embolism Complicated by Undiagnosed Patent Foramen Ovale – *Yasmin Sritapan, MD*
18. Failed Uterine Artery Embolization x2 Resulting in Hysterectomy - *Arjun Varadarajan, MD*
19. Common Immunologic Underpinnings for Amniotic Fluid Embolism and Reversible Cerebral Vasoconstriction Syndrome after Cell Salvage: A Case Report and Pathophysiology Review – *Anne Wanaselja, MD*
20. Unusual leg pain in pregnancy - a case report of acute compartment syndrome – *Simon Wydall, MD*
21. Anterior Mediastinal Mass and Cardiac Tamponade in Pregnancy – *Alix Zuleta Alarcon, MD*

9:00-9:15am

Opening Remarks

Ted Yaghmour, MD – SOAP Vice President

9:15-10:15am

Oral Presentations #1

Moderator: Thomas Klumpner, MD

Speakers:

1. Post-cesarean analgesia with epidural morphine following epidural 2-chloroprocaine - *Linden Lee, MD*
2. Effect of Dexmedetomidine as an adjuvant in Quadratus Lumborum block in patients undergoing caesarean section- A randomized controlled study. – *Neha Singh, MD*
3. High flow humidified nasal oxygen versus face mask oxygen for preoxygenation of pregnant women – a prospective randomized controlled crossover study – *Patrick Tan, MD*
4. Heart rate variability (HRV) can identify parturients at risk for maternal hypotension and fetal bradycardia following combined spinal epidural analgesia (CSEA) – *Shunsuke Hygwa, MD*
5. Treatment of Hypertension in Pregnancy: A Network Meta-Analysis of Randomized Control Trials – *Paige Keasler, MD*
6. Bupivacaine Pharmacokinetics After Labor Epidural Analgesia, Intrapartum Cesarean Delivery Anesthesia, and Transversus Abdominis Plane Block With Liposomal Bupivacaine – *Daniel Katz, MD*

10:15-11:45am

Gertie Marx Research Competition

Moderator: Richard Smiley, MD

Judges: Joanna Kountanis, MD; Ruth Landau, MD; Brendan Carvalho, MD;

Phil Hess, MD; Allison Lee, MD

Speakers:

1. The Effect of High Dose versus Low Dose Epidural Fentanyl on Gastric Emptying in Non-Fasted Parturients: A Double-Blinded Randomized Controlled Trial - *Elisheva Fiszer, MD*
2. Maternal Tranexamic Acid Plasma Concentration and Coagulation Status During Cesarean Delivery – *Sara Seifert, MD*
3. Carbetocin vs Oxytocin at elective cesarean deliveries: a double-blind, randomized controlled non-inferiority trial of high and low dose regimens – *Fergal McDonagh, MD*
4. The ED90 of intrathecal chloroprocaine for cervical cerclage placement: an up-down sequential allocation dose-response study – *Riley Landreth, MD*
5. Review of post C-Section Analgesia during Covid Crisis: Bilateral TAP (Tranversus Abdominis Plane) blocks with liposomal bupivacaine and neuraxial morphine reduces use of narcotics and length of stay – *Jason Kim, MD*
6. Use of WhatsApp to improve high risk obstetric referrals in Accra, Ghana – *Hebah Ismail, MD*

11:45am-12:30pm

Why Do You Need an OB Anesthesia Fellowship?

Moderator: Bryan Mahoney, MD

Speakers: Agnes Lamon, MD

Director of Obstetric Anesthesia
Penn Medicine Princeton Health
Princeton, NJ

Greg T. Palleschi, MD

North Shore University Hospital
Dix Hills, NY

Jackie Galvan, MD

Associate Professor of Clinical Anesthesia
The University of Illinois College of Medicine

12:30-1:00pm

LUNCH and view pre-recorded case reports

1:00-2:00pm

Gerard W. Ostheimer Lecture

Introduction: Ron George, MD

Speaker: Grace Lim, MD, MD

Associate Professor
Chief, Division of Obstetric & Womens Anesthesiology
Magee-Womens Research Institute BIRCWH Scholar
Faculty, Magee-Womens Research Institute
University of Pittsburgh
Pittsburgh, PA

2:00-2:15pm

BREAK and view pre-recorded case reports

2:15 - 3:45pm

SOAP/ASRA Panel

Moderator: Ruth Landau, MD

Panelists: Lisa Leffert, MD

Samer Narouze, MD, PhD

Britany Raymond, MD

Stuart Grant, MD

3:45-4:30pm

Thrombocytopenia in the Laboring Patient

Melissa E. Bauer, DO

Associate Professor of Anesthesiology
Duke University School of Medicine

Roulhac D. Toledano, MD. PhD

Clinical Associate Professor, Department of Anesthesiology
Perioperative Care, and Pain Medicine at NYU Grossman School of Medicine
Brooklyn, NY

4:30-5:15pm

Disparities in Maternal Care: Providers, Patients and Outcomes

Allison Lee, MD

Columbia University
New York, NY

Cesar Padilla, MD

Clinical Assistant Professor
Stanford University School of Medicine
Stanford, CA

Paloma Toledo, MD

Northwestern Medicine
Chicago, Illinois

5:15-5:30pm

BREAK

5:30 -6:30pm

Social Event – Charcuterie Class & Reception

5:30 -6:30pm

Fellows Reception

SUNDAY, MAY 16

8:15 – 9:00am

Case Reports Session #2 – Concurrent Breakouts

Moderators: **Erin Haggerty, MD, Amy Lee, MD, Kristen Vanderhoef, MD**

Room 1: Erin Haggerty, MD

1. Case report: Hypofibrinogenemia and neuraxial for elective cesarean section – *Kevin Barkley, MD*
2. Anesthetic Management Of A Parturient With Charcot-Marie-Tooth Disease – *Yveline Blot, MD*
3. Failed intrathecal catheter in a parturient with primary pulmonary hypertension and history of spinal fusion for scoliosis – *Paulina Cardenas, MD*
4. Case report of a parturient with coronary artery fistula: a multidisciplinary approach – *Meghan Cook, MD*
5. Undiagnosed Thrombotic Thrombocytopenic Purpura In The Setting Of An Urgent Primary Cesarean Section – *Paula Escobar, MD*
6. To Delay or Not to Delay: Cesarean Delivery in an Extremely Dyspneic Parturient with a Massive Anterior Mediastinal Mass – *David Gutman, MD*
7. Venous Air Embolism Mediated Near-Cardiac Arrest During Cesarean Delivery for Placenta Accreta – *David Gutman, MD*

Room 2: Amy Lee, MD

8. Challenges in the management of the parturient with hyperosmolar hyperglycemic state complicated by intrauterine fetal demise, septic shock and stress-induced cardiomyopathy – *Christian Hurst, MD*
9. Anesthetic Management of a Parturient with Nemaline Myopathy – *Allison Lee, MD*
10. Successful Cesarean Delivery of a Coronavirus Positive Patient with Hypoplastic Right Ventricle and Pulmonary Atresia at 27 Weeks' Gestation – *William Trudo, MD*
11. Eclamptic Seizure Prophylaxis in patients with renal failure – *Rudo Makonza Goto, MD*
12. Maternal exhaustion or hyponatremia: delay in diagnosis – *Christine McKenzie, MD*
13. Urgent Cesarean Birth for Worsening Pulmonary Hypertension Performed in Intensive Care Unit under Combined Spinal-Epidural case report – *Teshi Kaushik, MD*
14. Parturient with Jarcho-Levin Syndrome Managed Successfully for a Full-term Delivery with Labor Neuraxial Analgesia – *Erik Romanelli, MD*

Room 3: Kristen Vanderhoef, MD

15. Pre-eclampsia associated bilateral serous retinal detachments diagnosed on bedside ultrasound – *Jessica Sheeran, MD*
16. Persistent Vegetative State and 24 Weeks Pregnant: A Clinical and Ethical Dilemma - *Kathleen Smith, MD*
17. Patient-Centered Management of a COVID+ Pregnant Pediatric Patient with Fetal Congenital High Airway Obstruction Syndrome – *Caitlin Sutton, MD*
18. Massive Transfusion Protocol for Uterine Rupture in a Preterm Obstetric Patient with Suspected Cornual Pregnancy - *Amy Walker, MD*
19. Takotsubo's Cardiomyopathy and Spontaneous Coronary Artery Dissection in a 40-year-old Postpartum Patient with Cardiogenic Shock - *Gabriel Washington, MD*
20. Labor Epidural Analgesia for a Patient with Brugada Syndrome – *Lawrence Weinstein, MD*

9:00-9:15am	Opening Remarks Klaus Kjaer, MD, MBA - Legacy Director
9:15-10:15am	Oral Presentations #2 Moderator: Philip Hess, MD Speakers: <ol style="list-style-type: none">1. Which continuous monitor should we use for accurate detection of postoperative apnea events? – <i>Mohamed Elgamal, MD</i>2. Comparing the use of Quantra vs. Rotational Thromboelastometry for Point of Care Viscoelastic Testing – <i>Nayema Salimi, MD</i>3. Peripartum magnesium sulfate in preeclampsia: effect on postpartum endothelial function and blood pressure in early versus late onset preeclampsia – <i>Samantha Parsons, MD</i>4. Association of obstructive sleep apnea with body fluid distribution in pregnant women with obesity – A prospective observational pilot study – <i>James Wicker, MD</i>5. Anesthesia work force capacity and maternal mortality in low and middle-income countries – <i>Anjan Saha, MD</i>6. The clinical tolerability and pharmacokinetics of intraperitoneal chloroprocaine administered to peripartum women – <i>Brandon Togioka, MD</i>
10:15-11:00am	Fred Hehre Lecture Introduction: Rebecca Minehart, MD, MSHPEd Speaker: May Pian-Smith, MD, MS Massachusetts General Hospital Boston, MA
11:00-11:15am	BREAK and view pre-recorded case reports
11:15-11:30am	American Society of Anesthesiologists (ASA) President-Elect Address Randall M. Clark, M.D., FASA President Elect, American Society of Anesthesiologists Professor of Anesthesiology, University of Colorado School of Medicine Pediatric Cardiac Anesthesiologist, Children's Hospital Colorado Aurora, Colorado
11:30am-12:15pm	A unit in crisis --how do I fix it? Patient Safety on Labor and Delivery – PATIENT SAFETY Rachel Kacmar, MD Associate Professor, Anesthesiology University of Colorado Anschutz Medical Campus Denver, CO Grant Lynde, MD Emory University Atlanta, GA
12:15-1:00pm	LUNCH

1:00-1:45pm

Lessons Learned in OB Anesthesia

Joy Hawkins, MD

Professor and Director of Obstetric Anesthesiology
University of Colorado
Denver, CO

Caitlin Sutton, MD

Chief, Division of Maternal-Fetal Anesthesiology
Texas Children's Hospital, Baylor College of Medicine
Houston, TX

1:45-3:15pm

Best Paper Competition

Moderator: Cynthia Wong, MD

Judges: Arvind Palanisamy, MD; Jill Mhyre, MD; Daniel Katz, MD; Jose Carvalho, MD;

Speakers:

1. A Randomized, Double-Blind, Placebo-Controlled Trial of Outpatient Gabapentin to Reduce Persistent Pain and Opioid Use in Women Suffering from Severe Pain after Cesarean Delivery - *Cedar Fowler, MD*
2. Treatment of Shivering After Cesarean Delivery Under Epidural Anesthesia During Labor : Dexmedetomidine vs Meperidine – *Gabriel Paquin-Lanthier, MD*
3. A Randomized Controlled Trial of Dural Puncture Epidural versus Standard Labor Epidural Technique in Parturients with Obesity - *Olga Diomedes, MD*
4. Magnesium sulfate bioavailability and clearance after intramuscular dosing in women with preeclampsia - *Kathleen Brookfield, MD*
5. Appetite regulation in pregnancy: peripheral and central leptin and melanocortin neuropeptides - *Richard Smiley, MD*
6. Association between labor neuraxial analgesia and reduced odds of severe maternal morbidity among women who delivered vaginally in New York State hospitals, 2010-2016. - *Jean Guglielminotti, MD*

3:15-4:15pm

Research Poster Session #2 – Concurrent Breakouts

Moderators: Ron George, MD; Barbara Scavone, MD;

Moderators: Pamela Flood, MD; Yaakov Beilin, MD; Ashraf Habib, MD; Pervez Sultan, MD; Christine Warrick, MD; David Gambling, MD; Mark Zakowski, MD

Room 1 – Practice Improvement and Pain Control (Moderator: Christine Warrick, MD)

1. The association between patient satisfaction and inadequate regional anesthesia for cesarean delivery: a prospective observational study – *Michael Hofkamp, MD*
2. Effect of implementation of perineal tear pain management program on pain scores – *Karunakaran Ramaswamy, MD*
3. Acute pain intensity and opioid dose requirement after cesarean delivery in parturients with pre-existing chronic pain – *Ryu Komatsu, MD*
4. Informed Consent in Obstetric Anesthesiology: Resident Practices and Education to Improve Quality of Consent – *Jessica Meister Berger, MD*
5. Evaluating racial/ethnic inequities in the utilization of liposomal bupivacaine truncal blocks following cesarean delivery – *Christine McKenzie, MD*
6. Comparative Effectiveness of First-Dose Oral Versus Intravenous Acetaminophen for Cesarean Delivery Analgesia: A Prospective Interrupted Time Series Trial – *Francesca Jung, MD*

Room 2 – Cesarean Delivery: Maternal & Fetal Outcome (Moderator: Mark Zakowski, MD)

1. A Retrospective study to evaluate the effect of anaesthesia technique on foeto maternal safety among women with cord prolapse undergoing category one cesarean section – *Varsha Tipparaju, MD*
2. Impact of Post Anesthesia Position on Post Spinal Hemodynamic Variables in Elective Cesarean Sections – *Iakshmi Ram, MD*
3. Validation of a Portuguese version of the Obstetric Quality of Recovery-10 (ObsQoR-10) instrument – *Ricardo Vieira Carlos, MD*
4. Effect of Prophylactic Phenylephrine versus Noradrenaline Infusions on Funic Gases in Healthy Women for Elective Low Risk Caesarean Delivery: A Randomized, Double-Blind Trial – *Apoorva Singh, MD*
5. Reducing Cesarean Section Surgical Site Infections: Multidisciplinary Implementation of a Novel Bundle within an Integrated Health Care System – *Eric Hunt, MD*
6. Association Between Unscheduled Procedure and Poor Postpartum Recovery in Cesarean Delivery Patients: A prospective observational cohort study – *Cyrus Bhiladvala, MD*
7. Quality Improvement Survey Study of Obstetric Anesthesia Personnel with STAT C-Section Kit and Its Use in Preventing Inappropriate Practices When Preparing Medications – *Edward Kalaidjian, MD*

Room 3 – Miscellaneous (Moderator: Ashraf Habib, MD)

1. Obstetric Anesthesia Workload and Facility Utilization of SOAP Centers of Excellence Designated Institutions - *Mary Im, MD*
2. Obstetric and anesthetic management of deliveries in women with a Fontan circulation: single centre experience and trends in practice over the past 21 years – *Aidan Spring, MD*
3. Association between Diastolic Function Parameters and Obstructive Sleep Apnea in Morbidly Obese Pregnant Women – *Olga Diomedes, MD*
4. Association of Medicaid Expansion with the Provision of Neuraxial Labor Analgesia: A Retrospective Cross-sectional Analysis – *Dylan Whitney, MD*
5. Anesthetic Management of Parturients with Vascular Malformations – *Stephen Ellwood, MD*
6. Uterine Exteriorization Versus In Situ Repair of Hysterotomy During Cesarean Delivery: A Systematic Review, Equivalence Meta-Analysis, and Trial Sequential Analysis – *Adithya Bhat, MD*
7. Preventing Postpartum Hemorrhage After Cesarean Delivery: A Network Meta-Analysis of Available Pharmacologic Agents – *Danish Jaffer, MD*

Room 4 – Neuraxial Labor Analgesia (Moderator: Barbara Scavone, MD)

1. The rate of maternal fever does not differ between women receiving continuous spinal versus continuous epidural labor analgesia – *Francis Seiler, MD*
2. Racial and ethnic disparities in obstetric anesthesia: a review of the literature (2004-2021) – *Chloe Kern, MD*
3. Labor Epidural with Dural Puncture Reduces Catheter Replacement Rates when Compared to Epidural without Dural Puncture – *Amnon Berger, MD*
4. The Interaction of Programmed Intermittent Epidural Bolus Flow Rate and Time Interval on Labor Analgesia Quality: A Prospective, Randomized, Double-Blind Study of Three Pump Settings – *Charlie Prior, MD*
5. Anesthetic Outcomes of the Dural Puncture Epidural Technique: A Retrospective Cohort Study – *Ayumi Maeda, MD*
6. Labour epidural made safe – *Tam Al-Ani, MD*
7. Association Between Documentation Accuracy and Number of Neuraxial Placement Attempts and Redirections: A Prospective Observational Study – *Yousif Ali, MD*

Room 5 – Practice Improvement/Physiology (Moderator: Ron George, MD)

1. Implementation of an electronic alert notification platform for a maternal early warning system – *Gillian Abir, MD*
2. A cost-savings comparison between disposable and reusable pulse oximetry sensors in labor and delivery operating rooms – *Emily Stockert, MD*
3. Which tracks MV better, TV or RR for assessment of ventilatory function in postoperative patients? - *Mohamed Elgamel, MD*
4. Central cortisol regulation in pregnancy – *Richard Smiley, MD*
5. A Peripheral Immune Signature of Acute Labor – *Kazuo Ando, MD*
6. Intrathecal Bupivacaine Dosing for Transvaginal Cervical Cerclage: A Retrospective Analysis – *Sierra Mims, MD*
7. Intrathecal Bupivacaine versus Chloroprocaine for Transvaginal Cervical Cerclage: A Retrospective Analysis - *Sierra Mims, MD*

Room 6 – Practice Improvement/a-Adrenergic Agonists (Moderator: Yaakov Beilin, MD)

1. Introduction of a pre-procedural checklist to enhance compliance with anesthesia medication safety in the labor and delivery room – *Johanna Cobb, MD*
2. Use of Intrathecal Dexmedetomidine in Caring for Pregnant Women who have Opioid Use Disorder Undergoing for Cesarean Delivery – *Yunping Li, MD*
3. Effect of Neuraxial Clonidine on Post-Cesarean Opioid Consumption and Pain Scores in Parturients on Chronic Buprenorphine Therapy: a Retrospective Cohort Study – *Michael Taylor, MD*
4. Cognitive Aid for Maternal Cardiovascular Life Support in Corona Virus Disease-19 Infection: A Simulation-Based Development of New Clinical Pathway – *Vandana Vaishnav, MD*
5. Dexmedetomidine as an Adjunct to Neuraxial Anesthesia in Cesarean Delivery: A Retrospective Chart Review – *Paul Davis, MD*
6. Predictive performance of 3 risk-assessment tools for postpartum hemorrhage after vaginal delivery: A nested case-control study using quantitative blood loss – *Arthur Chyan, MD*
7. Labor & Delivery Operating Room Staffing and Operating Efficiency Using Queueing Theory – *Grace Lim, MD*

Room 7 – Practice Improvement and Teamwork (Moderator: David Gambling, MD)

1. Standardizing the Approach to Epidural Placement to Reduce Time to Epidural Completion: A Quality Improvement Project – *Kaitlyn Brennan, MD*
2. Questionnaire on Management of Unwitnessed Disconnected Labor Epidurals – *Rustin Roberts, MD*
3. Nutritional preferences of women during labor: a survey study – *Geoffrey Liang, MD*
4. High Dependency Unit on the Labor and Delivery Floor - *Rustin Roberts, MD*
5. Using verbal and physical cues to identify temporary co-leaders during an obstetrical critical event in the operating room – *Grace Shih, MD*
6. Anesthesia and Nursing Leadership During an Obstetrical Critical Event Enhances Communication, Performance, and Teamwork - *Grace Shih, MD*

Room 8 – Maternal-Fetal Health (Moderator: Pamela Flood, MD)

1. Mitochondrial dysfunction accompanies placental aging and promotes labor onset – *Erin Ciampa, MD*
2. A Cellular Model of Placental Aging – *Padraich Flahardy, MD*
3. Combined Spinal-Epidural and Fetal Heart Rate Monitoring: Time to Reevaluate the Use of Intrathecal Fentanyl – *Javier Pilania Guetierrez, MD*
4. Effect of enhanced recovery after surgery for elective cesarean deliveries on neonatal outcomes – *Khadija Razzaq, MD*
5. Correlating Prenatal and Delivery Platelet Count Values in Obstetric Patients: Clinical Utility of Reflexive Admission Laboratory Assessments – *Michelle Yanik, MD*
6. The association between umbilical cord, maternal and neonatal sodium concentration: using cord gas analysis to expedite a diagnosis of peripartum hyponatraemia – *Louis Carlson-Hedges, MD*

Room 9 – POCUS/Fetal Interventions (Moderator: Pervez Sultan, MD)

1. Maternal Pain Management for Fetal Myelomeningocele Repairs: From Fetal Surgery to Delivery – *Claire Naus, MD*
2. Review of anesthetic management of minimally invasive fetal interventions for complex monochorionic pregnancies – *Meryl William, MD*
3. Ultrasound-assisted versus landmark-based spinal block performance in emergency caesarean delivery in obese patients at a central hospital – a randomised controlled trial – *Bojan Korda, MD*
4. Importance of Forward Leaning in Optimizing Sitting Position for Administration of Labor Neuraxial Analgesia in Term Parturients: An Ultrasonographical Study – *Jie Zhou, MD*
5. A multicenter interdisciplinary national survey of practices and perceptions regarding oral intake during labor – *Elisheva Fiszer, MD*
6. Ultrasound Image Quality Comparison between an Inexpensive Handheld Ultrasound Machine and a Large Mobile Ultrasound – *Nayema Salimi, MD*
7. Echocardiography During Active Labor - Initial Observations and Protocol Implementation – *Piranthini Suntharalingam, MD*

4:15-5:15pm

Closing Reception & Award Ceremony

Pre-Recorded Presentations

1. Neuroaxial Block in pregnant women with Pseudotumor Cerberi- *Mohannad Abushora, MD*
2. LSCS after 5 weeks & 4 days of Percutaneous transluminal coronary angioplasty/ Drug eluting stent Anesthesiologist's Dilemma - *Megha Agrawal, MD*
3. Anesthetic Management of a Parturient with Glanzmann's Thrombasthenia - *Saamia Alam, MD*
4. Lumbar Neuraxial Ultrasound Made Easy - *Tam Al-Ani, MD*
5. Use of epidural catheter for emergent hysterectomy immediately after prophylactic epidural blood patch: not our usual practice! - *Mariam Ashraf, MD*
6. Successful External Cephalic Version and Anesthesia Management in a Patient with Repaired Tetralogy of Fallot - *Mohamad Ayoub, MD*
7. Anesthetic Management of a Parturient with Fontan Circulation - *Mariam Batakji, MD*
8. Anesthetic considerations for cesarean section in a parturient with multiple uncommon co-morbidities - *Ali Bazzi, MD*
9. Reduction in massive postpartum haemorrhage and red blood cell transfusion during a national quality improvement project, Obstetric Bleeding Strategy for Wales, OBS Cymru: an observational study - *Sarah Bell, MD*
10. Induction of Labor for a Primigravid Patient with Propionic Acidemia - *David Bennett, MD*
11. Severe Right Ventricular dilatation and Pulmonary Hypertension caused by a large ASD: Obstetric Anesthesia Management - *Michael Beshara, MD*
12. Life Threatening Labial Hematoma - *Callan Bialorucki, MD*
13. Epidural Analgesia for Labor: Comparing the Effects of Continuous Epidural Infusion (CEI) and Programmed Intermittent Epidural Bolus (PIEB) on Obstetric Outcomes – *Yair Binyamin, MD*
14. Subdural Hematoma after Unintentional Dural Puncture- *Lauren Blake, MD*
15. Refractory Hypotension Secondary to Labetalol Administration in Preeclampsia and the Utility of Glucagon - *Taylor Blalack, MD*
16. Management of Postpartum Hemorrhage in a Parturient with Type 2M von Willebrand Disease - *Kaitlyn Brennan, MD*
17. Managing Critical Mitral Stenosis in Pregnancy in Kenya - *Kaitlyn Brennan, MD*
18. Emergent cesarean delivery in a parturient with previously undiagnosed severe mitral stenosis - *Derek He, MD*
19. Greater Occipital Nerve Block as an Adjunct in Postdural Puncture Headache - *Seung Choi, MD*
20. Abdominal Pain despite functioning epidural anesthesia: Uterine rupture - *Lu Chou, MD*
21. Multiple Failed Neuraxials - *Dhruv Choudhry, MD*
22. Obstetric Anesthesia Management Of Cesarean Delivery For A Patient With Repaired Aortic Coarctation, Total Anomalous Pulmonary Venous Return, And Thoracolumbar Scoliosis - *Annie Chow, MD*

23. XSupraglottic Airway for General Anesthesia in Obstetric Emergency - *Praeophayom Clarke, MD*
24. Remifentanyl for Labor Analgesia in a Morbidly Obese Parturient. Is it Worth the Pain? - *Collin Conrad, MD*
25. Development of a competency-based curriculum for obstetric anesthesia residency training using a Delphi Model - *Christopher Cosden, MD*
26. Cesarean in a Parturient with a Complicated Tetralogy of Fallot Repair - *Candace Curtis, MD*
27. Complex Regional Pain Syndrome in the Parturient Patient - *Veronica D'Ambra, MD*
28. Video-assisted Thoracoscopic Surgery under General Anesthesia for Directed Biopsy of a Mediastinal Mass in Pregnancy - *James Damron, MD*
29. Low-Dose Combined Spinal-Epidural for Cesarean Delivery in a Woman with Severe Aortic Stenosis - *Camille Davis, MD*
30. A case report for the management of refractory sustained, unstable supraventricular tachycardia in the peripartum period - *Kathryn Davis, MD*
31. Awake Dual-Lumen Endotracheal Tube Placement for Primary Mediastinal B-Cell lymphoma in a parturient - *Gustavo Diaz-Mercado, MD*
32. Migraine with aura presenting as a transient ischemic attack in a parturient - *Gustavo Diaz-Mercado, MD*
33. The Perfect Storm: Thyrotoxicosis, Full Anticoagulation, and Difficult Airway in a Parturient - *Timothy Edmonds, MD*
34. Subarachnoid Hemorrhage Complicating Severe Pre-eclamptic Neuropathology: A Case Report - *Lindsey Efird, MD*
35. Successful Neuraxial anesthesia in the parturient with history of spinal cord AVM - *Kevin Elaahi, MD*
36. Anesthetic Management of a Parturient with Arthrogryposis Multiplex Congenita for Cesarean Delivery - *Ilhan Eli, MD*
37. Anesthesia for C-section in a Patient with Brain Meningioma with mass effect and increased ICP - *Sherif Elsayed Ali Ali, MD*
38. Anesthetic management of a woman with mast cell activation syndrome and allergy to lidocaine undergoing cesarean delivery - *Marie Eve Fiset, MD*
39. Management of a Patient with Severe Mitral Regurgitation and Non-ischemic Cardiomyopathy for Cesarean Delivery in a Cardiac Operating Room - *Taylor Foster, MD*
40. Anesthetic Management for Cesarean Delivery in a Patient with a Difficult Airway and Risks for Postpartum Hemorrhage - *Rofayda Gad, MD*
41. Anesthetic Management for a Grand Multipara Patient With HELLP Syndrome and Acute Renal Failure undergoing CD - *Rofayda Gad, MD*
42. Detection of apical hypertrophy (Yamaguchi syndrome) and subsequent anesthetic management of cesarean delivery - *Rofayda Gad, MD*
43. Multimodal anesthesia for EXIT procedure - *Rofayda Gad, MD*
44. Prolonged sedation in a parturient with COVID-19 and fetal outcome - *Rofayda Gad, MD*
45. Case Report: Vaginal Delivery and A Tale of Two Ventricles (Transposition of the Great Arteries), Simply Baffling! - *Ishan Garg, MD*

46. Acute respiratory failure in a patient with severe preeclampsia and morbid obesity during cesarean section - *Aryeh Ginsburg, MD*
47. Management of Undiagnosed Pseudocholinesterase Deficiency in a Parturient Undergoing Urgent Cesarean Section Under General Anesthesia - *Lana Glantz, MD*
48. Emergent Cesarean Delivery Secondary to Non-conventional Presentation of Uterine Rupture in a Parturient with Systemic Lupus Erythematosus - *Ashlee Gourdine, MD*
49. Sphenopalatine Ganglion Block to Treat Perioperative Migraine Headache - *Gilbert Grant, MD*
50. Paramyotonia Congenita - *Carter Guice, MD*
51. The non-Subarachnoid "Worst Headache of My Life" in a T4 Paraplegic Parturient with Autonomic Dysreflexia - *Katherine Herbert, MD*
52. Procedure on Placental Support Under Neuraxial Anesthesia for Fetal Oropharyngeal Mass - *Kathryn Hackett, MD*
53. Anesthesia Management Of Emergency Cesarean Section With A Platelet Count Of 3000/ μ l and Idiopathic Thrombocytopenic Purpura - *Achmad Hariyanto, MD*
54. Factor XIII deficiency: Is it or isn't it? - *Jakayla Harrell, MD*
55. Delayed Interval Delivery in a Parturient with Essential Thrombocythemia and a Triamniotic-Trichorionic Triplet Pregnancy - *Jakayla Harrell, MD*
56. General Anesthesia for Balloon Valvuloplasty in A Pregnant Patient with Severe Mitral Stenosis and Pulmonary Hypertension: A Case Report - *Pamela Huang, MD*
57. Case Report: Management of a case of severe Abruptio with IUFD and severe PET: Importance of ROTEM in management of such high risk cases - *Sanjeev Jain, MD*
58. Subdural hematoma as a complication of accidental dural puncture - *Deborah Jeon, MD*
59. Anesthetic Management of a Parturient with Pulmonary Hypertension On Treprostinil Treatment - *Samuel Joseph, MD*
60. Anesthetic management of a parturient with vascular Ehlers-Danlos Syndrome undergoing repeat cesarean delivery - *Lana Joudeh, MD*
61. Anesthesia for an Unscheduled Cesarean Delivery in a Woman with Stage IV Alcoholic Cirrhosis - *Gus Kefalopoulos, MD*
62. Supraglottic Airway for General Anesthesia in Obstetric Emergency - *Kyle Kang, MD*
63. Successful neuraxial anesthesia administration in a patient with hydromyelia - *Alexandra Kiers, MD*
64. Atypical Presentation of Iatrogenic Bladder Injury during Elective Cesarean Delivery - *Jinsoo Kim, MD*
65. Multiple Etiologies of Postpartum Headache Presenting in a Single Parturient - *Christopher Kim, MD*
66. It's Time to Wake Up: An International Quality Improvement Project that Dramatically Decreased the Rates of Cesarean under General Anesthesia - *Joseph Klaus, MD*
67. Demystifying the Epidural: Increasing the Use of Neuraxial for Labor Pain in Ukraine - *Anna Gabrielian, MD*
68. Novel Approach to Analgesia for an Intellectually Disabled Labor Patient - *Anna Gabrielian, MD*
69. Management of Labor With Heliox in a Patient with Subglottic Stenosis - *Seth Landa, MD*

70. Cerebral Venous Sinus Thrombosis Discovered After Post-dural Puncture Headache Treated with Sphenopalatine Ganglion Block and Epidural Blood Patch - *Danielle Levin, MD*
71. The Peripartum Management of COVID-19 in a Patient with Brugada Syndrome - *Sherry Liou, MD*
72. Amniotic Fluid Embolism and the Recrudescence of COVID-19 Symptoms - *Nathaniel Liu, MD*
73. Preterm Cesarean Delivery in a Patient with Methamphetamine-Associated Cardiomyopathy - *Mingchun Liu, MD*
74. Management of the Parturient with Factor VII Deficiency - *Whitney Loggins, MD*
75. Placement of a Labor Epidural in a Patient with a Spinal Cord Stimulator - *Kody Massner, MD*
76. Spinal anesthesia for caesarian in a parturient with Arnold-Chiari Type 1 Malformation and significant lumbar disc prolapse - case report. *Gisha Mathew, MD*
77. Neuraxial anesthesia in a parturient with cerebral palsy and prior selective dorsal rhizotomy - *Christine McKenzie, MD*
78. Anesthetic Management of a Morbidly Obese Parturient with Charcot Marie Tooth and HELLP with Cord Prolapse - *Jessica Meister Berger, MD*
79. Spontaneous Postpartum Uterine Rupture in a Primigravida Following Vaginal Delivery - *Jessica Meister Berger, MD*
80. Life Threatening Hemorrhage Secondary to Hidden Uterine Inversion - *Vasilije Mijovic, MD*
81. Management of Post-Partum Hemorrhage in a 31-year-old Patient with Severe Osteomyelitis and Placenta Accreta Spectrum Disorder - *Aaron Montani, MD*
82. Case Study: Management Of Peripartum Cardiomyopathy At Delivery - *Suzanne Mundhenke, MD*
83. Convulsion immediately after vaginal delivery - *Hyo-Seok Na, MD*
84. Two Surgeries in the Second Trimester: Fetal Myelomeningocele Repair Followed by Laparoscopic Cholecystectomy - *Claire Naus, MD*
85. Multidisciplinary management of pulmonary arterial hypertension in pregnancy: a case report - *Nemade Preeti, MD*
86. Resistance to local anesthetics: a case report in pregnant woman who failed to achieve skin analgesia – *Thong Nguyen, MD*
87. Perioperative Management of Parturient with Cystic Lung Disease - *Leziga Obiyo, MD*
88. Labor Analgesia Options for Parturient with an Implanted Intrathecal Baclofen Pump - *Taylor O'Neal, MD*
89. Central Anticholinergic Syndrome: An Unusual Awakening from General Anesthesia after Cesarean Delivery - *Sophia Dunworth, MD*
90. Neuraxial anesthesia for a laboring patient with hereditary spastic paraplegia: a case report - *Joshua Falescky, MD*
91. Cesarean delivery in Spinal Muscular Atrophy type 3 (Kugelberg- Welanders Syndrome) - Case report - *Borislava Pujic, MD*
92. Initiation of First ERAS Protocol for Cesarean Delivery in Serbia-preliminary results – *Borislava Pujic, MD*
93. Lidocaine allergy? 2-Chloroprocaine, An Ester Alternative, May Be The Solution For Epidural Anesthesia When Amide Local Anesthetics Are Not An Option - *Sidhant Pamnani, MD*

94. Compartment Syndrome Following C-section Complicated By Persistent Postpartum Hemorrhage - *Sidhant Pamnani, MD*
95. Complicated analgesic management for a laboring patient on buprenorphine - *Sue Panayiotou, CRNA*
96. 30 Minutes Decision to Incision: A Quality Improvement Project - *Javier Polania Gutierrez, MD*
97. Avoiding Perioperative Sudden Cardiac Death In Williams Syndrome - *Bethany Potere, MD*
100. Labor epidural placement in a patient with tinea versicolor of thoraco lumbar region - *lakshmi Ram, MD*
100. Platelets are Overrated! Hemostatic Strategies for Cesarean Delivery with < 5k Platelets – *Krishnan Ramanujan, MD*
101. AFE or PE: A Case of Acute CV Collapse - *Julian Rios, MD*
102. A Case Report of Anesthetic Planning for a Parturient with Severe Mitral Valve Stenosis – *Mary Roberts, MD*
103. Prone Positioning for the Treatment of ARDS in the Post-Partum Patient - *Spencer Robichaux, MD*
104. Intracranial Mass in a Pregnant Patient, the management, of the patient, and course of pregnancy – *Jonathan Rogerson, MD*
105. Uterine Rupture and Emergent Cesarean Hysterectomy in an Unscarred Uterus - *Susanne Rupert, MD*
106. Use of ROTEM as an adjunct to assess coagulopathy in thrombocytopenic parturient prior to neuraxial anesthesia - *Emmarie Myers, MD*
107. Cesarean Delivery in a patient with COVID-19 and Holt-Oram Syndrome - *Maria Sheikh, MD*
108. Can You Place Neuraxial Anesthesia in a Patient With a History of Intravenous Drug Abuse and Presumed Bacteremia? - *Jennifer Song-Andrews, MD*
109. Avoiding Amide Anaphylaxis – Unconventional Neuraxial Options for Cesarean Delivery – *Claire Spradling, CRNA*
110. What To Do When You Can't Transfuse – Blood Transfusion Alternatives for Jehovah's Witnesses - *Mellany Stanislaus, MD*
111. Evans Syndrome: A Qualitative or Quantitative Defect in Platelets? - *Nathan Steiner, MD*
112. Placental Abruption and Disseminated Intravascular Coagulation Unveiled by Epidural Catheter Site Bleeding - *Nathan Steiner, MD*
113. Elective cesarian hysterectomy in parturient complicated by placenta previa and placenta accreta spectrum and history thoracolumbar spinal fusion with Harrington rods - *Shruti Sudhakar, MD*
114. Urgent Cesarean Delivery of Dichorionic/Diamnionic Twins in a Parturient with Prior C5 Spinal Cord Injury and Resultant Incomplete Quadriplegia with a History of Autonomic Dysreflexia - *Cameron Sumner, MD*
115. Parturient with rare bleeding disorder requiring all facets of obstetric anesthesia care – *Justin Swengel, MD*
116. Pneumocephalus after Labor Epidural - *Erica Tafuro, MD*

117. Unilateral Lung Hypoplasia in the Morbidly Obese Obstetric Patient: A Case Report - *Angeli Thawani, MD*
118. Obstetric anesthesia for a patient with HELLP syndrome versus SLE flare: a diagnostic challenge - *Caroline Thomas, MD*
119. Ballantyne Syndrome- *Julie-Ann Thompson, MD*
120. Spinal cord hemangioblastoma resection and cesarean delivery in a 31-week gravid patient: a case report – *Reade Tillman, MD*
121. Perioperative Management of a Parturient with a Spontaneous Cerebrospinal Fluid Leak. - *Joseph Tipton, MD*
122. Identification of Factors that Lower the Accuracy of Quantitative Blood Loss During Cesarean Delivery: Pre- Delivery Fluid and Omission of Gravimetry – *Natalie Tukan, MD*
123. Management of extra cardiac Fontan patient on labor and delivery for three obstetric procedures – *Nicholas Unkrich, MD*
124. Neuraxial Analgesia in a Parturient with NF-1 - *Yuri Volnov, MD*
125. Anesthetic Management for Diabetic Autonomic Dysregulation in Pregnancy - *Allen Wang, MD*
126. Anesthetic Management of a Patient with Intracranial Aneurysm for Cesarean Delivery – *Lawrence Weinstein, MD*
127. Postpartum hemorrhage in a patient with prior uterine artery embolization - *Kelly West, MD*
128. Clinical improvement and tumor regression in parturient with brain tumor and intracranial bleeding after c-section with general anesthesia : a case report - *Andreas Willianto, MD*
129. Elective cesarean delivery in a parturient with transverse myelitis - *Mike Wong, MD*
130. Symptomatic Vasovagal Episodes in Synchrony with Uterine Contractions in an Expectant Multipara – *Ivana Wroblewski, MD*



SAVE THE DATE

54th Annual Meeting

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Chicago, Illinois

May 11-15, 2022



55th Annual Meeting

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New Orleans, La.

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To advance and advocate for the health of pregnant women and their babies through research, education, and best practices in obstetric anesthesia care

Safe and equitable care
for women and newborns
everywhere

VISION

CORE VALUES

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Diversity
Inclusivity

Experience

Deliver a beneficial year-round experience for members that provides a safe environment for the exchange of knowledge, best practices, successes and challenges

Supporting Efforts

- Provide a content-rich Annual Meeting
- Ensure members receive year-round value and engagement from their memberships
- Deliver impactful educational opportunities and learning resources
- Advance obstetric anesthesia research
- Communicate with members in effective and beneficial ways

Community

Build a diverse, inclusive, engaged membership community that reflects the values and purposes of SOAP

Supporting Efforts

- Ensure a welcoming and inclusive society
- Build strong, mutually beneficial strategic partnerships
- Advocate for our patients and profession; establish best practices
- Elevate the next generation of professionals

Infrastructure

Develop an infrastructure that provides effective operations and aligns our governance model with the changing needs of our organization and environment

Supporting Efforts

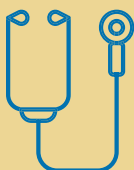
- Provide meaningful opportunities for members to engage
- Develop a cohesive and inclusive leadership team
- Ensure financial sustainability and growth
- Operate efficiently, transparently and consistently
- Solidify SOAP's brand and focus

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- Offers opportunities for professional development and leadership
- Allows access to previous meeting publications, files, and supplements
- Gives a forum to evaluate and discuss the latest research, education, and clinical practices in the specialties of obstetric anesthesia, obstetrics, and perinatology
- Affords CME opportunities and reduced registration fees for SOAP Annual Meetings and virtual events
- CME credits earned are supplied to the ABA (ABA# must be provided upon registration)
- Enables access to significant research grants and research mentorship
- Connects you to other individuals that share similar issues in their practices for advice and counsel
- Provides access to American College of Obstetricians and Gynecologists documents of interest to OB anesthesia
- Provides discounted membership for the International Anesthesia Research Society, including subscription to Anesthesia & Analgesia (the official journal of SOAP) and event discounts
- Provides discounted journal subscription rates to Obstetric Anesthesia Digest and International Journal of Obstetric Anesthesia
- Provides discounted registration rates for meetings of the Obstetric Anaesthesia Association (UK)

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Memoriam

In 2020, SOAP was saddened to learn of the passing of two distinguished Past Presidents.

Dr. Barbara Leighton

Dr. Charles P. Gibbs

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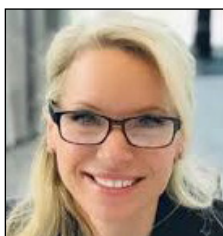
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Heather C. Nixon, M.D.
Annual Meeting/Live Events
Chair



May C. Pian-Smith, M.D., M.S.
Education Chair

SOAP Awards

SOAP Media Award

The goal of the SOAP Media Award is to acknowledge the contribution of a member of the media in furthering public awareness of the important role obstetric anesthesiology plays in the care of the parturient. Journalists, photographers, producers, directors, and any other media professionals involved in the development and advancement of the above content will be considered. All relevant media genres including but not limited to print, radio, television, and the internet are eligible. The award is given for merit and may not be awarded every year.

SOAP Media Award Recipients

- 2020 Brian Scott, FOX TV Orlando: "CBD Use During Pregnancy"
- 2019 Reuben Castaneda, U. S. News and World Report "8 Myths About Managing Labor Pain"
- 2018 Renee Montagne, NPR "Maternal Mortality and Serious Morbidity Investigative Reporting"
- 2017 Univision, Dr. Cesar R. Padilla Interview by Salud y Mujer, "Lo que debe saber sobre la anestesia epidural", May 16, 2016
- 2017 OpenAnesthesia.org, Obstetric Anesthesia Webinars by Dr. Elizabeth H. Ellinas
- 2016 Isabella Epiu, M.D., "Prioritise anaesthesia on the health agenda," New Vision, November 12, 2015 2015
Linda Ciampa, CNN: "The Gentle Cesarean: More Like A Birth Than An Operation," January 20, 2015
- 2014 Dana Kozlov, WBBM-TV Chicago: "Mother dies while delivering baby - and lives to tell about it," Dec. 17, 2013
- 2013 Craig M. Palmer, M.D. and Kevin Pho, M.D., "Obstetric Anesthesiologists Not Only Relieve Pain, They Save Lives," kevinmd.com, June 30, 2012
- 2012 Melinda Wenner Moyer, "The Truth About Epidurals," Slate Magazine, January 2012
- 2011 Roini Caryn Rabin, "In Labor, a Snack or a Sip?," New York Times, Jan 26, 2010
- 2010 Larry Hatteberg, Hatteberg's People, for "From Goddard to Ghana: A Woman's Journey", KAKE ABC Channel 10
- 2008 Kathryn J. Alexander, Co-Author, "Easy Labor", and prominent pregnancy and parenting journalist.
- 2005 Cynthia Wong, M.D. and William Camann, M.D., for Today Show appearance (with Katie Couric) regarding Dr. Wong's study on epidurals in early labor.
- 1999 Rachel Ward, the Australian actress, for her piece "Maternity Ward", describing her own childbirth experience.

Distinguished Service Award

The Board of Directors selects the recipient of the SOAP Distinguished Service Award based on the following criteria: The recipient has been a long-standing society member. The recipient made numerous contributions to the Society (i.e., served on the Board of Directors, presented at Annual Meetings, served on Society committees) and has provided exceptional service to the specialty of obstetric anesthesia. In addition the SOAP Board of Directors recognizes the recipient as one who is viewed by the community at large as an exemplary ambassador of obstetric anesthesia.

Distinguished Service Award Recipients

- 2019 Richard M. Smiley, M.D., Ph.D
- 2018 David H. Chestnut, M.D.
- 2017 Robert D'Angelo, M.D.
- 2016 Joy L. Hawkins, M.D.
- 2015 William R. Camann, M.D.
- 2014 Alan C. Santos, M.D., M.P.H.
- 2013 Alex F. Pue, M.D.
- 2012 Gerard M. Bassell, M.D.
- 2011 Joanne Douglas, M.D.
- 2010 Mark A. Rosen, M.D.
- 2009 Sanjay Datta, M.B.
- 2008 Samuel Hughes, M.D. (posthumous)
- 2007 Frank James, M.D.
- 2006 Felicity Reynolds, M.D.
- 2005 Frederick Zuspan, M.D.
- 2004 Sheila E. Cohen, M.B., Ch.B.
- 2003 Brett B. Gutsche, M.D.
- 2002 Bradley E. Smith, M.D.
Robert F. Hustead, M.D.
James A. Evans, M.D.
James O. Elam, M.D.
Richard B. Clark, M.D.
Robert O. Bauer, M.D.
- 2001 Mieczyslaw Finster, M.D.
- 2000 Gertie F. Marx, M.D.

Research in Education Award

The research in Education Award was established in 2001 by the SOAP Board of Directors and first given at the May 2002 Annual Meeting in Hilton Head, South Carolina.

The criteria are:

- Abstracts may focus on the education of medical students, residents, patients, obstetric care providers, or the community.
- All health care providers (anesthesiologists, fellows, residents, obstetricians, nurses, etc) are eligible as long as they are a member of SOAP or sponsored by a SOAP member.

Research in Education Award Recipients

2019 Allison Lee, M.D., M.B.B.S.
 2018 Janette Brohan, M.D.
 2017 Victoria Danahkl, M.D.
 2016 Heather C. Nixon, M.D.
 2015 Mrinalini Balki, M.B.B.S., M.D. and Katherine G. Lim, M.D. (tie)
 2014 Kelly G. Elterman, M.D.
 2013 Clemens M. Ortner, M.D.
 2012 Raymund Glassenburg, M.D.
 2011 Michelle A. Walters, M.B., B.S.

SOAP Teacher of the Year Award

The SOAP Teacher of the Year Award was created to recognize outstanding practitioners of obstetric anesthesiology who have demonstrated superior teaching primarily of anesthesiology residents and fellows, and secondarily of obstetricians, nurses, midwives, and the lay public. The SOAP Education Awards Subcommittee is charged with the task of evaluating candidates and would like nominators to consider the following attributes of the candidates: clinical teaching, mentoring, and the advancement of obstetric anesthesia outside of our own community.

Teacher of the Year Award Recipients

2020 Regina Y. Fragneto, M.D. (Over 10 Years of Experience)
 2020 Bryan P. Mahoney, M.D. (Less than 10 Years of Experience)
 2019 Manuel C. Vallejo Jr., M.D. D.M.D. (Over 10 Years of Experience)
 2019 Daniel Katz, M.D. (Less than 10 Years of Experience)
 2018 Barbara M. Scavone, M.D. (Over 10 Years of Experience)
 2018 Michaela K. Farber, M.D., M.S. (Less than 10 Years of Experience)
 2017 Philip E. Hess, M.D. (Over 10 Years of Experience)
 2017 Heather C. Nixon, M.D. (Less than 10 Years of Experience)
 2016 Joy E. Schabel, M.D. (Over 10 Years of Experience)
 2016 Katherine W. Arendt, M.D. (Less than 10 Years of Experience)
 2015 Jose C.A. Carvalho, M.D., Ph.D., FANZCA, FRCPC (Over 10 Years of Experience)
 2015 Rebecca Minehart, M.D. (Less than 10 Years of Experience)
 2014 Cynthia Wong, M.D. (Over 10 Years of Experience)
 2014 Paloma Toledo, M.D., M.P.H. (Less than 10 Years of Experience)
 2013 Curtis L. Baysinger, M.D. (Over 10 Years of Experience)
 2013 Mark D. Rollins, M.D. (Less than 10 Years of Experience)
 2012 May Pian-Smith, M.D. (Over 10 Years of Experience)
 2012 Brendan Carvalho, M.B.B.Ch., FRCA, M.D.Ch. (Less Than 10 Years of Experience)
 2011 Lawrence C. Tsen, M.D. (Over 10 Years of Experience)
 2011 Moeen Panni, M.D., Ph.D. (Less Than 10 Years of Experience)
 2010 Sivam Ramanathan, M.D. (Over 10 Years of Experience Category)
 2010 Sabri Barsoum, M.D. (Less than 10 Years of Experience)
 2009 Medge D. Owen, M.D.
 2008 William Camann, M.D.

Diversity & Inclusivity Award

On May 12, SOAP will present the first-ever SOAP Diversity & Inclusivity Award, recognizing a member actively doing the important work of promoting Diversity & Inclusivity in their communities and workplaces.

The SOAP Diversity and Inclusivity Award will recognize outstanding obstetric anesthesiologists who have **acted to address racial and ethnic disparities in maternal health outcomes** and made significant contributions to **increasing diversity and inclusivity of the anesthesiology workforce** through their scholarship, mentorship and leadership.

Frederick P. Zuspan Award

The Zuspan award started in 1997 and its purpose is to promote collaborative research and scholarship between Obstetricians and Obstetric Anesthesiologists by rewarding the top research paper co-authored by an Obstetrician interfacing with an Obstetric Anesthesiologist. Eligibility criteria for the Zuspan award is that at least one co-author of the abstract must be an Obstetrician.

Frederick P. Zuspan Award Recipients

2019	Danny Mireault, M.D.
2018	Shunsuke Hyuga, M.D.
2017	Jeremy Juang, M.D., Ph.D.
2016	Brendan Carvalho, M.B.B.Ch., FRCA, M.D.C.H.
2015	Chiraag Talati, M.B.B.S., B.Sc. (Hons), FRCA
2014	Mrinalini Balki, M.D.
2013	Emmanuel K. Srofenyoh, M.D., FWACS
2012	Suresh Anandakrishnan, M.D.
2011	Elena Reitman, M.D.
2010	Mrinalini Balki, M.D.
2009	Mrinalini Balki, M.D.
2008	Adrienne Stewart, M.B., B.S.
2007	Ronald B. George, M.D.
2006	Geraldine O'Sullivan, M.D.
2005	Mughina Siddiqui, M.D.
2004	Errol R. Norwitz, M.D.
2003	Anthony G. Maratea, M.D.
2002	Laura M. Goetzi, M.D.
2001	Patrick S. Ramsey, M.D.
2000	Yasser Y. El-Sayed, M.D.
1999	Kenneth Leveno, M.D.
1998	A.H. Shennan, M.D.
1997	Yasser Y. El-Sayed, M.D.

SOAP Honorary Lectures

52nd Annual Meeting

September 17 – October 29, 2020 • Virtual Event

Gerard W. Ostheimer Lecture: What's New in Obstetric Anesthesia? – Ronald B. George, MD, FRCPC

Fred Hehre Lecture – May C. Pian-Smith, M.D., M.S.

51st Annual Meeting

May 1-5, 2019 • Phoenix, Arizona

Gerard W. Ostheimer Lecture: What's New in Obstetric Anesthesia? – Carolyn Weiniger, M.B., Ch.B.

Fred Hehre Lecture: "Dogmas in Obstetric Anesthesia, The Balance Between Evidence, Common Sense, Habit and Fear" – Jose C.A. Carvalho, M.D., Ph.D., FANZCA, FRCPC

50th Annual Meeting

May 9-13, 2018 • Miami, Florida

Fred Hehre Lecture: Robert A. Dyer, FCA (SA), Ph.D.

Gertie Marx Education Lecture: SOAP's 50th Anniversary: Brendan Carvalho, M.B.B.Ch, F.R.C.A, M.D.C.H.;
Richard B. Clark, M.D.; Bradley Smith, M.D.; Mark I. Zakowski, M.D., FASA

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?: Ashraf S. Habib, M.B.B.Ch., M.H.Sc., F.R.C.A.

49th Annual Meeting

May 10-14, 2017 • Bellevue, Washington

Gertie Marx/FAER Education Lecture: Anesthetic Neurotoxicity - An Update: Ansgar M. Brambrink, M.D., Ph.D.

Fred Hehre Lecture: Two Steps Forward and One Step Forward: Cynthia A. Wong, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia: Brian T. Bateman, M.D., M.Sc.

48th Annual Meeting

May 18-22, 2016 • Boston, MA

What's New in Obstetric Medicine:
Need T. Shah, M.D., M.P.P.

What's New in Neonatology:
Terrie E. Inder, M.D., Ph.D., M.B.Ch.B.

Fred Hehre Lecture:
Lawrence C. Tsen, M.D.

Gerard W. Ostheimer Lecture- What's New in Obstetric Anesthesia: Philip E. Hess, M.D.

47th Annual Meeting

May 13-17, 2015 • Colorado Springs, CO

Gertie Marx/FAER Education Lecture:
Frederic W. Hafferty, Ph.D. *"Professionalism and the Hidden Curriculum"*

What's New in Obstetrics:
Linda A. Barbour, M.D., M.S.P.H., FACP
"What's New in Obstetric Medicine? The Intrauterine Factors Fueling Trans-generational Obesity"

What's New in Fetal Surgery: Timothy M. Crombleholme, M.D., FACS, FAAP

Fred Hehre Lecture:
Warwick Ngan Kee, B.H.B., M.B., Ch.B., M.D., FANZCA, FHKCA, FHKAM
(Anaesthesiology)

Gerard W. Ostheimer Anesthesia Lecture- What's New in Obstetric Anesthesia:
Katherine W. Arendt, M.D.

46th Annual Meeting

May 14-18, 2014 • Toronto, Ontario, Canada

Gertie Marx/FAER Education Lecture:
Eleni Tsigas
"Preeclampsia: What Your Patients Want You to Know"

What's New in Obstetrics: John Kingdom, M.D. *"Pathogenesis, Prevention & Management of Severe Preeclampsia"*

What's New in Neonatology:
Jeff Perlman, M.B., Ch.B.
"Avoiding Hypothermia/Hyperthermia in the Delivery Room in the Newly Born Infant has Significant Beneficial Downstream Consequences"

Fred Hehre Lecture:
David J. Wlody, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?: Lisa R. Leffert, M.D.

45th Annual Meeting

April 24-28, 2013 • San Juan, Puerto Rico

Gertie Marx/FAER Education Lecture:
Ndola Prata, M.D., M.Sc.
"Maternal Mortality in Resource-Poor Settings"

What's New in Obstetrics:
Michael Greene, M.D.
"The Obstetrician's Perspective: Obstetrical Directions in the Near Future"

What's New in Obstetric Medicine:

Dennis McNamara, M.D.

"The Cardiologist's Perspective: Peripartum Cardiomyopathy"

Special Lecture:

José Cordero, M.D.

"The Neonatologists Perspective: The Challenge of Premature Births in Puerto Rico: Why Are So Many Born Too Soon in Paradise?"

Fred Hehre Lecture: Richard Smiley, M.D., Ph.D.
"Passion"

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:
Arvind Palanisamy, M.D., FRCA

44th Annual Meeting

May 2-5, 2012 • Monterey, CA

Gertie Marx/FAER Education Lecture: Gordon Guyatt, M.D., B.Sc., M.Sc., FRCPC
"Why Bother With Evidence-Based Anesthesia"

What's New in Obstetrics:

Julian Parer, M.D.

"Evolving Consensus on Standardization of FHR Pattern Management"

Fred Hehre Lecture: Gordon Lyons, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?: Alexander Butwick, M.B.B.S., FRCA, M.S.

43rd Annual Meeting

April 13-17, 2011 • Lake Las Vegas, NV

Special Research Lecture: Valerie A. Arkoosh, M.D., M.P.H. *"Health Care Reform: Impact on Physicians and Practice"*

Gertie Marx/FAER Education Lecture: Sulpicio Soriano, M.D. *"Effects of Anesthetics on Neurodevelopment of Fetus"*

What's New in Obstetrics:

Aaron Caughey, M.D.

"Critical Care Management of the Parturient"

Fred Hehre Lecture:
William Camann, M.D.

Gerard W. Ostheimer Anesthesia Lecture-What's New in Obstetric Anesthesia:
Paloma Toledo, M.D.

42nd Annual Meeting

May 12-16, 2010 • San Antonio, TX

Special Research Lecture:
Steven L. Shafer, M.D.

"The Role of Mathematical Modeling in Advancing Obstetric Anesthesia Research"

Gertie Marx/FAER Education Lecture:

Michael R. Pinsky, M.D.

"Perioperative Technology: Use and Limitations of Non and Minimally Invasive Hemodynamic Monitoring"

What's New In Obstetrics:

George R. Saade, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Jill M. Mhyre, M.D.

Fred Hehre Lecture:

Susan K. Palmer, M.D.

41st Annual Meeting

April 29-May 3, 2009 • Washington, DC

Fred Hehre Lecture:

Joy L. Hawkins, M.D. *"Anesthesiology's Contribution to Maternal Safety"*

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

John T. Sullivan, M.D., M.B.A.

40th Annual Meeting

April 30-May 4, 2008 • Chicago, IL

Fred Hehre Lecture:

Alan C. Santos, M.D.

"See One, Do One, Teach One: Is This What Women Really Want?"

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Ruth Landau, M.D.

39th Annual Meeting

May 16-19, 2007 • Banff, Alberta, Canada

What's New In Obstetrics:

Michael Helewa, M.D.

Obstetric Medicine Update:

Linda Barbour, M.D., M.S.P.H.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Alison Macarthur, M.D., M.Sc., F.R.C.P.C.

Fred Hehre Lecture:

David J. Birnback, M.D., M.P.H. *"Malpractice or Miscommunication? The Importance of Improved Communication between Anesthesiologists, Patients and our Colleagues"*

38th Annual Meeting

April 26-30, 2006 • Hollywood, FL

What's New In Obstetrics :

Howard Minkoff, M.D.

Obstetric Medicine Update: Erin Joanne Keely, M.D., F.R.C.P. *"Endocrine Disease in Pregnancy"*

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Roshan Fernando, F.R.C.A.

Fred Hehre Lecture: David Chestnut, M.D.

37th Annual Meeting

May 4 - 7, 2005 • Palm Desert, CA

What's New In Obstetrics:

Errol R. Norwitz, M.D., Ph.D.

What's New In Obstetric Medicine: Raymond Powrie, M.D., F.R.C.P.(C), F.A.C.P.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Brenda A. Bucklin, M.D.

Fred Hehre Lecture: James C. Eisenach, M.D. *"Pain and Delivery - Why, What and When"*

36th Annual Meeting

May 12 - 16, 2004 • Ft. Myers, FL

What's New In Obstetrics

Gary Hankins, M.D.

What's New In Neonatology:

Ruben Quintero, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Lawrence C. Tsen, M.D.

Fred Hehre Lecture: Samuel C. Hughes, M.D. *"Maternal Mortality: What have we learned and how do we use it?"*

35th Annual Meeting

May 14 - 17, 2003 • Phoenix, AZ

What's New in Obstetrics:

Kathryn L. Reed, M.D.

What's New in Neonatology:

Kevin Coulter, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Audrey S. Alleyne, M.D.

Fred Hehre Lecture: Donald Caton, M.D.

34th Annual Meeting

May 1 - 5, 2002 • Hilton Head Island, SC

What's New in Neonatology - Vignettes in

Neonatal Resuscitation: Robert Chantigian, M.D.

What's New in Obstetrics:

Michael Greene, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

David J. Wlody, M.D.

Fred Hehre Lecture: David M. Dewan, M.D.

"Obstetric Anesthesia 1977 - 2002 A Personal Perspective - from Consilience to Victory"

33rd Annual Meeting

April 25 - 28, 2001 • San Diego, CA

What's New in In Vitro Fertilization:

Christo Zouves, M.D.

What's New in Obstetrics: Robert Resnik, M.D.

Fred Hehre Lecture: M. Joanne Douglas, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

B. Scott Segal, M.D.

32nd Annual Meeting

May 31 - June 4, 2000 • Montreal, Quebec, Canada

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

Linda S. Polley, M.D.

What's New in Obstetrics:

Frank Chervenak, M.D.

What's New in Intrauterine Fetal Surgery and "Exit" Procedures: Timothy Crombleholme, M.D.

Fred Hehre Lecture: Michael J. Cousins, M.D. *"Persistent Pain: A Disease Entity?"*

31st Annual Meeting

May 19 - 22, 1999 • Denver, CO

What's New in Neonatology:

Susan F. Townsend, M.D.

"Ethical Issues at the Intersection of Neonatology and Anesthesia"

What's New in Obstetrics:

Larry C. Gilstrap, III, M.D.

Fred Hehre Lecture:

Sheila E. Cohen, M.B., Ch.B.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

McCallum R. Hoyt, M.D.

30th Annual Meeting

April 29 - May 2, 1998 •

Vancouver, British Columbia, Canada

What's New in Neonatology: Shoo Lee, M.D.

What's New in Obstetrics:

Thomas Benedetti, M.D.

Fred Hehre Lecture: Gershon Levinson, M.D.

Gerard W. Ostheimer Lecture - What's New in Obstetric Anesthesia?:

David Campbell, M.D.

29th Annual Meeting

April 13 - 17, 1997 • Bermuda

Fred Hehre Lecture: M. Finster, M.D. *"Abandoned Techniques and Drugs in Obstetrics and Obstetric Anesthesia"*

What's New in Obstetrics:

Valerie M. Parisi, M.D., M.P.H.

What's New in Obstetric Anesthesia:

Richard N. Wissler, M.D., Ph.D.

28th Annual Meeting

May 1 - 4, 1996 • Tucson, AZ

What's New in Obstetrics:

Maurice L. Druzin, M.D.

What's New in Neonatology:

Wallace Nogami, M.D.

Fred Hehre Lecture: Charles P. Gibbs, M.D. *"Obstetric Anesthesia - USA"*

What's New in Obstetric Anesthesia:

David J. Birnbach, M.D.

27th Annual Meeting

May 17 - 20, 1995 • Montreal, Quebec, Canada

Fred Hehre Lecture: Ronald Melzack, Ph.D. *"Current Concepts of Pain"*

What's New in Anesthesiology:

Holly A. Muir, M.D., F.R.C.P.

26th Annual Meeting

May 11 - 14, 1994 • Philadelphia, PA

Fred Hehre Lecture:

Felicity Reynolds, M.B.B.S., M.D. *"In Defense of Bupivacaine"*

What's New in Obstetric Anesthesia:

Valerie A. Arkoosh, M.D.

25th Annual Meeting

May 5 - 8, 1993 • Indian Wells, CA

Fred Hehre Lecture:

Frederick P. Zuspan, M.D. *"New Thoughts on an Old Disease: Preeclampsia/Eclampsia"*

What's New in Obstetric Anesthesia:

Beth Glosten, M.D.

What's New in Obstetrics:

Jeffery P. Phelan, M.D., J.D.

What's New in Neonatology:

Stephen Baumgart, M.D.

24th Annual Meeting

May 7 - 10, 1992 • Charleston, SC

Fred Hehre Lecture:

Bradley Smith, M.D.

"Visionary of the Past, Example for the Future of Obstetric Anesthesia."

What's New in Obstetrics:

Roderick F. "Rick" Hume, Jr., M.D.

What's New in Neonatology:

Frank Tanaka, M.D.

What's New in Obstetric Anesthesia:

Andrew Malinow, M.D.

23rd Annual Meeting

May 23 - 25, 1991 • Boston, MA

What's New in Obstetrics:

David B. Cotton, M.D.

What's New in Obstetric Anesthesia:

Barbara L. Leighton, M.D.

What's New in Neonatology:

Steven Ringer, M.D.

22nd Annual Meeting

May 23 - 26, 1990 • Madison, WI

What's New in Obstetrics:

Sharon Dooley, M.D.

What's New in Obstetric Anesthesia:

Susan Palmer, M.D.

What's New in Neonatology:

Jane Brazy, M.D.

21st Annual Meeting

May 24 - 27, 1989 • Seattle, WA

What's New in Obstetrics:

Thomas Benedetti, M.D.

What's New in Anesthesia:

James Eisenach, M.D.

Fred Hehre Lecture: Francis M. James, M.D.

"Lessons Learned from Obstetric Anesthesia"

What's New in Neonatology:

John Scanlon, M.D.

20th Annual Meeting

April 27 - 30, 1988 • San Francisco, CA

Annual Review of Neonatology:

Roderic Phipps, M.D.

Annual Review of Anesthesiology:

David Chestnut, M.D.

Fred Hehre Lecture: Tony Yaksh, Ph.D. *"New Horizons in the Control of the Spinal Cord Level of the Sensory and Autonomic Response to Pain"*

Annual Review of Obstetrics: James Green, M.D.

19th Annual Meeting

May 20 - 23, 1987 • Halifax, Nova Scotia, Canada

Annual Review of Anesthesiology:

Sally K. Weeks, M.D.

Annual Review of Obstetrics:

Tom Baskett, M.D.

Fred Hehre Lecture: John J. Bonica, M.D. *"The Mechanisms and Pathways of the Pain of Childbirth"*

What's New in Neonatology - Part 1:

M.J. Vincer, M.D.

What's New in Neonatology - Part 2:

C.G. Nwaesei, M.D.

18th Annual Meeting

May 14 - 17, 1986 • Salt Lake City, UT

Fred Hehre Lecture: Frank C. Greiss, Jr., M.D. *"The Evolution of the Placental Circulation with Comments on Clinical Implications"*

What's New in Pediatrics:

John Scanlon, M.D.

Special Lecture - Obstetric Anesthesia:

A National Survey: Charles Gibbs, M.D.

What's New in Obstetrics:

Neil K. Kochenour, M.D.

What's New in Anesthesia:

Laurence Reisner, M.D.

17th Annual Meeting

May 9 - 12, 1985 • Washington, DC

Fred Hehre Lecture: Sol M. Shnider, M.D. *"The Fellows Made Me Do It"*

What New's in Obstetrics:

M. Lynn Yonekura, M.D.

What's New in Neonatology:

Virginia Williams, M.D.

What's New in Anesthesia:

Samuel C. Hughes, M.D.

16th Annual Meeting

April 12 - 15, 1984 • San Antonio, TX

What's New in Anesthesia:

Robert Middaugh, M.D.

What's New in Obstetrics of Particular Relevance to Anesthesia: Robert W. Huff, M.D.

Fred Hehre Lecture: Phillip R. Bromage, M.D. *"Evolution and Revolution in Obstetrical Anesthesia"*

15th Annual Meeting

May 25 - 28, 1983 • San Francisco, CA

Annual Review of Anesthesiology:

W.D.R. Writer, M.D.

Annual Review of Obstetrics: Sidney Effer, M.D.

Fred Hehre Lecture: Edward Hon, M.D. *"Whose Distress - Mother, Fetus, Doctor"*

Annual Review of Pediatrics: A.J. MacNab, M.D.

14th Annual Meeting

June 2 - 6, 1982 • Grand Teton National Park, WY

What's New in Neonatology:

Lawrence J. Grylack, M.D.

Fred Hehre Lecture: L. Stanley James, M.D.

What's New in Obsterical Anesthesia:

Kenneth Conklin, M.D.

What's New in Obstetrics:

Thomas Benedetti, M.D.

13th Annual Meeting

April 1 - 4, 1981 • San Diego, CA

Annual Review of Neonatology: Louis Gluck, M.D.

Annual Review of Anesthesiology:

Walter L. Millar, M.D.

Fred Hehre Lecture: Gertie F. Marx, M.D. *"Monitoring the Mother During Labor"*

Annual Review of Obstetrics:

Larry M. Cousins, M.D.

12th Annual Meeting

May 9 - 11, 1980 • Boston, MA

What's New in Obstetrics: David Acker, M.D.

What's New in Anesthesia:

Robert G. Strauss, M.D.

What's New in Neonatology:

Michael F. Epstein, M.D.

11th Annual Meeting

April 5 - 8, 1979 • Winston-Salem, NC

What's New in Obstetrics:

Phillip J. Goldstein, M.D.

What's New in Pediatrics:

Robert G. Dillard, M.D.

What's New in Anesthesia:

Michael H. Plumer, M.D.

10th Annual Meeting

March 30 - April 2, 1978 • Memphis, TN

What's New in Anesthesia:

John B. Craft, M.D.

What's New in Pediatrics:

John W. Scanlon, M.D.

What's New in Obstetrics:

Richard Depp, M.D.

9th Annual Meeting

April 14 - 17, 1977 • Seattle, WA

What's New in Obstetrics: Kent Ueland, M.D.

What's New in Anesthesia:

Gershon Levinson, M.D.

What's New in Pediatrics:

David E. Woodrum, M.D.

8th Annual Meeting

April 8 - 11, 1976 • Orlando, FL

What's New in Obstetric Anesthesia:

Thomas Joyce, M.D.

What's New in Neonatology:

George Cassady, M.D.

What's New in Obstetrics:

Calvin Hobel, M.D.

7th Annual Meeting

April 4 - 6, 1975 • Philadelphia, PA

What's New in Obstetric Anesthesia:

Robert Hook, M.D.

What's New in Obstetrics:

John Fishburne, M.D.

What's New in Perinatology:

Paul Branca, M.D.



The SOAP Center of Excellence (COE) designation was created to recognize institutions and programs that demonstrate excellence in obstetric anesthesia care and to set a benchmark of expected care to improve standards nationally and internationally. It is an annual program, with new designees announced each spring.

Read on to learn more about the COE program, processes, benefits and fees.

2020 Designees

Clinica Universitaria Bolivariana – Medellin, Columbia

George Washington School of Medicine – Washington DC

Hamad Medical Corporation, Women's Wellness & Research Centre, - Doha, Qatar

Hoag Memorial Hospital Presbyterian – Newport Beach, CA

Loma Linda University – Loma Linda, CA

Long Island Jewish Medical Center – Hyde Park, NY

Minneapolis Anesthesia Partners – Plymouth, MN

National Center for Child Health and Development – Tokyo, Japan

Ohio State University Wexner Medical Center – Columbus, OH

Sidra Medicine – Doha, Qatar

Stony Brook Medicine – Stony Brook, NY

Sutter Medical Center, Sacramento – Sacramento, CA

UC Davis Medical Center - Sacramento, CA

University of Alabama at Birmingham – Birmingham, AL

University of Chicago – Chicago, IL

Virginia Commonwealth University Health System – Richmond, VA

Yale New Haven Hospital – York Street Campus – New Haven, CT

The COE designation was awarded March 12, 2021, to the institutions and obstetric anesthesia programs listed above and will remain valid for four years.



2019 Designees

University of Michigan - Michigan Medicine
Kaiser Permanente - Roseville Women & Children's Hospital
University of Maryland Medical Center
Virtua Voorhees Hospital - West Jersey Anesthesia Associates
UAMS College of Medicine
Vanderbilt University
Missouri Baptist Medical Center
BC Women's Hospital
Hospital of the University of Pennsylvania
Hackensack University Medical Center
The Froedtert & the Medical College of Wisconsin
Froedtert Hospital Birth Center
Mayo Clinic
Miller Women's and Children's Hospital
University of Utah

The COE designation was awarded March 25, 2020, to the institutions and obstetric anesthesia programs listed above and will remain valid for four years.

2018 Designees

Stanford University
Northwestern University Feinberg School of Medicine
Columbia University
University of New Mexico
Colorado Fetal Care Center, Children's Hospital Colorado
North Shore University Hospital
Johns Hopkins Hospital
Saddleback Memorial Medical Center
Albany Medical Center
University of North Carolina, Chapel Hill
New York Presbyterian - Weill Cornell
Tufts Medical Center
Icahn School of Medicine at Mount Sinai
Beth Israel Deaconess Medical Center
Overlook Medical Center
University of Minnesota
Sparrow Hospital
Ochsner Hospital
NYU Langone - Tisch Hospital
University of California San Francisco
Wake Forest University Health Sciences
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Massachusetts General Hospital
Mount Sinai West
Magee-Womens Hospital of UPMC
University of Washington
Sharp Mary Birch Hospital for Women and Newborns
Washington University School of Medicine
Victoria Hospital
Brigham and Women's Hospital
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Mercy Hospital St. Louis
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The COE designation was awarded March 25, 2019, to the institutions and obstetric anesthesia programs listed above and will remain valid for four years.

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Alydia Health is the proud maker of the Jada System for postpartum hemorrhage and abnormal postpartum uterine bleeding. Jada uses low-level vacuum to induce uterine contraction, offering a fast, definitive and physiologic approach. Recently cleared by the FDA, Jada is now available on a limited basis in the US.



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BD has produced regional anesthesia products for most of the more than 100 years that we have been in business. We offer a full range of anesthesia products for regional anesthesia, peripheral block and postoperative pain management. These products include needles, syringes, catheters, connectors, accessories, regional anesthesia trays and kits. We have a proven track record of innovation in needle technology and a market-driven product development process.



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Pacira

About Pacira BioSciences Pacira BioSciences, Inc. (NASDAQ: PCRX) is a leading provider of non-opioid pain management and regenerative health solutions dedicated to advancing and improving outcomes for health care practitioners and their patients. The company's long-acting local analgesic, EXPAREL® (bupivacaine liposome injectable suspension) was commercially launched in the United States in April 2012. EXPAREL utilizes DepoFoam®, a unique and proprietary product delivery technology that encapsulates drugs without altering their molecular structure and releases them over a desired period of time. In April 2019, the company acquired the iovera® system, a handheld cryoanalgesia device used to deliver precise, controlled doses of cold temperature only to targeted nerves. To learn more about Pacira, including the corporate mission to reduce overreliance on opioids, visit www.pacira.com.



Pajunk USA

PAJUNK® Medical is a leading manufacturer in regional anesthesia and pain management. Pajunk was founded in 1965 by two brothers, Horst and Heinrich Pajunk, who had a vision to bring high quality German engineering to the manufacturing of medical devices. Throughout the years Pajunk became well-known for working closely with clinicians on new innovations, further strengthening the efficacy of their product portfolio. Neuraxial product innovations include the atraumatic SPOTTE® spinal needle created in partnership with Prof. Dr. Gunter Sprotte, and the EpiLong VPC epidural detection syringe created with Prof. Dr. Dietmar Enk. Today, the tradition continues as the next generation of Pajunk's are dedicated to expanding their clinical innovations to existing and new markets.

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Indication

EXPAREL[®] (bupivacaine liposome injectable suspension) is indicated for single-dose infiltration in patients aged 6 years and older to produce postsurgical local analgesia and in adults as an interscalene brachial plexus nerve block to produce postsurgical regional analgesia. Safety and efficacy have not been established in other nerve blocks.

Important Safety Information

EXPAREL is contraindicated in obstetrical paracervical block anesthesia.

Adverse reactions reported in adults with an incidence greater than or equal to 10% following EXPAREL administration via infiltration were nausea, constipation, and vomiting; adverse reactions reported in adults with an incidence greater than or equal to 10% following EXPAREL administration via interscalene brachial plexus nerve block were nausea, pyrexia, and constipation.

Adverse reactions with an incidence greater than or equal to 10% following EXPAREL administration via infiltration in pediatric patients six to less than 17 years of age were nausea, vomiting, constipation, hypotension, anemia, muscle twitching, vision blurred, pruritis, and tachycardia.

If EXPAREL and other non-bupivacaine local anesthetics, including lidocaine, are administered at the same site, there may be an immediate release of bupivacaine from EXPAREL. Therefore, EXPAREL may be administered to the same site 20 minutes after injecting lidocaine.

EXPAREL is not recommended to be used in the following patient populations: patients <6 years old for infiltration, patients younger than 18 years old for interscalene brachial plexus nerve block, and/or pregnant patients.

Because amide-type local anesthetics, such as bupivacaine, are metabolized by the liver, EXPAREL should be used cautiously in patients with hepatic disease.

Warnings and Precautions Specific to EXPAREL

Avoid additional use of local anesthetics within 96 hours following administration of EXPAREL.

EXPAREL is not recommended for the following types or

routes of administration: epidural, intrathecal, regional nerve blocks **other than interscalene brachial plexus nerve block**, or intravascular or intra-articular use.

The potential sensory and/or motor loss with EXPAREL is temporary and varies in degree and duration depending on the site of injection and dosage administered and may last for up to 5 days, as seen in clinical trials.

Warnings and Precautions for Bupivacaine-Containing Products

Central Nervous System (CNS) Reactions: There have been reports of adverse neurologic reactions with the use of local anesthetics. These include persistent anesthesia and paresthesia. CNS reactions are characterized by excitation and/or depression.

Cardiovascular System Reactions: Toxic blood concentrations depress cardiac conductivity and excitability, which may lead to dysrhythmias, sometimes leading to death.

Allergic Reactions: Allergic-type reactions (eg, anaphylaxis and angioedema) are rare and may occur as a result of hypersensitivity to the local anesthetic or to other formulation ingredients.

Chondrolysis: There have been reports of chondrolysis (mostly in the shoulder joint) following intra-articular infusion of local anesthetics, which is an unapproved use.

Methemoglobinemia: Cases of methemoglobinemia have been reported with local anesthetic use.

Please refer to brief summary of Prescribing Information on adjacent page.

For more information, please visit www.EXPAREL.com or call 1-855-793-9727.

Reference: 1. Data on File. 6450. Parsippany, NJ: Pacira BioSciences, Inc.; January 2021.

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EXPAREL®

(bupivacaine liposome injectable suspension)

Brief Summary

(For full prescribing information refer to package insert)

INDICATIONS AND USAGE

EXPAREL is indicated for single-dose infiltration in patients aged 6 years and older to produce postsurgical local analgesia and in adults as an interscalene brachial plexus nerve block to produce postsurgical regional analgesia.

Limitation of Use: Safety and efficacy has not been established in other nerve blocks.

CONTRAINDICATIONS

EXPAREL is contraindicated in obstetrical paracervical block anesthesia. While EXPAREL has not been tested with this technique, the use of bupivacaine HCl with this technique has resulted in fetal bradycardia and death.

WARNINGS AND PRECAUTIONS

Warnings and Precautions Specific for EXPAREL

As there is a potential risk of severe life-threatening adverse effects associated with the administration of bupivacaine, EXPAREL should be administered in a setting where trained personnel and equipment are available to promptly treat patients who show evidence of neurological or cardiac toxicity.

Caution should be taken to avoid accidental intravascular injection of EXPAREL. Convulsions and cardiac arrest have occurred following accidental intravascular injection of bupivacaine and other amide-containing products.

Avoid additional use of local anesthetics within 96 hours following administration of EXPAREL.

EXPAREL has not been evaluated for the following uses and, therefore, is not recommended for these types of analgesia or routes of administration.

- epidural
- intrathecal
- regional nerve blocks other than interscalene brachial plexus nerve block
- intravascular or intra-articular use

EXPAREL has not been evaluated for use in the following patient population and, therefore, it is not recommended for administration to these groups.

- patients younger than 6 years old for infiltration
- patients younger than 18 years old for interscalene brachial plexus nerve block
- pregnant patients

The potential sensory and/or motor loss with EXPAREL is temporary and varies in degree and duration depending on the site of injection and dosage administered and may last for up to 5 days as seen in clinical trials.

ADVERSE REACTIONS

Clinical Trial Experience

Adverse Reactions Reported in Local Infiltration Clinical Studies

The safety of EXPAREL was evaluated in 10 randomized, double-blind, local administration into the surgical site clinical studies involving 823 patients undergoing various surgical procedures. Patients were administered a dose ranging from 66 to 532 mg of EXPAREL. In these studies, the most common adverse reactions (incidence greater than or equal to 10%) following EXPAREL administration were nausea, constipation, and vomiting. The common adverse reactions (incidence greater than or equal to 2% to less than 10%) following EXPAREL administration were pyrexia, dizziness, edema peripheral, anemia, hypotension, pruritus, tachycardia, headache, insomnia, anemia postoperative, muscle spasms, hemorrhagic anemia, back pain, somnolence, and procedural pain.

Adverse Reactions Reported in All Local Infiltration Clinical Studies in Pediatric Patients Aged 6 to Less Than 17 Years

The safety of EXPAREL in 110 pediatric patients between the age of 6 and 17 years old undergoing various surgical procedures was evaluated in one randomized, open-label, clinical study in which EXPAREL was administered by infiltration into the surgical site and one single-arm, open-label study in which EXPAREL was administered by infiltration into the surgical site. Patients were administered a weight-based dose of EXPAREL at 4 mg/kg (maximum dose of 266 mg) or bupivacaine HCl 2 mg/kg (maximum dose of 175 mg). In these studies, the most common adverse reactions (incidence greater than or equal to 10%) following EXPAREL administration were nausea, vomiting, constipation, hypotension, anemia, muscle twitching, vision blurred, pruritus, and tachycardia.

The common adverse reactions (incidence greater than or equal to 2% to less than 10%) following EXPAREL administration were bradycardia, muscle spasms, tachypnea, hypoesthesia oral, anemia postoperative, dizziness, pyrexia, diarrhea, hypoaacusis, hypoesthesia, back pain, hematuria, incontinence, muscular weakness, and visual impairment.

Adverse Reactions Reported in Nerve Block Clinical Studies

The safety of EXPAREL was evaluated in four randomized, double-blind, placebo-controlled nerve block clinical studies involving 469 patients undergoing various surgical procedures. Patients were administered a dose of either 133 or 266 mg of EXPAREL. In these studies, the most common adverse reactions (incidence greater than or equal to 10%) following EXPAREL administration were nausea, pyrexia, and constipation. The common adverse reactions (incidence greater than or equal to 2% to less than 10%) following EXPAREL administration as a nerve block were muscle twitching, dysgeusia, urinary retention, fatigue, headache, confusional state, hypotension, hypertension, hypoesthesia oral, pruritus generalized, hyperhidrosis, tachycardia, sinus tachycardia, anxiety, fall, body temperature increased, edema peripheral, sensory loss, hepatic enzyme increased, hiccups, hypoxia, post-procedural hematoma.

Postmarketing Experience

These adverse reactions are consistent with those observed in clinical studies and most commonly involve the following system organ classes (SOCs): Injury, Poisoning, and Procedural Complications (e.g., drug-drug interaction, procedural pain), Nervous System Disorders (e.g., palsy, seizure), General Disorders And Administration Site Conditions (e.g., lack of efficacy, pain), Skin and Subcutaneous Tissue Disorders (e.g., erythema, rash), and Cardiac Disorders (e.g., bradycardia, cardiac arrest).

DRUG INTERACTIONS

The toxic effects of local anesthetics are additive and their co-administration should be used with caution including monitoring for neurologic and cardiovascular effects related to local anesthetic systemic toxicity. Avoid additional use of local anesthetics within 96 hours following administration of EXPAREL.

Patients who are administered local anesthetics may be at increased risk of developing methemoglobinemia when concurrently exposed to the following drugs, which could include other local anesthetics:

Examples of Drugs Associated with Methemoglobinemia:

Class	Examples
Nitrates/Nitrites	nitric oxide, nitroglycerin, nitroprusside, nitrous oxide
Local anesthetics	articaine, benzocaine, bupivacaine, lidocaine, mepivacaine, prilocaine, procaine, ropivacaine, tetracaine
Antineoplastic agents	cyclophosphamide, flutamide, hydroxyurea, ifosfamide, rasburicase
Antibiotics	dapsone, nitrofurantoin, para-aminosalicylic acid, sulfonamides
Antimalarials	chloroquine, primaquine
Anticonvulsants	Phenobarbital, phenytoin, sodium valproate
Other drugs	acetaminophen, metoclopramide, quinine, sulfasalazine

Bupivacaine

Bupivacaine HCl administered together with EXPAREL may impact the pharmacokinetic and/or physicochemical properties of EXPAREL, and this effect is concentration dependent. Therefore, bupivacaine HCl and EXPAREL may be administered simultaneously in the same syringe, and bupivacaine HCl may be injected immediately before EXPAREL as long as the ratio of the milligram dose of bupivacaine HCl solution to EXPAREL does not exceed 1:2.

Non-bupivacaine Local Anesthetics

EXPAREL should not be admixed with local anesthetics other than bupivacaine. Nonbupivacaine based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more. There are no data to support administration of other local anesthetics prior to administration of EXPAREL.

Other than bupivacaine as noted above, EXPAREL should not be admixed with other drugs prior to administration.

Water and Hypotonic Agents

Do not dilute EXPAREL with water or other hypotonic agents, as it will result in disruption of the liposomal particles

USE IN SPECIFIC POPULATIONS

Pregnancy

Risk Summary

There are no studies conducted with EXPAREL in pregnant women. In animal reproduction studies, embryo-fetal deaths were observed with subcutaneous administration of bupivacaine to rabbits during organogenesis at a dose equivalent to 1.6 times the maximum recommended human dose (MRHD) of 266 mg. Subcutaneous administration of bupivacaine to rats from implantation through weaning produced decreased pup survival at a dose equivalent to 1.5 times the MRHD [see Data]. Based on animal data, advise pregnant women of the potential risks to a fetus.

The background risk of major birth defects and miscarriage for the indicated population is unknown. However, the background risk in the U.S. general population of major birth defects is 2-4% and of miscarriage is 15-20% of clinically recognized pregnancies.

Clinical Considerations

Labor or Delivery

Bupivacaine is contraindicated for obstetrical paracervical block anesthesia. While EXPAREL has not been studied with this technique, the use of bupivacaine for obstetrical paracervical block anesthesia has resulted in fetal bradycardia and death.

Bupivacaine can rapidly cross the placenta, and when used for epidural, caudal, or pudendal block anesthesia, can cause varying degrees of maternal, fetal, and neonatal toxicity. The incidence and degree of toxicity depend upon the procedure performed, the type, and amount of drug used, and the technique of drug administration. Adverse reactions in the parturient, fetus, and neonate involve alterations of the central nervous system, peripheral vascular tone, and cardiac function.

Data

Animal Data

Bupivacaine hydrochloride was administered subcutaneously to rats and rabbits during the period of organogenesis (implantation to closure of the hard plate). Rat doses were 4.4, 13.3, and 40 mg/kg/day (equivalent to 0.2, 0.5 and 1.5 times the MRHD, respectively, based on the BSA comparisons and a 60 kg human weight) and rabbit doses were 1.3, 5.8, and 22.2 mg/kg/day (equivalent to 0.1, 0.4 and 1.6 times the MRHD, respectively, based on the BSA comparisons and a 60 kg human weight). No embryo-fetal effects were observed in rats at the doses tested with the high dose causing increased maternal lethality. An increase in embryo-fetal deaths was observed in rabbits at the high dose in the absence of maternal toxicity.

Decreased pup survival was noted at 1.5 times the MRHD in a rat pre- and post-natal development study when pregnant animals were administered subcutaneous doses of 4.4, 13.3, and 40 mg/kg/day buprenorphine hydrochloride (equivalent to 0.2, 0.5 and 1.5 times the MRHD, respectively, based on the BSA comparisons and a 60 kg human weight) from implantation through weaning (during pregnancy and lactation).

Lactation

Risk Summary

Limited published literature reports that bupivacaine and its metabolite, picecoloxylylide, are present in human milk at low levels. There is no available information on effects of the drug in the breastfed infant or effects of the drug on milk production. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for EXPAREL and any potential adverse effects on the breastfed infant from EXPAREL or from the underlying maternal condition.

Pediatric Use

The safety and effectiveness of EXPAREL for single-dose infiltration to produce postsurgical local anesthesia have been established in pediatric patients aged 6 years and older. Use of EXPAREL for this indication is supported by evidence from adequate and well-controlled studies in adults with additional pharmacokinetic and safety data in pediatric patients aged 6 years and older.

Safety and effectiveness have not been established in pediatric patients aged less than 6 years old for local infiltration or less than 18 years old for interscalene brachial plexus nerve block.

Geriatric Use

Of the total number of patients in the EXPAREL local infiltration clinical studies (N=823), 171 patients were greater than or equal to 65 years of age and 47 patients were greater than or equal to 75 years of age. Of the total number of patients in the EXPAREL nerve block clinical studies (N=531), 241 patients were greater than or equal to 65 years of age and 60 patients were greater than or equal to 75 years of age. No overall differences in safety or effectiveness were observed between these patients and younger patients. Clinical experience with EXPAREL has not identified differences in efficacy or safety between elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

Hepatic Impairment

Amide-type local anesthetics, such as bupivacaine, are metabolized by the liver. Patients with severe hepatic disease, because of their inability to metabolize local anesthetics normally, are at a greater risk of developing toxic plasma concentrations, and potentially local anesthetic systemic toxicity. Therefore, consider increased monitoring for local anesthetic systemic toxicity in subjects with moderate to severe hepatic disease.

Renal Impairment

Bupivacaine is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. This should be considered when performing dose selection of EXPAREL.

OVERDOSAGE

Clinical Presentation

Acute emergencies from local anesthetics are generally related to high plasma concentrations encountered during therapeutic use of local anesthetics or to unintended intravascular injection of local anesthetic solution.

Signs and symptoms of overdose include CNS symptoms (perioral paresthesia, dizziness, dysarthria, confusion, mental obtundation, sensory and visual disturbances and eventually convulsions) and cardiovascular effects (that range from hypertension and tachycardia to myocardial depression, hypotension, bradycardia and asystole).

Plasma levels of bupivacaine associated with toxicity can vary. Although concentrations of 2,500 to 4,000 ng/mL have been reported to elicit early subjective CNS symptoms of bupivacaine toxicity, symptoms of toxicity have been reported at levels as low as 800 ng/mL.

Management of Local Anesthetic Overdose

At the first sign of change, oxygen should be administered.

The first step in the management of convulsions, as well as underventilation or apnea, consists of immediate attention to the maintenance of a patent airway and assisted or controlled ventilation with oxygen and a delivery system capable of permitting immediate positive airway pressure by mask. Immediately after the institution of these ventilatory measures, the adequacy of the circulation should be evaluated, keeping in mind that drugs used to treat convulsions sometimes depress the circulation when administered intravenously. Should convulsions persist despite adequate respiratory support, and if the status of the circulation permits, small increments of an ultra-short acting barbiturate (such as thiopental or thiamylal) or a benzodiazepine (such as diazepam) may be administered intravenously. The clinician should be familiar, prior to the use of anesthetics, with these anticonvulsant drugs. Supportive treatment of circulatory depression may require administration of intravenous fluids and, when appropriate, a vasopressor dictated by the clinical situation (such as ephedrine to enhance myocardial contractile force).

If not treated immediately, both convulsions and cardiovascular depression can result in hypoxia, acidosis, bradycardia, arrhythmias and cardiac arrest. If cardiac arrest should occur, standard cardiopulmonary resuscitative measures should be instituted.

Endotracheal intubation, employing drugs and techniques familiar to the clinician, maybe indicated, after initial administration of oxygen by mask, if difficulty is encountered in the maintenance of a patent airway or if prolonged ventilatory support (assisted or controlled) is indicated.

DOSAGE AND ADMINISTRATION

Important Dosage and Administration Information

- EXPAREL is intended for single-dose administration only.
- Different formulations of bupivacaine are not bioequivalent even if the milligram strength is the same. Therefore, it is not possible to convert dosing from any other formulations of bupivacaine to EXPAREL.
- DO NOT dilute EXPAREL with water or other hypotonic agents, as it will result in disruption of the liposomal particles.
- Use suspensions of EXPAREL diluted with preservative-free normal (0.9%) saline for injection or lactated Ringer's solution within 4 hours of preparation in a syringe.
- Do not administer EXPAREL if it is suspected that the vial has been frozen or exposed to high temperature (greater than 40°C or 104°F) for an extended period.
- Inspect EXPAREL visually for particulate matter and discoloration prior to administration, whenever solution and container permit. Do not administer EXPAREL if the product is discolored.

Recommended Dosing

Local Analgesia via Infiltration Dosing in Adults

The recommended dose of EXPAREL for local infiltration in adults is up to a maximum dose of 266mg (20 mL), and is based on the following factors:

- Size of the surgical site
- Volume required to cover the area
- Individual patient factors that may impact the safety of an amide local anesthetic

As general guidance in selecting the proper dosing, two examples of infiltration dosing are provided:

- In patients undergoing buccinectomy, a total of 106 mg (8 mL) of EXPAREL was administered with 7 mL infiltrated into the tissues surrounding the osteotomy, and 1 mL infiltrated into the subcutaneous tissue.

- In patients undergoing hemorrhoidectomy, a total of 266 mg (20 mL) of EXPAREL was diluted with 10 mL of saline, for a total of 30 mL, divided into six 5 mL aliquots, injected by visualizing the anal sphincter as a clock face and slowly infiltrating one aliquot to each of the even numbers to produce a field block.

Local Analgesia via Infiltration Dosing in Pediatric Patients

The recommended dose of EXPAREL for single-dose infiltration in pediatric patients, aged 6 to less than 17 years, is 4 mg/kg (up to a maximum of 266 mg), and is based upon two studies of pediatric patients undergoing either spine surgery or cardiac surgery.

Regional Analgesia via Interscalene Brachial Plexus Nerve Block Dosing in Adults

The recommended dose of EXPAREL for interscalene brachial plexus nerve block in adults is 133 mg (10 mL), and is based upon one study of patients undergoing either total shoulder arthroplasty or rotator cuff repair.

Compatibility Considerations

Administering EXPAREL with drugs other than bupivacaine HCl prior to administration is not recommended.

- Non-bupivacaine based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more.
- Bupivacaine HCl administered together with EXPAREL may impact the pharmacokinetic and/or physicochemical properties of EXPAREL, and this effect is concentration dependent. Therefore, bupivacaine HCl and EXPAREL may be administered simultaneously in the same syringe, and bupivacaine HCl may be injected immediately before EXPAREL as long as the ratio of the milligram dose of bupivacaine HCl solution to EXPAREL does not exceed 1:2.

The toxic effects of these drugs are additive and their administration should be used with caution including monitoring for neurologic and cardiovascular effects related to local anesthetic systemic toxicity.

- When a topical antiseptic such as povidone iodine (e.g., Betadine®) is applied, the site should be allowed to dry before EXPAREL is administered into the surgical site. EXPAREL should not be allowed to come into contact with antiseptics such as povidone iodine in solution.

Studies conducted with EXPAREL demonstrated that the most common implantable materials (polypropylene, PTFE, silicone, stainless steel, and titanium) are not affected by the presence of EXPAREL any more than they are by saline. None of the materials studied had an adverse effect on EXPAREL.

Non-Interchangeability with Other Formulations of Bupivacaine

Different formulations of bupivacaine are not bioequivalent even if the milligram dosage is the same. Therefore, it is not possible to convert dosing from any other formulations of bupivacaine to EXPAREL and vice versa.

Liposomal encapsulation or incorporation in a lipid complex can substantially affect a drug's functional properties relative to those of the unencapsulated or nonlipid-associated drug. In addition, different liposomal or lipid-complexed products with a common active ingredient may vary from one another in the chemical composition and physical form of the lipid component. Such differences may affect functional properties of these drug products. Do not substitute.

CLINICAL PHARMACOLOGY

Pharmacokinetics

Administration of EXPAREL results in significant systemic plasma levels of bupivacaine which can persist for 96 hours after local infiltration and 120 hours after interscalene brachial plexus nerve block. In general, peripheral nerve blocks have shown systemic plasma levels of bupivacaine for extended duration when compared to local infiltration. Systemic plasma levels of bupivacaine following administration of EXPAREL are not correlated with local efficacy.

PATIENT COUNSELING

Inform patients that use of local anesthetics may cause methemoglobinemia, a serious condition that must be treated promptly. Advise patients or caregivers to seek immediate medical attention if they or someone in their care experience the following signs or symptoms: pale, gray, or blue colored skin (cyanosis); headache; rapid heart rate; shortness of breath; lightheadedness; or fatigue.



Pacira Pharmaceuticals, Inc.
San Diego, CA 92121 USA

Patent Numbers:

6,132,766 5,891,467 5,766,627 8,182,835

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For additional information call 1-855-RX-EXPAREL (1-855-793-9727)

Rx only

March 2021