

MSK CME  
**ON DEMAND**

9<sup>TH</sup> ANNUAL  
GLOBAL CONFERENCE ON  
**Perioperative Care of  
the Cancer Patient**



Memorial Sloan Kettering  
Cancer Center



MOCA<sup>®</sup>

# OVERVIEW

**Leading anesthesiologists from several cancer centers of excellence worldwide put together this multispecialty international consortium, which addresses the clinical and translational evidence emerging in perioperative cancer care.** Recorded live on December 10-11, 2020, this on demand program addresses the complexity and unique challenges for the perioperative care of the cancer patient and cancer survivors.

As the incidence of cancer and cancer survivorship grows, there is an increased need for anesthesiologists, surgeons, interventional radiologists, nurses and other perioperative health care professionals to provide their services for the multiple diagnostic and interventional procedures in this patient population. This on demand program consists of lectures that focus on the key elements related to perioperative care of the cancer patient needed to deliver value-based patient centric care.

## **Target Audience**

The program is intended for anesthesiologists, surgeons, medical oncologists, internists, basic scientists, CRNAs, perioperative nurses and allied health professionals. The course will also be geared towards scientists involved in translational and clinical research.

## **Educational Objectives**

- Understand the global impact of cancer
- Identify aspects of perioperative care to lead to improved care and outcomes
- Implement a strategy to deliver patient centric value based perioperative care
- Learn the latest advances in cancer therapy and the implications for the perioperative period
- Learn about the challenges of caring for the chronic pain patient

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By registering for this on demand program, you will receive access to videos of 20+ lectures and PDFs from select course presentations, which was originally recorded on December 10-11, 2020.

## Memorial Sloan Kettering Course Directors



**Anahita Dabo-Trubelja, MD**

Associate Attending  
Department of Anesthesiology and Critical Care Medicine



**Eric R. Kelhoffer, MD**

Attending  
Department of Anesthesiology and Critical Care Medicine



**Rebecca S. Twersky, MD, MPH**

Chief of Anesthesia  
Josie Robertson Surgery Center  
Department of Anesthesiology and Critical Care Medicine



**Gregory Fischer, MD**

Chairman  
Department of Anesthesiology and Critical Care Medicine

**FACULTY DISCLOSURE** | It is the policy of MSK to make every effort to insure balance, independence, objectivity, and scientific rigor in all continuing medical education activities which it provides as an ACCME accredited provider. In accordance with ACCME guidelines and standards, all faculty participating in an activity provided by MSK are expected to disclose any significant financial interest or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services which are discussed by the faculty members in an educational presentation. As required by the ACCME, when an unlabeled use of a commercial product or an investigational use not yet approved for any purpose is discussed during an educational activity, MSK requires the speaker to disclose that the product is not labeled for the use under discussion or that the product is still investigational.

## Guest Faculty

### **Juan Cata, MD**

Assistant Professor  
Department of Anesthesiology and Perioperative Medicine  
MD Anderson Cancer Center  
Houston, TX

### **Vijaya Gottumukkala, MBBS, MD, FRCA**

Professor  
Department of Anesthesiology and Perioperative Medicine  
MD Anderson Cancer Center  
Houston, TX

### **Bernhard Riedel, MBChB, FCA, FANZCA, FASE, MMed, MBA, PhD**

Director  
Department of Anesthesia, Perioperative and Pain Medicine  
Peter MacCallum Cancer Centre  
Melbourne, Australia

### **Bobbie Jean Sweitzer, MD**

Professor of Anesthesiology  
Northwestern University, Feinberg School of Medicine  
Chicago, IL

### **Tim Wigmore, BM, BCh, FRCA, FFICM, FCICM**

Consultant in Intensive Care Medicine and Anaesthesia  
Associate Medical Director  
The Royal Marsden  
London, UK

## Memorial Sloan Kettering Course Faculty

### **Anoushka Afonso, MD**

Director, Enhanced Recovery after Surgery (ERAS)  
Department of Anesthesiology and Critical Care Medicine

### **Laura Ardizzone, DNP, CRNA, DCC**

Clinical Director, Nurse Anesthesia Services  
Department of Anesthesiology and Critical Care Medicine

### **Jamie Chaft, MD**

Medical Oncologist  
Department of Medicine

### **Anahita Dabo-Trubelja, MD**

Associate Attending  
Department of Anesthesiology and Critical Care Medicine

### **Lisa DeAngelis, MD**

Physician-In-Chief, Memorial Hospital

### **Gregory Fischer, MD**

Chairman  
Department of Anesthesiology and Critical Care Medicine

### **Amit Gulati, MD, FASA**

Director, Chronic Pain  
Department of Anesthesiology and Critical Care Medicine

### **Mini Kamboj, MD**

Chief Medical Epidemiologist, Infection Control

### **Eric R. Kelhoffer, MD**

Attending  
Department of Anesthesiology and Critical Care Medicine

### **Robina Kitzler, MSN, CNS, AOCNS, CCRN, CPAN**

Clinical Nurse Specialist

### **Beatriz Korc-Grodzicki, MD, PhD**

Chief, Geriatrics Service

### **Alexandra Lewis, MD, M.Sc.**

Assistant Attending  
Department of Anesthesiology and Critical Care Medicine

### **Elena Mead, MD**

Assistant Attending, Intensivist  
Department of Anesthesiology and Critical Care Medicine

### **Shannon O'Keeffe, CNP**

Manager, Advanced Practice Providers

### **Stephen Pastores, MD**

Director, Critical Care Medicine Fellowship Training  
and Research Programs  
Department of Anesthesiology and Critical Care Medicine

### **Vinay Puttaniah, MD**

Director, Regional Anesthesia and Perioperative Pain Medicine  
Department of Anesthesiology and Critical Care Medicine

### **Michel Sadelain, MD, PhD**

Director, Center for Cell Engineering

### **Leslie Sarraf, MD**

Assistant Attending  
Director, Medical Simulation  
Department of Anesthesiology and Critical Care Medicine

### **Jessica Scott, PhD**

Investigator, The Lee Jones Lab

### **Gerald Soff, MD**

Attending Physician, Hematology Service

### **Jaqueline Sumanis, CRNA, DNAP CHSE**

Assistant Clinical Director, Nurse Anesthetist  
Department of Anesthesiology and Critical Care Medicine

### **Robert Veselis, MD**

Vice Chair for Research  
Department of Anesthesiology and Critical Care Medicine

### **Jedd Wolchok, MD, PhD**

Chief, Melanoma and Immunotherapeutics Service

### **Cindy Yeoh, MD, FASA**

Associate Attending

# SESSION 1

Session	Time
<b>Improving Outcomes</b> <b>Aging and Cancer</b> Beatriz Korc-Grodzicki, MD, PhD <b>Chemo Brain</b> Robert Veselis, MD	30 MIN. 30 MIN.
<b>ERAS in Cancer - Does it Make a Difference?</b> Anoushka Afonso, MD	30 MIN.
<b>Special Challenges in Critical Care</b> <b>Update on Sepsis</b> Stephen Pastores, MD <b>Critical Care Complications of Novel Therapeutics</b> Elena Mead, MD Alexandra Lewis, MD	30 MIN. 30 MIN.
<b>Practice Makes Perfect:</b> <b>Medical Simulation to Improve Team Functioning</b> Jaqueline Sumanis, CRNA, DNAP CHSE Leslie Sarraf, MD	45 MIN.
<b>Identification and Management of PACU challenges</b> <b>Difficult Airway Challenges Outside of the OR</b> Laura Ardizzone, DNP, CRNA, DCC <b>Intravesical Chemotherapy in the Perioperative Setting</b> Robina Kitzler MSN, CNS, AOCNS, CCRN, CPAN <b>Challenges for the PACU APPs in Managing Varying Levels of Acuity</b> Shannon O'Keefe, CNP	30 MIN. 30 MIN. 30 MIN.
<b>Blood Management - Current Concepts</b> <b>Thrombosis and Coagulation in Cancer</b> Gerald Soff, MD <b>Transfusion Practices in Cancer-Science and Reality</b> Juan Cata, MD	30 MIN. 30 MIN.
<b>Update on Acute and Chronic Pain</b> <b>Managing Substance Use Disorder for the Oncology Pain Patient</b> Amit Gulati, MD <b>Chronic Opioid Use After Cancer Surgery: Implications for Perioperative Management</b> Vinay Puttaniah, MD	30 MIN. 30 MIN.

# SESSION 2

Session	Time
<p>Plenary Lecture</p> <p><b>The Emperor of All Maladies: Can Anesthesia Influence Oncological Outcome?</b></p> <p>Gregory Fischer, MD <i>Chairman, Department of Anesthesiology and Critical Care Medicine, MSK</i></p>	30 MIN.
<p>Panel</p> <p><b>Cancer Biology in the 21st Century: What's Relevant to Me as a Practicing Clinician?</b></p> <p>MODERATOR Eric Kelhoffer, MD</p> <p><b>Car-T-cell Therapy</b> Michel Sadelain, MD, PhD</p> <p><b>Precision Medicine</b> Jamie Chافت, MD</p> <p><b>Immunotherapy</b> Jedd Wolchok, MD, PhD</p>	<p>30 MIN.</p> <p>30 MIN.</p> <p>30 MIN.</p>
<p>Panel</p> <p><b>Improving Outcomes</b></p> <p>MODERATOR Ana Dabo-Trubelja, MD</p> <p><b>Preoperative Optimization</b> Bobbie Jean Sweitzer, MD</p> <p><b>Preoperative Cardiorespiratory Exercise Testing and Prehabilitation</b> Jessica Scott, PhD</p>	<p>30 MIN.</p> <p>30 MIN.</p>

# SESSION 3

Session	Time
<p>Special Session</p> <p><b>COVID 19 and Cancer</b></p> <p>MODERATOR Eric Kelhoffer, MD</p> <p><b>Risks and Outcomes of Cancer Patients with COVID-19</b> Mini Kamboj, MD</p> <p><b>Lessons learned from the ICU</b> Elena Mead, MD</p> <p><b>Anesthesia Considerations during the COVID Pandemic</b> Cindy Yeoh, MD</p>	<p>30 MIN.</p> <p>30 MIN.</p> <p>30 MIN.</p>
<p>Panel</p> <p><b>The Great Debate: Perioperative Strategies to Reduce Cancer Recurrence</b></p> <p>MODERATOR Ana Dabo-Trubelja, MD</p> <p><b>Regional Anesthesia to Reduce Cancer Progression</b> Tim Wigmore, BM, BCh, FRCA, FFICM, FCICM</p> <p><b>TIVA vs. Inhalational Based Anesthetics</b> Bernhard Riedel, MBChB, FCA, FANZCA, FASE, MMed, MBA, PhD</p> <p><b>Opioids and Cancer Recurrence</b> Vijaya Gottumukkala, MD, MBBS, FRCA</p>	<p>30 MIN.</p> <p>30 MIN.</p> <p>30 MIN.</p>

REGISTER ONLINE:  
[mskcc.org/periop2020online](https://mskcc.org/periop2020online)

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**On Demand Registration Fees: \$99**

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This on demand program will be available for purchase until December 31, 2021. Access to the videos and ability to claim credit will be available until March 31, 2022.

**Discounts/Promotions**

- A registration discount is available for MSK Alumni, MSK Cancer Alliance, and Cancer Care Partners to attend a MSK CME course. If you are a member of one of these groups, contact [cme@mskcc.org](mailto:cme@mskcc.org) for details.
- Registration is complimentary for all MSK employees; however, you must complete registration in order to attend this course.

Please note that after your payment has been processed, no further promotional discounts or adjustments will be made to your registration.

Registration for this MSK CME on demand course is non-refundable.

## Accreditation

Memorial Sloan Kettering Cancer Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

**AMA Credit Designation Statement**

Memorial Sloan Kettering Cancer Center designates this other activity (live activity and on demand material) for a maximum of **12.50 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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Memorial Sloan Kettering  
Cancer Center



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GUEST  
FACULTY

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BIOGRAPHIES





## **Juan Cata, MD**

Assistant Professor  
Department of Anesthesiology and  
Perioperative Medicine  
MD Anderson Cancer Center  
Houston, TX

Dr. Cata is an anesthesiologist and physician-scientist with a passion for the care of cancer patients whose area of expertise is the role of perioperative factors that lead to cancer recurrence and poor survival. Dr. Cata is also interested in the mechanisms of perioperative recovery in cancer patients.

Following internship and residency in the Department of Anesthesiology at the Hospital Privado de Cordoba, Cordoba, Argentina, Dr. Cata joined the Department of Anesthesiology and Perioperative Medicine at MD Anderson Cancer Center at Houston as a Postdoctoral Fellow in 2002. He then completed an Anesthesiology residency in the Department of Anesthesiology and Pain Medicine at the Cleveland Clinic, Cleveland in 2010, and in 2011, he joined the Cleveland Clinic Anesthesiology Department as an attending anesthesiologist and Clinical Investigator in the Outcomes Research Department. In 2012, Dr. Cata joined the Department of Anesthesiology and Perioperative Medicine, Division of Anesthesiology and Critical Care at MD Anderson Cancer Center as an Instructor and was soon promoted to Assistant Professor.

He has over 150 peer-reviewed manuscripts and has been author or co-author in top journals, including NEJM, Lancet, JAMA, Journal of Internal Medicine, and Anesthesiology.



## **Vijaya Gottumukkala, MBBS, MD, FRCA**

Professor  
Department of Anesthesiology and  
Perioperative Medicine  
MD Anderson Cancer Center  
Houston, TX

Dr. Gottumukkala is currently a Professor and Deputy Chairman of Anesthesiology & Perioperative Medicine at the University of Texas MD Anderson Cancer Center, Houston Texas, USA. He currently serves MDACC as the institutional co-lead for Enhanced Recovery Programs, as the Medical Director for the Program for Advancement of Perioperative Cancer Care (PACE), and as an Associate Head for the Institute for Cancer Care Innovation (ICCI).

He is actively engaged with the professional societies at the state, national and international level. He serves as the scientific and education committee Chair for the Texas Society of Anesthesiologists (TSA); on the Board for the American Society for Enhanced Recovery (ASER), currently as the Secretary on a two year term; and as an Advisory Member for Evidence Based Perioperative Medicine-USA.

He initiated an international collaborative on perioperative care of the cancer patient and Chaired the inaugural global conference on perioperative care of the cancer patient, in November 2012 in Houston, Texas and has since organized annual meetings on perioperative care of the cancer patient all over the world.

He has given over 50 invited lectures at local and state meetings, and over 100 lectures at national and international meetings. He has given 15 visiting professorship lectures in 7 countries; and key note addresses at annual meetings of the professional anesthesiology societies of 5 different countries.

He started the first Cancer Anesthesia Fellowship Program in the US at MDACC in 2011. The program has so far graduated 9 Fellows, 3 of whom currently serve as faculty members in the department of Anesthesiology and Perioperative Medicine at MDACC. He helped develop fellowship programs in Onco-Anesthesiology in other parts of the world.

Dr. Gottumukkala's main research and academic interests are: Perioperative management strategies to improve postoperative and oncological outcomes, Enhanced Recovery Protocols in major cancer surgery, and to develop Onco-Anesthesiology as a specialty. He is actively involved in clinical research as a PI, Co-PI or as a collaborator. He completed 8 RCTs; has 1 institutional RCT, 1 RO1, and a UT-grant currently underway; and multiple projects including an international trial planned to start this year.

He is currently a reviewer for multiple national and international journals, is an Associate Editor for BMJ Anesthesiology, has served as a Section Editor for four publications in Anesthesiology and is currently working on a Text Book on "Perioperative Care of the Cancer Patient" as one of the Editors. He has published a combined total of over 100 book chapters, invited articles and peer reviewed manuscripts.



**Bernhard Riedel, MBChB, FCA,  
FANZCA, FASE, MMed, MBA, PhD**

Director  
Department of Anesthesia, Perioperative  
and Pain Medicine  
Peter MacCallum Cancer Centre  
Melbourne, Australia

Dr. Riedel is the Director of the Department of Anesthesiology, Perioperative and Pain Medicine at the Peter MacCallum Cancer Centre and a Professorial Fellow at the University of Melbourne. His academic interests are in the field of onco-anaesthesia; understanding the role of prehabilitation prior to major cancer surgery; and the impact of the perioperative adrenergic-inflammatory response and anaesthetic technique on tumor-progression signaling to improve cancer outcomes.



## **Bobbie Jean Sweitzer, MD**

Professor of Anesthesiology  
Northwestern University,  
Feinberg School of Medicine  
Chicago, IL

Dr. BobbieJean Sweitzer is dual trained and boarded in anesthesiology and internal medicine. She is a Professor of Anesthesiology and Associate Chair for Perioperative Clinical Practice at Northwestern University in Chicago, Illinois. Dr. Sweitzer is an author and the editor of *Preoperative Assessment and Management* (currently 3rd edition). She has authored over 100 peer-reviewed manuscripts and abstracts and over 30 book chapters. She lectures internationally on preoperative medicine and ambulatory surgery topics. She hosts a monthly podcast for Anesthesiology.

Dr. Sweitzer is President elect of the Society of Ambulatory Anesthesia (SAMBA), on the board of directors of SAMBA and a co-director of the annual meeting. She is a Fellow of the American College of Physicians, an elected member of the Association of University Anesthesiologists, a founding member of the Governing Board and past President of the Society of Perioperative Assessment and Quality Improvement. She is a member of the Society for Anesthesia and Sleep Medicine. She is the Executive Editor of *A&A Practice*, and on the editorial board of *Anesthesiology and Anesthesia and Analgesia*.



**Tim Wigmore,  
BM, BCh, FRCA, FFICM, FCICM**

Consultant in Intensive Care Medicine and  
Anaesthesia  
Associate Medical Director  
The Royal Marsden  
London, UK

Dr Wigmore has both a private and an NHS practice at The Royal Marsden. He is a Consultant Anaesthetist and Intensivist, and Divisional Medical Director (Clinical Services) at The Royal Marsden.

He qualified from Oxford University (John Radcliffe Hospital) in 1994 having conducted his pre-clinical studies at Cambridge University (Clare College). He subsequently trained in the Imperial School of Anaesthesia before moving to Australia where he spent three years working in ITU in Sydney and gained the Australian Fellowship in Intensive Care.

Dr Wigmore leads the Critical Care Team at The Royal Marsden's new Critical Care Unit. The Unit provides full support for patients suffering from disease- or treatment-related complications and records excellent outcomes for patients with life-threatening conditions.

His areas of interest include infectious diseases and care of the haemato-oncological patient in intensive care units. He is widely published in the field of intensive care. Dr Wigmore specialises in anaesthesia for urological oncology patients and has extensive experience managing patients undergoing robotically assisted surgery.

# MSK COURSE FACULTY

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BIOGRAPHIES



## **Anoushka Afonso, MD**

Director, Enhanced Recovery after Surgery (ERAS)  
Department of Anesthesiology and  
Critical Care Medicine

Dr. Anoushka Afonso is the Director of Enhanced Recovery at MSK. She has trained in both Internal Medicine and Anesthesiology at Mount Sinai Hospital in NY prior to joining MSKCC as faculty 9 years ago. She is interested in efforts to improve outcomes of cancer patients after surgery. Additionally, she is on the Board of American Society of Enhanced Recovery (ASER), published and led many efforts to streamline and standardize perioperative care through enhanced recovery after surgery (ERAS) efforts here at MSK. She is excited to talk to you today on Enhanced recovery and the cancer patient.

### Education

MD, Georgetown University School of Medicine

### Residencies

Mount Sinai Medical Center (New York)

### Fellowships

Mount Sinai Medical Center (New York)

### Board Certifications

Internal Medicine; Anesthesiology



## **Laura Ardizzone, DNP, CRNA, DCC**

Clinical Director, Nurse Anesthesia Services  
Department of Anesthesiology and  
Critical Care Medicine

Laura L. Ardizzone is the director of Nurse Anesthesia Services at Memorial Sloan Kettering Cancer Center in New York City and a member of the Executive Nursing Leadership team. She also serves as adjunct clinical faculty at Columbia University School of Nursing. Her previous roles include Assistant Clinical Professor of Nursing and Director of Clinical Education at Columbia University School of Nursing.

Laura recently completed two terms as member of the patient safety steering committee of the National Quality Forum, is the current President of the Columbia University School of Nursing Alumni Board, a member of the advisory board for Advanced Practice Provider Executives and a fellow of the New York Academy of Medicine. Laura serves on the editorial board for the International Student Journal of Nurse Anesthesia and the Anesthesia eJournal and has lectured nationally and internationally on a variety of patient safety and clinical anesthesia topics. Laura also has an interest in global health and has worked with The Carter Foundation on projects for perianesthesia and clinical education in Sudan and Nigeria.

Laura is a graduate of the University of Pennsylvania for her BSN and received her Master's and Doctor of Nursing Practice degrees from Columbia University. She also completed a post-doctoral clinical fellowship at Columbia University School of Nursing. Laura has been a practicing certified registered nurse anesthetist for 16 years and a nurse for 21 years.





## **Jamie Chaft, MD**

Medical Oncologist  
Department of Medicine

Dr. Chaft is a certified medical oncologist who specializes in caring for patients with lung cancer. She is part of a team of physicians from multiple disciplines — including thoracic surgery, radiation oncology, pathology and interventional radiology — who meet weekly and collaborate to determine the optimal treatment plan for our patients. As part of the suite of treatment options, Dr. Chaft and her colleagues run and participate in a multitude of clinical trials, all of which are available to patients who qualify and wish to participate. These trials range from therapeutic trials evaluating new treatment approaches to translational trials that help us learn more about lung cancer.

In the clinic, Dr. Chaft and her team focus on personalizing care for each patient not only to his or her type of cancer and its genetics but to the patient's personal circumstances, beliefs, and wishes. They consider a patient's disease characteristics and biological characteristics in light of the priorities of each patient and his or her family, and discuss treatment options — including clinical trial opportunities when appropriate — to provide the best care for patients to fight their cancer.

While Dr. Chaft cares for patients with all types and stages of lung cancer, her research focuses on the use of multimodality therapies (such as chemotherapy plus radiation or surgery) to improve cure rates in patients with early-stage non-small cell lung cancer.

At Memorial Sloan Kettering, she is the lead investigator on all trials evaluating multimodality treatment for non-small cell lung cancers. These trials focus on developing new treatment regimens by finding different applications for standard drugs or testing new therapeutic agents with surgery and/or radiation. Additionally, she conducts research to identify biomarkers that are unique to a patient or his or her cancer. These biomarkers can be used to preferentially select a drug treatment regimen that is likely to be more effective against that individual's lung cancer. Discovering such biomarkers will allow us to optimize the use of available chemotherapies to maximize the benefit of anticancer treatments while minimizing the patient's exposure to side effects of less-active treatments. This is a promising and active research niche in the area of personalized medicine with the aim to improve the outcomes and quality of life of patients diagnosed with lung cancer.

Education: MD, New York University School of Medicine

Residencies: New York-Presbyterian Hospital/Weill Cornell Medical Center

Fellowships: Memorial Sloan Kettering Cancer Center

Board Certifications: Internal Medicine; Medical Oncology



## **Anahita Dabo-Trubelja, MD**

Associate Attending  
Department of Anesthesiology and  
Critical Care Medicine

Anahita Dabo-Trubelja, MD provides anesthesia to patients who are having surgery at Memorial Sloan Kettering Cancer Center. Her special interest lies in anesthesia care for critically ill patients.

### Education

MD, University of Zagreb (Croatia)

### Residencies

NewYork-Presbyterian Hospital

### Fellowships

NewYork-Presbyterian Hospital



## **Lisa DeAngelis, MD**

Physician-In-Chief, Memorial Hospital

Lisa DeAngelis, MD is a neuro-oncologist with more than 30 years of experience in caring for people with brain tumors and neurologic complications due to cancer. She is also Physician-in-Chief and Chief Medical Officer at Memorial Sloan Kettering, where she oversees all clinical, research, and medical education efforts for Memorial Hospital.

When neuro-oncology was a budding field, she came to MSK to do my fellowship under Jerome Posner, the founding Chair of Neurology. She has been honored to call MSK her home since and assumed the role of Chair in 1997. Over the years, the department has grown substantially into what is today one of the most robust neuro-oncology programs in the world. She co-founded MSK's Brain Tumor Center, where experts from across MSK work to bring new discoveries from the lab to our patients as quickly as possible. Her own research is focused on primary brain tumors and the neurological complications of cancer and its treatment, including cognitive impairment and strokes. She helped develop the current regimen to treat primary central nervous system (CNS) lymphoma, and she has led national clinical trials that investigate new brain tumor therapies.

Brain tumors are some of the most challenging forms of cancer. However, new developments in understanding and treating brain cancer are improving people's health and quality of life where options previously were limited. She works as part of a team of nurses, doctors, and other specialists who care for people with incredible dedication and compassion

### Education

MD, Columbia University

### Residencies

Neurology - Columbia-Presbyterian Medical Center

### Fellowships

Neuro-Oncology - Columbia-Presbyterian Medical Center

Neuro-Oncology - Memorial Sloan Kettering Cancer Center

Neurology - New York Hospital

### Board Certifications

Neurology



## **Gregory Fischer, MD**

Chairman  
Department of Anesthesiology and  
Critical Care Medicine

Dr. Fischer is a board-certified anesthesiologist with subspecialty fellowship training in cardiothoracic anesthesia and critical care. Prior to joining Memorial Sloan Kettering Cancer Center as Chairman of the Department of Anesthesiology & Critical Care Medicine, he served as the Director of Cardiac Anesthesia in the Cardiothoracic Intensive Care Unit at Mount Sinai Hospital from 2008-2016.

As a result of spending most of his career in cardiovascular medicine most of his research has been clinical and focused on the cardiac surgical patient (e.g. cerebral oximetry, echocardiography and outcomes after surgery). Dr. Fischer has lectured and published extensively on these topics.

Since his transition to MSKCC, his interests have shifted away from cardiovascular medicine and are now more geared towards the cancer patient undergoing surgical procedures. Specifically, with the question what influence do modern anesthetics have on tumor growth, metastasis and the immune system?

### Education

MD, University of Zurich (Switzerland)

### Residencies

Kantonsspital Aarau and Stadtspital Triemli (Switzerland)

### Fellowships

Mount Sinai Medical Center

### Board Certifications

Anesthesiology; Intensive Care



## **Amit Gulati, MD, FASA**

Director, Chronic Pain  
Department of Anesthesiology and  
Critical Care Medicine

Amitabh Gulati, MD is both a board certified anesthesiologist and chronic pain specialist who specializes in treating cancer related pain syndromes. He devotes his time to helping improve quality of life through pharmacotherapy and interventional pain treatment options. His academic interests include using ultrasound technology to treat painful conditions (high intensity focused ultrasound). He is also involved in education and training for our future pain specialists both as part of our institution and at academic societies.

### Education

MD, Baylor College of Medicine

### Residencies

Emory University School of Medicine

### Fellowships

NewYork-Presbyterian Hospital/Weill Cornell Medical Center  
Memorial Sloan Kettering Cancer Center

### Board Certifications

Anesthesiology and Pain Medicine



## **Mini Kamboj, MD**

Chief Medical Epidemiologist, Infection Control

Dr. Kamboj is a board-certified infectious disease physician and Chief of the Medical Epidemiology Service. Members of this program work to prevent healthcare-associated infections (HAIs) from developing and spreading among patients and staff and are also actively engaged in several research projects on various aspects of epidemiology and prevention of HAIs.

Their research focuses on defining the rates and risks of HAIs across oncology centers. They also study novel interventions to reduce HAIs and ascertain the transmission risk of epidemiologically relevant nosocomial (hospital-related) pathogens.

Her research initiatives include developing methods to integrate molecular-based diagnostic and fingerprinting techniques to elucidate transmission patterns of common nosocomial pathogens, such as *Clostridium difficile* and Vancomycin-resistant enterococcus. I have partnered with other New York medical centers to characterize genotypic patterns of *C. difficile* and detect transmission between facilities. At a national level, I have participated in several multicenter collaborations to establish benchmarks and performance measures for HAIs among oncology centers.

### Education

MD (MBBS), Government Medical College of Hospital (Chandigarh, India)

### Residencies

Michigan State University

### Fellowships

Memorial Sloan Kettering Cancer Center

### Board Certifications

Internal Medicine; Infectious Diseases



## **Eric R. Kelhoffer, MD**

Attending  
Department of Anesthesiology and  
Critical Care Medicine

After graduating Georgetown School of Medicine, Dr. Kelhoffer did his residency in Anesthesiology at the University of Pennsylvania, where he developed an interest in Non Operating Room Anesthesia as well as Pediatric Anesthesia.

Since then he has been involved in resident and fellow education, specifically regarding safe sedation practices and airway management. Additionally, as the education coordinator for the department, Dr. Kelhoffer plans Grand Rounds and other meetings to meet the Department needs.

### Education

MD, Georgetown University School of Medicine

### Residencies

University of Pennsylvania Health System

### Board Certifications

Anesthesiology



**Robina Kitzler,**  
**MSN, CNS, AOCNS, CCRN, CPAN**  
Clinical Nurse Specialist

Robina is the Clinical Nurse Specialist for the Pre-surgical Center and Main PACU. She received both her BSN from MSN from Drexel University. She is in the process of applying for my DNP at Villanova University. She has worked in Perioperative Services at MSK for over 20 years.





## **Beatriz Korc-Grodzicki, MD, PhD**

Chief, Geriatrics Service

Dr. Korc is the Service Chief of the Geriatrics Service, in the Department of Medicine, at MSK. Since she joined MSK in 2009, she has been dedicated to the care of older adults with cancer, to the management of geriatric syndromes and perioperative care. She created, developed and directed a successful Geriatrics Service with unique characteristics for a cancer center, mentored numerous multidisciplinary health care providers locally, nationally and internationally and is a panel member of the NCCN Senior Adult Oncology Guidelines.

She has been the PI of the HRSA funded Geriatrics Workforce Enhancement Program (GWEP), successfully bringing to completion multiple educational activities on Geriatric Oncology for and by professionals from MSK, from underserved health care facilities in NYC, from community organizations and the community at large.

She is a PI of an NCI-funded R25 grant for interprofessional education about communication with the older cancer patient with cognitive impairment.

### Education

MD, Universidad de la Republica (Uruguay)  
PhD, Weizmann Institute of Science (Israel)

### Residencies

University of Rochester School of Medicine

### Fellowships

University of Rochester School of Medicine

### Board Certifications

Internal Medicine; Geriatric Medicine



## **Alexandra Lewis, MD, M.Sc.**

Assistant Attending  
Department of Anesthesiology and  
Critical Care Medicine

Dr. Alexandra Leah Lewis is an assistant professor in the Department of Anesthesiology & Critical Care Medicine. She graduated with a B.A. in History of Science, History of Medicine from Yale University and earned a master's degree in International Health Policy and Health Economics from the London School of Economics. She subsequently attended the University of Pittsburgh Medical School and completed her residency at Beth Israel Deaconess Medical Center/Harvard Medical School. She received additional fellowship training in thoracic anesthesia at Memorial Sloan Kettering Cancer Center in 2014. Beyond her interest in thoracic anesthesia, she has also taken an interest in gender and global health issues. She was accepted into the Women Transforming Leadership Program at Saïd Business School, Oxford University. She has given lectures and speeches on intersectionality and structural discrimination in the workplace for the American Society of Anesthesiologists (ASA) and the Society for Education in Anesthesia (SEA). She has also co-authored numerous book chapters and abstracts with her most recent publication on immune checkpoint inhibitors featured in the British Journal of Anesthesia.

In her spare time, she volunteers for her church and fundraises to support book scholarships for underrepresented minority students in college. She currently serves on the Equity, Diversity and Inclusion Advisory Board for the Convent of the Sacred Heart in Greenwich, CT.

### Education

MD, University of Pittsburgh Medical Center

### Residencies

Beth Israel Deaconess Medical Center/Harvard Medical School

### Fellowships

Memorial Sloan Kettering Cancer Center

### Board Certifications

Anesthesiology



## **Elena Mead, MD**

Assistant Attending, Intensivist  
Department of Anesthesiology and  
Critical Care Medicine

Elena Mead, MD is an intensive care specialist with board certifications in internal medicine, pulmonary disease, and critical care medicine. As an intensivist she treats life-threatening conditions such as respiratory failure, heart failure, circulatory shock, kidney failure, and acute bleeding. In the ICU, her primary goal is to provide supportive measures — including but not limited to actual life support — while the body attempts to recover from a life-threatening illness. Her secondary goal is to support patients' comfort and maintain awareness so that they may participate in physical therapy and other activities and not become deconditioned during their illness. Her third goal is to support patients' families during this time of crisis.

She routinely use ultrasound at the bedside to expedite diagnoses and assist in invasive procedures. In the role as an educator of residents, fellows, and nurse practitioners, she runs workshops in the use of ultrasound in the ICU.

Her areas of scientific interest are the role of cytokines in sepsis and in inflammatory states caused by immunotherapy as well as acute heart failure in cancer patients.

### Education

MD, University of Massachusetts Medical School

### Residencies

Montefiore Medical Center (New York)

### Fellowships

Montefiore Medical Center (New York)

### Board Certifications

Pulmonary Disease; Internal Medicine; Critical Care Medicine



## **Shannon O'Keeffe, CNP**

Manager, Advanced Practice Providers

Shannon O'Keeffe, MSN, ACNP-BC is the Advanced Practice Provider Manager for the Post-Anesthesia Care Unit at MSKCC. She received her Bachelors of Science in Nursing from the College of Mount St. Vincent and her Masters in Science in Advanced Practice Nursing specializing in Acute care of the Adult from New York University. She began her career in the PACU at MSK as Registered Nurse, then as a Nurse Practitioner and current APP Manager for Main, SDH and Koch PACU at MSKCC. She continues her clinical practice in the Main PACU and represents the APPs on the Anesthesia & Critical Care Medicine QA Committee and the MSK Code Committee.



## **Stephen Pastores, MD**

Director, Critical Care Medicine Fellowship  
Training and Research Programs  
Department of Anesthesiology and  
Critical Care Medicine

Dr. Pastores is the Program Director of Critical Care Medicine and Vice-Chair of Education in the Department of Anesthesiology and Critical Care Medicine at Memorial Sloan Kettering Cancer Center in New York, NY. He is a Professor of Medicine in Anesthesiology and Medicine at Weill Cornell Medical College of Cornell University and. He was trained and Board Certified in Internal Medicine, Pulmonary Disease, and Critical Care Medicine.

He is a Master of the American College of Physicians, Fellow of the American College of Critical Care Medicine, and American College of Chest Physicians, and the immediate past Chancellor, Board of Regents of the American College of Critical Care Medicine.

Dr. Pastores' research interests include clinical studies of sepsis and pneumonia in immunocompromised patients, use and costs of critical care medicine in the US, and critical care oncology. He has authored over 200 peer-reviewed articles and book chapters. He was the 2013 Distinguished Service Award and 2016 Safar Global Partner Award from SCCM.

### Education

MD, Lyceum-Northwestern College (Philippines)

### Residencies

Metropolitan Hospital Center/New York Medical College

### Fellowships

New York University Medical Center

Mount Sinai Medical Center (New York)

### Board Certifications

Internal Medicine; Pulmonary Disease; Critical Care Medicine



## **Vinay Puttaniah, MD**

Director, Regional Anesthesia and  
Perioperative Pain Medicine  
Department of Anesthesiology and  
Critical Care Medicine

Dr. Puttaniah is a board-certified anesthesiologist with additional expertise and training in pain medicine. As a member of both the Anesthesiology Service and the Pain Service in the Department of Anesthesiology and Critical Care Medicine, his clinical work involves delivering anesthesia as well as treating postoperative pain. He also treats cancer pain using medications, nerve blocks, intrathecal drug delivery systems, radiofrequency techniques, and neurolytic blocks. He regularly supervises and teaches clinical fellows.

### Education

MD, Stony Brook University School of Medicine

### Residencies

St. Luke's-Roosevelt Hospital Center

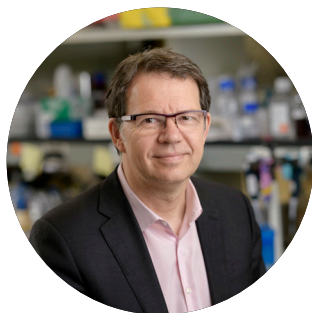
NewYork-Presbyterian Hospital/Weill Cornell Medical Center

### Fellowships

Tri-Institutional Pain Fellowship: (Memorial Sloan Kettering Cancer Center/  
Weill Cornell Medical Center/Hospital for Special Surgery)

### Board Certifications

Anesthesiology and Pain Medicine



## **Michel Sadelain, MD, PhD**

Director, Center for Cell Engineering

Michel Sadelain, MD, PhD is a physician-scientist at Memorial Sloan Kettering Cancer Center, New York, New York, where he holds the Steve and Barbara Friedman Chair.[1] He is the founding director of the Center for Cell Engineering and the head of the Gene Transfer and Gene Expression Laboratory. He is a member of the department of medicine at Memorial Hospital and of the immunology program at the Sloan Kettering Institute. He is best known for his major contributions to T cell engineering and chimeric antigen receptor (CAR) therapy, an immunotherapy based on the genetic engineering of a patient's own T cells to treat cancer.

### Education

MD, University of Paris

PhD, University of Alberta

### Residencies

Centre Hospitalier Universitaire Saint-Antoine (Paris)

### Fellowships

Massachusetts Institute of Technology



## **Leslie Sarraf, MD**

Assistant Attending  
Director, Medical Simulation  
Department of Anesthesiology and  
Critical Care Medicine

Leslie M. Sarraf, MD, is an Assistant Member and Director of Medical Simulation in the Department of Anesthesiology and Critical Care Medicine. She received her M.D. from SUNY Upstate Medical University in Syracuse, NY in 2011 and completed her anesthesiology residency at the SUNY Downstate Health Sciences Center in Brooklyn in 2015. She was named Chief Resident and was honored at graduation with the Most Valuable Resident Award. She joined Memorial Sloan Kettering Cancer Center in 2015. Her main clinical focuses are regional anesthesia and ambulatory anesthesia for cancer patients. She has presented at national workshops on regional anesthesia and participates in clinical research, currently serving as co-PI on two studies addressing optimal pain management in breast surgery.

In addition to her clinical work, Dr Sarraf leads a high fidelity, in situ, interprofessional medical simulation team that rehearses high stakes, low frequency emergencies that occur during the perioperative period. Many of these scenarios not only allow clinicians to practice skills in a psychologically safe space but are also used to test new and old processes. Her leadership has transformed MSK's appreciation for medical simulation where she hopes to further train and educate medical and clinical staff in providing safer and higher quality care.

### Education

MD, SUNY Upstate Medical University

### Residencies

SUNY Downstate Medical Center

### Board Certifications

Anesthesiology





## **Jessica Scott, PhD**

Investigator, The Lee Jones Lab

Jessica Scott, PhD, is an Assistant Member in the Exercise Oncology Service at Memorial Sloan Kettering Cancer Center. She received her PhD in Exercise Cardiovascular Physiology at the University of British Columbia in Vancouver, Canada, and completed her Post-doctoral Fellowship at NASA Johnson Space Center (JSC) in Houston, Texas. She joined MSK in 2017 after 5 years as a Senior Scientist in the Exercise Physiology and Countermeasures Laboratory at JSC. Her research is focused on: (1) characterization of multisystem toxicity using exercise testing, imaging, and biomarker techniques, and (2) the efficacy of exercise to prevent and reverse toxicity.



## **Gerald Soff, MD**

Attending Physician  
Hematology Service

Dr. Soff is a hematologist with a particular interest in benign hematologic disorders. He has extensive experience in the diagnosis and management of thrombotic diseases and also hemorrhagic disorders. This is particularly helpful for the complex population of patients with cancer who are at risk for both thrombosis and bleeding.

His research interests include studies of the interaction of the coagulation system and cancer. Dr. Soff has published a number of papers in the field, including both clinical and basic science studies. He also actively contributes to the training of students and house officers.

### Education

MD, Johns Hopkins School of Medicine

### Residencies

Medical College of Virginia

### Fellowships

Beth Israel Medical Center (Boston)

### Board Certifications

Internal Medicine; Hematology



## **Jaqueline Sumanis, CRNA, DNAP CHSE**

Assistant Clinical Director, Nurse Anesthetist  
Department of Anesthesiology and  
Critical Care Medicine

Jacqueline N. Sumanis, is the Assistant Director of Nurse Anesthesia Services JRSC. She completed her Master of Science in Nurse Anesthesia in 2000 and Doctorate in Nurse Anesthesia Practice in 2015, both at Virginia Commonwealth University. She has over twenty years' experience in anesthesia, with special interests in improving patient safety through medical simulation, quality assurance and medical error reporting.

She is a founding member and co-leader of the JRSC and Anesthesiology Critical Care Medicine Medical Simulation teams at MSK. She is a Certified Healthcare Simulation Educator. Our medical simulation programs provide interprofessional team training for high risk, low frequency critical events to improve patient safety and optimize team functioning.

In addition to her anesthesia practice, she is on the board of the Malignant Hyperthermia Association of the United States and lectures nationally on medical simulation effectiveness.



## **Rebecca S. Twersky, MD, MPH**

Chief of Anesthesia  
Josie Robertson Surgery Center  
Department of Anesthesiology and  
Critical Care Medicine

Rebecca S. Twersky, MD, MPH is the Chief of Anesthesia for Memorial Sloan Kettering's Josie Robertson Surgery Center (JRSC) in NY. JRSC is an innovative, freestanding center that provides the highest quality, patient-centered outpatient and short-stay surgical care for cancer patients. Dr. Twersky is an internationally recognized expert in ambulatory anesthesiology and prior to her coming to MSK in 2015, was at SUNY Downstate, where she was a Professor of Anesthesiology and Vice Chair for Research in the Department of Anesthesiology, Medical Director of the Ambulatory Surgery Unit, and Chair of the Institutional Review Board. She received her MD in 1983 and her MPH in 2005 from Downstate and has established a solid national and international reputation as an expert clinician, researcher, leader, and educator in ambulatory anesthesia.

Dr. Twersky's extensive professional activities have included serving as Chair of the American Society of Anesthesiologists (ASA) Section on Professional Standards, ASA Annual Meeting Chair, NYSSA PGA General and Scientific Program Chair, past President of the Society of Ambulatory Anesthesia (SAMBA), liaison to the FDA, Joint Commission and continues to serve on advisory committees to New York State Department of Health. She has presented extensively on preop evaluation and patient selection for ambulatory surgery, ERAS for outpatient cancer surgery, outpatient anesthetic techniques, quality assurance, sedation safety and office-based anesthesia. She has authored over 87 publications, including *The Ambulatory Anesthesia Handbook*, the only handbook devoted solely to outpatient anesthesia. She has received numerous awards and recognitions for her contributions including the 2005 Distinguished Service Award of the Society of Ambulatory Anesthesia. She has been honored this year with the distinction of receiving the New York State Society of Anesthesiologists 2020 Distinguished Service Award.

### Education

MD, MPH, SUNY Downstate College of Medicine

### Residencies

Mount Sinai Medical Center

### Fellowships

New York State Department of Health  
Rockefeller College of Public Policy

### Board Certifications

Anesthesiology; National Board of Medical Examiners



## **Robert Veselis, MD**

Vice Chair for Research  
Department of Anesthesiology and  
Critical Care Medicine

Dr. Veselis received his MD degree from the University of Toronto, anesthesia training at Duke University, North Carolina, and Critical Care Fellowship at University of Virginia, Charlottesville. Dr. Veselis has spent most of his career at MSKCC, developing a research program focused on mechanisms of the amnestic actions of anesthetic drugs, as investigated in healthy human volunteers. Recently Dr. Veselis has focused on more clinical aspects of cognition in the peri-operative period, including delirium, anesthesia related outcomes, pediatric sedation, and neuromonitoring. He is currently Vice Chair for Research in the Department of Anesthesiology/Critical Care Medicine.

### Education

MD, University of Toronto

### Residencies

Duke University Medical Center

### Fellowships

University of Virginia Medical Center

### Board Certifications

Anesthesiology; Critical Care Medicine



## **Jedd Wolchok, MD, PhD**

Chief, Melanoma and Immunotherapeutics Service

Jedd Wolchok received his undergraduate degree from Princeton University and both M.D and Ph.D. from New York University, where he also fulfilled his residency program. He completed his fellowship at MSK and remained on faculty with an appointment in the Melanoma Immunotherapeutics Service.

Dr. Wolchok is Chief of the Immuno-Oncology Service and holds The Lloyd J. Old Chair in Clinical Investigation at Memorial Sloan Kettering Cancer Center (MSK). He is also head of the Swim Across America - Ludwig Collaborative Laboratory; Associate Director of the Ludwig Center for Cancer Immunotherapy (LCCI); SU2C-ACS Lung Cancer Dream Team Co-leader and Director of the Parker Institute for Cancer Immunotherapy at MSK. Dr. Wolchok is a clinician-scientist exploring innovative immunotherapeutic strategies in laboratory models, and a principal investigator in numerous pivotal clinical trials. He specializes in the treatment of melanoma. The focus of his translational research laboratory is to investigate innovative means to modulate the immune response to cancer as well as to better understand the mechanistic basis for sensitivity and resistance to currently available immunotherapies.

Dr. Wolchok was instrumental in the clinical development leading to the approval of ipilimumab for advanced melanoma. He has been at the forefront of cancer immunotherapy, as an active clinician scientist exploring immunotherapy and as a principal investigator in several pivotal clinical trials, including the phase III trial that led to the FDA approval of ipilimumab + nivolumab as a treatment for patients with advanced melanoma. He supervises an R01-funded basic science laboratory which is focused on investigating novel immunotherapeutic agents in pre-clinical mouse models. In 2011, he established the Immunotherapeutics Clinical Core, a specialized phase 1-2 outpatient unit at MSK that is focused on the conduct of novel immunotherapy trials, with a specific emphasis on pharmacodynamic biomarker identification. This group treats patients with a broad spectrum of malignancies.

In 2011, Dr. Wolchok was named Director of the Cancer Vaccine Collaborative (CVC), a joint initiative between the Cancer Research Institute (CRI) and the Ludwig Institute for Cancer Research (LICR). The CVC is an international academic clinical trials network dedicated to developing safe and effective therapeutic vaccines and other immunotherapies for cancer. The CVC has conducted nearly 50 early-phase clinical trials of different therapeutic cancer vaccines involving more than 950 patients with melanoma, lung, ovarian, prostate, breast, and other cancers. In 2015, Dr. Wolchok was elected to the ASCO Board of Directors. In 2019, he was named Melanoma Committee Chair, ECOG-ACRIN Cooperative Group.

Dr. Wolchok has been recognized for his momentous career throughout the years and has received several of awards including the Melanoma Research Foundation-Humanitarian Award in 2010, the Melanoma International Foundation's Doctor of the Year award in 2012, and the Live, Love, Laugh Foundation and was named the Virginia and Daniel K. Ludwig Chair for Clinical Investigation in 2013. He has been recognized with the American Association for Cancer Research Richard and Hinda Rosenthal Memorial Award, the Giants of Cancer Care in Melanoma Award and received the AICF Prize for Scientific excellence in Medicine. He has received the Melvin and Sylvia Griem Lectureship in Molecular and Cellular Oncology; the Alumni Achievement Award in Clinical and Translational Science from NYU, the Alfred Taubman Prize for Excellence in Translational Medical Research and Society of Surgical Oncology (SSO) James Ewing Lecturer, the RCCS Monsey Medical Devotion Award and has received the Fellow of the American Society of Clinical Oncology (FASCO) award. Most recently, he has been awarded the Mark Foundation Grant, the Distinguished Alumni Award at MSK, the AACR-Joseph H. Burchenal Award for Outstanding Achievement in Clinical Cancer Research, the ESMO Award for Immuno-Oncology and was awarded the Hearst foundation grant.

#### Education

MD, New York University

#### Residencies

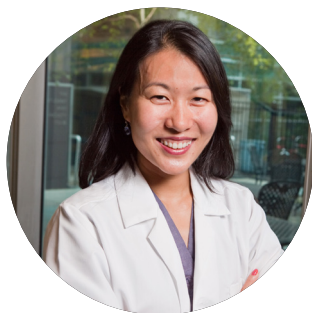
Internal Medicine - New York University Medical Center/Bellevue Hospital

#### Fellowships

Medical Oncology/Hematology - Memorial Sloan Kettering Cancer Center

#### Board Certifications

Internal Medicine, Medical Oncology



## **Cindy Yeoh, MD, FASA**

Associate Attending

Dr Cindy Yeoh has been an attending anesthesiologist at Memorial Sloan Kettering Cancer Center since 2008. She is an Associate Clinical Member at MSKCC and holds a teaching position in Clinical Anesthesiology at Weill Cornell Medical College. She is a member of the Department of Anesthesiology's Quality Assurance Committee and leads the RISQ sub-committee. Her areas of interest include patient safety, outcomes and performance, and technology in the field of anesthesiology. Dr Yeoh is actively involved in mentorship programs through MSK's annual summer research fellowship for medical students and undergraduates, and the American Society of Anesthesiologists Committee on Professional Diversity's annual mentoring grant.

### Education

MD, Washington University School Of Medicine (St. Louis, MO)

### Residencies

Saint Vincent Catholic Medical Center/New York Medical College  
(New York City)

### Board Certifications

Anesthesiology; Pediatric Anesthesiology





Memorial Sloan Kettering  
Cancer Center