

SEMINAR REPORT

MATERNAL AND INFANT HEALTH OMI MEX COLUMBIA UNIVERSITY SEMINAR

November 28-30, 2022

Medical Education Beyond Borders



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OMI MEX COLUMBIA UNIVERSITY SEMINAR IN MATERNAL AND INFANT HEALTH

November 28-30, 2022

49 fellows from Mexico
4 faculty members from the USA
12 lectures given by faculty
8 interesting case presentations by fellows
2 excellent case presentations by fellows

Group Photo of Faculty and Fellows





OMI MEX Columbia University Seminar in Maternal and Infant Health Monday, November 28 – Wednesday, November 30, 2022



	Monday November 28	Tuesday November 29	Wednesday November 30
08:00 - 09:00	REGISTRATION & BREAKFAST	REGISTRATION & BREAKFAST	REGISTRATION & BREAKFAST
09:00 – 10:00	Introductions Pre-Seminar Test Opening Ceremony	Surfactant Replacement: Past, Present, and Future Rakesh Sahni, MD	Anemia and Transfusion in Preterm Infants Thomas Hays, MD
10:00 – 11:00	The Science and Fine Art of Practicing Bubble Nasal CPAP Rakesh Sahni, MD	Postpartum Hemorrhage Noelia M. Zork, MD	Shoulder Dystocia Russell S. Miller, MD
11:00 – 11:30	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
11:30 – 12:30	Multiple Gestation Management - Surveillance, Timing, and Mode of Delivery Russell S. Miller, MD	Recognition and Treatment of Pulmonary Hypertension in Newborns Thomas Hays, MD	Hypertensive Disorders in Pregnancy Noelia M. Zork, MD
12:30 – 13:30	Diabetes in Pregnancy Noelia M. Zork, MD	Twins Pregnancies - The Importance of Ultrasound Russell S. Miller, MD	Post-Seminar Test Evaluation & Discussion
13:30 – 14:30	LUNCH	LUNCH	LUNCH CLOSING CEREMONY & AWARDS
14:30 – 15:30	Perinatal Sequencing: Improving Care of Newborn Thomas Hays, MD	Patent Ductus Arteriosus Management in Preterm Infant Rakesh Sahni, MD	
15:30 – 17:00	Workshop Fellows' Case Presentations	Workshop Fellows' Case Presentations	



FACULTY BOOKLET

MATERNAL AND INFANT HEALTH OMI MEX COLUMBIA UNIVERSITY SEMINAR

November 28-30, 2022

Medical Education Beyond Borders





Wolfgang Aulitzky, MD

Director, Open Medical Institute

American Austrian Foundation

Associate Dean and Gerhard Andlinger Professor for International Medicine & Distance Learning Adjunct Professor of Clinical Urology Adjunct Professor of Clinical Reproductive Medicine Weill Medical College of Cornell University

Adjunct Professor of Pediatrics

Perelman School of Medicine at the Children's Hospital of Philadelphia

Associate Professor of Urology

Medical University of Innsbruck, Austria

Wolfgang Aulitzky, MD is the Medical Director of the American Austrian Foundation. He is Associate Dean for International Medicine and Distance Learning, Adjunct Prof. of Clinical Urology and Adjunct Prof. of Clinical Reproductive Medicine at the Weill Medical College of Cornell University/New York Presbyterian Hospital. In 2016, he was appointed Adjunct Professor of Pediatrics in the Associated Faculty of the Perelman School of Medicine at the Children's Hospital of Philadelphia. He is also Associate Prof. of Urology at the Medical University of Innsbruck and Visiting Professor at the Medical University of Vienna. Amongst others he is a member of the American, German and Austrian Societies of Urology and was awarded the Zuckerkandlpreis of the Austrian Society of Urology in 1989. In 1995 he received the Silver Medal, in 2007 the Golden Medal for Merits to the Republic of Austria and in 2014 the cross of honor of the Land Salzburg. As Director of the Medical Program of the American Austrian Foundation he has initiated the Open Medical Institute, a scientific and educational collaboration of Weill Cornell and the NewYork Presbyterian Hospital, the Children Hospital of Philadelphia, Duke University, Columbia University, the Cleveland Clinic and leading hospitals in Austria. Dr. Aulitzky earned his medical degree at the University of Innsbruck in 1977, was a research associate at the University of Uppsala, Sweden and the Rockefeller University, New York. He received his training as an urologist at the University of Innsbruck and the General Hospital of Salzburg. He is the author of more than 140 publications on Urology, Andrology and Health Care issues and is co-author of books on basic and clinical urology/andrology.



Rakesh Sahni, MD (Course Director)

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Rakesh Sahni, MD is a Professor of Pediatrics at Columbia University Irving Medical Center, the Medical Director of the Neonatal Intensive Care Unit at NewYork-Presbyterian Morgan Stanley Children's Hospital, and the Director of Infant Physiology Laboratory at Columbia University Vagelos College of Physicians and Surgeons. After earning his medical degree from Maulana Azad Medical College, University of Delhi in India, he did pediatric residency training in India, the United Kingdom, and the United States. He further completed fellowship training in Neonatal-Perinatal Medicine at Columbia University in 1993 and has been on the faculty since. Dr. Sahni's major area of interest is in neonatal physiology, behavior, and intensive care monitoring. He utilizes continuous invasive and non-invasive physiological monitoring in preterm and term infants to develop novel predictive monitoring strategies as early warning systems for serious illnesses through advanced mathematical and statistical analysis of cardiorespiratory waveforms and other informatics data from bedside monitors. Such strategies have the potential of recognizing critical illness before it becomes clinically overt and thus improve monitoring for earlier detection and prompt treatment of potentially catastrophic illness in the NICU to improve outcomes. He is a frequent invited speaker on respiratory care of the newborn, and non-invasive monitoring during neonatal intensive care at various national and international forums and institutions. He is the recipient of several grant awards from the National Institutes of Health and has published 96 original papers and more than 140 abstracts. He serves as a scientific grant reviewer at the various NIH study sections and on the American Board of Pediatrics-Sub-board of Neonatal-Perinatal Medicine.



Thomas Hays, MD, PhD

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Thomas Hays, MD, PhD is a neonatologist specializing in the care of preterm and critically ill infants. He grew up in the northeastern United States in a rural region of Pennsylvania. He attended Penn State University, followed by predoctoral research fellowships at the National Institutes of Health (NIH) near Washington, DC. At NIH, he also worked as a lab technician studying cell cycle regulation in basic animal models. He completed his MD and pediatric residency at the Carl Icahn School of Medicine at Mount Sinai. He also completed a PhD at Mount Sinai in biomedical research studying the cellular and molecular mechanisms of kidney disease. He completed a neonatology fellowship at the Columbia University Irving Medical Center, where he recently became a faculty member. He conducts research studying the genetic basis of neonatal diseases, with particular focus on congenital renal anomalies and small for gestational age birth. He has written or co-authored approximately 20 research publications, reviews, and chapters on his research including a recently published epidemiologic study in JAMA Network Open demonstrating that congenital renal anomalies are strongly associated with preterm birth and genetic disorders, and that these anomalies were associated with four-fold higher odds of death or severe illness in preterm infants. He serves as a peer reviewer for multiple journals and is the co-editor of the upcoming seventh edition of Polin's Workbook in Practical Neonatology. His research is funded by an Early Career Award from the Thrasher Research Fund. His personal interests include horology, weightlifting, and backpacking. He lives in New York with his wife Naomi, who is a clinical psychologist, and their children, Ella and Matan.



Russell S. Miller, MD

Sloane Hospital for Women Associate Professor of Prenatal Pediatrics (in Obstetrics and Gynecology) Medical Director, Carmen and John Thain Center for Prenatal Pediatrics Program Director, Maternal Fetal Medicine Fellowship Division of Maternal Fetal Medicine Department of Obstetrics and Gynecology Columbia University Medical Center 622 West 168th Street, PH 16-66 New York, NY 10032 USA

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Russell S. Miller, MD is the Sloane Hospital for Women Associate Professor of Prenatal Pediatrics (in Obstetrics and Gynecology) at the Columbia University Irving Medical Center. He grew up in Long Island, New York, and completed undergraduate studies at Columbia College, followed by a medical degree at Columbia University College of Physicians & Surgeons. His residency and fellowship training continued at Columbia University Irving Medical Center, and since graduation he has remained a member of the Columbia Division of Maternal Fetal Medicine. Dr. Miller serves as the Medical Director of the Carmen and John Thain Center for Prenatal Pediatrics, which is a high-volume multidisciplinary fetal diagnosis and therapy center. His clinical and research interests include prenatal diagnosis, sonographic evaluation of fetal malformations, evaluation and management of complicated twin pregnancies, Twin-Twin Transfusion Syndrome, and performing invasive fetal therapies. He lives in Westchester, New York with his wife, two children, and their dog, Oliver.



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Noelia M. Zork, MD is a Maternal-Fetal Medicine specialist with expertise in the field of diabetes in pregnancy. She directs the Diabetes in Pregnancy Program at the Mothers Center, which is a first-of-its-kind center in the United States focused on maternal health during pregnancy. Dr. Zork completed her undergraduate studies at Andrews University in Michigan. She attended Indiana University School of Medicine where she obtained her MD degree and did her residency in obstetrics and gynecology at Harbor-University of California Los Angeles (UCLA). She completed her fellowship in maternal-fetal medicine at Columbia University in 2014 and stayed on as faculty. She primarily cares for people with diabetes of all types prior to and during pregnancy but also sees patients with a variety of other complications like hypertension, heart disease, autoimmune disorders, multiple gestations, and cervical insufficiency. Her research interests include gestational diabetes in twins and postpartum complications in people with type 1 diabetes and her more recent publications focus on the use of telemedicine in obstetrics. She has led multiple diabetes-related multisite studies at Columbia, including the National Institutes of Health-funded study GO MOMs (Glycemic Observation and Metabolic Outcomes in Mothers and Offspring) which is currently underway. She lives in New York City with her husband and two children.



Becky Aguilar-Álvarez de Sáenz Executive Director | AMSA

- Bachelors degree in economics, Instituto Tecnológico Autónomo de México (ITAM)
- Banking and financial career for 15 years
- Member of the Board Civic Committee, Ford Motor Company Mexico
- Treasurer of the Board of Trustees UNETE (Unión de Empresarios por la Tecnología en la Educación)
- Member of the International Women's Forum
- Member of the Mexican Council for International Affairs
- AMSA's Executive Director since 2010



Gerardo Legorreta Creel President of the Board | AMSA

- Chairman of the Board of Trustees, Alianza Médica para la Salud, A. C. (AMSA)
- Studied at the London Business School and Instituto Tecnológico Autónomo de México (ITAM)
- CEO of UBS (Union Bank of Switzerland)
- Member of the Board of Directors of Bepensa, SA de CV
- Founder and Managing Director of LG & A

Fellow Booklet

OMI MEX Maternal and Infant Health



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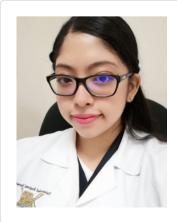
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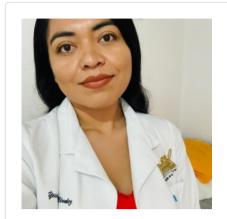
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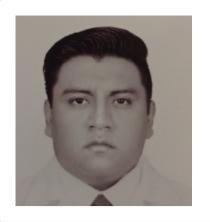
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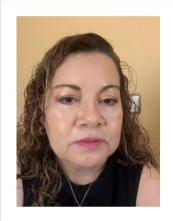
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FELLOW DIARY MATERNAL AND INFANT HEALTH





Alejandro García, MD
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Monday, November 28, 2022

After a cordial welcome by the hosts of the event and an introduction to the faculty members, the lectures began. We were in a spacious place with excellent conditions for learning. The lectures in general were fabulous, all in tune with the needs and characteristics of the Mexican population. The schedule was punctual, and the logistics were impeccable. It was very pleasant to listen to the course director share his pedagogical mastery, in which he highlighted simplicity, great preparation, and his own experience over many years dedicated to Neonatology. The lecture on pregnancy was also very good, the essential concepts were masterfully deconstructed in a very didactic way.

Tuesday, November 29, 2022

As on the first day, the hosts of the event welcomed us with much enthusiasm. The lecture on the management of pulmonary hypertension was impressive in terms of management and consequences. I learned a lot about the management of critically ill patients with this condition. In addition, it is important to denote the quality of the high level of scientific information using secondary evidence in meta-analysis and systematic reviews that allow better understanding for decision making.

Wednesday, November 30, 2022

All faculty presented very clearly today. The event ended with the presentation of certificates. Once again, many congratulations to OMI MEX and AMSA for the excellent management, and I thank all the faculty for their participation.



FELLOW DIARY MATERNAL AND INFANT HEALTH





Mayra Susana Noriega Cámara, MD Hospital de la Niñez Oaxaqueña Oaxaca Mexico

Monday, November 28, 2022

In the morning, we took the pre-seminar test. I felt that I did not do so well because there were many topics that I had maybe read about once but did not remember at that time. Next, we had a lecture about CPAP, which I loved. It took away many of my doubts and left me wanting even more information. The faculty shared techniques that are still in experimentation, but very promising. Then we heard about ultrasound in twin pregnancy. Ultrasonography is not my field, but the way Dr. Miller explained it was very good.

Tuesday, November 29, 2022

The first talk on surfactants was very interesting. I only knew about two but learned that there are several. Additionally, I did not know before that there are more than two application techniques. Dr. Zork handled the topic in a very didactic way, I would have liked her to expand on the techniques of administration, but even so I liked the mastery of the subject. Dr. Zork spoke in a passionate manner about her topics, in such a way that she makes difficult topics look simple. Her comparative tables were excellent, and Dr. Hays, despite speaking on the very complex topic of the physiology of fetal circulation, took us from the basics to the complexity of pulmonary pathology.

Wednesday, November 30, 2022

I loved today's lecture on shoulder dystocia, including the graphics that Dr. Zork showed. Dr. Hays spoke to us about the possibility that soon these techniques would be carried out in the USA, where it is very expensive and time consuming, but good to know that they exist. Fellows' case presentations were very interesting, and I liked that the panelists also interacted and gave their opinion on the handling of each case. Thank you for inviting me to be part of this experience.