AURORA CARDIOVASCULAR SERVICE LINE WELCOMES NEW CO-VICE PRESIDENTS, RECOGNIZES FORMER PRESIDENT

Building on their distinguished medical careers, Daniel O’Hair, MD, and Jasbir Sra, MD, have been named co-vice presidents of the Aurora cardiovascular service line, succeeding A. Jamil Tajik, MD, who led the group through five years of growth.

Tajik’s leadership saw Aurora Cardiovascular Services through expansion into subspecialty centers for adult congenital heart disease and other cardiac disorders, cardiovascular genomics and regenerative cardiology, translational research, cardiovascular gerontology and preventive cardiology.

“Through the hiring of top-tier cardiologists and skilled and caring support staff, as well as significant investment in cardiology research, cutting-edge technologies and life-saving procedures, Aurora Cardiovascular Services provides premier care to patients with heart, vascular and surgical disorders,” Dr. Tajik said. “It has been a privilege to lead this team, and I look forward to seeing the innovative path Drs. O’Hair and Sra will pave for it in the future.”

Dr. Tajik is now president emeritus of Aurora Cardiovascular Services and continues to see patients at Aurora St. Luke’s Medical Center cardiac subspecialty clinics. He will be actively involved in research and in mentoring through the Aurora Cardiovascular Disease Fellowship program.

Daniel O’Hair, MD

In addition to serving as president of the Cardiothoracic Surgery Section of Aurora Medical Group, Dr. O’Hair also is surgical director of the Transcatheter Heart Valve Program based at Aurora St. Luke’s Medical Center. In partnership with Tanvir Bajwa, MD, director of Aurora Cardiovascular Services’ Vascular Center, Dr. O’Hair’s leadership and clinical expertise has helped Aurora St. Luke’s Medical Center develop one of the largest and fastest growing Transcatheter Aortic Valve Replacement (TAVR) programs in the United States.

Dr. O’Hair believes strongly in continuous learning and early adoption of new techniques, and he teaches TAVR technology and best practices to physicians throughout the nation.

As primary investigator on multiple clinical trials, he has treated many patients who have been declined for treatment by other physicians and medical centers.

Jasbir Sra, MD

Dr. Sra serves as Aurora Cardiovascular Services’ director of electrophysiology, director of the Electrophysiology Research Laboratory at Aurora Sinai Medical Center and associate program director of the Clinical Cardiac Electrophysiology Fellowship at Aurora Sinai and Aurora St. Luke’s Medical Centers.

He was the first U.S. clinical investigator to implant an atrial defibrillator. He also performed the first successful epicardial ablation of atrial fibrillation in the U.S. and implanted the first defibrillator in the Indian subcontinent.

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AURORA CARDIOVASCULAR SERVICE LINE WELCOMES NEW CO-VICE PRESIDENTS, RECOGNIZES FORMER PRESIDENT continued from pg. 1

The author of more than 100 abstracts, Dr. Sra has published more than 60 original manuscripts and 50 reviews or book chapters. He is editor of the book “Practical Electrophysiology.”

He is a fellow of the American College of Cardiology and a member of the North American Society of Pacing and Electrophysiology.

A. Jamil Tajik, MD

Dr. Tajik, who also is the Thomas J. Watson Jr. Professor Emeritus in honor of Dr. Robert L. Frye and Chairman Emeritus of Zayed Cardiovascular Center, Mayo Clinic Rochester, Minnesota, is a highly decorated member of several professional societies and has received many honors, including being named Distinguished Fellow of the American College of Cardiology in 2003. He is a past recipient of the Ellis Island Medal of Honor, the American Society of Echocardiography’s Lifetime Achievement Award, the Melvin L. Marcus Memorial Award for distinguished teaching contributions and the Mayo Clinic Department of Medicine Outstanding Mentorship Award.

Since joining Aurora Cardiovascular Services in 2010, Dr. Tajik has established five multispecialty cardiac subspecialty centers at Aurora St. Luke’s Medical Center: adult congenital heart disease, Marfan syndrome and aortopathies, hypertrophic and inherited cardiomyopathies, complex valvular heart disease, and pericardial diseases.

His bibliography to date includes more than 650 articles and book chapters. He also has co-authored seven books.

PHYSICIAN RECRUITMENT

Ghassan Elkadi, MD
Vascular Medicine

Dr. Ghassan Elkadi joined the Aurora Health Care Vascular Center at Aurora St. Luke’s Medical Center in October 2015. As a vascular and internal medicine physician, Dr. Elkadi specializes in treating patients with peripheral arterial and venous diseases. He has special training as a Registered Physician in Vascular Interpretation (RPVI), reading vascular medicine ultrasound studies. Dr. Elkadi is board-certified in vascular medicine by the American Board of Vascular Medicine and internal medicine by the American Board of Internal Medicine. He attended medical school at Cairo University, Egypt, and Boston University, and was a resident at the National Heart Institute, Cairo, Egypt, and Roger Williams Medical Center/Boston University, Providence, RI/Boston, MA. He completed a

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AURORA MEDICAL CENTER IN GRAFTON
A NATIONAL CASE OBSERVATION SITE FOR THORACIC ROBOT-ASSISTED SURGERY

With a 3D, high-definition view of the surgical field, fully-wristed instruments with an extended range of motion, and controls that allow precise movements, robot-assisted thoracic surgery offers patients an option with the potential to reduce pain and shorten recovery times.

William B. Tisol, MD, leads the busiest robot-assisted thoracic surgery program in Wisconsin at Aurora Medical Center in Grafton. The center’s robotic system was upgraded to the state-of-the-art Intuitive da Vinci® XI™ Surgical System in 2014. Surgeons and surgical teams from throughout the Midwest and as far away as California come to Grafton to observe robot-assisted thoracic surgery.

“The observation experience provides surgeons and other surgical team members the opportunity to learn a new procedure or better understand how to run a smooth and efficient robotic operating room,” Dr. Tisol explained. Aurora Medical Center at Grafton is one of 10 approved thoracic robotic surgery mentor sites in North America and one of two in the Midwest.

Dr. Tisol is able to use the robotic system for procedures such as pulmonary lobectomies, esophagectomies, mediastinal mass resections, diaphragm plications, hiatal hernia repairs, and Heller myotomies.

In 2015, he performed more than 100 robot-assisted surgeries.

Coaxial high-definition cameras inserted in the patient allow the surgeon to see the surgical field in a highly magnified, three-dimensional view. From the surgeon’s console, he is able to maneuver the instruments throughout the chest. The robotic instruments can bend and twist like the human wrist, and mimic the surgeon’s hand motions with a high degree of precision.

The thin, robotic arms are inserted into the patient through small incisions made between the ribs. This greatly reduces the patient’s pain after surgery compared to an open-chest procedure, and that can have many positive effects downstream, Dr. Tisol said. With less pain often comes less pain medication, fewer complications from those medications and faster recovery and return to an active everyday life.

“The surgical robot allows us to deliver the same high-quality outcomes to patients while allowing them to more quickly recover and return to their professional and recreational activities,” Dr. Tisol said.

To learn more about the robot-assisted thoracic surgery program at Aurora Medical Center in Grafton, call 262-329-8150.

CONNOLLY DELIVERS LECTURE ON MARFAN SYNDROME, AORTOPATHY

Heidi M. Connolly, MD, FACC, FASE, director of the Congenital Heart Center and the Adult Congenital Heart Disease Clinic and former director of the Marfan and Thoracic Aortic Clinic at Mayo Clinic, presented “Marfan Syndrome and Aortopathies: Latest Diagnostic and Management Strategies” during grand rounds at Aurora St. Luke’s Medical Center in December 2015.

Connolly’s visit, made possible by an educational grant from the Schildkraut Memorial Lecture Fund, provided physicians an opportunity to learn more about the diagnosis and management of genetic aortic disorders, which can cause enlarged aortas (aneurysms) and other cardiac and vascular complications.

Dr. Connolly received her medical degree from Royal College of Surgeons in Ireland and has been in practice at Mayo Clinic for 23 years. She also serves as a professor of medicine at the College of Medicine at Mayo Clinic.

The Harold Schildkraut Memorial Lecture Fund was created in 1987 and is supported by the Schildkraut family, including Susan and Neil Rosenberg, and Naomi and Sheldon Zimbler. The fund supports guest lecturers who speak about advances in cardiovascular care.

Aurora’s Marfan and Aortopathies Center was established five years ago. For an appointment, call 414-385-2400.
Four-dimensional ultrasound isn’t just for fetal imaging anymore.

Aurora St. Luke’s Medical Center became the first hospital in the world to use cSound (GE Healthcare), a software-based beamforming ultrasound, to visualize the human heart in three spatial dimensions and time. The software, designed by GE Healthcare for its new cardiovascular ultrasound systems—the Vivid S70, Vivid E90, and Vivid E9—may help reduce non-diagnostic exams and lower the cost of care.

“It’s like opening the chest and seeing the heart beating,” said Bijoy K. Khandheria, MD, medical director of echocardiography for Aurora Cardiovascular Services.

Unlike traditional, hardware-based cardiac ultrasound imaging that was limited in how much data it could process, cSound can collect vast amounts of data and pick the best signals, pixel by pixel, to create the highest-quality image.

A color-coding system differentiates various cardiac tissues, providing yet more information for the physician.

It can be used from a transesophageal or transthoracic vantage point, and can provide a means of obtaining useful images in patients who are obese, frail, suffering from lung damage or otherwise hard to image.

Dr. Khandheria said using 4D ultrasound is almost like holding the heart, or one of its valves, in your hand. It is even possible to see blood swirling around a clot.

“The distinct advantage is that now we can see the structures of the heart in multiple dimensions, instead of reconstructing it in our mind’s eye,” Dr. Khandheria said, adding that 4D cardiac ultrasound is being used whenever echocardiography is called for. While it has striking benefits in structural procedures, its heightened clarity and greater sensitivity make it useful for diagnosing and treating many cardiac dysfunctions.

Use of cSound has reduced some procedure times, and it benefits patient care, Dr. Khandheria said.

“If you can see the heart better, you can get a better understanding of what is happening and decrease the possibility of misdiagnosis,” he said.

Aurora Health Care anticipates having 4D cardiac ultrasound available throughout its system of medical centers by mid-2016.

This 3D image shows a mitral valve repair from the atrial side. Also seen is the orifice of the left atrial appendage.
AURORA ENHANCES CARDIAC CARE FOR CANCER PATIENTS

Aurora Health Care has bolstered its cardio-oncology program, standardizing a risk assessment that includes laboratory biomarkers, imaging and clinical care throughout cancer treatment for the purpose of detecting and treating cardiotoxicity. Cardio-oncology services are being offered through the Karen Yontz Center for Cardio-Oncology at Aurora Health Care.

"Cardiologists within the cardio-oncology program work with oncologists throughout the Aurora network from the time of cancer diagnosis if the risk of cardiotoxicity is present," explained Vinay Thohan, MD, who directs the program with Bijoy K. Khandheria, MD.

A baseline evaluation is performed to assess patient factors such as high blood pressure, diabetes or stroke, and family and social history to determine the patient’s risk of developing cardiotoxicity during cancer treatment.

"Being aware that a patient is at high risk for cardiac dysfunction during or after cancer treatment allows us to take a more aggressive approach to surveillance and treatment at the earliest stages," Dr. Thohan said. "For some, changing chemotherapy or adding specific cardiac medications may be valuable before, during or even after treatment."

Echocardiography and other imaging tools are used throughout treatment—especially when radiation, anthracyclines or other agents linked with cardiac dysfunction are involved.

Even after the cancer treatment ends, follow-up is essential as cardiovascular dysfunction can occur months or years afterward, Dr. Thohan said.

To contact the Karen Yontz Center for Cardio-Oncology at Aurora Health Care, call 414-646-2662.

DR. JAGAT NARULA TO GIVE KEYNOTE ADDRESS AT SECOND ANNUAL MILWAUKEE HEART FAILURE SYMPOSIUM IN JUNE

Renowned cardiologist Jagat Narula, MD, PhD, MACC, will be the keynote speaker at the second annual Milwaukee Heart Failure Symposium, set for June 17 and 18 at the Milwaukee Marriott Downtown.

Aurora Health Care began the continuing medical education event last year as a way to bring physicians and other healthcare providers throughout the region together with top experts in heart failure patient care. Due to the success of the inaugural program, it has been expanded to two days.

Dr. Narula is the Philip J. and Harriet L. Goodhart Professor of Medicine at Mount Sinai’s Zena and Michael A. Wiener Cardiovascular Institute and the Director of the Cardiovascular Health System at the Mount Sinai West, St. Luke’s, and Beth Israel Hospitals of the Mount Sinai Health System. He is associate dean at the Arnhold Institute for Global Health of the Icahn School of Medicine at Mount Sinai, New York, NY.

He also is the executive editor of the Journal of the American College of Cardiology (JACC) and the editor-in-chief of JACC: Cardiovascular Imaging.

Dr. Narula is set to kick off the symposium with a lecture, "New Classification of Cardiomyopathy Based on Clinical and Genetic Data–MOGE(S): A Critical Review," and will present "Incessantly Increasing Use of Imaging for In-Hospital Management–An Economic Perspective" after dinner Friday.

Saturday will begin with the lecture, "Inherited Cardiomyopathies–State of the Art 2016" by A. Jamil Tajik, MD, president emeritus of Aurora Cardiovascular Services.

The symposium will address a number of topics, including advances in heart failure management, congenital heart disease and cardiomyopathies, advanced heart failure therapies and pulmonary hypertension.

Event organizers are Nasir Sulemanjee, MD, Vinay Thohan, MD, and Frank Downey, MD, all of Aurora Cardiovascular Services.

The field of heart failure cardiology has grown exponentially in the last five years; more patients and practitioners are faced with this vexing problem," Dr. Thohan said. "The Center for Advanced Heart Failure Therapies has been on the cutting edge of diagnostic and treatment options for these patients, and our symposium provides the opportunity for practitioners to meet the experts."

For information about the symposium or to register to attend, contact Laurel Landis at 414-219-7684 or laurel.landis@aurora.org.
MULTIDISCIPLINARY TEAM DELVES INTO LINKS BETWEEN RESTLESS LEGS SYNDROME AND CARDIOVASCULAR OUTCOMES

Restless legs syndrome (RLS), which affects one in 10 American adults, is one of the most common unrecognized medical conditions. The majority of patients with this sensorimotor neurological condition, also known as Willis-Ekbom Disease, have a sleep-related movement disorder (periodic leg movements during sleep, or PLMS) that affects the quality of their life and impacts their overall health, explained Arshad Jahangir, MD, director of Aurora Health Care’s Sheikh Khalifa bin Hamad Al Thani Center for Integrative Research on Cardiovascular Aging (CIRCA).

The association of RLS with cardiovascular disease is poorly recognized. In recent years, sleep-related disorders, including obstructive sleep apnea and insomnia, have been identified as risk factors for adverse cardiovascular outcomes, but the association of RLS or PLMS with changes in cardiac structure, function and outcome are not well defined.

A multidisciplinary team, led by CIRCA and including cardiologists, pulmonologists, sleep medicine experts, psychologists, internal medicine physicians, biostatisticians and data analysts, has been formed to investigate the link between RLS, PLMS and other sleep disorders with cardiovascular outcomes, such as heart failure, myocardial infarction, atrial fibrillation, stroke and mortality.

Mahok Mirza, MD, a CIRCA investigator and resident in the Internal Medicine Training Program at Aurora St. Luke’s Medical Center, has published two seminal papers in this area under the guidance of Dr. Jahangir, and was invited to speak at the American Heart Association (AHA) Seminar on Sleep Disorders in the Elderly in Orlando, Fla., in November 2015. Dr. Jahangir was interviewed at AHA by Robert Bonow, MD, for ACCEL, the American College of Cardiology’s international audio journal of contemporary cardiovascular medicine and surgery, about ongoing research occurring in this area.

Preliminary findings of ongoing research on the association of RLS with stroke risk in diabetic patients were presented by Zoe Heis, a CIRCA investigator, at a joint meeting of the International Restless Legs Syndrome Study Group (IRLSSG) and the European Restless Legs Syndrome Study Group in California in October 2015. She received the Young Investigator Award for this original research work.

“We are excited about our research findings on the association of RLS and periodic leg movement during sleep with cardiovascular disease,” Dr. Jahangir said. “This link between sleep disorders and heart disease provides another opportunity to reduce cardiovascular morbidity and mortality by targeting sleep disorders as an emerging modifiable risk factor for heart disease.”

In 2015, CIRCA researchers were invited to speak at the World Congress on Sleep Medicine in Seoul, South Korea, participated in workshops to define criteria for periodic leg movement disorder in the IRLSSG group meeting in Taormina, Italy, and presented at the IRLSSG and the European Restless Legs Syndrome Study Group annual scientific meetings.

Zoe Heis, a student researcher with the Sheikh Khalifa bin Hamad Al Thani Center for Integrative Research on Cardiovascular Aging (CIRCA), has helped the team investigate and report its findings on restless legs syndrome.


NEW DISCOVERY LABORATORY HOUSES MULTIDISCIPLINARY RESEARCH

Aurora Research Institute’s opening of its $3.4 million state-of-the-art Discovery Laboratory on the Aurora Sinai Medical Center campus in Milwaukee in late 2015 provides physician researchers and scientists at the Sheikh Khalifa bin Hamad Al Thani Center for Integrative Research on Cardiovascular Aging (CIRCA) an opportunity to work with other investigators in a communal laboratory space.

The 14,000-square-foot Discovery Laboratory is an addition to the existing research infrastructure at Aurora Health Care that promotes patient-centered research to find innovative ways to improve care and patient outcomes.

“Discovery Laboratory is home to bright and talented researchers, physicians and caregivers who will conduct meaningful and impactful research from the molecular to cellular levels,” said Randall Lambrecht, PhD, president of Aurora Research Institute and senior vice president of Aurora Health Care.

Among the lab’s features:

- Refrigerated room and a separate room housing deep freeze cryogenic equipment for storage of tissues, cells and supplies at up to -150°F
- Imaging, cell biology, virology, protein and molecular, experimental optics, microscopy/histology and flow cytometry laboratories
- Tissue processing and microscopy area
- Biosafety Level 2 enclosed area
- Small-animal vivarium

The CIRCA team currently is conducting research in the areas of mitochondrial physiology, fibrosis, ion channel homeostasis, regulatory RNA, biomarkers and cardio-oncology as it works toward its goal of improving patient outcomes by broadening understanding of cardiovascular aging and aging-associated diseases.

In addition to research on cardiovascular diseases and aging, the Discovery Laboratory will be used in pursuit of research on cancer, neurology and other specialty areas.

PHYSICIAN RECRUITMENT continued from pg. 2

fellowship in vascular medicine at Ochsner Clinic, New Orleans, LA. He is an assistant professor of medicine at Weill Cornell Medical College in New York, NY.

Lakshmi Muthukumar, MD
Non-invasive Cardiology
Dr. Lakshmi Muthukumar joined Aurora Cardiovascular Services as an echocardiologist in September 2015. She completed a fellowship in advanced cardiac imaging at St. Francis Heart Hospital in Roslyn, NY, as well as a cardiovascular disease fellowship and a geriatric medicine fellowship at Oakwood Hospital and Medical Center in Dearborn, Mich., where she also completed her residency. She is board-certified in geriatric medicine and internal medicine. She will practice at Aurora St. Luke’s Medical Center and be affiliated with Aurora Sinai Medical Center and Aurora St. Luke’s South Shore, all in the metro Milwaukee area.

Valentin Suma, MD
Non-invasive Cardiology
Dr. Valentin Suma joined Aurora Cardiovascular Services as an echocardiologist in September 2015. He previously served as director of echocardiography at North Shore University Hospital–Hofstra North Shore–LI School of Medicine in Manhasset, NY. He is board-certified in internal medicine, cardiovascular disease, adult echocardiography, nuclear cardiology and cardiovascular computed tomography. After graduating from general cardiology training, he completed a fellowship in advanced cardiac imaging at St. Luke’s–Roosevelt Hospital Center–Columbia University College of Physicians and Surgeons in New York, NY. He is an assistant professor of medicine at Hofstra North Shore–LI School of Medicine. Dr. Suma will practice at Aurora St. Luke’s Medical Center and has affiliations with Aurora Sinai Medical Center; Aurora Medical Centers in Grafton, Summit and Washington County; Aurora St. Luke’s South Shore; and Aurora West Allis Medical Center.
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