



Dr. Praseon P. Mohan Receives SIR's Excellence in Innovation Award and Other Miller School Highlights from SIR 2022

Members of the University of Miami Miller School of Medicine's Department of Interventional Radiology made an impressive showing at the Society of Interventional Radiology (SIR) 2022, held June 11-16 in Boston. Department faculty, residents, and students participated as oral presenters, invited faculty speakers, session coordinators, and session moderators.

Among the meeting highlights: Praseon P. Mohan, M.D., associate professor of clinical interventional radiology at the Miller School, received SIR's Excellence in Innovation award for the study "Liver Regeneration Following Thermal Ablation Using Targeted Nanocarrier Mediated Stem Cell Therapy."



Praseon P. Mohan, M.D., associate professor of clinical interventional radiology at the Miller School, received SIR's Excellence in Innovation award.

The award recognizes compelling, novel ideas that lead to improved health outcomes in the field of interventional radiology. In this study, Dr. Mohan and coauthors from the Miller School evaluated a novel liver regeneration strategy using targeted nanocarrier mediated stem cell therapy following thermal ablation in a swine model. The technique successfully targeted delivery of stem cells, leading to better liver regeneration compared to plain stem cells.

“Our study validates an innovative technology which could expand the eligibility of thermal ablation in liver cancer. This technology can also potentially be used for solid organ regeneration following ablation or surgery,” Dr. Mohan said. “It is a great honor to receive this prestigious award from the Society of Interventional Radiology, and I want to thank



our entire research team for this remarkable achievement. This research is a collaboration between multiple departments, and it highlights the great potentials of multidisciplinary collaboration at the University of Miami.”

Funded by the Wallace H. Coulter Foundation at the University of Miami, the study was a collaborative project involving the Department of Interventional Radiology, the Department of Biochemistry and Molecular Biology, and the DeWitt Daughtry Family Department of Surgery.

Significant Innovation for Treating Liver Cancer

“Dr. Mohan is highly deserving of this wonderful recognition,” said study coauthor Omaidia C. Velazquez, M.D., chair of the DeWitt Daughtry Family Department of Surgery at the Miller School. “His project carries great novelty and significance for treatment options in metastatic liver cancer. It brings new hope to our patients.”

“Dr. Mohan is a superb physician-scientist, and it has been an honor to be his mentor and collaborator in this very important translational multidisciplinary project,” said study coauthor Sylvia Daunert, Pharm.D., M.S., Ph.D., and Lucille P. Markey Chair of Biochemistry and Molecular Biology. “Dr. Mohan is an innovator, full of ideas and enthusiasm, and there is no question that his contribution is key to the success of the project.”

The project would not have been possible without the guidance and mentoring from Drs. Daunert and Velazquez, according to Dr. Mohan.

“I am immensely grateful for their support,” he said.



Dr. Praseon Mohan (center) with interventional radiology residents (from left) Dhane Stomp, M.D.; Jessica Kumar, M.D.; Andre Richardson M.D.; and Mark Barton, M.D.

Possible Implications for Other Cancers

Dr. Mohan's work is truly groundbreaking and could save the lives of liver cancer patients, many of whom also have cirrhosis of the liver and end up dying from the cirrhosis rather than the cancer, according to Shivank Bhatia, M.D., professor and chair of the Department of Interventional Radiology.

"Dr. Mohan's work needs to be evaluated in not only liver but many of the solid organs like the kidney and pancreas to see if the stem cells can lead to regeneration of the normal parenchymal solid organs. It would be a game changer for so many," Dr. Bhatia said.

Abstract Presentations

Another Miller School highlight at this year's SIR was an abstract presentation on more than 800 of Dr. Bhatia's patients treated with prostate embolization for benign



enlargement of prostate and followed for more than six years. It is the largest series released to date in the United States. Dr. Bhatia's resident Andrew Richardson, M.D., presented on that series and another study looking at the effect of prostate artery embolization on reduction or cessation of preprocedural benign prostatic hyperplasia (BPH) medication.

Overall, this was one of the most successful SIR meetings for the Miller School, according to Dr. Bhatia.

"We had 11 abstracts and 14 invited lectures with 10 faculty members," said Dr. Bhatia, who was a faculty speaker on several meeting panels on topics delving into prostatic artery embolization, men's health, and more.

Among the oral sessions presented by Miller School representatives: Medical school student Thomas Pennix presented on studies looking at radiation exposure reduction in prostatic artery embolization and a combination approach for treating painful spine metastases. Jessica Kumar, M.D., presented on three prostate artery embolization studies, including one retrospective review comparing prostate artery embolization for benign prostatic hyperplasia on prostate gland size less than 80 g versus greater than 80 g. Mark Barton, M.D., presented a comparison of pre-procedure imaging versus direct stick venography for low-flow vascular arteriovenous malformations. David Archer, M.D., discussed the effect of preprocedural antiplatelet and anticoagulant use on antegrade access site complication rate during lower extremity peripheral arterial disease interventions. And Dhane Stomp, M.D., addressed percutaneous transluminal angioplasty and stenting as treatment for transplant renal artery stenosis.

Srinvas Tummala, M.D., was among the faculty speakers addressing tibial vessel recanalization.

SIR represents more than 8,000 interventional radiology providers. SIR's Annual Scientific Meeting is a recognized forum for peer-reviewed presentations of new research by interventional radiologists and allied scientists from around the world.

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