New selective therapy may improve repair of arteries after interventional Cardiovascular procedures

Preclinical study shows microRNA approach inhibited re-narrowing while healing vessels

Written by Anne DeLotto Baier
Edited by Hana Totary-Jain

Dr. Hana Totary-Jain has lead a team of researchers that developed a new therapy that may help reduce the life-threatening complications of interventional cardiovascular disease treatment. This innovative microRNA-based strategy combine anti-proliferative and pro-healing mechanisms for improved repair of coronary arteries," said the study's principal investigator Hana Totary-Jain, PhD, assistant professor of molecular pharmacology and physiology at the USF Health Morsani College of Medicine, who came to USF Health from Columbia University Medical Center last year to join the USF Health Heart Institute.

“The most significant finding of our study is that for the first time we were able to achieve in one fell swoop both the inhibition of cells responsible for re-narrowing of the vessel, and preserving the 'good' endothelial cells that protect against thrombosis,” said lead author Gaetano Santulli, MD, PhD, a cardiologist working at CUMC’s College of Physicians & Surgeons.

More studies are needed, including models of atherosclerosis and diabetes. Their preclinical study appears online in the Journal of Clinical Investigation.

To read more about Dr. Totary-Jain’s research go to: http://hscweb3.hsc.usf.edu/blog/2014/08/18/new-selective-therapy-may-improve-artery-repair-interventional-cardiovascular-procedures/

MPP Welcomes Its newest Faculty member

This fall we have a new faculty member, Dr. Ruisheng Liu who has joined MPP. Dr. Liu comes to us from the University of Mississippi Medical Center where he worked in the Department of Physiology & Biophysics, Department of Medicine/Division of Nephrology. Dr. Liu has is an M.D. with an M.S. in Cardiology, and a Ph.D. in Physiology and Cell Biology.

Dr. Liu is interested in the renal mechanisms in the development of hypertension, acute and chronic renal injury and diabetic nephropathy.

He is already on campus so please stop by his lab, MDC 3507 – 3513 and welcome him.
Dr. Nazian retired this past June, 2014. He will be missed by his students and colleagues alike.

The team from the Tampa Bay area has been carrying out a medical mission in Dilaire, Haiti for the past five years. This team has included physicians, pharmacists and nurses from USF, the V.A., Tampa General, Florida Hospital and other local hospital/clinics. During that time, over 8000 patients have been treated.

This year USF approved for the first time the participation of residents and students. The following USF faculty participated this year: Drs. Richard Roetzheim (lead physician), Shirley Codada, Javier Cuevas (non-physician faculty) The USF Med Peds residents that participated were Drs. Devi Yalamanchili and Michelle Tang. They had 4 USF com students (Thanhnga Doan, Vignesh Iyer Doraiswamy, Thanh-Phuong (Kaylee) Pham, and Jennifer Shields) and one USF COPH student (Anabel Fernandez). Dr. Michelle Tang carried out a research project examining the link between post-traumatic stress and hypertension in their patients. The medical students carried out three projects: 1) examining general public health issues, including water quality, 2) hypertension trends and medication adherence, and 3) responsiveness to skin infection therapies and secondary skin infections in patients with tinea capitis and scabies. Approximately 2300 patients were seen in their clinic over four days (March 31-April 3) by a team of 9 physicians, 6 nurses, 3 pharmacists and numerous support personnel. The team included two physicians from north Haiti that they employ during the entire clinic. This helps familiarize the team with local medical issues and helps us provide continuing education to these local doctors.

The reason for patient visits ranged from well-patient check-ups to minor surgeries. All patients first received a hygiene education class focusing on cholera prevention. The full-service pharmacy had over 200 different medications for all types of illnesses and patients with chronic illnesses received at least a 90 day supply of medications (some even a full year supply). The team carries out several diagnostic tests including blood glucose, malaria, HIV, urine dipstick, pregnancy, and ISTAT Chem8. They also had access to a sonogram. All patients received hygiene kits with toothbrushes, toothpaste, soap, etc. Malnourished individuals received peanut butter and other nutritional supplements. Wheelchairs and walkers were provided to patients needing them.

They have started a telemedicine program to provide sustainable healthcare to patients with severe hypertension. This program will be expanded for long-term treatment of patients with diabetes and epilepsy.

If you would like to participate, donate or find out more information about this program, please feel free to contact Dr. Javier Cuevas at jcuevas@health.usf.edu.

"Coming together is a beginning. Keeping together is progress. Working together is success."

-Henry Ford
MPP Faculty Corner
Published Works 2014
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**Alumni Achievements**

**Dr. Justin Trotter** graduated 2013 and is now working as a postdoctoral fellow in the laboratory of Stanford neuroscience researcher, Thomas Sudhof, MD, a Howard Hughes Medical Institute investigator who jointly won the 2013 Nobel Prize in Physiology or Medicine for insights into the traffic control system for living cells. To read the entire story go to: [http://hsweb3.hsc.usf.edu/blog/2013/10/17/usf-phd-graduate-in-neuroscience-to-join-laboratory-of-new-nobel-prize-winner/](http://hsweb3.hsc.usf.edu/blog/2013/10/17/usf-phd-graduate-in-neuroscience-to-join-laboratory-of-new-nobel-prize-winner/)

**Dr. Antoinette Bailey** graduated in 2013 Postdoctoral Biology Scholar, Freelance Editor at the California Institute of Technology, - Find Antoinette on LinkedIn at: [www.linkedin.com/pub/antoinette-bailey/4/a22/89a](http://www.linkedin.com/pub/antoinette-bailey/4/a22/89a)

**Dr. Tony Gebhard** graduated in 2013 and is now a Process Development Scientist focused on bioconjugation, assay development, and technical transfer of established methods working in the Process Development-Downstream Processing (PD-DSP) at Goodwin Biotechnology, Inc. In Fort Lauderdale, Florida. To find out more about what Dr. Trotter is doing, find him on LinkedIn at: [www.linkedin.com/pub/anthony-gebhard-ph-d/25/4b1/965](http://www.linkedin.com/pub/anthony-gebhard-ph-d/25/4b1/965)

**Dr. Hilary Seifert** win’s Best USF Dissertation!

Congratulations to Dr. Hillary Seifert, a USF graduate student from MPP who worked in Dr. Pennypacker’s lab. Her dissertation was selected as one of the recipients of USF Office of Graduate Studies 2014 Outstanding Thesis and Dissertation Award. The Graduate School views this as the highest award given to our students.

This year’s Colloquium showcased the research of over a hundred student’s across a multitude of disciplines and the selection process was extremely competitive with a range of truly exceptional theses and dissertations submitted by students. Hilary’s work stood out among other outstanding student’s thesis’, and the committee was very impressed with not only the theme of her work but also her ability to articulate its importance and with the extent of her professional development to date.

Hilary will be invited to return to USF to take part in the Scholars of Excellence event, which is being planned for some time in mid- to late October.

Her work is a reflection of the University of South Florida’s academic excellence!

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**THERE ARE BIG CHANGES IN TRAVEL AT USF**

Travel at USF has changed effective July 1, 2014. The most important change is the use of the Orbitz for Business requirement! This is required by Florida statute 112.061 not MPP so you must comply with these rules or you may not be reimbursed for travel!! Help us, help you!

Here are three commonly occurring inaccuracies that can prevent your travel from being reimbursed:

- Always request a TAR before you travel;
- Never book travel “outside of policy” (outside of Orbitz for Business) travel;
- Rental Car’s should be booked through ENTERPRISE for instate state travel only (contract #L422257, PIN: USF) or in state or out of state you can use AVIS (contract # AWD A113400). (sub-compact or compact class cars only);

For justifications and exceptions to these rules, please see Beth Woodcock in the MPP office before you book your travel.

To review the Travel Manual go to: [http://usfweb2.usf.edu/uco/travel/TravelRulesRequirements.asp](http://usfweb2.usf.edu/uco/travel/TravelRulesRequirements.asp)

To find out more go to: [http://usfweb2.usf.edu/uco/travel/](http://usfweb2.usf.edu/uco/travel/)