

SARVER HEART CENTER NEWSLETTER ISSUE 81 • SUMMER 2022



Elizabeth Juneman, MD (left), interim Chief of Cardiology, Mathew Hutchinson, MD (middle), interim Director of Cardiovascular Service Line and Carol Gregorio, PhD (right), interim Director of the Sarver Heart Center.

A NEW ERA FOR THE SARVER HEART CENTER

It's an exciting chapter at the Sarver Heart Center at the University of Arizona College of Medicine – Tucson. **Carol Gregorio, PhD, Elizabeth Juneman, MD**, and **Mathew Hutchinson, MD**, are leading the center and cardiologists into a new tenure focused on engagement of members and patients.

While the center is in a period of transition, the heart remains the same: life-saving innovations, research, and patient care. Membership is growing amongst scientists and cardiologists, promoting translational collaboration from bench to bedside.

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COMMUNITY PARTNERS Volunteers provide CPR training, increase awareness on heart health, and monitoring blood pressure. **p. 14** The UArizona Sarver Heart Center Newsletter is published biannually. News reporters are welcome to quote from newsletter articles and are asked to provide credit. Correspondence or inquiries should be addressed to: UArizona Sarver Heart Center Communications PO Box 245046 Tucson, AZ 85724-5046

Sarver Heart Center is part of the University of Arizona Health Sciences, the statewide leader in biomedical research and health professions training.

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When I joined the Sarver Heart Center in 2014, I was excited about the opportunities and challenges facing me as the new heart center director. Looking back eight years later, I want to express to all of you my immense gratitude for the opportunity to lead at this great institution. The move to Sarver Heart Center accelerated my career in many ways, providing me a vast array of new leadership skills, taking me in new scientific directions and providing me with opportunities to grow my national and international reputation in the field of cardiology and particularly in heart failure.

Those engaged in the Sarver Heart Center from both the faculty and the community are a smart and perceptive group, and the mentoring, training, and gentle nudging I received during my tenure have imbued me with an entirely new set of leadership and life skills. The role also allowed me to explore in great depth which aspects of leadership energize me and at which I excel, and those necessary to this role that I leave behind somewhat happily to take on new challenges.

As I depart, I wish to highlight those achievements of which I am most proud. Despite the significant turmoil in governance and leadership in healthcare at UA during my tenure, the Sarver Heart Center has stood firm as a beacon of excellence, and has expanded its reach in cardiovascular education, research and care. Under my leadership, the heart center has become more inclusive of a truly broad spectrum of cardiovascular clinicians and scientists across both the Phoenix and Tucson campuses. Three programs deserve particular mention.

These programs are all near and dear to me personally, and share a common theme of providing resources for career development to Sarver Heart Center members. I have relished developing infrastructure that permits our faculty and fellows to engage in deliberate and directed career development, exposing them to opportunities and roles they might not otherwise have considered, with a focus on academic cardiovascular science and practice. The details of each are below, but I hope you can see that the existence of these programs allows our membership access to career enrichment concentrated in the Sarver Heart Center.

Investigator Awards

Started by Dr. Gordon Ewy, the investigator awards program provides financial support for scientific projects conducted by heart center investigators. In consultation with Carol Gregorio, PhD, co-director of the Sarver Heart Center, I made a strategic decision to focus the funding very specifically on early career faculty, with the goal of providing critical funding for development of data to support career development and early career grant applications.

During my tenure, the investigator awards application process has become more rigorous, and has been successful in fostering funded grant applications based on preliminary data obtained using investigator awards dollars. The program has also developed an increasingly broad reach, funding scientists in cardiology, cellular and molecular medicine, biomedical engineering, psychology and physiology. Read about this year's investigator awards recipients on page 10.

Grand Rounds

I began the Sarver Heart Center Grand Rounds program when I arrived in Tucson because I believed the center would benefit from more exposure to state-of-the-art cardiovascular medicine and science through presentations by national and international leaders. Over the last eight years we have brought 110 expert speakers for a Grand Rounds day. These structured educational visits include a dinner for the speaker with a small group of faculty, a breakfast meeting with fellows where they commonly receive career advice and mentorship along with discussing cardiovascular science, and individual meetings with interested heart center members. Numerous collaborations and scientific efforts have resulted from these visits, both for me personally and for many of our faculty and fellows. Each visiting professor gives a formal scientific lecture, a 'Grand Rounds" covering a topic in cardiovascular health or disease.

I am extremely proud of this program. I believe it has been transformational for the scientific discourse and atmosphere within the heart center and it has raised the profile of the University of Arizona by bringing so many experts to campus and sharing with them the amazing work that occurs here every day.

Clinical Trials Research

While before I began in the role of Sarver Heart Center Director a few faculty participated in clinical trials research, infrastructure supporting these activities was fragmented and tended to be developed by each investigator individually, the proverbial "reinventing the wheel". I set out to create robust centralized infrastructure available to all Sarver Heart Center members. We designed this infrastructure to support integration of clinical trials research with a busy clinical career and to also support early translational activities for our basic science members, including easy access to appropriate patients.

In partnership with Catherine MacDonald, the first program director, I worked to create the infrastructure I wished had existed to support me earlier in my career, and to train our personnel to exacting standards. Our current center has a cadre of coordinators that we deploy across all cardiovascular trials. We now have 60 trials in various stages of development and I'm proud to say the breadth of the research has steadily increased over the eight years. Our mission is to provide necessary clinical research infrastructure to all heart center members involved in cardiovascular sciences at the University of Arizona and Banner University Medical Center.

Thanks to a generous donor, there is a newly renovated space at the Sarver Heart Center for our clinical research program (more on page 6). All of these programs have been supported by philanthropy to the Sarver Heart Center, and it is my fervent hope that generous donors will continue the critical giving that permits us to raise funds for important heart center activities such as those above. I cannot stress enough the importance of such philanthropy to our faculty, our trainees and the scientific success of the Sarver Heart Center.

Future of the Sarver Heart Center

Carol Gregorio, PhD, co-director of the Sarver Heart Center, will serve as the interim director until the next Sarver Heart Center director is named. I have no doubt that Dr. Gregorio will make the transition period seamless.

My current national and international presence and leadership in cardiology are largely due to the trust placed in me by Robert Sarver and the search committee when they named me the second director of the Sarver Heart Center. The opportunity has been vast and extremely special, allowing me to achieve many professional milestones I had set for myself. I leave with a great sense of satisfaction and pride to take the next step in my career and fulfill additional goals and dreams, not because I have been unhappy at the University of Arizona and Sarver Heart Center but rather because it is time for me to chase new dreams and give another ambitious, talented investigator the opportunity to lead this great center. My next step will be in clinical research leadership at Washington University in St. Louis (Wash U), where I am delighted to continue my focus on career development and leadership of those in early career stages.

I want to express my tremendous gratitude to all of you for shaping this phase of my career. I am extremely thankful for every day spent at the University of Arizona and the Sarver Heart Center and wish nothing more than continued success for this great institution.

Naucyk Sweet

Nancy K. Sweitzer, MD, PhD Director, Unversity of Arizona Sarver Heart Center

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NEW ENDOWED CHAIR

Longtime University of Arizona supporters and volunteers Humberto and Czarina Lopez have given the University of Arizona \$3.5 million to establish two endowed chairs, one at Sarver Heart Center.

The Czarina M. and Humberto S. Lopez Endowed Chair for Excellence in Cardiovascular Research has been established at Sarver Heart Center with \$2 million from the overall gift. Carol Gregorio, PhD, co-director of Sarver Heart Center and chair of the Department of Cellular and Molecular Medicine at the College of Medicine - Tucson, is the inaugural chair holder. She also is the director of the Molecular Cardiovascular Research Program at Sarver Heart Center.

"Bert and Czarina are inspiring members of the Wildcat family," said University of Arizona President Robert C. Robbins. MD. "This exceptional investment in health and education adds to their already generous legacy of time, expertise and philanthropy. I am so grateful for their transformative support and their far-reaching impact across campus."

Humberto Lopez is a 1969 graduate of the Eller College and chair of HSL Properties, Arizona's largest owner-operated property management company, which he co-founded. The Lopezes are wellknown at the university and in the Tucson community for their philanthropy and for their volunteer service on many organizations' governing boards.

"We've been blessed, and we're getting to an age where we realize we can't take it with us. We started out with nothing and we will leave with nothing, so in the meantime we'd like to be able to help others," Humberto Lopez said.

"It grows on you. The more you give, the more you notice it's not enough." Czarina Lopez said.

Lifelong Ties

Humberto Lopez recalls a high school counselor saying he wasn't college material because he was a C student. What the counselor didn't know was that Lopez was working long hours to help support his family and didn't have much time for homework. The counselor's comment gave Lopez a greater sense of determination to pursue higher education. He enrolled at Cochise College in Douglas, Arizona, before transferring to the University of Arizona, where he majored in accounting.

guide the direction of the "Attending the University of Arizona was the best center, and by establishdecision I ever made. It ing this endowed chair, was a steppingstone to they have in perpetuity expanded our ability to get me where I am today," recruit and retain worldhe said. class faculty. Their gen-The couple have reerous philanthropy will mained connected to reinforce the renowned the university ever since research capabilities of Lopez's graduation. They the Gregorio Lab immedibuilt strong relationships ately and forever increase across campus as they the stature of Sarver Heart served on and led adviso-Center at the University of ry and governing boards Arizona."

for the Eller College, the The couple's affiliation with the College of Medicine - Tucson through the Sarver Heart Center is

Steele Children's Research Center, the UArizona Foundation and Sarver Heart Center. made more personal by "Bert and Czarina Lopez Czarina Lopez's experihave been effective ence as a heart and kidfriends of Sarver Heart ney transplant recipient. Center for decades. Their While she had the transengagement and commuplant at another medical nity connections literally center, she has been a helped build the center," patient of Sarver Heart previous Sarver Heart Center, with Dr. Sweitzer Center Director Nancy and Professor Emeritus Dr. Gordon A. Ewv. former Sweitzer. MD. PhD. said. "Their partnership and director of the center, proadvice continue to help vidina care.



Carol Gregorio, PhD was selected inaugural Czarina M. and Humberto S. Lopez Endowed Chair holder.

"We trust Carol will put the money to good use and help people with problems related to heart disease, which has affected us. She's capable and highly thought of. This addition will help advance her research," Humberto Lopez said. "We expect her to do great things."

"This appointment will allow me to expand my research program to identify how mutations in essential heart muscle proteins lead to devastating diseases of heart muscle. Obtaining this information is key to the design of new therapeutics. Importantly, this gift allows us to pursue exciting new research directions that involve riskier 'fishing expedition' experiments, often resulting in high-impact data necessary to submit competitive applications for scarce federal research funds," said Dr. Gregorio.

ROBERTO & JOSEPHINA RUIZ SUITE CARDIOVASCULAR MEDICINE CLINICAL RESEARCH PROGRAM



and Josefina Ruiz Suite for the Cardiovascular Medicine Research Program with members of the team.

Clinical research. which helps us determine the effectiveness and safety of new medications and treatments for humans, has been part of Sarver Heart Center's mission throughout its 35-year history. Under the previous leadership of Dr. Nancy Sweitzer. donor support has helped the center develop a robust research core that serves clinical faculty dedicated to

cardiovascular advancing medicine. Thanks to a generous gift from Roberto and Josefina Ruiz in late 2020, the clinical research team now has an updated, highly efficient space that serves as a hub for these studies - sometimes more than 20 at a time - with investigators who specialize in cardiology, cardiothoracic surgery and pediatric cardiology.

RESEARCH EXPLORES NEW POSSIBILITIES THROUGH PHILANTHROPY

The Sarver Heart Center is at the forefront of research to prevent and cure cardiovascular disease, as it remains the number one killer of Americans - both men and women. More than 160 physicians and scientists with national and international reputations are members of the Heart Center, participating in transdisciplinary collaboration. But the advancements in bench-to-bedside care is not possible without philanthropy.

Other than participating in one of the numerous clinical trials taking place, philanthropy can make a big difference in the future of cardiovascular care, be it outright, endowed, named or planned.

Outright

Donors have the option of specifying where they would like to see their money used. including supporting the fellowship program. Jeffrey Tran, MD, Sarver Heart Center Cardiovascular disease fellow is mentored by Nirav Merchant, Director of the Data Science Institute, during the additional year of fellowship he opted-in for dedicated to research training. Tran's research will focus n development a data management system to im-

prove patient data extraction for clinical research. He plans to combine his research and clinical careers and has a particular interest in structural heart disease.

Named/Endowed

Through generous gifts, more than a dozen endowment chairs are established at the Sarver Heart Center, usually influenced by the family's personal experiences. Endowments can be very specifically focused on a particular disease state or condition, or they can be generally designated to focus on the most critical research needs.

Gifts can also lead to the creation of an award, which can also financially assist researchers in their investigations and experimentations. Those original ideas explored



at the Heart Center can lead to a change in prevention. treatment, and education of heart disease around the world. The Gieszl family established the William J. "Billy" Gieszl Endowment for Heart Research in 1998, to support ing prevention, diagnosis and treatment of congenital heart disease. Jim's son, Billy, was born in 1977 with a congenital condition that decreases flow of blood through the heart. Billy required several surgeries, a pacemaker and a heart transplant before he passed away in 1993 at age 16.

Planned

Planned gifts give donors the opportunity to support the Sarver Heart Center without a large up-front gift. Mort and Lorain **Zimmerman** from Green Valley, became involved in the Sarver Heart Center as a patient after Mort's bypass surgery at age research focused on improv- 57. After losing family members to heart disease and Mort's own experience, the Zimmermans transformed their losses and made a significant contribution to cardiac research and heart health education. For more information on how to support the work of the Sarver Heart Center, please contact LaToya Singletary, Senior Director of Development at 520-626-4518.



Carol C. Gregorio, **PhD**, co-director of the Sarver Heart Center and department head of Cellular and Molecular Medicine, named fellow of the American Association for the Advancement of Science.

Gregorio is being honored for her internationally recognized contributions toward understanding heart and skeletal muscle structure, function and disease.

"It's an honor to be nationally recognized," Gregorio said.

The 2021 class of **AAAS** Fellows includes 564 scientists, engineers and innovators spanning 24 scientific disciplines who are being recognized for their scientifically and socially distinguished achievements.





COLLEGES OF MEDICINE

Two internal medicine physicians and two medical students at the UArizona were selected to receive the Charles W. Hall Jr. and Virginia C. Hall Memorial Endowment Award for Outstanding House Officer in the Cardiac Care Unit. Originally established at the Sarver Heart Center to inspire and reward the most outstanding trainees in medicine based on their performance and excellence in the Cardiac Care Unit, the Hall family recently expanded the focus to also support the College of Medicine - Phoenix.









CHARLOTTE TODD HONORED WITH 2021 BATEMAN SUPERB SERVICE AWARD

Sarver Heart Center's business manager, who was honored for her thoughtfulness, professionalism and hard work as the 2021 recipient of the Brian Bateman Superb Service Award.

"Charlotte makes every aspect of the Sarver Heart Center run smoothly and error-free. She works very independently as the business manager of the center, ensuring we focus on our mission continuously and steward all

HALL AWARDS HELP MEDICAL STUDENTS IN THE

Christy Lougheed, MD, is an internal medicine resident currently working towards her dream of becoming a cardiologist, while mothering three girls. It's those skills that assisted her in being able to balance multiple responsibilities, said Deepak Acharya, MD, who nominated Lougheed for the Award. "I am fortunate to have such exceptional mentors in Cardiology who have inspired and supported me in my endeavours, and grateful for the Hall family as well," Lougheed said.

Vanessa Cristina Piscova, DO, initially developed an interest in medicine while watching her father practice family medicine in Yuma, Ariz. She is now an internal medicine resident at the College of Medicine – Tucson. "I feel extremely fortunate to learn from our cardiology department, which is filled with such knowledgeable, patient and truly caring physicians who always strive to perform their best and improve," said Piscoya.

Sabrina Dahak, Class of 2023, expressed her gratitude to the Hall family for the recognition and support: "I believe we should always pay it forward. I am very interested in bridging the gap in healthcare access and volunteer at the free community clinic." Sabrina is the first in her family to attend a university and medical school. "I truly believe that I would not be where I am without the support of the Hall family and those who have believed in me all these years. This path is not easy, but supportive people make it all worthwhile," said Sabrina.

As a non-resident student from Southern California, Rachel L. Schuurs, Class of 2025, is strongly considering cardiology. As a nine-year-old girl, she was in awe of the care given to her cousin, an athletic 14-year-old who was a heart transplant recipient after being diagnosed with dilated cardiomyopathy. "I have recently accepted a position on a research project at Banner University Medical Center that seeks to standardize the cardiac evaluation for liver and kidney transplant candidates. I am very excited."

Congratulations to Charlotte Todd, our resources as wisely as possible," said Nancy K. Sweitzer, MD, PhD, previous director of Sarver Heart Center and professor of medicine, UArizona College of Medicine - Tucson.

> Brian Bateman served as director of development for the Sarver Heart Center for nearly a decade. A key ingredient to his success was the "whatever it takes" attitude that he instilled in those with whom he worked.

DR. RUIZ APPOINTED TO U.S. **PREVENTATIVE SERVICES TASK FORCE**



"Dr. Ruiz is a valued and highly collaborative member of Sarver Heart Center. His sceintific career has been devoted to reducing cardiac and metabolic disease risk."

Nancy K. Sweitzer, MD. PhD, director of the Sarver Heart Center.

John M. Ruiz. PhD. Universitv of Arizona associate professor of clinical psychology in the Department of Psychology and Sarver Heart Center, has been appointed to the U.S. Preventive Services Task Force (Task Force).

"All of his colleagues at the Sarver Heart Center congratulate Dr. Ruiz on this prestigious appointment," said Nancy K. Sweitzer, MD, PhD, previous director of the UArizona Sarver Heart Center. "Dr. Ruiz is a valued and highly collaborative member of Sarver Heart Center. His scientific career has been devoted to reducing cardiac and metabolic disease risk and to addressing health disparities in Hispanic/Latino communities. Dr. Ruiz's research is innovative, impactful and culturally sensitive. He is really making a difference in Hispanic/Latino communities, now more than 15% of the US population, where risk factors for heart disease are very prevalent. We are certain Dr. Ruiz will share his unique and important perspective to the Task Force panel, which has significant influence over national policy on cardiac disease pre-

vention."

The Task Force is an independent, volunteer panel of national experts in prevention and evidence-based medicine. Members come from primary care and prevention-related fields, including internal medicine, family medicine, pediatrics, behavioral health, obstetrics and gynecology, and nursing. Members are appointed to serve 4-year terms.

"Dr. Ruiz is one of the world's leading experts on the social and psychological factors that impact physical health and wellness. His appointment to this important national Task Force is a unique opportunity to influence policies that will have a meaningful impact on access to healthcare and disease prevention for all individuals. Congratulations on this very prestigious appointment," said Lee Ryan, PhD, professor and dead, Psychology Department, and associate director, Evelyn F. McKnight Brain Institute.

"I am pleased to welcome Dr. Ruiz to the Task Force," said Task Force chair Karina W. Davidson, PhD, MASc. "With his knowledge of cardiovas-

cular behavioral medicine and extensive research into racial disparities in preventable diseases, Dr. Ruiz will be a valuable addition to the Task Force, especially as we expand our focus on addressing health inequities."

Dr. Ruiz is director of health psychology/behavioral medicine training, and diversity, equity, and inclusivity in the Department of Psychology at the University of Arizona. Dr. Ruiz examines relationships individual-level between psychosocial factors, social behaviors, and a number of important and prevalent health conditions, including atherosclerotic cardiovascular disease and metabolic diseases such as obesity and diabetes and cancer. He was a 2018-2019 recipient of a Sarver Heart Center Investigator Award for his research titled, "Hispanic Ethnicity and Southern Border Proximity as a Moderators of Cardiovascular Risk and Resilience: Ethnicity, Stress, and The Relational Environment Study (ESTRES)." Dr. Ruiz is the incoming editor-in-chief of the American Psychological Association journal, Health Psychology.

AHA HONORS DR. JULIA INDIK WITH THE LAENNEC MASTER CLINICIAN **AWARD**

The American Heart Association honored Julia Indik, MD, PhD, with the Laennec Master Clinician Award during the virtual 2021 Scientific Sessions in November. The award recognizes a senior clinician with a lifetime of outstanding contributions to teaching and patient care in cardiovascular disease.

Dr. Indik, professor of medicine in the Division of Cardi- cardiology has changed so ology, University of Arizona College of Medicine - Tuc- technology is incorporated son, is director of the Univer- into patient care and diagsity of Arizona Sarver Heart nostics," she said. Cardiovascular Disease Fellowship Program. She also is the Flinn Foundation and nician Award is one of the American Heart Association Endowed Chair in Electrophysiology and Heart Dis- the most distinguished and ease Research.

past honorees, I'm overwhelmed," said Dr. Indik. who specializes in cardiac electrophysiology, a cardiology subspecialty that focuses on heart rhythm dis- Heart Center. orders. "During the past 20

vears, the idea of 'bedside' much, particularly the way

"The Laennec Master Clihighest honors in cardiology and is awarded only to brilliant teachers of cardiovascular medicine. Dr. Indik "As I look over the list of is highly deserving of such recognition for her skills as a physician educator of trainees and peers," said Nancy Sweitzer, MD, PhD, previous director the Sarver



DR. GOLDMAN NAMED TO THE NATIONAL ACADEMY OF INVENTORS



Steven Goldman. MD. professor of cardiology and Sarver Heart Center Pfeiffer C. Leonard Endowed Chair, was among four UArizona faculty researchers to be inducted into the National Academy of Inventors' 2022 class of

Senior Members. His team created a bioengineered patch to implant on damaged hearts. In vivo studies have shown that the patch creates new heart tissue, improves heart function, and increases blood flow. "It is an honor for me to be

recognized," Goldman said, "but I have to give credit to the University of Arizona and the Tucson VA Medical Center for enabling me to get the work done that is the basis for being recognized as an NAI Senior Member."

NEW MEMBERS

In the last year, the UArizona Sarver Heart Center welcomed six new members.



Michel Corban, MD



Robert Hooker, MD. FACS



Craig Hoover, MD



Saad Kubba, MD



Kelly Palmer, PhD, MBS. CCRP



Jamit Rohant, MD. FACC

lichel Corban, MD, an interventional cardiologist and clinical researcher, is a clinical assistant professor of medicine who focuses on treating patients with coronary artery disease that require percutaneous coronary interventions and invasive diagnosis. He specializes in coroary microvascular dysfunction, endothelial dysfunction, and transcatheter interventions for patients with valvular eart disease, such as severe aortic valve stenosis

Robert L. Hooker, MD, is chief of the Division of Cardiothoracic Surgery, the Sarver Heart Center Jack G. Copeland Endowed Chair of Cardiothoracic Surgery and the Michael Drummond Distinguished Professor of Cardiovascular and Thoracic Surgery. He has nearly 25 years of clinical experience specializing in cardiac, thoracic and transplant surgery.

Craig Hoover, MD, an interventional cardiologist, was appointed clinical assistant professor of medicine in 1997 after graduating in 1996 from the Cardiovascular Disease Fellowship Program at the UArizona College of Medicine – Tucson. He was a cardiologist in community practice at the Southern Arizona VA Medical Center in Tucson. Dr. Hoover's research focus is on clinical trials of novel interventional devices and therapies.

Saad Kubba, MD, an assistant professor, provides general cardiology care and treats patients with complex neart conditions as part of the advanced heart disease and transplant cardiology team and the pulmonary vascular and pulmonary hypertension program. Dr. Kubba recently completed the advanced heart failure and ransplant cardiology fellowship at the Mayo Clinic in Rochester.

Kelly Palmer, PhD, MHS, is an Assistant Professor in he Department of Health Promotion Sciences in the JArizona College of Public Health. She has extensive experience with lifestyle modification interventions for cardiometabolic disease risk reduction. Broadly, her research seeks to understand sociocultural influences of nealth behavior and to design and implement culturally nformed interventions to achieve health equity for marginalized and underserved populations.

Dr. Namit Rohant, clinical assistant professor at University of Arizona College Medicine - Tucson and Sarver Heart Center, is an Advanced Heart Failure and Transplant Cardiologist at Banner - University Medical Center Tucson. He returns to Tucson, where he previously completed internal medicine residency at the COM-T. He is board certified in cardiovascular disease, adult echocardiography, geriatric medicine and internal medicine

INVESTIGATOR AWARDS

For the 2021-2022 grant cycle, the University of Arizona Sarver Heart Center awarded six Investigator Awards. These research projects focus on the testing, treatment, and education of the heart.

Investigator Awards have been a staple of the Sarver Heart Center since 1995. The program provides a stepping stone between bright ideas and promising proof that may help researchers compete for national grants. "We are appreciative of all the donors who continue the success this program. This funding is most often awarded to early career investigators and trainees, for innovative pilot projects. We see the return on the investment as the preliminary data collected via the pilot projects frequently lead to large external grant awards," said Carol Gregorio, PhD, interim director of the UArizona Sarver Heart Center. The Investigator Awards provide variable amounts of funding per project.



Tushar Acharya, MD, MPH, Assistant Professor, Division of Cardiology with Franz Rischard, DO and Nancy K. Sweitzer, MD, PhD Donors: Ella Waltz & Thomas Berresford Heart Research and Phil and Bobby

Hanft Young Investigator Award Dr. Acharya's study is seeking a more efficient, streamlined method for evaluating

the performance of the right side of the heart and lung function in patients with pulmonary hypertension, a serious condition that affects these organs. He will collaborate with Dr. Rischard, a pulmonary hypertension specialist, to evaluate the feasibility of simultaneously performing right heart catheterization and CMR with exercise testing to obtain comprehensive simultaneous RV PV-loops, with and without exercise. The Investigator Award will allow the research team to enroll 10 pulmonary hypertension patients scheduled to undergo a clinically indicated invasive cardiopulmonary exercise test to test this methodology.

FORMER INVESTIGATOR, MENTOR NOW FUNDED

These clinical research stories demostrate the tremendous potential of the Sarver Heart Center Investigator Awards Program. Innovated ideas fueled by award developed data to then be funded by the National Institute of Health in the next stages of their clinical trials.



Katri Typpo MD, MPH, Assistant Professor of Pediatrics, received the William "Billy" Gieszl Award in 2015 to pursue a study called, "Gut Dysbiosis is a Target to Improve Surgical Outcomes for Infants Born with Congenital Heart Disease." Dr. Typpo's goal was to identify methods to target a disordered intestinal microbiome and improve post-surgical care of infants with congenital heart disease.

Dr. Typpo now studies how enternal nutrition may work to alter the gut microbiome and improve lung injury and inflammation in pediatric acute respiratory distress syndrome (ARDS). She recently transitioned from a NIH K23 Award to an R01 grant program.





E. Fiona Bailey, PhD, professor of physiology at the UArizona College of Medicine – Tucson, was awarded a fiveyear, \$3.4 million grant from the National Institute on Aging, a division of the National Institutes of Health, to build on her group's previous research that showed a respiratory workout entailing 30 breaths a day can lower blood pressure. In 2014, Dr. Bailey mentored Jennifer Vranish, then a graduate student, who was awarded \$25,000 for her project, "Respiratory Training and Cardiovascular Health in Sleep Apneics." "Sarver Heart Center's support was key in getting Jennifer's idea off the ground and the outcome provided us preliminary data for an American Heart Association Grant in Aid which in turn provided us the preliminary data for our current RO1 from NIH/National Institute

of Aging," said Dr. Bailey.











In prior research, Dr. Blackwood has shown that activation of stress-responsive signaling pathways via a novel small molecule which he and his team discovered provides a promising approach for reducing heart-attack-associated injury and heartmuscle damage. The Investigator Award provides him the opportunity to study toxicity and effectiveness of the identified pharmacological compound in a clinically relevant large animal model.

T. and Janet K. Billington

Heart muscle injury, often caused by poorly controlled high blood pressure or heart attacks, leads to activation of cardiac fibroblasts. Prolonged activation of these cells leads to cardiac fibrosis, resulting in heart muscle stiffening that impedes the heart's ability to pump blood efficiently. Dr. Garvin is studying ways to leverage mitochondrialmediated cell death as a force for good by curtailing the activated cardiac fibroblasts that cause fibrosis.

Murrav

Cardiovascular disease is one of the leading causes of death worldwide. Women have a higher mortality and worst prognosis after acute cardiovascular events. These discrepancies are likely due to the loss of the sex hormone estrogen during menopause, a condition almost all women will experience. The goal of this project is to find the connection between loss of estrogen during menopause and changes in gut microbes and gut permeability that contribute to worsening cardiovascular disease risk and outcomes after menopause in women.

PharmD and Nancy Sweitzer, MD, PhD

Focusing new research on an old drug – warfarin. Steiner will apply two stateof-the-art research methods to warfarin dose prediction: machine learning and metagenomics. Machine learning uses artificial intelligence algorithms to identify patterns in and learn from data. Metagenomics will allow Steiner to read the genome of thousands of organisms from the gut simultaneously, thereby surveying the ability of the microbiome to produce vitamin K.

Jacob Ref, medical student, Class of 2025, with Steve Goldman, MD Donors: Margarito Chavez Undergraduate / Medical School Student Awards

While working with scientists in the Goldman Lab, Jacob Ref used his growing knowledge of clinical medicine to observe that the 2-dimensional black and white radiology images were perhaps not the best tool to provide a true scope of the damaged area to guide research procedures. To bridge the translational gap from science to the patient, Jacob has been working alongside Brad Baxley, a local architect and creative director at Part to Whole, along with experts in cardiovascular imaging, to execute a methodology that creates a 3D model of the heart that is anatomically correct based on clinical and research images.

Erik Blackwood, PhD, postdoctoral fellow, University of Arizona College of Medicine -Phoenix with Christopher Glembotski, PhD and Steven Goldman, MD **Donors: Irving J. Levinson Memorial Research Award and J.G. Murray**

Alexandra (Bobbie) Garvin, PhD, postdoctoral fellow, physiology, basical medical sciences, College of Medicine - Phoenix with Taven Hale, PhD Donors: Dr. Alex Frazer and Frank H. Frazer, Robert C. and Olive M. Johnson, John

Vito Marino, PhD student, Physiological Sciences with John Konhilas, PhD **Donors: Ralph and Shirley Morgan Cardiovascular Research Award and J.G.**

Heidi Steiner, doctoral candidate, Pharmacy Practice and Science with Jason Karnes,

Donors: The Finley and Florence Brown Endowed Research Award



Continued from page 1

Nancy Sweitzer, MD, left the Sarver Heart Center after serving as the Director and Chief of Cardiology for nearly seven years. You can read more of her farewell message on page 2.

During the recruitment process for a new leader of the heart center and division of cardiology, several prominent. longtime members and supporters are stepping up to continue the decades-long success.

of the Sarver Heart Center and a member since 1996, is serving as interim Director. Under her direcachievement in the beloved grand rounds, investigator awards, and ly CPR.

Her goal is to facilitate a seamless transition between hires.

"A search is underway to find a and Mathew Hutchinson, MD, as new Director of the Sarver Heart Center and Chief of Cardiology," said Dr. Gregorio. "I am a member of the search committee to ensure the Center's commitment to re-

search and patient care remains a focus."

Carol Gregorio, PhD, director of is a natural leader and a highly the Molecular Cardiovascular Research Program at the UA College of Medicine, is the Czarina M. research focused on mechanical and Humberto S. Lopez Endowed Chair for Excellence in Cardiovascular Research. She also heads the Department of Cellular and Molecular Medicine and is the Assistant Vice-Provost for Global Health Sciences.

As a basic scientist, Gregorio has ulty. a special research interest in the Carol Gregorio, PhD, co-director contractile proteins of heart muscle. Not only has she made major contributions to the understanding of heart muscle abnormalities, but na College of Medicine – Tucson tion, the heart center continues its she also has been an integral part in 2007, is an associate professor of the UA College of Medicine's goal to strengthen its translational trainings of chest compression-on- research and the UA Sarver Heart the medical director of Advanced Center's effort to recruit other outstanding basic scientists.

> Elizabeth Juneman, MD is serving as the interim chief of cardiology interim director of the cardiovas- failing heart as well as women's cular service line.

interim period," said Mindy Fain, MD, interim chair of the Department of Medicine. "Dr. Juneman accomplished cardiologist who brings expertise in translational and cellular remodeling in heart failure."

"We are in a time of change, and we must come together to better the Division as we adapt and become stronger," said Juneman in a statement to the cardiology fac-

Juneman, a member of the Sarver Heart Center since 2004 and faculty at the University of Arizoof medicine in the Division of Cardiology. She currently serves and Heart Failure and Transplantation. Dr. Juneman's translational research interest is focused on mechanical and cellular remodeling in heart failure. Her clinical interest is cardiac physiology in the cardiovascular disease.

"The Division of Cardiology will Mathew Hutchinson, MD, is a probe in excellent hands during this fessor of medicine and the direc-



tor of the clinical cardiac electrophysiology fellowship program at the College of Medicine -Tucson and cardiac electrophysiology program at Banner – University Medical Center Tucson. He specializes in the treatment of complex heart rhythm disorders, such as atrial fibrillation and ventricular tachvcardia. His clinical research activities are centered on developing new techniques to improve procedural outcomes in patients with atrial and ventricular arrhythmias. He is in- division and in the externationally renowned cellent care we provide for his work in the use of to Tucson and Southern imaging to characterize Arizona communities." arrhythmia substrate in patients with structural Juneman and Hutchinheart disease.

based on transparency, diology Kwan Lee, MD, communication and equi- who announced he is tability," said Dr. Juneman. leaving the University of "We believe in fostering a Arizona, Banner Univerculture of respect, service sity Medical Center, and to the community and ac- the Sarver Heart Center ademic advancement. to go to the Mayo Clinic We truly believe in our in Scottsdale.

"Our leadership style is based on transparency, communication and equitability. We believe in fostering a culture of respect, service to the community and academic advancement." Elizabeth Juneman, MD, interim Chief of Cardiology.

son are dividing the responsibilities of previ-"Our leadership style is ous interim chief of car-

SAMUEL AND EDITH MARCUS LECTURE RETURNS AFTER HIATIS

Family, friends and colleagues gathered to celebrate the esteemed legacy of Frank I. Marcus, MD, Professor Emeritus, for the 23rd Samuel and Edith Marcus anniversary lecture, following the postponement in 2020 and 2021 due to the coronavirus pandemic.

A founding faculty member Former colleges Joseph for the College of Medicine Alpert, MD, Mark Feidman, - Tucson at the University of MD, and researcher Michael Arizona, Dr. Marcus retired Bosnos presented at the in 2020 after 51 years of lecture held at the Lodge on dedicated service, which the Desert. included a stint as the Chief of the Section of Cardiology The Samuel and Edith Marcus from 1971 to 1981. During his visiting professor in cardiology tenure, he became a world- professorship was established renowned authority in ARVC, as a loving memorial in 1997 a genetic form of heart by Dr. Marcus and his siblings, disease that causes the heart's Julius and Shirley, to enhance muscular wall to break down, education and research for increase increasing the risk students, residents, fellows of arrhythmia and possibly and faculty in cardiology. sudden cardiac death.



SARVER HEART CENTER MINOITY OUTREACH PROGRAM **CHAIR HONORED WITH FOUNDERS AWARD**

Wanda F Moore, chair of University of Arizona Sarver Heart Center's Minority Outreach Program, is the 2021 recipient of Greater Tucson Leadership's Founders Award.



Wanda F Moore (left) is surprised by Katie Maass, former Sarver Heart Center Director of Communications and Public Education, and Jennifer Turner with the news of her Greater Tucson Leadership's Founders Award. Management 4

Health Education Committee in 2009, Wanda quickly began to encourage others to join and to solicit donations for the heart center. Her involvement has included expanding community education and outreach activities to include underserved minority communities. She also serves on the Sarver Heart Center Board.

"African Americans bear a disproportionate burden of heart disease in the United States. Wanda has been personally impacted by heart disease, as have many members of her family. She has learned the factors impacting heart disease risk in her in reducing risk in herself, those she loves, and everyone in her commuus and I cannot express how grate- more than 600,000 volunteer hours

Invited to join the Women's Heart ful I am to have an ally like Wanda," said Nancy K. Sweitzer, MD, PhD, previous director of the Sarver Heart Center and professor of medicine at son.

ing the COVID-19 pandemic, Wanda quickly recognized the deadly intersection presented by cardiovascular disease and COVID infection, overcame her doubts about the vaccine. and started educating her community about the importance of vaccination. She wrote and received a number of grants supporting efforts to educate at-risk populations about community and is highly engaged COVID-19 prevention as well as heart higher education. disease and stroke risks and symptoms. Under her leadership, the Minity. We have much work ahead of nority Outreach Program contributed

since 2009, focusing on heart health education, particularly for women of color and their families," wrote Katie Maass, Sarver Heart Center's former communi-UArizona College of Medicine – Tuc- cations director, in nominating Wanda for the Founders Award.

"While most people retreated dur- The Founders Award, established in 1985, is a lifetime achievement recognition honoring an individual who has demonstrated significant long-term community involvement and accomplishments and who has helped to shape the community in a positive manner with merit and dedication. The Greater Tucson Leadership selection committee includes community leaders representing business, government, non-profit, and

SARVER HEART CENTER MINORITY OUTREACH PROGRAM RECEIVES WALMART GRANT

On the first federally recognized Heart Failure Program. Juneteenth National Holiday, the University of Arizona Sarver Heart Dr. Juneman has collaborated with Center faculty and staff gathered CCHHE to present heart health inforwith the Minority Outreach Program/Community Coalition for Heart Health Education (CCHHE) to receive \$20.000 from Walmart on its National Day of Giving.

thank you to Walmart for recognizing and supporting the far-reaching work of the Community Coalition," da F Moore, chair of CCHHE. said Elizabeth Juneman. MD. as-

mation focused on women.

Since 2009, the Sarver Heart Center minority outreach members have contributed 600.000 volunteer hours, primarily in Tucson, South-"On behalf of Sarver Heart Center, ern Arizona and the Phoenix area. "These grants will further our volunteers' outreach program," said Wan-

sociate professor of medicine and "You are doing the work to make medical director of the Advanced your community healthier. We are



UArizona College of Medicine - Tucson Students

organization or community, email heart@arizona.edu.

proud Walmart can support your work," said Margues Hunter, senior director II, Regional Health & Wellness Operations, Walmart, who met the CCHHE.

Funds from the grant went back into the Southern Arizona community, by covering some of the cost of the CCHHE's lunch and learn held in April 2022 on hypertension. More than one hundred community members attended to learn the signs of hypertension, important research being conducted to reduce high blood pressure, and the importance of monitoring your blood pressure at home.

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tion at the 2022 Gootter Grand Slam.



THE UNIVERSITY OF ARIZONA The University of Arizona **Health Sciences** Sarver Heart Center PO Box 245046 Tucson, AZ 85724-5046

CONGRATULATIONS TO OUR 2022 GRADUATING FELLOWS

Cardiovascular Disease



Mahesh Balakrishnan, MBBS



Adriana Martin, MD, PhD



Ibrahim Barry, MD, MPH



Nanda Pullela, MBBS



Emily Cendrowski, MD



Ignacio Zepeda, MD



Juliya Cress, MD, PharmD



Michael Kendall, MD, MSc

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