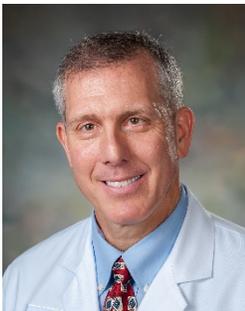# PTEF 2020 Pitch Day Winners

Alexander Papanastassiou

Alex Papanastassiou is an Associate Professor in Neurosurgery, specializing in epilepsy and
functional neurosurgery. After attending Stanford, he completed medical school at UCSF, residency at the Brigham and Women's Hospital/Harvard, and epilepsy surgery fellowship at Yale. He currently leads the UTHSCSA efforts in epilepsy surgery and functional neurosurgery. His research is focused on improving care in surgery for epilepsy, movement disorders, and chronic subdural hematoma.

"Rook Procedure Scheduler"

Procedure scheduling is often done using calendar software. Our software streamlines scheduling, including surgeon availability, location of procedure, and clinical and administrative tasks such as pre-authorization.

Robert De Lorenzo

Dr. Robert A. De Lorenzo, MD, MSCI, MSM, FACEP, US Army retired, is a professor of emergency medicine at UT Health San Antonio. He completed his emergency medicine residency and fellowship in EMS at Wright State University, and his master's in research (Clinical Investigations) at UT Health. Prior to entering medicine, he completed a degree in bioengineering at Syracuse University and worked as a clinical engineer. His military career spans 32 years and includes two combat tours in Iraq.

"Portable Suction Device for Airway Management in Emergencies"

Small, lightweight, powerful and disposable medical suction device for combat casualty care and emergency medical use.

John Calhoon

Dr. Calhoon obtained his medical degree at Baylor College of Medicine in Houston, Texas in 1981. He is Board Certified in Thoracic Surgery and Congenital Cardiac Surgery. He joined the group in 1989 and is Professor and Founding Chair of the Department of Cardiothoracic Surgery. His current interests include complex congenital heart surgery; complex adult cardiac surgery and improving education and patient care. He has long been troubled by IV complications and methods to decrease them.

"Safe IV Project"

Our project aims to perfect and commercialize a novel patented IV monitoring system. It in real time will notify caregivers an IV is no longer safely functioning.

Sepehr Bahadorani

Born in Iran and moved to Canada at age 16, I have completed my high school, undergrad, and PhD studies in Toronto. Thereafter continued postdoctoral research at UCLA for two years followed by medical school at Wayne State in Detroit, Michigan. Completed my ophthalmology residency at UTHSCSA in 2018 and continued my retina fellowship afterward in the same program. Expected to start working as a retina attending here at UTHSCSA as of July 1st, 2020.

"Computer-aided analysis of full-field electroretinogram"

Interpretation of ffERG is incredibly difficult owing to the presence of numerous variable. Throughout this project, computer analysis is used to help with interpretation and graphing of the results.

Dimitrios Miserlis

I have received advanced endovascular aortic surgery training, Biomedical Engineering – Device development research, and developed the Medical device "Pleuraleak". I have directed my passion and experience, in the development of novel interventional robotic and imaging systems, for the management of complex arterial pathologies. Our innovative technology will be a trailblazer for a new generation of surgical tools to improve health care delivery to vascular patients in the US and the world.

"Robotic Endovascular technology with integrated Artificial Intelligence"

Novel Flexible Robotic Endovascular device with integrated Artificial Intelligence – For Aortic and other Endovascular applications

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Daniel Lodge

I am an Associate Professor who joined the department of Pharmacology at UT Health San Antonio in 2009. My research focuses on psychosis and, in collaboration with Dr. Frazer, we developed the hypothesis detailed in this application. Together, we have put together a collaborative team of basic and clinical researchers and have generated significant preliminary data in support of our hypothesis.

"A drug combination to reduce the abuse liability of opioid medications"
We are asking for funds to complete a clinical study investigating the abuse liability of our drug combination in recreational drug users.

Vaida Glatt

Dr. Vaida Glatt is an Assistant Professor and is the Director of Research at the Department of Orthopaedics at the UT Health SA. Her primary interest is in translational research to develop novel strategies for the treatment of bone injuries, specifically, the development of biologics to enhance bone regeneration, and implants to accelerate bone healing. Dr. Glatt is the author of 60+ publications in peer-reviewed journals and has presented her work at over 50 international conferences.

"Biomimetic Hematoma: Novel Carrier for the Delivery of Growth Factors to Enhance Bone Healing"
Biomimetic Hematoma was created to effectively deliver an extremely low dose of bone morphogenetic protein with efficiency. It is the only known carrier to consistently initiate successful repair of bone defects without any known side effects.

Daniel Chupp

I am a PhD candidate in Dr. Paolo Casali's laboratory, an internationally recognized leader in B cell immunobiology and antibody responses. My research focuses on advancing the humanized mouse (HuMice) platform. My proficiency within the field of B cell immunobiology and epigenetics coupled with my experience at Siemens Healthcare's antibody development division and tenure as a VP of operations provides an excellent foundation to advance this technology into a viable commercializable platform.

"Novel humanized mouse platform supporting Natural Human antibody production"

We have developed a novel humanized mouse platform with a functional human immune system capable of generating natural human antibodies to virtually any biological target which can be efficiently developed into therapeutic human antibodies.