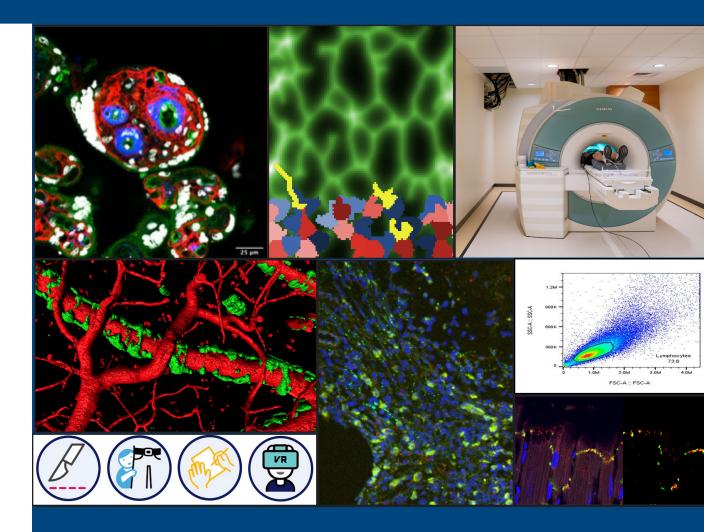
Poster	Student	Mentor	Research Project
23	Ashley Nyitray	Susan Campbell, PhD Harald Sontheimer, PhD	Characterization of Peritumoral Hyperexcitability in Adult and Pediatric Glioma: The Role of KCC2
24	Stephen Owen	Warren K. Bickel, PhD Jeff Stein, PhD Jennifer Vaughn, MD, MPH	Does Delay Discounting Predict Smoking Cessation in those Diagnosed with Head and Neck Cancer?
25	Hannah Palmerton+	Gary Simonds, MD	The Effect of Various OR Noise on Fine Motor Skills, Cognition, and Mood
26	Dan Park	John W. Mann, MD	Efficacy of an Intra-Operative Marcaine Adductor Canal Block during Total Knee Arthroplasty
27	Jay Patel	Farrell Adkins, MD	Does Repeat Tissue Compression by Robotic Stapling Devices Increase Colonic Anastomotic Leak Rates?
28	Harsh Patolia*	John Chappell, MS, PhD	Agent-Based Model Simulates Pericyte Migration and Recruitment to the Angiogenic Front in Response to PDGF-B Signaling by Sprouting Endothelium
29	Steve Siyuan Qian	Steven Poelzing, PhD Mark Joseph, MD	Multi-Parametric Predictors of Post-Operative Atrial Fibrillation
30	Mustafa Rasheed*	Kenneth Oestreich, PhD	The Role of the Ikaros Zinc Finger Factor Eos in TH2 Cell Differentiation
31	Mercedes Robinson*	Pearl Chiu, PhD	Gender Differences in Reward and Punishment Processing Within Depression
32	Jean Sabile*	Samy Lamouille, PhD	Targeting Cx43 in Colon Cancer Stem Cells
33	Simran Sandhu	Kenneth Oestreich, PhD	Evaluating Cooperative Roles for STAT3 and Aiolos in Lymphocyte Mimicry Associated with Metastatic Disease
34	Brian Saway+	Terri-Ann Wattsman, MD	Mindfulness in the OR
35	Don Scarboro	David Sane, MD	Predictors of Subsequent Hospital Encounters in Patients with Takotsubo Cardiomyopathy
36	Farah Shah+	Zhi Sheng, PhD	PIK3CB and Connexin-43 Inhibition Sensitizes Glioblastoma Cells to Temozolomide
37	Mira Tanenbaum	James W. Smyth, PhD	Targeting the Integrated Stress Response to Prevent Pathological Cardiac Hypertrophy
38	Jordan Taylor	James W. Smyth, PhD	Investigating Pathogenic Manipulation of Cellular Junctions to Facilitate Viral Spread
39	Albert Truong	Robert L. Trestman, PhD, MD	Adaption and Effectiveness of START NOW in the Treatment of Opioid Addicted Individuals Enrolled in Outpatient Based Opioid Treatment
40	Lena Turkheimer	Fidel Valea, MD	Barriers to Breastfeeding in Opiate Sustained Mothers and the Effects of Breastfeeding on NAS Symptom Severity, Infant Pharmacologic Use, and Length of Hospital Stay
41	Benjamin Walker+	Mark Hamill, MD	Effects of Interdisciplinary Education Regarding Potentially Inappropriate Medication Use in Geriatric Fall Patients
42	Tyler Willson	Mikhail Koffarnus, PhD	Brain Valuation Networks in Stimulant Users: Using fMRI to Further Understand Sexual HIV- Risk Behavior
43	Abigail Winn	Zhi Sheng, PhD	Activation of PI3K in Glioblastoma Multiforme
44	Melika Zarei	Jonathan Carmouche, MD Maxine Lee, MD Pamela Zollinger, MD	The Ability of Visual Evoked Potentials (VEPs) Obtained During Spine Surgery to Predict Postoperative Visual Changes
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VTCSOM Medical Student Research Symposium 2020

Friday, March 27, 2020 12:00 to 5:15 p.m.



VTCSOM Medical Student Research Symposium 2020 **Program**

12:00 to 1:00 p.m. ~ Poster Presentations, Odd Numbers (First Floor)

1:00 to 1:20 p.m. ~ Introduction and Research Mentor Award Presented to Devasmita Dev, MD (M203)

1:20 to 2:40 p.m. ~ Oral Presentations (M203)

Vascular Remodeling in Preeclampsia: Smooth Muscle and Collagen Content in Placental Vessels Anisha Chada (Mentors: John Chappell, PhD and Allison Durica, MD)

Soluble Amyloid-Beta Oligomers Trigger Disruption of the Astrocyte-Vascular Interface Christopher Liao (Mentors: Ian Kimbrough, PhD and Harald Sontheimer, PhD)

> Effect of Myocardial Infarction on Sodium Channel Organization Tom Liu (Mentor: Robert Gourdie, PhD)

The Influence of Anxiety on Outcomes in Pediatric Surgery Lisa Crisalli (Mentors: Shawn D. Safford, MD, MAS and Sarah Parker, PhD)

2:40 to 3:30 p.m. ~ Poster Presentations, Even Numbers (First Floor)

3:30 to 4:50 p.m. ~ Oral Presentations (M203)

Gender Differences in Reward and Punishment Processing Within Depression Mercedes Robinson (Mentor: Pearl Chiu, PhD)

Agent-Based Model Simulates Pericyte Migration and Recruitment to the Angiogenic Front in Response to PDGF-B Signaling by Sprouting Endothelium Harsh Patolia (Mentor: John Chappell, PhD)

> The Role of the Ikaros Zinc Finger Factor Eos in TH2 Cell Differentiation Mustafa Rasheed (Mentor: Kenneth Oestreich, PhD)

> > Targeting Cx43 in Colon Cancer Stem Cells Jean Sabile (Mentor: Samy Lamouille, PhD)

4:50 to 5:15 p.m. ~ Student Awards (M203)

4 Lisa Crisalli* Shawn D. Safford, MD. MAS The Influence of Anxiety on Outcomes in Sarah Parker, PhD Pediatric Surgery Implementation of Diabetes Self-Management 5 Lindsey Dove Sallie Beth Johnson, PhD, MPH and Strength Training Programs for Older Samantha M. Harden, PhD Adults: A Post-Trial Mixed Methods Study 6 Soleille Everest Robin Queen, PhD Balance Deficits Remain More than One Year Following Total Hip Arthroplasty Joseph Moskal, MD Brendon Fusco+ 7 Alexei Morozov, PhD Artificial Potentiation of the Dorsomedial Prefrontal Cortex to Basolateral Amygdala Pathway 8 Susan Giampalmo John Burton, MD Opioid Use Disorder Patients in an Emergency Department Buprenorphine Program with Referral to Outpatient Therapy Use of Observation Status Versus Readmission 9 Adam Goode Thomas K. Miller, MD Joseph T. Moskal, MD in Elective Total Knee and Hip Arthroplasty Trevor M. Owen, MD Returns to Hospital: A Single-Institution Perspective Stephen LaConte, PhD The Effects of Ketosis on fMRI 10 Jeffrey Henry 11 Nicholas Homsy Michael Wolfe, MD The Effect of Orthopaedic Referral on Decision Benjamin R. Coobs, MD for Weight Loss Management 12 Caleb Hubbard Martha Ann Bell, PhD Mild-to-Moderate Hearing Loss Evaluated Through EEG Coherence 13 Darlon Jan James W. Smyth, PhD Investigations into Adenovirus Cardiotropism Leslie LaConte, PhD 14 Awaiz Khan Edmundo Rubio, MD The Effect of Hypertonic Saline on Mucus Viscosity in the Mechanically Ventilated Patient 15 Margaret Kneifel Carla Finkielstein, PhD miRNAs as Potential Biomarkers for the Kurtis Moyer, MD Identification of Night-Shift Workers at Risk of Developing Breast Cancer 16 Christopher Liao* Ian Kimbrough, PhD Soluble Amyloid-Beta Oligomers Trigger Harald Sontheimer, PhD Disruption of the Astrocyte-Vascular Interface 17 Tom Liu*+ Robert Gourdie, PhD Effect of Myocardial Infarction on Sodium Channel Organization 18 Rosemary Mallonee Nighttime, Day-Of-Week, and Month Influence Sarah Parker, PhD Shawn Safford, MD, MAS Operative Duration and Turnover Time: A Linear Mixed Model Analysis of 609 Colectomies 19 Justine McGiboney Frank Biscardi, MD Outcomes with Third-Line Vasopressors on In-Bradlev Icard, DO Hospital Mortality in Septic Shock Anthony Loschner, MD Sanaz Monjazeb Cassandra Mierisch, MD Perioperative Opioid Administration and Postoperative Opioid Consumption: A Retrospective Study The Cooperative Roles of Aiolos and STAT3 in 21 Sol Moon Kenneth Oestreich, PhD Th17 Differentiation 22 Utilization of Referral to a Prescription Exercise Robert Nicholson+ Damon Kuehl, MD Program to Reduce Pain and Improve Function Following Discharge from the Emergency Department

Research Project

Resource Settings

Vessels

Perciyte Coverage and Microvessel Caliber in Normal and Pre-eclamptic Pregnancies

Vascular Remodeling in Preeclampsia: Smooth

Clinical Validation of an Affordable, Reusable

Muscle and Collagen Content in Placental

Novel EKG Monitor for Children in Low-

Poster

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3

Student

Malek Bouzaher+

Anisha Chada*

Judy Chen

Mentor

John Chappell, MS, PhD

John Chappell, MS, PhD

Andre Muelenaer, MD, MS

Allison Durica, MD

John Bird, MD

Cover images represent the research of Research Scholar Letter of Distinction recipients. Clockwise from upper left: Anisha Chada, Harsh Patolia, Mercedes Robinson, Mustafa Rasheed, Tom Liu, Jean Sabile, Lisa Crisalli, and Christopher Liao