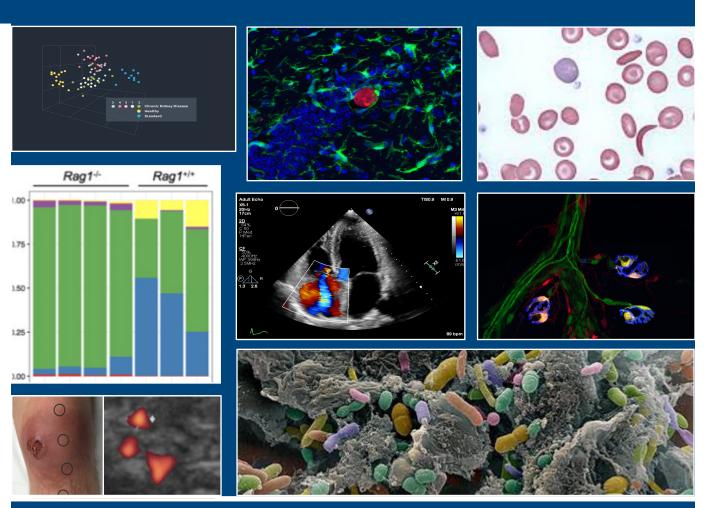
Poster	Student	Mentor	Research Project
21	Quan Phan	Jack Perkins, MD Danielle Guilliams, MS	Screening for Sepsis: Implementation of a Sepsis Outreach Program at a Local Skilled Nursing Facility
22	Amit Piple	Jonathan Carmouche, MD Carol Bernier, DO	Cervical Spine CT Can Miss Fractures When Protective Football Equipment is in Place
23	Sam Plant	Zhi Sheng, PhD Kevin Pridham, PhD	A New Combinational Therapy Targeting Cx43, PI3K, and GPCR Overcomes Temozolomide Resistance in Glioblastoma
24	Meeta Prakash	Xin Luo, PhD	Roles of Regulatory B Cells and Gut Microbiota in the Pathogenesis of Systemic Lupus Erythematosus
25	Meredith Rahman	Michael Fox, PhD Jianmin Su, PhD	<i>In Vivo</i> Delivery of Synthetic Collagen XIX Matricryptins Triggers Inhibitory Circuit Assembly in Neocortex
26	Faith Robinson	Eli Vlaisavljevich, PhD Fidel Valea, MD	Investigation of Histotripsy and Thermally Enhanced Histotripsy for the Treatment of Uterine Leiomyomas: A Feasibility Study in <i>Ex</i> <i>Vivo</i> Human Fibroids
27	Ishaan Sachdeva+	Jonathan Carmouche, MD	The Predictive Value of Postoperative Anemia on Length of Stay for Patients Undergoing Minimally Invasive Lumbar Fusion
28	Davit Shahmanyan	Katie Love Bower, MD	Elimination of Fasting Before and After Percutaneous Endoscopic Gastrostomy (PEG) Tube Placement
29	Michael Shlossman*	Mike Fox, PhD Gabby Carrillo	Dopamine Metabolism and Signaling in Murine Toxoplasma gondii Infection
30	Anna Shvygina*	Violet Borowicz, MD Jennifer Vaughn, MD Thomas Diller, PhD	A Novel Method to Measure Perfusion Abnormalities in Sickle Cell Disease
31	C. Taylor Smith	Jonathan Carmouche, MD	Improved Diagnosis and Classification of Cervical Myelopathy via Quantitative Magnetization Transfer MRI Analysis
32	Vaish Sridhar	Stephanie DeLuca, PhD Stephen LaConte, PhD	Using fMRI to Map Neurological Changes With Visual Feedback in Individuals With and Without Neurological Impairment
33	Steven Svoboda	Lisa Apfel, MD Evin Guilliams, DO	Modified Ketogenic Diet and Time Restricted Feeding as Adjuvant Therapy for Glioblastoma Patients
34	Meyha Swaroop	Rahul Sharma, MD	Radial Versus Femoral Secondary Access in Patients Undergoing Transcatheter Aortic Valve Implantation (R-TAVI): A Randomized Pilot Study
35	Kian Tehranchi	Sarah Parker, PhD Shawn Safford, MD	Application of Eye-tracking to Improve the Situational Awareness and Calibrated Confidence of Novice Surgeons in Laparoscopic Cholecystectomy
36	Peter Weber	Eli Vlaisavljevich, PhD David Luyimbazi, MD	Investigation of Dosimetry Metrics for Non- Invasive Histotripsy Ablation of Hepatocellular Carcinoma, Cholangiocarcinoma, and Metastatic Liver Tumors
37	Alyssa Wenzel	Jonathan Carmouche, MD	Anterior Cervical Discectomy and Fusion (ACDF) Surgery Using a Local Source for Cancellous Autograft: A Prospective Study
38	Cameron Worden+	Adam Kimple, MD	Sinonasal Mucin in Aspirin Exacerbated Respiratory Disease
39	Kermit Zhang	Susanti le, MD	Prospective Randomized Controlled Trial of High-Intensity Lightbox Phototherapy to Prevent Incidence of ICU-Acquired Delirium



VTCSOM Medical Student Research Symposium 2021

Friday, March 26, 2021 12:00 to 6:00 p.m.

In accordance with COVID-19 safety precautions, in-person attendance is limited to the class of 2021 and select faculty members. The remainder of the audience will attend virtually.

> VTC Virginia Tech Carilion School of Medicine

*Denotes receiving a Letter of Distinction for Research Scholarship +Denotes receiving a Letter of Distinction for Research Productivity

VTCSOM Medical Student Research Symposium 2021

Program

12:00 to 12:20 p.m. ~ Introduction and Research Mentor Award Presented to Anita Kablinger, MD (M203 and Virtual)

12:30 to 1:00 p.m. ~ Poster Presentations, Group 1A (Virtual)1:00 to 1:30 p.m. ~ Poster Presentations, Group 1B (Virtual)

1:40 to 3:00 p.m. ~ Oral Presentations (M203 and Virtual)

Ultrasonographic Discrimination of Cellulitis Versus Pseudocellulitis Aaditya Chandrasekar (Mentors: Apostolos "Paul" Dallas, MD, and Jonathan Noguiera, DO)

The Role of CX3CR1 Signaling in Microglia Development in a Model of Maternal Microbiome Dysbiosis (MMD) Miranda Creasey (Mentors: Michelle Theus, PhD, and Yeonwoo Lebovitz, PhD)

Utilization of a Novel Molecular Fingerprint to Investigate the Development of Perisynaptic Glia Kerilyn Godbe (*Mentor: Gregorio Valdez, PhD*)

Analysis of Urine Raman Spectra Differences from Patients with Diabetes Mellitus and Renal Pathologies Varun Kavuru (Mentors: Devasmita Dev, MD, and John Robertson, VMD, PhD)

3:10 to 3:40 p.m. ~ Poster Presentations, Group 2A (Virtual) 3:40 to 4:10 p.m. ~ Poster Presentations, Group 2B (Virtual)

4:15 to 5:35 p.m. ~ Oral Presentations (M203 and Virtual)

Effects of Lactobacillus reuteri Supplementation on Neonatal IgA Production in Murine Models Grace Lee (Mentor: Xin Luo, PhD)

Prospective Evaluation of a Standardized Transthoracic Echocardiographic Criteria for the Assessment of Possible Native Valve Infective Endocarditis Dixon Lee (Mentor: John Lystash, MD)

Dopamine Metabolism and Signaling in Murine Toxoplasma gondii Infection Michael Shlossman (Mentors: Mike Fox, PhD, and Gabby Carrillo)

A Novel Method to Measure Perfusion Abnormalities in Sickle Cell Disease Anna Shvygina (Mentors: Violet Borowicz, MD, Jennifer Vaughn, MD, and Thomas Diller, PhD)

5:35 to 6:00 p.m. ~ Student Awards (M203 and Virtual)

Cover images represent the research of Research Scholar Letter of Distinction recipients. Clockwise from upper left: Varun Kavuru, Michael Shlossman, Anna Shvygina, Kerilyn Godbe, Miranda Creasey, Aaditya Chandraseka, Grace Lee, and (center) Dixon Lee

Poster	Student	Mentor	Research Project
1	Adenike Adenikinju+	Jayasimha Rao, PhD, MVPHA Roderick Jensen, PhD Dorothy Garner, MD	The Role of Pyoverdine and Iron Complex Uptake in the Virulence of Clinical Strains of Pseudomonas aeruginosa
2	Sarah Anderson	Alan Asbeck, PhD	Development of a Modular EMG Sensor
3	Manavi Bhagwat	Devasmita Dev, MD	Dietary Adherence for the Prevention of Kidney Disease
4	Dakota Burhman	Carol Gilbert, MD	Effectiveness of Cadaver Lab on Surgical Resident Education
5	Lauren Cashman	TK Miller, MD Vincent Wang, PhD	Biomechanical Comparison of Double- and Single-Row Rotator Cuff Techniques
6	Aaditya Chandrasekar*	Apostolos "Paul" Dallas, MD Jonathan Noguiera, DO	Ultrasonographic Discrimination of Cellulitis Versus Pseudocellulitis
7	Miranda Creasey*+	Michelle Theus, PhD Yeonwoo Lebovitz, PhD	The Role of CX3CR1 Signaling in Microglia Development in a Model of Maternal Microbiome Dysbiosis (MMD)
8	Mehdi Elmouchtari	Katherine Liebesny, MD Jeffrey Wilson, MD	Delay Discounting and Substance Use on Adolescent Psychiatric Inpatients
9	Miranda Gerrard	Stephanie DeLuca, PhD	Application of Pediatric Constraint-Induced Movement Therapy (PCIMT) in Lower-Resource Countries
10	Kerilyn Godbe*+	Gregorio Valdez, PhD	Utilization of a Novel Molecular Fingerprint to Investigate the Development of Perisynaptic Glia
11	Hailey Gosnell+	Gregorio Valdez, PhD	Analysis of a New Glial Subtype in the Mouse Brain
12	Parker Hambright	Renee LeClair, PhD Andrew Binks, PhD	Determining the Expression Pattern of Piezo2 in Human Lung Tissue across Various Pathologies
13	Ayesha Kar	Eric Marvin, DO	Relationship of Volume of Residual CSDH Space with Recurrence Rate
14	Varun Kavuru*+	Devasmita Dev, MD John Robertson, VMD, PhD	Analysis of Urine Raman Spectra Differences from Patients with Diabetes Mellitus and Rena Pathologies
15	Dixon Lee*	John Lystash, MD	A Prospective Evaluation of a Standardized Transthoracic Echocardiographic Criteria for the Assessment of Possible Native Valve Infective Endocarditis
16	Grace Lee*+	Xin Luo, PhD	Effects of Lactobacillus reuteri Supplementation on Neonatal IgA Production in Murine Models
17	Giovanni Malaty	Mark Witcher, MD, PhD Sujith Vijayan, PhD	Neural Dynamics in Cognition and Sleep
18	Tien Nguyen	Stephanie DeLuca, PhD	Psychometrics of Emerging Behaviors Scale
19	David O'Neil	Katherine Luci, PsyD	Feasibility and Case Series of Transdiagnostic Group-Based Acceptance and Commitment Therapy in Older Veterans
20	Ryan Perry	Andrew Binks, PhD	Do Changes in PCO2 Produce Lung Volume Illusion?

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