# TABLE OF CONTENTS

Keynote Speakers ........................................... 2

Student Speakers ............................................ 3

Poster Awards ................................................. 5

List of Posters ................................................. 6

Campus Publications ......................................... 17

Thank You / Acknowledgements .......................... 26

Abstract Reviewers and Award Judges ................. 27
KEYNOTE SPEAKERS

Olusola Alade Ajilore, MD, PhD

Associate Professor
Associate Head for Faculty Development
Associate Director of the UIC College of Medicine Medical Scientist Training Program
University of Illinois Center for Depression and Resilience Scientist
Director, Mood and Anxiety Disorders Program
Director, Clinical Research Core/Center for Clinical and Translational Science
Associate Director, Residency Training and Education
University of Illinois College of Medicine Chicago
Department of Psychiatry

Dr. Ajilore graduated magna cum laude from Harvard University with a degree in biology. He went on to do his MD/PhD degree at Stanford University, where he studied the deleterious effects of stress hormones on the brain. He joined the research track residency at UCLA, where he transitioned into neuroimaging in major depression. Dr. Ajilore now has several positions in the UIC College of Medicine and Department of Psychiatry. His UIC lab currently uses computational neuroimaging techniques and digital biomarkers to track better and treat neuropsychiatric disorders.

Learn more about the science behind the disparities African Americans are facing during the COVID-19 pandemic, including social determinants of health, biological consequences of the stress of racism, and the neuropsychiatric sequelae of COVID-19 in Dr. Ajilore’s keynote presentation, The Fire This Time: The Stress of Racism, Inflammation and COVID-19.

Alesia O. Jones, PhD

Assistant Dean for Diversity and Inclusion
Associate Professor
Director of Behavioral Medicine
Co-chair of the Ad Hoc Committee for Diversity and Inclusion
University of Illinois College of Medicine Rockford
Department of Family and Community Medicine

Dr. Jones is a licensed clinical psychologist at the UI Health Mile Square Health Center – L.P. Johnson Rockford where she provides evidence-based treatments for mood and anxiety disorders and specializes in the treatment of PTSD and depression among victims of crime and other stressful life events. Prior to joining the UICOMR in 2009, Dr. Jones completed a two-year postdoctoral fellowship at the National Crime Victims Research and Treatment Center at the Medical University of South Carolina focused on the assessment and treatment of traumatic stress among the civilian population. In her role as assistant dean, Dr. Jones works to design and implement initiatives and programs focused on diversity and inclusion for the Rockford campus.

Dr. Jones has published and presented research focused on the relationship between trauma and subsequent psychological, emotional, and behavioral consequences of trauma exposure among ethnic/racial minorities and other underserved communities. She will present the latest research on how COVID has impacted our communities in her presentation, Unmasking Mental Health During the COVID-19 Pandemic: A Call for Interdisciplinary Collaboration.
STUDENT SPEAKERS

This year’s virtual Research Week feature dozens of research posters from students at the UIC Health Sciences Campus-Rockford and other area institutions. A few students were selected from various programs to present a short video of their poster.

**JAMES SCHOLAR**

**Studying Neuromuscular Defects in Spinal Muscular Atrophy using Patient-specific Induced Pluripotent Stem Cells**
Parshva Shah

**RMED/RPHARM**

**Food Insecurity Initiative: An Approach to Nutritional Improvement in Centralia/Mt. Vernon, IL**
Cody Ratermann RMED & Ana Carolina Hinojosa Felix RPHARM

**COLLEGE OF PHARMACY**

**Impact of G-quadruplexes on DNA Double-strand Break Repair by End Joining**
Shruthi Selvaraj

**Characterization of Genome Destabilizing and Oncogenic Mutations in Human Top2α**
Viraj Shah

**MBT PROGRAM**

**Ligand targeted therapy: Role of the surface density of anti- ανβ3 peptides on PEG-b-PPS micelles for anti-angiogenic activity**
Neha Phani Bushan

**Potential Role of Anti-HMGB1 IgM in Sexual Dimorphism in Type 1 Diabetes Mellitus in NOD mice**
Abhinav Chatterjee
RESEARCH DAY AWARDS

Best Basic Science Research Poster Award
Sponsored by: Department of Biomedical Sciences

Best Basic Science Research Poster Award
Sponsored by: Thermo Fisher Scientific

Best Case Report Award
Sponsored by: Rockford Anesthesiologists Associated

Best Clinical Research Poster Award
Sponsored by: Rockford Ambulatory Surgery Center

Best MBT Student Research Poster Award
Sponsored by: Master of Science in Medical Biotechnology (MBT) Program and Department of Biomedical Sciences

Best Student Technical Poster Awards (Two Awards)
Sponsored by: Winnebago County Medical Society

Best Use of Literature in a Student Research Project Award
Sponsored by: Crawford Library of the Health Sciences-Rockford

CCTS Best Clinical-Translational Research Poster Award
Sponsored by: UIC Center for Clinical and Translational Science

CCTS Best Community-Translational Research Poster Award
Sponsored by: UIC Center for Clinical and Translational Science

College of Pharmacy Outstanding Poster Award
Sponsored by: UIC College of Pharmacy at Rockford

Dean’s Action Council Award
Sponsored by: Office of the Regional Dean, UICOMR

Innovation in Basic Science Research Award
Sponsored by: Office of the Regional Dean, UICOMR

James Scholar Award
Sponsored by: James Scholar Program

NCRHP Poster Award for Encouraging Excellence in Rural Health
Sponsored by: National Center for Rural Health Professions

Sister Mary Linus Nowak Research Award
Sponsored by: Saint Anthony College of Nursing

Supporting Model Public Health Practices Research Award
Sponsored by: Winnebago County Health Department and its Board of Health
# LIST OF POSTERS

<table>
<thead>
<tr>
<th>Poster #</th>
<th>All Authors</th>
<th>Primary Author Status</th>
<th>Category</th>
<th>Project Title</th>
<th>Primary Author Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adedokun Adedoyin, Tim Morris, Brian Follstad</td>
<td>Industry Participant</td>
<td>Basic Science</td>
<td>Investigating the Impact of Rocking Agitation and Angle on HEK293 Cell Aggregation for Applications in Large-scale Biomanufacturing</td>
<td>Catalent Biologics</td>
</tr>
<tr>
<td>2</td>
<td>Oba Akinfosile, Guoxing Zheng, Samuel Pope, Mark Barba, Deborah Hall, Robin Pourzal, Mathew Mathew, Divya Bijukumar</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>MCA macrophages: A unique sub-population of macrophages with altered cytokine and chemokine expression profile induced by CoCrMo wear nanoparticles</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>3</td>
<td>Vaishnavi Beena Valsan, Oba Akinfosile, Guoxing Zheng, Samuel Pope, Mark Barba, Deborah Hall, Robin Pourzal, Mathew Mathew, Divya Bijukumar</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Exploring implant-derived wear particle mediated macrophage polarization: TLR-2 and TLR 4 co-activation.</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>4</td>
<td>Aisha Bhatti*, Mathew Mathew, Paul David Chastain, Divya Bijukumar</td>
<td>Medical Student</td>
<td>Basic Science</td>
<td>Role of Vitamin E in Enhancing Implant Procedure Outcomes: In-Vitro Study</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>5</td>
<td>Eniola Birch, Kai-Yuan Cheng, Ravindra Badhe, Samuel Pope, Guoxing Zheng, Mark Barba, Divya Bijukumar, Mathew Mathew</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Variation in macrophage response to metal wear nanoparticles generated from hip implants: Effect of size and chemical nature.</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>6</td>
<td>Mariaelana Brenner*, Kai-yuan Cheng, Mark Barba, Mathew Mathew</td>
<td>Medical Student</td>
<td>Basic Science</td>
<td>The Effect of Accumulated Air Pressure on Corrosion Processes in a Hip Modular Junction undergoing Simulated Micromotion</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>7</td>
<td>Abhinav Chatterjee, Sneha Halwasia, Aoshuang Chen, Guoxing Zheng</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Potential Role of Anti-HMGB1 IgM in Sexual Dimorphism in Diabetes in NOD Mice.</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>8</td>
<td>Abhinav Chatterjee, Ravindra Vijaykumar Badhe, Kai Yuan Cheng, Joshua Green, Divya Bijukumar, Mathew Mathew</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Quick Bone Fracture Healing: Low-Intensity Electric Current with Osteoblast cells in Electro-conducting scaffolds</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>9</td>
<td>Zhenyu Chen, Xuejun(June) Li</td>
<td>Postdoctoral Research Associate</td>
<td>Basic Science</td>
<td>Rescue axonal degeneration in human stem cell models of hereditary spastic paraplegia with mitochondrial fission inhibitor</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
</tbody>
</table>

*Primary Author; *James Scholar; **Craig Fellow
<table>
<thead>
<tr>
<th>Poster #</th>
<th>All Authors</th>
<th>Primary Author Status</th>
<th>Category</th>
<th>Project Title</th>
<th>Primary Author Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Kai-yuan Cheng, Ravindra V. Badhe, Divya Bijukumar, Alfons Fischer, Robin Pourzal, Mathew Mathew</td>
<td>Postdoctoral Research Associate</td>
<td>Basic Science</td>
<td>Accelerated Fretting-Corrosion Damage at Hip Modular Junction Triggered by CoCrMo Particle Challenged Macrophage Media</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>11</td>
<td>Kai-yuan Cheng, Mahemaa Rajasekaran, Divya Bijukumar, Alejandro A. Espinoza Orías, Mathew Mathew</td>
<td>Postdoctoral Research Associate</td>
<td>Basic Science</td>
<td>Electrochemical Investigation of Additively Manufactured Hip Implant Acetabular Shells</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>12</td>
<td>Joshua Dein*, Yongchao Mou, Xue-Jun Li</td>
<td>Medical Student</td>
<td>Basic Science</td>
<td>Impact of MFN2 knockdown on human motor neuron survival and mitochondrial function and morphology</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>13</td>
<td>Edidiong Essien, Vishal Khatri, Ravindra Badhe, Kai-yuan Cheng, Geoffrey Thei, Mathew Mathew, Divya Bijukumar</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>A novel drug delivery system for Rheumatoid Arthritis: L-sulforaphane loaded boronate-PAMAM dendrimers</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>14</td>
<td>Varsha Ganesan, Vishal Khatri, Divya Bijukumar, Ravindra Badhe, Ramaswamy Kalyanasundaram</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Development of pH-Sensitive Microgels for Oral Delivery of Filarial Cystatin for the Treatment of Inflammatory Bowel Disease</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>15</td>
<td>Mrunali Jagdale, Xue-Jun Li, Yongchao Mou</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Generation Of 3D Culture Organoid Model for Studying Hereditary Spastic Paraplegia Using Human Induced Pluripotent Stem Cells</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>16</td>
<td>Yashashree Karpe, Zhenyu Chen, Xuejun Li</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Investigating Motor Neuron-Specific Degeneration using Human Stem Cell-based Model of Spinal Muscular Atrophy</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>17</td>
<td>Nabiha Khan, Dana Thomas, Roberto De Vera, Neelu Puri</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Overcoming TKI-resistance in NSCLC using SphK2 inhibitors</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>18</td>
<td>Cayla Kleeman, Matthew Summerlin, Les Hanakahai</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>An Investigation of the Role of CYREN Protein in DNA Repair</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>19</td>
<td>Aishwarya Kumar, Ramaswamy Kalyanasundaram, Vishal Khatri</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Evaluating the Therapeutic Potential of Filarial Parasite-derived Cystatin in a Mouse Model of Atopic Dermatitis</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>20</td>
<td>Alejandro Magana, Regina Giovanni, Mathew Mathew, Sarah Hagarty, Divya Bijukumar</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Synergistic Effect of Placental Membrane Extract and Hypoxia on Human Adipocyte Differentiation</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>Poster #</td>
<td>All Authors</td>
<td>Primary Author Status</td>
<td>Category</td>
<td>Project Title</td>
<td>Primary Author Institution</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-----------------------</td>
<td>----------</td>
<td>---------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>21</td>
<td>Savita Matapurkar, Gabriela Swan, Karin Nitiss, John Nitiss</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Topoisomerase II trapping by oxidative DNA lesions</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>22</td>
<td>Yongchao Mou, Zhenyu Chen, Craig Blackstone, Su-Chun Zhang, Xue-Jun Li</td>
<td>Research Scientist</td>
<td>Basic Science</td>
<td>Impaired Lipid Homeostasis Underlies Axonopathy in Human Stem Cell Models of Hereditary Spastic Paraplegia</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>23</td>
<td>Meet Patel, Roberto De Vera, Kayya Sri Racherla, Katrina Dovalovsky, Neelu Puri</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Role of PRMT-1 and p120-catenin as an EMT mediator and in Osimertinib resistance in NSCLC</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>24</td>
<td>Neha Phani Bhushan, Trevor Stack, Benjamin Mathew, Evan Scott, Mathew Mathew, Divya Biju Kumar</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Ligand targeted therapy: Role of the surface density of anti- αvβ3 peptides on PEG-b-PPS micelles for anti-angiogenic activity</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>25</td>
<td>Frances Quinones, Alexander Pineschi, Tina Sanders, Conley Gustafson, Elina Wagner, Emily Down, Kari Severson</td>
<td>Undergraduate student</td>
<td>Basic Science</td>
<td>Identification and Characterization of an Acinetobacter beijerinckii Natural Isolate</td>
<td>Rockford University</td>
</tr>
<tr>
<td>26</td>
<td>Pamela Reyes, Ravindra Badhe, Kai-yan Cheng, Yongchao Mou, Xue-Jun Li, Paul Chastain, Mark Barba, Divya Biju Kumar, Mathew Mathew</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Dynamic Microfluidic Bioreactor for Neurotoxicity Assessment of CoCrMo Metal Particles from Hip Implants</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>27</td>
<td>Nithila Saravanan, Vishal Khatri, Nikhil Chauhan, Ramaswamy Kalyanasundaram, Sean Gray, Darrick Carter</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Evaluating the immunogenicity and vaccine efficacy of three variants of a human filariasis vaccine candidate, rBmHAXT</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>28</td>
<td>Shruthi Selvaraj, Jacob Seiver, Erik Larson, Leslyn Hanakahi</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Impact of G-quadruplexes on DNA Double-strand Break Repair by End Joining</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>29</td>
<td>Hillary Shah, Velavan Bakhthavachalam, Stephen Motika, Paul Hergenrother, Gnanasekar Munirathinam</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Evaluation of Ferroptocide (FTC) As a Potential Immunogenic Cell Death Inducing Agent in Prostate Cancer Cells</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>30</td>
<td>Parshva Shah*, Zhenyu Chen, Xuejun Li</td>
<td>Medical Student</td>
<td>Basic Science</td>
<td>Studying Neuromuscular Defects in Spinal Muscular Atrophy using Patient-specific Induced Pluripotent Stem Cells</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
</tbody>
</table>

Primary Author; *James Scholar; **Craig Fellow
<table>
<thead>
<tr>
<th>Poster #</th>
<th>All Authors</th>
<th>Primary Author Status</th>
<th>Category</th>
<th>Project Title</th>
<th>Primary Author Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Viraj Shah, Karin Nitiss, John Nitiss</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Characterization of Genome Destabilizing and Oncogenic Mutations in Human Top2α</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>32</td>
<td>Preksha Shahagadkar, Gnanasekar Munirathinam</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Exploring NCX4040, an Aspirin Derivative, for Treating Benign Prostatic Hyperplasia</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>33</td>
<td>Sejal Sharma, Pradyut Paul, Rahul Das, Arvinder Kapur, Lisa Barroiilhet, Jacques Galipeau, Manish Patankar</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Synthetic Fusion Cytokine GIFT4 - Engineered Autologous Peritoneal Immune Cells a Novel Cell Therapy for Treatment of Ovarian Cancer</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>34</td>
<td>Rashmi Sridharan, Yongchou Mou, Zhenyu Chen, Xue-Jun Li</td>
<td>MS in Medical Biotechnology Student</td>
<td>Basic Science</td>
<td>Investigating the Role of Atlastin-1 in Hereditary Spastic Paraplegia using Human Pluripotent Stem Cells</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>35</td>
<td>Farah Auckbarallee, Rhonda Verzal, Suraj Bopanna</td>
<td>Family Medicine Resident</td>
<td>Case Report</td>
<td>Acute bilateral lower extremity weakness following COVID19: a case report</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>36</td>
<td>Marisaelena Brenner*, Melva Navarro, Vibhav Bansal</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>Moyamoya Disease: A Case Report of Caucasian Twins</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>37</td>
<td>Joshua Dein*, Arshad Merchant, Aftab Merchant</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>Pancreatic pseudocyst-induced congestive splenomegaly and its associated vascular abnormalities</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>38</td>
<td>Sandra Giraldo, Sonia Parmar, Rhonda Verzal</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>Amenorrhea in a young female: Diagnosis, Delivering Bad News, and Addressing Psychological Sequelae</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>39</td>
<td>Madeline Hunt, Melissa Stenstrom</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>A Case of Dermatomyositis after Breast Implants</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>40</td>
<td>Akila Khan, David Lyu</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>Takayasu's arteritis causing multiple watershed region strokes: a case report</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>41</td>
<td>Jesseca Pirkle, M. Burhan Janjua</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>Cerebellar Stroke associated with COVID-19 patient</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
</tbody>
</table>

Primary Author; *James Scholar; **Craig Fellow
<table>
<thead>
<tr>
<th>Poster #</th>
<th>All Authors</th>
<th>Primary Author Status</th>
<th>Category</th>
<th>Project Title</th>
<th>Primary Author Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>Jesseca Pirkle, Meghann Houck</td>
<td>Medical Student</td>
<td>Case Report</td>
<td>Life-long drummer with retained singing capability after major left MCA stroke</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>43</td>
<td>Allison Beggin*, Daniel Heller, Alexander Lam, Michael Heller</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Stop The Bleed! Geniculate Artery Embolization for Knee Hemarthrosis</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>44</td>
<td>Nicole Blumenstein*, H Steven Sims, Jan Potter-Reed, Jeff Costello</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Comparison of Audio Quality of WebEx and Zoom in an Otolaryngology Setting</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>45</td>
<td>Renee Carter, Matthew Dalstrom, Michelle Brady, Gail Brick</td>
<td>DNP Student</td>
<td>Clinical</td>
<td>Bedside Reporting</td>
<td>Saint Anthony College of Nursing</td>
</tr>
<tr>
<td>46</td>
<td>Peter Cirrincione**, James Girardy, Brian Bear, Geoffrey Van Thiel</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Informed Consent Documentation in Orthopedics</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>47</td>
<td>Paige Clayton, Emilee Bocker</td>
<td>Family Medicine Resident</td>
<td>Clinical</td>
<td>Tdap vaccination rates in caregivers of newborns</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>48</td>
<td>David Fisher, Bailey Terhune, David Fischer, Joel Williams, Jeffrey Earhart</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Anterior Gluteal Pillar Bone Graft Harvesting using Acetabular Reamer Technique: as effective as Reamer-Irrigator-Aspirator System</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>49</td>
<td>Daniel Heller, Allison Beggin*, Alexander Lam, Michael Heller</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Keep your Knee, not the Pain: Geniculate Artery Embolization for Treatment of Osteoarthritis</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>50</td>
<td>Akash Khurana*, Daniel Leffler, Chandrashekhar Thukral</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Short and Long-Term Follow-Up and Clinical Outcomes in Patients with Celiac Disease in a Large Private Practice Setting</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>51</td>
<td>Gabrielle Kuhn, Hana Hinkle</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Shingles vaccination perceptions and compliance in a rural community</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>52</td>
<td>Gabrielle Kuhn, Theodore Guild, Marie Rivers, Rebecca Cheski, Kayeromi Gomez, Brian Bear, Rolando Izquierdo</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>The effect of humeral component retroversion on external rotation and shoulder function outcomes in patients undergoing reverse total shoulder arthroplasty</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
</tbody>
</table>

Primary Author; *James Scholar; **Craig Fellow
<table>
<thead>
<tr>
<th>Poster #</th>
<th>All Authors</th>
<th>Primary Author Status</th>
<th>Category</th>
<th>Project Title</th>
<th>Primary Author Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td><strong>Syndey Mathis</strong>, Jose Cataneo, Diana del Valle, Alejandra Perez-Tamayo, Anders Meligren, Gerald Gantt, Lee Alkureishi</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Outcomes of Perineal Wound Closure Techniques after Abdominoperineal Resections in Rectal Cancer: A NSQIP Propensity Score Matched Study.</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>54</td>
<td><strong>Hannah Miller</strong>, Brandie Messer, Cynthia McGrath, Alissa Bartel, Andrea Doughty</td>
<td>DNP Student</td>
<td>Clinical</td>
<td>Electronic Nicotine Delivery Systems: A Change in Practice</td>
<td>Saint Anthony College of Nursing</td>
</tr>
<tr>
<td>55</td>
<td><strong>Emily Nepomuceno</strong>, Kathryn Saulcy, Jillian Kaskavage</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Assessment of provider confidence and variation in pediatric concussion diagnosis and management in emergency department, urgent care, and primary care practice settings</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>56</td>
<td><strong>Saagar Pamulapati</strong>, Mitul Vakharia, Jordan Saeed</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Randomized Controlled Trial of IOL Orientation for Dysphotopsia</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>57</td>
<td><strong>Saumya Patel</strong>, Sarah Grace Bowyer, Joseph Vicari, Aaron Shiels, Chandrashekhar Thukral, Iliche Nonevski, Sunil Patel, Matthew Stier</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>Colonoscopy results after a positive Cologuard test</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>58</td>
<td><strong>Parshva Shah</strong>, Sarah Linder, Vibhav Bansal</td>
<td>Medical Student</td>
<td>Clinical</td>
<td>G-FAST Pre-Hospital Assessment Tool for Stroke Patients</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>59</td>
<td><strong>Elizabeth Andekian</strong>, Shannon Lizer, Michelle Brady, Matt Dalstrom, Mary Westerman</td>
<td>DNP Student</td>
<td>Community</td>
<td>Use of a Farming Specific Website to Improve Farmer Wellness and Stress</td>
<td>Saint Anthony College of Nursing</td>
</tr>
<tr>
<td>60</td>
<td><strong>Allison Beggin</strong>, Rebecca Lyons, Manorama Khare</td>
<td>Medical Student</td>
<td>Community</td>
<td>Needs Assessment Analysis of Muthumandapam and Samuel Nagar Communities in Vellore, India</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>61</td>
<td><strong>Daniel Bicklein</strong>, Lindsay Cohen, Siva Sreedhar, Shashank Sandu, Linda Chang, Heidi Olson</td>
<td>Medical Student</td>
<td>Community</td>
<td>Fostering growth of meaningful relationships between students and older adults in the community targeting social isolation and loneliness.</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>62</td>
<td><strong>Riley Brubaker</strong>, Martin MacDowell, Michael Niederbrach, Alexander Thomas, Paige Marchini, Brooke Heibel, Joshua Crist, Jared Cerny</td>
<td>Medical Student</td>
<td>Community</td>
<td>Assessment of Variation in Stroke Mortality Rates in the USA and IL by Level of Urbanization and Racial Groups</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
</tbody>
</table>

Primary Author; *James Scholar; **Craig Fellow
<table>
<thead>
<tr>
<th>Poster #</th>
<th>All Authors</th>
<th>Primary Author Status</th>
<th>Category</th>
<th>Project Title</th>
<th>Primary Author Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>Riley Brubaker, Martin MacDowell, Michael Niederbrach, Alexander Thomas, Paige Marchini, Brooke Heibel, Joshua Crist, Jared Cerny</td>
<td>Medical Student</td>
<td>Community</td>
<td>Urbanization Level and Smoking Use Impact on Age Adjusted Mortality Rates</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>64</td>
<td>Enrique Ceppi*, Manorama Khare, Noemi Rico Moreno</td>
<td>Medical Student</td>
<td>Community</td>
<td>Identifying Barriers to Healthcare Access for the Rockford Latino Community</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>65</td>
<td>Akila Khan, Umber Waheed, Patrick McIntyre, Martha Crotts</td>
<td>Medical Student</td>
<td>Community</td>
<td>The association between e-cigarette use and mental health in adolescents</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>66</td>
<td>Rachel Miller*, Kristine Zimmermann, Manorama Khare</td>
<td>Medical Student</td>
<td>Community</td>
<td>Impact of the COVID-19 Illinois Statewide Shutdown on Physical Activity of Rural Women</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>67</td>
<td>Lauren Rivkin, Emily Bazi, Allison Beggin*, Kurt Whisenand, Kayeromi Gomez</td>
<td>Medical Student</td>
<td>Community</td>
<td>Domestic Violence-Related Adverse Childhood Events in Juvenile Violent Offenders</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>68</td>
<td>Abbey Zacharski, Manorama Khare, Kristine Zimmermann</td>
<td>Medical Student</td>
<td>Community</td>
<td>Assessment of Participant Satisfaction with Physical Activity Tracker Interventions in Rural Illinois</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>69</td>
<td>Drew Amador, Hana Hinkle</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Improving Nursing Home Resident Satisfaction</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>70</td>
<td>Justin Bailey, Michael Glasser, Michael</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Identification of needs in the rural Veteran population</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>71</td>
<td>Liana Beauchamp, Michael Glasser</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Mental Health Awareness in a Rural Community</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>72</td>
<td>Calee Bresnahan, Danielle Von Ruden, Martin MacDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Impacts of COVID on Heart Health</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>73</td>
<td>Eric Bulak, Bailey Swan*, Martin MacDowell</td>
<td>RPHARM/RMED</td>
<td>Rural Medicine</td>
<td>Rural Opioid Education</td>
<td>UIC College of Pharmacy Rockford</td>
</tr>
<tr>
<td>Poster #</td>
<td>All Authors</td>
<td>Primary Author Status</td>
<td>Category</td>
<td>Project Title</td>
<td>Primary Author Institution</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-----------------------</td>
<td>----------</td>
<td>---------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>74</td>
<td>Timothy Cox, Hana Hinkle</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Assessing Potential Barriers to Accessing Mental Health Services in a Rural Community in Southern Illinois</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>75</td>
<td>Brad Dulee, Austin Reeder, Martin MacDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Community Education on the Opioid Epidemic</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>76</td>
<td>Aaron Flynn, Erin Roberts, Manorama Khare, Heidi Olson</td>
<td>RPHARM/RMED</td>
<td>Rural Medicine</td>
<td>The Impact of COVID-19 on Influenza Vaccination Uptake: Examining Participant Perceptions and Behavioral Intentions</td>
<td>UI College of Pharmacy at Rockford</td>
</tr>
<tr>
<td>77</td>
<td>Colin Kavanaugh, Seth Schiibfauer, Martin MacDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Caffeine Consumption &amp; Health Effects in Amboy High School</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>78</td>
<td>Jonathan Knisley, Hana Hinkle</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Community Health Assessment and Strategies to Address Prioritized Needs for Greene County</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>79</td>
<td>Nassim Mafi, Krystal Do, Martin MacDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Providing a Safe Haven for Families with Autistic Children in Rural Ford County</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>80</td>
<td>Jennifer Main, Hailey Sellek, Michael Glasser</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Post-COVID Effects within the Wind River Family and Community Health Care Population</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>81</td>
<td>Chad Martens, Faith Furst, Martin McDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>A Pilot Study of adolescent marijuana vaping in Lee County, Illinois</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>82</td>
<td>Alexandra McVicker, Hana Hinkle, Dana Thecla Louise Jungbauer</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Buprenorphine Treatment during Pregnancy: Charting Maternal and Neonatal Outcomes in the Prenatal and Postpartum Period</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>83</td>
<td>Marek Mlodzianowski, Jared Madden, Martin MacDowell</td>
<td>RPHARM/RMED</td>
<td>Rural Medicine</td>
<td>Assessing the Knowledge About Vaping and E-cigarettes in High School Students Pre/Post Educational session</td>
<td>UI College of Pharmacy Rockford</td>
</tr>
<tr>
<td>84</td>
<td>Meagan Nowian, Michael Glasser</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Knowledge of Mental Health in Rural Illinois Teenagers</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>85</td>
<td>Ravikumar Patel, Heidi Olson, Manorama Khare</td>
<td>RPHARM</td>
<td>Rural Medicine</td>
<td>Assessing the medication adherence and barriers for hypertension medications in a rural setting</td>
<td>UI College of Pharmacy Rockford</td>
</tr>
<tr>
<td>Poster #</td>
<td>All Authors</td>
<td>Primary Author Status</td>
<td>Category</td>
<td>Project Title</td>
<td>Primary Author Institution</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------</td>
<td>-----------------------</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>86</td>
<td>Cody Ratermann, Ana Hinojosa, Martin MacDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Food Insecurity Initiative: An Approach to Nutritional Improvement in Centralia/Mt. Vernon, IL</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>87</td>
<td>Ryan Schaab, Mark Foster, Martin MacDowell</td>
<td>RMED/RPHARM</td>
<td>Rural Medicine</td>
<td>Barriers to Suboxone Certification in a Rural Illinois County</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>88</td>
<td>Bailey Swan*, Martin MacDowell</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Social Demographics and Health Literacy Levels as Decision Factors for Nonurgent Emergency Department Utilization</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>89</td>
<td>Shannon Thoele</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Identifying and Correcting Misconceptions of the Effects of Bullying</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>90</td>
<td>Riley Van Velsor, Hana Hinkle</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>FAST Test Awareness in Galesburg, Illinois</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
<tr>
<td>91</td>
<td>Emily Wheat, Hana Hinkle</td>
<td>RMED</td>
<td>Rural Medicine</td>
<td>Assessing Sports Related Injuries and Student Knowledge in Injury Prevention</td>
<td>University of Illinois College of Medicine Rockford</td>
</tr>
</tbody>
</table>

*Primary Author; *James Scholar; **Craig Fellow


Chauhan, N., Khatri, V., Kumar, S. B. P., Malendez, V., & Kalyanasundaram, R. (2020). Macrophage migration inhibitory factor-2 of wuchereria bancrofti suppressed the DSS-induced colitis in a mouse model by promoting alternative activation of peritoneal macrophages and increasing the number of treg cells in the colon. *Journal of Immunology, 204*(1).


**UIC Health Sciences Campus Faculty Member or Affiliate**


UIC Health Sciences Campus Faculty Member or Affiliate


Khatri, V., Chauhan, N., & Kalyanasundaram, R. (2020). Fecundity of adult female worms were affected when brugia malayi infected Mongolian gerbils were immunized with a multivalent vaccine (rBmHAXT) against human lymphatic filarial parasite. *Acta Tropica, 208*, 105487.

Khatri, V., Chauhan, N., Kumar, S. B. P., & Kalyanasundaram, R. (2020). Peptide fragments of cystatin protein from filarial parasite has potent anti-inflammatory effect on DSS-induced colitis in mouse. *Journal of Immunology, 204*(1).


THANK YOU

Donations and Awards

UIC Center for Clinical & Translational Science
Crawford Library of the Health Science-Rockford
Dean’s Action Council
Department of Biomedical Sciences
James Scholar Program
Master of Science in Medical Biotechnology Program
National Center for Rural Health Professions
Rockford Ambulatory Surgery Center
Rockford Anesthesiologists Associates, LLC
Rockford Gastroenterology Associates, Ltd
Saint Anthony College of Nursing
Steve Gunderson, DO
Thermo Fisher Scientific
UIC College of Pharmacy at Rockford
University of Illinois College of Medicine Rockford – Office of the Regional Dean
Winnebago County Health Department and its Board of Health
Winnebago County Medical Society

Acknowledgements

Co-Chair:
Aoshuang Chen
Aftab Merchant

Lori Dredske
Kayéromi Gomez
Carrie Foust
Patrick McIntyre
Alaina Moore
Cynthia Reynolds
Jennifer Staman
Catherine Wehmhoefer
Vicki Weidenbacher-Hoper
RESEARCH DAY ABSTRACT REVIEWERS
AND AWARD JUDGES

Mario Affinati
Cara Allen
Maichle Bacon
Luqman Baloch
Felicia Barrett
Jeff Beichner
Divya Bijukumar
Linda Chang
Paul Chastain
Aoshuang Chen
Zhenyu Chen
Jae Choi
Mark Clodius
Monica Clodius
Matthew Dalstrom
Kayéromi Gomez
John Holden
Penny Jensen
Alesia Jones
Minami Kakuta
Kathleen Kelly
Manorama Khare
Vishal Khatri
Mitchell King
Thornton Kline
Jennifer Lane
Xuejun Li
Deborah Lischwe
Martin MacDowell
Mathew Mathew

Patrick McIntyre
Janet McMahon
Grant McNall
Aftab Merchant
Yongchao Mou
Gnanasekar Munirathinam
John Nitiss
Karín Nitiss
Marie Nlend
Samuel Pope
Neelu Puri
Erum Raja
Cynthia Reynolds
Vicky Rhine
Maureen Richards
Gary Rifkin
Arnie Rosen
Joseph Ross
Pam Schmidt
Christopher Schriever
Kari Severson
Peggy Shiels
Khalifah Sidik
Matthew Stier
Geoffrey Tsaras
Jenna Vater
Jeremy Weaver
Vicki Weidenbacher-Hoper
Chris Wojewodzki
Kristine Zimmermann