MUSC’s Approach to Comparative Clinical Effectiveness

Kathleen Brady, MD, PhD
Vice President for Research
MUSC New Frontiers in Medical Research

- Cancer immunotherapy
- CRISPR – advances in gene-editing
- Mobile technology to improve health
- Microbiome
- Regenerative medicine – tissue engineering
- Aging research - 1 million South Carolinians will be older than 65 by 2029.

Addiction research – great strength at MUSC - urgent with opioid deaths quadrupled between 1999 and 2013.
MUSC is dedicated to engaging community members in all aspects of the research process to promote health, reduce the risk of illness and disease, and build community resilience to help transform health care.

- Community-engaged research pilot project program funds partnerships between MUSC researcher and community organizations

- Safety and effectiveness of three blood-thinning drugs used to prevent potentially deadly blood clots in patients undergoing hip and knee replacement with PCORI funding

- 21st Century Cures: MUSC partnering with advocacy groups and single state agency to assess various approaches to addressing opioid dependence statewide

- Department of Justice award will fund treatment for Emanuel AME church congregation to help establish a resiliency center that will serve those affected by the violence to recover.
MUSC Funded Projects by PCORI Research Priority Areas

1. Assessment of Prevention, Diagnosis, and Treatment Options
   - Vincent Pellegrini, College of Medicine, Orthopaedics
   - David Morrisette, College of Health Professions
   - Gerard Silvestri, College of Medicine, Department of Medicine
   - Ramin Eskandari, College of Medicine, Neurosurgery
   - Richard Silver, College of Medicine, Department of Medicine

2. Accelerating PCOR and Methodological Research
   - Leslie Lenert, Biomedical Informatics Center

3. Improving Healthcare Systems
4. Addressing Disparities
5. Communication and Dissemination Research
## MUSC Funded PCORI Projects
(Includes subawards and completed projects)

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Fiscal Year</th>
<th>College</th>
<th>Department</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vincent Pellegrini</td>
<td>2016-2021</td>
<td>Medicine</td>
<td>Orthopaedics</td>
<td>Comparative Effectiveness of Pulmonary Embolism Prevention after Hip and Knee Replacement (PEPPER): Balancing Safety and Effectiveness</td>
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<tr>
<td>David Morisette</td>
<td>2015-2020</td>
<td>Health Professions</td>
<td>Research Division</td>
<td>Targeted Interventions to Prevent Chronic Low Back Pain in High Risk Patients: A Multi-Site Pragmatic RCT</td>
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<td>Leslie Lenert</td>
<td>2015-2018</td>
<td>Medicine</td>
<td>Biomedical Informatics Center</td>
<td>Mid-South Clinical Data Research Network (PCORI CDRN)</td>
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<tr>
<td>Gerard Silvestri</td>
<td>2015-2020</td>
<td>Medicine</td>
<td>Medicine, Division of Pulmonary</td>
<td>Pragmatic Trial of More versus Less Intensive Strategies for Active Surveillance of Patients with Small Pulmonary Nodules</td>
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<td>Richard Silver</td>
<td>2014-2017</td>
<td>Medicine</td>
<td>Medicine, Division of Rheumatology</td>
<td>Taking Charge of Systemic Sclerosis: Improving Patient Outcomes through Self-Management</td>
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<tr>
<td>Michelle Woodbury</td>
<td>2016-2017</td>
<td>Health Professions</td>
<td>Research Division</td>
<td>Partnership for Physical Rehabilitation Post-Stroke</td>
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<tr>
<td>Jin Seo</td>
<td>2015-2016</td>
<td>Health Professions</td>
<td>Research Division</td>
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<td>Ramin Eskandari</td>
<td>2015-2018</td>
<td>Medicine</td>
<td>Neurosurgery</td>
<td>Posterior Fossa Decompression With or Without Duraplasty for Chiari Type I Malformation With Syringomyelia</td>
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<tr>
<td>Pamela Williams</td>
<td>2012-2013</td>
<td>Nursing</td>
<td>Nursing</td>
<td>A Community Partnership Approach for Advancing Burden Measurement in Rare Genetic Conditions</td>
</tr>
</tbody>
</table>
Bringing Science to the Community

MUSC Science Café Series brings the community together with MUSC scientists in a casual setting.

Latest research, faces behind the science, and opportunities for dialogue

Come join the conversation about issues such as:

- Alzheimer's Disease
- Genetics
- Drug Discovery
- Human Microbiome
- Melanoma
- Opioid Addiction
- Fibrosis
- Nanotechnology
- Sickle Cell Disease
- Antioxidants