Designing the Atrium Health Wake Forest Neuroscience Research Center

Sara R. Jones, PhD, Associate Dean for Research, Chair, Dept of Physiology and Pharmacology, Interim Chair, Dept of Neurobiology and Anatomy
Collaborators: Greg Burke, MD, Kristie Foley, PhD, Eric Donny, PhD, Terry Stanford, PhD  Sponsor: Julie Freischlag, MD, Dean and Chief Academic Officer

Background
Atrium Health Wake Forest Baptist has individual strengths in neuroscience research but no overarching structure for integration and expansion.

A Neuroscience Research Center will provide a central home for translational neuroscience research, education and outreach.

Approach
Multi-Step Process
1) Integrate mechanistic researchers into new Neuroscience Department
   • Stakeholder Survey ✓
   • Key Stakeholders Meeting ✓
   • Department Integration Committee ✓
   • Retreat
2) Recruit Center Director
   • Investment in Recruitment Package ✓
   • Recruitment Committee
3) Design Neuroscience Research Center
   • Integration Task Force
   • Strategic Planning Process
   • Submit Internal Center Application

Assessment
Success will be measured by:
1) Faculty participation and engagement in retreat,
2) Surveys on effectiveness of activities,
3) Successful recruitment of visionary translational science leader as Director of Center
4) Ability to create an integrated strategic vision;
5) Establishment of a world-class Neuroscience Research Center (long-term).

Impact
Successful neuroscience integration will support:
• A world-class translational research pipeline;
• Accelerate the creation and application of innovations that improve health;
• Ability to recruit, inspire and develop the next generation of researchers, leaders and innovators.

Further benefits to the entire enterprise:
• Enhanced Academic Reputation
• Increased Extramural Funding
• Increased Clinical Trials and Clinical Revenue
ABSTRACT: 2022 ELAM Institutional Action Project

Project Title: Designing the Atrium Health Wake Forest Neuroscience Research Center
Name and Institution: Sara R. Jones, PhD, Wake Forest School of Medicine
Collaborators and Mentors: Greg Burke, MD; Kristie Foley, PhD; Julie Freischlag, MD, Dean

Topic Category: Research

Background, Significance of project: Atrium Health Wake Forest (AHWF) has strong mechanistic neuroscience research and large clinical practices in Neurology, Neurosurgery, Anesthesiology, Behavioral Health and Psychiatry; however, there is inadequate integration across basic, clinical and population health research in the neurosciences. The new Neuroscience Research Center will be established as an umbrella program to bring together the many diverse streams of neuroscience research at AHWF and provide a central home for interdisciplinary, translational research programs, training, education and outreach, with the ultimate goal of increasing translation of discoveries to clinical care, broadening access to research studies for patients with neurological diseases, and promoting community-based neuroscience research and outreach.

Purpose/Objectives: The objectives of this project are to develop a new paradigm of integrating neuroscience research across disciplines and to generate a scientific platform which can be used to engage and motivate stakeholders from multiple departments, institutes, and schools to participate in translational research.

Methods/Approach/Evaluation strategy: To become a leading neuroscience center of excellence, AHWF will endeavor to:
1) integrate mechanistic neuroscience researchers into one collaborative unit,
2) recruit a recognized leader in translational neuroscience research,
3) build a team and develop a strategic plan for the Center,
4) actively seek internal, external and philanthropic support to build the Center.

Outcomes/Results: A successful Neuroscience Research Center will support world-class basic, translational, community and clinical neuroscience research; support collaboration across disciplines, partners and communities; accelerate the creation and application of research-informed innovations that improve prevention, care and policies for the health and well-being of individuals and society; and recruit, inspire and develop the next generation of researchers, leaders and innovators.

Discussion/Conclusion with Statement of Impact/Potential Impact: Integration of neuroscience research into clinical care is very beneficial for an academic institution, and the direct advantage of supporting such enterprise can be construed in three domains.
1) Academic Reputation. Enhancing our Neuroscience integration will elevate the profile of presentations and publications. Furthermore, it will enhance our ability to retain our translational physicians and scientists, and to recruit more leaders in the field.
2) Extramural Funding. Increasing extramural research funding, with a specific focus on programmatic Center/Consortium funding, will increase our NIH rankings and promote the success of our researchers, increasing our ability to recruit and retain the best researchers and increasing the institution’s visibility on the national and international stage.
3) Clinical Trial and Clinical Revenue. Funded neuroscience-related clinical trials generate revenue, which can be used to support innovative preclinical research, and will help establish AHWF as a destination clinical care location for the cutting-edge treatments.