

## **ABSTRACT: 2014 ELAM Institutional Action Project Poster Symposium**

**Project Title:** Building the Duke Autism and Brain Development Center

**Name and Institution:** Helen Link Egger MD, Duke University Medical Center

**Collaborators:** Geraldine Dawson PhD, Holly Lisanby MD, Joanne Kurtzberg MD, Michael Platt PhD, Guillermo Sapiro PhD, Robert Calderbank, PhD, Provost Peter Lange PhD, President Richard Brodhead PhD, Dean Nancy Andrews MD PhD.

**Background, Challenge or Opportunity:** In June of 2011 I became Chief of Child and Adolescent Psychiatry at Duke and launched the Duke Integrated Pediatric Mental Health Initiative (IPMH). From reorganizing the Division into a multi-disciplinary faculty of 70 to obtaining a 1.6 million dollar grant from The Duke Endowment for IPMH, we have made enormous strides. A key goal of the IPMH Initiative is to build a world-class autism program at Duke. While Duke has clinicians seeing children with autism and world-class basic science research in autism, there has been no program or leader integrating clinical, scientific, and educational autism work at Duke.

**Purpose/Objectives:** My ELAM IAP was to develop a collaborative strategic plan for the Duke Center for Autism and Brain Development, an interdisciplinary scientific, clinical and educational center. Duke University has a deep institutional commitment to interdisciplinary collaboration and investment in innovative initiatives that will have real impact on the community ("Knowledge in the Service of Society). Our objective is to harness Duke's culture of collaboration and innovation to create an Autism Center that is truly interdisciplinary, innovative, and cross-university. Our broad mission is to transform how we identify, monitor, and treat autism and other childhood developmental and neuropsychiatric disorders through interdisciplinary clinical care, translational neuroscience research, and the development of innovative approaches to assessment and treatment.

**Methods/Approach:** To become a leading autism center of excellence, Duke needed to (1) recruit a recognized leader in autism; (2) build a team and develop a strategic plan for the Center; (3) develop awareness about autism and pediatric mental health among leaders at the Departmental, Hospital, and University levels; and (4) actively seek internal and external funding, as well as philanthropic support to build the Center.

**Outcomes and Evaluation Strategy:** We have achieved major milestones between August 2013 and March 2014. We (1) recruited Geraldine Dawson PhD, an international-renowned autism research scientist and clinician who is an expert in autism, brain development and neuroplasticity; (2) delivered an IPMH Strategic Plan to the Chairs of Psychiatry and Pediatrics with a sub-group report on autism; (3) submitted a strategic plan for The Duke Autism and Brain Development Center to the Chancellor of Duke Medicine; (3) applied for and were awarded internal, federal and industry grant funding (total ~1.5 million); and (4) Dr. Dawson and Joanne Kurtzberg, Director of the Duke Pediatric Stem Cell Program, were awarded a five year 30 million dollar foundation grant to establish a program to develop stem cell treatments for autism. I am a co-investigator of this novel program of research. I also plan to lead the Innovation and Discovery Core within the Autism Center.

# Building the Duke Autism and Brain Development Center

Helen Link Egger MD,

Chief, Division of Child and Family Mental Health  
Duke University Medical Center



## 1 Challenge and Opportunity

### Phase 1 of the Integrated Pediatric Mental Health (IPMH) Initiative (2011-2013) included

- Reorganization of the Division into a multi-disciplinary faculty of 70 and organization of clinical services
- \$1.6 million dollar grant from The Duke Endowment for IPMH
- **Phase 2 of the IPMH Initiative (2013-2017) includes**
  - Establish the Duke Autism Center

## 2 Purpose/Objectives

To develop and launch a collaborative strategic plan to establish the Duke Center for Autism and Brain Development

## 3 Methods/Approach

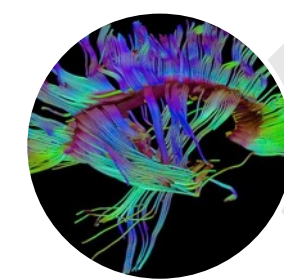
Steps to build the Duke Autism Center

- Recruit a recognized leader in autism
- Build a team and develop a mission statement and strategic plan
- Develop awareness about autism among Duke leaders and faculty
- Identify internal and external funding, including philanthropic support

## Figure 1. Duke's Autism Program: Four part mission



**Clinical** – Provide exceptional, coordinated, inter-disciplinary care that is compassionate and responsive to the needs of each person and family



**Research** – Conduct ground-breaking translational research spanning basic to applied to dissemination and implementation science



**Educational** – Inspire, educate and train the next generation of researchers and practitioners, both in the US and world-wide



**Policy** – Partner with the community to impact national and international policy to improve the lives of persons with autism and their families

## 4 Outcomes and Evaluation Strategy

- Our strategic plan for the Duke Autism Center emerged from the Duke IPMH Initiative
- We recruited **Geraldine Dawson PhD**, founder of the University of Washington Autism Center and the first Chief Science Officer for Autism Speaks, the largest autism science and advocacy organization, to join Duke faculty
- **Figure 1** summarizes the four part mission of the Duke Autism Center.
- **Figure 2** shows the major milestones we have achieved from July 2013-April 2014

## 5 Summary/Conclusions

- Collaborative leadership, collaborative strategic planning, and interdisciplinary, cross-university integration enabled us to make significant progress toward building the center in 9 months.
- Next steps are outlined in our 3 year strategic plan.

## 6 Discussion

- Phase 1 of the IPMH Initiative was the foundation for the autism initiative
- Three keys to our success include
  - (1) the recruitment of the right leader
  - (2) a collaborative leadership partnership between Dr. Dawson and Dr. Egger
  - (3) Cross-university collaboration and strategic planning aligned with the strategic aims of the IPMH Initiative and the strategic aims of our partners.
- **Impact**
  - We are on the road toward building the Duke Autism and Brain Development Center to be a world-class clinical, scientific, and educational leader in autism

**March 2014**  
Awarded \$ 35 million 5 year grant to establish stem cell autism treatment program  
Collaboration with Dr. Kurtzberg, Chief Division of Pediatric Blood and Marrow Transplantation

**March 2014**  
Awarded DOD grant: autism and anxiety in preschoolers

**March 2014**  
Awarded industry grant for pilot study of use of cord blood to treat autism in preschoolers

**February 2014**  
Awarded internal Duke grant for innovative approaches to autism screening in primary care with Pratt Engineering

**March 2014 Present**  
3 year plan for the Duke Autism and Brain Development Center to Chancellor Dzau's at his request

**August 2013**  
Geraldine Dawson PhD joins the Duke faculty to be Duke clinical and scientific autism leader

**November 2013**  
The IPMH Workgroup Report and Source Book submitted to Chairs of Psychiatry and Pediatrics. Includes autism report

### Collaborators and Mentors

Geraldine Dawson PhD, Holly Lisanby MD, Ira Cheifetz MD, Nicole Heilbron PhD, Christian Mauro PhD, Joanne Kurtzberg MD, Michael Platt PhD, Guillermo Sapiro PhD, Robert Calderbank PhD, Chancellor Dzau, Provost Peter Lange, President Richard Brodhead, Dean Nancy Andrews  
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