PET MRI Technology

- Positron Emission Tomography/Magnetic Resonance Imaging
- Combining PET and MRI offers complementary imaging perspectives
- Advantages of simultaneous use of these tools in a single setting
- Supports patient safety concept in Radiology known as “Image Gently” in which the minimum amount of radiation is used. PET/MR has a much lower radiation impact than PET/CT currently available in Delaware
Population Impact

- Providing new technology targeted to reach more than 600 patients by the third year after acquisition including, but not limited to, the following areas of focus:
  - Clinical Neurosciences
    - Neurology
      - Epilepsy and neurodevelopmental disorders such as Autism Spectrum Disorders.
    - Neurosurgery
      - Epilepsy Surgery Program
  - Clinical Oncology
  - Clinical Research
Clinical Benefits

- Provides access to technology currently not available in the State of Delaware
- Improves the quality of the studies as well as reduce the amount of lifetime radiation to which they are exposed, especially for our patients require multiple medical imaging studies throughout their lives
- Reduces need for other invasive diagnostic studies
- Reduces number of studies requiring sedation or anesthesia
- Assists us in developing new, more efficient diagnostic procedures for children
Other Benefits

- Patients and families will realize cost savings and convenience by limiting travel, expense, and stress associated with leaving Delaware for care.
- Keeps Delaware’s healthcare funds within the state.
- Will bring out-of-state referrals for Pediatric PET/MRI.

Research Implications

- Draw for Graduate and Undergraduate Programs for Delaware Universities.
- Creation of new jobs in areas of construction and infrastructure as well as professional staff and skilled technologists.
Financing

- Projected capital expenditure for the purchase of the PET/MR scanner of approximately $5.5 million.

- Project will be funded through existing capital and will not result in additional debt.
Service Location

- Located at the Nemours/A.I. duPont Hospital for Children
- Permanently sited within the Medical Imaging Suite adjacent to existing Diagnostic Imaging, MRI and Nuclear Medicine Modalities
Questions?