Synchronicity – Finding Meaningful Coincidence The Bucknell – Geisinger Initiatives

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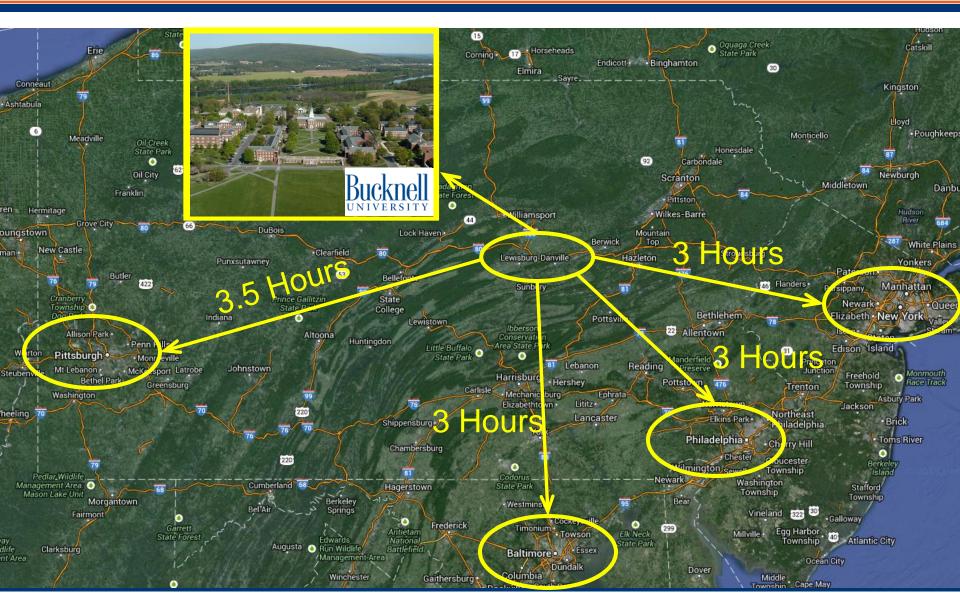
Department of Biomedical Engineering







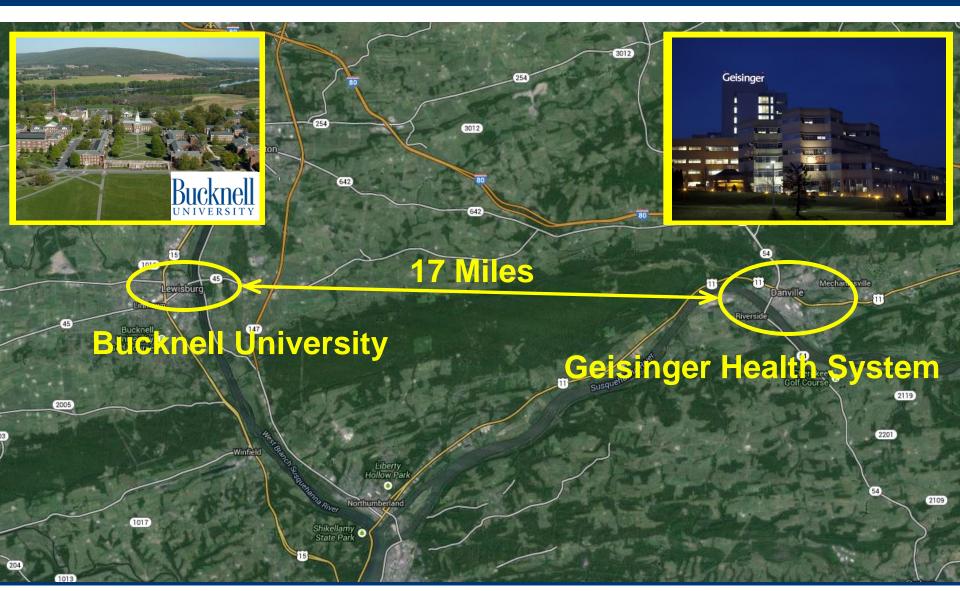




SYNCHRONIZED ENGINEERING COLLABORATIONS:
THE BUCKNELL – GEISINGER INITIATIVES

GEISINGER Human Health Collaborations Bucknell UNIVERSITY







Geisinger Health System



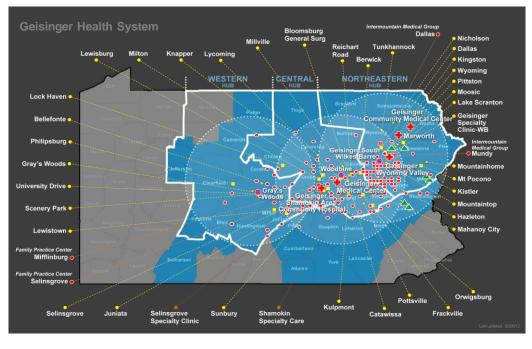
Facilities & Physicians:

- 44 county service with 2.6M patient population
- 4 major hospital centers& 2 community hospitals
- 77k admissions / 1800 beds
- 1000 physicians &450 resident physicians

Managed Care Plans:

- 322k members
 (including 68k Medicare Advantage members)
- 34k contracted providers/facilities
- 43 PA counties







Syncronicity?



Curricular & Capstone

- BME
- ME
- ECE
- CHEG

Interdisciplinary Projects

- Medical Device Development Program
- IDEAS Senior Design

Collaborative Research Initiatives

- BU-GHS Research Initiative
- Ciffolillo Heathcare Innovation Funds
- Costa Healthcare Research

Partnering with

Clinical Mentors

- General surgery
- Anesthesiology
- Orthopaedics
- etc.

Administrative Professionals

- Clinical Innovation & Process Transformation
- Tech. Transfer
- Clinical Research

What complementary pathways exist?

Do programs leverage unique attributes in support of each other?



Collaborative Partnerships



CurricularlyDriven Innovation Programs

Collaborative R&D / Scientific Advancement

- BME Dept. Capstone
- Various dept. capstones
- Various dept. electives

Develop & evaluate early stage health-care technology

- Medical Device Design Program
- KEEN IDEAS (interdisciplinary)
 Senior Design

Hybrid experiential learning & output driven

- BU-GHS
 Research Initiative
- Ciffilillo & Costa (college-wide)Funds

Most highlyresourced & output driven



Tech. Development Pathway



