



The MassEcon Annual Conference

Eds, Meds, and Industry: What's Next for this Critical Partnership?

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The MassEcon Annual Conference: *The Eds, Meds, and Industry Partnership*

Key Question

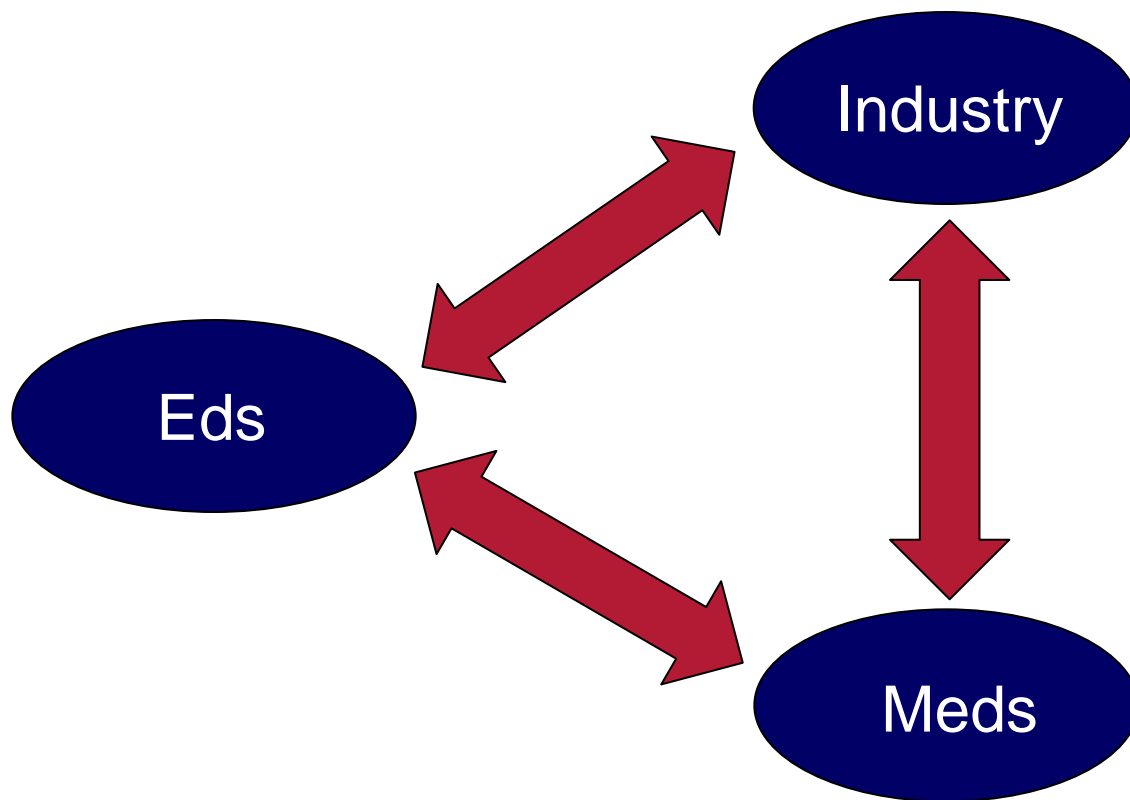
How do we create a comprehensive, dynamic,
and highly effective ecosystem in which:

$$1 + 1 + 1 = 10$$

Agenda Items:

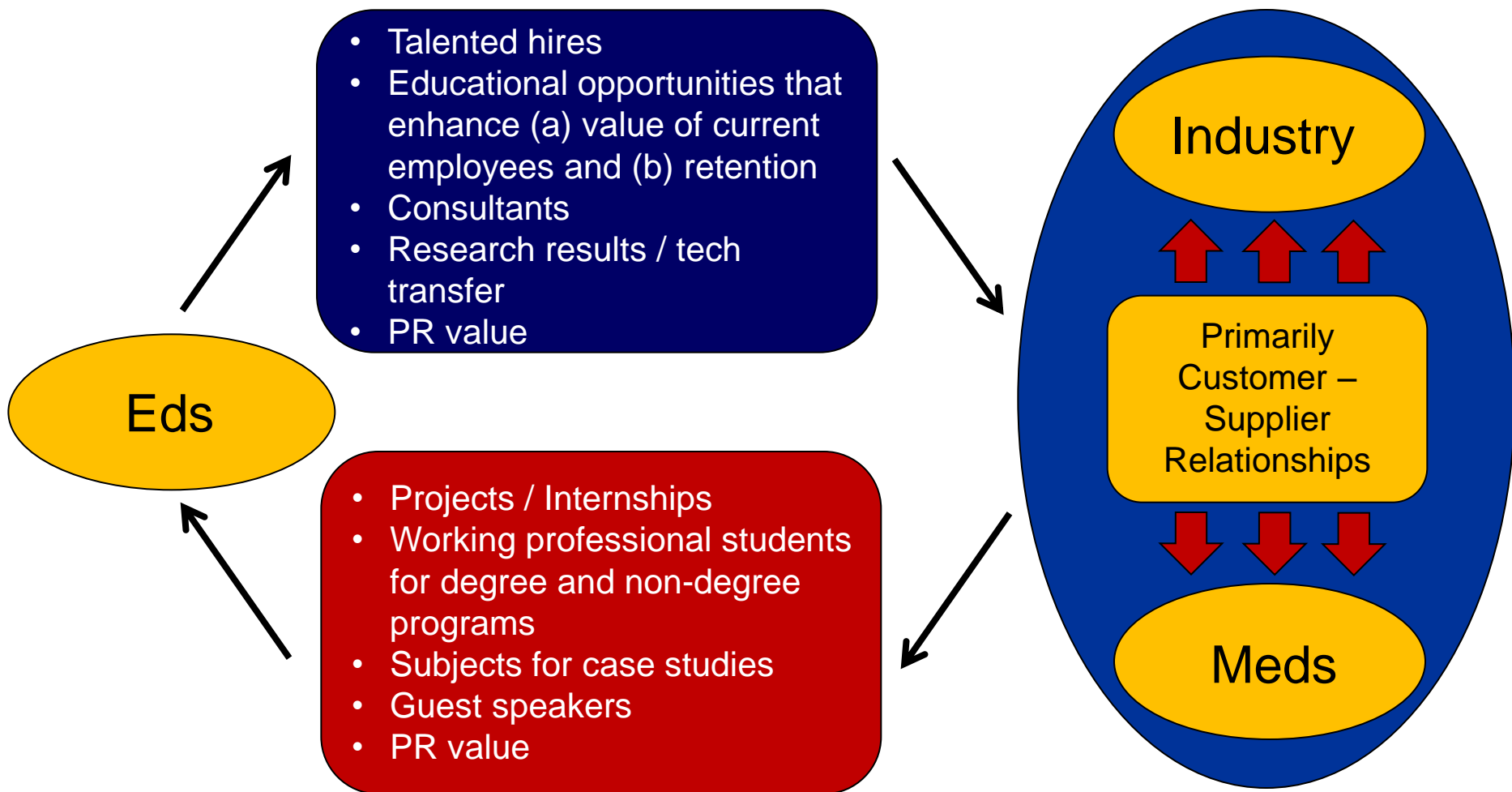
- Framework
- Case Examples
- What's next?

A Framework for an Effective Eds / Meds / Industry Partnership



The value exchange must be of sufficient intensity to make it worth engaging,
and the ROI needs to be significantly positive.

A Framework for an Effective Eds / Meds / Industry Partnership



Case Study #1: Gateway Park

- Gateway Park Life Sciences and Bioengineering Center (\$50+MM Investment)
- Strong partnerships with UMass Medical, UMass Memorial, and Fallon Healthcare
- Ongoing research funded by NSF, NIH, Veteran's Administration



- Biological imaging
- Molecular sensor technology
- Tissue regeneration and repair
- Stem cell therapeutics
- Biomaterial development
- Neuroprosthetic devices
- Bioprocess engineering
- Plant science and engineering
- Applied molecular genetics
- Biofuels
- Independent aging through technology and science



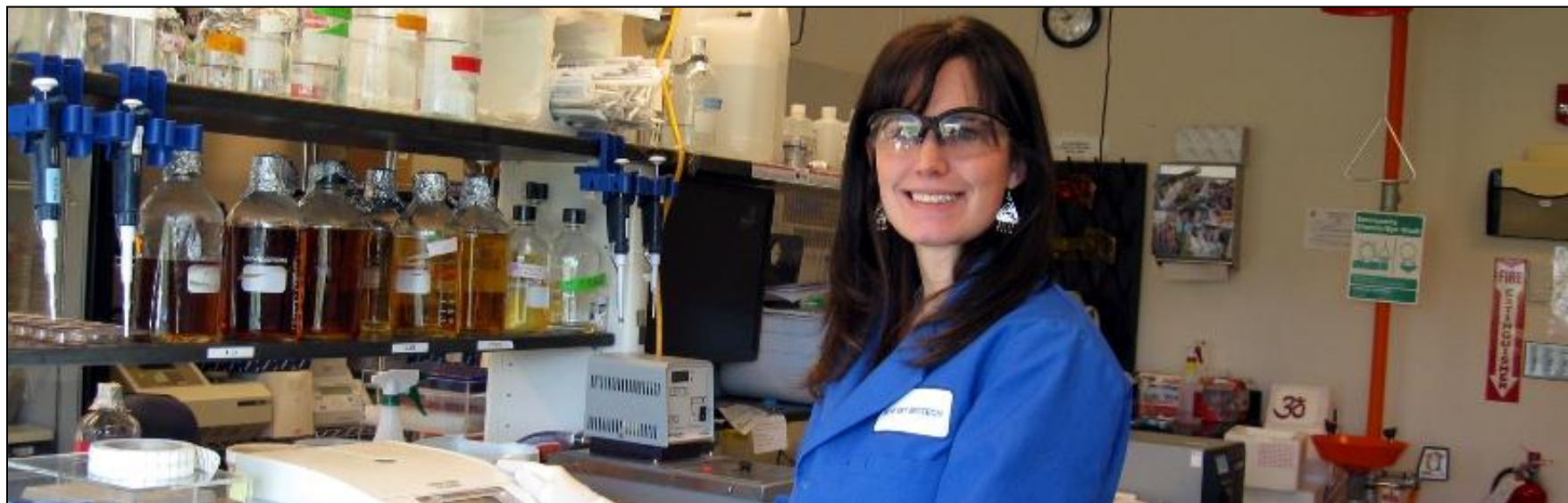
Future home of the Bio-manufacturing Education & Training Center and other Life Sciences activities Fall 2012.

Case Study #2: A WPI Major Qualifying Project (MQP)



**Developing Benchmarks
for the Life Science Incubation Industry**

**Submitted to:
Massachusetts Biomedical Initiatives**



Case Study #3: Tech Transfer -- New Business Formation

- ❖ **Advanced Body Sensing** – wearable physiological sensors
- ❖ **Advanced Surface Technologies** – platform nanotechnology
- ❖ **ProcessIQ** – Infra-red non-destructive evaluation
- ❖ **ImagiSonix** – ultrasound training
- ❖ **CellThera** – cell de-differentiation/regenerative tissue applications
- ❖ **InsightMRI** – high performance MRI coils
- ❖ **VivaScan** – non-invasive glucose monitor
- ❖ **Securos** – veterinary orthopedic supports
- ❖ **Five Star Technologies** – semiconductor materials processing
- ❖ **Critical Perfusion/Innovamedica** – tissue perfusion monitor

InsightMRI

Reinhold Ludwig Ph.D.
Chief Scientific Officer and
Co-founder of InsightMRI.



**Dr. Ludwig is a WPI Professor
of Electrical and Computer
Engineering with joint appt
in Biomedical Engineering**



Center for e-Health Innovation and Process Transformation

\$2.25M in research grants from the National Science Foundation and the Veterans Administration



PARTNERS

- **UMass Medical**
- **UMass Memorial Health Care**
- **Fallon Community Health Plan**
- **Family Health Center of Worcester**
- **Veteran's Administration (New England Region)**

Innovation: The New Driver of Economic Development



***“The Knowledge Economy
as we know it
is being eclipsed by
something new – call it the
Creativity Economy.
The game is changing.
It is about creativity,
imagination, and above all,
innovation.” 1/***

*1/ Get Creative: How to Build Innovative Companies,
Business Week Special Report*

Eds, Meds, and Industry: What's Next for this Critical Partnership?

Discovery

Invention

Innovation

Entrepreneurship

THE
ECONOMIC
MARKET-
PLACE

Key Success
Factors

Sustained Leadership in Eds, Meds and Industry Partners

Achieving critical mass → sustainability

The super-fluid flow of talent

Commitment to continuing innovation.
The creation and diffusion of intellectual property.

Acquisition / commitment of sufficient resources