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# PLENARY PANEL

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**Triple Helix Summit**  
**Global Linkages / Integration**  
Honolulu, Hawaii  
February 12-13, 2007

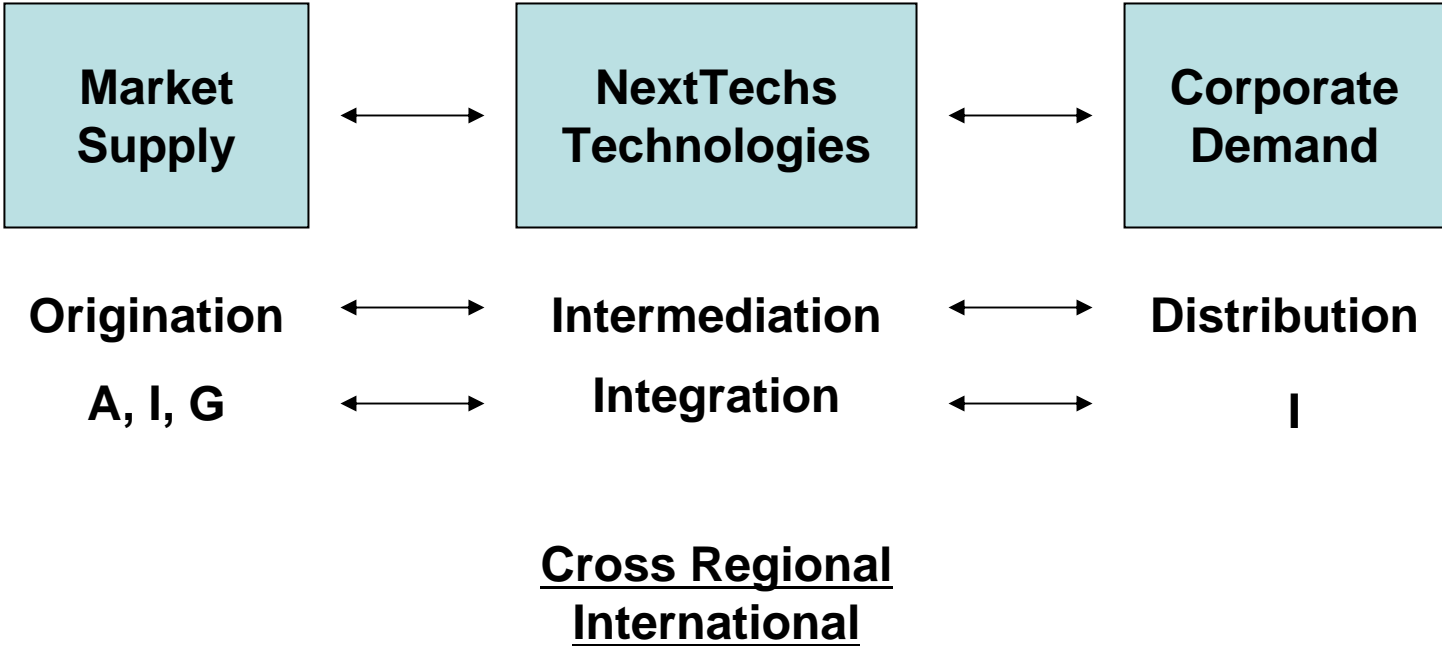
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**Michael E. Fitzgerald**



# NextTechs Technologies LLC

## Demand Focused, Information Business



# **NextTechs Technologies LLC**

## **Global Corporate Technology Intermediation**

**Business Basic** **Demand Pull, not Supply Push**

**Science and Technology Advisory Board** **20**

**Corporate Relationships** **300 Direct**  
**5,700 Indirect**  
**25% of Demand from Overseas**

**Direct Corporate Relationships** **41 Industries**  
**141 Research Disciplines**

**Primary Origination Relationships** **52**

**Strategic Relationships** **United States (3), European Union (1)**  
**Japan (1), Latin / South America (1)**  
**Saudi Arabia (Pending)**

# **NextTechs Technologies LLC Science and Technology Advisory Board**

<b>Academia</b>	<b>8</b>	<b>40%</b>
<b>Industry</b>	<b>7</b>	<b>35%</b>
<b>Government</b>	<b><u>5</u></b>	<b><u>25%</u></b>
<b>Total</b>	<b>20</b>	<b>100%</b>

**An integrated approach to A,I,G is critical to our  
business success.**

## Market Supply / Origination Participants

<b>Federal Agency (G)</b>	<b>NASA, DOE, NIST, etc.</b>
<b>Public / Private Research Entities (A, I, G)</b>	<b>Oxford University, SRI I'ntl, Faraday Advance, RTI</b>
<b>Universities (A, G)</b>	<b>Land Grants (ED), BYU, Cornell</b>
<b>Corporations (I)</b>	<b>Stranded / Non Core, Research and Development Investment</b>
<b>Economic Development</b>	<b>LARTA Institute, NEOS, UK DTI</b>

**Complex, Regional, Technology Development  
Competition, But Demand Is Global**

Origination Markets are Inefficient, Non Homogenous

# **Technology Supply Inefficiencies**

- 1) Cottage Industry, Regional (State) and/or Sector Focus**
- 2) Tends to Define by Center of Excellence: Biotechnology, Imaging Sciences, as opposed to Building Blocks**
- 3) Do not market their offerings!!! Little communication w/ I**
- 4) Many State / Government Seed Funds / 501 c3 First Dollar Investors**
- 5) But very little corporate integration on a technology by technology basis**

# Regional Supply to Global Demand

## Technology

## Company

**Next generation TCP technology  
(UK)**

**General Dynamics C4 Systems - US**

**Single crystal piezoelectrics  
(Pennsylvania)**

**Dyno Nobel – Australia**

**Heads Up telepresence display  
(Baltimore)**

**L3 Communications – Los Angeles**

**Cool suit thermal insulation  
(Navair – Md.)**

**Caterpillar - UK**

**Collision avoidance sensors  
(France)**

**Hewlett-Packard - Oregon**

**Geo-spatial based sensors  
(Md.)**

**Cargill – Brazil**

**Self repairing flight control system  
(Tulsa)**

**Boeing / P&G - US**

**Cancer diagnostic proteomics  
(Cleveland)**

**Roche - Switzerland**



# Corporate Demand Characteristics

- 1) Have the Need**
- 2) Have the Markets**
- 3) Have the Risk Appetite**
- 4) Have the Capital Base / Budget**
- 5) Have the Technical Understanding**

## Two Corporate Funding Sources

### A) Corporate venture capital arms – trend based

- Motorola, Intel, J&J
- 1H06 = \$1.0 billion
  - 20% of deals but 60% of IPOs (NVCA/TF)
- Later stage, co investor, generally not development capital

### B) Operating groups and divisions – need based

- Technology Application Decisions made here: The majority of corporate, early stage direct investment is here. Know specifically what they want. Open to suggestion. Everything is relationship / production driven.

## B Is NextTechs' Focus

# From Corporate Demand to Market Supply

## 17 December, 2006 Searches\*

### Materials Science / Chemistry

1. High Expansion/Elongation Material
2. New Polymer Development to Replace Existing Elastomers
3. Self-Healing and Abrasion Resistant Polymer Seal Development
4. Structural Adhesives for Wood Bonding with Exceptional Heat Resistance
5. New or Improved Fire Resistant Resins-Performance with Strength and Processibility
6. Impact-Resistant, Heat-Resistant Structural Adhesive

### Food Chemistry

7. Inhibition of Moisture Migration between Food Components
8. Low Water Activity and Moisture Savory Filling Development

### Medical / Healthcare /Biology

9. Creating Bright & Flat Optical Effects on Biological Substrates
10. Microneedle Liquid Delivery System
11. Skin Chemical Absorption Models and Assay Technologies
12. Sustaining Life In Vitro
13. Color Compound Formation from Protein/Amino Acid Reaction for Skin Tanning Application
14. Facial Contour

### Engineering / Environmental

15. Alternative Technologies for Storing Mechanical Energy
16. Non-chemical Control of Microbiological Activity in Industrial Water Systems
17. Personal Climate Control

\* Searches performed for companies like Caterpillar, L3 Communications, Roche, Eli Lilly, Ashland, Inc., Seimens, Sud-Chemie, Kraft, BAE Systems, etc.

## **December Searches Now Closed Results**

**34 Submissions for 15 of 17 searches**

**69% domestic, 31% non US**

**Distribution: 32% Economic Development (A,G)  
29% SBIR (G)  
23% Corporate (I)  
12% University Spin Out (A,G)  
4% Early Stage VC (I)**

# **Global Corporate Integration**

## **1) Additional, Very Powerful Support**

- Joint Development Agreements
- Marketing Arrangements
- Licensing Contracts
- Other Business Development Activities

## **2) Economic Development Implications**

- Technology Developed Faster
- Markets Established more Readily
- Sales Achieved Sooner
- Enhanced Valuations
- Built in liquidity event

# Corporate Technology Acquisition Rules

- 1) Corporate Technology Application a Function of Need
- 2) Outsourcing a Function of Market and Product Life Cycles
  - semiconductors vs. automotive manufacturing
- 3) Decentralized Acquisition a Function of Capital Base
- 4) Multi-layered / Multiple Industries

Corporate Demand Sectors Are Complex.  
Single Entity, Multiple Industries and Varied Global  
Markets

Demand Markets are Equally Inefficient, Non  
Homogenous

# NextTechs Technologies LLC

## Corporate Technology Intermediation

### Demand Focused



31 Countries, 52  
Entities

Direct 300+, 5,700 Indirect

**Origination**

**Global  
Integration**

**Distribution**

### Functions

#### NextTechs

Communications / Awareness  
Market Application / Definition  
Pricing / Negotiations  
Transaction Execution

#### Triple Helix

Information Sharing  
Knowledge Application  
Innovation Transfer  
Base Line for Value Creation

## **NextTechs Cumulative Experience Summary**

- 1) The development and application of new knowledge is a complex, global endeavor. European Union (11) Asia (8) Latin & South America (8), Africa (4).**
- 2) The Triple Helix approach, integrating academia, industry and government, will be the fundamental driver behind building tomorrow's economies. US, UK, Sweden, Finland, Israel, Australia, Taiwan, Switzerland, Hong Kong, France, Spain, Chile, etc.**
- 3) Tomorrow's economy will require new and expanded networks with more, rather than less, convergence between knowledge sets. Direct Relationships (300+), Market Origination (52)**
- 4) Connectivity, awareness are the key to higher orders of knowledge application.**
- 5) Commerce is only one of the disciplines through which tomorrow will be achieved.**



**Thank You**