Agenda Item 4

New Initiatives and Start-Up Deals through UM Ventures at UMCP
TOPIC: New Initiatives and Start-Up Deals through UM Ventures at UMCP (information item)

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: June 11, 2015

SUMMARY: The Committee will be briefed on new initiatives and start-up deals through UM Ventures at UMCP. UM Ventures has seen a strong increase in technology transfer results in FY 2014. Invention disclosures grew by 39% to 366; licenses executed grew by 24% to 51; and licensing revenues grew by 33% to $2.3 million.

ALTERNATIVE(S): This item is for information purposes.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: This item is for information purposes.

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Joseph F. Vivona (301) 445-2783
Board of Regents
Committee on Economic Development and Technology Commercialization

Gayatri Varma, Ph.D.
Executive Director
Office of Technology Commercialization
UM Ventures
University of Maryland

June 11, 2015
The criteria for tenure and promotion in the University of Maryland System are:
• (1) teaching effectiveness, including student advising;
• (2) relevant service to the community, profession, and institution.
• (3) research, scholarship, and,
• (4) in appropriate areas, creative activities or other activities that result in the
generation and application of intellectual property through technology transfer.
Who is an Entrepreneur? Maryland definition

A person who is:

1. **Not constrained** by current resources;
2. Accepting **risk** to establish a **new enterprise**;
3. **Creating more value** than is consumed.
Entrepreneurial Ecosystem

- Office of Technology Commercialization (OTC)
- Maryland Technology Enterprise Institute (MTech)
- Dingman Center for Entrepreneurship
- Small Business Development Center (SBDC)
OTC Staffing

Biotech/IP

IP

Material Sc. & Engg/ Business

Biotech/IP

Computer Sc./ Business

IP

Physics/ Business

Medical Sciences

Computer Sc./Legal

Elec. Engg/ Entrepreneurship
MTech Ventures Staffing

Management/Venture Investment

Venture Investment

Global Investments

Cybersecurity
EIR & Site Miners

Site Miners

Harry Geller
Lou Cantolupo
Dan Lathrop

EIR

Doug Humphrey
Programs

- Seed Grants
  - 30% increase in applicants
- Bridge Loans
Technology Transfer Numbers

Invention Disclosures

- 66% increase over 3 years

License Agreements

- 50% increase over 3 years
FlexEl’s batteries are designed to be thin and flexible. The electrodes are designed for performance and capacity retention. The choice of chemicals and components makes the product a cheaper and safer alternative to Li-Ion in disposable devices. The technology is also bio-compatible. The technology uses proven chemicals, parts and manufacturing techniques so that production scale-up is readily managed.

Tier 1 Start up

Number of Employees: 12

Where are they now?
Uses a powerful new platform of technologies for greatly expanding the range of advanced performance materials and specialty chemicals that can be produced from readily available and inexpensive commodity feedstocks derived from the oil and gas petrochemical industry.

Tier 1 Start up

Number of Employees: 3

Where are they now?
SentiMetrix offers cutting-edge data science and social analytics solutions to address the "big data" needs of commercial companies and government agencies. SentiMetrix has built an array of technology-based solutions, focusing on the near real-time analysis of huge quantities of complex data in multiple languages. From national security to elections to marketing to medical - our solutions are being used to solve problems in many market segments.

Tier 1 Start up

Number of Employees: 7

Where are they now?

Tier 1 Start up

Number of Employees: 7

Where are they now?
Redox will provide distributed power generation systems for commercial, industrial, residential, military and mobile applications. With an advanced solid oxide fuel cell technology they are able to drastically reduce the size, weight and the cost of reliable on-site generation of electricity while also providing high quality heat. The modular component nature of the products lends itself to constructing systems with a broad range of power generation capacities and fuel options.

Tier 2 Start up

Number of Employees: 9

Where are they now?
Challenges

Space

First round of Institutional Investment
Next Steps

Management of Equity