MINUTES
WORKFORCE, RESEARCH AND ECONOMIC DEVELOPMENT COMMITTEE

Wednesday, March 5, 2008

The Committee convened at 1:10 p.m.

Committee members present:  Lila Taylor, Chair, Lynn Hamilton, and Janine Pease.

Others present: Regent Hamilton, Regent Melvin, Regent Buchanan, and Regent Pease; Commissioner Stearns, Associate Commissioner Trevor, Chief Legal Counsel Swift, Kevin McRae, Frieda Houser, Tom Gibson, Brad Eldredge, Jan Clinard, Rene Dubay, Arlene Parisot, and Bruce Marks, all of OCHE; President Dennison, Bill Muse, Bill Johnston, Rosi Keller, Bob Durerger, Dan Dwyer, and Jim Foley, all of UM; Provost Dooley, Allen Yarnell, Cathy Conover, Rebecca Mahurin, and faculty representative Shannon Taylor, all of MSU; Chancellor Gilmore, and Maggie Peterson, of Montana Tech; Chancellor Groseth, MSU-N; Chancellor Storey, Susan Briggs, and Karl Ulrich, UM-W; Chancellor Sexton, Terry Iverson, and Dan Carter of MSU-B; Dean Moe, and MaryEllen Baukol of Great Falls College of Technology; Dean Bingham and Russ Fillner of Helena College of Technology; Education Policy Advisor Jan Lombardi, and Chief Business Development Officer Evan Barrett; Alan Peura Legislative Fiscal Division; President Stefani Hicswa, President Jane Karas and Chuck Jensen, and President Cargill of the community colleges; Marco Ferro of MEA-MFT.

INFORMATION

Research & Technology Transfer Report.

This information comes as a result of a 2007 Legislative Audit.

Dan Dwyer, VP for Research and Commercialization at The University of Montana-Missoula reported:

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<tr>
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<th>FY2006</th>
<th>FY2007</th>
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<tbody>
<tr>
<td>R&amp;D Expenditures</td>
<td>$60,070,832</td>
<td>$62,119,445</td>
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<tr>
<td>Research Salaries (Montana)</td>
<td>$30,759,085</td>
<td>$32,492,344</td>
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<tr>
<td>Purchased GoodslServices (Montana)</td>
<td>$4,805,667</td>
<td>$4,969,556</td>
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<tr>
<td>Total Direct Economic Impact</td>
<td>$71,129,504</td>
<td>$74,923,800</td>
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<tr>
<td>Number of Jobs (average annual salaries)</td>
<td>123</td>
<td></td>
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<tr>
<td>Researchers ($65,488)</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>Contract Professionals ($61,627)</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Classified ($34,544)</td>
<td>89</td>
<td></td>
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<tr>
<td>Contract Administrators ($57,941)</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Graduate Assistants ($19,000)</td>
<td>122</td>
<td></td>
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<tr>
<td>Undergraduate Students ($11,000)</td>
<td>104</td>
<td></td>
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<tr>
<td>Temporary Staff ($28,827)</td>
<td>75</td>
<td></td>
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<tr>
<td>Total Jobs</td>
<td>625</td>
<td></td>
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<tr>
<td>Intellectual Property</td>
<td></td>
<td></td>
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<tr>
<td>US Patents Issued (active)</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Active Licenses (total)</td>
<td>24</td>
<td></td>
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<tr>
<td>Active Licenses (MT companies)</td>
<td>15</td>
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Products Based on UM Licenses

Products Currently Produced and Sold

- PSI: high-affinity/capacity, stabile resins to capture heavy metals from water. 4-5 products are currently being sold.
- Sunburst Sensors: pressure resistant, self-calibrating sensors used to measure CO2 in deep oceans and lakes. 2 models are being sold.
- Lonza, BV: arabinogalactan (AG) used as a food additive, in drug delivery, and modified as an
immunostimulant. 2 types of AG are currently on the market.

- Roscoe Steel- a platform system to assist wildlife movement across (under) highways. 1 product.

Products Under Development

- S&K Electronics and Bee Alert Technologies are developing conditioning and monitoring systems for bees. 3 products

Products in Research Mode

- Big Sky Biotech: a virus system to deliver human genes. 1 product
- Transynaptic Technologies: small molecules to enhance nerve transmission. 3-4 products
- GT Neuropharma: small molecules to image or to inhibit neurotransporters. 3 products.

Examples of UM Intellectual Property-Dependent Spin-Off Companies

- Bee Alert Technologies, Inc.: products to condition and to monitor conditioned bees; lactated in Missoula, MT; 6-7 employees; $2-3 million R&D expenditures per year.
- Purity Systems, Inc.: products to remove heavy metals from water; located in Missoula, MT; 3-4 employees in Missoula; currently about $400,000 R&D expenditures per year in Montana.
- Sunburst Sensors: self calibrating sensors; 2-3 employees; about $250,000 R&D expenditures per year.

Other Companies Influenced or Enhanced by UM

- Visual Learning Systems: digital image recognition software; started in UM Computer Science Department; in Missoula, MT; about 20 employees.
- Endobiologics: vaccines and vaccine delivery; from the Division of Biological Sciences; in Missoula, T; 7 employees.
- Aquila Vision: remote sensing and satellite tracking methodology; from the School of Forestry and Research Administration; in Missoula; 6 employees.
- GCS ResearchfTerra Echos: software for geospatial analyses and perimeter/boarder security technology; in Missoula; 20 employees (12 in MT).

Becky Mahurin, Director of Technology Transfer, MSU reported:

- In the past year, they had over $100 mil in expenditures
  - Of that $66 mil was for salaries
  - $5 mil supported student jobs
- There were 30 inventions this past year
- At the end of the last FY they had 130 licenses
  - 81 of those were with Montana companies
- They had more than 30 start-up companies in Montana in the last ten years
  - More than 12 of those were established by MSU graduate students
  - Ligocyte Pharmaceuticals is one of those
    - Employs over 50 people
    - Average annual salary exceeds $50,000
    - Employs MSU interns from bio-tech programs
    - Employs graduates from both MSU and UM
    - Work collaboratively with MSU on over $10 mil in research efforts
    - Licensed 7 technologies from MSU
- MSU has 87 patents issued
- Long term plan is to maintain at least 50% of licensees as Montana companies (currently have 62% as Montana companies)

PUBLIC COMMENT

There was no public comment.

The committee adjourned at 1:25 p.m.