Testimony to the

Higher Education Funding Committee

by

Michael Moore, Associate Vice President, IP, Commercialization, and Economic Development, University of North Dakota

April 22, 2014

Chairman Sanford, Vice Chair Krebsbach and committee members:

For the record, my name is Michael Moore and I am the Associate Vice President for IP, Commercialization and Economic Development at the University of North Dakota. Thank you for the opportunity to talk to you again about technology commercialization efforts at UND.

The last time I addressed the Committee, we discussed our program from many angles. Today, I am here to specifically address the question the Committee has posed about licensing revenue from our program. I will discuss those figures, and I wanted to begin by describing a couple of factors that will help put this data in perspective.

1) The first is that technology commercialization from the research division at UND is quite young and very much at an adolescent stage. This effort began at UND about 12 years ago, but only became a more highly focused initiative with the addition of my position. I came to UND to lead these efforts in October of 2010.

2) Secondly, IP developed at the EERC is not included in my data, as there is a process that precedes my time at UND whereby the EERC is allowed to manage their own IP. With research numbers around $30 to $35 million per year, the EERC produces reasonable amounts of IP each year.

The data I am presenting today is from the research activities at UND that fall under the Research division.

Since 2010, my office at UND has gone from zero licensing revenue to 55K in 2011, 110K in 2012 and 148K in 2013. Our challenge is to continue to develop a culture of invention disclosure, which I feel we have made significant progress on (our invention disclosure rate has gone from just a couple of disclosures annually to 25-30 per year) and to work hard to monetize our best IP. I do appreciate programs from the state such as Research North Dakota, which will help us have additional opportunities. As long as our research enterprise keeps growing and we continue to foster an innovative culture, we should have the opportunity to commercialize more technology developed at UND. Thank you for this opportunity and I would be happy to answer any questions you may have.

Intellectual Property

Higher Ed Funding Committee,
April 2014

Michael F. Moore, CLP
Associate VP, IP Commercialization & Economic Development

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UND Research

- 2012-2013 research expenditures of $89M
- Strengths
  - Energy & Geology (Bakken)
    - Petroleum Engineering
    - Harold Hamm School of Geology
    - EERC
  - Aviation, in particular UAS
  - Medical School, Life Sciences

- UND is still fairly new to commercializing research

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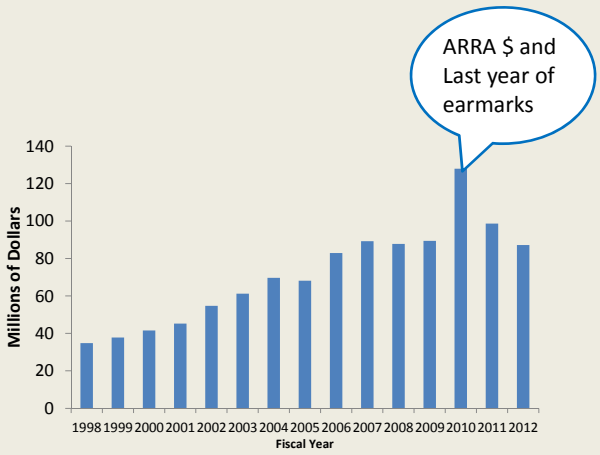
UND External Awards



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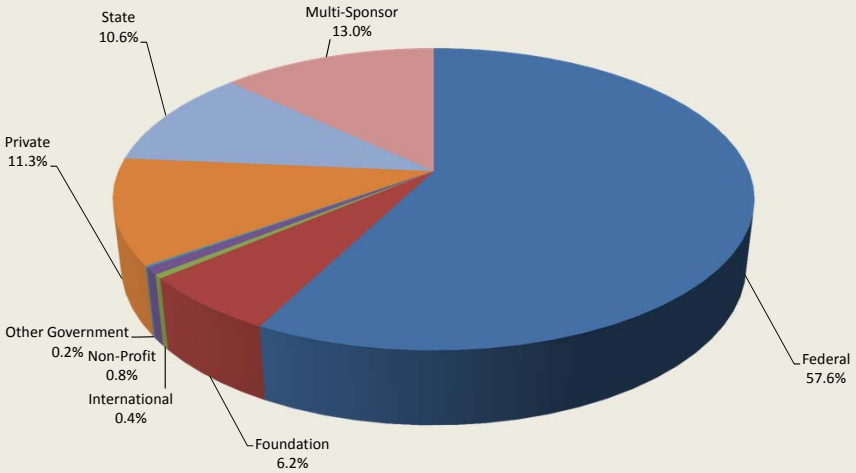
UND External Funding Sources, FY12



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Technology Commercialization @ UND

- IP Commercialization & Economic Development Office
  - Under the Vice President for Research
  - 3.5 FTEs
- Internal operation at UND
  - Not a separate foundation
  - Both internal and external models are accepted
- UND owns and manages IP developed at UND
  - NDUS 611.2 and UND policy are guides

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UND IP Polices/Procedures

- First follow NDUS IP policy
  - 611.2
- Campus IP Policy
  - Developed w/ University Senate
  - *What we do*
    - Ownership
    - Income Distribution
    - Covers patent(s), copyright(s) and Trademark(s)

- IP procedures
  - *How we implement policy*

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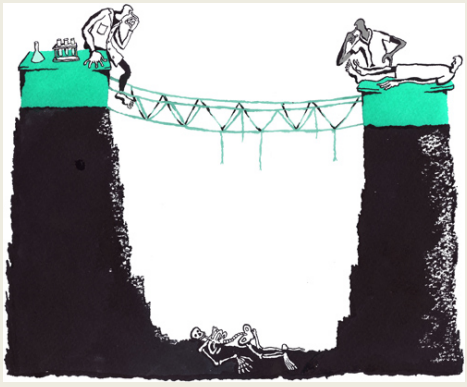
Commercialization Process



'Valley of Death'

Federal Funding
Or other fundamental
Research funding

Company translation to product

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Revenue Distribution

- After out of pocket cost recovery, licensing revenue is split
  - 45% to inventor(s)
  - 50% to UND to support **MORE** research
  - 5% to Department or Unit that supported the research
- Percent to inventors > NDUS policy
- May be amended if circumstances warrant and all parties agree

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Some Success Stories

- TruServe
  - Software for state rural health offices
  - Licensed *non-exclusively* to NOSORH
  - Maximum penetration model

- Breast Cancer Diagnostic
  - *Exclusive:* Halo Healthcare, Inc.
  - Logical partner with complementary technology

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Start up Companies

- Avianax, LLC
  - Developing unique goose antibody platform
- Chemera, LLC
  - Developing unique biofuel/biochemical platform
  - Raising capital
- Early stage start ups (in development)
  - CO_2 capture to polyurea, Company forming & seeking RND grant
  - CACYHS – potential CO_2 capture technology (forming)
  - UAS – sense and avoid technology (formed)

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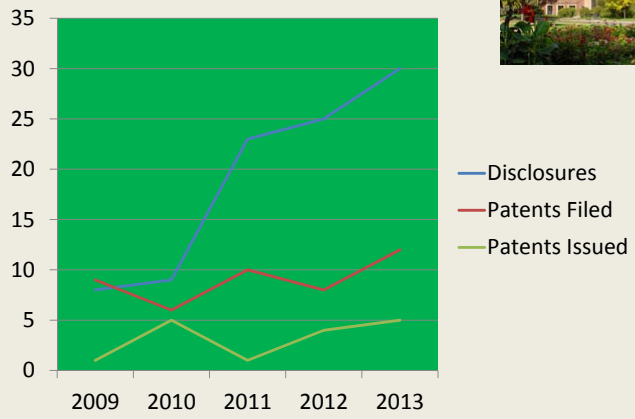
IP Activity



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IPCED Operations

	2010/2011	2011/2012	2012/2013
Licensing Revenue	$ 55,710.00	$ 110,509.00	$ 148,220.00
Patent/Legal Exp.	$ 129,611.00	$ 179,379.00	$ 224,560.00
Operation Expenses	$ 327,632.00	$ 460,003.00	$ 454,421.00

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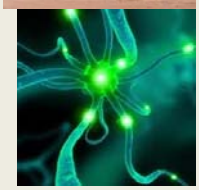
Thank you!

Michael F. Moore
(701) 777-6709
michael.f.moore@und.edu



"The Citizens of Grand Forks and the State of North Dakota look to UND to provide talented graduates, useful research discovery and Intellectual Property. These keep our state in a strong position and provide the impetus for economic growth."

Ray Holmberg
Senator, District 17
ND Legislative Assembly

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