

**STATEMENT OF
MR. KEN NISBET
EXECUTIVE DIRECTOR OF TECHNOLOGY TRANSFER
UNIVERSITY OF MICHIGAN**

**BEFORE THE
TECHNOLOGY AND INNOVATION SUBCOMMITTEE
HOUSE SCIENCE AND TECHNOLOGY COMMITTEE**

ON

**“BEST PRACTICES IN TRANSFORMING RESEARCH INTO INNOVATION:
CREATIVE APPROACHES TO THE BAYH-DOLE ACT”**

TUESDAY, JUNE 19, 2012

Thank you, Mr. Chairman, for the opportunity to speak to you today about the important topic of technology transfer and its value to the American public. I am Ken Nisbet, Executive Director of Technology Transfer at the University of Michigan. Our office helps to transform university research discoveries into valuable technologies for existing businesses and as the basis for creating new start-up ventures, both of which can generate jobs and economic benefits for the University, our communities and our nation.

The University of Michigan has a well-deserved reputation for excellence in the breadth and depth of our research activities, with over \$1.2 billion of annual expenditures. While having a robust pipeline of research discoveries is an ingredient for tech transfer success, it is only one component of many. A critical factor is support from University leadership to provide the resources and encouragement for tech transfer and entrepreneurship. Our President, Mary Sue Coleman, our Executive Officers, our Deans and others regularly communicate the importance of our tech transfer activities to faculty, students, staff and alumni.

Tech transfer is hard work requiring professionals with an unusual combination of skills and qualifications. Each year our faculty report to our office more than 300 new discoveries that form a diverse portfolio of technologies and market applications. We enter into over 100 different agreements with our industry partners annually and spin out an average of one new start-up every five weeks, most of which stay in Michigan. We also strive to measure what is even more

important – the impact of our technologies and our activities on our communities, our people and our nation.

Examples of Michigan technologies making an impact on society include FluMist®, a nasally-administered flu vaccine that is an alternative to a flu shot, the IntraLase® FS bladeless technology for LASIK corrective eye surgery, Arbor Networks, a University start-up that is providing network access security to data centers and businesses around the world and ARTISTRY® anti-wrinkle firming serum, a recently introduced cosmetic from Amway Corporation that uses a patented U-M technology.

There are a lot of great ideas to enhance tech transfer, but it is important to tailor these initiatives to account for the advantages and challenges of a specific region. I want to highlight three particular efforts that we believe are making a big difference at the University of Michigan. The first involves changes and investments we have made within our office and our university to improve our operational effectiveness. The second is using early-stage development funding to further develop and reduce the technical and market risk of our early stage innovations. And the third is enhancing our access to talent to more fully understand market needs and speed the deployment of our technologies and formation of our start-ups.

Over the last ten years, we have revamped our office culture by attracting and training tech transfer professionals with technical and market skills and an appreciation for creativity, risk-taking and customer service. We've simplified our

work documents and processes, to make working with others more rapid, effective and friendly. We have standardized agreements where it makes sense (for example, in software and research tool licensing), but we find it important, given the wide diversity of technology opportunities and business models, to be flexible and nimble for the value propositions required by our partners.

We've established a full service venture creation capability within our office, called the Venture Center, to more effectively form great start-ups for our entrepreneurs and investors, and to make it easier to do business with the University. We have changed University policies and practices to motivate our faculty to engage with industry and participate in commercialization activities, and to encourage our students to bring their own innovations to campus without fear of losing ownership of their inventions. And we encourage outreach and service internally, for example providing mentoring to student entrepreneurs, within our region and beyond, which enhances our market understanding, cultivates more partnerships and markets our resources and capabilities.

We've formed broader industry research agreements with innovation partners such as Procter & Gamble, Dow, and Ford. And we have addressed industry needs for predictability and flexibility with a new program, the Michigan Research Advantage, that provides up-front license terms for future inventions that may be derived from industry-sponsored research.

We have expanded the funding resources available for our early-stage technologies and new start-up opportunities. Our University has several translational funds that allow technical validation for emerging discoveries. One example is the Coulter Translational Fund for promising biomedical projects, created via a matched endowment from the Coulter Foundation. Complementing our translational funds, the University is reinvesting tech transfer revenues into an internal “Gap” fund that is generously matched with funds from the state of Michigan to address market validation and commercial-readiness issues. And recently, we established a program called MINTS (Michigan Invests in New Technology Start-ups) in which the University, alongside a qualified venture firm, is investing endowment funds in promising U-M start-ups. We have worked hard to establish partnerships for other funding resources, such as a Pre-Seed Fund administered by Ann Arbor SPARK, our local economic development partner. Our State has helped to broaden our early stage venture resources with Venture Michigan, a fund of funds and other programs administered by another partner, the Michigan Venture Capital Association. We have established effective relationships with local and national venture funding partners, understanding their investment needs and resources and providing them tailored funding opportunities to make a “yes” more probable.

Having access to high-quality talent is also a key ingredient for success, and we have focused our efforts to create several effective talent initiatives. We’ve recruited and trained graduate students and post-docs to provide technology

assessments and market analysis to enable our licensing professionals to make quicker decisions and to find more potential partners. We also pioneered a program to “embed” within tech transfer a team of seasoned entrepreneurs, our “Mentors-in-Residence,” to assist our efforts. The result has been improved venture creation capabilities, and a stream of high quality, sustainable startups that are creating jobs and providing superior investment returns. And seeing the positive impact of our U-M talent programs over the last 5 years, we recently proposed and received state funding for a Tech Transfer Talent Network. With six other Michigan universities, we are sharing and creating talent tools, resources and activities -- tailored to their regions -- to accelerate tech transfer success for their institutions.

In conclusion, at the University of Michigan we are firmly committed to continual improvement of our tech transfer operational capabilities and sharing of our findings to maximize the impact of research discoveries on our economy and our quality of life. As U-M President Coleman has said: “Universities bring ideas to life. But it is technology transfer that gives them wings and lets them fly.”

Thank you for this opportunity. I am happy to answer any questions you may have.