HEARING TESTIMONY OF TOM WALKER
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ON BEHALF OF
THE BIOTECHNOLOGY INDUSTRY ORGANIZATION (BIO)

BEFORE THE HOUSE OF REPRESENTATIVES COMMITTEE ON SMALL BUSINESS
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

MARCH 26, 2008

Chairman Altmire, Ranking Member Fallin, and Members of the Subcommittee:

Thank you for providing the opportunity to testify before you today regarding the difficulties facing the venture and angel capital industries and how it is impacting the biotechnology industry.

My name is Tom Walker and I am the President and CEO of i2E in Oklahoma. i2E is a private non-profit corporation that assists the creation of advanced technology companies and knowledge based jobs in the state of Oklahoma. We provide specialized commercialization services and access to risk capital in the earliest stages of a company's life. Our efforts to create an entrepreneurial infrastructure for advanced technology opportunities have become recognized as an innovative venture development organization in North America. We manage a proof-of-concept fund, a seed capital fund, an angel investment group, commercialization services and a statewide collegiate business plan competition. Our efforts are funded through the generous support of the Oklahoma Center for the Advancement of Science and Technology and other partners in the state of Oklahoma

i2E is usually the first source of capital for the companies in which we invest. Much of our time is spent assisting technology based entrepreneurs in accessing risk financing in the capital gap or the so called "valley of death". This is the point in time where companies are primarily pre-revenue and need risk capital to develop their product or technology offering. This capital gap has only become wider in the economic downturn and it is making it more difficult for innovation-based companies to start up and grow, not only in Oklahoma but throughout the U.S. Consider that in Oklahoma there are not a large number of organized venture capital funds. However, over the past several years, with a focus on specialized services geared towards the capital gap, we've witnessed over $300 million in angel and venture capital investment in over 150 advanced technology companies throughout our state.

Prior to 1998, when I joined i2E, I worked with Battelle Memorial Institute, an international science and technology enterprise that explores emerging areas of science and develops and commercializes technology. I hold a B.S. in Mechanical Engineering from the University of Oklahoma, and a Master of Business Administration from Oklahoma City University. I am a founding member of the Board of Directors of the National Angel Capital Association and I serve on the boards of several technology companies as well as industry Boards, such as the Oklahoma Bioscience Association.

Today I am testifying on behalf of the Biotechnology Industry Organization, an organization representing more than 1,200 biotechnology companies, academic institutions, state biotechnology centers and related organizations in 50 U.S. states and 31 other nations. BIO members are involved in the research and development of health care, agricultural, industrial, and environmental biotechnology products. The overwhelming majority of BIO member companies are small, early stage research and development oriented companies pursuing innovations that have the potential to improve human health, expand our food supply, and provide new sources of energy. In fact, almost 80 percent of BIO members have less than 50 employees, and almost 90 percent have less than 100 employees.

Biotechnology is an innovative, research-intensive industry whose products have the ability to improve public health and is an industry vital to our economic recovery. In recent years, the biotech industry has produced groundbreaking treatments for illnesses such as HIV/AIDS, multiple types of cancer, and heart disease. There are currently more than 400 biotech drug products and vaccines in clinical trials targeting more than 200 diseases including various cancers, Alzheimer's disease, diabetes, multiple sclerosis, and arthritis.

The biosciences continue to be recognized, most recently by President Obama, as a key driver of modern economic progress. Total employment in biosciences in the U.S. grew to 1.3 million in 2006, with these employees spread throughout all fifty states. Further, taking into account the indirect and induced employment as a result of the biosciences, the total employment impact of the sector is 7.5 million U.S. jobs.[1]

In recent years the biosciences sector has outperformed the overall private sector across a multitude of categories. Employment in the biosciences grew 5.7 percent since 2001, compared with a smaller 3.1 percent increase in employment in the overall private sector. Three-quarters of bioscience job growth has occurred since 2004. Further, the average annual wage of the bioscience worker is approximately $71,000, as compared with an average annual wage of $42,000 for the private sector as a whole. This is a difference of 68 percent.[2]

Additionally, life-extending drugs create enormous increases in societal wealth. Authors of a recent study found that from 1970 to 2000, gains in life expectancy added about $3.2 trillion per year to our national wealth.[3] Further, they reported, a one percent reduction in cancer mortality

[1] Beyond Borders: Global Biotechnology Report 2008, Ernst & Young.
[2] *Id.*
[3] Murphy, Kevin M. and Robert H. Topel. "The Value Of Health And Longevity," Journal of Political Economy, 2006, v114(4,Aug), 871-904.

rates would be worth about $500 million annually. Curing cancer entirely would be worth about $50 trillion.[4]

The role of the biotech industry in stimulating economic growth and job creation in the 21st century innovation economy is apparent. Unfortunately, the ongoing financial crisis facing our nation continues to have a profound impact on biotech companies. On average, it takes more than a decade and $1 billion to bring a biotech product to market. As a result, biotech companies go for years without product revenue, instead relying on financing from investors. Emerging biotech companies – comprising over 85 percent of the industry – are therefore highly dependent on well-functioning capital markets to finance their long term, capital intensive research and development projects. Over the past year and a half, the credit markets have seized up. Consequently, less capital is available for investors to put at risk, and the little capital available is dedicated to shorter-term, lower-risk options. Thus, while investments in some parts of the economy have declined, investment in small innovative biotechnology companies has plummeted.

Both public and private companies have been negatively impacted by the decrease in equity investment. 120 public biotechnology companies – 30 percent of all public biotechs – are now trading with less than six months of cash on hand. This represents an increase of more than 90 percent since 2007. Further, 180 companies – another 45 percent – have less than one year of cash remaining. In 2007, life sciences companies raised $1.9 billion through initial public offerings (IPOs). In 2008, this number fell 97 percent, to only $5.8 million. The slowdown in private investments has been dramatic as well. The total capital raised by the biotech industry has fallen 56 percent in the last year.

The impact of this decline in investment has already been felt substantially. In the last six months, more than 28 companies have shelved promising drug development programs in a number of therapeutic areas including Alzheimer's disease, multiple sclerosis, diabetes, and cancer. Over 100 small biotech companies have been forced to lay off over 7,000 employees, and 2,000 of those lost jobs have come in 2009 alone. Since November of 2008, at least ten biotech companies have sought bankruptcy protection. These problems are accelerating at an alarming pace.

The decline of the biotech industry jeopardizes not only America's patient population, but also America's competitive edge in the 21st century global economy. Biotech is an industry where the U.S. is the undisputed global leader and one of the dwindling number of industries that is not exporting jobs. But the gap is closing quickly. As U.S. biotech companies face financial uncertainty, other countries are increasing their investments and intellectual property protections to encourage domestic biotech growth. Experts predict that by 2050 China will have the world's largest drug market because of the Chinese governments' commitment to enhancing the capability for new medicine development and production. India is in the process of establishing a National Biotechnology Regulatory Authority, an entity that would encourage early stage innovation, technology transfer, and startup formation. Other countries that are even closer to home, such as Canada, are also making substantial investments to grow their biotechnology

[4] Murphy, Kevin M. and Robert H. Topel. "The Value Of Health And Longevity," Journal of Political Economy, 2006, v114(4,Aug), 871-904.

sectors. Canada's favorable R&D tax laws are enticing U.S. companies to spend significant amounts of their capital abroad instead of in the U.S. If America loses its global standing as the leader in biotech, high paying U.S. jobs will be lost and an important contributor to our economy will be weakened.

Before the economic crisis, the biotech industry was growing at rates faster than ever before. In 2006, venture capitalists invested $7.2 billion in the U.S. life sciences and medical devices industry, an increase of over $4.5 billion since 1998. Investors understood the promise of the biotechnology industry and investment was climbing quickly. Unfortunately, according to a joint study by BIO and Thompson Reuters, the current economic crisis has forced over 80 percent of biotech investors to change their investment approaches. They can no longer afford the high risk that is characteristic of investment in biotech. Even angel groups, which include biotechnology and medical devices as two of their top three interests for investment, are cutting back on investment. The Angel Capital Association says that investment activity was down ten percent in 2008 and predicts additional declines this year.

The frozen capital markets have brought the biotech industry to the brink of disaster. Unfortunately, this problem was not dealt with in the recently-enacted stimulus package. Small, emerging life sciences companies were left out of the legislation. As Congress moves forward with more legislation to encourage economic recovery, action must be taken to help American biotech companies through this time of unprecedented economy uncertainty. If such action is taken, the biotech industry can re-emerge after the crisis as the vibrant and growing industry that is so important to America's future. If nothing is done, however, decades of innovative science could be lost and America's economic prospects will be weakened.

Congress should consider options to inject new capital into the life sciences sector at a time when it is sorely needed. This could be done directly, such as through new grant programs or changes to the federal tax code. Or this could be done indirectly, by enacting incentives to encourage investors back into this critical sector of our economy. I would like to briefly mention a few approaches to sustain emerging biotechnology companies in this time of need.

1). Allow Small Life Sciences Company Access to NIH Recovery Act Funds

As part of the Economic Recovery Act, Congress recently appropriated $8.2 billion to the National Institutes of Health (NIH). These dollars will be used for basic research and must be spent within the next 2 years. BIO recently sent a letter to acting NIH Director Raynard Kington, supporting new grant programs that NIH might propose and encouraging NIH to make small biotechs eligible for these programs. Traditionally, less than one percent of NIH dollars – aside from the SBIR/STTR program – have gone to companies. If ever there was a time for NIH to make more of its R&D dollars available to small, struggling companies, now is that time. New grant programs at NIH available to small companies would be a "win-win" for America's life sciences industry and the America public, as it would help to sustain research into a wide variety of new therapies at a time when private-sector funding has dropped precipitously. I hope NIH will choose to make this money available to small, private sector life sciences companies.

2). New Tax Incentives for Investment in Biotechnology

Congress should consider reforms to the federal tax code to make investments in biotechnology more attractive to today's risk-averse investors. One proposal that BIO is helping to formulate would create a new "Therapeutic Investment Tax Credit." This credit would encourage new investments in next generation therapies and would be designed to direct capital to those companies pursuing therapeutic breakthroughs by allowing the companies to allocate their credits to third party investors in exchange for cash. This approach has already been tried in the renewable energy sector and has proved greatly successful in encouraging investment in that particular industry sector. Congress should consider such an approach for America's life sciences companies as well.

Congress should also consider lower capital gains rates on investments in cutting-edge small companies. I am pleased that President Obama's budget proposed to eliminate capital gains taxes on investments in start-up companies. However, we have not yet seen the details of this proposal and it is unclear how the budget would define a "start-up" company. Section 1202 of the tax code currently provides a 50 percent exclusion on the gain from sales of certain small business stock held for 5 years or more. This percentage was temporarily raised to 75 percent in the Economic Recovery Act. Unfortunately, Section 1202 has not been successful in helping to encourage investments in companies in high-technology fields due to certain restrictions. For example, corporations are not eligible to make use of this incentive, thus shutting out a large percentage of those who might otherwise be willing to make investments in small companies. Additionally, investments are limited to those companies with less than $50 million in gross assets. This may sound like a large number, but it excludes many emerging companies in high-technology fields, companies whose intellectual property might have high valuations even though the company is cash poor. I hope that members of this committee, and others in Congress, will work with the Obama Administration to refine this proposal in order to make it as useful as possible for small, capital-intensive companies greatly in need of new funds.

Finally, I would note that many of the companies – in biotechnology and other high-tech fields – reliant upon investor capital are also highly R&D oriented. While there are incentives for R&D for large, established companies, there are not similar incentives for emerging companies. The federal research and development tax credit, for instance, is only helpful to those companies already profitable and paying federal income tax. Small, start-up companies do not receive such a benefit. I would respectfully suggest that Congress consider options to provide R&D incentives for those companies not yet profitable. After all, these are many of the companies with the most promising research.

3). Amend the SBIR Eligibility Rules to Allow Greater Participation by Small, R&D-Focused Companies

In the current economic environment, every dollar of new funding is that much more important to a struggling company. As such, it is tragic that one of the few, highly-successful programs for injecting government dollars into small, innovative firms – the SBIR program – currently shuts out many of America's most innovative small companies. This is due to the fact that the SBIR program currently excludes companies that receive a majority of their funds from venture capital

investors. This restriction is antithetical to the very notion of supporting small, capital-intensive business that must rely for their R&D funds on private sources before they have a product for sale. I know that Chairman Altmire, along with Chairwoman Velazquez and Ranking Member Graves, are working to fix this problem in the SBIR reauthorization bill that the committee will consider later this year. I would urge you to move this legislation as expeditiously as possible, given the funding shortfall facing many innovative industries. The reauthorization of SBIR, with the changes to the VC rules, is more important than ever in the current economic climate.

4). Funding Mechanism for High Growth Companies

While the SBIR program, as I noted, has been very successful, it is not nearly enough to fill the funding gap we are currently facing. As such, a new funding mechanism, perhaps a grant program or a loan program, focused specifically on the high-growth companies unable to raise funds today should be considered. This program need not be permanent; it could simply exist for the next few years as our economy recovers. Depending on how such a program was structured, it need not exacerbate the government's deficit situation, as companies saved today would pay back the money in future years of profitability. There are terrific best practice examples at the state levels that could be used as models for this federal program.

The important point is that as private investors wait on the sidelines for the financial markets to recover, government can help to fill the funding gap through narrowly targeted measures. I would suggest that we are far better off spending a little money today, rather than seeing a whole generation of America's most cutting-edge science-based industries decimated by the current capital crisis.

I would like to thank the committee again for the opportunity to testify today and I look forward to answering whatever questions members of the committee might have.