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Pennsylvania's State of Competitiveness in the Biosciences

Testimony of Joseph P. Hammang, PhD, Senior Director, Worldwide Science Policy, Pfizer Inc.

My name is Dr. Joseph Hammang, Senior Director of Worldwide Science Policy at Pfizer Inc. It is a pleasure to join you today in Pittsburgh for this important discussion about the future of the life sciences industry in Pennsylvania.

I hold a PhD in neuroscience, and have nearly two decades of experience in the biotech and pharmaceutical industry. Prior to joining Pfizer, I spent four years in Rhode Island state government in the Economic Development Corporation and the Rhode Island Economic Policy Council, and served as Governor Lincoln Almond's Advisor for Science and Technology during his second term. My position in state government provided an important perspective on the challenges that we face in today's health care environment. Working together, our goal should be to provide innovative and life-saving treatments to patients in need, and to do so in ways that governments and individuals can afford. Because of my experience in state government, I have a great deal of respect for the work that you do and the multiple challenges that you face.

While Pfizer is not the only biopharmaceutical constituent in Pennsylvania, we have become one of the newest significant members of this sector through the company's recent acquisition of Wyeth. Pfizer has two sites in southeastern Pennsylvania, in Collegeville and Exton, where we employ more than 3,600 scientists and other professional colleagues. Pfizer's Specialty Care Business Unit has its headquarters in Collegeville where colleagues manage the Pfizer vaccine portfolio –this is a significant site for the company.

To Pfizer, Pennsylvania is a place of business rich in opportunities to partner with innovative companies, institutions, and thought leaders to help advance Pfizer's research and development efforts. Right now, Pfizer is involved in twenty-five ongoing collaborations throughout the state, including companies like ProModel in Allentown, major academic centers such as the University of Pittsburgh and the University of Pennsylvania, as well as hospital systems including the University of Pittsburgh Medical Center and Geisinger.

Pfizer does not have an unlimited R&D budget. Therefore, we must also look at the cost to conduct business in the state of Pennsylvania, and weigh this with other potential opportunities. In 2009, Pfizer's costs in Pennsylvania included paying more than $50 million in taxes –property taxes, sales and use taxes, payroll taxes, and corporate taxes.

Medical and biopharmaceutical innovation depends on a vibrant and healthy "ecosystem" of different organizations. Please pardon the reference, but as a scientist and a biologist, I am compelled to revert to terms like ecosystem. It is an apt description, nonetheless.

In this ecosystem, many different groups are involved in the complex and uncertain process of creating novel medical knowledge, then linking this to particular diseases and patients, inventing and optimizing new medicines or devices, and testing, manufacturing and distributing these new medicines to patients. The groups who participate in these various tasks include university and laboratory-based researchers, hospital clinicians working in research, small biotechnology and spin-off companies, contract research companies, and technology suppliers. This ecosystem also includes regulatory agencies, prescribers, payers and insurers, distribution networks, and pharmacies. Every part of this system needs to be working well in order for innovation to flourish.

The biopharmaceutical industry is connected to every group within the innovation ecosystem. Small and large, we are an integral part of the overall structure --both fostering and depending on the other organizations with which we interact. We can't innovate without the rest of the ecosystem, and they can't innovate without us.

Legislators and policy professionals are the only other group that has influence and interactions with all the components of the innovation ecosystem. But unlike those of us in the industry, you may be less clear how the different elements inter-relate and depend on each other. All too often we see legislation that aims to support one part of the ecosystem being passed alongside laws that damage and constrain other parts of the ecosystem that are equally important. For example, tax credits don't support innovation if they are introduced alongside major constraints on product pricing and revenues.

So what matters to a company like Pfizer?

- Consistent and transparent governance
  The actions of government speak as loudly as anything that a Governor or legislator can say publicly about the desire to grow this industry in Pennsylvania. Consider access in the public marketplaces controlled by the state – Medicaid or PACE. What about the introduction of legislation that duplicates federal regulatory efforts like clinical trial registry? The industry may not always agree with decisions reached by the state of Pennsylvania, but those decisions need to be made in a direct, logical and transparent manner with consideration for how they might affect the state's bioscience industry.
- Staying the course on supporting innovation
  The state of Pennsylvania has helped many life sciences companies get started through its various programs. But what happens when a company brings a product to market and attempts to put it on a state program like Medicaid? Unfortunately, attitudes often change once companies in the biopharmaceutical industry reach this stage. To continue investing in R&D, companies like Pfizer must be able to earn revenues on our innovative products. Technology development is just as important for established companies as it is for start-ups.
- Symbolism matters
  We live in a global market place, where Pennsylvania is competing with states like Massachusetts and California, and more importantly, with Singapore, Ireland and India. Pfizer was one of the largest users of the Research and Development Tax Credit in 2008

and 2009. Consider the message being sent when Pennsylvania introduced the Film Tax Credit. Compared to the R&D Tax Credit, the Film Tax Credit received significantly higher levels of funding, with clear differences in the manner in which the credits can be used.

Why does a company like Pfizer care so much about the innovation environment?

I've spent my professional career in this industry. The way in which we conduct our research and development efforts has changed radically over time from a large in-house rigorous model to one that is increasingly externally focused. I believe the bioscience industry can and will meet the unmet medical needs of today; but this will not be easy. I also believe that the "easy" has already been done, and now the industry is trying to solve some incredibly complex challenges to cure the most difficult diseases. This will require new technologies that will take time to develop, and also require the right ecosystem in which to flourish.

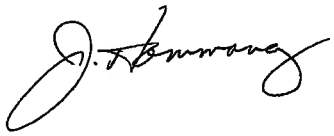
What do I believe can be done to help?

First, policy should reflect experience, and to the extent policymakers have direct and regular engagement with innovator companies and individuals, their policy will be the better for it. Legislators and policymakers should think the issues through from the inside, as if they were the innovator. That doesn't mean adopting the innovator's preferred position, but it does mean taking thoughtful account of it. Today's hearing is a first step in recognizing how policies either nurture or suppress innovation. I commend you for convening this type of forum, and for engaging the industry in the discussion.

Second, policymakers should recognize that they have a wide range of tools with which to work. They can push innovation with grants and tax credits. They can direct it with regulatory guidances and interventions. They can pull innovation with action at or near the marketplace, by preventing piracy and attacks on intellectual property. This diverse set of policy tools allows, indeed requires, policymakers to approach their challenges in creative ways. They can also help foster solutions that do more with less, that simplify and harmonize, and promote a statewide culture of innovation.

Through sustained and consistent strategies, the legislators and policymakers of Pennsylvania can support intelligent risk-taking in the life sciences industry, and nourish rich and diverse networks of innovative companies. In doing so, these bioscience companies will thrive in a policy-supportive environment, work collaboratively with the public and private sectors, and create a healthy ecosystem of innovation.

Thank you for the opportunity to testify. I look forward to your questions.



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Joseph Hammang is Senior Director of Worldwide Science Policy for Pfizer Inc. and leads a team of scientific professionals that perform scholarship and develop internal policies for the critical science and technology issues that face the industry. In addition, Joe manages external constituents and other key thought leaders in science and medicine to develop industry-leading policy positions.

Prior to joining Pfizer in 2002, he served as Vice President for Science, Technology and Business Development at the Rhode Island Economic Development Corporation and as Head of Science and Technology at the Rhode Island Economic Policy Council. In 1999, he was appointed Governor Lincoln Almond's Advisor for Science and Technology.

Hammang previously held positions at the Bristol-Myers Squibb Company where he was involved in Alzheimer's Disease research and at CytoTherapeutics, Inc., Providence, Rhode Island where he served as Director of Cell and Molecular Neuroscience and Director of the Ophthalmology Therapeutic program. He is author of 60 scientific articles and invited book chapters and is inventor or co-inventor of 35 U.S. patents. Hammang completed his graduate work at the University of Wisconsin in 1990 and holds a Ph.D. in the area of Neuroscience.