

## Dr. Stephen S. Tang President and CEO University City Science Center Before the Committee on Small Business of the United States House of Representatives Empowering Small Businesses: The Accelerator Model May 3, 2017

Chairman Chabot, Ranking Member Velazquez, and Members of the Committee, thank you for this opportunity to testify regarding small businesses and the accelerator model, and to help you recognize and celebrate our nation's legacy of entrepreneurial success.

I'm Steve Tang, President and CEO of the University City Science Center in Philadelphia. It's an honor to join my distinguished colleagues on today's panel.

I'd like to express my strong support for Federal programs – such as the SBA's Growth Accelerator Fund – that encourage and facilitate entrepreneurship.

I have an extensive background in science, business and entrepreneurship, and a first-hand understanding of the power and potential of technology commercialization. I've led a company through venture funding and an initial public offering, and served as a senior executive with a large life sciences company as it acquired and integrated smaller companies.

Last September I was re-appointed to the Department of Commerce's National Advisory Council on Innovation and Entrepreneurship (or NACIE), and I have the privilege of serving as NACIE co-chair through 2018. NACIE reports to Commerce Secretary Ross, and is charged with identifying and recommending solutions to issues critical to driving the innovation economy, including enabling entrepreneurs and firms to successfully access and develop a skilled, globally competitive workforce.

My organization, the University City Science Center, has been a key driver of growth and a source of stability for the Greater Philadelphia region's life sciences and technology sectors since its founding in 1963 as the nation's first and largest urban research park. Today we are a dynamic hub for innovation, entrepreneurship and technology development, offering business

incubation, acceleration and other programs that provide support for firms at all stages of the business life cycle.

At the Science Center, we cultivate and expand the possibilities that open up when research moves out of the lab and into the marketplace. Over the past 54 years, 442 companies have received incubation and acceleration services from the Science Center. Today, 155 of those 442 firms are located in Greater Philadelphia and account for 40,000 direct and indirect jobs – or one out of every 100 jobs in the region. And these 40,000 jobs drive \$13 billion in economic activity each year – more than 2% of the region's total economic output.

To date, our biggest success story is Centocor, now known as Janssen Biotech, a division of Johnson & Johnson. Centocor was founded in 1979 with a vision of developing monoclonal antibodies as a new paradigm to treat diseases such as rheumatoid arthritis. Today, Remicade is the biggest product in the J&J portfolio, with annual U.S. sales of \$5 billion. Another Science Center resident company, Spark Therapeutics, is developing gene therapies that are showing early, promising results for treating childhood blindness and potentially other conditions such as hematologic disorders and neurodegenerative disorders. These are just two examples of how the Science Center has paved the way for transformational business growth and job creation.

We are strong believers in the accelerator model as an ideal vehicle for empowering small businesses. We define an accelerator as a program that offers startups access to a suite of business tools, including mentorship and professional expertise, funding, and other support services over a defined, limited time period, in an intensive, high-touch setting.

For example, our Phase 1 Ventures (or P1V) program works with "long-horizon" technologies in pharmaceuticals, biotech, healthcare and other fields. P1V helps early-stage companies apply for and obtain SBIR and STTR grants, and then provides the companies with funding, management support and access to outside expertise, as well as connections to private sector funding, in order to help them grow.

And our Digital Health Accelerator (or DHA) helps health IT companies with products at the prototype stage to reach their first sales and investment milestones. The program selects promising companies from around the world and provides them with funding, collaborative workspace, professional mentorship, and introductions to key stakeholders and investors in the Greater Philadelphia region.

As you know, in the three years since the Growth Accelerator Fund was launched, awards of \$50,000 each have been made to 189 accelerators in 45 states, Washington, DC, and Puerto Rico. The Science Center has been fortunate to win two of those awards – one for P1V and the other for the DHA.

And I'm here to say that those awards, along with other strategic and critical Federal grants, have made a real difference. Since P1V was launched in 2015, a total of 18 startups have

participated in the program, advancing technologies developed at 12 different academic and healthcare institutions. Together these companies have secured approximately \$3 million in public and private funding. And the 13 companies that have gone through the DHA since its inception in 2014 have created more than 160 new jobs, generated more than \$20 million in new revenues, and raised nearly \$22 million in follow-on investment.

Thanks to the Federal support that we have received, we have been able to accelerate the growth of startup companies like UE LifeSciences, which is developing a low-cost, portable, hand-held scanner that can detect breast cancer in its earliest stages, anywhere in the world. Or Talee Bio, which is developing a gene therapy for cystic fibrosis, the first curative treatment for this disease. Or SimUCare, which is enhancing the training process for doctors and nurses by enabling them to learn how to handle medically complex situations using live actors, rather than manikins, to maintain realism.

At the Science Center, we support technology commercialization in the broadest sense, by acting as an innovation intermediary – or linchpin– that brings together academia, industry and capital. We create specific processes and frameworks, like P1V and the DHA, that lower barriers, facilitate collaboration, and enhance the likelihood of success. But we also create more generalized incubators, accelerators, and other resource-rich environments that combine multiple ingredients – including funding, expertise, and support services – to help generate the unpredictable and serendipitous outcomes that have always fueled our nation's scientific advancement and economic growth.

Accelerators work because they promote and reward efficiency. We have a saying in the industry - startups need to succeed or fail quickly, and cheaply. The only way to drive business creation and growth is for companies to move technologies across the value chain and get to market.

Accelerators force technologies to move quickly – and by offering multiple layers of expertise, services and support, accelerators often enable startups to pivot in a different direction, in response to market demand. If Congress is interested in stimulating entrepreneurship, and in pulling more high-potential technologies out of academia and elsewhere into the marketplace, then accelerators and other early-stage support programs are a wonderful way to achieve a robust return on investment.

Accordingly, we strongly support those targeted Federal initiatives – such as the Growth Accelerator Fund; SBIR and STTR; and the EDA's Regional Innovation Strategies program, among others – that encourage innovation, entrepreneurship, and tech-based economic development across the country. And – equally as important – we strongly support those programs, like the Growth Accelerator Fund, that promote greater diversity and inclusion in our nation's small business sector. More than two-thirds of our P1V and DHA companies are owned and/or led by women or members of underserved groups, such as racial minorities, veterans, or disabled individuals. We firmly believe that the knowledge-based economy must be not only a place of innovation and growth for the science and technology community, but also hub for innovation

and growth in the wider community, with meaningful opportunities for all of our citizens to pursue STEM-related careers at all levels.

Mr. Chairman, this concludes my testimony. On behalf of the University City Science Center and NACIE, I want to thank you for this opportunity to highlight the benefits of Federal programs for our nation's small businesses and, more broadly, our entrepreneurial ecosystem. I welcome your comments and questions.