

**INNOVATION AS A CATALYST FOR NEW JOBS:  
SBA's INNOVATION INITIATIVES**

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**HEARING**  
BEFORE THE  
**SUBCOMMITTEE ON ECONOMIC GROWTH,  
TAX, AND CAPITAL ACCESS**  
OF THE  
**COMMITTEE ON SMALL BUSINESS**  
**UNITED STATES**  
**HOUSE OF REPRESENTATIVES**  
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## **INNOVATION AS A CATALYST FOR NEW JOBS: SBA's INNOVATION INITIATIVES**

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**WEDNESDAY, JULY 14, 2021**

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON SMALL BUSINESS,  
SUBCOMMITTEE ON ECONOMIC GROWTH,  
TAX, AND CAPITAL ACCESS,  
*Washington, DC.*

The Subcommittee met, pursuant to call, at 1:10 p.m., in Room 2360, Rayburn House Office Building and via Zoom, Hon. Sharice Davids [chairwoman of the Subcommittee] presiding.

Present: Representatives Davids, Newman, Bourdeaux, Chu, Evans, Mr. Kim, Meuser, Ms. Young Kim, and Van Duyne.

Chairwoman DAVIDS. All right. Good afternoon, everybody. I am calling this hearing to order.

Without objection, the Chair is authorized to declare a recess at any time.

This is a remote hearing on innovation as a catalyst for new jobs, SBA's Innovation Initiatives Committee on Small Business, and this is the Subcommittee on Economic Growth, Tax, and Capital Access.

So we have called the hearing to order.

Let me begin by saying that the standing House and Committee rules and practice will continue to apply during remote proceedings. All members are reminded that they are expected to adhere to these standing rules including decorum when they are participating in any remote event.

With that said, the technology we are utilizing today requires us to make some small modifications to ensure that members can fully participate in these proceedings.

House regulations require members to be visible through a video connection throughout the proceeding, so please keep your cameras on. If you have to participate in another proceeding, please exit and log back in later.

In the event a member encounters technical issues that prevent them from being recognized for their questioning, I will move to the next available member of the same party and the I will recognize that member at the next appropriate time slot provided they have returned to the proceeding.

Should a member's time be interrupted by technical issues, I will recognize that member at the next appropriate slot for the remainder of their time once their technical issues have been resolved.

In the event a witness loses connectivity during testimony or questioning, I will preserve their time as our staff addresses tech-

nical issues. And I may need to recess the proceedings to provide time for a witness to reconnect.

And then finally, remember to remain muted until you are recognized so that we can minimize any background noise.

In accordance with the rules, staff have been advised to mute participants only in the event there is an inadvertent background noise.

Should a member wish to be recognized, please unmute yourself and seek recognition at the appropriate time.

I will now move to my opening statement.

For many years, America's innovative spirit has certainly propelled our nation to become the world's preeminent economic power. Our economic dominance in part was driven by Federal investment and research and development by prioritizing innovation, the federal government has financed inventions and discoveries that have benefitted the economy and improved lives across the globe.

Innovations have also increased productivity, made American workers more efficient and lowered the price of goods and services. Unfortunately, since the 1970s, America has lost its footing as the world's most innovative nation. In fact, in the 2021 Bloomberg Innovation Index, the U.S. fell outside of the top 10 entirely. This slowed pace of innovation has profound implications leading working Americans to experience wage stagnation or outright wage reduction when adjusted for the cost of living. High barriers to entry are also stifling our entrepreneurial ecosystem. Over the years, geographic and demographic gaps have formed excluding many folks from creating new products or starting new businesses.

Where a person is located heavily influences their economic opportunities. Economic clustering has limited the ability of Americans living outside of a handful of major metropolitan areas to develop new products. Women and minority groups are also frequently at a disadvantage when it comes to launching startups. On average, minority and female entrepreneurs have less access to capital and are more likely to rely on personal funds to finance their business. Minority entrepreneurs are approved for credit for their businesses at lower rates than that of their peers and are less likely to receive the full amount of their loan request.

It is clear that too many Americans are being denied the opportunity to create new business. Boosting innovation and making the innovation ecosystem more inclusive will be critical for rebuilding our post-pandemic economy. Achieving these goals is going to require a sustained Federal investment and improving our innovative capacity.

The CBO, Congressional Budget Office, reports that Federal investment can promote long-term economic growth, yet the Federal investment and research and development that we have seen has been steadily declining from its peak of 30 percent of Federal spending in the 1960s. Today, only 12 percent of all Federal spending and 2 percent of gross domestic product goes toward innovation. An investment in innovation is an investment in our country's future so it is vital that we are spending adequately at the Federal level. It is critical that we empower existing programs at the SBA to better reach and serve startups and entrepreneurs.

For example, SBA's Office of Investment and Innovation, the OII, leads programs that provide high growth small business with access to capital and R&D funding to develop their products. These SBA programs are training entrepreneurs and providing them with mentoring and technical assistance so they can launch America's next great companies. Funding from programs under OII's umbrella has helped develop successful companies like 23 and Me, Qualcomm, Symantec, and Da Vinci Surgical Systems. And I hope that today's hearing is going to allow us to examine these programs and find ways to improve SBA's innovation initiatives to help create more startups that will benefit Americans and support our economy.

As our country recovers from COVID, boosting innovation is going to be vital to getting our economy back on track. By focusing on expanding innovation to underserved entrepreneurs, Congress can certainly unleash economic potential that has long gone untapped.

I am going to take this time now to yield to Ranking Member Meuser for his opening statement.

Mr. MEUSER. Thank you, Madam Chairwoman. Thank you very much for holding this hearing today. Thanks to all for participating.

Small businesses, entrepreneurs and startups are resilient organizations that continue to innovate and adapt to the everchanging marketplaces. Prior to COVID-19 pandemic, small business entrepreneurs were opening new factories throughout my district and throughout the commonwealth and the country. Along main street, hiring more workers, creating new jobs. Manufacturing the next great American products and services really with rapid speed. This was, prior to COVID, in large part due to the pro-growth policy agenda that created an empowering environment and empowering innovators and entrepreneurs to reduce regulations and independence in running a small business. After such a harrowing year for public health that resulted in state and local lockdowns, capacity restrictions and so many numerous challenges for small businesses, I do believe the entrepreneurship of the economy can thrive again if we make the right decisions to help create the environment to empower that growth.

A recent survey of more than 2,500 Goldman Sachs 10,000 Small Business participants found that 78 percent of small businesses believe 2021 will be better than 2020. That is good. But only 36 percent believe it will be better than the economy they knew before COVID-19 hit. That is not so good and hopefully, perhaps that is where we come in.

The pandemic impacted businesses differently based on industry, longevity, location and other factors. However, meeting small businesses' workforce and capital needs will be a key to the continued recovery in all sectors.

I believe this can be an American decade if we do, in fact, help unleash the power of the American innovators and entrepreneurs but we cannot do that under the yoke of untargeted unemployment compensation supplements, government mandates that do not make sense to business, higher taxes, and runaway inflation which just adds a cost to everyone.

To this point, I recently wrote an op ed on the cost of Tax and Spend which I have submitted for the record. Unemployment incentives continue to plague small businesses with an unprecedented worker shortage. The U.S. Chamber of Commerce poll of the COVID-19 unemployed found that roughly 49 percent of Americans who became unemployed during the pandemic said they are not actively or not very actively looking for work. And 61 percent of respondents say they are in no hurry to return to work. There are various factors for this. We know with the randomness of school closures and just the fear of COVID and other societal factors, the NFIB June Jobs Report found that 46 percent of all small business owners reported job openings they could not fill. So that is the bottom line.

As we continue to see small businesses place help wanted signs in their doors, and very often that help wanted sign is followed by \$20 per hour or \$19 an hour or \$22 an hour, this is a prime reason innovation and productivity is being limited further and is on the decline.

Small businesses across the nation are also feeling——

Madam Chair, how am I doing on time?

Chairwoman DAVIDS. For your opening statement, I do not think that you have a——

Mr. MEUSER. I see. All right. Thank you. I do not want to go too long.

But we are dealing with stretched budgets, higher cost of goods and supply shortages. Inflation is, of course, being something that is of great concern as stated, raising the costs of businesses. Business owners as early as this past April to May found that 80 percent of their cost of supplies are up compared to pre-COVID levels; 22 percent say that there are costs of increase by 25 percent or more. This is very concerning to the fundamentals of our economy and to the vibrancy of small businesses.

As small businesses are reopening their doors to only be met with labor shortage and inflation, there simply cannot be a worse time to raise taxes on the American worker. President Biden's promise to repeal President Trump's Tax Cuts and Jobs Act would immediately raise taxes on small businesses by increasing marginal income tax rates and eliminating the 20 percent small business deduction. By eliminating the TCJA, this would also decelerate the bonus depreciation. Limiting the ability for businesses to deduct on their capital investments in a 10-year window. It will be extended far past that.

As well, capital gains is a big issue for small business. It directly impacts returns an entrepreneur will find in their work but also in the value of their companies. So investing in new ideas and gaining that access to capital would be mitigated and would have a higher level of risk and uncertainty. So reducing potential returns through higher capital gains tax does disincentivize investment and creates additional barriers to access to capital.

So we must grow our opportunity for our nation's entrepreneurs, not government. The SBA's resource partners and innovation programs that are congressional authorized remain important and serve as a valuable tool to small businesses. However, we must continue to examine these programs closely to ensure they are ef-

fectively and efficiently serving small business entrepreneurs, delivering the value that small businesses need but also preventing waste, fraud, and abuse.

I spent my fair share of time in the small business world, happened to grow a small business. I do know that is where you can learn the most by dealing directly with small business or being a small businessperson yourself, we as part of this Committee and as members of Congress in helping do all we can to create an environment for recovery and for long-term growth of small businesses certainly need to listen intently and respond favorably and that is why I am very pleased that this Committee has been pulled together and we have those testifying that we do.

So with that, Madam Chairwoman, I yield back. Thank you.

Chairwoman DAVIDS. Thank you, Mr. Meuser. The gentleman yields back.

I would like to take a moment just to explain how the hearing is going to proceed. Each witness will have 5 minutes to provide a statement and each Committee member will have 5 minutes for questions. Please ensure that your microphone is on when you begin speaking and then return to mute when you conclude your remarks or questions.

With that, I will go through and introduce all of the witnesses. Mr. Meuser will introduce a witness as well, and then we will get started.

So our first witness today Mr. E. LaVerne Epp, Executive Chair of the KU Innovation Park. As the leader of the KU Innovation Park, Mr. Epp has experienced and received several rounds of SBA growth accelerator fund competition awards. His work has helped many small businesses and entrepreneurs in my home state of Kansas here to achieve their dreams. And I am really excited to have them join us to share his expertise today. Welcome, Mr. Epp.

Our second witness is Mr. Benjamin Johnson, the Chairman of the Innovation Advocacy Council (IAC). The IAC works to educate policymakers on issues related to innovation, economic development, entrepreneurship, and technology. Welcome, Mr. Johnson.

And then our third witness is Dr. Gabriel Burks, the Vice President of FrostDefense. Mr. Burks's company is participating in the Enterprise Works Growth Accelerator, a recipient of the SBA Growth Accelerator Fund Competition Award. And I am excited to learn more about your company and how the growth accelerator has helped in its development. Welcome, Mr. Burks.

And I will now yield to the Ranking Member to introduce our final witness.

Mr. MEUSER. Thank you, Chairwoman.

Our next witness is Jeffrey Maguire. Jeffrey Maguire is Managing Partner and Co-Founder of Clearly Clean Products, LLC, which invented, patented, and manufactures 100 percent recyclable food trays. Mr. Maguire also was a co-founder of Tabby Tools, which manufactures tile installation tools that are available nationwide through Lowe's home improvement stores. Additionally, he is a certified public accountant and a graduate of the University of Connecticut. This morning I did have the opportunity to tour Mr. Maguire's company at Clearly Clean's Frackville campus, their office in my district, and certainly saw firsthand the level of innova-

tion, their technologically advanced manufacturing of their high quality and environmentally friendly products. Clearly clean is an all Made in America manufacturer that creates ecofriendly products with features that surpass non-sustainable alternatives which is very important, I think. The company holds the world's only patents of 100 percent recyclable PÉT. That is polyethylene terephthalate—perhaps I pronounced that right—overwrap food trays with a rolled edge. Since acquiring the first of many patents on a rolled edge tray in 2016, Clearly Clean has grown from three people to more than 200. Most of that growth has been in the last 3 years. Clearly Clean has been named the fastest growing manufacturer in Northeast Pennsylvania 2 years in a row and received the Ameristar Award and the Dupont Award for packaging innovation. Mr. Maguire, good to see you again. We all really appreciate you being here. Thank you for taking the time out from your busy day and from your business to answer our questions.

And with that, Madam Chairwoman, I thank you and I yield back.

Chairwoman DAVIDS. Thank you, Mr. Meuser.

And thank you all again for being here and for your patience as we were getting everything going.

We are going to go ahead and kick things off now. I will begin by recognizing Mr. Epp for 5 minutes.

**STATEMENTS OF E. LAVERNE EPP, EXECUTIVE CHAIR, KU INNOVATION PARK; BENJAMIN ROBERT JOHNSON, CHAIRMAN, INNOVATION ADVOCACY COUNCIL; DR. GABRIEL R. BURKS, VICE PRESIDENT/HEAD OF RESEARCH AND DEVELOPMENT, FROSTDEFENSE ENVIROTECH, INC.; JEFFREY MAGUIRE, MANAGING PARTNER AND CO-FOUNDER, CLEARLY CLEAN PRODUCTS LLC**

#### **STATEMENT OF E. LAVERNE EPP**

Mr. EPP. Thank you. Good afternoon, everybody. And thank you for inviting me to offer comment about small business and innovation. And a special thank you and a warm Jayhawk greeting to Chairwoman Davids. Congresswoman, we appreciate your service to our state.

You have all read and received my written testimony which describes the KU Innovation Park and the important role the SBA and particularly the growth the Accelerator Fund competition plays in supporting our work in innovating new technologies and starting companies. I will talk about some of those unique attributes that make that fund so important. But first I would like to begin with a brief story.

Several years ago, a private, not-for-profit foster care agency in Kansas approached my colleagues at the KU Innovation Park. As part of its work in placing foster children, the agency developed an algorithm which through the identification of a field of dominant characteristics was able to match foster children with foster parents in homes. Match.com for foster kids. The effectiveness of these matches was validated by research conducted by KU's distinguished School of Social Welfare. What followed was the development of ECAP, Every Child A Priority, a software platform. It was

an innovative solution that reduced replacement of foster kids, the cost of multiple placements, and in the process improves the lives of children. A new small business was born.

Today, Foster Care Technologies has engineered over 25,000 placements in numerous states and counties across the country. The company was created, capitalized, and managed by the KU Innovation Park and its small team of professionals. These resources were funded in part through the SBA and the Growth Accelerator Fund competition.

Over the last 6 years, the Innovation Park has received over \$200,000 through the Accelerator Fund competition. We have another pending grant today. We have used those funds to provide impact assistance to entrepreneurs who discover new technologies and then commercialize them. Innovating, producing jobs has become a catalyst for creating small businesses. Small businesses like ClaraBio Tech, another company that was created in the laboratory of former KU professor of chemical and petroleum engineering who, through her remarkable career, has become a prolific inventor. ClaraBio's technology helps enable medical breakthroughs using exosomes by solving the critical issues of purification and isolation. The applications of this technology are enormous, including early cancer detection. And with the help of the Innovation Park and our team, the company recently achieved a major capital raise. The Growth Accelerator Fund competition was part of this important underwriting, giving the company resources and funding to acquire that capital.

The Accelerator Fund's unique attributes serve small businesses like Foster Care Tech and ClaraBio. The fund is valuable because of its flexibility and minimal burden on entrepreneurs themselves. It is valuable because it is relatively free of restriction, allowing multiple uses with minimal tracking and reporting. And the Accelerator Fund competition is valuable because it supports organizations like the KU Innovation Park who work closely with early stage companies and develop intimate understanding of their needs and potential, usually at critical junctures in the company's life cycle. Companies like Foster Care Tech and ClaraBio are alive today in part because of the Growth Accelerator Fund competition.

Thank you to each of you for recognizing the value of small business and the innovations that lie at the heart of their creation. They are worthy of your support and I thank you.

Chairwoman DAVIDS. Thank you, Mr. Epp.

Mr. Johnson, we are going to go ahead and go over to you. You are now recognized for 5 minutes.

#### **STATEMENT OF BENJAMIN ROBERT JOHNSON**

Mr. JOHNSON. Thank you very much. Good afternoon, Chairwoman Davids, Ranking Member Meuser, distinguished members of the Committee. My name is Ben Johnson, Chair of the Innovation Advocacy Council, a National Coalition for Innovation Based Economic Development. I am honored to join you here today.

My work with small businesses started 17 years ago in Southern Indiana. Coaching entrepreneurs and making loans to businesses like painting, landscaping, catering services that lifted families out of poverty. And for the last 16 years in St. Louis, I have seen how

growing an industry cluster around a community's innovation strengths can help transform a regional economy.

But today I represent a broader network. The IAC is the policy arm of SSTI, which represents more than 150 organizations across 44 states, including state and local economic developers, universities, nonprofits, and small businesses, all dedicated to creating a better future through science, technology, innovation, and entrepreneurship.

Based on the successes of our members, I would like to present three principles that drive impactful economic development, especially through tech-based small business growth.

One, job creation is best fostered through locally designed strategies that capitalize on unique regional strengths. Two, the needs of innovation-based businesses, and therefore the tools and talents necessary to support their growth, are different than traditional microenterprise or so-called main street businesses. And three, programs specifically targeting innovation businesses, like SBA's growth accelerators and regional innovation clusters, are necessary complements to other existing supports for traditional small businesses, especially in rural communities and among women and minorities.

On principle one, my full-time job is with BioSTL, a consortium of 50 corporate, philanthropic, academic, and public sector leaders dedicated to leveraging St. Louis's research and industry strengths in medical and agricultural sciences. We capitalize on those strengths to build homegrown startups, attract innovation from across the globe, and harness entrepreneurship to foster a wholly inclusive ecosystem bridging urban and rural economies.

In other communities, the strategies and sectors differ based on the assets and history and geography and population and even personality of each region. While the shorthand often is to build the next Silicon Valley, successful regions recognize there is only one Silicon Valley and the right mix of business supports and the right organizations to deliver them vary depending on the needs of the unique market.

Second, innovation-based businesses create high-quality jobs and result in a higher standard of living. They modernize and diversify regional economies and they solve global challenges, like feeding a growing population, curing disease, addressing climate impact, and ensuring national security. But they are different. They vary in the type of support they need to mature a technology from idea to market. In capital raised, they often take longer to reach revenue and, so, traditional models of bank and even SBA financing often do not apply. And they vary in that their industry-specific networks must be deeper and more defined than the broad networks generally applicable to all types of business.

Third, I do not envy my peers at the SBA and its resource partners. They must be generalists—triaging all types of businesses from pharma companies to flower shops, and that is where innovation focused programs augment the resources of SBA. Programs like the SBIR and SBA's Fast Program and especially growth accelerators and regional innovation clusters provide communities with the perfect complements to SBA's array of other activities. They are designed specifically to address the needs of innovation busi-



nesses. Recognizing there is no national economy; rather, a combination of regional economies that differ in their strengths and needs and no one type of organization positioned to support all the needs of all types of business. Growth accelerators, as you heard, catalyzes a wide array of small business supports. Clusters augments SBA's broad activities with specific, deep domain expertise. Allowing regions to define their own unique clusters enables growth of distinct and diverse communities across the country—from advanced wood products in rural Appalachia, Southeast Ohio; to smart grids in Chicago; and unmanned aerial systems and manufacturing in Kansas; to defense in Minnesota. Clusters are a unique glue that bring people together, that align business supports in a system and that augment the programs of SBA. But these programs need additional support and direction from Congress. Flexibility in the growth accelerator program to allow for a wider range of project types. And, clusters should be fully authorized, especially because a recent interpretation from SBA narrowed the eligible applicant organizations. Congress should provide clarity to establish a broad range of eligible applicants and allow freedom for regions to define their own types of support.

Thank you for the opportunity and I look forward to more discussion and to questions. Thanks.

Chairwoman DAVIDS. Thank you, Mr. Johnson.

The Chair will now recognize Dr. Burks for 5 minutes.

#### **STATEMENT OF GABRIEL R. BURKS**

Mr. BURKS. All right. So I am Dr. Gabriel Burks, Vice President of FrostDefense and Biotech, Inc. and post-doctoral research associate in the Department of Material Science and Engineering at the University of Illinois, Urbana-Champaign. I am delivering this testimony today on behalf of FrostDefense Envirotech Inc. positioning for more programs and Federal investments that support innovation and entrepreneurship.

We are a national science foundation, SBIR phase one funded startup company who specialize in the development of polymer and analytics-based solutions to mitigate early spring frost damage in vineyards and other fruit crops. Late spring frost causes more economic losses to agriculture than any other climate-related hazards, costing growers more than \$10 billion annually. And to quote one of our vineyard partners, "We need a frost prevention and risk management technology like we need water for our vines and trees."

Our solution offers growers a nontoxic, biodegradable and environmentally—sustainable compound that delays bud break and increases the freeze resistance of tender fruit tissues while leaving a negligible carbon footprint.

So more generally speaking, I have three points for this testimony. The first being innovation is expensive and we can look no further than TVs and how their cost has changed drastically over the past 10 years. But just as televisions have, the cost for innovation also drops over time as the technology becomes better and more developed.

Point two. Tech startup success is elusive with failure rates as high as 63 percent but it has been shown that with proper supports the chances for success are greatly increased from these startups.

And the third point is that pivoting for early stage tech startups frequently equates to success but funding and resources must be as flexible as the startup environment itself to serve the greatest benefit. What most people do not realize is that all great ideas require refinement and polishing to become viable solutions for society and that the problems that society faces today tend to be extremely complex.

To give an example, our company tackles this problem minimizing the impact of frost on delicate fruit crops. One of the first questions we might have to ask is what crop? Every crop has a unique nutritional requirement, growing topography, growth rate, and response to environmental stimuli. Even without a singular crop type, in our case grapes, each variety also has great variance in those same factors.

Another question we might ask is what frost? How do we know when and where a frost will occur in a given crop? And what constitutes a frost for the plants? Some crops can be more or less tolerant to these frost events than others.

And then the third question, what product addresses these issues? You know, if it is a material solution like ours, you know, what is it made of? How long will it last on the shelf? Who will manufacture it and does it meet the regulatory requirements?

And so the final, and probably most important question is, who is going to answer all these questions and where are they going to have the space and resources to answer them?

So our team is extremely interdisciplinary in that it comprises a plant physiologist, a polymer scientist, atmospheric scientist, statisticians, agronomists, a systems engineer, a civil engineer, a data specialist among many others. And this list does not include our team of accountants, business managers, regulatory experts, attorneys, and other critical business experts.

Our major successes as a company have come as a direct result of timely funding and support from several sources including university incubator, private and Federal.

The University of Illinois Enterprise Works AWARE Proof of Concept Award, which is an SBA-funded initiative, enabled us to pivot at a critical time in our development. At the time of the award, our company had recently completed a field trial where we did not obtain the results that we expected but we did discover what we thought would be several key factors for our success going forward. AWARE Funding allowed us to quickly test our new hypotheses over a 3-month time period and develop a new version of our product that would be field tested again shortly after and be found to be a success. This success will go on to serve as the backbone for our petition for new funding.

The startup world moves fast and this funding was available to us quickly and was sufficient for our necessary technology pivot. Without this funding, we may not have been able to develop and quickly test our new product ideas. We have a viable product today and have been able to stay on schedule with our company growth

because we were able to change and test our product within a timeline synergistic with the grape growing season.

Technology startups have traditionally been leaders in new job creation and the competitive salaries. If our company successfully moves on to phase two of the NSF SBIR program, our business will entail the creation of upwards of 20 new tech jobs with nationally competitive salaries. And when we move on to commercialize our product, this number will likely double.

So finally, the COVID-19 pandemic has changed how we all have had to conduct business but our funding and infrastructure supports have given us a means to adjust to the circumstances of potential new partners.

So with that, this testimony positions for more programs and Federal investments that support innovation and entrepreneurship for the sake of successful tech startups and the prospects of new job creation.

So thank you all for your time and the opportunity to share with you today.

Chairwoman DAVIDS. Thank you, Dr. Burks.

Next, I will recognize Mr. Maguire for 5 minutes.

#### **STATEMENT OF JEFFREY MAGUIRE**

Mr. MAGUIRE. Chairwoman Davids, Ranking Member Meuser, and members of the Committee, I am honored to have the opportunity to testify today on innovation's impact on jobs.

My name is Jeffrey Maguire and I am a managing partner at Clearly Clean Products, LLC, which is based in Schuylkill County, Pennsylvania and has nine locations. Our company invents and manufactures 100 percent recyclable food trays, most notably the roll over wrap tray. This patented tray is made from recyclable PET plastic and its rolled edge does not tear the overwrap film on packaging for meat, poultry, produce, and seafood. Our goal is to provide a sustainable option to foamed polystyrene, more commonly known as Styrofoam.

When we began, we were told it would be like David versus Goliath. We invented an ecofriendly overwrap food tray that the industry said was impossible to manufacture up against an entrenched industry of big named companies. Fast forward to today and we are blessed with growing from three people to more than 200 people in less than 5 years and we are forecasting our sales to double in 2022 creating even more jobs.

What is at the heart of our growth? Innovation. And what is at the heart of innovation? Patents. These Goliaths I mentioned are now imitating our product and we have been forced to take legal action to defend our patents. Time and money that could have been spent on innovation is instead being spent on protecting our patents from others who seek to capitalize on them. We won our first case but now our patents are being challenged at their very core at the U.S. Patent and Trademark Office via an IPR, by a large company with extensive resources. We are confident in our numerous patents and will continue to fight the good fight but not all small businesses can. What would be helpful is a policy that requires a company challenging the validity of a patent being an IPR to pay for the patent owner's legal fees if that challenge fails. With-

out this safeguard, small businesses are forced to dig deep and defend what was theirs all along and innovation suffers.

Another challenge we face is difficulty hiring employees. We would hire 50 people today if we could but we cannot. The supplemental unemployment and stimulus checks are keeping people home. We are competing with the government and cannot afford to. Before the COVID-19 pandemic, we started employees at the higher end of the pay scale. Now, our daily debate is whether we raise our rates to an unsustainable level to attract new employees or we stop growing.

We recently learned that one large company in our area has increased its wages to \$25 an hour. Other large companies will likely follow suit. Small businesses like ours are caught between the government and the deep pockets of big business. In the future, when we face a similar situation, we recommend policies that including funding for small businesses to provide supplemental wages to the employees who continue to work. This would help stimulate the economy by providing bonuses to the working.

What do the current policies do to small business? They force us to automate which means less jobs. They force us to raise prices, which means inflation. And they force us to throttle back growth which is no one's interest. And yes, innovation suffers.

We firmly believe that Congress should enact a comprehensive solution to address the deteriorating infrastructure in the United States. However, that solution should not undue the competitive gains made through the Tax Cut and Jobs Act. The ability to write off capital expenditures such as equipment has been key to our success. But why is real estate treated differently? If the depreciable life for manufacturing plants and warehouses was reduced from 39 years to 10 years, then small businesses could accelerate depreciation which would enable quicker reinvestment.

With many small businesses, Federal taxes are paid at a personal level. Increases in personal tax rates decrease the dollars available for reinvestment. So when Congress increases the personal tax rate, it punishes small businesses and once again, innovation suffers.

In short, innovation flourishes when creativity meets investment and investment flourishes when policies enable growth. Increased taxes, paying workers to stay home, and legal fees associated with protecting already awarded patents are all counter to growth and disproportionately impact small businesses. We need to ask ourselves, are we a country that wants to leave innovation in the hands of the rich and powerful, or do we want to encourage fair competition and nurture small business? I know the SBA and this Committee believe the latter. Our only hope is that future policies continue to foster innovation and enable growth so that small businesses can not only compete with Goliath, but just like David, maybe one day even defeat Goliath.

Thank you very much for your time.

Chairwoman DAVIDS. Thank you, Mr. Maguire. Thank you to all of our witnesses for your testimony today.

So I am going to start by recognizing myself for 5 minutes. And Mr. Epp, I am going to come to you first. Thanks for being here today. I have got a couple of things to bring up. I think I will start

off by just saying Rock Chalk, Jayhawk. And then we will move on to something you obviously know a lot about. Venture capital funding is often centralized in coastal hubs leaving a lot of entrepreneurs outside those markets struggling to raise capital. I am curious about the approach that KU Innovation Park has taken to address that challenge. You talked about it a little bit in your opening remarks but would love to hear a little bit more.

Mr. EPP. Thank you, Chairwoman.

We do what many other early stage organizations do. We try to cluster investors that are interested. We have small investor groups. For instance, the Foster Care Technologies example that I provided. We assembled a small group of impact investors for that company and it fits very well for them. But a shortage of capital is a problem for us and we are constantly looking at new opportunities and new ways to raise capital for these small companies. One of the things that the State of Kansas has that is extremely valuable to us is called the angel tax credits which allow an investor to discount significantly its investment over a period of time and help the startup company at the same time.

Chairwoman DAVIDS. Mr. Epp, I am sorry. Can we pause for just a second? Is anybody else having a hard time hearing? Okay.

Can we put back, yeah. Can we put back like 30 seconds on his time and see if we can fix this echo? I do not know if that is what—I would call it something like a Darth Vader effect. Maybe, Mr. Epp, can you say something real quick?

Mr. EPP. Yeah, my sound is really quite good. I mean, I can hear all of you very well. I do not have a problem, so. And I think I have not changed anything with my microphone, so I do not know what is happening.

Let me make just one other comment, Chairwoman Davids and then I can be done. When you think ahead about the role that SBA might play in helping the early stage companies, some type of a venture fund or creating some type of incentive for venture funds would be very, very helpful because it can be seen for some of these very early age companies, and each of the witnesses today, Mr. Johnson, Dr. Burks, and Mr. Maguire all referenced that and I think that is extremely valuable.

Chairwoman DAVIDS. Thank you, Mr. Epp.

And actually, I am going to come to Mr.—sorry, Dr. Burks next. I would love to hear a bit about the experience you all had participating in a growth accelerator and how that participation impacted your business long-term from what you can see so far.

Mr. BURKS. Right. Right. So being affiliated with the University of Illinois incubator has been tremendous in the sense that it has given us a home to conduct innovation, a place where we can do research, and the staff here is phenomenal. They surround you by business professionals and all these resources and, you know, their events and development, professional development seminars that are in alignment with early phase startup growth. So just being in that environment really helps accelerate our own growth. And then when we interact with other companies—if we want to form a new partnership or if we need to reach out to figure out manufacturing needs, just having a place that is solid and foundational for us is super, super key.

And then with that, things like the SBA-funded Aware grant. This proof of concept award, it came from this incubator space. So all these opportunities to continue to push the idea forward. So if you do have a setback, it is not like you are alone. If you have an idea and you are alone, you are at home and then it goes away and you lose this whole company idea. But when you are supported by an incubator, you know, if you have a setback, you know you have someone there to say, oh, you failed here or something went wrong here. Do not worry about it. We have these resources or access to these resources and people that can kind of keep you going because as a startup, you know, there are all kinds of hurdles that come up but you do not know are going to come up and so being able to pivot and adjust to those different hurdles quickly is extremely important and extremely valuable for us.

Chairwoman DAVIDS. And then Mr. Johnson, I just was curious from your perspective. You know, I often talk about the strong entrepreneurial ecosystem we have here in the Kansas City metro area. You spent a decent amount of time speaking about what a robust regional ecosystem can look like. I am just curious in this last like 45 seconds if there was anything else you wanted to add around that, you know, from your perspective of having been a practitioner and now working also on policy stuff?

Mr. JOHNSON. Yeah. I think what you heard in my testimony and more in the written testimony is each region is unique. The Innovation cluster in St. Louis is different even than our neighbors in Kansas City, which is different than peers across the country. So, programs like the regional innovation clusters that allow regions to define what their strength is on their own, not a size fits all Federal model but where there is Federal partnership with local communities, that is where I think we democratize, for lack of a better term, the clustering that we typically see on the coasts or in metropolises and we bring that to the heartland. We bring that to rural communities. We better engage women and minority communities left behind in the tech economy. And so regional innovation clusters is unique and really can help drive innovation-based job growth.

Chairwoman DAVIDS. Thank you. Thank you, Mr. Johnson. My time has expired.

I will now yield to Ranking Member Meuser for 5 minutes.

Mr. MEUSER. Well, thank you again, Madam Chairwoman. And certainly, thanks to all the testifiers. All of your opening statements were very interesting and appreciated.

So Mr. Maguire, I will start with you. Good seeing you again, Jeff.

So with your testimony, you talk about a difference related to the Tax Cuts and Jobs Act. And of course, with small businesses, it was a 20 percent small business deduction and clearly it creates a more competitive atmosphere for small businesses.

So if that Tax Cut were to be repealed, what impact would that have on you and your employees?

Mr. MAGUIRE. Congressman Meuser, all of the tax cuts that are proposed that really impact small businesses will impact the amount of money that we have to reinvest into our expansion. So everything that we have taken advantage of from the accelerated

depreciation we have reinvested back into the business. And if those tax rates increase or some of these items change, then the amount of capital that we have available to reinvest has decreased because we will be using more of that money to pay taxes.

Mr. MEUSER. The bonus depreciation is of particular concern to you and we discussed that earlier today. Could you elaborate a little bit on how advantageous that was to your company?

Mr. MAGUIRE. Sure. Over the last year we added five production lines to our facility in Frackville. And through the rules that were available to us, we depreciated all of the cost of those assets against our income taxes. And that allowed us to invest it was upwards of \$7.5 million in those lines to sit there and continue to grow our company. And since this Committee is talking about innovation, the only way to innovate is to have the available resources to innovate and to sit there and move forward. So that was the most key component of what was in the tax cut law for us because it allowed us to expand our company as quickly as we have.

Mr. MEUSER. You obviously have some real smart people but that ability to invest in that technology, that was my next question. That had a great impact on your ability to innovate and be on the cutting edge with your products.

Mr. MAGUIRE. Absolutely. I mean, we are in a sustainable part of the economy. I mean, we are trying to provide recyclable trays to food packaging companies. You will see them if any of the representatives go or Congress people go to their local grocery store, you will see it in the Chicken aisle or in that part of the grocery store. But those tax advantages were very helpful in allowing us to grow and then grow as quickly as we did. And without them, we would have reduced our growth and stopped moving forward because it would have been impossible for us to sit here and go out and obtain the capital that we needed to deal with the sales because every bank is going to sit there and look at you as how much are you selling, how much can you afford, and they were very helpful. We greatly appreciate them.

Mr. MEUSER. Well, that is great. Well, it is imperative that we do not let those get repealed.

And I was also interested in what you had to say about patents and the legal fees being the responsibility of those who were trying to infringe upon your patents. So hopefully that is something we can work on as well.

I appreciate it very much. Do you want to say anything more about the patents?

Mr. MAGUIRE. No. Well, I would tell you this. Patents for small business are really important for growth. I mean, both of the startups that I have been working with, we had patents that we leveraged to sit there and grow our business. And if someone challenges your patent, if a plaintiff challenges your patent, I do not mind if they win and I am fighting, you know, and I lose, I will pay my fees if I lose. But if they challenge me and we win and their claim was not acknowledged.

Mr. MEUSER. Basically a tort situation. All right, thank you.

A quick question I would like to just ask Dr. Burks if I could. Doctor, can you just tell us what you think the biggest need for

startup companies or growing companies? You had a lot to say there. Maybe you can just offer a quick comment on that.

Mr. BURKS. I would say the biggest need, I think one of the biggest challenges we faced early on is, so because we saw a very big scientific or take problems, sometimes putting the initial teams together. You know, people, you know, you can get people to work sometimes volunteer. You may give away some equity to get them to volunteer to work with you but just getting those people in the beginning to even solve that problem or to get to a viable product, sometimes that can be kind of cumbersome. So assistance early on is important. And I would also add that the having the ability to pivot, like the fund allowed us to do, just that flexibility. So these different startup markets go quick and sometimes you need the money on some timeline that is not on that funding timeline. And so having the ability to get something quickly in and out and really continue to push forward and stay on schedule could be really, really important.

Mr. MEUSER. Madam Chair, I am past my time. Dr. Burks, it sounds like red tape is not your friend, and as more of a businessperson, I can appreciate that very. So thank you very much, and I yield back.

Chairwoman DAVIDS. Thank you, the gentleman yields back.

The Chair will now recognize Rep. Newman for 5 minutes.

Ms. NEWMAN. Thank you, Madam Chair and thank you Ranking Chair for putting this discussion together. Always really helpful.

So a couple of things. By the way, Mr. Maguire, I agree with you on your patent situation. It is okay to challenge things but then do not penalize people on the back end. So I am with you on that.

Secondly, as we all know in the proposed increase for the largest of large businesses, it does not include small business just as a friendly reminder to everyone. So that is a good news report from my office.

And then thirdly, what I would like to address with perhaps Dr. Burks is you made some interesting comments and I think this is so relevant. Being a former small business owner, getting the right people in the right jobs is critical. Right? And then knowing where to go and knowing where to go for the right resources, not just financial but expertise. Those are really critical things. So this is a blended question for Mr. Johnson and Dr. Burks. What if we extended the Community Navigator program that is currently in PPP and EIDL and some of the other SBA programs into an RFIC designated line item where, in fact, these incubator and business groups could get funding to give companies like yourself expertise in very specific areas. And sometimes it is HR. Sometimes it is accounting. Sometimes it is legal. Sometimes it is in innovation. So I will go to Dr. Burks first. Is that something that you think would be useful coming from that type of organization?

Mr. BURKS. I think that kind of supplement would be tremendous. So in a way, the incubator space does that. Right? So we get help in paying to for business management. So we have personnel who can take care of so many different things and help us out. So from what I am hearing, it sounds like what you are saying is an extension of that but we may need a person to do some type of ma-



terial development. A supplement to help us pay for these things that are expensive early on definitely helps us. And by the time we become sustainable as a business, hopefully we are able to cover those costs on our own but in the beginning it is a pain to pay those when you are trying to accrue funds.

Ms. NEWMAN. Right. Right. So Mr. Johnson, if we were to propose something like that from this Committee, would that be helpful to give an addition line item for this group of what formerly was navigators but expanded to be other types of experts that are available to your members and your affiliates?

Mr. JOHNSON. Yeah, I think the Community Navigator model is promising as a hub and spoken model to connect with SBA resources. For us in St. Louis, the regional innovation clusters program was sort of that original hub and spoke, Community Navigator program within our innovation cluster. Through the RIC program, BioSTL and our partners were able to support more than 2,000 entrepreneurs in their journey of starting their business, helping create 500 jobs and raising more than a billion dollars in capital, and we did that through a range of activities. Partnering to support Black would-be entrepreneurs with the Family Workforce Centers of American in urban/suburban St. Louis suburb, Wellston. Connecting small businesses at the intersection of biosciences and IT and advanced manufacturing with St. Louis Makes and ITEN. Working with our innovation community, Cortex, on providing small business training and counseling. And then launching a network of growers and producers in rural communities to connect urban and rural communities—ag innovation in urban St. Louis with the growers and producers in rural Missouri who are bringing those to market. All of that connected with our partners at the SBDCs, the veteran business outreach centers, the women business centers, navigating community resources in an area of unique strength in St. Louis for us medical and agricultural sciences. So I think with the Community Navigator model being promising, I think authorizing and bringing additional resources to something like the Regional Innovation Clusters Program that has been, not just promising but, effective in meeting communities is a unique opportunity.

Ms. NEWMAN. I agree. And maybe I tis just a model that has worked very well and we need to scale. So good food for thought from my office and I appreciate all of the guests that shared their thoughts today. And thank you to Dr. Burks and Mr. Johnson for your thoughtful answers.

And I yield back, Chairwoman.

Chairwoman DAVIDS. Thank you. The gentlewoman yields back. The Chair will now recognize Rep. Young Kim for 5 minutes.

Ms. YOUNG KIM. Thank you Chairwoman Davids and Ranking Member Meuser. I want to thank the witnesses for being with us today.

My district is California's 39th District and the suburban area in North Orange County, LA and San Bernardino counties. And this is the area that I represent and that is home to a robust startup and entrepreneur community.

In 2020, the LA area startup ecosystem had approximately \$3.5 billion in early stage funding for new startups. But in contrast, the

average startup ecosystem globally received about \$431 million in early stage funding for new startups. And in Orange County, early stage venture capital investment has grown from \$107.5 million in 2010 to \$404.2 million in 2019. Unfortunately, the administration's proposal to increase taxes on long-term capital gains will likely disincentivize investment on our entrepreneurs. So I am concerned that the proposal to increase the marginal tax rate will punish small businesses categorized as pass through entities such as sole proprietorships. It is worth noting that 95 percent of businesses file their taxes as pass-through entities.

So let me pose this first question to Mr. Johnson. If the Biden administration's proposal is enacted, the U.S. could have the highest top capital gains tax rates among OECD countries. So can you describe what a higher capital tax rate would do to early stage funding?

Mr. JOHNSON. Thank you very much, Congresswoman Kim. Tax rates are important, as are programs and investments into entrepreneurship ecosystems. The Kauffman Foundation and the national Start Us Up Coalition in their American's New Business Plan outlines the both/and of policies that create an environment to provide opportunity for entrepreneurs, a level playing field, reduced red tape tax issues, funding the right kinds of capital at the right time, the knowledge of how to start a business and the types of supports that we are talking about here today with the SBA, and support for the opportunity to take a risk. From our entrepreneurs, we do not often hear about tax issues being their top issue. It certainly is most likely an issue. We heard from Mr. Maguire about the challenges he has faced. What we more often hear, what really bubbles to the top, is that they need support. They need help in developing their business model and de-risking their technology, turning that idea into a new product, into new jobs, in connecting with sources of capital, being able to compete globally for capital and bring it into their community. So the policy environment, it needs to be a both/and, how do we reduce regulation? How do we reduce red tape? How do we balance taxes with investments and supports in ecosystems.

Ms. YOUNG KIM. Thank you, Mr. Johnson. I want to stay on the topic. And let me pose the same question to Mr. Maguire. Would you agree that a higher capital tax rate puts our entrepreneurs and startups at a competitive disadvantage compared to other countries? And can you cite an example?

Mr. MAGUIRE. Well, absolutely. I mean, I do not care if you are a Republican or a Democrat, no one wants higher taxes. We all needed to decide what the balance is for everyone out there. If you are asking me if the capital gains rate will impact investment in companies, absolutely it will. Will it stop investment in other companies? No, it will not. I mean, we are still going to go out and work hard to sit there and try to make our businesses successful. What I think is more important is what you said before, 95 percent of taxable entities. Once you start messing with taxable gains and the personal income tax rate you are going to impact every small business. I do not care if it is a barber shop or if it is Clearly Clean products. You will start impacting them negative.

Ms. YOUNG KIM. Sure. I know I have got a little time left. So Mr. Maguire, I really appreciate your testimony as you talked about the difficulty in hiring employees but I also give you a lot of kudos from growing from a very small three employees to over 300 employees and that is because of your innovation and creativity. But I also wanted to talk to you about the recent CPI that rose to 5.4 percent in June compared to a year ago. This is the highest inflation numbers in 13 years. So can you tell us how the increase in prices and inflation impacts your small business?

Mr. MAGUIRE. You are going to see inflation. I do not think anyone on this Committee should sit there and not think we are going to see inflation. In our business, specifically, we are seeing between 15 to 30 percent increases in our raw material costs and in some of our supplies that are required to sit there and put our product out there at market. It is coming. Third quarter, fourth quarter you are going to see it. I do not think there is any getting away from it. Your CPI, where it is at right now is not where it is going to be in the fourth quarter and the first quarter of 2021.

Ms. YOUNG KIM. Well, thank you. I see my time is up, so I yield back.

Chairwoman DAVIDS. Thank you. The gentlewoman yields back.

The Chair will now represent Rep. Chu from California for 5 minutes.

Ms. CHU. Thank you so much.

Mr. EPP, I am so glad to hear of the success that your Innovation Park has had as a growth accelerator, and I want to ensure that startups and small businesses that are growing in these accelerators also have access to private investment. That is why 2 weeks ago I reintroduced H.R. 4256, the Investment in Main Street Act with my colleague, Representative Garbarino. This legislation would enable banks to dramatically increase their share of the capital and surplus that can be invested into SBA certified SBIC or small business investment companies from 5 percent to 15 percent. Last year, SBICs made nearly \$5 billion in leverage and investments for over 1,000 small businesses. Unlike many private venture capitalists, SBICs are backed by the SBA, and last year made one quarter of their investments in underserved businesses showing that these SBICs are well-suited at funneling capital to the businesses who need it most.

So can you talk about the importance of private investment for the startups you work with and how SBICs can help them grow and succeed?

Oh, can you unmute? Please unmute.

Mr. EPP. Can you hear me now, please?

Ms. CHU. Yes.

Mr. EPP. I switched to another channel because I was having trouble before using my phone which is why you saw the mute engaged there. Is the sound better now than it was before?

Ms. CHU. Yes, it sounds much better. Yes.

Mr. EPP. Okay, thank you. And thank you for your support, Representative Chu and for the work that you are doing, particularly with the legislation that you have proposed. I think that is extremely helpful.

Small company investors are always looking for match funding and they often do not want to be first in. And so any kind of support that can be provided in this kind of way can be extremely helpful because it kind of opens the gate. It kind of opens the floor gates. And once one investor is in with some match funding or whatever, it is very easy to attract—well, not easy but it is easier to attract other investors. So the focus on venture capital and kind of creating a unique package with Federal funding around creating those venture clusters and those venture packages is very, very effective. And thank you.

Ms. CHU. Well, thank you for that.

Mr. Johnson, in April, I reintroduced my legislation, H.R. 2680, the Providing Real Opportunities for Growth to Rising Entrepreneurs for sustained success, the Progress Act. This legislation would support the smallest businesses, those without any employees by helping them expand and incentivizing third-party investment, the legislation would create a refundable payroll tax credit for nonemployer firms that hire their first full-time employee and an investment credit to encourage third-party capital investment into nonemployer firms. Nonemployer firms are much more likely to be owned by women, and female entrepreneurs on average start out with roughly half the capital as male entrepreneurs.

So could you talk about how incentivizing third-party investment into the smallest of businesses and helping startups to hire their first full-time employee can improve outcomes for innovative small businesses?

Mr. JOHNSON. Thank you very much and thank you for your support of the Progress Act.

With the entrepreneurs that we support and serve, we see that hurdle of hiring the first employee is often one of the largest challenges, accompanied with de-risking technologies and trying to bring talent on the team as Dr. Burks referenced, that paving the way to hire the first employee is a big gap. And so anything that can help bring a hire to an individual sole practitioner is important. We know from data that all new job growth in the country over the last decade is from new businesses, businesses that are less than 5 years old and helping them start a hiring process, helping them grow can be really critical. For us, as an example, we used our RIC dollars and our growth accelerator dollars to support an entrepreneur, Jennifer Silva, a cofounder of Senti-AR, helped secure \$2.25 million in SBIR funding that was then able to be leveraged and matched with more than \$3 million in private venture capital that enabled them to grow the team, de-risk the technology, and bring to market a new, real-time augmented reality in the operating room to help with invasive surgery, in particular cardiac arrhythmia when you have an irregular heartbeat. And that hurdle to be able to leverage those dollars to hire the first people to the team, to bring on sales and regulatory expertise was really critical.

Ms. CHU. Thank you. I yield back.

Chairwoman DAVIDS. Thank you. The gentlewoman yields back.

The Chair will now recognize Rep Van Dwyne from Texas for 5 minutes.

Ms. VAN DWYNE. Great. Thank you.

I have been having a hard time with my volume so I am hoping that you guys will be able to hear me. If not, I can dial back in.

But I want to thank you, Chairwoman Davids and Ranking Member Meuser for holding this hearing today.

This past Tuesday, the Labor Department reported its highest 12-month consumer price index increase since August 2008. In addition, in June, the National Federation of Independent Businesses found that the number of small business owners raising prices was the highest since 1981. A third of small businesses are facing supply chain disruptions. Nearly half of those businesses have job openings they cannot sell.

As a former small business owner and entrepreneur, I can tell you that no counseling or training can overcome tone deaf settlement policies. Innovators must understandably cross a high bar to succeed but the federal government should not raise that threshold by threatening higher taxes and paying a qualified work force to stay unemployed.

I want to reiterate that point for those who have never run a business before. It is incredibly difficult to run a business with thin margins when you cannot hire workers, and much needed dollars are sent to Federal coffers instead of reinvestment in innovation.

At the beginning of 2020, the small business economy saw record levels of optimism and production. And my Republican colleagues and I understand that the best way to support innovation and entrepreneurship is getting the government out of the way. Unfortunately, this point seems to be lost on the current administration. There is no doubt that COVID-19 was a disaster for small businesses. In a time of crisis, the federal government responded but this pandemic is ending and we need to empower Americans to transition back to back. The government cannot continue to hold businesses and the workforce back through their failed policies. The strength of the American economy is in its innovation and the key to innovation is in the American people. If we want to spur innovation, the simple solution is to get government out of the way and let people prosper.

And with that, I want to thank Mr. Maguire for his testimony today. You talked about your company's rapid growth in hiring. Do you think that that growth would have been possible in today's labor market? And do you think that the economic environment today compared to what it was before the pandemic is more or less friendly to small business innovation?

Mr. MAGUIRE. Well, with COVID-19 it has been an extremely difficult challenge. So, you know, it was easier to hire before the pandemic. And in 2018, there is no doubt about it. We have gone through an incredible phase in trying to deal with our situation and trying to have the appropriate people on the production line to make things work but there is no doubt that it has been more difficult, much more challenging right now. And the current situation, you know, I do not see it getting better for the next 6 months.

Ms. VAN DUYNE. In your testimony you had said something I found really interesting. Innovation flourishes when creativity meets investment. When you think about the tax proposals coming from this administration, how do you think they would affect not only your margins but small business capital at large?

Mr. MAGUIRE. Oh, it is going to be extremely difficult because most small businesses are self-funded. I mean, you may sit there and think that small businesses have the ability to go out and get resources and all of the other panelists that are talking, it is incredible. The opportunities that you provide to entrepreneurs is phenomenal. I applaud every one of you, and Dr. Burks, I applaud you the most. But I will be there and will come back to you and I will tell you, it is extremely hard, and you will not be able to build a business in the environment that taxes are increased because we took every penny of our savings and put it back into our business. And that is really how most small businesses work. I mean, you work, you try to make a profit, you use that profit to build your business and you continue to do so. And if you change the rates and if you change some of what is going on out there, it is negatively impact small businesses and there is no two ways about it.

Ms. VAN DUYNE. So without sacrificing any of the waste, this is for Mr. Epp, without sacrificing any of the waste, fraud, and abuse protections that need to be required, how can we eliminate some of the paperwork burden for small businesses participating in SBA's innovations programs?

Cannot hear you. Mr. Epp? Can anybody else hear him?

Mr. EPP. Can you hear me now?

Ms. VAN DUYNE. I can hear you.

Mr. EPP. Can you hear me?

Ms. VAN DUYNE. Yeah, I can hear you.

Mr. EPP. Can you hear me now?

Ms. VAN DUYNE. Yes.

Mr. EPP. I am sorry. I am still trying to figure all this out.

You know, as I mentioned, that is one of the really very good attributes about the accelerator growth competition is the minimal restrictions on it, the minimal paperwork that is required. I am sorry to be so picky but more of that.

Ms. VAN DUYNE. All right. Thank you. I yield back my time.

Chairwoman DAVIDS. Thank you. The gentlewoman yields back. The Chair will now recognize Mr. Evans.

Mr. EVANS. Thank you. Thank you, Madam Chair. Thank you, Ranking Member.

The question I would like to ask is to Dr. Burks. Access to capital is a persistent issue for small businesses and entrepreneurs, and particularly for Black businesses and women. What types of funding have you utilized?

Mr. BURKS. Good question. As a startup, you usually use as much as you can find but we have been able to utilize funding from the University of Illinois. Probably our largest supporter is Federal. The National Science Foundation SBIR funding, so we are in that pipeline. We are a phase one SBIR funded company at this point and we are in advanced review for NSF SBIR phase two. Those are the largest funding sources that we have received thus far. We have also received the Proof of Concept Award through the Illinois incubator which is an SBA funded initiative. And for certain aspects of like development we have gotten support from private vineyards. So vineyards who believe in our product. You know, the problem we are trying to solve is extremely huge, so the vineyards

that could benefit from our product being a success, they have been giving us resources, whether it is manpower, whether it is access to data, whether it is equipment and to space on their farms to do work. We had an international partner who we could not pay for but they put the money up to fund us to do a field trial at their site internationally. So I would say those are our primary sources. But without the government funding, particularly the SBIR, I mean, none of this would be probably possible because that has funded salaries, that has funded initial material costs, that has funded personnel. It just goes on and on what it has funded. And it has given us the ability to be housed in this incubator in a way because we have to pay rent to the incubator for our laboratory space and so that has paid for all of that. So the NSF SBIR has been tremendous and huge as part of our funding.

Mr. EVANS. Let me follow up a little bit. How does this work? Can you talk a little bit about it?

Mr. BURKS. How does what work?

Mr. EVANS. How does the Committee, in terms of the funding issue, how does it work? As you said, you are housed in the incubator. How does it work?

Mr. BURKS. So it is a long process but the incubator recognized our idea as something that had a lot of potential, so that gave us access to the incubator. And in the beginning the incubator has funds available to house us there. And then from there you continue to grow your pot for other funding and then that is where the NSF funding came into play. We also had NSF I-Corp, which involved going out to do customer discovery, figuring out what the customer needs are. There was funding involved in that to kind of also help offset costs of being in the incubator. But then in our world for like material tech startups, you know, if you get the NSF SBIR it is a huge, like that is like you kind of made it in a way. And so from there you use that funding to continue to develop your efforts in this incubator. And the hope for the incubator is that they can give you all the resources that you need so that you can eventually fly away on your own and be able to be a self-sustaining business. So we have to apply. And so the NSF SBIR has a vetting process where basically we submit our idea in an organized, scientific way and it is vetted by other scientists for its technical feasibility and then after that it is kind of vetted from a financial standpoint to see if it is financially suitable, like our money and things like that add up and we are a responsible company in our accounting practices. So, but it is nice because it is scientifically vetted first, which means there is a higher likelihood that what we are proposing is going to be technically successful going forward. And then as we all know, all the business owners here know, you know, just because you are a good scientist does not make you necessarily a good businessperson. So then there is this leap that we also have to make to become good businesspeople or to hire good business people or to have good business advisors to help us grow in that capacity as well.

Mr. EVANS. I would like to thank you, Dr. Burks.

I yield back the balance of my time, Madam Chair.

Mr. BURKS. Thank you.

Chairwoman DAVIDS. Thank you. The gentleman yields back.

I want to start off by saying thank you to all of our witnesses today. I definitely appreciate you being here. Your compelling testimony has certainly helped shed light on the importance of SBA's innovation initiatives. And of course, as always, input from stakeholders, folks like you, it is critical as we make our innovative ecosystem more inclusive and prolific here in this country. Obviously, we have more work to do if our country is going to reclaim the title of world's most innovative. Small businesses are going to play a critical role in achieving that and that is why we have to work together on this Committee to ensure the SBA programs have the support that they need to guide entrepreneurs and ensure that they have the support they need to support the entrepreneurs with what they need. So, I am looking forward to working with members on this Committee to ensure that these programs are operating at their full potential and serving small businesses effectively.

And with that I would ask unanimous consent that members have 5 legislative days to submit statements and supporting materials for the record.

Without objection, so ordered.

And if there is no further business to come before the Committee, we are adjourned.

[Whereupon, at 2:28 p.m., the subcommittee was adjourned.]



**A P P E N D I X**

**KU Innovation Park**

**Hearing: Innovation as a Catalyst for New Jobs: SBA's Innovation Initiatives**

**Written Testimony**

**Accompanying Oral testimony by**

**E. LaVerne Epp, Executive Chair**

**KU Innovation Park**

**7/14/21**

July 12, 2021

**KU Innovation Park**

The KU Innovation Park is an economic development organization whose mission is to create high-paying jobs and build a more modern, resilient, and diverse regional economy by developing technology and innovation-focused industry clusters, centered around the strengths of the University of Kansas. The Park's unique underlying coalition model represents a decade-long public-private partnership among the City of Lawrence, Douglas County, the Lawrence Chamber, and the University of Kansas. Together, these four stakeholders comprise the region's most comprehensive economic development partnership, representing the interests and combined resources of regional government, business, and academic stakeholders.

Beginning as a small bioscience incubator facility adjacent to KU's West Campus, the organization has expanded its focus, service offerings, and footprint over the years, developing into a regional engine of commercialization, entrepreneurship, small-business support, and industry-university collaboration. The Park's ~60 innovation-focused companies now represent more than 400 jobs and roughly \$25M in annual payroll. The Park's underlying coalition model, its location along the Animal Health Corridor, and its proximity to KU and the KU Medical Center have positioned it at the center of a regional network of resources and organizations supporting innovation-based economic growth. Located on private land owned by the Kansas University Endowment Association, the park sits directly adjacent to KU's West Campus 'Research Circle', which is a concentration of bioscience research facilities and KU's nationally recognized School of Pharmacy. This exceptional close proximity to the University, while remaining physically and organizationally independent and fully within the private sector, creates an ideal environment for commercializing university research and facilitating industry-university collaboration.

A key factor in its success at creating, growing, and retaining companies is the organization's experienced professional staff, which is supported by a team of student analysts from KU's Schools of Law, Business, and Engineering. The Park's professional staff provides entrepreneurs and early-stage startups with a wide range of low-cost or no-cost support, services, and assistance, including market and technology validation, grant writing assistance and grant management support, general business counsel and management assistance, financial and accounting services, and assistance accessing government funding and private capital. Another unique advantage of the Park that has been critical to its success in assisting entrepreneurs is the extremely flexible nature of its programming, support, and methods of engaging with companies, which is enabled by the organization's small, but versatile team. The Park prides itself on its ability to operate like a startup itself—crafting unique approaches to helping solve its companies' problems and pivoting when necessary to accommodate changes in their circumstances and to solve new challenges as they arise.

More traditionally, the Park also leases modern, specialized office and wet lab space to bioscience and technology companies interested in collaborative research with KU and those seeking access to highly educated students and graduates, as well as startups working to develop new technologies or commercialize university research. Additionally, the Park offers a range of shared workspaces and services through its Virtual Tenant Program for entrepreneurs and startups that are still too early-stage for dedicated physical space, but that need a professional commercial environment from which to operate. A critical component of the Park's support for startup companies, shared spaces and virtual tenant services are supported by an incentive fund provided by the City and County, which is used to offset or fully subsidize the cost of space and service fees for deserving companies and entrepreneurs. As a nonprofit entity with public entity stakeholders, the Park offers these resources to anyone who seeks assistance, to the extent capacity and resources allow, regardless of their affiliation with the University.

### **The Importance of SBA Support**

Roughly 70% of Park companies are early-stage startups, most of which are still working on developing their core technologies and intellectual property, and most of which are in the pre-revenue stages. Because of this, many of the traditional SBA programs, such as small business loans and the HubZone program, are difficult for companies to take advantage of. Thus, GAFC funding has been a critically important way for the SBA to support these companies, augmenting the various state and local funding that supports the Park's provision of space and services to startups. GAFC funds have allowed the Park to provide hundreds of hours of additional business services, support, and mentorship through its professional staff services and through its student analyst program, which are generally provided at significantly reduced cost or no cost to entrepreneurs and startups seeking to commercialize technologies or develop innovative technology-based solutions to industry problems. Of particular benefit is the GAFC funding that the Park has allocated towards supporting the student analyst program. This provides a dual benefit in that the analyst program greatly expands the Park's capacity to directly assist companies in developing their businesses, while providing valuable practical and engaging entrepreneurial experience to undergraduate and graduate students that cannot be otherwise gained through academic coursework or through traditional corporate internships. The work that analysts provide for early-stage companies in the Park have a real impact on the success of these startups. Working closely with these companies helps to demystify the entrepreneurial process and provides the necessary insight and confidence to encourage these entrepreneurially minded, intellectually curious, and highly motivated students to pursue entrepreneurial opportunities of their own.

### ***Supporting a Wide Range of Companies and Entrepreneurs***

The Park, and its predecessor organization, the BTBC, have assisted hundreds of individual entrepreneurs and early-stage companies over the past decade, ranging from the earliest stages of ideation through to rapid growth and expansion. Though the Park assists companies across a wide range of technologies and industry sectors, the Park has developed concentrations of companies working on technologies related to the strengths of the University, such as civil, chemical, and mechanical engineering; pharmaceutical chemistry; biomedical engineering; and radar and remote sensing. Individual entrepreneurs also range across the spectrum from university researchers, students, graduates, and staff, to experienced professionals from within existing bioscience and technology industries, to serial entrepreneurs exploring a new idea, and first-time entrepreneurs from the broader community looking to create new opportunities for themselves and to put their skills and experience to use in a new venture. The Park also works diligently to facilitate interaction and collaboration between early-stage companies and more established private industry firms, either through direct partnership, or through collaborative research relationships with the University. Startups benefit from the resources, stability, and organizational and technical expertise of the established firms, which in turn are invigorated by the innovative organizational and technological approaches of the early-stage companies, as well as their specialized technical expertise and talent.

Because of the Park's close affiliation and proximity to KU, most, if not all its ~60 resident companies and many individual entrepreneurs have at least some connections to the University, with roughly 25% of them currently commercializing University intellectual property. Not only has this measurably increased the rate of university spinout creation and licensing of university generated IP, a noticeable and important trend is that many of these instances of university-driven entrepreneurship are by women and minority individuals, which are well represented within graduate level STEM departments and research institutions within the University and Medical Center. As companies founded by women or minority entrepreneurs are on average more likely to hire additional minority and women employees, this has had positive outcomes on the overall diversity of the Park system. Not only is this an important consideration for the Park's primary stakeholders, diversity and inclusion are critically important to successful innovation generally, which by

nature requires a range of different approaches, perspectives, and viewpoints to solve challenging technical problems and to identify and address new market opportunities.

#### **The Importance of GAFC and Similar Types of Funding**

Of the many federal programs available for assisting small business and entrepreneurship, GAFC funding is especially valuable in directly assisting early-stage companies because of its flexibility and because of its minimal burden on the entrepreneurs and startups themselves. Unlike many other sources of funding available to support entrepreneurial activity, GAFC funds are relatively free of restrictions and place no burden directly on the startups in terms of application, tracking, or reporting. Often, legitimately deserving startups with great potential fall through the cracks of other programs, most of which have specific matching funds requirements, maximum company age limits, a narrow technological focus, revenue restrictions, collateral requirements, etc. These many restrictions will often place companies out of eligibility at points in their growth cycle at which they need help most. Similarly, lengthy application processes and ongoing reporting requirements common with many other programs lessen the value of otherwise helpful initiatives, as they tax startups' limited staff and resources. Alternatively, GAFC funding allows organizations like the Park, which work closely with companies and have an intimate understanding of their needs and potential, to deploy SBA funding quickly, directly, and efficiently in support of these companies with little burden on their operations. GAFC funds have been especially important to the Park and its companies in supplementing similar state and local funding sources, such as the City/County incentive fund, and KS Jobs Creation Funding, which are often channeled through organizations like the Park to reduce the administrative burden on the funding agencies themselves. These resources have allowed the Park to provide countless hours of business support and services, subsidize shared space and equipment, and supplement various other microgrant and direct incentive programs, all of which have proven incredibly valuable to helping a struggling startup survive a difficult month or access a valuable opportunity at a critical juncture in a company's life cycle, and most of which would not have been available to these startups through other programs.

Written Testimony before the U.S. House, Committee on Small Business  
Subcommittee on Economic Growth, Tax, and Capital Access

Hearing Entitled:  
“Innovation as a Catalyst for New Jobs: SBA’s Innovation Initiatives.”

Mr. Ben Johnson  
Chair  
Innovation Advocacy Council, SSTI

July 14, 2021

Good afternoon, Chairwoman Davids, Ranking Member Meuser, and distinguished Members of the Committee. My name is Ben Johnson, Chair of the Innovation Advocacy Council of SSTI, a national coalition focused on innovation-based economic development and modernizing federal innovation and entrepreneurship policy. I am honored to join you today to discuss innovation, commercialization, and entrepreneurship as drivers for economic growth and prosperity for all Americans.

**Innovation-based Economic Development is a Common Need among across Communities; and a Different Set of Challenges for Every Community.**

My personal journey in economic development started 20 years ago in the maintenance shop of a manufacturing small business and led to business planning for neighborhood small businesses and building a Community Development Financial Institution to finance their growth. For the last 16 years, I have seen how a long-term, multi-pronged approach to growing a specific industry cluster can help transform a regional economy.

But, I appear here today representing a much broader, diverse network of communities across the country who are working to create new economic opportunity in their respective regions. The Innovation Advocacy Council is the policy arm of SSTI – a nationwide coalition of more than 150 organizations from 44 states. These organizations include public sector state and/or local economic development organizations; public and private universities; nonprofits; and private small businesses – all dedicated to driving economic prosperity and creating a better future through science, technology, innovation, and entrepreneurship.

The services of our members range from incubators that provide physical spaces for entrepreneurs and startups and entrepreneur support organizations that provide a range of counseling and services to startups; to accelerators that provide small amounts of capital and support to a specific cohort over a specific time period and venture development organizations that more broadly drive commercialization of new technologies, turning them into new companies and new jobs through technology de-risking and financial support and investment. Our members also work to address the workforce needs of growing technology companies,

promote inclusive and equitable entrepreneurship ecosystems, and bridge public and private collaborators – all to the benefit of job-creating startups and small businesses.

Our membership is located in communities across the United States and ranges in organization type and location from:<sup>1</sup>

- the state-chartered Ben Franklin Technology Partners network across Pennsylvania and Empire State Development's Division of Science, Technology & Innovation in New York; to
- the Enterprise Center of Johnson County, Kansas, the Bowling Green Chamber of Commerce in Kentucky, and the City of Beaverton, Oregon; to
- the University of Florida Research Foundation, Emory University in Georgia, the University of South Dakota, Lorain County Community College in northcentral Ohio, and Johnson C. Smith University, an HBCU in North Carolina; to
- nonprofits, like the Texas Manufacturing Assistance Center, NexusLA in Louisiana, and the California Technology Council Foundation; or small businesses like Startup Junkie in Arkansas.

The work in each region varies based on the assets, history, geography, population, and personality of each region. For example, my full-time job is in St. Louis with BioSTL, a consortium of more than 50 corporate, philanthropic, academic, and public sector leaders dedicated to leveraging St. Louis' long-standing research and industry strengths in medical and agricultural sciences. We capitalize on those strengths through a broad suite of activities that build new homegrown startups and attract innovation from across the globe to our region, harnessing innovation and entrepreneurship to build a wholly inclusive ecosystem and bridge urban and rural economies. In other communities, our peers across SSTI's membership might have a single program focused on filling a gap in financing for local small business; or they might have a range of activities dedicated to their local sector strength, like advanced wood products in rural Appalachia of southeastern Ohio. In each case, the right mix of entrepreneur support activities and the right organization(s) to deliver them are different and dependent on the needs of small business in that unique market.

Yet, while we may differ in sector and structure, we are united by a conviction that innovation & technology are key to:

- creating high-quality jobs that result in a higher standard of living for all people in all communities;
- modernizing and diversifying a region's economy to make it (and the US) more globally competitive; and
- cementing US leadership in solving domestic and global challenges – like feeding a growing population; curing disease and battling pandemic; addressing climate impacts; and ensuring national security.

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<sup>1</sup> For a full list of SSTI membership, please see <https://ssti.org/ssti-members>.

**Aligned & Coordinated to Support All the Needs of Small Businesses**

The work of innovation-based or 'tech based-' economic development is synergistic with the great work of the Small Business Administration. It is grounded in the proven principle that with the right kind of support, at the right time, the entrepreneurs and business owners of this country can and will bring products to market that solve customer and societal needs...and they will create economic opportunity for their communities.

However, not every small business experiences the same challenges. The challenges of every emerging startup and growing small business are different at each stage of its development and unique based on its industry sector, customer base, and product mix.

I have often said that I do not envy my peers at the SBA and its resource partner network, including SCORE business mentors, Small Business Development Centers (SBDCs), Women's Business Centers (WBCs), and Veterans Business Opportunity Centers (VBOCs). These SBA providers must be generalists, "triaging" for all types of small businesses in communities – from the pharmaceutical company to the flower shop. That is where we in the innovation community come in and can support, specializing in technology-based economic development to augment the resources of the SBA and others.

The needs and opportunities of innovation-based businesses are just different from so-called, 'Main Street' businesses.

- The types of support needed to mature a technology from idea to market readiness are different than the supports needed to manufacture or market a widget. The path to market for a technology-based business (often in highly regulated markets) can be long and winding as technologies are de-risked and business models iterated.
- The types of capital raised by innovation-based businesses are different as these companies take longer to mature to revenues, so traditional models of bank, and even SBA, financing often do not apply. For example, even within the SBIR program (our country's primary technology advancement program, which helps immensely at re-risking the technology itself), only a very small portion (<0.3%) of the nearly 60,000 SBIR companies receive an SBA-backed loan.
- And, the networks of industry-specific expertise – ranging from research to regulatory – are often more narrow, but by necessity need to be deeper in defined expertise, than broad networks of business, finance, or marketing mentorship that is generally applicable across all types of business.

Since the needs are different for technology entrepreneurs, so too are the resource needs in our communities. The U.S. invests billions (as it should) in research and development, which makes us home to the greatest ideas and innovation in the world. But, we often assume that R&D is going to be pulled into the marketplace without further assistance when, in fact, it takes immense work to cross the gap from lab to market – especially in rural communities and for women and minorities often underrepresented in innovation industries.

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Programs like SBIR/STTR and SBA's FAST program, and more specifically for this hearing the Growth Accelerator Fund Challenge and Regional Innovation Clusters, are perfect complements to the SBA's array of other small business supports.

- They recognize that the needs of new businesses and innovation-based companies are different than those of many traditional businesses.
- These programs recognize that there is no true 'national economy', but rather an amalgamation of individual regional and community economies that differ in their strengths, their focuses, and their needs
- And, they recognize that no one entity or one-type of organization is best positioned to support all the needs of entrepreneurs and small business owners. Rather, small business owners should use multiple programs, at multiple times, in succession or in unison as it requires for them to be successful.

Small business support is, by necessity, a team approach to assistance – with each member of the support team, from various organizations, bringing a special skillset and suite of supports. As paraphrased from my colleague and counterpart Darcella Craven, director of St. Louis' regional Veterans Business Outreach Center: 'We do not use one doctor when working to improve our health and well-being. There isn't a doctor-dentist-ob/gyn-cardiologist-spinal system-organ combination doctor anymore.' We often have a general medicine or family doctor to see regularly, but as specific issues arise, we see specialists with deep knowledge and experience in a particular field related to a particular issue.

Likewise, the programs of SBA (and those of other agencies, like the Economic Development Administration) work to complement each other and provide the right expertise and support at the right time for a growing small business. More specifically, programs like Growth Accelerators and Regional Innovation Clusters enhance support for technology-based businesses and enable regions to tailor support, in concert with other SBA and community activities, to the unique needs of businesses in their regions.

#### **SBA Programs Support Innovation-based Economic Impact**

The Growth Accelerator program provides small prizes to a large range of programs across the country – more than 220 unique winners from 51 states/territories – to stimulate innovation and entrepreneurship, especially in rural communities and/or among women and minorities, all of whom have been traditionally underrepresented in the tech-based economy.

The program allows SBA to catalyze a wide array of supports targeted directly at the unique challenge faced by unique groups of small businesses within a given region and adds additional capacity to existing programs and partnerships across the US. In St. Louis, we used a Growth Accelerator award to increase National Institutes of Health-related SBIR success among female founders and are currently leveraging a second award to replicate that success among Black and Latinx founders. In other communities, the awards have expanded technology commercialization support for small businesses in sectors like cleantech in and around Los Angeles or food innovation in Reading, PA, among many others.

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The Regional Innovation Clusters (RIC) program allows SBA to augment its range of broad small business supports with specific, deep domain expertise in sectors of the economy critical to regional growth. By allowing regions to define their own unique clusters, the program enables global competitiveness in distinct, diverse communities across the country – from advanced wood products in rural Appalachia of southeastern Ohio to smart grid technology in Chicago; or unmanned aerial systems and manufacturing in KS to advance energy and defense technology in Minnesota.

The RIC program is unique in that it helps provide funding for the ‘glue’ that differentiates a regional economy from its competitors around the globe. Rather than funding a narrow, discrete project, the RIC program funds alignment of cluster-based small business supports that address small business growth from the perspective of the whole system rather than individual, programmatic elements of a system.

The RIC program brings all actors of a regional economy together (private sector, higher education, economic development organizations, nonprofits, foundations) to work collaboratively and focus resources and small business supports around approaches that are customized for and dependent on the local strengths, capabilities, needs and culture. While the shorthand is often aimed at building the “next Silicon Valley,” successful regions and states recognize there is only one Silicon Valley and that their job is to work on building the regional innovation economy that makes sense for their area.

The Regional Innovation Clusters program augments and aligns with existing SBA programs (SBDC, VBOC, WBC, SCORE, etc.) to bring a depth of industry expertise and networks. Within their respective regions, RICs serve both as industry expertise that can follow on more deeply from initial SBA support and as an initial entry point for innovative business that can then connect through RICs to other SBA services.

The RIC program brings flexible dollars to communities to invest in the right types of support at the right time for their specific businesses. Depending on these local needs of the small business ecosystem, those activities often cover: Business mentoring & counseling; Fundraising and capital access; Technology commercialization; and promoting linkages between small businesses and large businesses in the cluster. The multi-year nature of the program allows regions to cement capacity and cluster relationships that can then be augmented and/or sustained locally.

These distinguishing points related to the RIC program come from both lessons learned from a network of RICs across the U.S. and from my direct experience as a Regional Innovation Cluster administrator in St. Louis. BioSTL was fortunate to serve as a lead cluster contractor with SBA on behalf of the St. Louis Regional Bioscience Cluster and 6 subcontracting partners. Services through the RIC ranged from: support for Black would-be entrepreneurs in Wellston (in the urban suburbs of St. Louis); to counseling to small businesses at the intersection of bioscience and advanced manufacturing or information technology; to the launch of a network of agriculture growers and producers to close the urban/rural gap between new agtech innovation and the farming communities where food is grown, and innovation can make U.S. farmers more globally competitive. Over the 5-years of the contract, BioSTL and its partners provided counseling, training & mentoring to nearly 2000 small business and entrepreneurs just starting their small

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business journey. These activities resulted in the creation of nearly 500 jobs and the attraction of nearly \$1 billion in financing for the small businesses.

These kinds of results have been seen in RIC communities across the country. A sampling of these impacts is highlighted in the Appendix to this written testimony.

#### **Possible Congressional Action**

Yet, both the Growth Accelerator and Regional Innovation Clusters program need additional support and direction from Congress to solidify and scale their impact.

In its current form, the primary value of Growth Accelerators program is providing modest assistance to newer activities or smaller entrepreneurial support organizations. A more robust program that adds to the competition element by providing SBA flexibility in the funding mechanism to allow for a wider range of project sizes and types (e.g. authority to award grants or cooperative agreements in larger amounts) – and with further evaluation of activities and impacts – could enable these organizations to more effectively tackle significant or emerging needs in their region.

The Regional Innovation Clusters program can be significantly strengthened with the support of Congress. The program needs to be fully authorized to provide SBA provide further clarity and guidance on the purpose and possibilities of the program. The Innovation Advocacy Council and its membership have worked with congressional leadership in recent years to sustain and potentially authorize the program long-term. More detail on those efforts, including perspective legislative language, can be provide if there is interest.

Further, recent interpretation from SBA has significantly narrowed the range of eligible applicant organizations for the RIC program, ruling that only small businesses themselves are eligible applicants. This interpretation severs one of the strongest tenants of the RIC program – that individual regions are best equipped to determine their cluster lead. Across the country, the best organization to support innovative businesses within a region's particular cluster strengths may vary greatly. In some regions, it might be a public sector entity; in some, a private entity. It might be a university or its extension service (like Kansas State University). Or, it might be a incubator or entrepreneur support organization...or a non-profit, like BioSTL, organized specifically for supporting cluster-based economic growth. It might be a local or state government entity. Or, in some regions, it could be a small business consultancy working on behalf of regional stakeholders (like Startup Junkie in Arkansas). Congress needs to provide clarity that reestablishes a broad range of eligible entities and allows freedom for regions and local partners to define the type of organization best positioned to lead in supporting their cluster's small businesses.

#### **Conclusion**

Thank you for allowing me to testify today on how innovation is a catalyst to job growth and the importance of these SBA programs to local communities and small businesses as they work to grow regional economies. I am happy to answer any questions that you may have.

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**Appendix:****Examples from a sampling of Regional Innovation Clusters**

- a. Ozarks Regional Innovation Cluster (Arkansas)
- b. Arizona Optics Cluster (Arizona)
- c. Great Plains Technology and Manufacturing Cluster Initiative (Kansas)
- d. Defense Alliance (Minnesota)
- e. Montana Bioscience Cluster Initiative (Montana)
- f. Autonomous and Unmanned Systems Cluster (New Mexico)
- g. AgLaunch (Tennessee)
- h. Utah Advanced Materials & Manufacturing Initiative (Utah)
- i. Water Council (Wisconsin)

a. **Ozarks Regional Innovation Cluster** (Arkansas)

The Ozarks Regional Innovation Cluster (ORIC) led by Startup Junkie, focused on retail, supply chain, and food processing delivers in a catalytic way entrepreneurial support services. We're focused on positively impacting the region, and remain a leader in building a sustainable and inclusive venture ecosystem in an unexpected place. As a snapshot of our success over the past 5 years:

- **Outputs (Productivity of our Team):**
  - 4,041 mentoring, counseling, training, support, and assistance engagement sessions executed. Through these sessions, approximately 2,641 cluster small business owners and entrepreneurs were serviced. In addition, we served approximately 644 women owned small businesses, 429 minority owned small businesses, and 101 veteran owned small businesses. All topics covered ranging from venture finance and IP through digital marketing.
  - 767 events, programs, and workshops executed. Through these, 267,160 cluster small business owners, entrepreneurs, and stakeholders were reached. A diverse, inclusive, and globally recognized portfolio of events including but not limited to Startup Stories, IdeaFame, Veteran Venture Leaders, Startup Crawl, GameChangers, the Startup Junkie Podcast, and 1 Million Cups.
  - 2,046 outreach engagements executed reaching constituents in the underserved community in addition to outreach engagements focused on cross region collaboration, bench marking, and gathering/sharing lessons learned
- **Outcomes (Impact) (based on sample of 51 cluster companies):**
  - 2,042 net new jobs created
  - \$492,352,454 in revenue generated
  - \$340,140,116 in private capital raised (100% worked with the ORIC team)
  - \$20,096,691 in public capital raised (state funding, SBIR/STTR, grants, etc) (100% worked with ORIC team)
  - 957 new product, service, and solution lines added
  - 884 new markets entered
  - 150 patent applications submitted and approved

- 100% of these companies either received one-on-one mentoring, counseling, training, support, and assistance from the ORIC or participated in the ORIC's events, workshops, and programs.
- Naming just a small sample of the many incredible ORIC success stories include phenomenal ventures like:
  - RevUnit: <https://revunit.com> (2 to 50+ employees as a cluster client)
  - Bold Strategies: <https://www.boldstrategies.com/> (2 to 40+ employees as a cluster client) (**minority, veteran, and women owned**)
  - B-Unlimited: <https://www.b-unlimited.com/> (\$2M in revenue and 10 employees to \$12M in revenue with significant growth in employees, reaching 100+ as a cluster client)
  - Phigenics: <https://info.phigenics.com/> (\$10M to \$100M+ valuation as a cluster client serving major retail companies water quality needs as a cluster client) (**veteran owned**)
  - OurPharma: (Idea to raising over \$10M in capital to nation leading generic pharmaceutical manufacturer and supplier based in the Ozarks as a cluster client)
  - Natural Way Food Group: <https://www.naturalwayfoodgroup.com/> (Idea to being in over 700 store fronts nationwide as a cluster client)
  - Fetch Package: <https://www.fetchpackage.com/> (\$5M to over \$50M valuation providing a contactless and safe package supply chain solution across the country as a cluster client)
  - Teslar Software: <https://www.teslarsoftware.com/> (5 employees to over 50 inventing and rolling out critical PPP loan application and forgiveness software in partnership with Mark Cuban, all while being based in the Ozarks as an ORIC client)
  - EasyBins: [www.EasyBins.com](http://www.EasyBins.com) (Idea to rapidly growing grocery delivery company while helping the nation literally survive the Covid19 pandemic as an ORIC client)
  - Bungii: <https://bungii.com/> (Idea to raising over \$10M and seeing 400% annual growth across the nation, featured on CBS, providing contactless delivery of heavy items, all as a cluster client)
  - Little Bird Systems <https://www.littlebirdsystems.com/> (Idea to viable solution and commercialization with industrial IoT remote monitoring technology now installed on over 1500 chicken feed bins nationally and growing, all as a cluster client) (**minority and veteran owned**)
  - AcreTrader [www.acretrader.com](http://www.acretrader.com) (Idea through a \$12M Series A – the company brings liquidity to family farms and investment access to an overlooked asset class.)
  - OzarkIC [www.ozic.com](http://www.ozic.com) (The company employs 17 highly educated engineers and is a world-leader in harsh environment electronics with solutions for space, hypersonic jet engineer controls, and deep-well geothermal. The company was a MassChallenge winner in 2021. The

company has a 90% SBIR win rate from multiple agencies and is fully transitioning to production)

- Ox [www.getox.com](http://www.getox.com) (From concept to a \$3.5M Series A the company provides heads-up display solutions for grocery and retail warehouse automation to the world's largest retailers.) **(minority and women owned)**

We helped these companies reach success through our intensive 1:1 no-cost consulting, in addition to our inclusive events, workshops, and programs aimed at our diverse cluster companies. Events like the Minority Plug 1 and Minority Plug 2, focused on helping minority entrepreneurs build connections and gain exposure, these events helped hundreds of minority-owned small business owners gain traction and grow their businesses.

b. **Arizona Optics Cluster** (Arizona)

The Arizona Optics Cluster is the oldest optics industry cluster in the world. It has been operating continuously since its founding in 1992. However, by 2016 the cluster had shrunk to a mere shadow of its former self. In 2017 we changed the name to Optics Valley to reflect new management and an enhanced status within the Arizona technology community.

The RIC award in December 2018 has enabled us to aggressively rebuild the cluster so that today it is a thriving vibrant organization. We are up to over 80 members today, and most of them are growing. In addition, we have attracted at least four new companies to move to Arizona.

To provide value to our members, we have introduced several new programs, including:

- Monthly newsletter to highlight company information, as well as local and worldwide events
- Monthly "Tech Series" presentations that attract an international audience
- Industry focused networking events
  - o -This month we will release an online searchable directory
- This summer we will begin an enhanced website project
- In January 2022, we will hold out 5th Annual Arizona Photonics Days, a three day industry conference

Finally, there is a greatly improved sense of community and cooperation, even among competitors.

All of this would not have been possible without the RIC award.

c. **The Great Plains Technology and Manufacturing Cluster Initiative** (Kansas)

The mission of the Great Plains Technology and Manufacturing Cluster (GPTMC) is to increase the number of globally competitive and innovative technologies, manufactured products, and services produced in rural businesses and communities of the Great Plains region. Within the first two years alone, the GPTMC has: founded a connecting network of over 160 members,

including small manufacturers and supporting businesses/organizations; had 131 engagements with regional economic development partners; and 651 engagements with small businesses, which led to 42 contracted innovation-support projects. Additionally, GPTMC has participated in/co-hosted over 35 regional events and presentations, hosted a website-building course for small businesses, and developed websites for 7 small businesses. The GPTMC website ([www.greatplainstmc.org](http://www.greatplainstmc.org)) and monthly newsletter serve as portals to services available from the GPTMC technical assistance partners (engineering, new product prototyping, marketing, business planning, and data analytics), workforce and economic development partners across the region, and products/technologies available from the region's small manufacturers and innovators.

Through much of 2020, GPTMC allocated significant resources to helping businesses respond to the impacts of COVID-19. The website and newsletter were used to disseminate information on related legislation, advice for manufacturers, available funding and resources, and testimonials on how specific businesses were handling issues. COVID-19-related information was not only sent to members, but also to over 6000 regional manufacturing contacts collected from known active/past clients and subscription-based data services. In response to early concerns from local healthcare industry leaders, GPTMC worked with their host organization, the Kansas State University Technology Development Institute, to use in-house design and 3D printing resources to create face shields for frontline health professionals. Through the technical assistance provided by GPTMC partners Circle B Manufacturing, located in Junction City, KS was able to rapidly develop a new hand sanitizer dispenser and bottle design/bill of materials in order to develop a domestic resource for critical Personal Protective Equipment (PPE). Presently Circle B Manufacturing is scaling production in response to the domestic demand being requested.

The GPTMC's most recently established partnership is with the Kansas Department of Agriculture (KDA) and Kansas Manufacturing Solutions (Kansas NIST MEP Partner) to build a community of Agriculture Equipment Manufacturers—a subsector identified by the KDA as lacking in networking infrastructure. Two informational and networking events are planned for the Summer of 2021, one that focuses on supply chain issues, and the other on successful collaboration building. Several technical assistance projects have been contracted in support of the state's small agriculture equipment entrepreneurs and manufacturers, including the development of a Forklift truckbed for a Hays, Kansas entrepreneur. The new equipment design enables individual pallet loads of grain/feed/equipment to be lifted and carried all by the same service vehicle. Through the assistance of the GPTMC the innovator has entered into a licensing agreement with a larger Hays, KS manufacturer seeking to diversify their current product offerings.

Also in 2021, the GPTMC, along with several technology-based partners, launched a new Tech Portal to assist companies seeking early-stage innovation concepts to evaluate, license, develop, and commercialize. Through the GPTMC partners, an out-of-region small business, KM Pathogens, is building a new pilot production facility in Downs KS (population 752) in order to produce high-tech nanoparticle filtration technologies that can be used to improve the effectiveness of PPE filtration equipment. Local business support and a willing workforce were among the biggest factors in determining the location for this new pilot plant.

Repeatedly, the SBA RIC program has enabled Kansas rural small manufacturers to increase their innovation capacity through the forging of critical connections versus the critical mass typically experienced in urban regions. Without the SBA RIC program the innovation gap would continue to increase in our state's rural communities and regions.

**d. Defense Alliance (Minnesota)**

- Contributions to other regional economy efforts: The RIC program has been invaluable for our own cluster, bringing connections, opportunities and funding to hundreds of small businesses that they would otherwise not have had. But it has also been a unique additive force for the region, as we have spent considerable time with other regional economy efforts, including:
  - o Being instrumental in starting and growing an autonomous systems cluster in the Grand Forks, ND area;
  - o Assisting an ag-tech initiative in the Fargo, ND region ("Grand Farm") by developing their strategic partnerships and connections to Federal opportunities and funding;
  - o Assisting another SBA RIC, the Water Council in Milwaukee, with their Federal work and consulting with their small business members;
  - o Being a resource partner for an emerging Veteran outreach initiative in South Dakota;
  - o Helping to form and grow an aerospace and defense startup accelerator in western Wisconsin (Aero X), and;
  - o Advocating (aka not lobbying!) for programs that benefit small businesses, such as our work in pushing to bring back the DoD's Rapid Innovation Fund which was hugely beneficial for our Members trying to commercialize late stage technologies.

We dubbed this work as "extra-regional" during the first year of our operations as a RIC (unique at the time, as economic development entities are generally known for their competitiveness and resulting lack of cooperation), and it has proved to be a force multiplier and accelerator for putting the broader region on the map with regard to technology advancement through cluster work.

- A unique approach to commercialization of technology: Our origins, and much of our current focus, is defense-related technology. But we have been expansive in our definition of that and with whom we work. As such, we are relatively market-agnostic and are attuned to "adjacent" technology potential for our small businesses. As a result our cluster has what we believe to be a unique set of commercialization processes that are better understood and implemented/adapted for our many small business members.

**e. Montana Bioscience Cluster Initiative (Montana)**

Montana Bioscience Cluster Initiative (MTBSCI) is a multidimensional program with seasoned stakeholders from the private sector, university, economic development, trade associations and others who have boots on the ground providing technical assistance as well as support, training, and mentoring to new and established life science businesses, entrepreneurs, and students. In 2020, over 60 small businesses and 1000 faculty, student researchers, and entrepreneurs participated in 30 training and showcasing events offered virtually by MTBSCI. \$363,333,133 in total capital flowed to cluster participants in 2020.

Cluster participant, Inimmune Corporation, provides an insightful illustration of cluster impact for the state and nation. Inimmune develops immune therapies and components for more effective vaccines. In July of 2020, this biotech startup announced the largest Series A investment in Montana history: a \$22 million round led by Two Bear Capital out of Whitefish, Montana. Inimmune also maintains a symbiotic relationship with MTBSCI partner, the University of Montana, and was awarded a five-year, \$33.4 million NIH award as a result of this collaboration. In the early days of the coronavirus pandemic, the University of Montana and Inimmune dedicated part of their research to identifying and advancing a COVID-19 vaccine candidate.

**f. Autonomous and Unmanned Systems Cluster (New Mexico)**

The Autonomous and Unmanned Systems Cluster (AUSC) (New Mexico) has continued to support technology based economic development in rural areas of New Mexico. Key focus areas have been supporting emerging technology companies and providing workforce development opportunities for students from high school to college. We see the ability to assist small businesses in the maturation of technologies and developing technical workforce as critical efforts in providing economic opportunity in rural areas. Since the end of the SBA RIC in March 2020, we have continued to provide resources to the maximum extent possible to these efforts. We see other SBA programs such as the SBIR/STTR can continue efforts started under the RIC program. Our recent NASA STTR allows us to bring academic institutions together to build a technology ecosystem that will spawn companies and grow the technical workforce. We firmly believe the RICs have had an impact on the regions and started a generational change of providing economic opportunity in many underserved areas like rural New Mexico.

An initiative started under the SBA RIC program and continuing strongly today is the Kéyah Advanced Rural Manufacturing Alliance (KARMA) on the Navajo Nation. KARMA is built on the AUSC model and we are honored to be part of this initiative on the Navajo Nation with over 50% unemployment.

**g. AgLaunch (Tennessee)**

**AgLaunch Initiative** is leading the Delta Ag Cluster, an SBA RIC, over a 98-county, five-state region located along the Mississippi River comprised of primarily rural counties in Arkansas, Kentucky, Missouri, Mississippi, and Tennessee surrounding a few urban areas including the Memphis MSA, which is at the center of the region. AgLaunch has supported 38 companies through all programming, of which 26 received funding and field trial cost-share money, portfolio companies have collectively raised a total of **\$71,591,866.00** of



investment capital to date, and they have raised a total of **\$27,765,513** through grants and loans.

AgLaunch has developed the Farm-Centric Innovation Model as a business platform to facilitate the exchange of farm level data, knowledge and acres of the farmers in the the Mid-South Delta region to build and deploy a portfolio of new innovations ranging from robotics to market transparency mechanisms. The Covid-19 pandemic has revealed vulnerabilities in the nation's food supply chain, and this disruption has created greater relevance for the AgLaunch RIC work to drive investment and technology into the critical gaps exposed by the pandemic. A few highlights:

- Series A or B investment in last 12 months: Swinotech (\$5M); Rantizo (\$7.5M) and Stony Creek Colors (\$9M).
- AgLaunch portfolio companies deployed field trials in **20 states and 3 countries** (Canada, Germany, and Spain).
- The median wage at an AgLaunch portfolio company is **\$64,822.83** a year.
- AgLaunch portfolio companies currently employ **276** full- and part-time employees.
- AgLaunch has received federal, state and philanthropic funding totaling **\$4.6 Million** to support local ecosystem efforts in the Agrifood innovation sector in last 12 months.

SBA's RIC program is **crucial** in facilitating organizations like AgLaunch to bring together the unique assets and creative approaches that recognize the importance of localized innovation.

#### **h. Utah Advanced Materials & Manufacturing Initiative (Utah)**

In Utah, the SBA RIC program has successfully created a cluster of companies focused on advanced materials (composites, ceramics, etc.) and advanced manufacturing (3D printing, digital engineering, robotics). Last year, the cluster was recognized by the Governor's office as a targeted industry for the state and the impact of the SBA RIC program's work was directly tied to the designation of Utah as one of only six Defense Manufacturing Communities in the country. As the home to Hill Air Force Base, Utah's defense and aerospace industry is strong and growing. The Ground-Based Strategic Deterrent program (GBSD), an \$83 billion program to secure our nation through replacing the aging Minuteman program, generates opportunities for advanced manufacturing and the RIC cluster is critical to its success. The Utah SBA RIC program fosters the growth of small and medium businesses in advanced manufacturing as a cluster, to better position these companies to support the nation's defense industrial base. Utah's advanced manufacturing industry also supports the medical industry with products, which range from heart valves to prosthetics, and the recreational industry with stronger, lighter materials for bikes, skis, campers, and other sporting equipment.

As an SBA RIC awardee, UAMMI consistently provides services to the cluster that lead to long-term benefits for small businesses, SBA offices, cluster partners, and other stakeholders. For

example, the RIC activities to-date expanded the small businesses within the cluster, provided services to small businesses that create new jobs, and aided in efforts that secure ongoing increases in capital for its cluster members within the growing advanced manufacturing industry in Utah. During the most recent full contract year of operations (2020), the Utah RIC program was tied to a nearly 20% increase in cluster members, the creation of 83 new jobs, and more than \$9m of new capital for small businesses - even while navigating the difficulties of the COVID-19 pandemic and only represent a few of the RIC program's positive impacts to small and medium businesses in Utah.

i. **Water Council (Wisconsin)**

Built on more than a century of water innovation, The Water Council was established in 2009 by forward-thinking Milwaukee business, education and government leaders. As a result of an 2014 SBA RIC award, The Water Council has coalesced one of the most concentrated and mature water technology clusters in the world. The SBA has enabled The Water Council to launch innovation programs to accelerate the business expertise of dozens of small water technology companies from the Milwaukee region and across the United States. The support has ranged from export training, acceleration and lean startup support, sales training and capacity building, as well as B2B matchmaking that has offered business opportunities for cluster companies. Today, The Water Council has established itself as a global leader in the water industry and one of America's premier economic development clusters. This is exemplified by Brad McDearman from Brookings Institute who stated: "Milwaukee's water technology hub represents one of the national models for identification and implementation of a cluster initiative. What really stands out to me is that it positions the region at the center of solving a critical global challenge, provides Milwaukee with a new and compelling foothold in a fast changing economy, and represents a highly collaborative economic development effort that is industry driven, university fueled and government funded."

Committee on Small Business Subcommittee on Economic Growth, Tax, and Capital Access  
 “Innovation as a Catalyst for New Jobs: SBA’s Innovation Initiatives”

I am Dr. Gabriel R. Burks Vice-President and Head of Research & Development for FrostDefense Envirotech Incorporated and Postdoctoral Research Associate in the Department of Materials Science & Engineering at the University of Illinois at Champaign-Urbana and the Beckman Institute for Advanced Science and Technology.

I am delivering this testimony on behalf of FrostDefense Envirotech Inc. – a National Science Foundation SBIR Phase I funded startup company, where we specialize in the development of physical and computer-based solutions to mitigate early spring frost damage in vineyards and other fruit crops – in regards to Small Business Administration programs and federal investment to stimulate innovation at startups.

This testimony positions FOR more programs and federal investment that support innovation and entrepreneurship.

**Innovation is expensive.** In inflation-adjusted dollars, federal support for universities has increased from roughly \$8 billion per year in the 1960s, where today the National Science Foundation reports total university-performed research & development has now surpassed \$55 billion per year.

**Success in tech startups is elusive.** As of 2018, tech startups fail at a rate of 63% and this failure rate is reduced by about 20% when a startup has venture backing.

**Pivoting equates to success.** Startups that pivot 1-2 times have 3.6 times better growth and raise 2.5 times more money than startups that do not pivot at all or who pivot too much.

What most people do not realize is that all great ideas require refinement and polishing to become viable solutions for society, and that the problems that society face today tend to be extremely complex. For example, our company tackles this problem of minimizing the impact of frost on delicate fruit crops. First question, what crop? Every crop type has a unique nutritional requirement, growing topography, growth rate, growing season, and response to environmental stimuli. Even within a singular crop type – in our case, grapes – each varietal will also have great variance in those same factors. Second question, what frost? How does one know when and where a frost will occur? What constitutes a frost for the plants? Some crops may be more tolerant to frost events than others. Third question, what product addresses these issues? If it is a material solution, what is it made of, how long will it last on the shelf, how will you price it and deliver it to the customer, who will you manufacture it, does it meet regulatory requirements, and how does this materials react to different types of crops? If it is a digital solution, who will program it and how will we develop the necessary algorithms? Final question, who is going to answer all of these questions and where are they going to have the space and resources to answer them?

Perhaps the biggest difference between university-based R&D and startup R&D is that universities have the ability to share funds and human capital with other colleagues, whereas with startups there are a few founders who are all scrapping to learn new skills to fill gaps in knowledge and to acquire funding to see their idea through to the end. As a more concrete example, our team is composed of plant physiologists, a materials scientist & engineer, atmospheric scientists, statisticians, agronomists, systems engineer, civil engineer, data specialists, among others. Only five of those have been paid directly by our company to do this work. In many cases, we pay in company equity with the prospects of something bigger at the end of

the tunnel. To note, this list of science professionals does not include our awesome team of accountants, business managers, regulatory experts, attorneys, and other critical business experts.

These experiences are not unique to us. Many tech startups must undergo such developmental stages to reach their bigger goal. Solving these large and complex problems require interdisciplinary teams with diverse expertise, sufficient funding, and time. Regulations and federal funding should be organized in such a way as to accommodate the team formation and the need for new tech startups to pivot to better match their developed technology to the market need. Furthermore, the ability to hire appropriate team members early-on with the experience and technical background to develop the aforementioned technology could be a make or break factor in having a successful startup or reaching an early failure.

Funds from the University of Illinois EnterpriseWorks Incubator AWARE (Accelerating Women And underrepresented Entrepreneurs) Proof of Concept Award (SBA-funded initiative) allowed us the ability to pivot at a critical time during our company development – eventually resulting in a significant company success. At the time of the award, our company had recently completed an unsuccessful field trial where we did not obtain the results that we desired, but we did discover what we thought would be several key factors for our success going forward. AWARE funding allowed us to quickly test our new hypotheses over a three-month time period and to develop a new version of our product that would be field tested again shortly after and found to be a product success. This success would go on to serve as the backbone for our petition for new funding. The startup world moves fast, and this funding was available for us quickly and was sufficient for our necessary technology pivot. Without this funding we may not have been able to pivot and quickly test our new ideas. We have a viable product today because we were able to quickly change and test our product within a timeline synergistic with grape growing seasons.

If we successfully move on to Phase II of the NSF SBIR program, our business will entail the creation of upwards of 20 new tech jobs with nationally competitive salaries. During commercialization, this number will likely approach double.

Throughout the COVID-19 pandemic, government funds have given us the means to navigate this difficult space where forming new partnerships has been nearly impossible, just as many other moms and pops small businesses have had to do during this time. Unlike more traditional small businesses, we have been blessed with a supportive university/incubator infrastructure that has enabled us to conduct home business as usual. To the contrary, many businesses have been reluctant to meet with us to discuss new prospects given the uncertainty of the state of America, social distancing regulations, and their own company uncertainties.

Final thought: Technology startup companies experience a myriad of hurdles along the path towards successful commercialization. We are grateful and attribute our successes thus far to generous and timely support from the National Science Foundation, Small Business Administration, our business collaborators, Illinois EnterpriseWorks Incubator, University of Illinois, and the hardworking sweat equity of our team. We have had the ability to test our original ideas and pivot towards ideas that are more effective and in alignment with societal needs. Due to foundational federal support, we anticipate the creation of many new tech jobs to support the United States and global economies.

To conclude, technology innovation is expensive, but these costs frequently drop over time as the technology becomes better and more developed. Technology startup success is elusive, but it has been shown that with the proper supports the chances for success is greatly increased. Pivoting for technology

startups frequently equates to success, but funding and resources must be as flexible and the startup environment to serve the greatest benefit. Our major successes as a company have come as a result of timely funding and support from several sources – University of Illinois EnterpriseWorks Incubator AWARE (Accelerating Women And underrepresented Entrepreneurs) Proof of Concept Award (SBA-funded initiative) enabled our critical ability to pivot. Technology startups have traditionally been leaders in new job creation with competitive salaries and we project that FrostDefense Envirotech Inc. will sustain that standard. Finally, the COVID-19 pandemic has changed how we have had to conduct business, but our funding and infrastructural support have given us a means to adjust to the circumstances of potential new partners. With that, this testimony positions FOR more programs and federal investments that support innovation and entrepreneurship for the sake of successful tech startups and the prospects of new job creation.

Thank you all for your time and the opportunity to share with you.



Prepared Testimony and Statement  
for the Record of  
Jeffrey Maguire, Managing Partner,  
Clearly Clean Products, LCC

U.S. Congressional Committee on Small Business --  
Economic Growth, Tax, and Capital Access

Hearing Title:  
Innovation as a Catalyst for New Jobs:  
SBA's Innovation Initiatives

July 14, 2021

Via Zoom



Chairwoman Davids, Ranking Member Meuser, and members of the Committee, I am honored to have the opportunity to testify today on "Innovation as a Catalyst for New Jobs: SBA's Innovation Initiatives."

My name is Jeffrey Maguire, and I am a managing partner at Clearly Clean Products, LLC, which is based in Schuylkill County, Pennsylvania, and has nine locations. Our company invents and manufactures 100% recyclable food trays -- most notably, the Roll-Over Wrap™ tray. This patented tray is made from recyclable PET plastic, and its rolled edge does not tear the overwrap film on packaging for meat, poultry, produce, and seafood. Our goal is to provide a sustainable option to foamed polystyrene, more commonly known as Styrofoam.

When we began, we were told it would be like David versus Goliath. We invented an eco-friendly overwrap food tray that the industry said was impossible to manufacture, but we were -- and are -- up against an entrenched industry of big-name companies. Fast forward to today, and we are blessed to have grown from three people to more than 200 people in less than five years. And we are forecasting our sales to double in 2022, creating even more jobs. What is at the heart of our growth? Innovation. And what is at the heart of innovation? Patents.

Those Goliaths I mentioned are now imitating our product, and we have been forced to take legal action to defend our patents. Time and money that could have been spent on innovation are instead being spent on protecting our patents from others who seek to capitalize on them. We won our first case, but now our patents are being challenged at their very core -- at the U.S. Patent and Trademark Office via an IPR, by a large company with extensive resources. We are confident in our numerous patents and will continue to fight the good fight, but not all small businesses can. What would be helpful is a policy that requires a company challenging the validity of a patent via an IPR to pay for the patent owner's legal fees if that challenge fails. Without this safeguard, small businesses are forced to dig deep to defend what was theirs all along. And innovation suffers.

Another challenge we face is difficulty in hiring employees. We would hire 50 people today if we could, but we cannot. The supplemental unemployment and stimulus checks are keeping people home. We are competing with the government and cannot afford to. Before the COVID-19 pandemic, we started employees at the higher end of the pay scale. Now, our daily debate is whether we raise hourly rates to an unsustainable level to attract new employees or stop growing. We recently learned that one large company in our area has increased its wages to \$25 an hour; other large companies will likely follow suit. Small businesses are caught between the government and the deep pockets of big business. In the future, when we face a similar situation, we recommend policies that include funding for small businesses



to provide supplemental wages to the employees who continue to work. This would help stimulate the economy by providing bonuses to the working. What do the current policies do to small businesses? They force us to automate, which means less jobs. They force us to raise prices, which means inflation. They force us to throttle back growth, which is in no one's interest. And, yes, innovation suffers.

We firmly believe that Congress should enact a comprehensive solution to address the deteriorating infrastructure of the United States; however, that solution should not undo the competitive gains made through the Tax Cuts and Jobs Act. The ability to write off capital expenditures, such as equipment, has been key to our success, but why is real estate treated differently? If the depreciable life for manufacturing plants and warehouses was reduced from 39 years to 10 years, then small businesses could accelerate depreciation, which would enable quicker reinvestment.

With many small businesses, federal taxes are paid at a personal level. Increases to personal tax rates decrease the dollars available for reinvestment. So, when Congress increases the personal tax rate, it punishes small business. And, once again, innovation suffers.

In short, innovation flourishes when creativity meets investment. And investment flourishes when policies enable growth. Increased taxes, paying workers to stay home, and the legal fees associated with protecting already-awarded patents are all counter to growth and disproportionately impact small businesses.

We need to ask ourselves, are we a country that wants to leave innovation in the hands of the rich and powerful? Or, do we want to encourage fair competition and nurture small business? I know the SBA and this committee believe the latter. Our only hope is that future policies continue to foster innovation and enable growth so that small businesses can not only compete with Goliath, but -- just like David -- maybe one day even defeat Goliath.

Sincerely,

Jeffrey Maguire  
Managing Partner  
Clearly Clean





## APPENDIX A

### Tax Policies and the Impact on Clearly Clean Products, LLC

#### Detrimental Future Tax Proposal

Regarding future tax proposals, we would recommend the following:

- Do not allow the proposed income tax rate increase from 37% to 39.6%.
- Do not allow the proposed 3.8% net investment tax to be assessed on all pass-through income. This would effectively raise the marginal federal tax rate to 43.4%. Factoring in state taxes, the combined tax rate can be close to 50%. This will inhibit our future growth.
- Do not allow the bonus depreciation and qualified business income tax deduction to expire as scheduled in 2026 or potentially be repealed in 2022.

#### Beneficial Tax Policies

Clearly Clean has benefited from the provisions of 2017 Tax Cuts and Jobs Act (TCJA), which was effective in 2018. Specifically:

- Lowered maximum federal rate – 39.6% to 37%
- Establishment of 20 percent deduction of qualified business income for pass-through entities
- Bonus depreciation, which allows for full and immediate expensing of capital investments
- Federal research and development tax credits in 2018 and 2019 and any future credits
- PPP loan

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The cost of 'tax and spend' | TheHill

# The cost of 'tax and spend'

BY REP. DAN MEUSER (R-PA.), OPINION CONTRIBUTOR — 06/05/21 09:00 AM EDT  
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

<https://thehill.com/blogs/congress-blog/lawmaker-news/55754-the-cost-of-tax-and-spend?h=1>

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Simply put, inflation occurs when there is too much money chasing too few goods. In the last 15 months, federal spending on COVID-19 relief totaled \$5.9 trillion, a quarter of U.S. GDP. This level of spending, paired with the Biden administration's unwise fiscal and regulatory agenda, poses risks to our economy in the long run and is a wrong-headed approach at the onset of recovery from the pandemic.

Since the beginning of the Biden administration, economists and analysts of all stripes warned of inflation risks from the \$1.9 trillion American Rescue Plan. Larry Summers, who served as President Clinton's Treasury secretary and crafted the Obama stimulus, estimated the American Rescue Plan was three times larger than the pandemic's economic gap, warning of inflationary

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The cost of 'tax and spend' | TheHill

pressures not seen in a generation. Earlier this year, the nonpartisan Congressional Budget Office projected GDP at pre-pandemic levels and declining unemployment without additional stimulus. Nevertheless, the Biden administration insisted this level of spending was warranted and inflation concerns were irrelevant.

Now, the full impact of this influx of government spending is beginning to manifest itself as a tax on every American family. In April, consumer prices rose 4.2 percent, the highest rate since the 2008 financial crisis. As prices rise, the value of hardworking Americans' savings and retirement accounts declines, leaving those on a fixed income feeling squeezed. The Biden administration went headlong in pursuit of what Mr. Summers calls "the least responsible fiscal macroeconomic policy we've have had for the last 40 years." Now, Americans are paying the price.

Undeterred by the data, the Biden administration shows no sign of letting up, proposing a \$6 trillion budget for this year that puts our country on a path to a record level of debt in 2021. A key component of this plan is a so-called infrastructure package, less than 8 percent of which goes toward improving roads, bridges, airports and waterways. The vast majority of this proposal is slated to go toward electric vehicle subsidies, expanding Medicaid, and Green New Deal mandates. To pay for it, the Biden administration hopes to raise taxes and eliminate the Trump-era tax cuts for small businesses and families that spurred the strongest economy of our lifetimes.

Alongside this tax and spend wish list, the Biden administration is advocating for a \$1.7 trillion expansion of taxpayer-funded social welfare programs. An analysis by the Penn Wharton Budget Model indicates the burden of debt from the American Families Plan would outweigh any potential benefit and

<https://thehill.com/blogs/congress-blog/lawmaker-news/550754-the-cost-of-tax-and-spend?h=1>

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would actually reduce economic output. Even the White House's own budget projects tepid private sector growth for the next decade.

### **House clears bill to provide veterans with cost-of-living adjustment**

### **GOP ramps up pressure on vulnerable Democrats in spending fight**

These effects are not abstract: the burden of corporate tax increases will fall on workers in the form of lower wages, fewer jobs and higher prices. The president's energy plan ensures higher utility bills for homeowners and lost jobs in energy-producing states like Pennsylvania. Already, U.S. Steel has cancelled a planned expansion in western Pennsylvania and Ford has cancelled plans to build a new electric vehicle in Ohio, instead shifting production to Mexico. The reality is that the Biden agenda grows government rather than spurring economic growth.

If this feels all too familiar, that's because it is. These failed policies exported jobs overseas and jacked up prices in the 1970s under President Carter and gave us a long and jobless recovery during the Obama-Biden administration. The pro-growth agenda before the pandemic, on the other hand, brought declining unemployment and poverty rates, a domestic investment boom, and wages that grew fastest for the lowest earners. This can be a Great American Decade if we unleash the power of American innovators and entrepreneurs, but we can't do that under the yoke of excessive spending, higher taxes and runaway inflation. We must grow opportunity in America, not government.

*Rep. Dan Meuser (R-Pa.) is a member of the House Small Business Committee.*

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Committee on Small Business  
Subcommittee on Economic Growth, Tax, and Capital Access  
“Innovation as a Catalyst for New Jobs: SBA’s Innovation Initiatives”

Statement for the Record from  
University City Science Center

Thank you for the opportunity to submit a statement for the record for the Committee on Small Business Subcommittee on Economic Growth, Tax, and Capital Access hearing titled: “Innovation as a Catalyst for New Jobs: SBA’s Innovation Initiatives.” Our global economy faces many persistent challenges, including public health disparities, climate change, and defending ourselves against all kinds of national threats, such as biological- and cyber- attack. COVID-19 has exacerbated these challenges across the world. Innovation is the key to solving many of these concerns, but the United States has fallen behind other countries in providing resources to support researchers to commercialize their ideas. Countries like China have dedicated hundreds of billions of dollars in funding R&D of new technologies, while the U.S. has actually decreased funding for federal R&D in comparison to our GDP.

Even with these limited resources, universities across the country are excellent at cultivating some of the most promising research to solve these pressing issues of our day. Some universities are better than others in building successful technology transfer offices that help these researchers succeed in bringing their research to market. Because of this, there is a clear gap between basic research conducted at U.S. universities and the commercialization of said research. In order to maintain our global competitiveness, we need to provide more resources to entities that bridge the gap between basic and necessary fundamental research and the actual application of research into use across the commercialization continuum. In short, we can do more to help academic innovations enter the market and benefit society.

The University City Science Center has a long history serving as an effective bridge and intermediary between the research that comes out of universities and the business community, partnering with those university technology transfer arms to provide commercialization support. The Science Center is a 501(c)3 nonprofit corporation owned by 31 of the leading universities and research partners throughout Pennsylvania, New Jersey, and Delaware, including the University of Pennsylvania, Drexel University, the University of Delaware, and Rutgers University.

Innovation and commercialization are key to our work at the Science Center. For example, our QED proof-of-concept program receives submissions from researchers at 22 partner institutions, including many of the universities discussed above. After several rounds of a vigorous competition, the top four submissions receive funding from the Science Center and their host university and the Science Center provides customized coaching from industry experts, exposure to the investment community, and everything needed to develop a commercialization roadmap.

In addition, we run a Phase 1 Ventures (or P1V) which helps early-stage companies apply for and obtain SBIR/STTR grants, and then provides the companies commercialization expertise in order to help them grow.

Currently, the Science Center is actively engaging in developing more mature programming to support the access to early-stage private capital for science and technology-based companies. A critical gap in funding which hampers ventures in scaling and growing to becoming commercially viable. Even with federal programming such as SBIR/STTR providing support, the inability of many university infrastructures to effectively support actual company formation and creation in a way which allows for growth and investment continues to hamper the economic potential of the US economy.

We have also developed more opportunities for Philadelphia residents from communities that are underrepresented in STEM to attain family-sustaining careers in high-growth STEM industries. This also benefits industry, providing growing STEM businesses with the workforce that they desperately need.

These are just a few examples of our many programs that provide support for firms at all stages of the business life cycle. We have been fortunate to receive funding from the federal government to support many of our programs, like the ones described above, such as through the SBA, EDA, and BARDA at HHS. This funding, as well as the funding we receive from private partners, has allowed us to support and grow our programs.

We have a proven record of success, particularly in the bio-pharma fields given the local strength of the regional economy. We are not alone, and both university and nonprofit technology transfer organizations have matured and become more prevalent across the country. These entities, often referred to as "innovation intermediaries" often play a pivotal role in regional innovation ecosystems by serving as a conduit for connecting all stakeholders in a region, expanding on the excellent work of university and federal laboratory researchers by providing them with access to research space, business mentors, and angel investors.

In many ways the role of innovation intermediaries is most critical in supporting potential ventures at two critical points where traditional university infrastructure tend to hamper commercialization efforts. The first is in the ability to work with prospective companies in unique and creative ways to accomplish company formation support. Often universities, especially public institutions, are hampered by immense legal and structural hurdles to support even the most basic of support functions such the transfer of intellectual property from the university into a legal contractual vehicle that allows for the company to grow. The second is in deploying capital most often combined with specified programming, in a creative way guided by mission and not return while providing value in de-risking companies they serve for private markets in the future.

Unfortunately, federal policies have only started to acknowledge the value of these innovation intermediaries. As your Committee considers federal programs, we encourage you to allow innovation intermediaries, in addition to universities, to be lead applicants to all innovation-focused federal funding opportunities across the government. An innovation intermediary should mean a private or public nonprofit entity that focuses primarily on improving science, technology, innovation, or entrepreneurship, and/or access to capital.

Unfortunately, not all agencies recognize the importance of innovation intermediaries. For example, this year's Small Business Administration's Regional Innovation Clusters program solicitation was a 100% set aside for small businesses and nonprofit innovation intermediaries were not eligible to apply as the lead applicant. Innovation intermediaries often serve as a conduit for connecting together all stakeholders in a region. These innovation intermediary nonprofits look at the independent economic data on the regional economic focus of the region and spur targeted economic development to meet market needs, creating new small businesses. Since this is the exact intent of the Regional Innovation Clusters program, it is frustrating that nonprofits who are already doing this work with limited resources were not able to apply. While we of course support funding going directly to small businesses, for this solicitation, innovation intermediaries should at least be able to compete for the award based on their expertise and direct support of new and emerging small businesses.

This is true for the Regional Innovation Clusters program and other current and proposed regional innovation programs, such as those included in S.1260, the United States Innovation and Competition Act of 2021. Additionally, regional innovation programs should be defined by the existing economic strength of the region or locality. They should respond to market demand and seek to create or grow existing economic clusters that focus on innovation and technology-based economic development. Enabling regional industry partners to identify market challenges/gaps and stated goals within each cluster at the outset of the project would spur targeted development to meet the market need. This market-driven ecosystem creation and support would also differentiate this new program from other federal innovation initiatives. For example, with our health care crisis and the global economy competing for health care related profits, we would particularly like to see an award given to an already established cluster focused in the life sciences.

Finally, within all Small Business Administration innovation programs, we'd like to see a broader consideration of "underserved populations" in receiving federal funding. While it is valuable to direct resources to rural communities, there are many underserved communities in urban areas that also lack federal resources and struggle with poverty. As such, grants directed to "underserved communities" should also be given priority. Underserved communities could be qualified by many of the federal programs in existence, such as the opportunity zone tax law, HUB Zones, Promise Zones, or other zones supporting underserved communities.

In order to compete in this global economy, the federal government must have a renewed focus on innovation. Universities and innovation intermediaries across the country can help by supporting researchers commercialize their ideas into viable, profit-earning businesses, ultimately leading to job creation, growth in our economy, and a strengthened global leadership.

Thank you again for the opportunity to submit a statement for the record. Should you have any questions, please do not hesitate to contact the Science Center's Director of Government and Community Relations, Katie Nash, at [knash@sciencecenter.org](mailto:knash@sciencecenter.org).