

### **TESTIMONY OF TROY A. LeMAILE-STOVALL**

Chief Executive Officer & Executive Director Maryland Technology Development Corporation

Senate Budget & Taxation Subcommittee on Education, Business & Administration

House Appropriations Subcommittee on Education & Economic Development

Monday, February 8, 2021

#### **Introductions**

Chairman Zucker, Chairman Barnes, members of the Committees, thank you for the opportunity to appear before you to discuss TEDCO's fiscal 2022 budget request. I am joined by three of our portfolio companies who will share their stories on how we are creating an inclusive and growing innovation and entrepreneurial culture in Maryland.

I would also like to thank DLS analyst Emily Haskel, for her cooperation over the last few months.

While many of you are very familiar with TEDCO, for the benefit of others not so familiar, TEDCO was created by the legislature in 1998 to assist in the transfer of research and technology from Maryland universities and federal laboratories into the commercial marketplace and to assist in commercializing private sector research. It has evolved to be Maryland's state-backed agency that fosters a culture of innovation and entrepreneurship by investing in, and providing support to, the State's early-stage and startup businesses.

I started as CEO/ED in September 2020 and in that short time, and with the support of the TEDCO Board of Directors and its Chair Myra Norton, TEDCO has not only built on its existing strengths, but also challenged itself to do more for our entrepreneurs, ecosystem, and for the State. We are mindful that we are stewards of our public purpose to empower startup and early-stage companies to grow and prosper in Maryland. To accomplish this purpose, TEDCO is guided by a set of principles that are defined as our core values.

Core values serve as a lighthouse to help navigate us individually and collectively especially when times and/or choices are difficult. Like a lighthouse does for ships at sea, they should expose dangerous paths and provide a safe passage to our destination. That passage may not be the most expedient, or easiest and may even involve some risk, but it avoids those things that eventually will cause a shipwreck. The lighthouse provides an "unwavering guide," that must be followed to avoid disaster.

For TEDCO — our core values (our lighthouse) of accountability, collaboration, integrity, respect, and stewardship are our "unwavering guide."

- *Accountability* we will do the right thing and have internal and external measures demonstrating that commitment;
- *Collaboration* we are a collection of talented individuals that meet our own and Maryland's goals by doing it together internally and externally;
- *Integrity* we will lean to the truth even when it is uncomfortable or unflattering;
- *Respect* we see and value others and their roles before our own; and
- *Stewardship* we will use our valuable resources to the highest and best use aligned to TEDCO's and Maryland's goals.

These five values represent the guidepost for how we will interact with each of our TEDCO colleagues as well as our stakeholders. We incorporate these values into not just our words but also our actions. We will use these values to respectfully correct a colleague's behavior when it falls outside these norms. We will develop internal and external measures that demonstrate our commitment to these values. We will celebrate them when they are used during difficult times and introduce them to our new colleagues during onboarding.

We will show our portfolio companies that though they may be early-stage, a values-based culture can lead to surpassing strategic and economic goals. It can lead to competitive differentiation. It can lead to the attraction and retention of superior talent. It can lead to long-term success for the firm and its customers. Firms like McCormick, Marriott, GEICO, Intel, Zappos, Ben & Jerry's and Disney, among others have a strong set of values that have allowed them to be leaders in their respective sectors.

As TEDCO navigates through a global public health pandemic, social unrest and economic upheaval, our five core values (plus innovation and risk-taking) will shape our decision-making, define what a "TEDCO experience" will represent for ourselves and stakeholders, and determine how we invest, support and sustain a culture of values-based innovation and risk-taking for all Marylanders.

Finally, at this challenging time, it must be observed that TEDCO is uniquely positioned to play a crucial role in overcoming today's particular challenges. TEDCO, with its economic development mission and its cohesive ties to the life sciences community, is a vital component to solutions to both the economic downturn and to issues related to the current, or even the next, pandemic. In 2018, an independent study, conducted by researchers at the University of Baltimore's Jacob

France Institute and TEConomy Partners, concluded that TEDCO generates significant economic and fiscal returns to the State – totaling over \$1.6 billion. The study focused on the specific and meaningful impacts of technology-based economic development which include the "generation of new products, processes and technologies through research and development; the transformation of these technologies into products through technology commercialization; and the development and sale of new products and technologies in the global marketplace through the start-up of new companies and investment by existing companies."

Furthermore, TEDCO has invested in companies that are very specifically fighting COVID-19. For example, an Maryland Innovation Initiative (MII) portfolio company, <u>emocha Mobile Health</u>, is putting its mobile video technology to work in response to the crisis. The Maryland Stem Cell Research Fund has funded research that has found therapeutic remedies easing respiratory symptoms in COVID-19 patients. Additionally, TEDCO has funded Clear Mask, a company making medical masks that are used to help communicate to the deaf and hard of hearing, but also is working tirelessly to fill in shortfalls in invaluable personal protective equipment for medical professionals.

With that backdrop, I'd like to offer the following highlights of the many accomplishments that TEDCO has realized over the past year.

Demand in TEDCO's services and investments remains very high. For example, just in the past fiscal year (FY20), TEDCO could only fund 20% of the applicants for the Builder Fund and less than 8% of the applicants for the Technology Commercialization Fund. We have provided over 1,500 hours of mentoring under our Rural Business Innovation Initiative and almost 600 mentor hours under the Builder Fund, and yet this is still is not meeting the demand.

We support the innovation economy across the State including the rural parts of Maryland through our Rural Business Innovation Initiative (RBII) program. We continued to support technology transfer through our MII program and NIST – Science and Technology Entrepreneurship Program (N-STEP) program. We supported the development and economic impact of new cures through our Maryland Stem Cell Research Fund grants. We have continued to serve Maryland's entrepreneurs through our various Entrepreneur and Ecosystem Empowerment programs. We plan to bring together over 1,000 people at our next Entrepreneur Expo to celebrate the success of startup companies and to highlight the many resources to support entrepreneurs in the State.

The remainder of this written testimony covers each of our programs and specific achievements made in the last fiscal year followed by our responses to the DLS analysis.

# **Tech Transfer, Commercialization, and Investment Programs**

#### Maryland Technology Commercialization Fund

TEDCO's primary and legacy seed investment initiative is the Maryland Technology Commercialization Fund (TCF). TCF supports technology and product development by start-up companies often deemed too early in their development to gain the interest of traditional venture capital investments. TCF's investments are intended to defray the cost of the additional research and development activities that would move a specific technology or technology package to the threshold of commercialization.

#### FY2020 TCF Statistics

- # of investments 3
- # of jobs in funded companies 15
- Total \$ invested \$600,000

#### Maryland Stem Cell Research Fund

Maryland Stem Cell Research Fund (MSCRF) was established by the governor and the Maryland General Assembly under the Maryland Stem Cell Research Act of 2006. The purpose of the fund is to promote state-funded human stem cell research and medical treatments through grants to public and private entities in the state.

MSCRF offers six programs (Launch, Discovery, Validation, Commercialization, Clinical and Post-doctoral Fellowships) to accelerate research and commercialization of human stem cell-based technologies. Additional testimony on the program is included below.

#### Maryland Innovation Initiative

Chapter 450 of 2012 created the Maryland Innovation Initiative (MII). This program is intended to increase the rate of commercializing technologies developed in Maryland's research universities (Johns Hopkins, Morgan State, University of Maryland-College Park Campus, University of Maryland-Baltimore Campus, and University of Maryland-Baltimore County). The program achieves this goal through de-risking technologies through grant awards, startup creation, and investments. The MII program is governed by its own statute and independent Board of Directors.

#### FY2020 MII Statistics

- # of proposals 71
- # of awards/investments 44
- # of start-up companies formed 14
- # of start-up companies funded 11
- Total amount granted and invested \$5,494,782

#### **Builder Fund**

The Builder Fund was created to financially and operationally support the development of startup companies run by entrepreneurs who demonstrate a socially or economically disadvantaged background that hinders access to traditional forms of capital and executive networks at the preseed stage. Companies selected for Builder Fund support receive either executive management assistance, direct investment, or both, to accomplish specified milestones that better position the company for follow-on, professional investment.

FY 2020 Builder Statistics

- # of awards 8
- Total amount invested \$450,000

• # of mentor hours -578

#### **Cybersecurity Investment Fund**

Chapter 535 of 2014 created the Cybersecurity Investment Fund (CIF). The CIF is targeted to cyber security technologies and builds on TEDCO's Technology Commercialization Fund.

#### FY2020 CIF Statistics

- # of investments 4
- # of jobs in funded companies 4
- Total \$ invested \$800,000

#### Life Science Investment Fund

The Life Science Investment Fund provides funding to companies developing products for human health that require FDA approval. This fund was transferred to TEDCO from the Department of Commerce's BioMaryland program. This program previously provided awards under the names Biotechnology Development Awards and the Translational Research Awards. TEDCO modified the funding program to better meet the demand of those life science companies with the most challenging commercialization pathways.

FY2020 LSIF Statistics

- # of investments 4
- # of jobs in funded companies 10
- Total \$ invested \$800,000

#### **Gap Investment Fund**

The Gap Investment Fund seeks to make investments in technology-based start-up companies that are in need of capital to grow their businesses in Maryland. The investments are matched by investments the company has received from other private sources. The purpose of this Fund is to help bridge the gap between seed funding and venture capital investments. Companies must use Gap Investment Funds to employ new staff in Maryland to grow and accelerate commercialization efforts to become better positioned to attract institutional venture capital.

#### FY2020 Gap Investment Fund Statistics

- # of investments 2
- # of jobs in funded companies 19
- \$ awarded \$900,000

#### Maryland Venture Fund

The Maryland Venture Fund is an early-stage, evergreen venture capital fund dedicated to funding and growing the next generation of outstanding businesses in Maryland. The Fund is managed by an experienced team with significant venture investing experience whose focus is on making the entrepreneurs successful. The Fund was established in 1994 as the Enterprise Fund and was transferred to TEDCO in 2015.

# **Entrepreneur and Ecosystem Empowerment (E3)**

In 2020, TEDCO redefined our system of services to help individual entrepreneurs and to improve the entire ecosystem in which those entrepreneurs build their companies. Through Entrepreneur and Ecosystem Empowerment (E3), TEDCO will champion programs, deliver services, build resources, and foster networks to assist promising start-up companies to accelerate toward key milestones. Our services take several different forms, depending on the stage of the company and an assessment of its likely path forward. The TEDCO E3 Team collaborates with the start-up company and its other advisors to create an advisory solution that complements and augments the other assistance being received by the entrepreneur. The types of services provided are described below.

#### **Rural Business Innovation Initiative**

Rural Business Innovation Initiative (RBII) assists start up and small technology-based businesses in the rural areas of Maryland to advance the company to a higher level of success. The program offers professional ongoing mentoring and targeted projects to help companies succeed at no cost to the company. The program is designed to provide technical and business assistance to small companies and early-stage technology-based companies in rural Maryland as defined by the Rural Maryland Council. The goal of the program is to help companies overcome business and technical hurdles and advance to the next growth level. There is no cost to the company to receive assistance. Examples of business assistance included:

- Market studies
- Competitive analysis
- Funding source identification assistance
- Funding for infrastructure development
- Funding for technical assistance
- Funding for product development

#### FY 2020 RBII Statistics

- New companies mentored 104
- # of mentor hours -1,537
- # of companies receiving project assistance 10

#### **Advisory Services**

Growing great companies takes more than money and Maryland's entrepreneurs repeatedly express the need for assistance in certain very specific areas. To help meet that need, TEDCO has partnered with a series of consultants that have current, relevant experience in one or more of these specific areas. This curated set of Network Advisors brings its broad and diversified depth of experience to bear on the unique needs of Maryland's start-up companies – the entire effort is

dedicated to helping the State's technology-based entrepreneurs reach their full potential.

## **Prelude Pitch**

Each month, TEDCO invites start-up companies to give their pitch in front of our team members and experienced mentors to receive valuable feedback and an introduction to TEDCO. In fiscal 2020, TEDCO held 11 Prelude Pitch events which provided 39 companies (an average of four companies per event) an opportunity to pitch their ideas. A total of 23 Network Advisors volunteered their time for these events, which were held at TEDCO, a range of local incubators, as well as, a local university and business.

#### **Roundtables**

The CEO Roundtable groups 10 to 12 non-competitive portfolio entrepreneurs around a common theme – industry vertical, demographic, or stage of development. It is expected that each roundtable will continue to operate as long as it remains relevant. Participants are asked to make a soft commitment of one year to the roundtable, but turnover is anticipated and, once established, the facilitator and roundtable group will approve new members.

#### **On-line Educational Resources**

There are a lot of educational materials on entrepreneurship that can be found on-line. The current thinking around best practices in entrepreneurship revolves around the lean start-up approach. TEDCO believes strongly that entrepreneurs in most technology sectors should follow these practices when working to establish a company. Here you can find resources that may be helpful with accomplishing those goals. The TEDCO website links entrepreneurs to a variety of available and accessible on-line educational resources.

#### Market Search Databases

Many start-up companies fail due to a lack of understanding of their market. While there is no substitute for talking to potential customers, entrepreneurs first need to assess their potential market at a general level. An understanding of competitors, industry trends, and market segments through secondary research is an important part of developing a plan to launch a business. Moreover, entrepreneurs that do not have a solid understanding of their market will find it difficult to raise funding from TEDCO and other investors.

The Market Search Services provided by TEDCO are available at three locations; although, online access has been made available during the COVID-19 pandemic. The services are a resource to help entrepreneurs address the challenges of conducting market assessments. The goal is to improve the market assessment and opportunity analysis associated with the development of business plans and applications for TEDCO's funding programs. This has proven to be a critical asset for the nearly 70 start-up companies (WOSB, SDB, and Rural Small Businesses) going through the SBIR/STTR Proposal Lab.

## Rural and Underserved Business Recovery from Impact of COVID-19 (RUBRIC)

The Rural and Underserved Business Recovery from Impact of COVID-19 (RUBRIC) program is an economic relief initiative to benefit socially and economically disadvantaged and rural early-stage technology-based businesses hit hardest by the COVID-19 pandemic. This program is supported by <u>\$5M recently allocated from the Governor</u>.

The funds administered by TEDCO will be provided to early-stage companies that are impacted by the current crisis and are in need of bridge funding to survive and prosper as the downturn and COVID-19 crisis subsides. The funds will focus on companies that have the highest barriers to traditional financing but are still expected to scale to the next phase of fundraising.

# **Federal Laboratory Technology Initiatives**

#### NIST-Science and Technology Entrepreneurship Program

The overall objective of N-STEP (NIST – Science and Technology Entrepreneurship Program) is to provide opportunities for motivated researchers to build upon the experience gained while working at National Institute of Standards and Technology (NIST) as they explore entrepreneurial careers. The Program is focused on commercialization of research performed at NIST by employees nearing the end of their term of employment (including graduating post docs) that are interested in forming companies to independently pursue further translational research and development of technologies specifically related to NIST's mission, so that the technologies can be commercialized as products or services to benefit the public. Twelve awards have been made with funding available for eight more. Since this is supported with federal funds the program is national in scope. Of the twelve awards, seven have been to Maryland startup companies.

## FAST Grant – SBIR/STTR Proposal Lab

The Small Business Innovation Research/Small Business Technology Transfer, SBIR/STTR Proposal Lab is a new series of workshops initially funded, in part, by the Small Business Administration's FAST Grand program in 2018 with a TEDCO match of cash and in-kind effort. TEDCO received subsequent awards for the program in 2019 and 2020. TEDCO teamed with the GovCon Incubator and the Small Business Development Center (SBDC). The output of the program will be an increase in the win rate for first time SBIR/STTR proposals from Women Owned, Small Disadvantaged, and Rural Maryland small businesses. The SBA's goal is to double the national win rate for first time proposals from 16% to 32%. Not only does the SBIR/STTR Proposal Lab help with the SBIR/STTR win rate, it also provides business skills that improve the entrepreneur's overall business acumen.

Proposal submission from the first cohort had a win rate of 56%. This led to \$3,581,000 in SBIR awards for Maryland small businesses.

# **Entrepreneur Expo**

Each year, TEDCO holds its Maryland Entrepreneur Expo to bring together the various entities that have a vested interest in the development of entrepreneurs. The Expo serves to promote and

celebrate entrepreneurship in Maryland. This event typically attracts over 1,000 people comprised of new and seasoned entrepreneurs, investors, students, legislators, service providers, inventors, tech transfer officers and economic development professionals. Due to the COVID-19 restrictions, TEDCO canceled the 2020 Entrepreneur Expo, but is planning to return in October 2021, either in person or as a virtual event.

# **Management and Administration**

As you are aware, TEDCO is required by statute to seek an independent audit of its annual financial statements. For the 21st consecutive year, TEDCO received an unqualified (clean) audited financial statement.

As the new CEO/Executive Director, I have challenged the TEDCO team to be entrepreneurial and better leverage available technologies in all we do. They have embraced that challenge and done so using our 5 core values – Accountability, Collaboration, Integrity, Respect and Stewardship – as their guidepost. A great testament to that is our 1TEDCO Collaborative or 1TC, a cross-TEDCO group discussing, developing and defining our 5-year strategy. In a few months, we will present to our Board a proposed 3-5 year strategy based on three "pillars":

- Excelling at operations and talent management
  - Any goals we have for ourselves will require investments in our people, processes, policies and practices.
- Building and sustaining the innovation ecosystem
  - Once we have solid operations and talent we can invest in the relationships and entities leading to a vibrant, sustainable and nationally-recognized ecosystem in Maryland.
- Telling our story and raising our visibility
  - Telling our fact-based story of impact can lead to incremental resources needed to invest in the operations and talent needed to build an even more vibrant, sustainable and nationally-recognized ecosystem.

In thriving ecosystems, the degree of separation between the parts of the system is small and the cohesion between these parts is high. By building a coalition of willing, courageous individuals—entrepreneurs, business leaders, subject matter experts, legislators, academics, investors, and scientists—TEDCO will create the cohesion necessary to strengthen the state's entrepreneurial ecosystem.

Maryland's demographics, geography, and proximity to DC make the state, which has been called America in miniature, an ideal location for leading wealth expansion and inclusion initiatives. Certainly, we can't reengineer the state's economy by leaving people out—and there's strong evidence that indicates diversity and inclusion programs are good for the bottom line. My old firm McKinsey stated in its *Diversity Matters* report that:

• Companies with more diverse workforces perform better financially.

- Companies in the top quartile for ethnic and gender diversity are 25 percent more likely to have financial returns above their respective national industry medians.
- Companies with diverse management teams also have 19% higher innovation revenue.

I would like to thank members of the Subcommittees for their courtesy toward me and TEDCO, and for your steadfast support of our programs.

## **Responses to DLS Analysis**

# **TEDCO** should comment on the use of Builder Funds, including the reason less than 50% of appropriated funds were awarded to companies.

The Builder Fund was created to financially and operationally support the development of startup companies run by entrepreneurs who demonstrate a socially or economically disadvantaged background that hinders access to traditional forms of capital and executive networks at the preseed stage. Companies selected for Builder Fund support receive either executive management assistance, direct investment, or both, to accomplish specified milestones that better position the company for follow-on, professional investment.

The Builder Fund differentiates itself by identifying exceptional investment opportunities statewide operated by anyone who can exert proof of their disadvantaged status (e.g., women, minorities, rural-based, disabled, veteran, etc.) by collaboratively advancing the development of those opportunities in ways that can lead to the next stage of investment. This program supports TEDCO's overall mission of discovering, investing in, and helping to build great, Maryland-based companies that grow and last.

A key component of the program is the additional services that are provided to each company, tailored to the specific needs of each company. The companies are at a pre-seed stage. At this stage of a company's life cycle, it is extremely uncommon for a company to have a full executive Bv working with the founders to understand their expertise team. gaps (marketing/finance/software development/sales/reimbursement/etc.), TEDCO pairs them with a vetted industry expert to complete an agreed upon set of milestones. By leveraging our existing network, we save founders time, energy and money. Essentially, TEDCO provides additional employees to work for the companies at no cost to them. While this does not equate to a direct investment, it is certainly a real financial asset to the companies. We have further increased the return on investment by negotiating rates with our loaned executives at well below market. These supplemental resources are extremely common in pre-seed investment firms/accelerators/incubators. Based on our exit interviews and the progress our founders have made, we think that the funding is an efficient use of the program's funding.

Also, to provide additional support, TEDCO informs the companies of other State programs for minority and women-owned businesses. Specifically, all companies are informed of the services and investment programs under the Maryland Small Business Development Financing Authority (MSBDFA). TEDCO will systematically make referrals to MSBDFA for all companies that express an interest in other resources.

DLS Recommendation - Maryland Technology Development Corporation (TEDCO) unintentionally received restricted funds in fiscal 2020 that were not reverted. This action increases TEDCO's fiscal 2021 negative general fund deficiency appropriation by the same amount.

TEDCO concurs with the recommendation.

Maryland Stem Cell Research Commission FY 2022 Budget Testimony

# February 8, 2021

2020 has been an unprecedented year for all of us and the regenerative medicine field is no exception. At the Maryland Stem Cell Research Fund (MSCRF), in response to COVID-19 challenges, we stepped up our efforts to support our community and continue to advance science. We modified our review and funding processes to virtual or socially distanced formats. We supported each active project with necessary modifications for successful completion or to enable researchers/companies to pivot, to provide rapid response and technology development to address COVID-19. We organized numerous virtual networking events for our researchers and companies to build and expand scientific collaboration and to stay connected during these difficult times. We also expanded our global presence and industry engagement by collaborating with multiple national and international organizations to allow Maryland-based researchers and companies to participate in scientific meetings for free or at a discounted rate. We expanded our daily news updates on our website home page (www.mscrf.org) and our MSCRF phone App to include not just regenerative medicine updates, but also the latest information on Covid-19.

In addition, we funded two new proposals to address Acute Respiratory Distress Syndrome (ARDS), a prevalent COVID-19 complication that results in fatalities. One of these ARDS projects, a clinical trial, is currently recruiting patients in Maryland to evaluate this treatment. It is important to note that mesenchymal stem cell treatments were amongst the first-approved clinical trials for reducing fatality by COVID related complications. This rapid approval of cell therapy in the fight against COVID-19 is due to the visionary investment in stem cell research and the immense progress we have already made in this field in understanding these cells and their safety profile. This knowledge and progress positioned us to readily fight this and perhaps the next unforeseen challenge. There are several ongoing cell therapy clinical trials, related to COVID-19 in MD institutions and we are ready to enroll additional trials if needed.

Beyond progress and resilience, our community is thriving in the face of this pandemic. Our awardees, companies and research institutes advanced innovation and accelerated cures. They developed new partnerships and collaborations, and created new opportunities. Our companies continued to grow and participated in conferences around the globe (virtually). We have witnessed unprecedented scientific collaboration, and 2020 presented us with a record year for regenerative medicine and advanced therapy financing \$15.9 billion through Q3. Globally, there were 1,109 ongoing regenerative medicine clinical trials, with several targeting more prevalent diseases such as cancer, cardiovascular disease, diabetes, central nervous system disorders and infectious disease including COVID-19.

To advance the research and discoveries into the market we must enable an industry to commercialize these technologies, manufacture products and make them accessible to patients. We work with our faculty and companies to help them succeed and advance their technologies. Our efforts have stimulated the creation and growth of this industry in Maryland. We create value by providing critical support for early-stage high-risk/high-reward scientific discoveries, de-risking these innovations with key milestonebased grants, enabling company formation and novel product development, supporting each project and scientist with guidance and resources to meet their unique needs, and creating a collaborative community to accelerate cures. Regenerative medicine is thriving in Maryland, our research continues to accelerate at a rapid pace, and our companies continue to grow. Some of the companies in our portfolio are highlighted below. For more information on all our portfolio companies, visit https://www.mscrf.org/portfolio-companies.

In addition, two of our portfolio companies (Vita Therapeutics, Inc. and Theradaptive Inc.) made the Maryland Future 20 List, selected by the Department of Commerce and announced by the Governor. The selection was based on a variety of factors, including innovation, future growth potential, the company's Maryland story, and "wow" factor. You can read more about the new companies that we funded this year in the Commercialization section of this report.

In 2020, we created a program aimed at helping new or new-to-the-field faculty bring novel thought and expertise to the field of human stem cell research. The program is for research grants to develop innovative solutions to emerging challenges in the field, but which have limited or no preliminary data supporting the application. We received 14 applications for this new program and were able to fund four of them. We hope to help these faculty launch their stem cell research careers and innovative projects. You can read more about these projects in the Launch section of this report.

During calendar year 2020, we had six active programs. We received 87 applications in two separate funding cycles, and we funded 27 new awards with \$8,241,439 in 8 different research institutes and companies. We supported projects addressing a wide range of disease indications including psychiatric, neurological and neurodegenerative diseases, heart and blood disorders, autoimmune conditions, aging related disorders as well as research advancing an understanding of human development and genetics. We identify and fund the most innovative research that may provide new treatments for several prevalent, chronic diseases as well as for rare diseases that then serve as a platform to expand therapies to other areas. As an indication of the scientific collaboration that we have driven, we received several collaborative proposals, including partnerships between for-profit Maryland companies and academic institutions as well as projects between various Maryland research institutions. Such synergistic partnerships help us accelerate discoveries towards products and clinical trials so they can reach patients sooner.

The Maryland Stem Cell Research Fund is also an economic engine for the State, creating jobs and generating new revenue. MSCRF grants support researchers, physicians, lab technicians, and students as well as scientists and executives at stem cell companies. We are creating the next generation of workforce to grow the regenerative medicine industry and advance therapies.

Many of the research grants we have funded to date study stem cells in the context of specific diseases including heart disease, cancer, stroke, chronic lower respiratory disease, diabetes, Alzheimer's disease and flu/pneumonia. It is important to note that these conditions account for the top 10 leading causes of death in Maryland. Resulting therapies improve the health of many Marylanders and also reduce health care costs for the state. State funding has already allowed Maryland scientists and companies to advance the use of stem cells all the way to the clinic. It is imperative that we continue to advance research and treatments for all diseases affecting Marylanders with the added understanding that several of the listed pre-existing conditions cause greater risk of serious illness from COVID-19 and the knowledge that the virus targets multiple organs and systems in our bodies, not just the lungs. Despite the immense progress we've made, our work is far from over and we, at MSCRF, continue to bring the stem cell community together with a sense of urgency and a common purpose to advance biological science and improve human health.