

COMMONWEALTH of VIRGINIA

Office of the Governor Virginia Israel Advisory Board

MEMORANDUM

TO: Governor Terry McAuliffe

FROM: Mel Chaskin – Chairman, Virginia Israel Advisory Board

Ralph Robbins – Executive Director

DATE: November 18, 2016

RE: 2016 Annual Review of the Virginia Israel Advisory Board

CC: Distribution List (Attached)

The VIAB contributed to the growth of 97 new jobs in FY 2016. These jobs generated approximately \$5.63 million in revenue and in state tax revenue of \$323,495.00. The board continues to be an effective means of enhancing the relationship between Virginia and Israel. Based on direct and indirect job creation from projects developed by the VIAB (FY 2000-2016) the Commonwealth has historically received 550% return on investment.

Mel Chaskin

Chairman, Virginia Israel Advisory Board

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FY2016

FY2016 REVIEW OF ACTIVITIES

Mel Chaskin Chairman
Chuck Lessin Vice Chairman
Ralph Robbins Executive Director

November 2016





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Virginia Israel Advisory Board

FY2016 REVIEW OF ACTIVITIES

Summary

1. The most significant activity for the previous year was the planning and execution of Governor McAuliffe's economic development mission to Israel. The first visit was postponed for eight months with the visit taking place in July 2016. The additional lead time allowed the VIAB to identify and develop additional, significant opportunities. The Governor was on the ground for46 hours, participated in 11 high-quality meetings, made four announcements and signed an MOU between the Strauss Group and Virginia Tech, which will augment our growing activities in agro-technology.



- 2. One of the most significant meetings has resulted in Project Turbine. An Israeli company with strong financial backing and success in Israel and Europe was convinced, after having met the Governor, that Virginia can offer a unique opportunity for the company to enter the US market. The goal of the company is to build multiple facilities of either wind, solar or hybrid solar & wind that will add up to 500 MW of power or more. The company visited Virginia in August, approximately a month after the Governor met with them, has hired a team of Virginia experts to lead the analysis and development, and plans to revisit Virginia in early December 2016 to close deals. The project has added significance since Virginia has no wind farms at this time.
- 3. An MOU was signed between the Strauss Group and Virginia Tech. If activated properly, the MOU should result in several new programs or projects per year with the Strauss Group sourcing many of the opportunities. As the Strauss Group is a 50% owner of Sabra Dipping and PepsiCo owns 50%, we expect the MOU to augment interaction with these companies as well.
- 4. The first phase of the Chickpea research at VSU had disappointing results. The VIAB worked with the Secretary of Agriculture to shift the research to Virginia Tech along with modest State funding for Chickpea development. While research is currently being done at Virginia Tech determining the "best practices" for growing chickpeas in Virginia, the consensus is that only a full breeding program will result in a Virginia Chickpea that will be resistant to diseases that express themselves in a chickpea grown in a more moist Virginia climate. Virginia Tech will work with the Chief Sabra Agronomist to determine the best course of action to be taken as we move forward.
- 5. EPC, a manufacturer of an onsite waste treatment facility for remote locations, announced their entry into the US market through a successful RFP in Tazewell County and their intention to expand manufacturing and assembly in Tazewell.
- 6. During the Governor's visit, Tessa Dairy announced a \$500,000 gift of their micro dairy production facility to Virginia Tech which will provide the company with a showcase facility from which they expect to expand into the US.

- 7. Aquaculture continues to be a major focus for the VIAB. The VIAB initiated Project Jonah, which is expected to be a major transformational project creating 426 jobs in Southwest Virginia. The VIAB worked with the company and VCEDA to secure a conditional grant of \$10 million. The grant is conditional on the company raising over \$60 million in equity. A major management change took place in 2015 which has raised concerns by VIAB management.
- 8. Independent of Project Jonah, the VIAB has been working with three other aquaculture companies with proven innovations. The VIAB will join Virginia Tech's Aquaculture expert, Dave Kuhn Ph.D., for a working visit to Israel in January 2017 to meet these companies and additional companies in the field.
- 9. Because of the time consumed in planning the Governor's mission to Israel and the soft economy, the number of new jobs created during FY2016 was less than in FY2015, 97 vs. 144 respectively. However, the pipeline of new jobs has grown. The 97 new jobs represent additional tax revenue to the Commonwealth of \$323,495 on a tax base of \$5.63 million.
- 10. From FY2000 2016, the VIAB has been involved with activities adding approximately 2,051 new jobs to Virginia's workforce. These jobs have generated approximately \$67.7 million in state tax revenues. If we discount this amount by a conservative 78% for multiple parties involved in the facilitation process, the amount of tax revenue generated by the VIAB is \$14.9 million which represents a 550% return on Virginia's investment in the VIAB over the past 16 years.
- 11. The current pipeline of jobs is very robust and includes Project Turbine which we are aggressively pursuing and are optimistic that we will close in FY2017. The VIAB projects that the current pipeline of activities will increase jobs in Virginia by 1,104 jobs over the next one to three years. This would translate to an additional state tax revenue of \$3.68 million based on a tax base of \$64.0 million.
- 12. Based on the longer term projects in our pipeline, the VIAB projects the potential for an additional 1,405 jobs over the next five years which would increase the additional state tax revenue by \$4.69 million based on a tax base of \$81.5 million.
- 13. The State Auditor of Public Accounts completed the VIAB Audit for FY2016 and reported no issues.

VIAB OBJECTIVES

The primary mandate of the Virginia Israel Advisory Board continues to be economic development in Virginia. Our goals and strategies are:

- Facilitating new Israeli company entry into Virginia.
- Working with the Israeli companies already located in Virginia to help facilitate internal growth and expansion via the VIAB extensive network.
- Leveraging each company's strength to create a multiplier effect for job creation.
- ♣ Place emphasis on job creation in Southwest Virginia in the area of Agro Technology. This will augment a "new economy" for a rural area that has been dramatically affected by the decline in both the tobacco and coal industries. It also leverages a great strength in the area due to the presence of Virginia Tech which has a world class reputation in Agriculture.
- Devoting from 10% 15% of our energies to unique educational and cultural projects.

ECONOMIC DEVELOPMENT MISSION

Governor McAuliffe Visit to Israel July 2016

Significant opportunities generated by economic development trip to Israel

The Governor's trip to Israel created opportunities to accelerate existing projects and to develop new projects. The delegation was led by three Secretaries. While the trip was only forty-six hours long, the time was filled with high quality meetings with significant job creation potential.

I am excited to say that our trade mission to Israel was very successful.

Governor Terry McAuliffe



We achieved the following during the visit:

- 11 tier one meetings
- Reception: 250 business guests
- Multiple press interviews
- 4 announcements
- MOU signed between Strauss Group (Sabra partner and VT)
- Prime Minister meeting



ECONOMIC DEVELOPMENT: TIER 1 PROJECTS

1. Project Cycle

Disruptive technology that converts municipal solid waste into high-value plastic

The company has developed a breakthrough patented technology enabling the conversion of unsorted Municipal Solid Waste (MSW) into a novel thermo-plastic composite material. The company's management has visited Virginia several times and the Governor reciprocated with a visit to their facility. The key parameters for this project are:

- 🖶 \$40-\$70 million+ facility in Virginia
- Timeline: decision within six months

104 Jobs 1-3 years







2. Project Innovation

A leading Israeli company expected to open a cyber innovation center in Northern Virginia

The company envisions establishing an Innovation Center within one year and expects 40-50 personnel

to be employed within 3 to 5 years, with continued expansion beyond five years. The company plans to establish an additional business unit at this Virginia location for marketing, professional services and technical support for the products and services that will be generated in the

50 Jobs 1 – 3 years

300 Jobs 3 – 5 years innovation center. The company projects the sales and tech support division will add from 200 – 300 additional positions over a 5-year period following successful product development.



While the company has developed three such centers in Israel, Europe, and the Far East, this will be their only innovation center in the United States.

3. Project Turbine

A leading Israeli company interested in building multiple alternative energy projects for solar, wind and hybrid energy facilities in Virginia

The Governor and his team visited Energix, an alternative energy company that builds and operates projects in Europe and Israel. The company wants to enter the solar and energy field in the United States and is interested in Virginia because of its potential and underdevelopment of alternative energy.



Financial Strength and other Attributes:

Strong financial backing from their Israeli "parent" company, Alony Hetz, with over \$1 billion in real estate projects in Washington DC and Northern Virginia. Alony Hetz partners with the Carr Group in Washington, DC.

AlonyHetz

- Ability and desire to build and operate the facility(s).
- The desire to construct 500+MW of solar/wind/hybrid alternative energy facilities in Virginia, where there is not one wind facility.
- Emphasis on social responsibility.

The company visited Virginia within two months of the Governor's visit to Israel. The VIAB continues to drive the project bringing together counties, private and

600 Jobs 1-3 years

500+ Jobs 2-5 years public experts in energy, the VEDP, and other relevant groups.

> Asi Levinger Energix CEO in Wise County







The Governor with the CEO of the parent company at the Company HQ in Tel Aviv



4. Tessa to enter US Market via Virginia Tech

Israeli company to donate \$500,000 of equipment to Virginia Tech Food Science & Technology Department

Tessa announced during the Governor's reception that the company would give a \$500,000 mini dairy to the Virginia Tech Food Science and Technology Department at Virginia Tech. The equipment will serve as a teaching tool for the University and a demonstration site for marketing efforts of the company in the US.

10 Jobs 1-3 years

30 Jobs

2-5 years

Plans call for manufacturing and assembly in the Southwest Virginia. TESSA Mini Dairy lines are equipped for a full production cycle including the



equipment for receiving and cooling milk, pasteurization, separation, fermentation and packing of ready products. Apart from these, TESSA Mini Dairy lines include all necessary auxiliary units and equipment such as pumps, filter, auxiliary facilities, and so forth.

"This is unique equipment that I have not seen before in the United States."

Professor Joe Marcy, Ph.D., Head of Food Science and Technology Department, Virginia Tech

5. EPC LTD enters US market via Tazewell, Virginia

An onsite wastewater recycling technology that will serve new recreational park

EPC "bio-disk" system uses an ecologically friendly biosystem to address challenges of rural communities where connecting to the municipal line is cost prohibitive. The bio-disk unit is a scalable system designed for multiple residential clusters of individual homes in residential, subdivision, apartment complexes, condominium, and commercial applications such as hotels, shopping malls, convenience and entertainment and recreational centers such as parks.



The VIAB recognized the importance of EPC's solution for rural America and the quality of the company's management and worked with EPC for many years to help the business define their proper market entry strategy here in the Commonwealth.

Current Status

EPC won an RFP from Tazewell to install its system in Cavitt's Creek Recreational Center which up to now has been unable to reach its goal of incorporating revenue generating cabins on the property because of the prohibitive costs of connecting to the main sewage line. As an alternative to septic systems, EPC's system requires much less land and is ecologically friendly.



EPC additionally is now supplying both the cabins and the waste treatment infrastructure that was not part of the original RFP. With the unit in place, the county expects to receive all the permits necessary to activate the unit before the end of 2016.

Next Stage for EPC

The company has installed the system and is waiting for the County to provide final permits needed for commencement of operations.

EPC is currently installing piping and connections at the request of the county using novel products by another Israeli company, Hofit, one of the largest producers and the original inventor of polyethylene inspection chambers, manholes, and other products for drainage, sewage and water treatment systems.

The VIAB will continue to work with EPC to determine the next steps in their expansion:

Build a sales organization.

2. Begin assembly of bio disk in Virginia once sales develop. The Tazewell facility will be the demonstration center.

3. Work with Hofit via EPC to determine the potential for expansion into the US.

25 Jobs 1-3 years

75 Jobs 2-5 years







Virginia Tech delegation to Israel visits Hofit.

> Jeremy Weissman CEO, EPC



6. Sensilize brings value added payload to UAV industry

Opportunity in Wise County could serve as entry point for company into US market

The VIAB has identified a unique entry point for Sensilize, an Israeli company that has developed a value-added, miniaturized, multispectral sensing platform for UAVs. The VIAB worked with Wise County and the MAAP program at Virginia Tech to develop an opportunity for the company to demonstrate its platform that enables quicker and more cost effective methods for verification of compliance



issues for reclaimed abandoned coal mines. Deployment of the product will lead to quicker conversion of land to new economic development uses incresing jobs and revenues in economically depressed areas.

Multiple Applications

Sensilize offers a "Spatial Decision Support System" that provides valuable information on vegetation, based on imagery. The platform can easily be adapted for various applications to be used in the forestry, agriculture and utility industries just to name a few for early identification of potential disease and other threats. The VIAB hopes to work with the company to:

- Assist company to identify other applications via our resources at Virginia Tech.
- Assist the company in exploring opportunities for commercialization in Wise County.

Additional Opportunity

The VIAB is working with another Israeli company that has developed a working demonstration model for a "gyrocopter." **Wings&Rotors** has designed a new type of VTOL/STOL UAV family, based on autogyro aircraft, for the civilian and HLS market.

The VIAB is exploring a potential collaboration between both companies in which Wings & Rotors incorporates the Sensilize payload into its system to develop a service-oriented business with

10 Jobs 1-3 years

40 Jobs 2-5 years various applications that can be developed in cooperation with Sensilize, Virginia Tech, and other potential stakeholders. Wise County will be an option for assembly as well.











7. MOU between Strauss Group and VT brings new opportunities

Concentration on high-quality companies that are commercialization-ready or near commercialization ready.

An agreement signed during the Governor's economic development trip to Israel creates an innovative platform for Israeli & Virginia companies to collaborate on advancing food technologies. According to Ralph Robbins,

Executive Director of the VIAB, "Collaboration around agriculture, food research and development is another important phase in the relationship between Israel and the United States."

The Sabra Dipping Company, which is a 50%/50% joint

venture between the Strauss Group and PepsiCo, operates the world's largest hummus production facility in the world, located in Chesterfield, Virginia. It is anticipated that these two large companies will become involved in some of the development projects.

There are already various projects between Israel and Virginia that involve Virginia Tech:

- Tessa Dairy
- Aquaculture Research
- Smart Greenhouses
- Remote sensing from UAVs
- Chickpea Development







Meeting in Israel: (L)Dr. Joe Marcy PhD, Head of the Food Science and Technology Department at Virginia Tech

35 Jobs 1-3 years The VIAB will work with both Virginia Tech and the Strauss Group to activate the MOU which we expect will bring 3-5 additional companies into the program.

8. Exigent Raises Capital for ImmunArray expansion

VIAB Life Science program in Richmond results in additional \$10 million of investment and growth in jobs in Virginia

25 Jobs 1-3 years

25 Jobs 1-3 years During the Governor's visit to Israel, an investment company, Exigent, announced that they led a successful investment round of \$10 million for ImmunArray, a Life Science company that the VIAB brought to Richmond, Virginia, via its program that took place several years ago.

A second Israeli company brought to Virginia by the VIAB, Cupron, is also



expanding here through a licensing agreement with EOS, a company in Norfolk, that produces hospital counter tops with impregnated Cupron material which has been proven to significantly reduce hospital-acquired infections (HAI).

Exigent's visionary approach to Virginia

Exigent is a boutique multi-strategy investment manager. The firm operates various funds in liquid markets, as well as vehicles for private equity and venture capital investments. The company prides itself on flexible approaches to challenging situations. They will add value by leveraging their core expertise and extensive network in technology, banking, and finance.



During the Governor's visit to Exigent's headquarters

in Jerusalem, their management committed to organizing a group of their investors, representing over \$350 million of private equity, to visit strategic institutions in Virginia to seek advanced research and



collaborative agreements. The expected outcome: a steady stream of cutting edge technologies to develop their commercialization programs in Virginia. Discussions centered around creating a significant "Virginia-Israel Life Science" investment fund. The delegation is expected to visit Virginia during Q1 2017.

9. Hebrew University Connects their Innovation to Virginia

Virginia offers unique opportunities for world class "next generation" technologies

Hebrew University and its Innovation Center, Yissum

Yissum is considered one of the most successful innovation centers in the world. The Governor and his team heard several presentations by companies that were commercialization-ready and had specific opportunities in Virginia. The VIAB will aggressively pursue two of the possibilities:

10. Project Paper

This company has developed a proprietary technology for the economically viable industrial-scale extraction of nano crystalline cellulose (NCC) from side streams of the paper industry and wood pulp. The company also develops unique technologies for producing NCC based materials such as high oxygen barrier films for packaging, additives for packaging materials, water-based adhesives, paints and ecologically-friendly foams for composites, transportation, and construction.

The opportunity in Virginia centers around the Shandong Tranlin Paper Company that will establish a \$2 billion



manufacturing company in Chesterfield, Virginia which is on schedule to open in 2020. The VIAB continues to foster a potentially





synergistic relationship between these two companies as Project Paper can utilize the waste from Tranlin's facility as feedstock for their production facility that could be built adjacent to the paper installation.

11. Project Leaf

The VIAB continues to work with a company that focuses on advancing regenerative medicine by utilizing its proprietary processing technologies to reproduce human collagen which is a protein present in all the body's organs and tissues. It provides the matrix that sustains the body's structure. Until the invention of this product, all of the collagen used in medicine including orthopedics, wound management, cardiology and general surgery, was harvested from dead animals and other sources.

The tobacco plant is the basis for this platform. The resulting product could be a disruptive technology in this field as the alternative is relatively "impure."

The company has recently raised \$25 million to establish its first production facility in Israel but plans to develop other growing facilities and a production facility in the future in the US. The VIAB will continue to pursue this company even if it is a longer term project because we are sure



that the experience of high-quality Virginia tobacco will match the expectations and requirements of the company's process.

It should be noted that the "tobacco" product itself has gone through an extensive breeding program over many years and while it looks like a natural tobacco plant, it has many sophisticated genetic qualities that differentiate it. The company has expressed to the VIAB that the plant must be grown



under the highest quality control standards and by a particular protocol that will be provided to the farmers. Discussions with VDACS has confirmed that carefully selected Virginia farmers can produce a high-quality product according to the required protocols.

12. Project Heat

Virginia can become the center for this new alternative energy source

The VIAB continues to work with a world leader in the **Recovered Energy Generation** (REG) sector which has extensive experience in development of state-of-the-art, environmentally sound power solutions.

The company focuses on proven techniques for energy recovery systems on gas pipeline compressor stations; its units convert waste heat from the exhaust of gas turbine-driven compressors into electricity for sale to local utilities or additional compressor station power.

The VIAB has discussed a strategy for the company that could result in their successful deployment on the East Coast of the US. One of the important issues is that at this time tax credits given to other alternative



energy producers are not available for the REG industry probably because their overall size has not reached the critical level where authorities will take notice. The VIAB continues to work with the company on this issue.

13. Update: Project Sunshine... Smart Turnkey Greenhouse

Progress being made to open first demonstration site

The VIAB continues to work in close collaboration with Israeli companies to develop smart greenhouses in Southwest Virginia that will enable the economically viable production of fresh produce 12 months a year. While we had hoped for the first demonstration site to be developed in FY2016, there have been delays for reasons that should be resolved in the first half of FY2017. During FY2016, the VIAB achieved the following:

- Identified potential land for the first demonstration site in Smyth County.
- Introduced additional investors to the project which are currently engaged in intensive due diligence.
- Introduced another Israeli company with experience and expertise to the project and the stakeholders.
- Planned and executed intensive discussions with banks, VEDP, counties, contractors, and other stakeholders.
- Brought in Virginia Tech experts who have reviewed the project and are working with the business teams involved.
- Brought in Food City which continues to offer expertise and support.

The business concept is to develop a working demonstration model as the first stage which will be used as a sales tool for an additional 6 – 15 units in Virginia before expansion into other states. Both VDACS and the Veterans Administration have shown interest as it offers a total training and support package including:

- Micro feasibility analysis for each potential location.
- Contracts with the supply chain.
- Planning and construction of the facility.
- Hands-on teaching and support.
- Financial guidance and support.
- Steady flow of new products.







20 Jobs

200 Jobs

14. Update: Aquaculture projects

The VIAB initiated Project Jonah in 2013

The VIAB has identified Southwest Virginia as an ideal location for inland aquaculture production that deploys newer, cost efficient technologies developed in Israel and not yet introduced into the United States. These techniques coupled with the fact that 92% of fish consumed in the United States is imported supports the VIAB thesis that this industry can be developed and expanded in Virginia.

The VIAB began an initiative, **Project Jonah**, in 2013. The \$120 - \$150 million project ultimately will create 426 direct jobs and 750 - 1,250 indirect jobs in Southwest Virginia. The project is considered a "transformational project" for Southwest Virginia because it brings a totally vertically integrated aquaculture business to the region.

By mid-2015, the VIAB had completed significant milestones:

- Identified and helped develop the project from infancy to "project ready" status.
- With the understanding that the project required the raising of about \$80 million in cash, the VIAB
 helped the company identify and hire a highly qualified CEO with expertise in both fundraising
 and business development.
- Initiated and concluded a successful business and technical analysis in cooperation with experts from Virginia Tech.
- Advised localities about the project.
- Helped secure conditional grants from VCEDA that were to be a catalyst for raising the necessary private equity.
- At the appropriate time, the VIAB transferred primary responsibility for the project to the VEDP which has significant complementary resources critical to secure the project for Virginia.

A major milestone of the project was the company's purchase of 105 acres in Tazewell in 2015. The company also secured a significant amount of "soft investment", but had not yet secured and anchor investor.

Changes in Management in mid-2015

In mid-2015, the US company underwent significant management changes. This change has created concerns by the VIAB and we continue to monitor development of the project. At this time, the VIAB is taking a conservative approach and not projecting any new job creation from this specific aquaculture project.







Other Aquaculture Projects

15. Project Mega

Another aquaculture project that deploys a "Mega Flow" technology claims a significant reduction in energy usage, which is one of the largest expenses of inland aquaculture farms. Operating in Israel, the company wants to expand into the United States. Since this project is significantly more modest regarding investment and size compared to Project Jonah, the VIAB views the project as similar to the smart greenhouse project in concept: An

20 Jobs 2-3 years investor/operator can be taught the entire business even if he has no previous

knowledge, thus making this a turnkey business.



16. Project Hatch

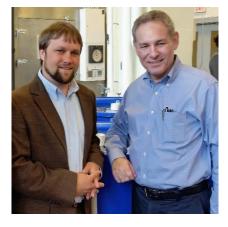
The VIAB is in discussions with another Israeli aquaculture company with a unique system for a commercial hatchery. We are discussing potential market entry strategies and a possible connection with Virginia Tech. This project is still in its early stages.

17. Virginia Tech Aquaculture Expert to visit Israel in January 2017

As a result of the past and current activity by the VIAB in Aquaculture and the potential for new technology acceptance in the US, the VIAB will host Dr. Dave Kuhn, an Aquaculture expert at Virginia Tech for a tour of current projects and potential new one.

LEAD-HEAD RAS SYSTEMS IS A VERY IMPORTANT STRATEGY FOR REDUCING OPERATIONAL EXPENSES AT RAS FACILITIES. IT APPEARS THAT MEGA FLOW HAS SOME NICE INNOVATIVE FEATURES.

David Kuhn PhD, Aquaculture specialist at Virginia Tech



18. Project Bag

Israeli company can manufacture in the US and compete with Chinese Imports

Reusable utility bags have become increasingly prevalent in the

30 Jobs 1-3 eyars US as a result of heightened interest in ecology and conservation. Until now, almost all of these bags are manufactured in China because of the labor intensive sewing of seams. The VIAB continues to



work with this company giving direction and suggestions on how they can build sales here to justify building their first manufacturing line. The company visited Southwest Virginia and has expressed interest in building a manufacturing line as soon as sales justify the operation.

OTHER ECONOMIC DEVELOPMENT ACTIVITIES

19. Chickpea Research

Reestablishing Momentum for the Virginia-Israel-Sabra chickpea research

In 2010, the VIAB facilitated discussions with Sabra Dipping and Virginia's Secretary of Agriculture about introducing the chickpea crop to Virginia. A successful development program would serve both the interests of the State by creating anywhere between 8,000 – 10,000 jobs, and the interests of a major corporation in Virginia by helping them save millions of dollars on transportation if they purchased their chickpeas in Virginia. VIAB has already secured a verbal commitment for the purchase of these chickpeas if they can be successfully bred.

Prof. Tom Thompson

The research project was begun at Virginia State University but after five years of work and money invested by the State showed unsatisfactory results. When VIAB received this report, we decided to take a different approach. We worked with the Virginia Secretary of Agriculture and Virginia Tech and we are happy to announce that we have successfully moved the research to Virginia Tech. The project is now headed by Prof Tom Thompson, Department Head of Crop and Soil Environmental Sciences at the University.

Our goal for 2017 is for Virginia/VT to reestablish credibility with the Chief Agronomist at Sabra Dipping and to move forward with the research.

As part of this process, the VIAB took the following actions:

- Hosted Prof Thompson in Israel where he sought information on activities in Israel about chickpea development.
- Worked with prestigious Israeli Volcani Institute, to have Prof Thompson become part of their newly formed US Board of Advisors.
- Confirmed that Prof Thompson would be an integral component of the MOU that was signed between the Strauss Group and Virginia Tech.
- Successfully worked with the Secretary of Agriculture to move the remaining state funds for the chickpea research from Virginia State University to Virginia Tech.

What we have learned:

While preliminary research is being carried out to determine "best practices" for growing chickpeas, it is clear that a full breeding program to develop a Virginia disease resistant chickpea will have to be undertaken. This is a long-term project that could take 5+ years and several millions of dollars of investment. The VIAB will combine several factors to reach this goal. These include the recently signed MOU between the Strauss Group and Virginia Tech, Professor Thompson's involvement with Israeli scientists through the Volcani Institute, his growing relationship with Sabra's Chief Agronomist and his commitment to developing the "Sabra-Virginia chickpea."

Next Steps

- 1. Guide confidence building activities that will lead to an investment in the chickpea program at the right time.
- 2. Coordinate with Virginia Tech to commit to periodic working visits to Israel to build on the relationship.

20. VIAB Teaming Program

The VIAB has identified and addressed an opportunity that leverages the strength of both Virginia & Israel: Israeli companies develop new technologies in the defense, cyber security and aligned industries and Virginia offer a large pool of businesses that can provide a path to market for these innovative companies via teaming agreements.

The opportunity: Every Federal Agency must "set aside" 3% of their purchases to companies that fall into a special category that includes: 8(a) Small Disadvantaged Business; Women-Owned Small Business (WOSB); Veteran Owned Small Business (VOSP) and so on. Companies certified in any of these categories receive certain benefits that level the playing field when competing for Federal Contracts. The Israeli companies that can offer superior technologies can team with these Virginia companies who often lack the ability to develop their own technologies.

Once a foothold is achieved, the Israeli company will need a presence in the US and eventually manufacturing and/or assembly capabilities to satisfy other demands such as Federal "Buy America" requirements.

While the VIAB enhanced the model during FY2016 through a growing "model relationship" between Darkblade

45 Jobs 2 – 4 years (20 per line) (Virginia VOSP) and Semperis (Israeli company), we did not have the bandwidth to execute a full program as we had hoped in Hampton Roads. We plan to implement the r



EL7*VA*L7X.I

Hampton Roads. We plan to implement the program in Q3 or Q4 of FY 2017.

21. Update: Direct Flight between Dulles and Israel

The VIAB, Metropolitan Washington Airports Authority (MWAA) and Fairfax County have worked together for years to secure a direct flight between Israel and Dulles. Clusters of Israeli companies tend to grow wherever there is a city connecting it to Israel via a direct route.

The VIAB has aggressively approached this opportunity in 2016 through the following activities:

- Organized several visits of the MWAA jointly with the VIAB to meet with EL AL management in Israel.
- Planned and executed a visit by the Governor and his senior team during his visit in July 2016.
- Planned a meeting with a Senior Director of the US Chamber of Commerce, VIAB and EL AL in Israel.



Outcome: EL AL is appreciative of the quality research that has been provided them and confirmed that Virginia is on the short list for future route decisions.



22. Teaming and Leveraging with Fairfax County

The VIAB leverages our contacts throughout the Commonwealth with the Fairfax County Economic Development Authority. We team on several programs and initiatives with an emphasis on companies in the Defense, Homeland Security and Cyber Security areas. We team and collaborate with each other at different times and with different intensities. Companies we have worked together with over the years:



23. BIRD Foundation Grants

The BIRD Foundation provides up to a \$1 million grant per project for joint R&D projects between an Israeli company and a US Company. The VIAB uses this as a tool to attract Israeli companies to Virginia by offering to locate potential partners for Israeli companies. While this does not result in a significant number of jobs in the short term, it does provide several high-quality leads per year.



A BIRD project involving Dynamic Aviation, a Virginia company, is now in its second year. Another project submitted to BIRD in FY2016 that included a Virginia company, Old World Lab in Norfolk and an Israeli company, Triticum Ltd, failed to secure funding for that round. However, the VIAB believes in the project and is attempting to find other opportunities for this venture in Virginia.

24. Retention Activities – Zim Integrated Shipping

Over the past few years, Zim management has turned to the VIAB for assistance in resolving several issues: 1) Visa issues 2) A retention issue that involved 400 jobs and 3) Assistance to address a problem

that affected their activities in Port of Oakland in California. The VIAB guided the CEO to a resource within our network that helped the company deal with those problems.

The company in Norfolk hired a new CEO in the fall of 2015. After the VIAB proactively met with the CEO, it was agreed that the VIAB would arrange a "good will" meeting with either the Governor or the Secretary of Trade and Commerce. We continue to try to coordinate the meeting with the new Secretary of Trade and Commerce, Todd Haymore.



CULTURAL PROGRAMS

25. Minds in Motion

Initiated by the VIAB and the Richmond Ballet and now in its seventh year *Minds in Motion* is a program that teaches fourth-grade students from a Jewish and Arab community discipline, dedication, and self-awareness by leading them together through a series of choreographic movements which must be memorized and expanded upon in each class session. This is not a dance class, but a way to teach students the benefits of applying themselves to a task involving both mental and physical challenges. The program is an outreach program of the Richmond Ballet.

The Virginia-Israel Program is unique because of the following attributes:

- Encourages the development of expressive participation skills concentrating on creativity, selfconfidence, focus, and dedication
- Fosters improvement of interpersonal skills building on values of cooperation, mutual respect, and selfawareness
- Nurtures an understanding and appreciation of working towards the achievement of a challenging physical and mental goal
- Promotes relationships between children of all backgrounds, which is particularly impactful in the Middle East
- Guides MIM students to unite beyond stereotypes, which is a meaningful message for Jewish and Arab participants



- Informs a more compassionate community with cooperative experiences as students practice towards a unified performance goal and moving in unison
- Breaks down social boundaries and lays groundwork for collaborative dialogues.



Approximately 400 students participate in this compulsory program

"This program is not just about training children for a joint performance. It sets the stage for a growing partnership between a Jewish and an Arab community in the center of Israel. At its core, MIM is about children, parents, educators and community leaders sharing their hearts in motion."

Professor Jack Habib, Director Myers-JDC Brookdale Institute, Jerusalem



Research – Taking the MIM program to the next level

With support from Annie Sandler of Virginia Beach, a research project was initiated by the "Myers-JDC-Brookdale Institute" located in Jerusalem, Israel. The Institute is Israel's leading center for applied research on social policy and services, serving Israel, the Jewish world, and the international



community. Its mission is to increase the effectiveness of society to address critical challenges.

Two schools and communities have been engaged in the program for three years. Both are also involved in the research: Beit Itzhak and Qalansua. The former is a Jewish Israeli school located in Emek Hefer and the latter is a Muslim Arab Israeli school in the town of Qalansua. While Beit Itzhak has participated in the program for seven years, Qalansua has been involved for three years.

Status of Research

Goals of Evaluation

To provide systematic information about the program implementation and its contribution to the children and the communities.

The data collection is being conducted in parallel at both schools. In-depth interviews are being carried out with school principals, coordinators, teachers, parents of children in the program, and the children in the program.

Expectations

According to Brett Bonda, the Director of the Richmond Ballet, the results of the research will apply to Virginia communities as well.







Professor Habib discusses research with Beit Itzhak and Qalansuwa teams.

Upper Left: Cat Studdard, Director of the Minds in Motion Program, Richmond, Virginia

26. Student Exchange

Cape Henry Collegiate reciprocates by visiting their counterparts in Israel

For more than fourteen years, a high school exchange program that the VIAB initiated between Cape Henry Collegiate in Virginia Beach and high schools in Israel continues. Modern technology enables online video conferencing with discussions about contemporary topics that touch the lives of the students.

For the first time, the Virginia students visited Israel for a week of activities that included interacting with their peers.







"The primary goal of the collaboration between Israeli and American students is to foster a greater awareness of differing perspectives on global issues. The impact of hearing first-hand how rockets from Gaza impact an Israeli student's life is invaluable in creating a greater empathy with their situation. Consequently, questions from Israelis about racial relations in the US create a vibrant discussion and greater understanding of issues that impact American students. The resulting increase in awareness not only brings our students closer but educates them far beyond what a book could achieve. "

Willy Fluharty, Director of Nexus Center for Global Studies, Cape Henry Collegiate

Virginia Israel Advisory Board

GOALS FOR FY2017

- 1. To develop the projects that Governor McAuliffe was introduced to during his visit to Israel in July 2016.
- 2. To finalize agreements to develop two projects in Southwest Virginia: Smart Greenhouses and Project Turbine. Both projects can bring 100's of jobs to SW Virginia within 1-2 years.
- Strengthen the bonds between Virginia and Israel in the Agro Technology field by activating the MOU that was signed by the Strauss Group and Virginia Tech during the Governor's visit in July 2016.
- 4. To develop at least two projects with an investment of between \$5 million \$10 million each that will result in a total of between 50 and 100 new jobs in FY2017 Q1 of FY2018.
- 5. Finalize agreements on at least one aquaculture project. At the same time, we will continue to work with Secretary of Trade and Commerce Todd Haymore to monitor the progress of Project Jonah which will go through a critical period in Q4 2016 when the VECEDA conditional grant is due to expire.
- 6. Generate 20 qualified leads, which the VIAB will develop in cooperation with other State Agencies such as the VEDP and the County EDAs. Based on experience, we know that we have to screen seven targeted companies on average to get one qualified lead with above-average potential for growth in Virginia.
- 7. Expand the "teaming program" with the goal of finding partners for three additional Virginia companies.
- 8. Bring a group of qualified investors organized by Exigent to Virginia to explore the development of a Virginia-Israel Life Science Fund.
- 9. Move the Minds in Motion Research project forward and continue to expand the program.

CONTACT INFORMATION

Ralph Robbins
Executive Director
Virginia Israel Advisory Board, Office of the Governor
8300 Boone Blvd, Suite 450
Tysons, Virginia 22182
Telephone: 703-966-6178
robbins@viab.org
www.viab.org