

**RHODE ISLAND ECONOMIC DEVELOPMENT CORPORATION**  
**MEETING OF THE SCIENCE & TECHNOLOGY ADVISORY COUNCIL**

**PUBLIC SESSION**

**June 13, 2013**

The Rhode Island Science & Technology Advisory Council (“STAC”) met on Thursday, June 13, 2013 in Public Session at the offices of the Rhode Island Economic Development Corporation, Providence, Rhode Island pursuant to notice of the meeting to all Members and public notice of meeting, a copy of which is attached hereto, as required by applicable Rhode Island Law.

The following Members were present and participated throughout the meeting as indicated: Clyde Briant (Co-Chair), Peter Alfonso (Co-Chair), Pierre Corriveau, Molly Magee, Jay Marshall, Patricia Phillips, Thomas Rockett, Peter Snyder, Donald Stanford and Marcel Valois. David Hibbitt was absent.

Also present during the meeting were Governor Chafee, Lt. Governor Roberts, and RIEDC staff. Co-chairs Briant and Alfonso presided over the meeting assisted by Christine Smith.

**Welcome**

Co-chairs Briant and Alfonso welcomed everyone and noted that the agenda would feature announcement of the recipients of the 2013 RIRA Collaborative Research Grant awards. This is the 7<sup>th</sup> year that STAC has awarded these funds and they have become an important part of efforts to build the RI research infrastructure, nurture new ventures and assist companies develop innovative products. As seed funds they play a critical role in making it possible for researchers from different institutions and disciplines from across the state to work collaboratively as a team to achieve together what each cannot accomplish alone. The Co-Chairs also welcomed new STAC members Jay Marshall-AMGEN, Patricia Phillips-RISD, Molly Donohue-SENEDIA and Marcel Valois-RIEDC. They added that following the announcement, we would have presentations on STEM workforce development efforts in RI and an update on the national EPSCoR/IDEA program.

Governor Chafee noted his support for small, smart, strategic investments like the STAC grants that pay off in the long term. He also thanked co-chairs Briant and Alfonso for their service and presented them with official citations. Lt. Governor Roberts added her appreciation for the co-chairs’ service and dedication to STAC and noted they will be missed. The Co-chairs both responded it had been an honor and privilege to serve and were very pleased to have been involved in the development of such a uniquely close working relationship between an Ivy League institution and a state land grant university.

### **STAC Collaborative Grant Awardees**

The Governor and Lt. Governor joined the Co-Chairs in recognizing the following awardees who received a total of \$ 810,541.00. The 2013 Research Alliance awardees represent 18 scientists from 5 research organizations pursuing projects that support of STAC's partnership with the National Science Foundation's (NSF) Experimental Program to Stimulate Competitive Research (EPSCoR) and address the three research questions related to RINSF EPSCoR: **What are the impacts of climate change on marine life?**

### **RI Seaweed Biodiversity Project: Establishing a DNA-Based Framework for Understanding Seaweed Range Expansions in RI Waters**

This team is using genomics to identify and catalogue invasive species of algal marine bio-invaders to improve coastal management and biosecurity in Narragansett Bay.

### **Temperature-mediated Changes in RI's Benthic Community: What Are the Implications for Local Food Webs and Fisheries?**

This team will work to return winter flounder to RI waters through better understanding the evolving population dynamics of the blue crab and summer flounder, two of its natural predators.

### **The Pathogenic Cause and Impact of the Local Sea Star Wasting Disease**

This collaboration will bring together six researchers with ecological, veterinary, molecular, microbial and aquaculture expertise to determine the mysterious cause of a deadly infectious disease attacking starfish from New Jersey to the Gulf of Maine.

### **Estimating the Potential for Evolutionary Adaption of Marine Organisms to Climate Change**

This team will use native shrimp to study the evolutionary potential of marine species to adapt to warming waters

### **Electric Microcable Bacteria in Narragansett Bay Sediments**

Working in the new area of electromicrobiology, this team will pursue their hypothesis that microbial bacteria are evolving to detoxify sediment in coastal dead zones.

### **Ocean Acidification Effects on Plankton Community Composition and Food Web Energy Flow**

This team will look at how whole marine communities respond to ocean acidification.

### **Approval of Minutes**

Citing no changes, upon a motion duly made by Thomas Rockett and seconded by Donald Stanford, the minutes of the September 19, 2011 and May 9, 2012 STAC meetings were accepted.

### **Building a STEM Workforce**

Co-chair Alfonso stated workforce preparation is an important part of any economic development strategy. And with many more STEM related jobs available than there are job candidates for, there is a special need to focus on making sure our workforce has the skills and training required for STEM careers. He then introduced Dr. David Rowley, associate professor of biomedical and pharmaceutical sciences at URI and the coordinator of the RI Summer Undergraduate Research Fellowship program which provides a hands-on learning experience for promising science undergrads. Dr. Rowley discussed how URI and other local colleges and universities are training undergraduate students in labs. Co-chair Alfonso then introduced Richard Brooks, Executive Director of the Governor's Workforce Board, who summarized the Board's efforts to support training for STEM occupations as well as jobs in the "hidden STEM economy". He shared the significant increase in wage earnings in the STEM fields, with workers gaining anywhere from a 10 to 14% increase in wages if they have a 2 or 4 year STEM related degree.

### **EPSCoR Report**

Co-Chair Alfonso introduced James Hoehn, Executive Director of the National EPSCoR/IDEA foundation. Hoehn reported that the EPSCoR program was developed to help states that do not receive a large share of federal research funding become more competitive for these awards. To highlight the disparity among states, he stated that 31 states receive less than 10% of total research funding. RI has been very active in increasing our federal research award portfolio since becoming an EPSCoR/IDEA state and STAC, as the State Governing Committee, is very important to these efforts and to maintaining the program.

### **Discussion and Adjournment**

There being no further business, upon a motion duly made by Marcel Valois and seconded by Thomas Rockett, Co-Chair Briant adjourned the meeting at 10:10 a.m.

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Christine M.B. Smith  
Secretary