

Research and Technology Investment Advisory Committee  
Meeting Minutes  
30 April 2013

**OPEN MEETING**

I. Call to Order:

Pete Jobse called to order the meeting of the Research and Technology Investment Advisory Committee (RTIAC) at 1:05pm on Tuesday, April 30, 2013 in Herndon, Virginia.

II. Roll Call

The following RTIAC members were present: Dan Gonzalez, Mohammad Karim, Thomas Kirchmaier, Dennis Manos, Ken Newbold, Rob Patzig, and Matt Zingraff. Also present: Pete Jobse, Bob Stolle, Nancy Vorona, Jennifer Hiltwine, and Nina Araujo-de-Kobes from the Center for Innovative Technology (CIT) and Robert McClintock from the Virginia Economic Development Partnership. The following RTIAC members were absent: Martin Briley and Robert Kahn.

Nancy Vorona provided an overview of the FY2013 Commonwealth Research Commercialization Fund program and submissions. Public comment was then invited; none was received.

**CLOSED MEETING**

Mohammad Karim read the following statement to proceed to a Closed Meeting:

*"We will go into a closed session to discuss the Commonwealth Research Commercialization Fund (CRCF) with RTIAC members. I move that the Research and Technology Investment Advisory Committee of the Innovation and Entrepreneurship Investment Authority (IEIA) move into a closed session pursuant to Virginia Code 2.2-3711 (A)(30). There will be discussion or consideration of grant application records.*

*Do I have a second? Any discussion? All those in favor say Aye; those oppose say Nay." (All members present said 'Aye.') The Motion carried."*

**CLOSED SESSION**

After the Research and Technology Investment Advisory Committee came out of the Closed Session, Mohammad Karim read the following statement:

*"The Committee is now reconvened in open session having completed a closed meeting. I will now ask that a roll-call be conducted, asking each member to certify, to the best of his or her knowledge, that only public business matters lawfully exempt from open meeting requirements under the Freedom of Information Act and only those public business matters identified in the motion convening the closed meeting were heard, discussed or considered in the closed meeting."*

Mohammad Karim took a roll call to vote on this statement: “Committee members please indicate that you agree or disagree.”

Dan Gonzalez	Agree
Mohammad Karim	Agree
Thomas Kirchmaier	Agree
Dennis Manos	Agree
Ken Newbold	Agree
Robert Patzig	Agree
Matt Zingraff	Agree

### **OPEN MEETING**

Once the open session was resumed, Pete Jobse announced that 43 proposals had been recommended for award and these recommendations would be submitted to the Innovation and Entrepreneurship Investment Authority Board of Directors for their approval subject to vote of the RTIAC in open meeting.

The vote confirming the 43 proposals below be recommended for funding was unanimous:

Dan Gonzalez	Agree
Mohammad Karim	Agree
Thomas Kirchmaier	Agree
Dennis Manos	Agree
Ken Newbold	Agree
Robert Patzig	Agree
Matt Zingraff	Agree

Dennis Manos suggested modifying the proposal rating system to permit finer gradations.

### **Adjournment**

Pete Jobse adjourned the meeting at 4:15pm.

Proposals recommended for award by the RTAIC:

### **Commercialization Program**

- CyberSheath Services International, LLC (Great Falls), *Cyber Security Health Assessment*, Mr. Eric Noonan, \$42,500, Cyber Security
- CyberSheath Services International, LLC (Great Falls), *Data Breach Cost Quantification Model*, Mr. Eric Noonan, \$42,500, Cyber Security
- IgM Immunotherapy, LLC (Charlottesville), *Naturally-Occurring Immunoglobulin M (IgM) Antibodies to Prevent Autoimmune Diabetes*, Dr. Kenneth Brayman, \$50,000, Life Sciences
- Leone Bioventures, LLC (Roanoke), *Development of an Agricultural Fungicide*, Mr. Edward Goyette, \$49,920, Life Sciences

- Neoantigenics LLC (Charlottesville), *Critical Characterization of Candidate Monoclonal Antibodies for Generating Cancer Therapeutics*, Dr. Brian Pollock, \$50,000, Life Sciences
- Neoantigenics LLC (Charlottesville), *Survey of Human Urogenital Tumors Expressing the SAS 1B Oocyte-Associated Cancer Biomarker*, Dr. Brian Pollock, \$50,000, Life Sciences

### Matching Funds Program

- Commonwealth Center for Advanced Manufacturing (Disputanta), *Abrasive Blasting - Understanding and Optimizing the Process*, Mr. Matt Stremmer, \$100,000, Advanced Manufacturing
- Eastern Virginia Medical School (Norfolk), *Pre-Clinical Development of New Characterized Compounds That Preserve Functional Beta Cell Mass in Diabetes*, Dr. David Taylor-Fishwick, \$100,000, Life Sciences
- Eastern Virginia Medical School (Norfolk), *Proton Therapy Simulation and Treatment Planning Algorithm Development*, Dr. Cynthia Keppel, \$100,000, Modeling & Simulation
- George Mason University (Fairfax), *Sequencing Instrumentation Support for the Commercialization of Diagnostics of Dysbiosis in Gastrointestinal and Liver Diseases*, Dr. Patrick Gillevet, \$95,564, Life Sciences
- Old Dominion University (Norfolk), *Advanced Nano-Architecture for High Efficiency Energy Convergence Systems*, Dr. Helmut Baumgart, \$100,000, Energy
- Old Dominion University (Norfolk), *Efficient Diesel Exhaust Remediation Using a Nonthermal Plasma Reactor*, Dr. Richard Heller, \$99,471, Environment
- Old Dominion University (Norfolk), *Reducing Energy Use and Emissions through Innovative Technologies and Community Designs: Methodology and Application in Virginia*, Dr. Asad Khattak, \$100,000, Transportation
- Old Dominion University (Norfolk), *Smart Combiner for Residential Photovoltaic Systems*, Dr. Shirshak Dhali, \$75,000, Energy
- Southeastern Universities Research Association (Newport News), *Development of Method for Reduced Dose Breast Specific Gamma Imaging*, Dr. Andrew Weisenberger, \$98,235, Life Sciences
- Southwest Virginia Higher Education Center Foundation d/b/a Clean Energy R&D Center (Abingdon), *Tazewell County Renewable Natural Gas*, Mr. Edwin Rogers, \$100,000, Energy
- University of Virginia (Charlottesville), *Generation of T Regulatory Cells for Type I Diabetes*, Dr. Mary Laughlin, \$100,000, Life Sciences
- University of Virginia (Charlottesville), *Hacker-Proofing the Web*, Dr. Jack Davidson, \$36,500, Cyber Security
- University of Virginia (Charlottesville), *Monoclonal Antibodies to Target Tumor Surface Metalloprotease*, Dr. John Herr, \$100,000, Life Sciences
- University of Virginia (Charlottesville), *System-Aware Cyber Security Sentinel*, Dr. Barry Horowitz, \$100,000, Cyber Security
- University of Virginia (Charlottesville), *Therapeutic Targeting of Glioblastoma Stem Cells with Cav3.2 Blockers*, Dr. Roger Abounader, \$100,000, Life Sciences
- University of Virginia (Charlottesville), *Thermal Transport across GaN Interfaces: Linking Structural Imperfections to Thermal Properties*, Dr. Patrick Hopkins, \$100,000, Energy
- Virginia Commonwealth University (Richmond), *A Minimally Invasive Treatment for Cerebral Palsy Using Engineered Hydrogels*, Dr. Ning Zhang, \$100,000, Life Sciences
- Virginia Commonwealth University (Richmond), *Developing New Products to Prevent Healthcare-Associated Infections*, Dr. Xuejun Wen, \$100,000, Life Sciences
- Virginia Tech (Blacksburg), *High Frequency Irreversible Electroporation for Lung Cancer and Other Endoscopic Ablation Applications*, Dr. Rafael Davalos, \$100,000, Life Sciences
- Virginia Tech (Blacksburg), *Use of Electric Fields for the Isolation of Tumor Initiating Cells and Other Rare Cells*, Dr. Rafael Davalos, \$100,000, Life Sciences

## **SBIR Matching Funds Program**

- algorithmRx, LLC (North Chesterfield), *Computer Assisted Clinical Decision Support Tool for Management of Statins*, Mr. Steve Hutcherson, \$50,000, Life Sciences
- Bear Technologies, LLC (Oilville), *Design and Modeling of a Revolutionary Commercial High Torque Motor*, Mr. Tom Myrick, \$50,000, Modeling & Simulation
- Ceres Nanosciences, Inc. (Manassas), *Nanotrap-Enabled Biofluid Collection and Preservation Toolset*, Mr. Ben Lepene, \$50,000, Life Sciences
- ClearEdge3D, Inc. (Herndon), *Novel Algorithms for Automated 3D Building Models and 3D Street Maps*, Mr. Christopher Scotton, \$49,965, Modeling & Simulation
- Designed Material Technologies LLC (Richmond), *Modeling Growth of Crystalline Oxides on Silicon for High-K and Ferroelectric Applications*, Dr. Christopher Ashman, \$49,973, Modeling & Simulation
- HemoShear, LLC (Charlottesville), *Development of a Human Hepatocyte Predictive Pharmacology and Toxicology System*, Dr. Brian Wamhoff, \$49,996, Life Sciences
- HemoShear, LLC (Charlottesville), *Creating a Predictive Vascular System for Early Development*, Dr. Brian Wamhoff, \$50,000, Life Sciences
- iTi Health, Inc. (Charlottesville), *Development of a Targeted Therapy for Pancreatic Cancer*, Dr. Greg Fralish, \$50,000, Life Sciences
- Parabon NanoLabs, Inc. (Reston), *A Nano Pharmaceutical Platform for Creating Artificial Vaccines*, Dr. Steven Armentrout, \$50,000, Life Sciences
- Power Fingerprinting, Inc. (Blacksburg), *Active Software Defense to Reduce Threat Capability Effectiveness*, Dr. Carlos Aguayo Gonzalez, \$50,000, Cyber Security
- RetiVue, LLC (Charlottesville), *Atlas – A Handheld High Resolution Wide-Field Retinal Imager*, Dr. Paul Yates, \$50,000, Life Sciences
- Rivanna Medical, LLC (Crozet), *X-Ray Replacement for Bone Imaging with a Portable Ultrasound Device*, Dr. Frank Mauldin, \$50,000, Life Sciences
- Rivanna Medical, LLC (Crozet), *Three-Dimensional Ultrasound for Neuroaxial Anesthesia Guidance*, Dr. Frank Mauldin, \$50,000, Life Sciences
- S34A, Inc. (Arlington), *Forensic Analysis of Solid State Drives*, Mr. Hank Wallace, \$30,000, Cyber Security
- Serpin Pharma, LLC (Nokesville), *Efficacy Testing of SP16 in NOD Mice*, Dr. Soren Mogelsvang, \$50,000, Life Sciences
- SphynKx Therapeutics LLC (Charlottesville), *Evaluation of Sphingosine Kinase Inhibitors for the Treatment of Chronic Kidney Disease*, Dr. Kevin Lynch, \$50,000, Life Sciences

## **STTR Matching Funds Program**

- Power Fingerprinting, Inc. (Blacksburg), *Security for Wireless Devices: Security Monitoring and Intrusion Detection in SDR and CR Using Power Fingerprinting*, Dr. Carlos Aguayo Gonzalez, \$50,000, Cyber Security