

VIMS Industry Partnership - *Meeting Minutes*

16 May 2008

Director's Conference Room. Watermen's Hall. 10:00am - Noon

Attendees

Bill Bean, Lee Beach, Tina Bunai, Alex Daniel, Warren Deal, Jay Diedzic, Doug Dwoyer, Carl Friedrichs, Marjorie Friedrichs, David Forrest, Jim Golden, Gregory Hodges, Virginia Jones, Steve Kaattari, Jane Lopez, Dennis Manos, Dave Marsell, Tucker Pierce, Melanie Rapp, Willie Reay, John van Rosendale, Maciek Sasinowski, Leonard Sledge, Gregory Stringfield, Mike Unger, Harry Wang, John Wells.

Purpose

The purpose of this meeting was to cover:

Updates

VIMS budget, observation systems, pressure systems and pending proposals, local opportunities for starting and growing commercialization of technology-based products, and advertising possibilities.

Follow-ups - February 2008 Meeting

Including inundation modeling and emergency planning grants, biodiesel and wind power initiatives, the seawater research lab and funding status, buoy status, NOAA marine sensors workshop status, and status of SBIR proposals.

Handouts: None

Agenda

John Wells chaired the meeting and Jim Golden facilitated the agenda.

ANNOUNCEMENTS:

Relocation of W&M Economic Development Office to New Town

Jim Golden, Bill Bean, and Leonard Sledge are now in the **Discovery II Building**, Suite 201, 5308 Discovery Park Boulevard.

New mailing address is Economic Development, P.O. Box 8795, Williamsburg, VA 23187-8795
Phone and **e-mail** addresses are unchanged.

DISCUSSIONS:

John Wells. (VIMS Budget)

John reviewed the status of three VIMS projects in the biennium budget that included:

1. **Construct Eastern Shore Sea Water Laboratory**, Wachapreague -- **\$4,239,000**. Supports construction of a new laboratory facility with running sea water for research on coastal marine ecology and aquaculture in a high salinity environment.
2. **Control Shoreline Erosion -- \$1,200,000**. Supports erosion control and aesthetic enhancement of the entire shoreline of the Gloucester Point campus.
3. **Replacement Pier at VIMS -- \$1,450,000**. Supports construction of new concrete pier to replace two wooden piers that have been heavily damaged in recent storms.

A **strategic planning process** is underway at VIMS. Several faculty members have stressed the importance of including partnerships with industry in the planning process.

VIMS will be responding to an RFP from NOAA for \$6-8 million per year. The funding would be to create a NOAA Cooperative Institute. Topics might include observation systems and fisheries support.

Carl Friedrichs. (Observing Systems)

Carl reviewed the observing system projects and proposals his lab at VIMS has been involved in from **2003 through 2008**, which have received some **\$5.26 million in grant support** from the US Coast Guard, the Commonwealth of Virginia, NOAA, the Office of Naval Research, and the NSF. He noted that the industry partnerships have been important in these efforts: the SAIS/NOAA NOMAD buoy donation; the INCOGEN observing system web portal - a key in reporting real-time data; and IWT wireless transmission and Franktronics networking systems supporting data movement and conversion.

Agenda, cont.

Carl showed photos of three buoys in the York River that highlighted the results of several projects including: the CBOS-INCOGEN buoy, the MUDBED-IWT buoy, and the MUDBED WormCam buoy used by **Robert Diaz, VIMS biology department**. Carl's presentation is posted at <http://www.wm.edu/economicdevelopment/VIMS-Industry%20Partnership.php>.

Dave Marsell. (Pressure Systems Updates and Proposals)

Dave reviewed the Pressure Systems (<http://www.pressuresystems.com>) corporate structure, the product lines, and the potential areas for collaboration with VIMS. Hampton-based Pressure Systems, a division of Esterline, has 140 employees. Product lines related to VIMS include submersible transducers and data loggers and Quartzonix™ precision pressure transducers. Dave suggested that potential collaborations with VIMS might include: deployment of PSI level transducers at VIMS data stations, level instrumentation to validate VIMS storm flood models, and feedback or collaboration on future water quality instrumentation requirements. Dave's presentation is also posted on the VIMS-Industry website.

Dennis Manos noted that work is needed to identify technology available from other universities and the technical issues that need to be solved. **Jim Golden** asked if other Esterline companies might also be potential collaborators with VIMS, and Dave agreed to investigate.

Leonard Sledge (VIMS Advertising Opportunity – *Virginia Business Magazine*)

Leonard outlined advertising options with the *Virginia Business Magazine*. The group felt we needed a clearer understanding of our target audience, the various ways to promote the group's work, and the alternative publications that might be considered. The group noted that we might get coverage for free through **editorials** and **articles** if we made information available.

Bill Bean (Grant Applications and SBIR Proposals)

Grant Applications - Modeling and Emergency Planning. Bill reported that the Rossiter/Wang **\$125K grant proposal** to Hampton Roads Planning District Commission (**HRPDC**) for a study of storm flood-surge vs. nursing home/assisted living evacuation needs **has been accepted** and has been incorporated into HRPDC's project requests that will be forwarded soon to DHS for approval. Rossiter/Wang have also collaborated on a **\$600K proposal** to NIH for storm surge – health services response to the needs of nursing homes, the elderly and infirm, assisted living, and others.

SBIR Proposals – Neither the **Oceana Sensor** SBIR proposal (Steve Kaattari/H. Kator) nor the **Luna Seawater Research** Lab SBIR proposal to ONR was funded.

This led to a discussion about "lessons learned" from these recent unsuccessful SBIR proposals. Although NSF provides feedback on why proposals were rejected, unfortunately most agencies do not. The group felt that one area needing improving was earlier coordination.

Dennis Manos noted that **early May to June** is the best time to begin work for the August-September round of proposals.

Bill outlined changes in the SBIR program under consideration in Congress, including higher funding limits in **Phase I (\$300,000)** and **Phase II (\$2.2 million)**. The higher totals per project will make it easier to develop meaningful collaborations, although there is no proposed increase in total SBIR funding, so there will be fewer projects.

Tucker Pierce/Bill Bean (Buoy Status and NOAA Marine Sensors Workshop)

Tucker reviewed the plans for deployment of **three** new buoys in **June** (Rappahannock), **July** (northern Chesapeake), and **September** (Nautilus in Norfolk). The new information is the additional sensors that will be available – nitrate, phosphate, and GPS water level. NOAA will consider incorporating new sensor technologies (including prototypes) on the platforms.

Dennis Manos noted the potential advantage of grouping the nitrate and phosphate sensors for Chlorophyll A algae detection. **Willie Reay** commented that placement in the feeder streams would be useful. **Jay Diedzic** observed that buoys could be used at the Blackbeard site in North Carolina and the Monitor site.

Agenda, cont.

Jay Diedzic (Biodiesel and Wind Power Initiatives)

Jay summarized the results of a brainstorming session that was held at VIMS last week to explore the potential **growing of algae and processing into biodiesel and jet fuel**. The group is developing a white paper to summarize potential areas of research and development. **Target audiences** would include major and independent oil companies, aerospace companies, Sovereign Wealth Funds, and the military. **Local advantages** include expertise at VIMS and main campus, the new Seawater Lab at VIMS, local strategic partners, potential links to coal-fired and nuclear power plants, and the military market in general.

Jim Golden (Introductions)

Jim introduced **Virginia Jones**, who is a potential resource for VIMS. She has a strong corporate background as a technical writer/editor/Web usability analyst (ex., test trials, practices, procedures, global standards, white papers, web content). Jim noted that she had done an excellent job reviewing the Economic Development website and she is particularly effective in developing minutes and action steps as part of project management.

John Wells thanked the participants and adjourned the meeting at 11:55.

NEXT STEPS:

Active Grant Opportunities

- Track VIMS submission in response to the NOAA RFP – **John Wells**.
- Track progress on the Modeling and Emergency Planning proposals to the HRPDC and NSF and identify other opportunities – **Harry Wang, Bill Bean**.

Extension of On-Going Projects

- Continue to identify potential industry collaborations in observing system projects – **Carl Friedrichs** and other interested partners.
- Explore the possibility of placing VIMS sensors on the new NOAA Buoys and providing ideas about the placement of future buoys – **Tucker Pierce, Willie Reay**, and other interested VIMS researchers.

Exploration of New Opportunities

- Explore potential use of Pressure Systems technology in VIMS projects – **Dave Marsell** and interested VIMS researchers.
- Explore potential collaboration with other Esterline companies – **Dave Marsell**.
- Report on future opportunities with emerging Angel Networks and potential non-profit research organizations – **Gregory Stringfield**.
- Discuss potential collaborations with the Gloucester EDA – **Gregory Stringfield, Warren Deal**.
- Track progress on the White Paper and proposals for the development of diesel fuel from algae and report collaboration opportunities to the Partnership – **Jay Diedzic, Tina Bunai, and Dennis Manos**.

Improving Partnership Processes

- Research and discuss alternative ways of promoting Partnership activities to target audiences – **Leonard Sledge** and other interested participants.
- Summarize recent SBIR submission experience and provide lessons learned for future submissions – **Bill Bean, Jane Lopez**.
- Coordinate with Virginia Jones concerning potential assistance with Partnership projects – **Virginia Jones** and interested partners.
- Integrate the Partnership into the ongoing VIMS strategic review as appropriate – **John Wells, Jim Golden**

Next Meeting

Friday, 1 August 2008. VIMS Director's Conference Room, Watermen's Hall. 10:00am – Noon.
