VIMS-Industry Partnership Meeting October 12, 2012 Notes

Attendees: Bob Armstrong (National Center for Collaboration in Medical Modeling and Simulation), Bill Bean (W&M), Vic Chatigny (Ocean Power Technologies), Betty Feet (GM Engineering), Margaret Fonner (VIMS), Carl Friedrich (VIMS), Jim Golden (W&M), Steve Kaattari (VIMS), Jen Kostyniuk (Dominion), Christopher Machut (GM Engineering), Dennis Manos (W&M), Paul Panetta (Applied Research Associates), Neil Rondorf (SAIC), Leonard Sledge (W&M), Greg Stringfield (Consultant), Dennis Taylor (W&M), Mike Unger (VIMS), John Wells (VIMS)

Notes from our meetings and some presentations are posted at:

 $\frac{\text{http://www.wm.edu/offices/economicdevelopment/regional projects/chesapeakebay/vimsindus partner/index}{\text{x.php}} \ .$

• VIMS Update - John Wells

- o VIMS mission is to achieve and maintain a national and international position as a premier coastal marine science institute.
- o FY13 budget is \$42.4M; 40% is from state funding and 54% is from grants and contracts.
- VIMS is the state advisor on natural resources in Virginia. Over 30 sections of the Virginia code require VIMS Advisory Service.
- o A strategic objective of VIMS is to develop partnerships that maximize industry collaboration.
- o Budget reductions and reductions in faculty have resulted in a net loss of research funding.
- o Largest external funder of VIMS is NOAA.
- o National level strategic opportunities for VIMS include:
 - Application of molecular biological tools to address vital questions in ecological, biogeochemical and evolutionary processes.
 - Research initiatives in understanding impacts of sea level-rise and long-term climate change.
 - Expansion of our ability to process large complex data sets and fisheries models through growth of bioinformatics.
 - Advances in modeling and simulation through high performance computing (HPC).
 - Exploitation of ocean observing systems in wide array of marine and environmental sub-fields.
 - Development and application of new tools in environmental toxicology and human health.
- o Economic opportunities from VIMS research include:
 - Aquaculture genetics and breeding technology.
 - Ocean observing system deployments.
 - Algae biofuel research.
 - Chemical bio-sensor development.
 - Autonomous underwater vehicle applications.
 - Storm surge modeling and simulation.

SAIC/OCEANS 12 Update – Neil Rondorf

- Announced that the U.S. Department of Energy has purchased the Chesapeake light tower.
 - This purchase assists in figuring out what type of instrumentation can be used there and the type of research that can be done there.
 - Research opportunities for the long-term impact of power and telecommunications cables in the ocean.

• Company Introduction: GM Engineering Services – Christopher Machut

- o Company has developed a rapidly deployable situational awareness platform as well as underwater cameras
- o www.tugcam.com
- o www.hoistcam.com
- o <u>www.chartercam.com</u>

• National Center for Collaboration in Medical Modeling and Simulation – Taryn Cuper

- Mission is to improve patient care and affordability by advancing the quality of medical modeling and simulation-based training and education available to healthcare students and practitioners through active collaboration with industry, academic, and government partners.
- o Historic and ongoing development efforts include:
 - Augmented standardized patient/virtual pathology stethoscope
 - Wound debridement simulator
 - Health record data mining
 - Virtual immersive portable environment applications
 - Re-purposing of DoD M&S technologies in the healthcare domain
- o Desires to develop a collaborative relationship with VIMS
- Next meeting Friday, February 15, 2013 10AM Noon Room A/B, Watermen's Hall, VIMS