### Michelle Miller

From: Marine Bio-Technologies Center of Innovation <mmiller@mbcoi.net>

**Sent:** Monday, December 08, 2014 10:59 AM

**To:** mmiller@mbcoi.net

**Subject:** A Nexus for Marine Biotechnology - Supporting the Blue Economy



**DECEMBER 2014** 

We would like to take this opportunity to wish you a safe and happy holiday season. We look forward to working with you in the New Year.

## **FATHOM THE OPPORTUNITIES**

## Message from MBCOI CEO, Deb Mosca

Welcome to the 2014 year end wrap-up edition of our newsletter.

As a powerhouse in both marine science and biotechnology research, North Carolina is poised to become a global hub for marine biotechnology in the 21st century. The disparate goals and roles of research and commercialization require a concerted effort to actively develop opportunities that would otherwise remain unrealized. To facilitate that process, as MBCOI enters its third year of operation, we are seeking to become the **NEXUS** for information, collaboration, and commercialization of marine



information, collaboration, and commercialization of marine biotechnologies among our stakeholders, both domestically and internationally.

In our first two years of operation, MBCOI has focused much time and energy to develop strong foundations with academic institutions, industry, and entrepreneurs regionally, nationally, and internationally. As a direct result of these relationships, we have obtained access to unique platforms and in 2015, will be focusing on our 4 key **Technology Translation** programs to drive near term revenue.

## **Technology Translation Programs**

**GF Platform** (Genomic Signatures and Motif Fingerprinting) - the most sensitive and fastest genomic bioinformatics system in the world is now available through an exclusive partnership with Orion Integrated Biosciences (OIB). GF has potential applications in both basic and applied

research including the development of advanced molecular diagnostic products, novel vaccine and therapeutic targets, and for the identification of novel biosynthetic genes.

MMRF Instrument Platform (Marine Magnetic Resonance Facility) - a unique analytical capability which combines magnetic resonance imaging with magnetic resonance spectroscopy to characterize anatomy and biochemical changes for longitudinal studies of living organisms is made available through a partnership with North Carolina State University (NCSU). Though focused on marine and environmental science discovery, we have great interest in expanding the use of this powerful new technology into other R&D areas and industry sectors.

**E-Lit Platform** - search and creation of comprehensive databases of chemistries and biologies for high-value intellectual property (IP) and made available through an exclusive partnership with ParlezCHEM. We can create custom databases on any subject matter.

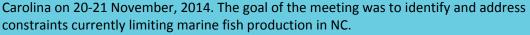
**Aquaculture** - a catalyst for biotechnology development that is of strategic importance to MBCOI and NC by offering long term potential for substantial economic growth in NC.

Program Brochures with more information can be downloaded here: MBCOI Brochures

Please contact **Roy Carter** to discuss your project needs.

# Marine Aquaculture in North Carolina - Strategic Prioritization Workshop on Finfish Mariculture November 20-21, 2014, Beaufort, NC

The North Carolina Marine Fish Culture Workshop, co-hosted by NOAA and MBCOI, brought together academic researchers and industry leaders from across North Carolina, South Carolina, Louisiana, and Florida to the Center for Coastal Fisheries & Habitat Research Auditorium at NOAA, Pivers Island, Beaufort, North



The event was a great success thanks in no small part to the help we received from our co-hosts at NOAA. It was attended by over 35 participants from academia (aquaculture research, fisheries, fish genetics and physiology, seafood safety), commercial producers, industry support (wholesalers, facilities design and engineering, equipment manufacturers) and state and federal government (NOAA, NC Dept. Ag., NC Division of Wildlife, Division of Marine Fisheries, NCBC). With such a diverse group of expertise and opinions on hand we had some lively discussions and excellent networking.

Charles Weirich, of Atlantic Caviar and Sturgeon, provided the keynote address on 'Thoughts on Industry Development, which highlighted the reasons why NC needs marine aquaculture. Aquaculture Extension and Governance reports were provided by Pete Anderson from the NC Dept. of Agriculture, Garry Wright, NC Division of Marine Fisheries, Mike Frinsko, NC Cooperative Extension Service, and Jess Beck-Stimpert, the SE Regional Director of NOAA National Marine Fisheries Service. Industry panel sessions (producers and suppliers) discussed the needs and wants of industry going forward, and identified the under-utilized and potentially high impact research topics that need more attention to advance aquaculture in NC.

Workshop groups discussed the strategic development initiatives in terms of R&D needs assessments, identification of environmentally and economically significant R&D opportunities, prioritization of short- and long-term opportunities for technological innovation and investment, and research and commercial partnerships for fisheries stock enhancement and habitat restoration.

The second day of the workshop focused specifically on the assessment of candidate species and technology for aquaculture development for finfish mariculture, and featured Tim Pfeiffer of Aquaculture Systems Technologies as the invited speaker.

The workshop report will be made available to research scientists, engineers, students, managers, administrators, and farmers pursuing aquaculture in industry, academia, and government.

- MBCOI and NOAA wish to thank the Carteret Economic Development Council (EDC) www.carteretedc.com for their generous sponsorship.
- The workshop was also made possible by a BES grant from the North Carolina Biotechnology Center, Raleigh, NC <u>www.ncbiotech.org</u>
- We also wish to thank NOAA for their co-hosting the workshop, and for providing the venue.

### 2014 BIOMARINE BUSINESS CONVENTION, CASCAIS, PORTUGAL

The 2014 BioMarine Business Convention (Oct 30-31), a prestigious annual gathering of

international science and business leaders focused on the sustainable harvesting of riches from the oceans, kicked off with a Welcome Reception hosted by the President of the Republic of Portugal in the Palace of the Cidadela of Cascais in the presence of H.S.H. Prince Albert II of Monaco on October 29th. The plenary sessions and round table discussions covered a wide range of topics including biotechnology, biotechnology and genetics in aquaculture, regulatory policies, strategies to attract the right investors, and market development of new species. The final



report produced by PriceWaterhouseCooper is available to download here.

Delegates also had the opportunity to participate in the live streaming sessions on <u>BioMarine</u> Live TV, 1:1 pitching forums, and networking events.

The convention concluded with a presentation and ceremonial handover from Portugal 2014 to North Carolina 2015. Video link

#### **SAVE THE DATE!**

2015 BioMarine Business
Convention
Wilmington, North Carolina
12-14 October, 2015
More Information: BioMarine2015



Dr. John Hardin flanked by winners of the free passes to attend in 2015

We are very excited that the BioMarine organizers selected Wilmington, NC for the 2015 business convention. Dr. John Hardin, the Executive Director of the North Carolina Office of Science, Technology and Innovation (a unit of the NC Department of Commerce) accepted the formal handover from Portugal 2014 to North Carolina 2015 on behalf of the Governor of North Carolina, the Honorable Pat McCrory, during the closing ceremony in Cascais, Portugal.

Dr. Hardin's presentation highlighted the interests and strengths in biotechnology in North Carolina, particularly in marine biotechnology. "As the 10th largest state in the US, NC is consistently ranked as having one of the top business climates by major media outlets, such as CNBC, Forbes, Chief Executive, and Site Selection magazines.

NC has attracted significant Foreign Direct Investment into the state for many years, and boasts unequaled access to North American markets via its central, east coast location, strong transportation network, and strong commitment to innovation. NC is among the top three biotechnology states in the US, and has 600+ biotech companies, biotech is a \$59 billion annual industry, and it has more than 237,000 jobs in biotech and biotech-related fields."

MBCOI, along with its partner, the Southeastern Office of the North Carolina Biotechnology Center, was instrumental in attracting the 2015 BioMarine Business Convention to Wilmington, NC, the first time the conference will take place on American soil!

Planning for the 2015 meeting is underway. If you would like to serve on a planning committee, or are interested in sponsorship opportunities, please email Michelle Miller at MBCOI for details: mmiller@mbcoi.net











### **NEW WEBSITE COMING IN 2015**

Marine Bio-Technologies Center of Innovation www.mbcoi.net mmiller@mbcoi.net



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