

Research by Day, MBA by Night: The Business of Marine Biotechnology at UNCW

By Kim Proukou

The Center for Marine Science (CMS) at UNC Wilmington is offering a very few exceptional Ph.D. scientists the opportunity to conduct research by day while earning an executive MBA from the Cameron School of Business (CSB) — at night. The demanding program is attracting researchers worldwide.

“We are recruiting Ph.D. scientists on an international basis,” said Daniel Baden, director of the Center for Marine Science. “Only three applicants made the cut from more than 100 applications.”

Vince Howe, director of the Cameron School of Business’ MBA program, is enthusiastic.

“UNC Wilmington is offering these ‘post-docs’ the chance to test the commercial feasibility of their research. We will graduate scientists savvy in the business of marketing and development. The majority of our most socially conscious students, those who desire to work with non-profits as well as those who enjoy the incentives that for-profit management brings, believe in the value of service-delivery as a necessary complement to profit incentive. Both for-profit and non-profit enterprises have the similar objective of bringing beneficial products and services to the widest number of users.”

At CMS, the Business of Marine Biotechnology MBA program, funded by the MARBIONC program (Marine Biotechnology in North Carolina), is one part of a three-fold initiative promoting marine biotechnology and aquaculture. Other educational biotechnology research collaborations are underway with East Carolina University, NC State University, UNC CH Institute of Marine Science and community colleges in the region. Further research targeting bioassay technique development, finfish mariculture, aquaculture technology, nutrition and commercial demonstration, marine pharmaceuticals and nutraceuticals derived from cultured organisms, bioengineered natural products, novel enzymes and biosynthetic pathways completes the focus.

The MARBIONC-MBA program requires that candidates who have completed a Ph.D. in areas related to biotechnology finish in the standard 24 months, taking the same classes as regular MBA students and participating in all required applied-learning projects.

Applied-learning projects provide an integration of practical and theoretical knowledge that explains the wide appeal of the MBA degree to people with managerial and/or administrative responsibilities — an integration that Baden wants to offer researchers. Real business experiences with regional companies involved in and with marine biotechnology provide accelerated applied research experience.

Regional corporate collaborations expand opportunities and benefits. Product ideas are assessed for marketability in the earliest stages of their development. Those with patent potential can be evaluated by AAIPharma and other companies that network with the MARBIONC-MBAs to support the patent process and, if realized, eventual licensing.

Finally, “The researchers themselves are a value-added product of the program,” Baden says. “The intellectual property these researchers generate will have far-reaching impacts on economic growth and development in the region and beyond. Their skills become a regional asset as well.”

Graduates of the MARBIONC-MBA collaboration, trained in the marketing and development of biotechnology products, offer North Carolina a pool of professional talent that will assure its quality of life by providing, well-paying jobs from products that will protect the environment as they grow the economy.

MARBIONC-MBA candidate Dr. Shah Alam, left, and CSB-MBA candidate Vickie Chambers present their final project. Alam’s mariculture study focused on the biochemical structure and composition of fish feed that would produce high quality farm-raised Southern flounder and black sea bass — at a competitive price. Chambers presented a feasibility study for marketing the product. Other final practicum projects from “post-doc” MBAs: Dr. Michael Denture, a protein chemist, studied the properties of an antitoxin derived from the algae that causes red tide fish kills, which has been demonstrated effective in treating cystic fibrosis. Dr. Julie Gauthier investigated the marketability of a user-friendly test for disease in oysters that could enhance consumer protection from unhealthy shellfish. Dr. Becky Porterfield is the practicum course leader for MBA final projects.

