

Cellular-Molecular Biology

- Biosafety Level 2+ facilities
- Marine Genomics Core Facility equipped with: a TissueLyser Homogenization System for RNA extractions; Nanodrop Spectrophotometer and Qubit Fluorometer for RNA quantification; Agilent Bioanalyzer for RNA quality measurement; Agilent Microarray Hybridization oven; Agilent Microarray scanner; Agilent Feature Extraction Software; Rosetta Resolver data warehousing and gene expression analysis system; and Genespring and DNA Star gene expression analysis software
- Illumina MiSeq sequencer
- CEQ 8000 Genetics Analysis System sequencers (2)
- ABI 7500 and ABI 7000 Real-time PCR Instruments
- Illumina Eco qPCR instrument
- Genetix Q-bot colony picking robot
- Dako MoFlo sorting flow cytometer

Microscopy

- Scanning Electron Microscope
- Confocal Microscope with multi-line argon, green helium neon, and red helium neon lasers
- Light Microscopes

Marine Environmental Specimen Bank and Reference Materials Production Facility

- Cryogenic facilities for long term-archival of well documented and preserved specimens for both retrospective and comparative environmental health analysis
- Clean rooms
- Specialized equipment for production of reference and control materials used in analytical and environmental chemistry

Challenge Laboratories

- Suite of laboratories adaptable to environmental conditions that include light, temperature, salinity and oxygen for animal health and toxicology research

Level 2+ Biosafety Laboratories

- Four Level 2+ laboratories to bring in unknowns and separate projects that require a heightened level of safety and isolation

Nuclear Magnetic Resonance

- High field facilities and laboratories to support structural biology, metabolomics and natural product research
- 800 MHz instrument
- 700 MHz instrument
- Auxiliary equipment such as magic angle and flow probe



Kevin Huncik, a research chemist with NIST (National Institute of Standards and Technology), looks for contaminants in all types of marine mammals.