History of the Laboratory

GML is located at Fort Johnson on James Island, across the harbor from downtown Charleston. The facility houses classrooms, teaching laboratories, research laboratories, faculty offices, an aquarium room, a systematics collection of marine invertebrates and fishes, and a small housing unit. The Marine Resources Library, a CofC unit that represents a collaboration among the academic, state, and federal government partners on the Fort Johnson campus, sits just across the street in the South Carolina Department of Natural Resources building.

The Fort Johnson property was traditionally a gathering place for the local Stono tribe, with Native American artefacts recovered on James Island from as far back as 600 B.C. The property has historic associations with European settlement dating back more than 250 years. Among the remains of fortifications from the Revolutionary War period are a brick powder magazine and, from a later period, the foundations of a Martello tower. The opening rounds of the bombardment on Fort Sumter that began the Civil War were started with a signal shot fired from these shores.

Since 1955, the Grice Marine Laboratory has served as the core facility in support of the undergraduate and the graduate programs in marine biology of the College of Charleston.
Stop #1–Room 101
A lecture classroom where undergraduate and graduate courses are taught. The classroom is also equipped for remote teaching.

Stop #2–Posters in Hallways
Posters in the hallways will give an idea of our academic programs as well as the scope of research being conducted by students and faculty members. Recent publications of student and faculty hang near the main office.

Stop #3–Room 106, Conference Room
In the view through the windows to the east, Fort Sumter can be seen as a low-profile building on the water near the harbor entrance.

Stop #4–Room 108, Computer Lab
The computer lab is used for student work and teaching.

Stop #5–Room 105, Collections Room
The GML preserved specimen collection contains about 100,000 mostly regional specimens from more than 1300 species. This collection is used for research projects, as a reference base for the research community, and for undergraduate and graduate instruction. Material in this collection has been a resource for numerous publications and graduate theses.

Stop #6–GML Annex
Turn left at the short hallway off the main hallway to the exterior door to the annex. This building, built in 1935, holds a lab classroom as well as staff offices, faculty labs, and the GML Housing facility.

Stop #7–Room 107, Aquarium Room
Retrace your steps to the main building and continue left down the main hallway to the Aquarium Room on your left. Students and faculty use the aquarium room to maintain live animals and algae for research and teaching. Please do not touch any organisms, tanks, or experiments in this room.

Stop #8–Research Labs & Faculty Offices
Proceeding up the stairs, the upstairs hallway contains a series of student-faculty research labs on the right and faculty offices on the left. Please do not enter these labs or offices.

Stop #9–Room 210, Molecular Core Facility
The molecular core facility offers molecular services to students, faculty, and staff researchers.

Stop #10–Room 201, Fish Lab
This room serves as an extra teaching lab for undergraduate and graduate courses in fish biology.

Stop #11–Room 202
This “dry” lecture classroom is used for graduate and undergraduate courses. It is also equipped for remote teaching.

Stop #12–Powder Magazine
Continuing down the stairs and exiting through the front doors, a Revolutionary War era powder magazine can be seen to your left. The magazine was originally constructed of brick but its walls were thickened to allow for its burial after the Civil War (it was unearthed in 1931). The powder magazine is was built in 1765 by the British army, though the Fort was captured and used by colonists during the Revolutionary War. The first shot of the Civil War was fired from the shore near this building. Continue up along the tree line past the powder magazine to see a marker commemorating this historical event and place.

Stop #13–GML Bog Garden
Near the powder magazine, closer to the building, is the GML Bog Garden. Built and maintained by the Marine Biology Graduate Student Association (MBGSA), this garden uses condensate from the building’s HVAC system to create a wetland environment for native plants.

Stop #14–Marine Resource Library (MRL)
The MRL is located in the Marine Resources Research Institute (MRRI) of the South Carolina Department of Natural Resources (SC-DNR) directly across the street from GML. Entering through the main doors of the MRL, the library will be directly ahead. Established in 1972, the MRL is a cooperative enterprise of the College of Charleston, the South Carolina Department of Natural Resources, and the National Oceanographic and Atmospheric Administration. The library provides resources and services to the staff, faculty, and students of the Fort Johnson partnership.

Stop #15–Green Teaching Garden
Retrace your steps back to the road and turn left on the sidewalk near the mailbox. The Green Teaching Garden (GTG) is on your right in between the two porches of GML. The garden is used for community education and service. It collects and uses rainwater from roof runoff, storing it in the colorful cistern and barrels. The GTG was South Carolina’s first certified “Ocean Friendly” garden.

Stop #16–Boat Slip
Walk down the road and follow it towards the harbor to the boat slip. The large vessels in the slip, operated by the SC-DNR, are used for research and education, including harbor trips by CofC classes. GML has two smaller boats that are deployed for teaching and research.