# **Research Plan**

#### PROJECT TITLE

[Should encompass the over-reaching goal of the project and be not more than 80 characters]

by STUDENT'S NAME

DATE [month, year]

ADVISOR, Dauphin Island Sea Lab ADVISOR, FDA Gulf Coast Seafood Laboratory

# **BACKGROUND & SIGNIFICANCE**

[Provide an overview of relevant research in the area of proposed study, including pertinent citations. This section should also highlight the significance of the proposed research in terms of advancement of scientific knowledge, marine and/or estuarine ecology, and relation to public health. 1 page.]

# **MILESTONES**

[Outline specific academic objectives for the graduate career, including timeline for course work completion, development of laboratory techniques, etc. 0.5 page]

# **OBJECTIVES**

[Outline proposed research objectives, with a brief rationale. A master's candidate should have 2-3 objectives and a doctoral candidate should have 4-6 objectives. 1-2 pages.]

[Example: Objective 1. Assess the role of anaerobic microbes involved in seafood spoilage, with the goal of identifying reliable and accurate biomarkers of decomposition. Many fish species associated with scombroid poisoning, such as tuna and mahimahi, are subjected to conditions (time-temperature abuse) that result in decomposition prior to evisceration. The microorganisms present in the gastrointestinal tract of fish likely proliferate under these conditions and may penetrate the intestinal wall and migrate into the edible tissue where anaerobic decomposition occurs. I will define the anaerobic microflora involved in this decomposition and the means by which they invade and decompose the edible tissue.]

# **METHODOLOGY**

[Provide a brief description of analytical methods that will likely be employed. 0.5-1 page]

#### LITERATURE CITED

[References should be arranged first alphabetically and then sorted chronologically, if necessary. For web references, as a minimum, the full URL should be given and the date when the reference was last accessed.]

#### **APPROVAL**

[Should be a separate page at the end of the document. See form below.]

#### **General Guidelines**

- 1) Font type 12-point Times New Roman should be used throughout.
- 2) Line spacing should be 1.5 lines throughout.
- 3) Page margins should be set at 1" for top, bottom, left, and right.
- 4) Page numbers should appear on every page in the upper right-hand corner.
- 5) Measurements units should be standardized using SI and expressed in the form m/s.
- 6) All citations in the text should refer to be listed using author, date format. Citations with a single author should include the author's name (without initials, unless there is ambiguity) and the year of publication; two authors should include both authors' names and the year of publication; three or more authors should include first author's name followed by "et al." and the year of publication. [Examples: "as demonstrated (Allan, 1996a, 1996b, 1999; Allan and Jones, 1995). Kramer et al. (2000) have recently shown...."]



# DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service Food and Drug Administration Gulf Coast Seafood Laboratory P.O. Box 158, 1 Iberville Drive Dauphin Island, AL 36528-0158

# RESEARCH PLAN APPROVAL FORM

Date Submitted:		
Student:	First	MI
	FDA APPROVAL CHAIN	
Print Name	Signature (required)	Date
1		
2FDA Advisor		
3Chief, MHSB or CHSB		
Student's Signature:	Γ	Oate: