

August 31, 2018

## To Whom it May Concern

The Interstate Shellfish Sanitation Conference (ISSC) is the recognized deliberative body within the United States that is responsible for identifying and adopting public health control measures for reducing the risk of illnesses associated with the consumption of raw molluscan shellfish. ISSC participation includes the US Food and Drug Administration, the US Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and State Shellfish Control Authorities. Additionally, the ISSC includes industry participation to provide consultation on harvesting and processing.

The ISSC continues to identify and implement regulatory approaches that could reduce the risk of illnesses associated with the consumption of molluscan shellfish. In particular, the ISSC has focused attention on Vibrio, Norovirus, and Biotoxin illnesses. While we continue to evaluate the effectiveness and adequacies of program guidelines, the ISSC recognizes that additional research is needed to further the organization's ability to address the risk of illness. The recent emergence of more virulent strains of *Vibrio Parahaemolyticus* has added urgency to our Vibrio efforts.

The lack of scientific information related to pathogens and toxins associated with specific illnesses is a primary obstacle in developing control strategies. To address this obstacle, the ISSC is seeking your assistance. You are requested to include the ISSC identified research needs in your research initiatives. I have included a list of specific research priorities that, if incorporated into future requests for proposals, could provide valuable information to the ISSC and its regulatory partners as we attempt to reduce illnesses.

Should other funding programs exist within your organization, please share this request. If you have additional questions regarding this request, please contact me at (803) 788-7559 or email me at issc@issc.org.

Sincerely,

Ken B. Moore

**Executive Director** 

/nsd

## **2018 RESEARCH PRIORITIES**

#	Research Need
1.	Methods for detection of pathogenic Vibrios that are faster, cheaper and more sensitive
2.	Understanding of the ecology and pathogenicity of virulent strains of Vibrios
3.	Update risk assessments for Vp and Vv. to address regional differences, consumption patterns, dose-response, influence of local environmental conditions, etc.)
4.	Better screening methods (qualitative or semi-quantitative detection of toxins; field deployable, inexpensive, rapid, and easy)
5.	Better tools for the identification of toxin-producing algal species and a better understanding of the factors influencing toxin production and shellfish uptake / depuration dynamics. (For example, what species are producing okadaic acid, dinophysis toxins, and related toxins in regions where DSP has been detected?)
6.	Evaluate influence of culture methods and post harvest practices on Vibrio growth
7.	Time required to depurate viruses?
8.	Better quantitative and confirmatory methods, (such as liquid chromatography (LC) and LC with mass spectroscopy).
9.	Compilation and collection of Vibrio strains for virulence research and describe established ranges for various strains
10.	Tools to allow the culture of Norovirus for enumeration.
11.	Alternative PHP methods for reducing Vibrios that retain the product attributes of live shellfish
12.	Refine minimum dilution standards for classification around WWTP according to plant design, capacity, characteristics of receiving water basin (ie. tidal flow, retention times and flow rates)
13.	What are the human health impacts of contaminants of emerging concern in WWTP effluent that may be accumulated by shellfish (ie. pharmacological compounds, estrogen mimics, EU-banned detergent Oxy-clean, caffeine, insecticides, etc.)
14.	Evaluate public health impact of contamination by birds, mammals and wildlife associated withcultured and wild shellfish.
15.	Develop better tools to evaluate whether shellfish have been fully cooked. The acid phosphatase test has not been fully validated. A quantitative test would be a significant improvement over current organoleptic tests.
16.	Evaluate public health impact of microplastics consumption