# UC Davis UC Davis Previously Published Works

### Title

Preface to the NeuroToxicology Special Issue, "Mercury in fish: The Seychelles child development study"

**Permalink** https://escholarship.org/uc/item/04t4f7ft

# Authors

Myers, Gary van Wijngaarden, Edwin Lasley, Stephen M <u>et al.</u>

**Publication Date** 

2020-07-01

#### DOI

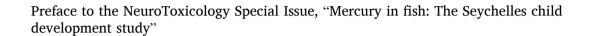
10.1016/j.neuro.2020.05.001

Peer reviewed

Contents lists available at ScienceDirect

## Neurotoxicology

journal homepage: www.elsevier.com/locate/neuro



In 2003 the Seychelles Child Development Study held an international scientific meeting in the Seychelles Islands to discuss the findings to date and plan the future direction of the study. Following the meeting the study team collaborated with the Seychelles Medical Dental Society (SMDS) to publish a special issue of their journal, the Seychelles Medical Dental Journal (SMDJ). The Special Issue reported on the conference, provided background information on the Seychelles, and contained a series of scientific reports related to methylmercury (MeHg) exposure and fish consumption. Shortly after that Special Issue was published the SMDS dissolved, the SMDJ stopped publication, and the contents were lost to the scientific community.

Two individuals intimately involved in these studies, Gary Myers and Edwin van Wijngaarden, approached the founding and current Editorsin-Chief (Joan Cranmer, Pamela Lein and Remco Westerink) about republishing the articles in the Special SMDJ Issue. They, in concurrence with the journal's Editor of Reviews, Stephen Lasley, agreed that making these studies available to the scientific community was important because epidemiologic studies of mercury and child development have been conducted in many geographic locations including the United States, the Amazon, Japan, the Faroes Islands, and others, with conflicting findings. Why findings are inconsistent is not entirely clear. The association between low-level MeHg exposure from fish consumption and child neurodevelopmental outcomes is complex, and differences between studies in social, economic and cultural factors and exposure to nutrients and other contaminants may be important. A unique aspect of the SMDJ Special Issue is that it provided background information to the Seychelles Child Development Study. Such information is often not reported but is critically important to understand and properly interpret epidemiological studies.

The reprinting of that Special SMDJ Issue corrects this key loss in the

scientific literature, and adds data to the current controversy concerning the risk of consuming fish with naturally acquired quantities of MeHg. It also adds data to the outcomes of Japanese citizens exposed to fish industrially contaminated at Niigata, Japan. We believe this republication of that Special issue of the SMDJ increases the scientific data available for accurately evaluating the public health issue regarding the risks and benefits of fish consumption.

In closing, we dedicate this special issue to the collaboration of over 5000 children and their families spanning 3 generations and 35 years who reside in the Seychelles and whose dedicated participation in the Child Development Study made it possible; and in honor of Dr. Heather Shamlaye who was the Editor for the Special Issue of the Seychelles Medical Dental Journal reproduced here.

Gary Myers, Edwin van Wijngaarden University of Rochester, Rochester, NY, USA

Stephen M. Lasley University of Illinois, College of Medicine, Peoria, IL, USA

Joan M. Cranmer

Neuro Foxicology

Editor-in-Chief 1979-2017, University of Arkansas for Medical Sciences, Little Rock, AR, USA

Pamela J. Lein

University of California-Davis, School of Veterinary Medicine, Department of Molecular Biosciences, Davis, CA, USA

Remco H.S. Westerink Utrecht University, Institute for Risk Assessment Sciences, Neurotoxicology Research Group, Utrecht, the Netherlands

