



**Joint FAO/WHO Expert meeting on Ciguatera fish poisoning (CFP)**  
**Rome, 19-23 November 2018**

**Experts participating in the meeting**

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*For the list of WHO experts, please follow the link below:*

[http://www.who.int/foodsafety/areas\\_work/chemical-risks/CFP/en/](http://www.who.int/foodsafety/areas_work/chemical-risks/CFP/en/)

**List of Experts**

The following list of experts is proposed for the meeting. Please find below their bio-sketches. If you have any comments, please contact us at [JECFA@fao.org](mailto:JECFA@fao.org) no later than 25 October 2018.

**ABRAHAM Ann**

Ann Abraham is a leading scientist with the U.S. Food and Drug Administration, performing research and regulatory review activities to assist the Agency in keeping the seafood safe, sanitary, and secure. Ann provides scientific leadership, technical expertise, and training in conducting research to support regulatory decisions and Agency goals. She has acquired a unique combination of scientific skills enabling new developments in mass spectrometry, experimental therapeutics, and biochemistry. She is internationally recognized in the residue chemistry of marine toxins, and aquaculture drugs in seafood. Ann is frequently consulted as a subject matter expert internationally in the field of marine toxins, especially in the area of brevetoxin and ciguatoxin to support international efforts in the control of emerging marine toxins that present potential public health hazards via tainted seafood consumption. Dr Abraham serves as panel member of the U.S. Japan Cooperative Program on Development and Utilization of Natural Resources, UNESCO Intergovernmental Panel on Harmful Algal Blooms and Task Team on Biotoxin monitoring, Management and Regulations, and as member of technical advisory panels of Global Ciguatera Strategy Team. Ann received her Ph.D. in Basic Medical Sciences with specialization in Biochemistry from University of South Alabama, USA.

**DECHRAOUI BOTTEIN Yasmin**

Dr Marie-Yasmine Dechraoui Bottein is an environmental toxicologist with extensive research and capacity building experience in toxicology and seafood safety & security. She worked 11 years at the NOAA Coastal Environmental Health and Biomolecular Research (USA), and since 2012 at the International Atomic Energy Agency (IAEA) in Monaco. At the IAEA-Environment Laboratories, she leads a research program on harmful algal blooms and marine biotoxins and is Technical Officer for various national, regional and inter-regional technical cooperation projects related to seafood safety and global environmental change. She represents the IAEA on the IOC-UNESCO Intergovernmental Panel on Harmful Algal Blooms, and contributes to coordinating the implementation of the IAEA, WHO, FAO and IOC-UNESCO Interagency Global Ciguatera Strategy. She has published over 50 peer-reviewed papers, reports and book chapters. Her current projects focus on biotoxins' toxicokinetic, food web transfer and detection method validation, to assist Member States achieve their sustainable development goals (SDGs).

### **DIOGÈNE FADINI Jorge**

**Jorge Diogène** (Barcelona, 1962) is currently Senior Researcher and Director of the Marine and Continental Waters program at IRTA (Catalonia, Spain). He has a PhD. in Applied and Fundamental Toxicology (Université Paris 7). He has developed his career in different laboratories and institutions in the USA (University of South Alabama; Food and Drug Administration), France (Université de Paris 7; INSERM), Canada (Université Laval) and Spain (Instituto Español de Oceanografía, IEO, UNESCO and IRTA). His research interests are oriented towards the evaluation of toxin production by microalgae and their presence in fish, shellfish and the environment, and method development for marine toxin quantification and risk assessment, including cell-based assays used to identify and quantify the toxicological potential of toxins. His research has contributed to a better understanding of several groups of toxins (Ciguatera, PSP, DSP, Cyclic Imines). He is in charge of the monitoring for the Quality of Waters in Shellfish harvesting areas of Catalonia. J. Diogène has been head of several research projects (out of 27), director of 7 PhD thesis and author of 115 scientific articles (88 SCI). He has been chairman in several international conferences and he is scientific reviewer of scientific journals.

### **GAGO MARTINEZ Ana**

Professor at the Analytical Chemistry and Food Department of the University of Vigo in Spain and Director at the EU Reference Laboratory for Marine Biotoxins, Co-chair of the International Association Official Analytical Chemists (AOAC) Task Force on Marine and Freshwater Toxins. Completed her Ph.D studies in the University of Vigo, Spain, working in the development of instrumental methods for the analysis of marine biotoxins and conducted postdoctoral studies at the Institute of Marine Biosciences from the National Research Council in Halifax, Canada. She carried out several research projects on the development and implementation of chromatographic-based analytical methods for marine biotoxins, as a visiting scientist at the Ministry of Health in Ottawa, Canada, as well as in other Universities and Research Institutions in EU and USA: She has been also involved in Proteomics research at the University of California San Francisco (USA), mostly focused on the optimization of sample pretreatment for Mass Spectrometric analysis. She has been involved in several research projects through both National and EU funding and published extensively in the field of phycotoxins analysis. She has supervised 16 Doctoral Thesis and more than 25 research projects for Masters Degree based on the research areas above mentioned.

### **HARWOOD Tim**

Dr Tim Harwood is an analytical chemist based at the Cawthron Institute in Nelson, New Zealand. He has specialised expertise in the field of marine biotoxin analysis and research and leads the Seafood Safety research programme (CAWX1801 2018-2024; \$2.1M/yr), which shares his vision for New Zealand to be a leader in the safety of seafood exports and development of tools/systems for ensuring safety. He has recently participated in projects developing new analytical test methods to rapidly measure levels of the toxins responsible for ciguatera fish poisoning and paralytic shellfish poisoning. The method for paralytic shellfish toxins incorporates breakthrough sample preparation technology and has been successfully transferred into the routine Cawthron Biotoxin Laboratory, where it is used routinely to test all commercially-produced New Zealand shellfish for export clearance. Dr Harwood's research is internationally recognised, and he has had several recent collaborations, including; Australia (accumulation in rock lobster), Japan (structural elucidation), French Polynesia (ciguatera fish poisoning) and England (analytical method development). He is a member of the Global Ciguatera Strategy facilitated through the Intergovernmental Panel on Harmful Algal Blooms.

### **HESS Philipp**

Studies of chemistry at Universität des Saarlandes & EHICS Strasbourg (FR), PhD 1998 on organic contaminants in the marine environment (UK). Subsequently, study of algal toxins, initially focusing on domoic acid and saxitoxins. In 2001, he implemented chemical testing for domoic acid and lipophilic toxins in parallel to mouse bioassays to combat azaspiracid shellfish poisoning (IE). Subsequently, toxin isolation and reference materials for official control. Furthermore, he implemented proficiency testing

for shellfish toxins within QUASIMEME, undertook method validation exercises for domoic acid and lipophilic toxins and contributed to standardisation of methods. In parallel, he contributed to risk evaluation & management (Irish, UK and French Food Safety Agencies, European Food Safety Agency (10 risk assessments from 2006–2010), FAO Expert consultations 2005/2016). Since 2008, he continues studies at Ifremer. Interests cover the biodiversity and ecological role of toxic algae & the detection, chemistry, diversity and impact of phycotoxins. Since 2011, he has assisted the EU-FVO (Food and Veterinary Office) as expert and represents France on the Intergovernmental Panel on Harmful Algal Blooms (IOC-UNESCO), chairs Task Team 1 (Biotoxin Detection, Management and Regulation) and recently contributes to the Interagency CFP strategy implementation (2017). Directs the French Research Network PHYCOTOX CNRS 3659 (<http://www.phycotox.fr>).

#### **HUNGERFORD James**

Dr James Hungerford obtained his BS and MS in chemistry at Western Washington University, with his master's thesis focused on organometallic chemistry. He earned his PhD in analytical chemistry at the University of Washington doing research on flow-based analysis. He has worked on seafood safety-related research at the US Food and Drug Administration since 1987 with a focus on detecting histamine and marine biotoxins. In addition to chemical instrumental methods this work also included research with biologist Dr. Ron Manger on microscale assays for ciguatoxins which are still widely used. Dr Hungerford has authored and co-authored many publications addressing seafood safety and in 2004 he created the Marine and Freshwater Toxins Task Force of AOAC Int., an international group devoted to accelerating the development and validation of modern methods to detect marine toxins. The Task Force was instrumental in producing several official methods for detecting marine toxins which remain in use worldwide and is co-chaired by Dr. Ana Gago-Martinez, director of the EU Reference Lab for Marine Biotoxins and professor at the University of Vigo, Spain. For several years Dr Hungerford served on a joint US-Japan government (UJNR) panel of experts on toxic microorganisms.

#### **KARUNASAGAR Iddy**

Dr Iddy Karunasagar obtained his Masters and Doctoral degrees from University of Mysore in India and carried out postdoctoral Research in University of Maryland, USA; University of Sendai, Japan; University of Wurzburg, Germany and Natural Resources Institute, UK. He started his academic career as Assistant Professor in the University of Agricultural Sciences, Bangalore, India in 1978 and rose to become the Head of Division of Fisheries Sciences in 2003. He became the Director of Research at Karnataka Veterinary Animal and Fisheries Sciences University in 2005 and was awarded National Professorship of the Indian Council of Agricultural Research. Since 200, he has been associated with FAO/WHO risk assessments. In 2007, he moved to FAO, Rome as Senior Fisheries Industries Officer and served in this position till 2014. Since then, he has been serving various international organisations as Consultant and took up the position of senior Director at Nitte University, Mangalore. Dr Iddy Karunasagar's major area of research has been fish safety, quality and one health. His laboratory has published extensively in different areas including biotoxins associated with fish and fishery products. He has published over 200 scientific papers, several book chapters. He has 6 patents, mentored over 50 Masters and Ph D students.

#### **OSHIRO Naomasa**

Naomasa OSHIRO is currently a section chief of the Second Laboratory (Marine Biotoxin Lab.), Division of Biomedical Food Research, National Institute of Health Sciences (NIHS), the Ministry of Health, Labour and Welfare (MHLW). Japan. He is responsible for studies on seafood safety including method development of marine biotoxin analysis, estimation of amount of principal toxin intake by patients, and isolation and structure elucidation of unknown marine and fresh water toxins. He also conducted the research program entitled "Studies for risk assessment of ciguatera fish poisoning" of the Food Safety Commission of Japan, from 2014 to 2015.

Before he joined to NIHS in 2012, he was worked as a research chemist at Okinawa Prefectural Institute of Health and Environment (OIHE, 1994-2012), Okinawa, Japan. He worked for investigation on

principal substances of food poisoning outbreaks, development of analytical methods of marine and terrestrial biotoxins, and epidemiological studies on marine biotoxin poisonings at the OIHE. Besides working at the OIHE, he completed his PhD thesis on Marine Science at Tokyo University of Marine Science and Technology, Japan, in 2009.

#### **TESTER Patricia**

Ecophysiology and molecular detection of harmful algae were the focus of Dr. Tester's career with the U.S. Department of Commerce's National Oceanic and Atmospheric Administration (NOAA). More than 190 journal articles and book chapters document her success and her lab's efforts. Since 2002, the emphasis of her group has been *Gambierdiscus* and ciguatera poisoning. In 2009 they published a seminal monograph that was recognized by the International Society of Phycology with the Tyge Christensen Prize. This work provided morphological and molecular identification for all described *Gambierdiscus* species and sequence data were deposited in GenBank for open access. Assays (qPCR) were developed for the Caribbean *Gambierdiscus* and with colleagues from the Institut Louis Malardé in Tahiti similar assays were published for Pacific species. To have sequence data on all described species prompted renewed interest in *Gambierdiscus* and ciguatera poisoning while supporting analytical techniques for building multi-tier monitoring programs.

Dr. Tester was President of ISSHA for four years and her work is recognized nationally and internationally (Provasoli Award Phycological Society of America, NOAA Awards – Administrator, 2004; Technology Transfer, 2007; Lifetime Achievement, 2012; US DOC's highest honor, Gold Medal, for development and implementation of a monitoring tool that safeguards marine resources).

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