

# PACE-NET Plus Platform of bi-regional policy dialogue Brussels, 23-24 June 2016

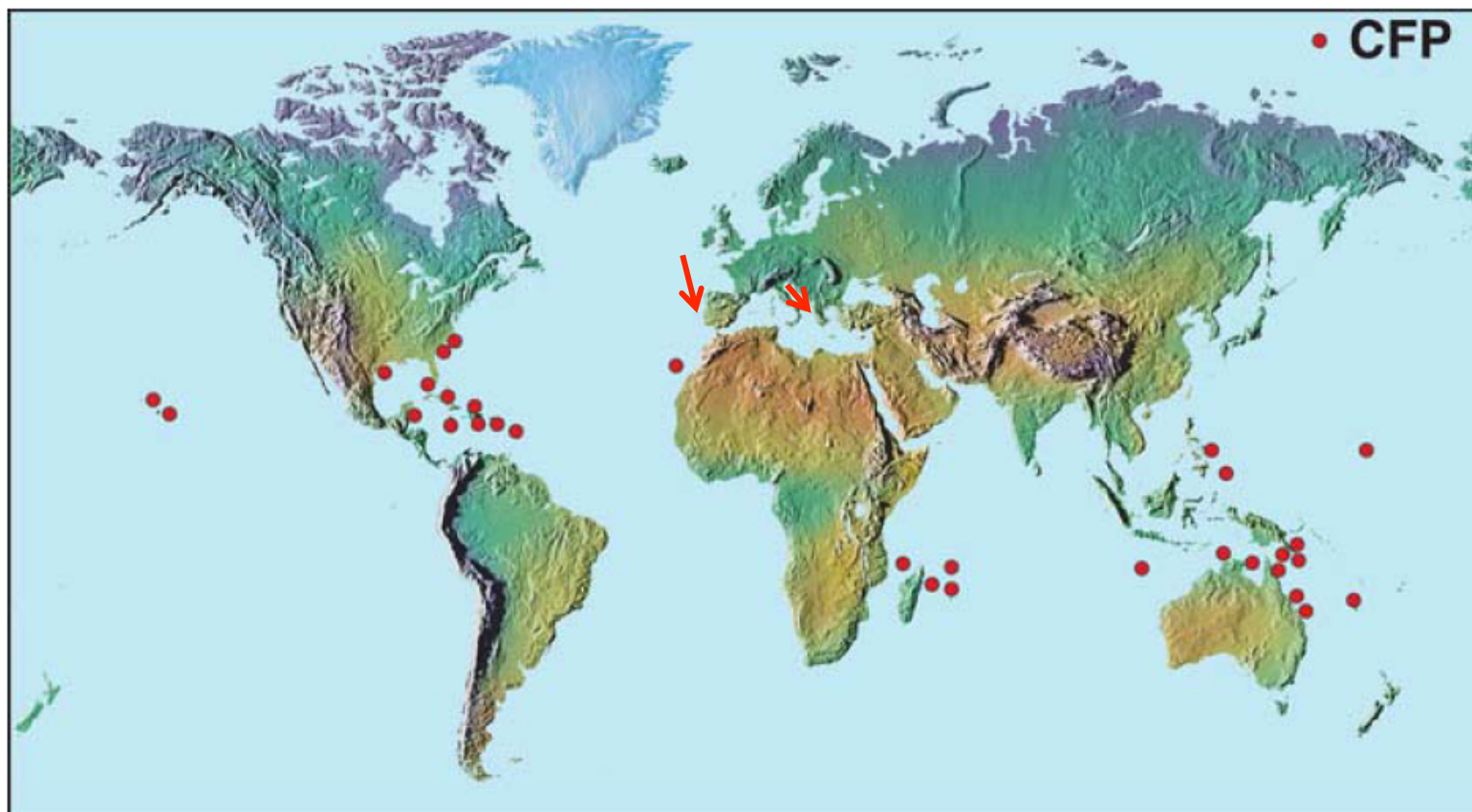
**“Coastal ecosystem disturbances, fish and shellfish poisoning and their socio-economic implications”  
Noumea – Secretariat of the Pacific Community  
November 2014**



**Olivier Auguin  
Secretariat of the Pacific Community**



# All over the world





# Think tank thematic scope

- Marine toxins
- Effects of climate change and environmental disturbances
- Health
- Societal, cultural and economic aspects



# Problems and gaps

## Data

- Ability to predict when blooms will occur
- Knowledge of species & locations affected
- Understanding of climate change forces : ocean acidification

## Origins

- Mechanisms causing toxicity
- Interactions within different factors

## Impact on human

- Impact on health and economy not well known
- No treatment for ciguatera fish poisoning victims

## Tools

- Lack of reliable detection tests and diagnostic tools







# What works well

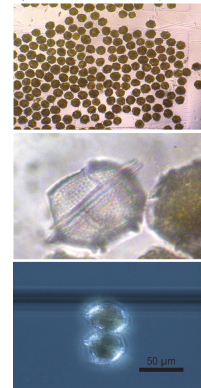
- Local knowledge is thought to be effective in identifying toxic species, locations and seasons
- Good general understanding of the Ciguatera Fish Poisoning phenomenon
- Some ciguatoxins already identified
- Sampling protocols
- Some trainings on monitoring have already taken place



# Research priorities recommendations

- Quantify/collecte traditional knowledge using science to validate observations
- Analyse relationship between physical environment, marine ecosystem parameters, fish toxicity and health impacts
- Toxins in fish and shellfish : identifying toxins involved
- Develop indicators/predictors of risk
- Curative treatments

*Pyrodinium bahamense* var. *compressum*



# Innovation priorities recommendations

- Cost effective rapid detection test
- Mass production of toxin standards
- Sample/data bank of T cells from affected people
- Integrated meta data-web portal or similar data sharing systems
- Awareness tool for the public and resource & public health managers
- More communication between practitioners and local communities
- More synergies within countries between ministries of fisheries and health : cross disciplinary approach
- Develop a regional responsive network



# Project ideas

- Regional review of CFP/HABs impacts
- Inventory of traditional knowledge
- Physical, biological and chemical characterization of HABs and non HABs sites
- Implementation of functional method for ciguatoxin detection in sink samples
- Pilot multidisciplinary monitoring HABs program
- Regional workshop for building capacity of PICTs fishers offices in monitoring HABs
- Monitoring HABs for small island states
- Regional center for HABs
- Regional HABs CFP data sharing project



# EU-Pacific cooperation : why ?

Global importance of the Pacific region – e.g.  
high biodiversity, opportunities for  
bioprospecting (e.g. for medical application)  
higher latitudes of the region could provide  
refugia for coral reefs, tuna supply (70% of  
global supply), region is an important driver  
of global climate patterns.



# EU-Pacific cooperation : why ?

## For EU

- **Offers opportunity for European scientists**
- **Offers opportunity for economic return on technology**
- **Ensuring seafood safety**
- **Bioprospecting - Potential medical benefits from Pacific organisms**
- **Pacific region could act as a looking glass for EU into the future**
- **Important and strategic for EU to fund research into orphan / neglected diseases**



# EU-Pacific cooperation : why ?

## For Pacific countries and territories

- **Development of drugs and vaccines for CFP**
- **Economic opportunities**
- **Inputs from European institutions may help to find solutions**
- **Food safety, security and sustainability**
- **Raised visibility of Pacific**



# PACE-NET Plus Consortium

