



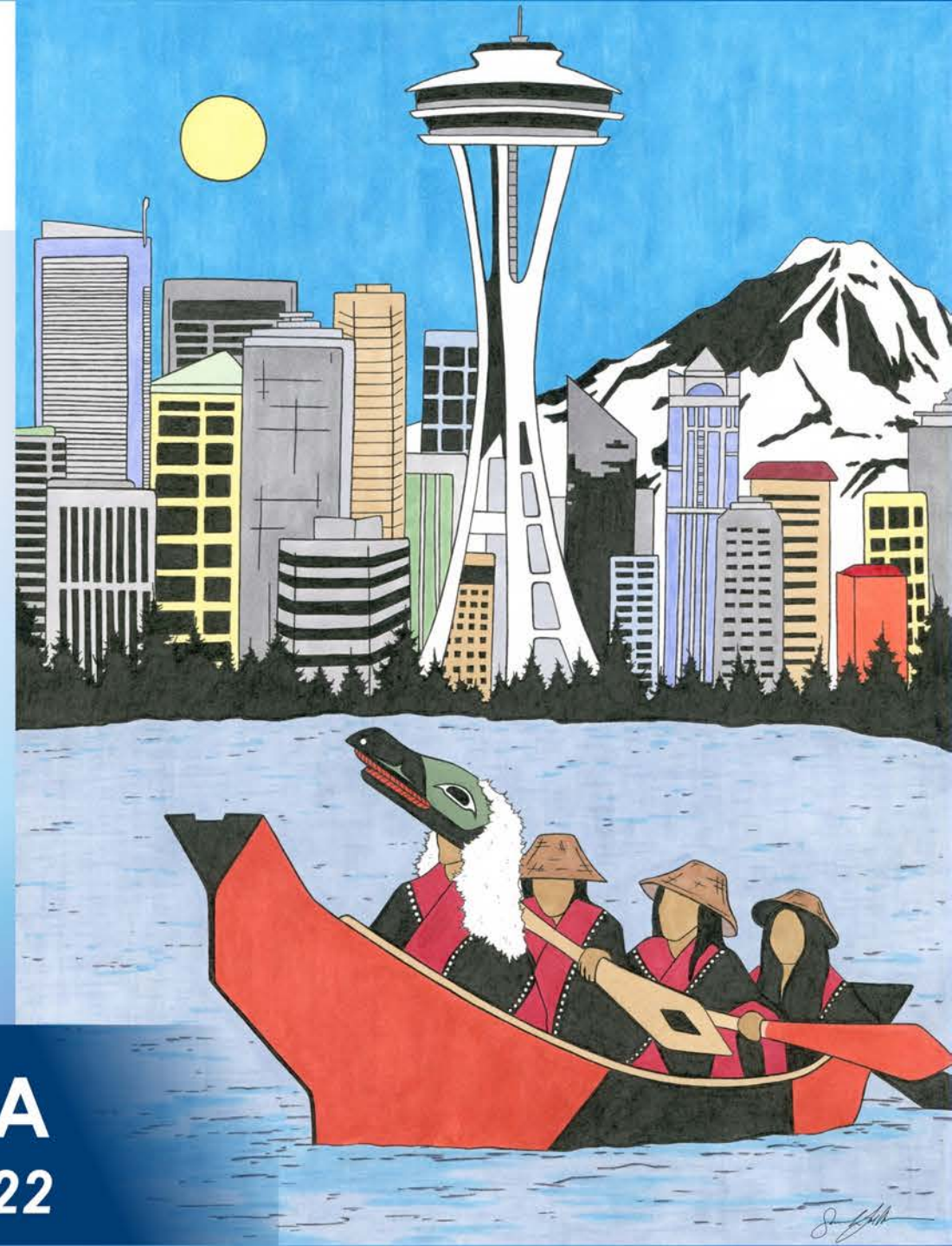
PICES-2023



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

Connecting Science and Communities for Sustainable Seas

Oct 23–27, 2023 • Seattle, USA
with pre-conference workshops Oct 20–22



PICES-2023 by the numbers



- **596** attended in person from **22** countries, **672** total participants (*including virtual*)
- **244** Early Career Ocean Professionals (ECOP) among in-person participants
- Observers from **20** International / regional organizations / programs represented.
- **15** Expert Group and **7** Committee business meetings.
- Science Board, Governing Council, and F&A Executive meetings
- Science Board Symposium, **13** Topic Sessions, **1** Special Session,
4 Paper Sessions, **11** Workshops
- **293** oral presentations, **126** poster presentations
- **Whova app** is used by **70%** of participants (**90%** of ECOPS)





PICES-2023 Awards



North Pacific Marine Science Organization

PICES-2023 CHAIR AWARD WINNER



Robin Brown



North Pacific Marine Science Organization



PICES-2023 WOOSTER AWARD WINNER

Steven J. Bograd





PICES 2023 PICES OCEAN MONITORING SERVICE AWARD (POMA) WINNER

HAB monitoring and research programmes in China





PICES-2023 Zhu-Peterson ECS AWARD WINNER

Minkyung Kim



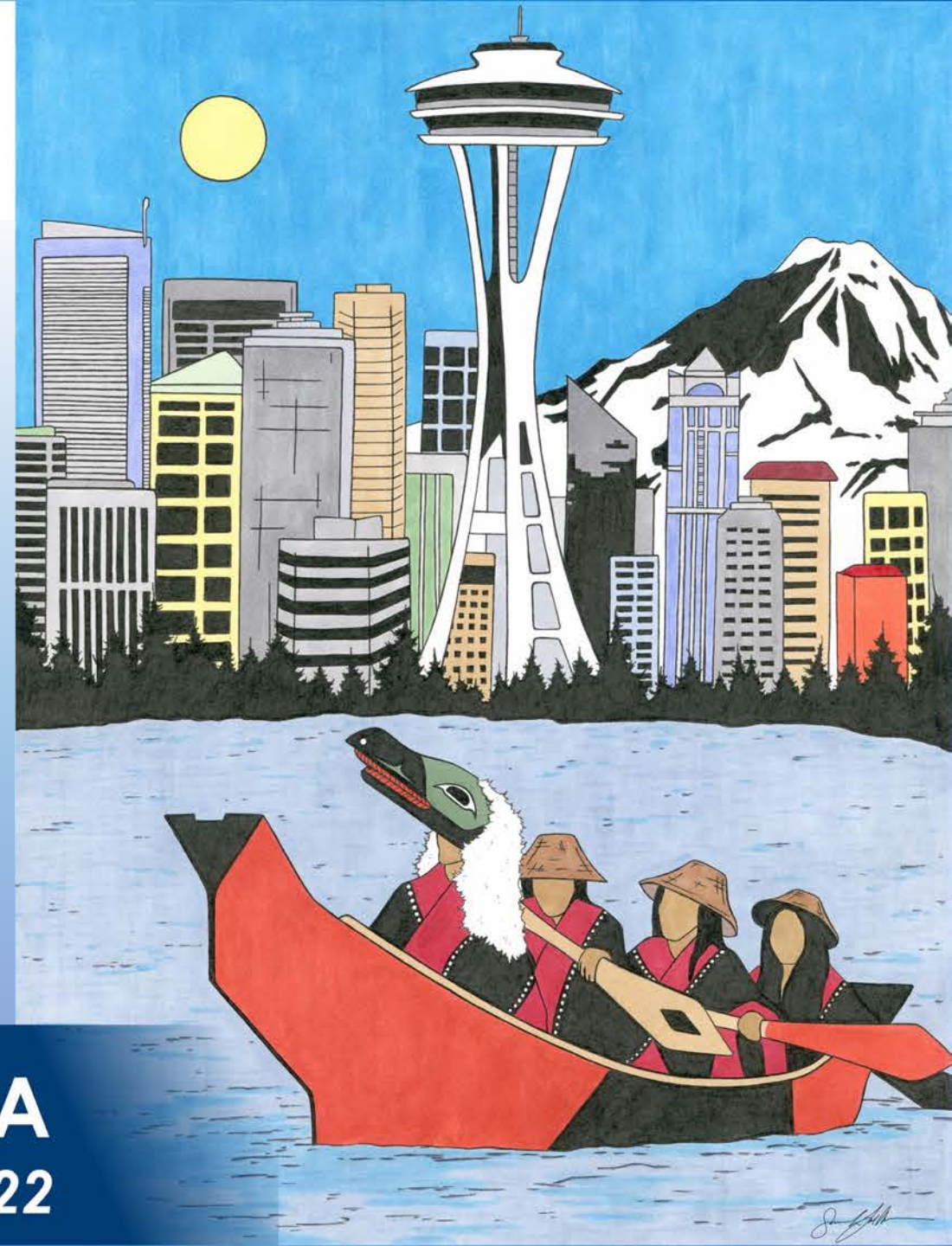
PICES-2023



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development

Highlights

Oct 23–27, 2023 • Seattle, USA
with pre-conference workshops Oct 20–22





Here we came to Seattle





PICES 2023

Welcoming remarks:
by Francisco E Werner
(Chief Science Advisor,
NOAA Fisheries)

AI Ocean TE
decade

Engage Curators
(chair of PICES) → extends review of
UN DOS Capital UN
Decade of Future PICES
Ocean Science 2021-2030

Year-in-review
FUTURE program-
phase III
Forecasting and
understanding
trends, uncertainty,
and responses of
Northwest Ecosystems

NEW EXPERT GROUPS
• SG-ARC: study
group on Arctic
• SG-DATA: study
group of data
awareness
• WG 51 - exploring
human networks
to power
sustainability
• SG-GREEN: environmentally
friendly
networking

INTERNATIONAL → ECCW

Keynote - Eric Qvaem

For our scientific excellency



Confederated Tribes
Umatilla Indian reservation

WA OR

Tribe's land use was widespread

From the Creation story comes the order of the foods -

but this order ~~order~~ also mirrors the upstream → downstream spatial dist from the Columbia

2011 meacham Creek channelization → restoration

2019 Baby Chinook and Spawning! (and native veg)

Food brings people together.

control to region of these peoples
Songs sung when the food is being served:
water
salmon/fish
deer/ungulates
roots (below-ground)
huckleberry/berries/above-ground fishing

First foods management approach example: rivers
→ a healthy river can provide first foods

- hydrology
- native vegetation
- biota
- connectivity
- geomorphology



Courtesy of Kat Dale



AREAS OF FOCUS



Community



Mentorship



Integration

Advisory Panel

Early Career Ocean Professionals

ECOPs will inherit the ocean, so we need to include them in the solution that they will be expected to carry forward in the future.



What is a PICES ECOP?

- A self-identified individual
- Within 10 years of obtaining a degree or 5 years in a current position
- In the process of completing or who has completed professional training
- In areas relevant to ocean knowledge
- From a diverse range of sectors

Contact AP-ECOP co-chairs

Raphael Roman:
rk_roman@unesco.org
 Hannah Lachance:
hannah.lachance@noo.gov
 Hana Matsubara:
hmatsubara@g.ecc.u-tokyo.ac.jp
 Minkyung Kim:
minkyung@knu.ac.kr

AP-ECOP

The Ocean is HUGE and complex and trying to ensure a sustainable ocean will be around for generations to come is also a huge, complex and long-term endeavor.

Increasing Early Career Ocean Professional (ECOP) integration into PICES will help bring new voices and ensure succession planning is in place.

Increasing mentorship and training will also help ensure PICES is providing the skills and learning opportunities to prepare for leadership opportunities and to welcome them into the PICES family.

Current Actions

- ✓ Creating a mentorship program for ECOPs to gain insight from senior PICES members
- ✓ Working with PICES governing board to incorporate ECOPs into decision making & working groups
- ✓ Creating flyers in multiple languages to describe what PICES defines as an ECOP
- ✓ Creating and advertising ECOP opportunities for engagement to make sure ECOPs feel welcome and valued in PICES
- ✓ ECOP Reporting & demographic data collection

The Issues

Placeholder photo

People don't always understand or know what an ECOP is.

Hard to retain ECOPs interested and engaged in the longer term (retention of talents kind of issue) and how to make sure we are inclusive and meaningfully involving ECOPs across sectors and cultures.

Integrating ECOPs into PICES needs to a tiered approach with opportunities at various leadership levels and commitment levels.



W1: Creating Concise and Compelling Fact Sheets

*We will be in touch with Expert Group chairs to develop one-page **Fact Sheets** with you!*





And many more....





Here's to all PICEANS XXX





We look forward to seeing you at upcoming PICES Science Events!



ZPS7

ICES-PICES 7th International
Zooplankton Production Symposium
Hobart, Tasmania
March 17-22, 2024



MSEAS

Marine Socio-Ecological Symposium
Yokohama, Japan
June 4-7, 2024





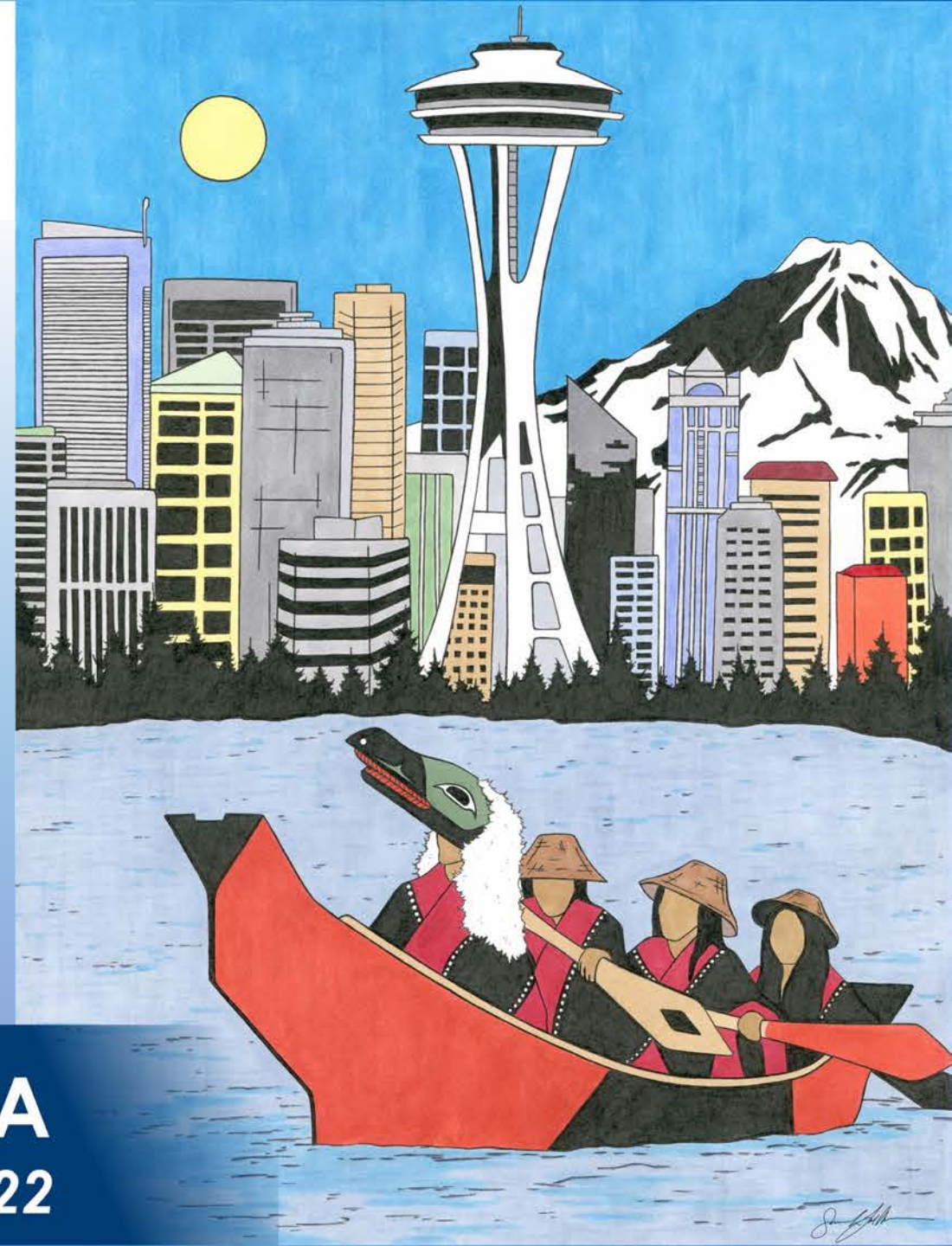
PICES-2023



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development

ECOP Presentation Awards

Oct 23–27, 2023 • Seattle, USA
with pre-conference workshops Oct 20–22





ECOP Presentation Awards

Science Board, FUTURE and each Committee select one oral and one poster presentations

Selection Criteria

- Research is primarily the presenter's
- Content is scientifically excellent
- Content is presented clearly
- Presenter responds thoughtfully to questions if asked.





PICES-2023 ECOP Presentation Awards Science Board





Science Board

Best oral presentation

to

Yunzhou Li

on

How will China's stressed marine fisheries respond to climate change impacts? A social-ecological analysis of vulnerability and risk





Science Board

Best poster presentation
to

Kyungsik Jo

on

**Presuming the pathways of sea turtles by using
 $\delta^{18}\text{O}$ values from commensal barnacle shells**





PICES-2023 ECOP Presentation Awards FUTURE





FUTURE

Best oral presentation
to

Jessica Randall

on

**Using otoliths to understand how marine
heatwaves affect fish growth**





PICES-2023 ECOP Presentation Awards Biological Oceanography Committee





BIO Committee

Best oral presentation

to

Anna K. McLaskey

on

**Inter-specific differences outweigh seasonal variability
in zooplankton trophic markers, revealing distinct roles
within a complex food web**





BIO Committee

Best poster presentation
to

H. William Fennie

on

**Increased temperature decreases starvation
resiliency in first feeding Sablefish
(*Anoplopoma fimbria*)**





PICES-2023 ECOP Presentation Awards Fishery Science Committee





FIS Committee

Best oral presentation

to

Andrea N. Odell

on

**Spatiotemporal trends in weight and its potential
implications for stock assessments**





FIS Committee

Best poster presentation
to

Luke A. Bobay

on

**Predicting larval northern anchovy (*Engraulis mordax*)
abundance across space and time**





PICES-2023 ECOP Presentation Awards Human Dimension Committee





HD Committee

Best oral presentation

to

Patrick Farnole

on

Framework for regional downscaling of climate modelling based on a co-designed traditional seasonal calendar, with the community of Ulukhaktok





PICES-2023 ECOP Presentation Awards Marine Environmental Quality Committee





MEQ Committee

Best oral presentation
to

Yaamini R. Venkataraman

on

**Investigating the basis of thermal tolerance
of a rapidly spreading crab**





MEQ Committee

Best poster presentation

to

Olivia Boisen

on

**Assessing potential drivers for microplastic ingestion
by myctophids caught near the Columbia River mouth**





PICES-2023 ECOP Presentation Awards

PHYSICAL OCEANOGRAPHY & CLIMATE COMMITTEE





POC Committee

Best oral presentation

to

Hikaru Homma

on

**Distribution of acoustically detected marine organisms
across Kuroshio Extension front associated with physical
and biogeochemical environments**





POC Committee

Best poster presentation

to

Wonkeun Choi

on

Evaluation of marine heatwave biases in the North Pacific Ocean simulated by the CMIP6 model





PICES-2023 ECOP Presentation Awards

TECHNICAL COMMITTEE ON MONITORING





MONITOR Committee

Best oral presentation

to

Tatsuya Sakamoto

on

**Consideration of the population dynamics of sardines
in the western and eastern North Pacific
on the basis of isotope chronologies**





MONITOR Committee

Best poster presentation

to

Kelia E. Axler

on

**Shifts in the distribution, size structure,
and feeding of Arctic cod early life stages
in a changing Pacific Arctic**





PICES-2023 ECOP Presentation Awards

TECHNICAL COMMITTEE ON DATA EXCHANGE





TCODE Committee

Best oral presentation

to

Hannah E. Kepner

on

**Fine-scale spatial patterns of gelatinous zooplankton
in the Northern Gulf of Alaska**





TCODE Committee

Best poster presentation

to

Karlee E. Zammit

on

**Automating the acoustic detection of
Arctic ringed seal vocalizations using deep learning**



**PICES Sports
Event Winner**





PICES Sports Event Winner Team International Incident



And....

Braveheart Award to PICES Swimmers!!





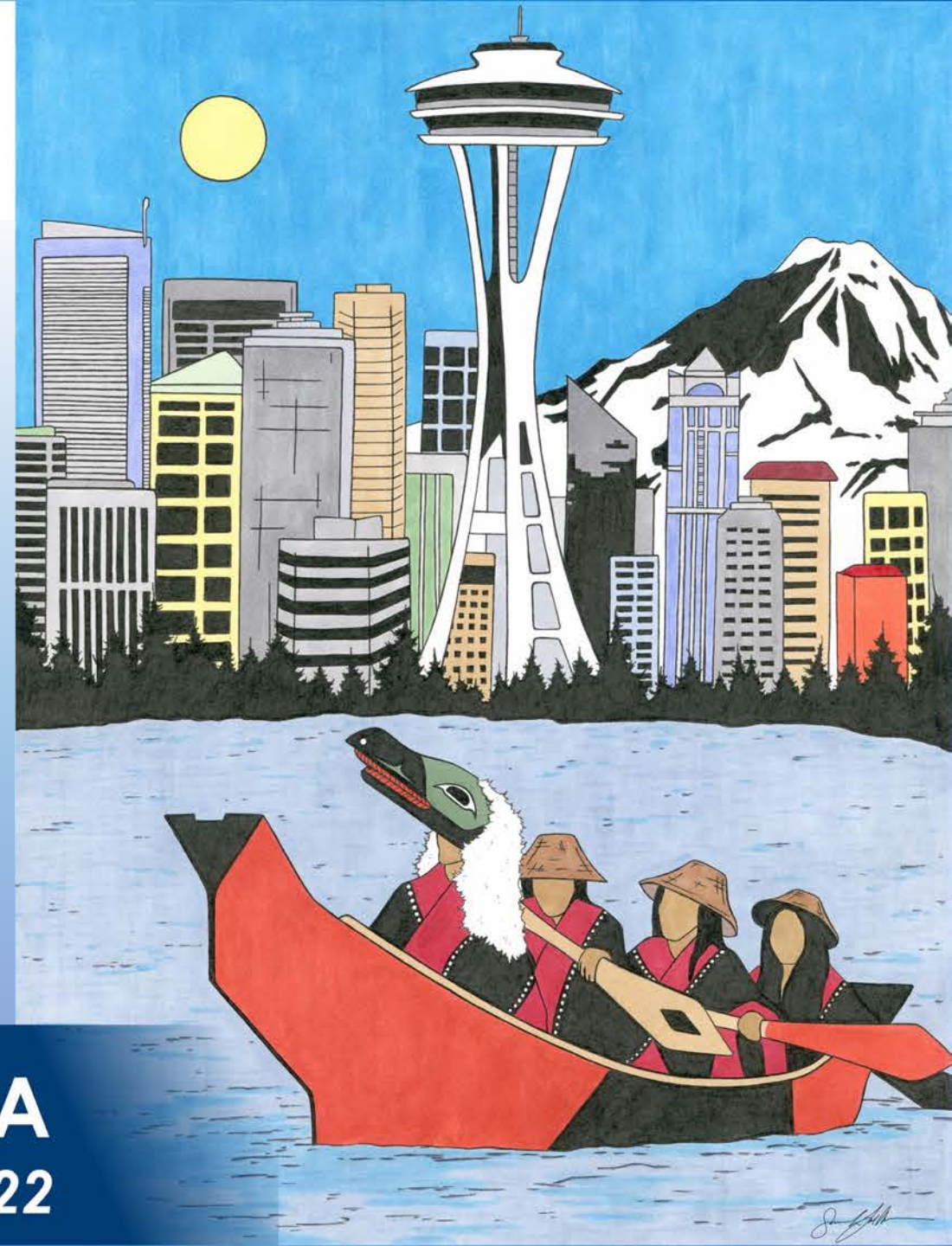
PICES-2023



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development

Chair Appreciation

Oct 23–27, 2023 • Seattle, USA
with pre-conference workshops Oct 20–22



Fishery Science Committee (FIS)



FIS Chair (PICES 2017~2023)

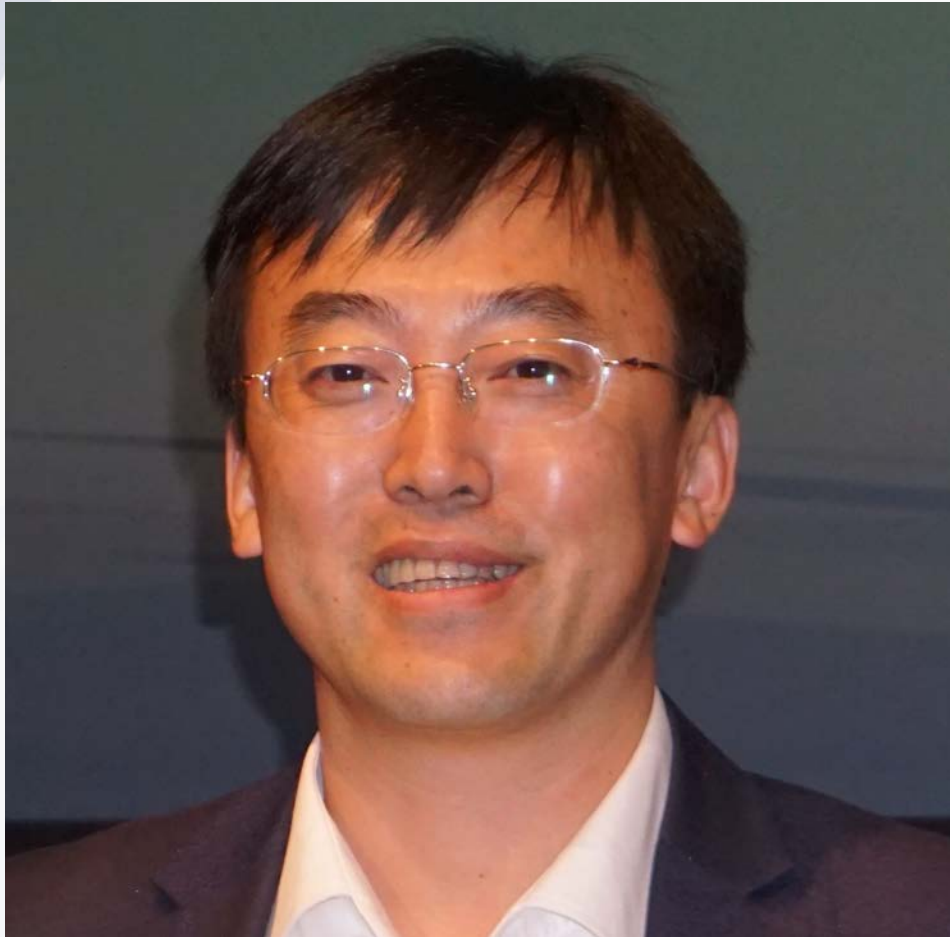
Prof. Xianshi Jin

Yellow Sea Fisheries

Research Institute, CAFS



Marine Environmental Quality Committee (MEQ)



MEQ Chair (PICES 2018~ May. 2023)
Prof. Guangshui Na
Hainan Tropical Ocean University



Marine Environmental Quality Committee (MEQ)

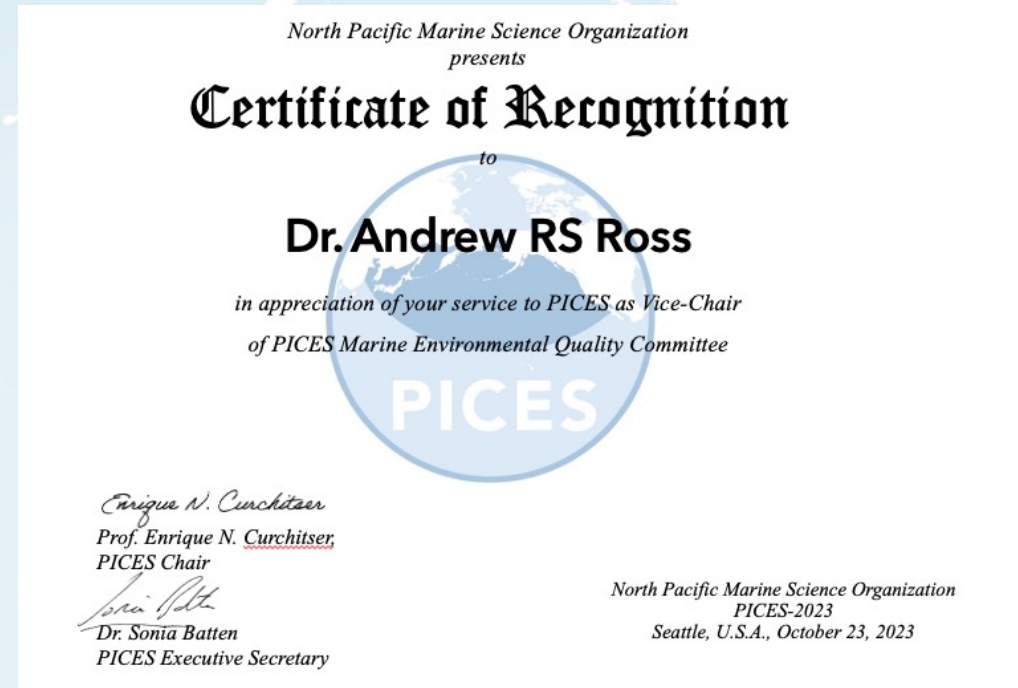


MEQ Acting Chair (May 2023 ~ PICES 2023)

* MEQ Vice Chair (PICES 2018 ~ 2023)

Dr. Andrew Ross

Institute of Ocean Science,
Fisheries and Oceans Canada





Thank you to **EVERYONE** who made
PICES-2023 fantastic!

XOXOXO from...

Local Organizing Committee Members

Edward Gorecki (NOAA)
Hannah Lachance (NOAA)
Kym Jacobson (NOAA)
Maggie Costley (UCAR)
Corinne Burns (NOAA)

And.....

PICES Secretariat Staff

- Sonia Batten
- Sanae Chiba
- Julia Yazvenko
- Saeseul Kim
- Susan Hannah
- Alexander Bychkov
- Rosalie Rutka
- Robin Brown (Emeritus)
- Shannon Brown
- Lori Waters



PICES-2024

**The FUTURE of PICES: Science for Sustainability in 2030
with 1-day FUTURE OSM**



**See you in Honolulu, USA
October 26 – Nov 1, 2024
Honolulu Convention Center**

A Hui Hou!