


## 보 도 자 료

	◆ 2025. 11. 3. (월) 배포
	◆ 총 9쪽 (본문 2쪽, 첨부 7쪽)
	<b>즉시 보도해주시기 바랍니다.</b>
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### 한국, 태평양 측 북극해 연구협력 허브로 도약

극지연구소, 인천 송도에서 PAG와 DBO 국제 워크숍 연속 개최

- 극지연구소(소장 신형철)는 오늘(3일)부터 5일(수)까지 인천 송도 극지연구소 청사에서 '2025 태평양북극협의체(Pacific Arctic Group, PAG) 가을 회의'와 '제8회 북극해생태계관측망(Distributed Biological Observatory, DBO) 워크숍'을 연속 개최한다고 밝혔다.
- 이번 회의는 북태평양과 이어지는 북극해 지역(이하 '태평양측 북극해')을 중심으로 급격히 진행되는 해빙·해류 변동과 이에 따른 해양환경·생태계 변화를 국제 과학자들이 공유하고 공동 대응 방안을 모색하기 위해 마련됐다.
- 태평양북극협의체(PAG)는 2010년 결성된 국제 연구 네트워크로, 한국·중국·일본을 비롯해 미국, 캐나다 등 주요 참여국으로서 태평양측 북극해 연구의 소통과 협조를 담당한다. 북극해생태계관측망(DBO)은 같은 해 제안된 국제 공동 관측 프로그램으로, 태평양측 북극해역의 생태계 변동을 장기간 관측하는 데 목적이 있다.

- 이번 회의에는 미국, 중국, 일본, 캐나다, 노르웨이, 폴란드 등 6개국 약 80여 명의 북극해 연구자가 참가한다. 각국의 현장 조사 결과를 공유하고, 연구자료의 통합·관리 체계 강화, 장기 관측의 지속 가능성 확보 등 실무적 과제가 집중 논의될 예정이다. 특히 급속한 해빙 감소와 해류 변동이 해양환경과 생태계 구조 등에 미치는 영향이 핵심 의제로 다뤄진다.
- 올해는 향후 북극 연구 생태계의 지속 가능성을 높이고 국제협력의 기반을 강화하기 위해 '젊은 과학자 세션'을 신설했다. 이 프로그램은 일부 해양수산부와 미국 해양대기청(NOAA)의 공동연구사업의 지원을 받았으며, 차세대 과학자들은 이 자리에서 최신 연구성과와 분석기법 등을 공유한다.
- 양은진 PAG 의장은 "북극에서 관측되는 해양과 해빙 변화는 한반도와 직·간접적으로 연결돼 있다"며, "이번 회의는 태평양측 북극해 변화를 정확히 이해하고 국제 협력을 강화하는 중요한 계기"라고 말했다.
- 신형철 극지연구소장은 "극지연구소는 북극 장기 관측과 데이터 공유 체계 구축에 적극 참여하고 있으며, 이를 기반으로 북극항로와 같은 미래 활용을 위한 과학적 기반 마련에도 기여하고자 한다"며, "국제 파트너들과 협력을 확대해 해양환경 모니터링 역량을 한층 강화하고, 태평양측 북극해 연구의 허브로서 역할을 지속적으로 넓혀 나가겠다"고 말했다.

## **붙임 1. PAG 및 DBO 프로그램**

## Pacific Arctic Group (PAG) 2025 Fall Meeting



<https://pag.arcticportal.org/>

**PAG 2025 Fall Meeting Agenda**  
November 3, 2025: 9:00-17:00 (KST)  
November 4, 2025: 9:00-12:00 (KST)

**Venue: Sejong Seminar Room, 2<sup>nd</sup> floor, Cafeteria building**  
**Korea Polar Research Institute**  
26 Songdomirae-ro, Yeonsu-gu, Incheon, Republic of Korea, 21990

**Local hosts:** Eun Jin Yang ([ejyang@kopri.re.kr](mailto:ejyang@kopri.re.kr)); +82 10-3125-0144  
Catherine Lalande ([catherine.lalande@kopri.re.kr](mailto:catherine.lalande@kopri.re.kr)); +82 10-2254-0930  
Chaelin Yeon ([chyeon@kopri.re.kr](mailto:chyeon@kopri.re.kr)); +82 10-3007-4825

### Virtual Zoom meeting:

<https://us06web.zoom.us/j/82435490298?pwd=CKrWpBrEmDobTbs438NiTHNGW8cC49.1>  
Meeting ID: 824 3549 0298  
Password: 046969

The **PAG 2025 Fall Meeting** is hosted by the Korea Polar Research Institute. We will report on the 2025 field sampling and preliminary results, prior PAG activities, as well as discuss plans for the 2026 field activities and beyond. The meeting will provide highlights of science results from PAG endorsed projects (DBO, PACEO, CAO), joint research activities, interaction with other organizations/projects, PAG organizational issues, and other business topics.

## Agenda

Monday November 3, 2025 (9:00-17:00 KST)

[9:00-9:30] **1. Welcome and Overview**

Agenda review and Introduction of participants – Eun Jin Yang (KOPRI)

[9:30-10:30] **2. Country reports: Field activities, prior results, and plans for 2026 (max 15 min each)**

- Canada = Bill Williams (DFO-MPO)
- China = Jianfeng He (Polar Research Institute of China)
- Japan = Motoyo Itoh (JAMSTEC)
- Korea = Eun Jin Yang (KOPRI)
- USA = Jackie Grebmeier (UMCES)

[10:30-11:00] **Group photo and coffee break**

[11:00-12:00] **3. PAG-related joint research activities: reports, summaries, results, plans (max 15 min each)**

*3a. Distributed Biological Observatory (DBO)*

- Pacific DBO activities 2025 and 2026 plans – Jackie Grebmeier (UMCES)
- KOPRI's Contribution to DBO: Current Status and Future Plans – Jinyoung Jung (KOPRI)
- Atlantic DBO activities Pan-Arctic DBO – Monika Kedra (IOPAN) & Christina Goethel (UMCES)
- Baffin Bay/Davis Strait DBO – Craig Lee (University of Washington; online)

[12:00-13:30] **Lunch (hosted by KOPRI)**

[13:30-15:00] **PAG-related joint research activities (continued):**

*3b. Pacific Arctic Climate Ecosystem Observatory (PACEO)*

- Update from KOPRI physical oceanography activities – Kyoung-Ho Cho (KOPRI)
- Update from KOPRI biological oceanography activities – Jee-Hoon Kim (KOPRI)
- Arctic Ocean trace metal activities – Taejin Kim (Pukyong National University)
- Mechanisms and consequences of pulsed autumn phytoplankton blooms in the Pacific Arctic seas with sea ice decline – Zhixuan Feng (East China Normal University)

*3c. Central Arctic Ocean (CAO)*

- Brief updates on the Working Group on Integrated Ecosystem Assessment for the Central Arctic Ocean (WGICA) and CAOFA Joint Program of Scientific Research and Monitoring (JPSRM) – Shigeto Nishino (JAMSTEC)
- CAOFA 4<sup>th</sup> COP Update – Jihoon Jeong (KOPRI)

[15:30-16:00] **Coffee break**

[16:00-17:00] **PAG-related joint research activities (continued):**

*3d. Synoptic Arctic Survey (SAS)*

- Brief updates on recent SAS activities and results – Shigeto Nishino (JAMSTEC)
- US SAS activities and plans - Jackie Grebmeier (UMCES) and Carin Ashjian (WHOI)

**4. Updates on proposed international research activities (max 15 min each)**

- Cross cutting proposal for SAS ECR activities – Christina Goethel (UMCES)
- 2<sup>nd</sup> International Workshop on Arctic Ocean Observation – Takashi Kikuchi (JAMSTEC; online)

[17:00] **End Day 1**

[17:00-17:30] **Executive committee meeting**

[17:30] **Reception at KOPRI cafeteria (hosted by KOPRI)**

**Tuesday November 4, 2025 (09:00-12:00 KST)**

**[09:00 -10:00] Agenda review**

**5. Updates on interaction with other organizations/projects (max 15 min each)**

- Update on CoObs RNA and SAON – Hajo Eicken (University of Alaska Fairbanks; online)
- An overview of Arctic Ocean 2050 – Jørgen Berge (University of Tromsø; online)
- An overview of FACE (Following Arctic/Antarctic iCE) program - Xi Zhao (Sun Yat-sen University; online)
- An overview of ArCS-3 – Eiji Watanabe (JAMSTEC; online)

**[10:00 -10:30] Coffee Break**

**[10:30 -11:45] 6. Early Career Scientists (max 15 min each)**

- Impact of Ocean Acidification on pteropod shell density - Ahra Mo (KOPRI)
- Long-term sediment trap observation in the Pacific Arctic: Insights from multi-tracers - Hojung Kim (Kyungpook National University)
- “Seeds” on the Seafloor of the Pacific Arctic: What is the Role of Diatoms in Sediments? - Yuri Fukai (JAMSTEC)
- Sea ice from an upward-looking perspective: Applications of high-resolution acoustics in the NE Chukchi Sea - Savannah Sandy (UAF)
- Microbial Communities from the Shelf to the Pole: Results from the US SAS - Christina Goethel (UMCES)

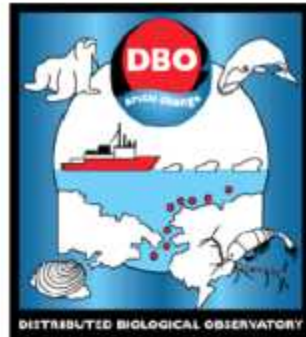
**[11:45 -12:00] 7. Update/other discussions**

- Executive committee member: PAG Chair rotation in fall 2026 to Japan
- Future PAG meetings
  - 2026 Spring meeting (26 ASSW, Denmark)
  - 2026 Fall meeting: Canada
  - 2027 Spring meeting (27 ASSW, Japan)
- Other discussions or information

**[12:00] End of PAG meeting**

**[12:00-13:30] Lunch (hosted by KOPRI)**

## 8<sup>th</sup> Distributed Biological Observatory Data Workshop



<https://dbo.cbl.umces.edu/>

DBO Workshop Agenda  
November 4, 2025: 13:30-17:00 (KST)  
November 5, 2025: 9:00-15:00 (KST)

Venue: Korea Polar Research Institute  
26 Songdomirae-ro, Yeonsu-gu, Incheon, 21990  
Sejong Seminar Room, 2<sup>nd</sup> floor, Cafeteria building

Local hosts: Eun-Jin Yang ([eiyang@kopri.re.kr](mailto:eiyang@kopri.re.kr)); +82 10-3125-0144  
Catherine Lalande ([catherine.lalande@kopri.re.kr](mailto:catherine.lalande@kopri.re.kr)); +82 10-2254-0930  
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Meeting ID: 824 3549 0298

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The 8<sup>th</sup> Distributed Biological Observatory (DBO) data workshop will highlight DBO field results from ship-based samples and moorings, remote sensing results, modelling activities and archiving. Additional topics include DBO synthesis activities and products, the developing international Pan-Arctic network, and interactions with other Arctic programs.



## Agenda

Tuesday November 4, 2025 (13:00-17:00 KST)

[13:30-14:00] **1. Welcome, Logistics and Workshop Objectives - Jackie Grebmeier (UMCES)**

- Overview of DBO and Agenda Review
- Introduction of participants: in person and online

[14:00-15:00] **2. Highlights of DBO data**

### *Physical oceanography and moorings*

- Elucidating the circulation in Bering Strait: new features from high resolution hydrographic measurements – Robert Pickart (WHOI)
- Arctic Moorings and hydrography by Japan – Motoyo Itoh (JAMSTEC)
- The Siberian Arctic Ocean continues to unveil its hidden secrets – Igor Polyakov (UAF)
- A decade in the NE Chukchi: Perspectives from a pan-ecosystem moored observatory – Savannah Sandy (UAF)

[15:00-15:30] **Coffee Break and Group Photo**

[15:30-17:00] **2. Highlights (continued)**

### *Satellite observations, phytoplankton, and hydrography*

- Satellite observations, phytoplankton, and hydrography by Japan – Amane Fujiwara (JAMSTEC; online)
- Marine carbonate chemistry: Publicly available data from the Distributed Biological Observatory – Natalie Monacci (UAF; recorded)
- A macronutrient time-series from the Distributed Biological Observatory – Lee Cooper (UMCES)
- Siberian-DBO: Monitoring Arctic Environmental Change – Jinyoung Jung (KOPRI)

[17:00] **End of Day 1**

**Wednesday November 5, 2025 (9:00-15:00 KST)**

**[9:00-10:30] 2. Highlights (continued)**

*Biological oceanography*

- Assessing interannual variability of biological communities at DBO-8 in Amundsen Gulf, Canada – Michelle Kamula (DFO-MPO; online)
- Assessing phytoplankton and nutrient dynamics in the DBO region with a special focus on the contribution of diatoms and silicon cycling – Diana Varela (University of Victoria)
- Continuing studies on benthic prey for gray whales in the Pacific Arctic – Brian Marx (UMCES; online)
- Marine Mammal Watches in the Pacific DBO – Sue Moore (UW-CES; online)
- Monitoring export fluxes to detect seasonal and interannual changes in the pelagic ecosystem of the northern Bering Sea (DBO1) – Catherine Lalande (KOPRI)
- Time series of benthic macrofaunal and environmental drivers within the Pacific DBO – Jackie Grebmeier (UMCES)

**[10:30-11:00] Coffee break**

**[11:00-12:00] 2. Highlights (continued)**

- Size class distributions of the bivalves *Macoma calcarea* and *Serripes* spp. in the northern Bering Sea and the southeastern Chukchi Sea from 2015-2019 – Christina Goethel (UMCES)

**3. Modeling efforts within the DBO**

- A forecast system using FVCOM-CICE-SWAN model in the Arctic - Jia Wang (NOAA; online)

**4. Data access and management**

- US Arctic Data Center – Jackie Grebmeier (UMCES)
- Open plenary discussion on data access, protocols and data exchange
- Others

**[12:00-13:30] Lunch (hosted by KOPRI)**

**[13:30-14:45] 5. Open discussion period for DBO future direction, field sampling and modeling**

**[14:45-15:00] 6. Upcoming relevant DBO meetings**

- ASLO Ocean Sciences Meeting, Glasgow, Scotland, February 2026
- ASSW26 Aarhus, Denmark: PAG 2026 Spring meeting + Pan-Arctic DBO community workshop, March 2026

**[15:00] End of DBO workshop**