

Warming ocean **And Responses** of Arctic **Marine Mammals**

Marie Skłodowska-Curie – Global Fellowship



Overseas Countries and Territories

Philippine CHAMBAULT

10 June 2021



Greenland Institute
of Natural Resources



2014

2017

PhD



Biologging
Movement Ecology
Oceanography



2014

2017

PhD

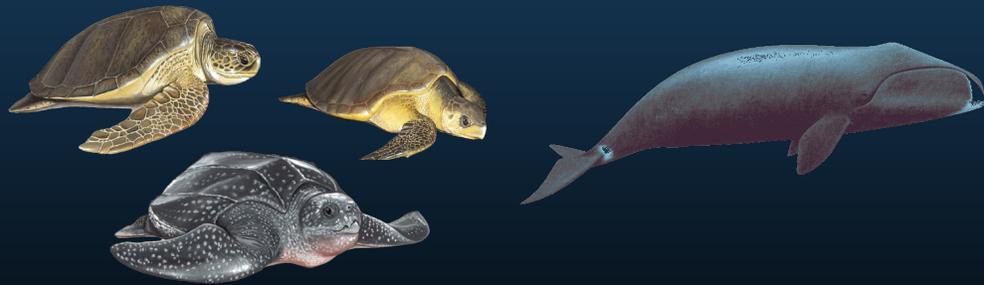


GINR



Biologging
Movement Ecology
Oceanography

Spatial
modelling



2014

2017

2018

PhD



GINR



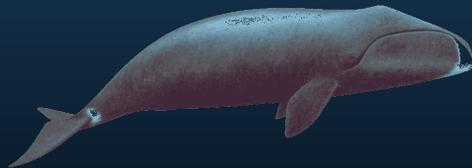
IMAR



Biologging
Movement Ecology
Oceanography

Spatial
modelling

Biologging
Movement Ecology
Oceanography



Background

Why MSCA

WARMM

Some tips

2014

2017

2018

2019

2020

PhD



GINR



IMAR



Ifremer

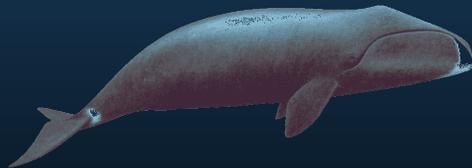


Biologging
Movement Ecology
Oceanography

Spatial
modelling

Biologging
Movement Ecology
Oceanography

Spatial
modelling



Background

Why MSCA

WARMM

Some tips

2014

2017

2018

2019

2020

2021

MSCA GF

PhD



GINR



IMAR



Ifremer



GINR



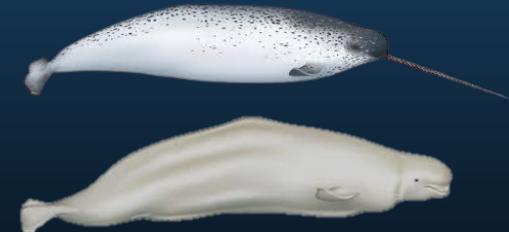
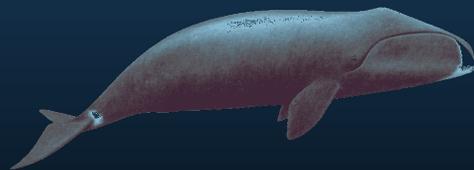
Biologging
Movement Ecology
Oceanography

Spatial
modelling

Biologging
Movement Ecology
Oceanography

Spatial
modelling

Climatic
projections

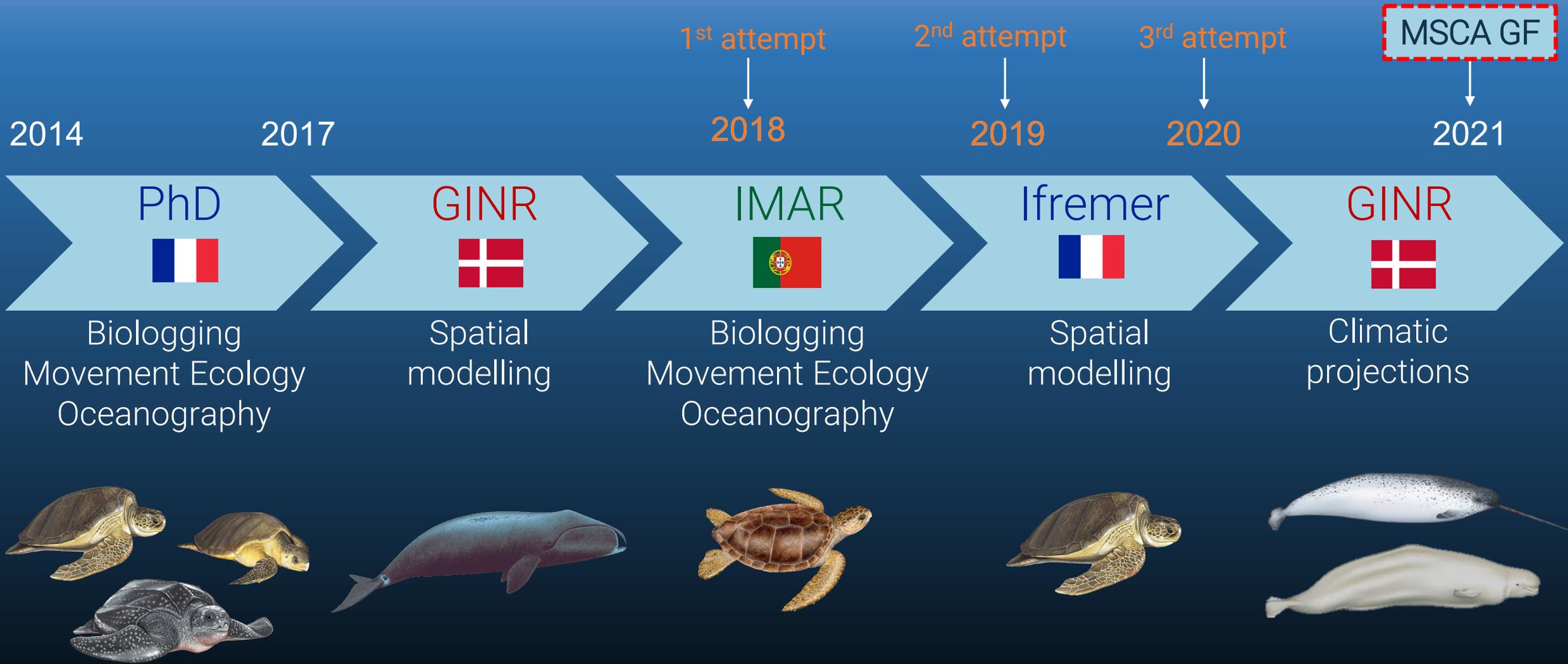


Background

Why MSCA

WARMM

Some tips

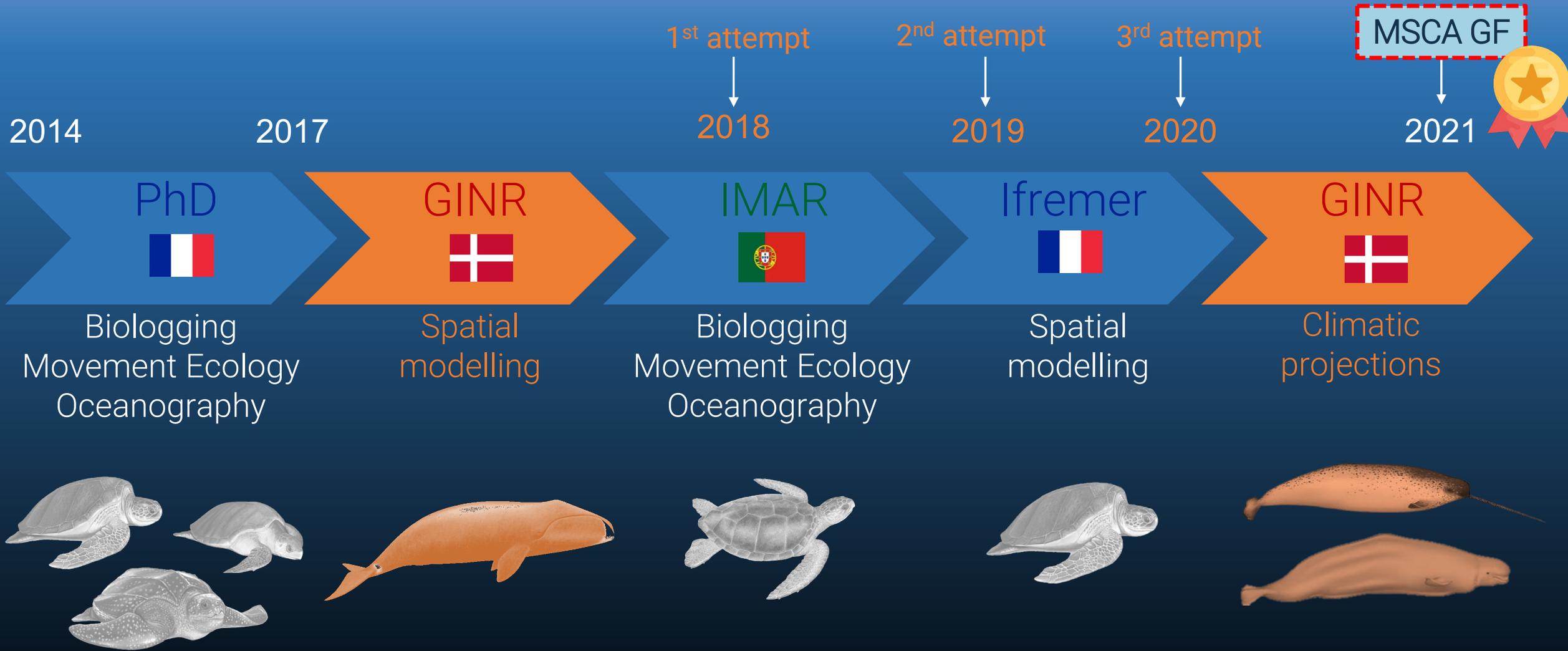


Background

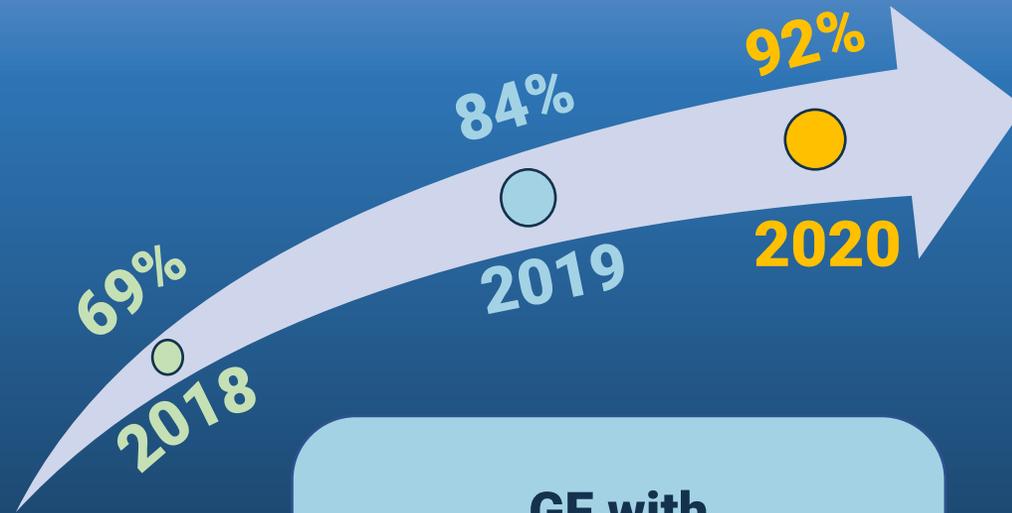
Why MSCA

WARMM

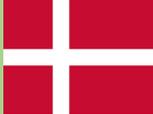
Some tips



2 articles published with the GINR

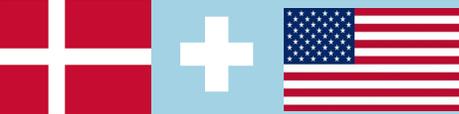


EF with Greenland



- Lack of transfer of knowledge
- Too close to my existing skills

GF with Greenland & USA



- New partner organization in California
- Much better but still...

GF with Greenland & USA



Got it !



Springboard

- To launch your career
- Internationally recognized
- Open new opportunities



Springboard

- To launch your career
- Internationally recognized
- Open new opportunities



Generous & flexible grant

- Salary + travel + extras costs
- Family allowance
- Flexible start date



Springboard

- To launch your career
- Internationally recognized
- Open new opportunities



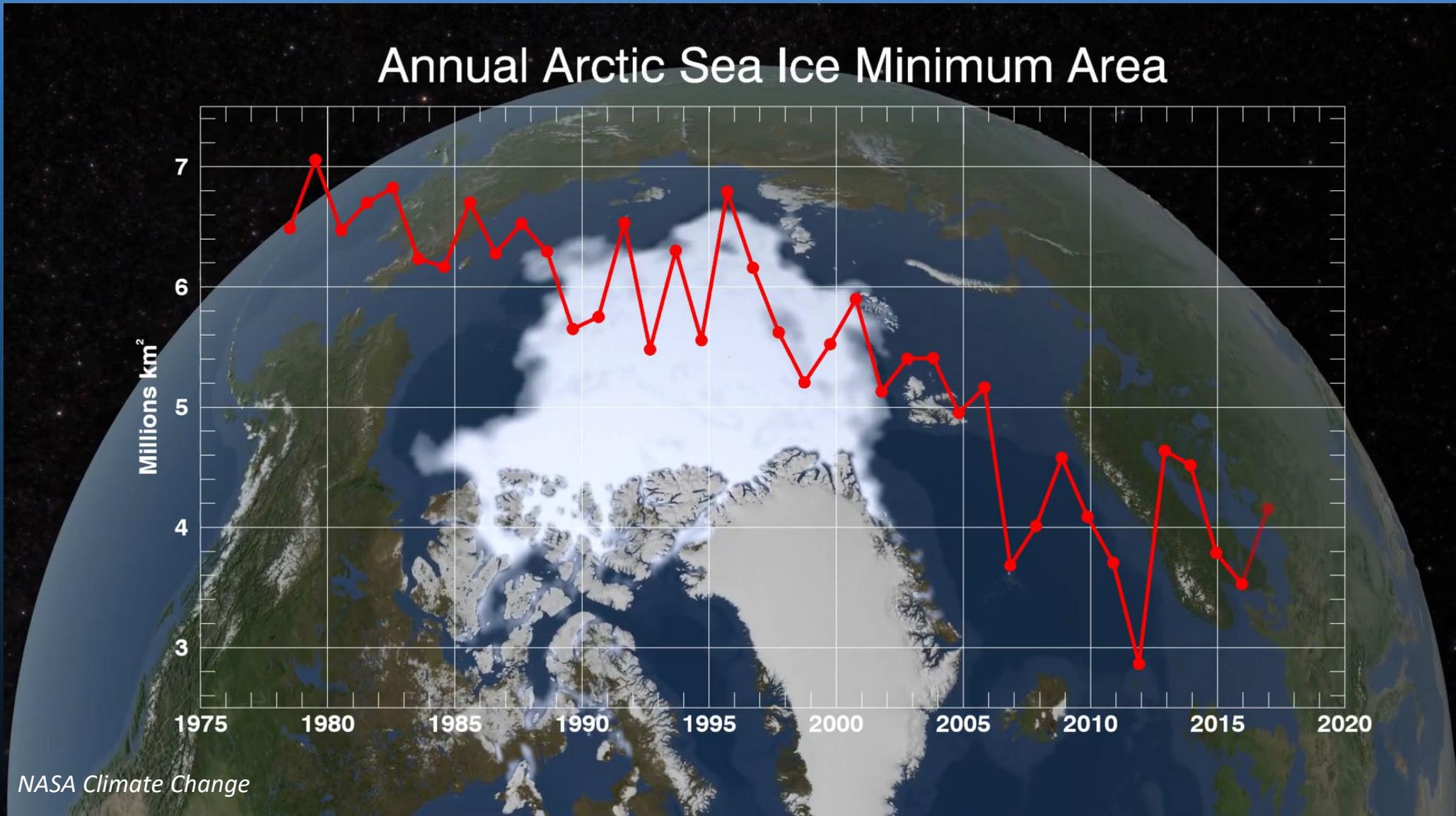
Generous & flexible grant

- Salary + travel + extras costs
- Family allowance
- Flexible start date



Lead your project

- Be your own boss!
- New responsibilities
- Handle your budget

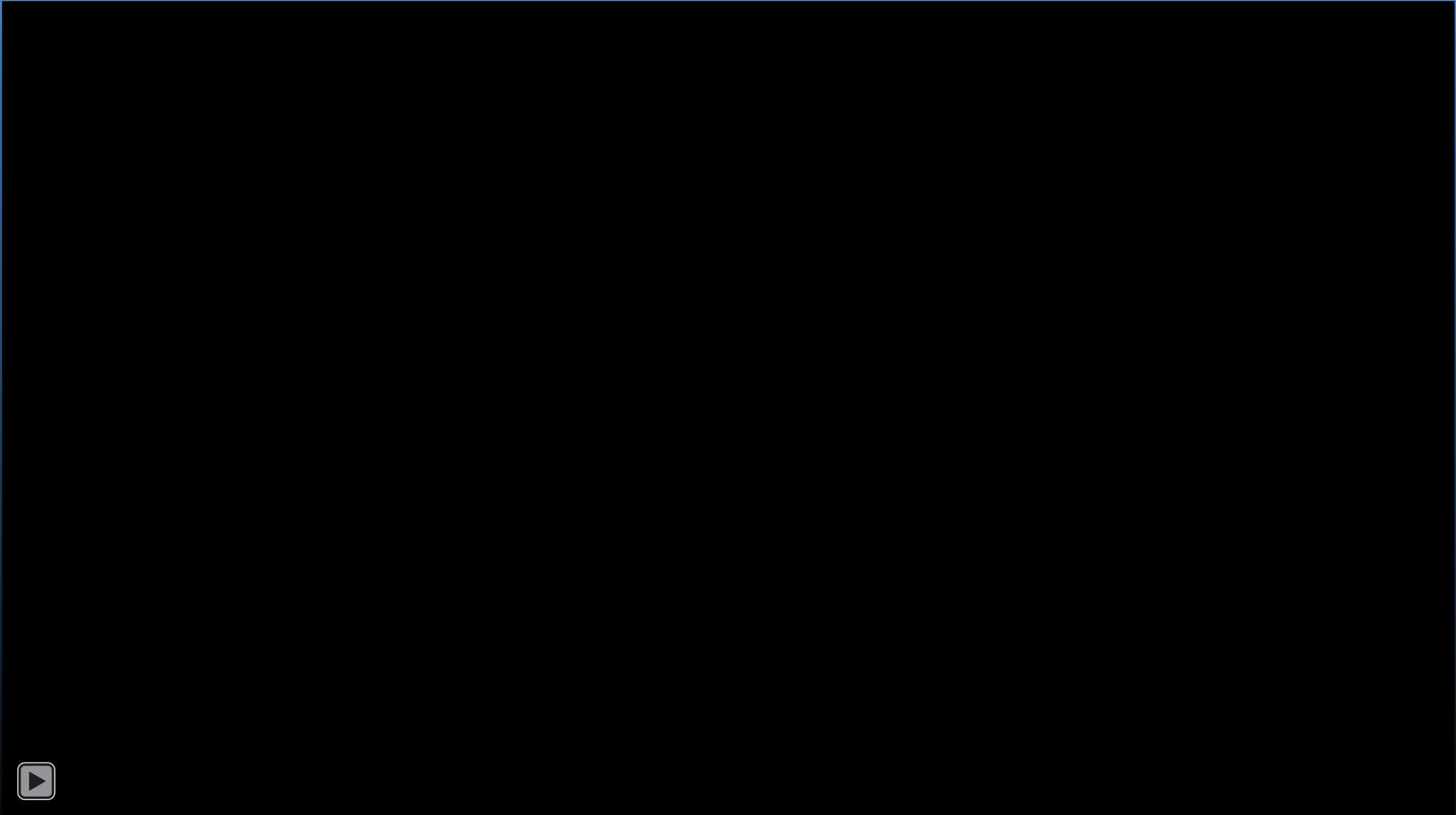


Background

Why MSCA

WARMMM

Some tips



Warming ocean **A**nd **R**esponses of Arctic **M**arine **M**ammals

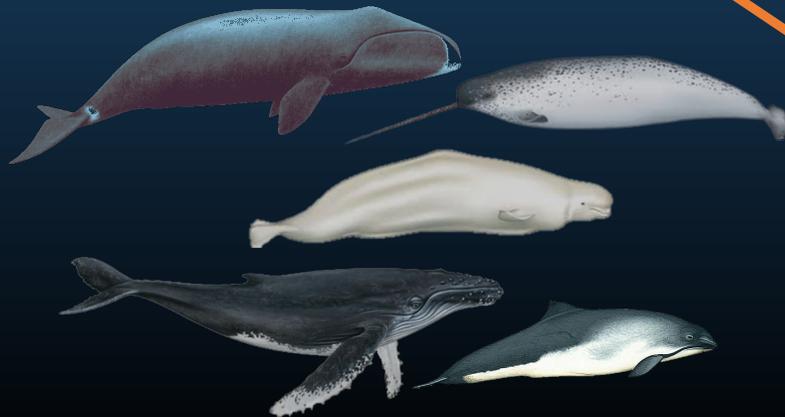


Global warming



Plankton

Apex predators



Physiological adaptations

- Heat flux
- Body mass
- Skin temperature
- Thermal conductance

Eco-physiology

Behavioural adaptations

- Foraging strategies
- Diving abilities
- Geographical range

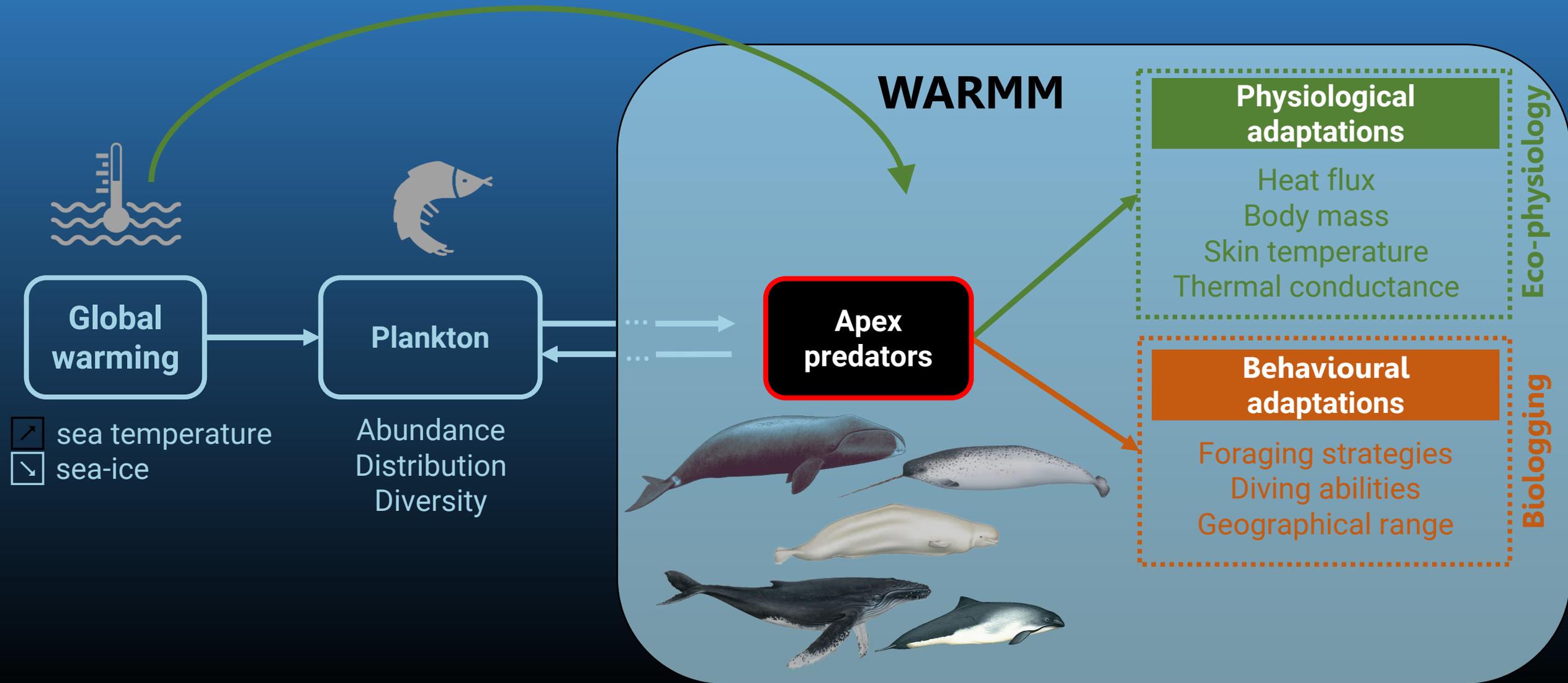
Biologging

- ↗ sea temperature
- ↘ sea-ice

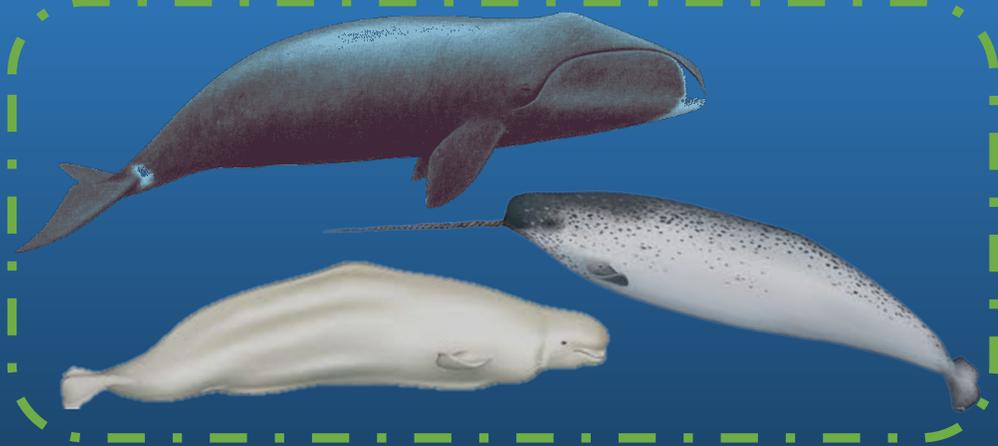
Abundance
Distribution
Diversity



Warming ocean **A**nd **R**esponses of Arctic **M**arine **M**ammals



3 Arctic species



3 Arctic species



2 sub-Arctic species

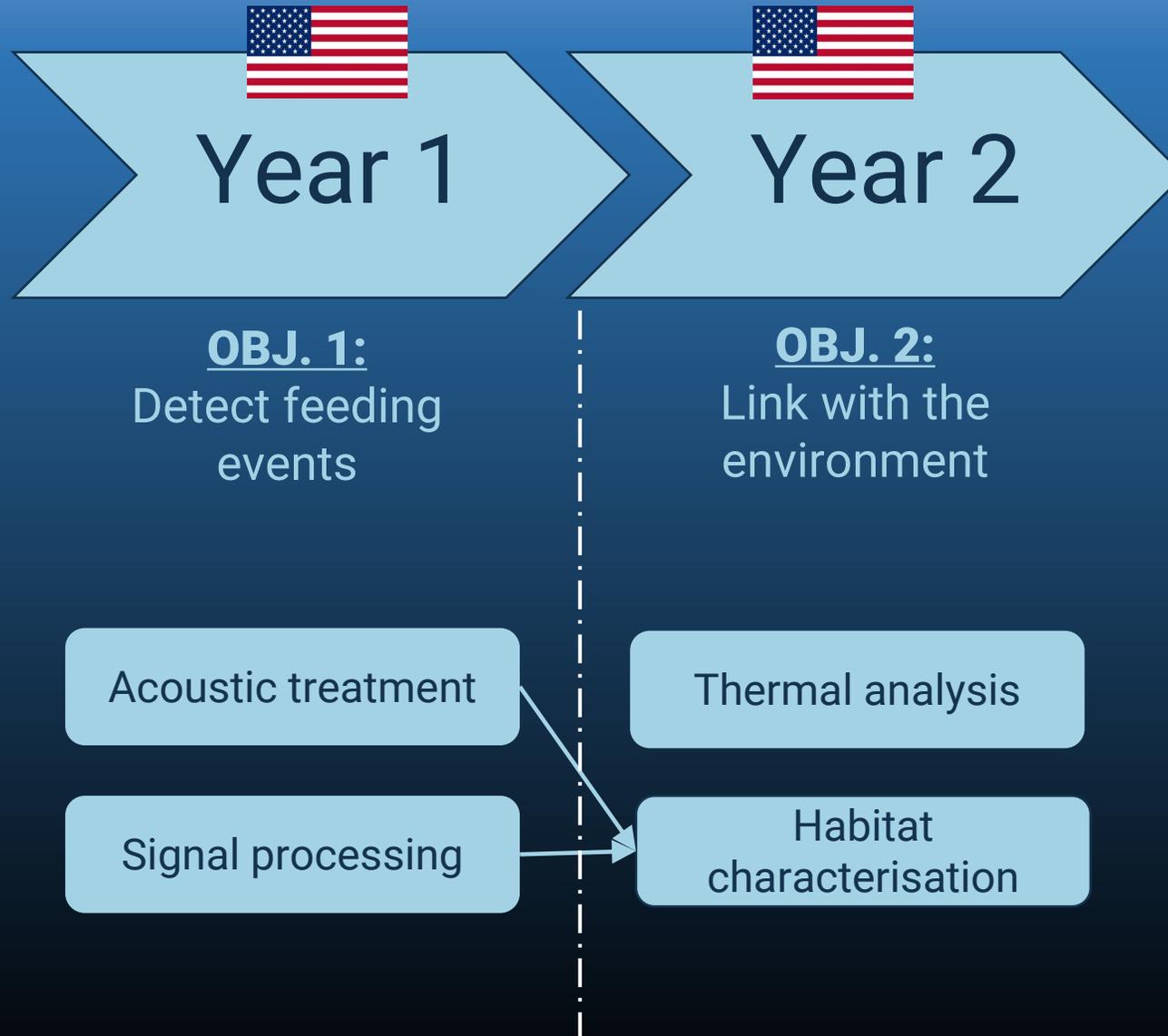


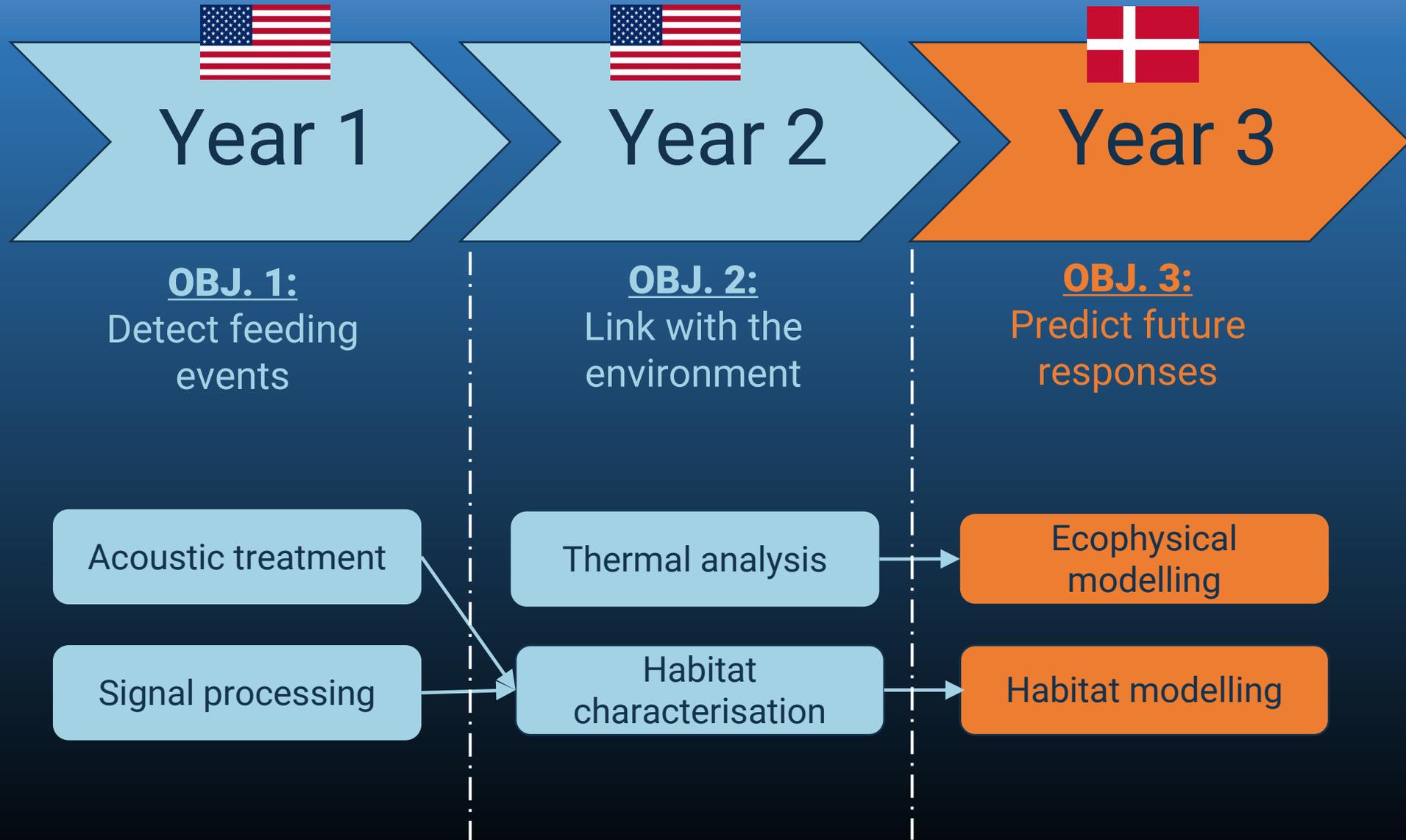


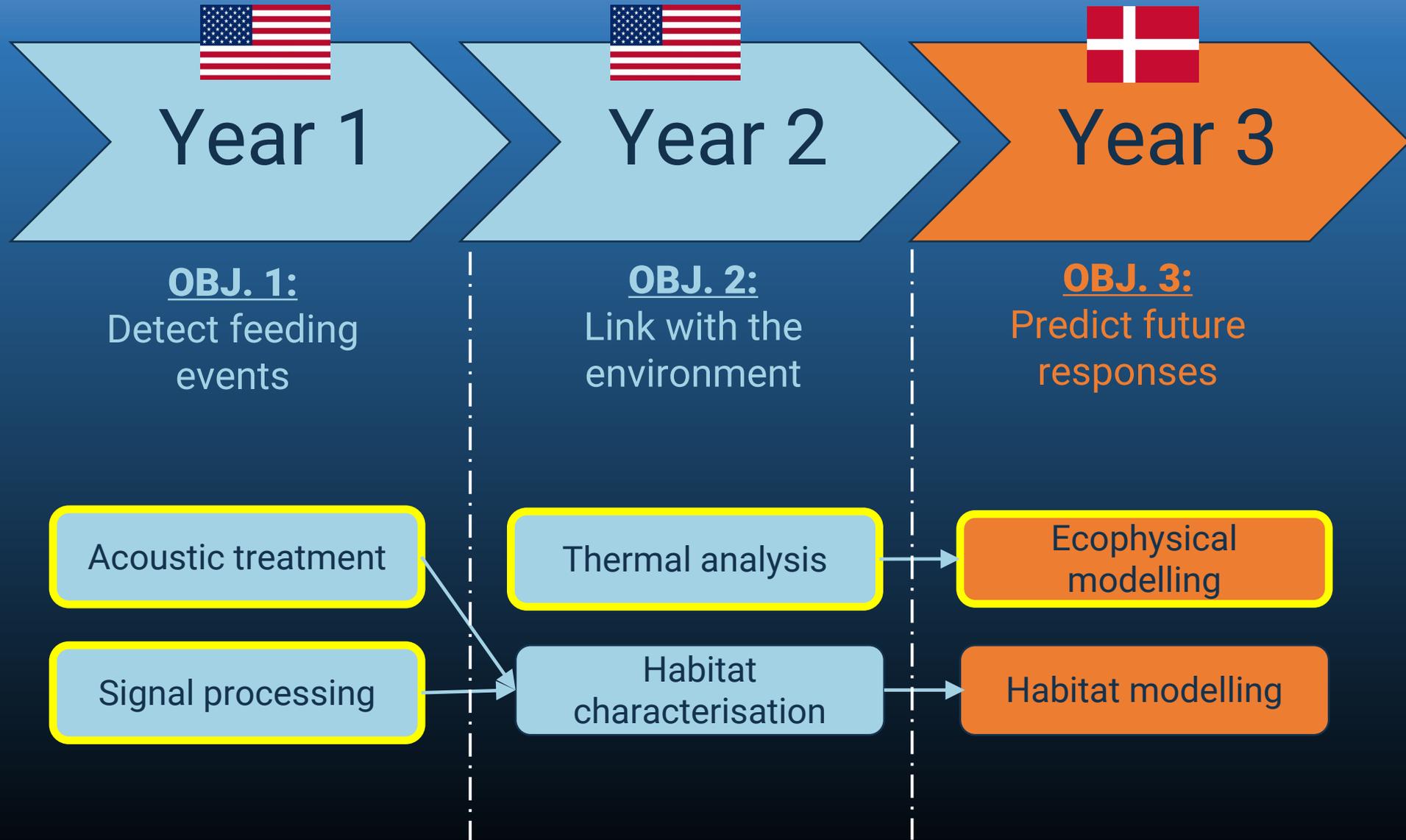
OBJ. 1:
Detect feeding
events

Acoustic treatment

Signal processing

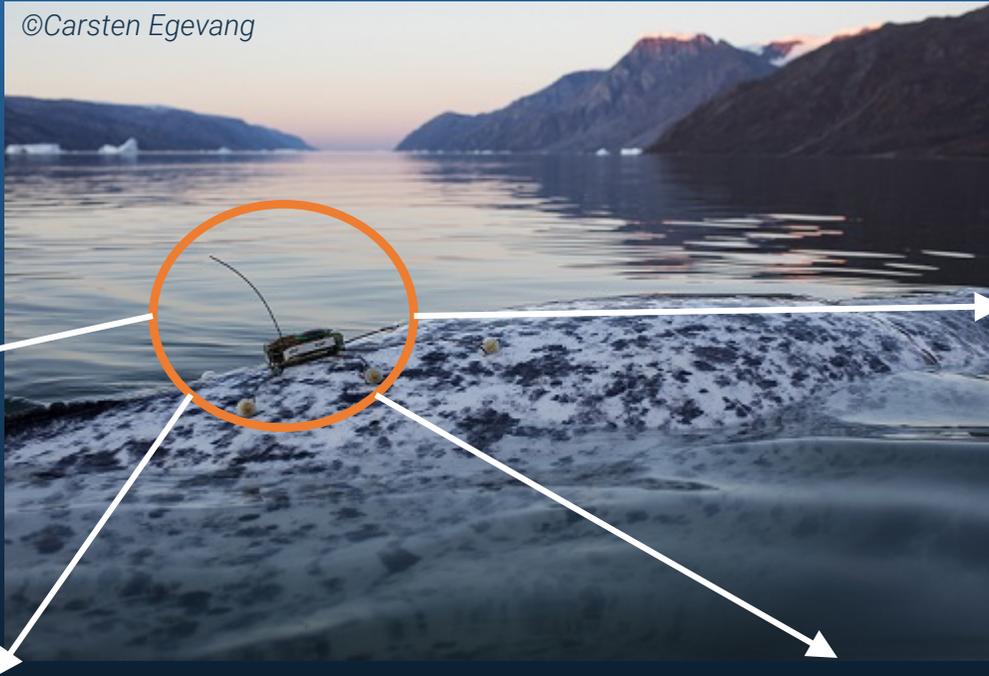








Data *In natura* (biologging)



©Carsten Egevang

Location



Environment



Diving abilities



Prey capture



1 Do they avoid warm waters?

2 Do they hunt less when it is too warm?

3 Where will they go in the future?

4 Will sub-Arctic species be less affected?



Data in captivity (ecophysiology)



Activity



Body temperature



Ambient temperature



Morphology



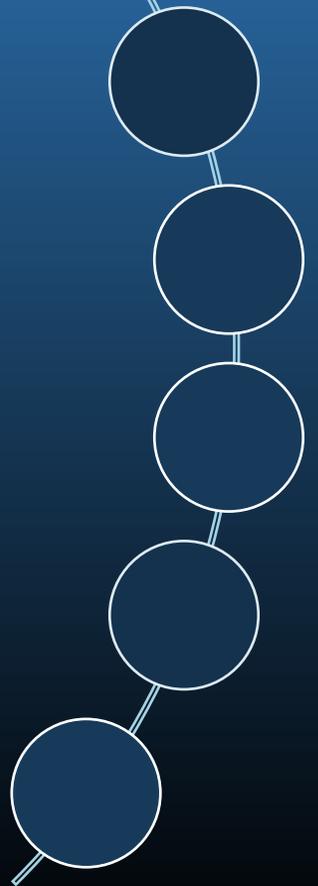
1 How do they regulate the excess of heat?

2 How do they adjust their activity when temperature rises?

3 Will smaller animals dissipate heat more efficiently?

 Choice of the beneficiary

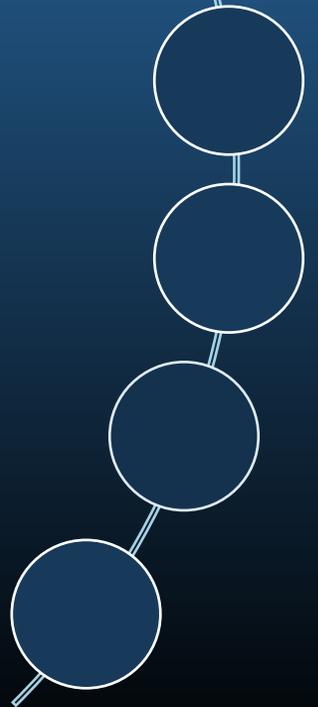
- Look for the skills before the lab
- Why this lab?
- Why these people?
- The beneficiary serves the project

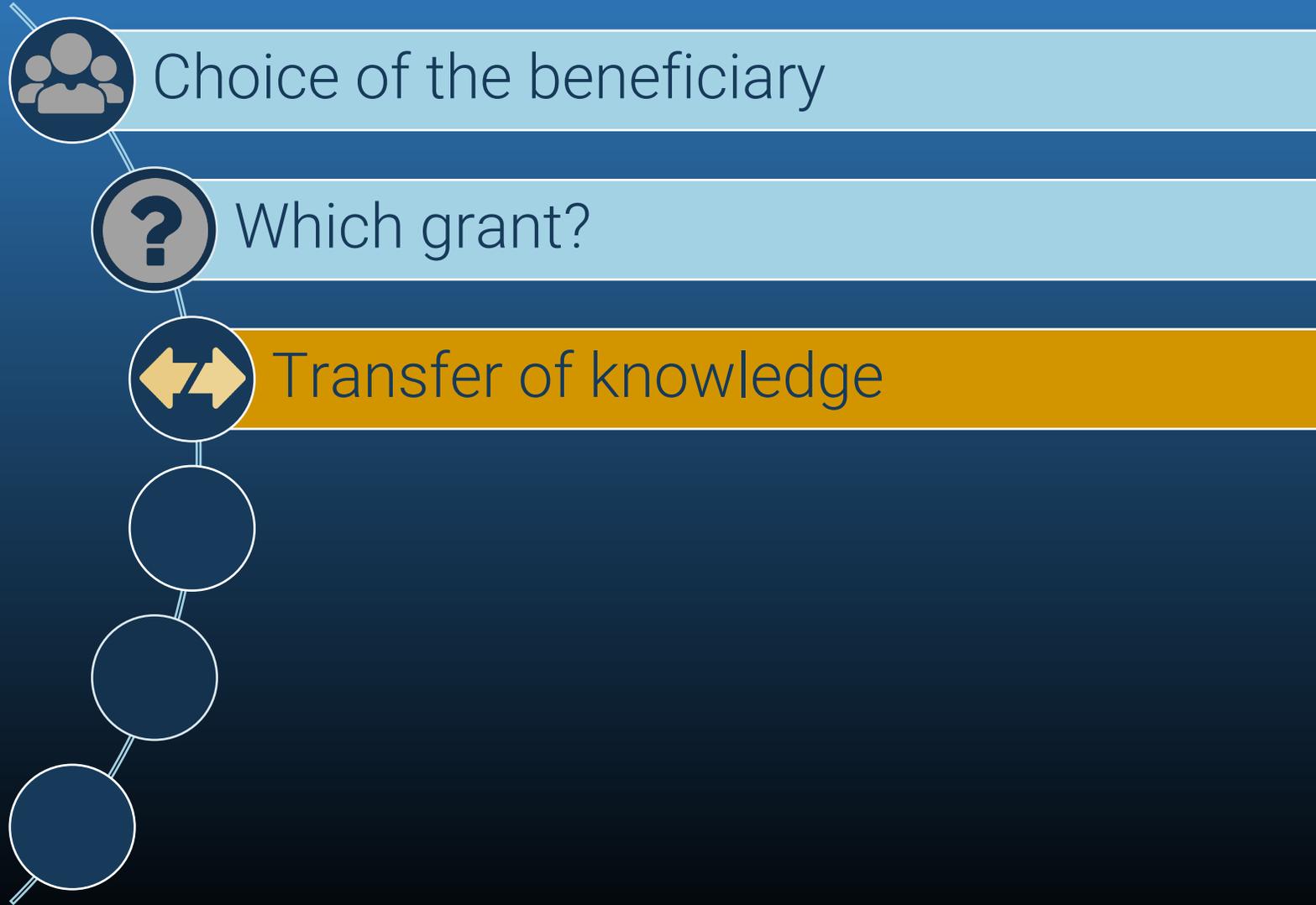


 Choice of the beneficiary

 Which grant?

- Check the eligibility criteria first !
- The most appropriate (IF, GF...)
- Depending on the skills targeted





- In both ways
- Host institution → You
- You → Host institution



Choice of the beneficiary



Which grant?



Transfer of knowledge



Why EU should finance you?

- Relate your project to EU vision





Choice of the beneficiary



Which grant?



Transfer of knowledge



Why EU should finance you?



As much detailed as possible

- Methodology (deliverables...)
- Expected publications, journals
- Dates / locations of conferences



Choice of the beneficiary



Which grant?



Transfer of knowledge



Why EU should finance you?



As much detailed as possible



Never give up!

- Perseverance
- UE feedbacks are useful !
- Tons of proofreadings !

Philippine CHAMBAULT

Global Fellowship - MSCA

Philippine.Chambault@gmail.com



Warming ocean **A**nd **R**esponses of Arctic **M**arine **M**ammals

10 June 2021