# CHALLENGE KNOWLEDGE IN BAROMEDICINE

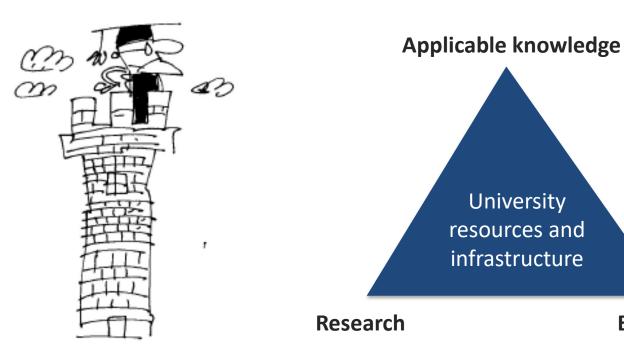
EUROPEAN RESEARCH COLLABORATIONS INVOLVING UNIVERSITIES AND INDUSTRY

**BERGEN INTERNATIONAL DIVING SEMINAR 2019** 

Ingrid Eftedal PhD NTNU Research Group Leader

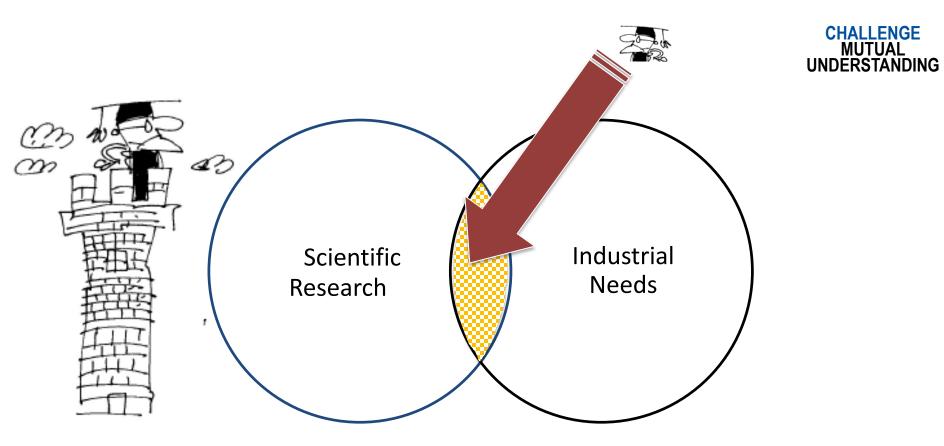






**D**NTNU

Education





# ESTABLISHING RESEARCH COLLABORATIONS





## **Initial phase**

- Identify partners
- Agree on themes with scientific impact
- Target calls for funding (This is the hard part: success rate is typically 5-20 %)
  - Apply. Repeat until..



- Complete research protocols
- Obtain approvals
- Recruit students/PhDs

- Run pilots and quality controls
- Collect and analyze material
- Publish in scientific journals



## **Conflict of interest is inevitable in university – industry collaborations**

- University researchers study questions at the front of science
- Industry is concerned with issues that require applicable solutions
- These are often not the same.
   Yet research collaborations must address both





### CHALLENGE PATIENCE

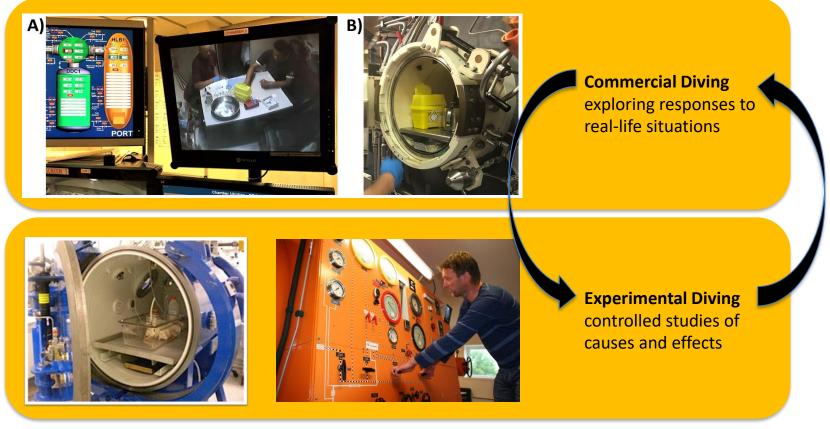
PETROMAKS2 — STORT PROGRAM PETROLEUM

# Dealing with biology of hea professional saturati

Kilde:	Forskningsrådet	
Prosjektleder:	Forsker Ingrid Eftedal	
Prosjektnummer:	280425	
Søknadstype:	Kompetanseprosjekt for na	
Prosjektperiode:	2018 - 2022	
Tildelt:	12,0 mill kr	
Midlene er mottatt fra:	PETROMAKS2 — Stort program	
Organisasjon:	UoH-sektor > Universiteter > N UNIVERSITET NTNU > NTNU FA	

Tuesday, June 19, 2018 Collaboration Agreement for NRC Project # 480425, Version 0.3 COLLABORATION AGREEMENT FOR KNOWLEDGE-BUILDING PROJECTS IN THE PETROLEUM SECTOR WITH SUPPORT FROM THE RESEARCH COUNCIL OF NORWAY Norwegian University of Science and Technology (NTNU) Organization Number: 974 767 880 ("Project Owner") St. Olav's Hospital HF Organization Number: 883 974 832 Helse Bergen HF Organization Number: 983 974 724 Equinor Energy AS Organization Number: 990 888 213 Technip Norge AS (TechnipFMC) Organization Number: 963 052 944 Hereafter collectively referred to as the "Participants" or individually as the "Participant". Dealing with depths: systems biology of health preservation in professional saturation diving















# **UNIVERSITIES AT THE** 2019 DIVING SEMINAR





# **D**NTNU













### Fatima Kiboub, PhD completed January 2019



Collaboration TechnipFMC, NTNU and Brussels through Norwegian industrial PhD scheme

### Simin Ardestani, PhD defense early 2020



Collaboration Aarhus University and NTNU. Offshore saturation diving study with TechnipFMC and Equinor

#### **Commercial Divers' Subjective Evaluation of Saturation**

💽 Jean Pierre Imbert · 🛞 Costantino Balestra · 🍙 Fatima Zohra Kiboub · 🕘 Øyvind Loennechen · 🛞 Ingrid Eftedal



#### Hemoglobin and Erythropoietin After Commercial Saturation Diving

📦 Fatima Z. Kiboub · 👰 Costantino Balestra · 🚇 Øyvind Loennechen · 🔬 Ingrid Eftedal

٢	Frontiers in Physiolo Published on 21 Aug 20	OPEN ACCES
		<ul> <li>OPEN ACCES</li> </ul>

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#### Blood Gene Expression and Vascular Function Biomarkers in Professional Saturation Diving

👔 Fatima Z. Kiboub · 🦲 Andreas Møllerløkken · Astrid Hjelde · Arnar Flatberg · இ Øyvind Loennechen · 🔊 Ingrid Eftedal

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	Published on 16 Jul 2018		OPEN ACCE

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Evaluation of Divers' Neuropsychometric Effectiveness and High-Pressure Neurological Syndrome via Computerized Test Battery Package and Questionnaires in Operational Setting

🏟 Simin Berenji Ardestani · 👰 Costantino Balestra · 🦲 Elena V. Bouzinova · 🔘 Øyvind Loennechen ·

Frontiers in Physiology Published on 08 Nov 20...

## A Single Simulated Heliox Dive Modifies Endothelial Function in the Vascular Wall of ApoE Knockout Male Rats More Than Females

🚯 Simin Berenji Ardestani 🛛 🌀 Vladimir V. Matchkov 🖓 🔞 Ingrid Eftedal 🕚 🕙 Michael Pedersen

Frontiers in Physiolo... GOPEN Published on 22 Oct 2019

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Please come and talk with us at the research stand in the exhibition area

