



6th Annual Entrepreneur's Forum WHOI Center for Marine Robotics 26<sup>th</sup> August 2020

## Introduction

Cellula Robotics Ltd. is a privately owned and operated Canadian business providing turn-key robotic solutions to the subsea industry. Cellula focuses on developing autonomous subsea technology platforms to increase the efficiency of current processes and pave the way for new capabilities.





## Core Technology Platforms



**Geotechnical Tools** 



Fuel Cell Powered, Long Range AUVs



Hovering AUVs



## Solus-LR Pilot Program

- Contracted by Defence Research and Development Canada under the All Domain Situational Awareness program
- Mission to cover 2000km submerged, without refueling
  - High pressure H2/O2 fuel cell: 250kWhr usable energy
  - Suction anchor to hold station
  - Variable buoyancy engine
  - Flooded payload bay
- 10km test range in Burrard Inlet, BC
  - Buoy with LTE / USBL / Blue light communications bridge
  - LBL beacon at north end for navigation update











## **Imotus Hovering AUV**

- 6-Degree of Freedom HAUV
- 150msw (3000msw option)

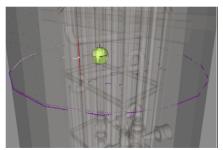
- Redundant vectored thrusters design
- Reconfigurable structure & sensors



Confined space and online tank inspection



Mobile Ranging & Ship Hull Inspections



**SLAM Navigation &** Simulation



Subsea surveillance Seabed Residency





**Vertical Profiling** 



