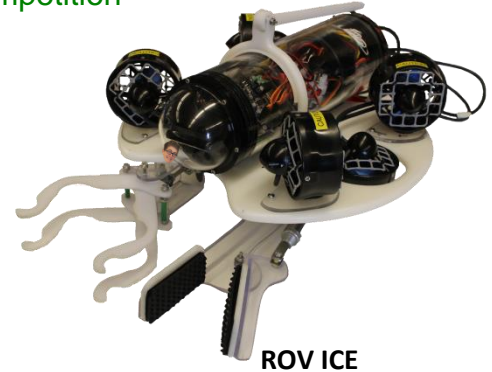


## O'Donel High School

**Design, Develop, Demonstrate, Deploy**  
 Mount Pearl, Newfoundland and Labrador, Canada  
 4159 Kilometers to International Competition

### OD-4D STAFF

Staff Member	Responsibility / Role	New/Return	Grade
Michael Howse	President and CEO, Safety Officer	R	12
Kaitlin Genge	CFO, Marketing	R	12
Emily Wiseman	Marketing, Tool Development	R	12
Joel Hatcher	Manager, Public Relations	R	11
Robin Murphy	ROV Operations- Pilot	R	11
Patrick Breen	Tool Development, Public Relations	R	11
Zachary Norman	Fabrication Technician, Testing	R	11
Clarke Payne	Tool Development	R	11
Matthew Butt	Manager, Tool Development	R	11
Josh Edwards	Electronics, Tool development	N	11
Melissa Mosher	Fabrication Technician	N	11
Lawrence O'Keefe	Software Designer	N	10
Keeley Flynn	Research & Development	N	10
Aby Pike	CAD Technician	N	10
Harley Alway	Software Designer	N	10



**ROV ICE**  
**Photo Credit: Matthew Butt**

#### ROV SPECS:

- **ROV name:** *ICE : Innovative Competitive Entry*
- **Total cost of New Materials for 2016:** \$1,505 USD
- **Value of Recycled Materials on ROV:** \$3,148 USD
- **Total Student hours to design and build:** 800
- **Safety features:** commercial electrical connectors, rounded frame, no sharp projections, shrouded thrusters, hi-grade electrical and electronics components, 25A circuit breaker at power source, LP pneumatic actuation.
- **Special features:** all tools are multi-function, non-corroding, unique and proprietary - designed and fabricated in-house; patent pending™ on three tools; CNC routed floating frame (HDPE) and tool skid (which can be separated from thruster unit); high maneuverability achieved by 30° thruster vectoring, multiple POV digital video cameras.

### BOARD of DIRECTORS: James Hickman, Joseph Santos

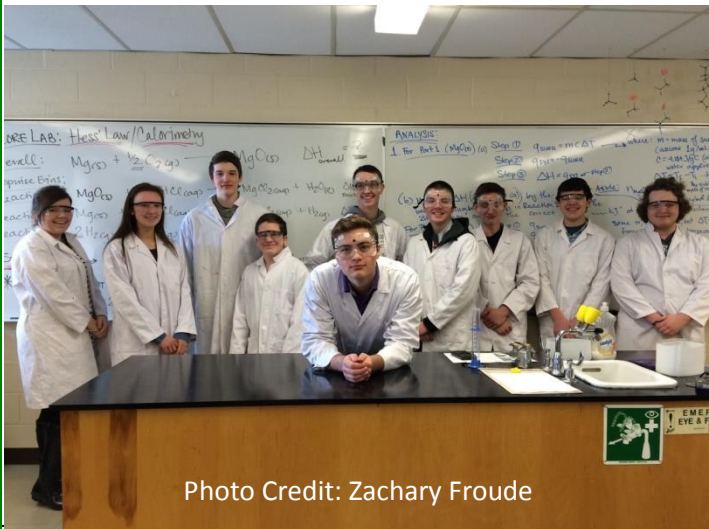


Photo Credit: Zachary Froude

#### Front Row: (L-R)-

Michael Howse

#### Back Row :(L-R)-

Aby Pike, Kaitlyn Genge, Matthew Butt, Josh O'Keefe, Patrick Breen, Clarke Payne, Robin Murphy, Joel Hatcher, Josh Edwards

#### Absent from Photo:

Emily Wiseman, Zachary Norman, Melissa Mosher, Keeley Flynn, Harley Alway