



**OCEAN  
DISCOVERY  
INSTITUTE**  
*young lives transformed through science*

## TRAINING MODULE 1: OCEAN LEADER INTRO TO RESEARCH PROGRAM OVERVIEW

# OUTLINE

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## Ocean Discovery & Programs

Pathway of an Ocean Leader

Ocean Leader Intro to Research

Syllabus

Daily schedule

Roles & Responsibilities



## OUR MISSION

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To inspire the next generation of science leaders, Ocean Discovery Institute creates learning experiences for young people traditionally excluded from science due to race, income status, and educational opportunity. Our students will join high-paying fields, break generational poverty, and change the future of science.

# WHY WE ARE UNIQUE

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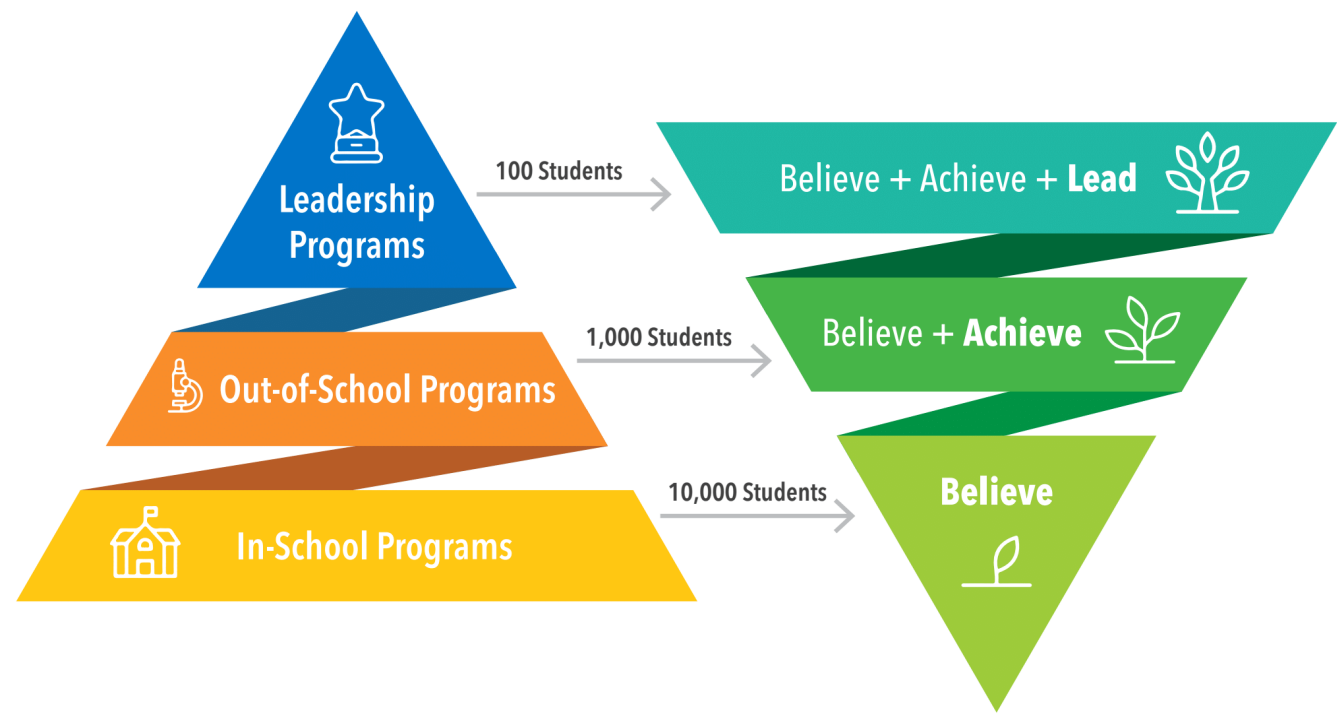


Our model:

- Reach one community at a time
- Supports students throughout their development K-career
- Provides all programming 100% tuition-free
- Uses the ocean as a platform for discovery
- Provides science experiences, mentoring, and tools for success both in-school and out-of-school



# OUR PROGRAMS & IMPACT



Our program model, showing the scale of each of our 3 programs (left) and their associated goals and impacts (right).

# OUR OUTCOMES

**5,800 out of 10,000** students participated

*In-school program participants:*

- **62%** of students demonstrated belief that they can do science and become a scientist.

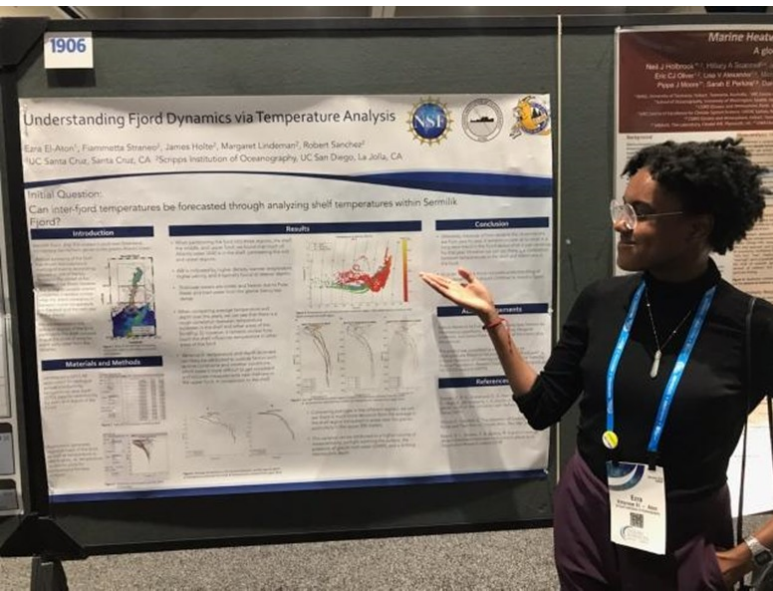
*Out-of-school intensive leadership program participants:*

- Ocean Leaders are **6 times** more likely to graduate college than their peers.
- **90%** of students graduate college within 6 years
- **77%** of these students earned science and related degrees and **42%** attained careers in these fields

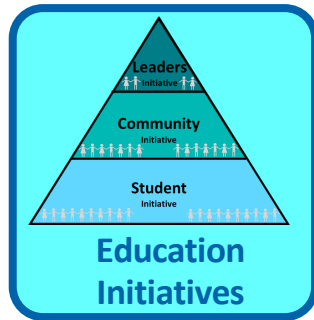




# OUR OCEAN LEADERS

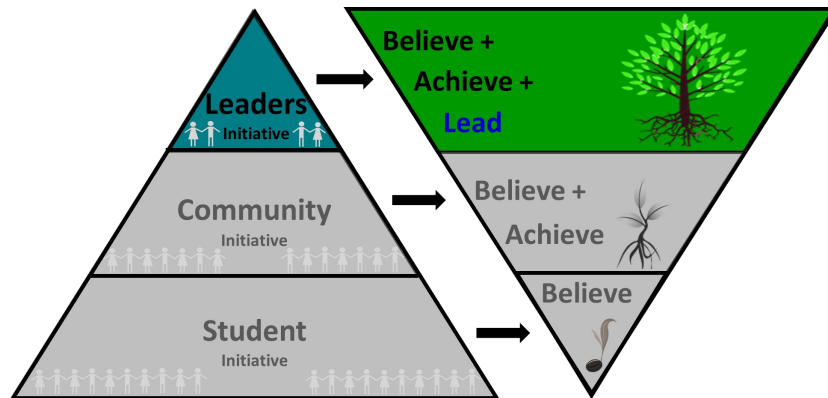


# PROGRAM GOALS



Our Leaders Initiative is our most intensive tier, and offers young people, who want to do more, the opportunity to do more, as they progress on their pathway from 8<sup>th</sup> grade through college and beyond. By pairing rigorous science programming and experiences with college and career support services, this initiative aims to develop young people into science and conservation leaders who make a difference in their community and our world.

This initiative offers two tracks – Ocean Leaders, which provides ongoing scientific research experiences, and Discovery Fellows, which provides science and conservation-based work experiences. An individual can participate in one or both tracks.



**Fig. 1** Our Leaders Initiative grows leaders in STEM through participation in authentic research, development of practical work skills, and provision of critical tools, enabling our students to fulfill their potential, and to LEAD transformation in their community and our world.



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Ocean Discovery & Programs

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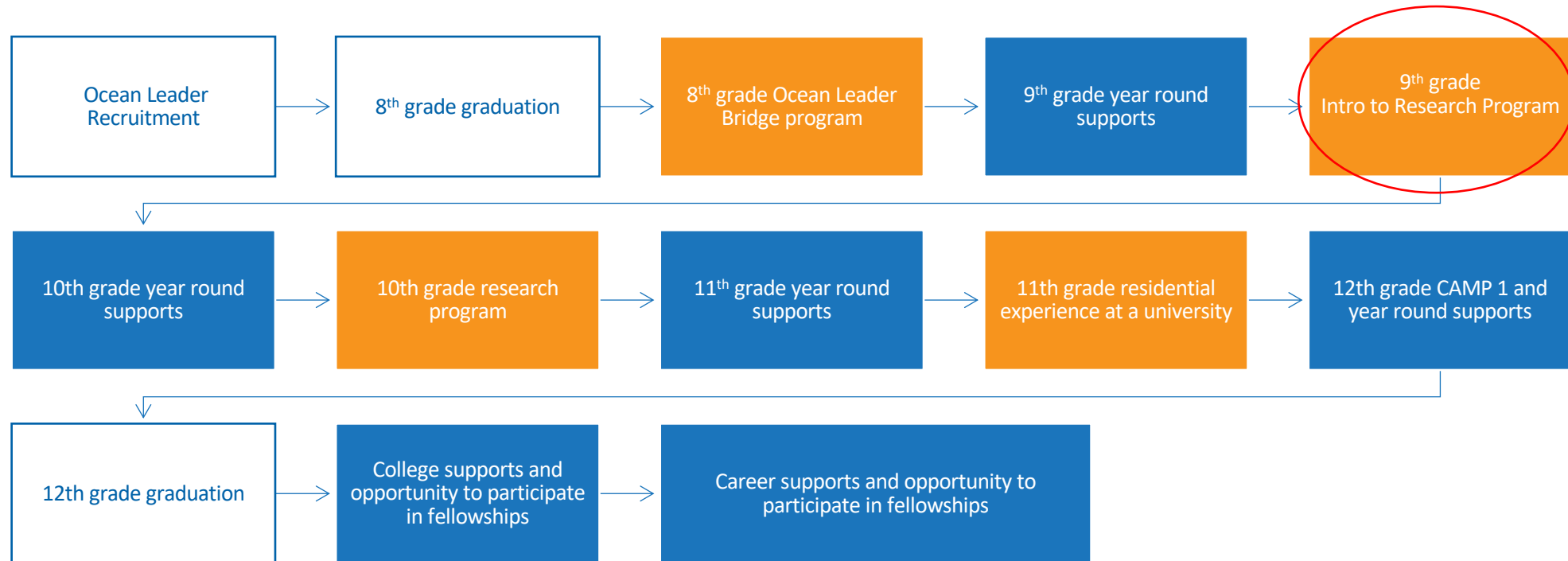
Daily schedule

Roles & Responsibilities





# OCEAN LEADERS: PATHWAY



= LI intensive summer programs



= Year round supports including Academic Achievement, tutoring, field trips, college and career trips.

## PATHWAY OF AN OCEAN LEADER

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Through intensive summer programs, students progressively build the knowledge and skills to build research experience.

In the 8<sup>th</sup> grade program, students learn and understand the basics of the Science Discovery Process.

In the 9<sup>th</sup> grade program, students gain first-hand experience with field research.

In the 10<sup>th</sup> grade program, students follow a single field project through the Science Discovery Process.

In the 11<sup>th</sup> grade program, students translate these skills to a lab setting, gaining new expertise and comfort.

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# OCEAN LEADER INTRO TO RESEARCH

A 12-day intensive program designed for students to experience hands-on science research in Bahía de los Angeles Mexico.

In this program, students will:

- Have daily field research experiences.
- Swim and snorkel.
- Writing and reflection.
- Have daily fitness and recreation.





# OUTLINE

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Ocean Discovery & Programs

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**Syllabus**

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# SYLLABUS

Day	Dates Cohort 1	Dates Cohort 2	Field Research	Evening Activity
1	7/19	7/26	<i>Explore &amp; Wonder</i> Program Goals & Field Station Orientation (Land)	Zumba
2	7/20	7/27	<i>Explore &amp; Wonder</i> Explore the Bay (Boat)	Circuit Training
3	7/21	7/28	<i>Investigate</i> Spider & Cactus Survey (Boat) – Cohort 1 Intertidal Monitoring (Land) – Cohort 2	Zumba
4	7/22	7/29	<i>Investigate</i> Fisheries (Boat)	Circuit Training
5	7/23	7/30	<i>Investigate</i> Wetlands (Land)	Zumba
6	7/24	7/31	<i>Analyze</i> Whale Shark Monitoring (Boat)	Circuit Training
7	7/25	8/1	<i>Analyze</i> Intertidal Monitoring (Land) – Cohort 1 Spider & Cactus Survey (Boat) – Cohort 2	<i>Analyze</i> Sea Turtle Monitoring (Land)
8	7/26	8/2	<i>N/A</i> Recover from Sea Turtle Monitoring (Land)	Zumba & Night Snorkel
9	7/27	8/3	<i>Make a Difference</i> Bird Monitoring (Land)	Circuit Training & Night Snorkel
10	7/28	8/4	<i>Celebrate Success!</i> Enjoy a day of beach and boat fun! (Boat)	Zumba & Night Snorkel
11	7/29	8/5	<i>Communicate</i> Museo (Land)	Circuit Training
12	7/30	8/6	<i>Communicate</i> Community Celebration (Land)	Community Celebration!

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# PROGRAM DATES & SCHEDULE

## Group 1: Current 10<sup>th</sup>-11<sup>th</sup> grade Ocean Leaders

- July 18<sup>th</sup>- July 31<sup>st</sup>

## Group 2: Current 9<sup>th</sup> grade Ocean Leaders

- July 25<sup>th</sup>- August 7<sup>th</sup>

### Daily Schedule

6:00am	6:30am	Wake Up
6:30am	7:15am	Community Building
7:15am	12:15pm	Field Research
12:30pm	1:00pm	Lunch
1:05pm	1:45pm	Self-Reflection
1:45pm	2:30pm	Siesta
2:30pm	4:00pm	Salud
4:00pm	6:00pm	Know It! Own It!
6:00pm	6:30pm	Dinner
6:35pm	7:10pm	Servant Leadership
7:15pm	8:25pm	Evening Activity
8:30pm	9:00pm	Sleep Prep
9:00pm		Bed Time



# WAKE UP

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# COMMUNITY BUILDING

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**Overview:** Building a community of support is one of the Tools for Success. This community includes peers, program alumni, mentors, and staff who provide a safety net for burgeoning science leaders to fall back on when challenges arise and a network to access to pursue further opportunities. By offering students a safe, inclusive, and effective community in which they can take risks that no one in their family has done before, they are able to try out what it takes to become a science leader.

**Goals:** Community building is incorporated into all Ocean Leader programs through the below activities:

- Food & Conversation: An informal time to continue expanding their community of support through the shared experience of food and conversation. A daily question is provided.
- Community Building Activity: A structured activity designed to build students' belief that they are a unique individual and a member of the Ocean Discovery family and scientific community.
- Announcements: A time to introduce new members of the community, share the day's agenda, and upcoming opportunities.





# FIELD RESEARCH

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# LUNCH, REFLECTION, SIESTA & SALUD

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# KNOW IT! OWN IT!

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The late afternoon is spent reflecting on what we saw that day in the field, gaining a stronger understanding of the Science Discovery Process, and making sure we can connect what we've learned to previous knowledge.

We learn to take this new knowledge and make it our own by using study skills like flash cards and concept maps.

We also have time to ask an “expert” if we have questions or don't understand something.

# DINNER, CHORES

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## EVENING ACTIVITY & BEDTIME

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In the evening, we experience a series of activities like Zumba, circuit training, and night snorkeling.



# BEDTIME

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**SD Safety Leads**

- Act as the primary safety contacts in SD.
- Monitor trips and coordinate with departure trips to orient and pack vehicles.

**Associate Director (Lindsay)**

**Program Manager (Jo Vance)**

- Manage LI direction and growth.
- Oversee programs and support services so that goals are met.
- Develop and manage LI Budget.
- Direct program evaluation and enhancements.
- Manage the LI WBS and accompanying manuals.
- Establish and oversee program partnerships.
- Daily management of program and communication with Intensive Program Manager.
- Manage LI Staff.
- Secure and prepare programmatic staffing and volunteers.
- Manage Fellows

**Assistant IPM**

- Assist IPM with the program.
- Support with program supplies.
- *Support with community management.*
- Support program manager with daily responsibilities and community celebration.

**Substitute**

- *Substitute for program staff as needed.*

**Writer in Residence\***

- Leads students writing and reflection in the program.

**Safety officer\***

- Provides safety expertise for the program.

**Student Coordinator (Isabel)**

- Identify and secure all students for the program.
- Lead and oversee communication with Ocean Leaders.
- Lead program events.
- Provide support for programs.
- Provide support across Leadership Program and organization.

**Intensive Program Manager (Jo)**

- Manage volunteers (including setup team).
- Manage program staff.
- Manage schedules.
- Facilitate daily program communication (Community Building etc.)
- Attends field trips (as needed).
- Facilitate the self-reflection process.
- Oversee the first 2 days of the program.
- *Acts as the Harbor Master.*
- Manage financials.
- Oversee community celebration.

**2 -3 Team Leads or 1 lead/ team**

- Leads lecture, labs, and field experiences.
- Manage student groups.

**Scientist & Alumni Mentors**

- Mentor and support students in the program.

**Community Manager (Shara)**

- Foster community relationships.
- Coordinate with community to implement program.
- Secure community participation for the Community Celebration.

**Field Station Manager (Anne)**

- Secure field station for the program.
- Foster relationship with field station and staff house contacts.
- Manage technology, program and field supplies.
- Manage setup and breakdown of field station.
- Implement field station orientation for all participants.
- Conduct pre-trip safety meeting.
- Facilitate pack and put away for trip.
- Monitor trips and coordinate with departure trips to orient and pack vehicles.
- Kitchen Management

**Field Station owner (Jose Mercade)**

**Handyman (x)**

**Cook (Alejandrina)**

**Nighttime security (Jorge)**

**Pre and Post Cleaning (Bibi)**

KEY	
LI STAFF	
FT STAFF/ HIGH LEVEL VOLUNTEERS	
VOLUNTEERS	
EXTERNAL	
* = DEPENDENT ON PROGRAM NEED	
<i>Ocean Leader Intro to Research only</i>	
DIRECT REPORT	—————→
TASK SUPPORT & COLLABORATION	- - - - -

# WHAT'S NEXT?

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1. Introductions to the 2022 Intro to Research team
2. Review and Questions from this presentation
3. Logistics
  - Packing List
  - Paperwork
  - Bahia de los Angeles and our field station





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THANK YOU  
LIVE TRAINING: TUESDAY, 6/7 FROM 4:00-5:30 PST