



# Protei

Open Source, Shape Shifting  
Sailing Robots, To Explore  
& Protect The Oceans

Sponsorship Proposal, November 2012  
[sponsor@protei.org](mailto:sponsor@protei.org)



# What is Protei?



Originally developed to clean up the BP oil spill in the Gulf of Mexico, Protei has many other potential applications, from transporting scientific payload, oil spill cleanup, and radioactivity sensing, to studying coral reefs, monitoring fisheries and much more.

*“Someday, this fish boat robot-thing could be surveilling the oceans.”*

*Wired.com, Tim Maly*

**WIRED**



# Newsworthy Ocean Technology

We are developing a sailing robot to study and clean the oceans that is creating waves in global media.

## **Scientific American, David Biello**

*“Hackers Use Open Hardware to Solve Environmental Problems. Open hardware is not just about making fetishes; it’s also about saving the world.”*

## **CNN, Sean Yeaton**

*“Protei is unmanned, autonomous, relatively inexpensive and open hardware (anybody can use, modify and distribute its designs), making it a potentially powerful weapon in the battle to clean up the Gulf of Mexico while preserving the safety of the workers who would otherwise be exposed to the toxic mess. Already Harada imagines other uses for the sailboat drone, like oceanography and surveillance.”*

## **The Guardian, Damian Carrington**

*“For big problems, you need big ideas, even if they seem crazily ambitious. And with the anniversary of the BP Deepwater Horizon oil spill on 20 April, a swarm of robot oil-slick clearing boats is a timely big idea. So, Protei seems to me to be useful, simple and backed by smart people. Crucially, by virtue of being open source, the profit motive can’t compromise the search for the best technical solution.”*

SCIENTIFIC  
AMERICAN™



theguardian

Make:  
technology on your time

TED

IDEAS WORTH SPREADING

FAST COMPANY

INNOVATION  
NEWS DAILY

NewScientist

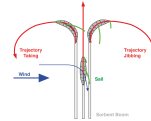


# Innovation for Environment

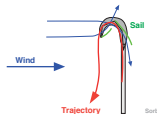
## Simple & Robust Design

- Shape-shifting hull
- No centerboard or rudder
- Entire hull changes shape for wind-powered propulsion. Paradigm shift in the world of sailing.
- Unprecedented maneuverability, stability and pulling power

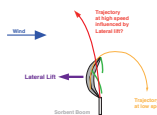
Superior maneuverability.



Reduced radius of tacking and jibing. Minimized loss of pulling power in the turn.



Greater dynamic stability at low speed. Lateral lift at high speed.



No centerboard and no rudder for less resistance and turbulences.



Flexible hull absorbs environmental noise (wave) for improved forward motion.





# Accelerated Evolution of Sailing Technology

## Fast, Economic, Open

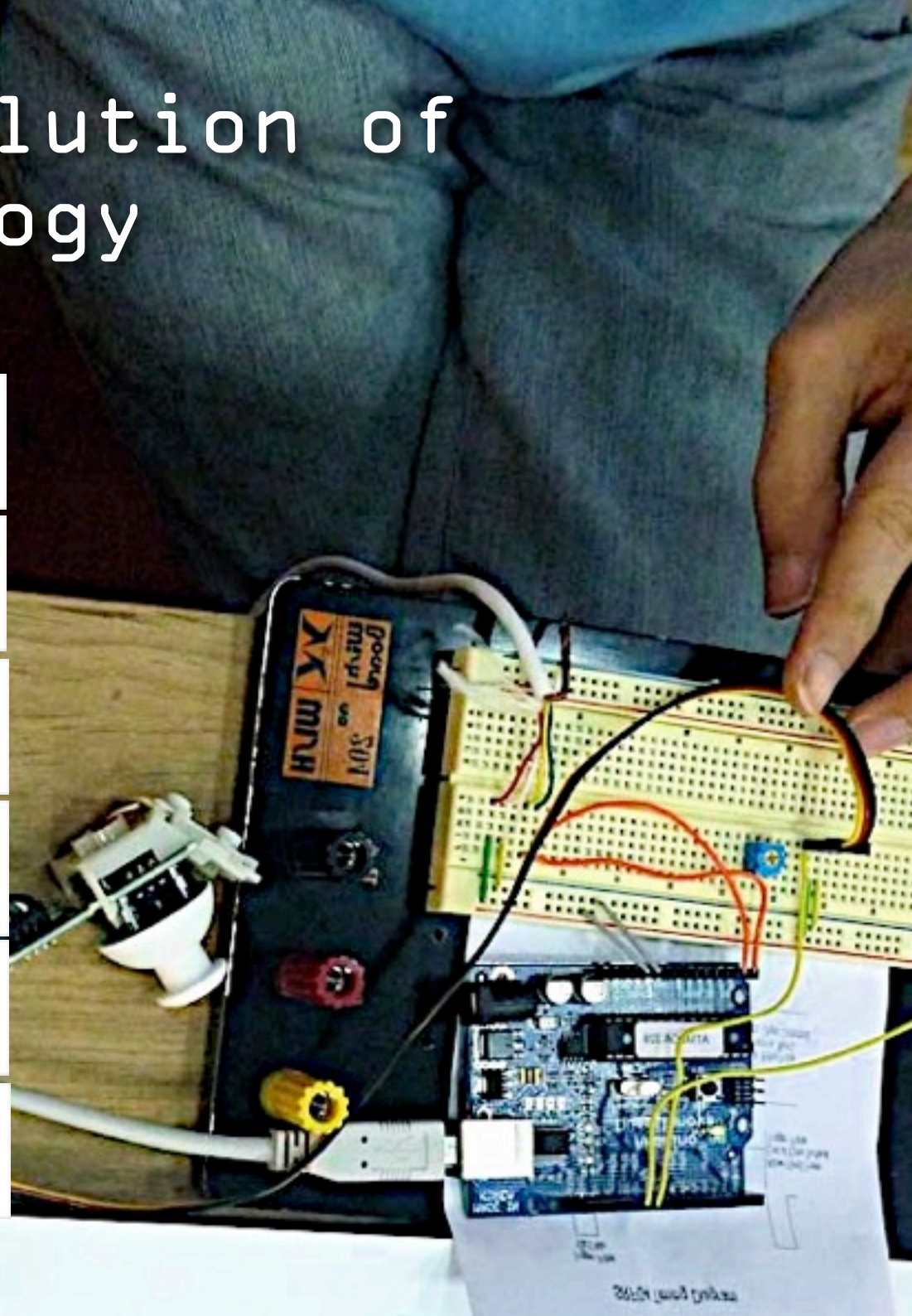
- New family in ocean robotics
- Open Hardware innovation driven by global collaboration
- Fast prototyping cycles
- Bringing together art, design, science, technology
- Shared Intellectual property
- Easily adaptable to needs and resources (appropriate technology)

Everybody invited to:

- Use
- Modify
- Distribute

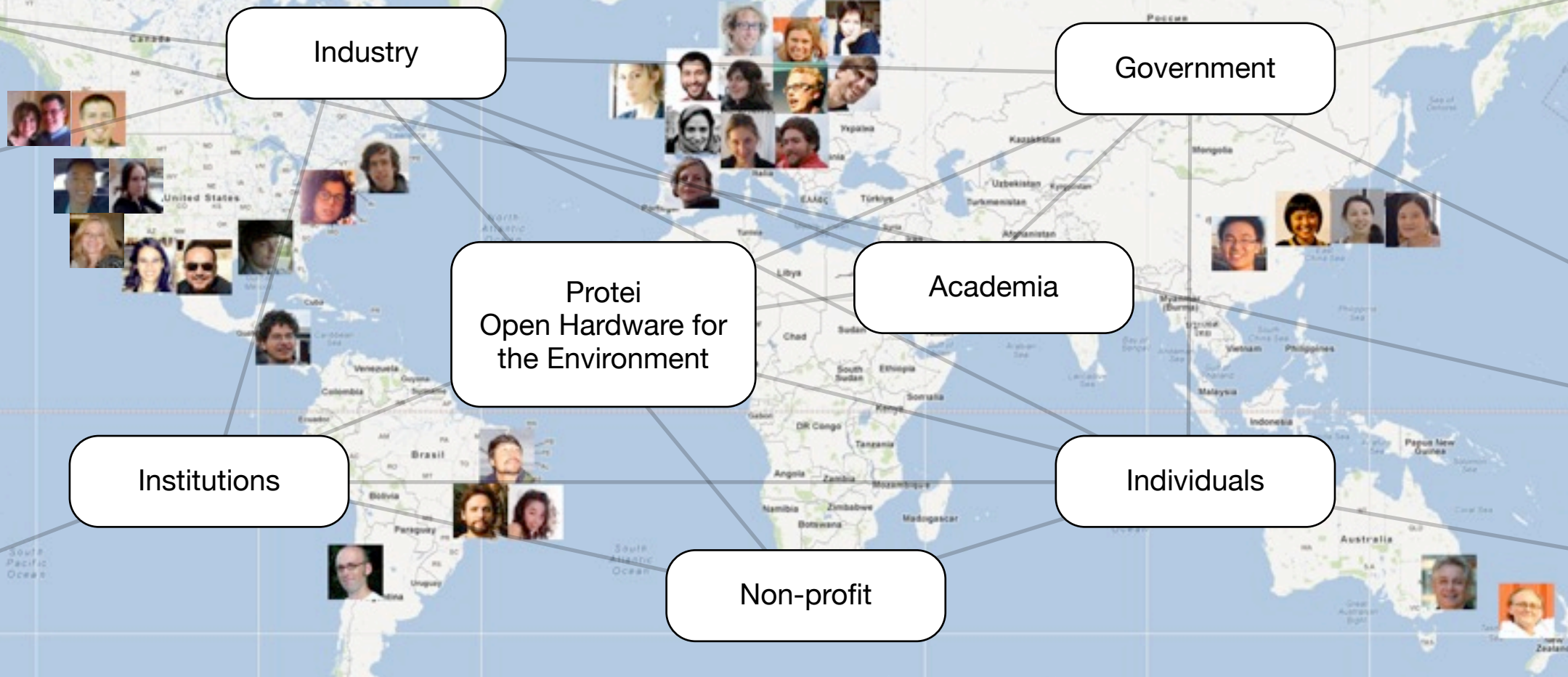
In exchange we require to

- Credit "Protei"
- Contribute to the community on-line





# Global Network of Innovation



Protei is developed by an international team of makers, designers, engineers, scientists, sailors as an Open Hardware technology for the ocean. Protei Inc is a C-Corp based in New York USA with many local branches. Because of our team distribution, we can guarantee global exposure in several languages to relevant targets.



# The Protei Team



**Cesar Harada**, Protei Founder & CEO | [Cesar.Harada@Protei.org](mailto:Cesar.Harada@Protei.org)  
French-Japanese Inventor, entrepreneur & Environmentalist.  
Former MIT project project leader, TED Senior Fellow.

**Gabriella Levine**, Protei COO | [Gabriella.Levine@Protei.org](mailto:Gabriella.Levine@Protei.org)  
American Technologist and artist, Master ITP NY.



# Range of Applications



## Advancing Research & Ocean Cleanup

- Oil spills sensing and cleanup
- Plastic debris sensing and cleanup
- Radioactivity sensing
- Fishery monitoring
- Coral reefs mapping
- Natural reserves surveillance
- Algae blooms studies
- Safety at sea
- General oceanography
- Astronomy
- Climate studies
- Relay surface data relay to underwater vehicles ...



# Who will see your brand?

CHANNY  
MODEL CLUB

- Join a culture of open innovation
- Increase your international brand visibility
- Empower environmental mitigation

## Who will use Protei?

Kids, Hobbyists

Governments

Hackers, Activists

Scientists

Teachers

Professionals

Researchers

Engineers

Designers

## Where will Protei be used?

At sea by marine laboratories

Universities

Corporate research

Operated by coastal residents

Classrooms

Environmental activists

In large lakes by enthusiasts

Hackerspaces

Roboticists, Sailors

## How many spectators does Protei expect?

3 million minimum on TV Web and radio. Hundreds of thousands of visitors in person. Global exposure on mainstream and specialized media.

## Cost of 1 meter Protei to manufacture ?

\$250 for a basic Protei that can be upgraded to carry scientific equipment.

rotei  
Source: Sailing Channel



# Protei is Looking to Expand



We have about 30 volunteers operating in 10+ countries and ~10 paid staff.

Protei currently comprises 10+ generations of prototypes, over 50+ active members, countless contributors and soon-to-be users.

We are looking to expand staff and facilities in San Francisco, London, Rotterdam, Berlin, Oslo and Asia.



# Big Opportunity for Your Brand

By sponsoring this project, your brand will reach millions of people around the world through our extensive media coverage, exhibitions, workshops, products, publications and more.

**Fast company**, Morgan Clendaniel

“While things in the ocean move downwind, the genius of Protei's design is that it can tack into the wind without losing power.”

**New Scientist**, Jacob Aron

“...the first robotic sailors to spend long periods at sea may come from the Protei project, which aims to build autonomous craft for cleaning up oil spills...a unique articulated design.”

**Huffington Post**

“It's an elegant idea...Harada is showing a new way all of us can take responsibility for risks.”

FASTCOMPANY

NewScientist

THE  
HUFFINGTON  
POST

GIZMODO

@treehugger

VOGUE

VICE Instructables

Zeilon HACK & DRV

GOOD

NEXT NATURE DIY DRONES



# Protei Next Steps

## Objectives of 2013 \_ activities and dates subject to changes

- **Communication** : Events, exhibitions, presentations, public events. Reach 4 Million+ offline and online.
- **Product** : Make a small-scale production of 1m Protei to put in many hands. Produce at least a 100 units.
- **Community** : build and a strong and popular website. Develop the interface to control a fleet of Protei through the web-browser, so anyone can control Protei through their laptop, tablet or mobile device.
- **Technology** : Make Protei robust, affordable, easy to maneuver for everyone.
- **Operation** : Test Protei for initial environmental sensing. Test general oceanography, underwater imagery, spectrography, radioactivity, oil traces, water quality etc.

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Communication</b>			Unreasonable at Sea					Documentary				Publication		
<b>Product</b>	Protei_X optimization for manufacturing							Protei_X Manufacture				Protei_XI Manufacture		
<b>Research</b>	Protei_X extensive testing							Protei_XI				Protei_XII		
<b>Community</b>	Website Dev		Crowd-sourcing research				Support local branches				Decentralize manufacture			
<b>Operations</b>			Pacific, Indian, Atlantic Ocean				Japan (radioactivity), Brazil (coral), USA (oil, fisheries)...							

Protei research departments are Physics, Mechanical, Material and Electric Engineering, Artificial Intelligence, Web and mobile development.



# Become a Sponsor of Ocean Innovation

## Protei Sponsorship Opportunities

We offer 6 limited global sponsorship “seats” to share media exposure of Protei from January 2013 through December 2013. We will use the sponsorship budget to contribute to the research, development, manufacturing, distribution and scientific research of Protei.

## Three levels of sponsor engagement

<b>1 Visionary</b>	<b>€500K +</b>
<b>2 Innovators</b>	<b>€250K - €499K</b>
<b>3 Pioneers</b>	<b>€25K - €249K</b>

## Key Dates

Nov, Dec 2012:  
> Sponsor Outreach

Dec 14th 2012:  
> All potential sponsors meet and finalize agreements

Jan 2013 - Dec 2013  
> Sponsorship period

## Visibility

Visionary		
Innovator	Innovator	
Pioneer	Pioneer	Pioneer



# Communication we share with you

## **Prototype**

All the prototypes produced by Protei Inc in 2013 could have your visuals on our sails and/or hulls. Our prototypes have a hard life on the field and on the road around the world for expos and demos.

## **Expeditions & Field Work**

Protei was inspired by the BP Oil Spill but we plan to measure radioactivity in Fukushima, measure plastic debris in the Pacific, map coral reefs in Brazil and more, all well documented and media-covered....

## **Products**

So far we've only produced prototypes one by one. In 2013 we are starting to produce multiple small units (approx. 1m) and set up a manufacturing chain. Our goal for 2013 is a hundred units. More coming.

## **Off-line and On-line communications**

- Website x Social Media : Protei has a powerful presence on the web and social media.
- Video : We produce dozen of video each year.
- Print : 100p handbook, simple handouts.
- Merchandise : Uniforms, caps, mugs...

## **Exhibitions, Presentations, Workshops & Events**

Since 2010 Protei has toured the world many times, won several prizes (VIDA Awards, Savannah Ocean Exchange), was exhibited in prestigious venues, presented on many TED and other stages, introduced through workshops to a wide audience.

## **In your branding, associating our images.**

You are invited to use Protei's media in your company communication to enrich your brand outside, and inside your company to infuse Protei's spirit of openness, exploration, innovation, active concern for the environment and collaboration.



# Sponsor Options & Benefits

SPONSORS OPTIONS AND BENEFITS	VISIONARY: €500K+	INNOVATOR: €250K-€499K	PIONEER: €25K-€249K
<b>Prototypes, Expeditions</b>			
Logo on sail	Large	Medium	
Complimentary boat	✓	✓	
Logo in video	Large	Medium	Small
<b>Products</b>			
Logo on Sail	✓		
<b>Website</b>			
Logo on front page	✓		
Logo on sponsor page	Large	Medium	Small
Logo provided for your website	✓	✓	✓
<b>Exhibits &amp; Symposiums</b>			
Logo during exhibition	✓		
Logo during demo	✓	✓	
Logo on banner & signs	✓	✓	✓
<b>Promotional Materials &amp; Apparel</b>			
Uniforms, T-shirts, publications, handouts.	✓	✓	
Links	✓	✓	✓
<b>PR &amp; Marketing &amp; Social Media</b>			
Joint press release	✓		
Mentioned in press release	✓	✓	
Personal quote provided for your PR	✓	✓	✓
Column in newsletter	✓		
Article in newsletter	✓	✓	
Mention in newsletter	✓	✓	✓
Logo on social media channels	✓	✓	
Mention in social media channels	✓	✓	✓
Dedicated forum or blog	✓		
Video placement	Large	Medium	Small
<b>Workshop &amp; Consulting</b>	3 Days	2 days	1 day
<b>Challenge</b>	✓		



# Visionary Sponsorship Overview

A photograph of a person in the water pulling a white sailboat on the ocean. The person is shirtless and wearing dark shorts, standing in the water and holding a rope attached to the sailboat. The sailboat is white and has a large, triangular sail. The water is a deep blue, and the sky is a lighter blue with some clouds. The overall scene is serene and suggests a focus on environmental or sustainable technology.

As a Visionary Sponsor you will benefit with :

- Prominent branding on the **prototypes** and **products, website**, at **events** and with our **social media** channels
- Inclusion in **promotional material** and **publications** and **handouts**.
- Powerful global **PR** and **media** exposure (Web, TV, radio, general and specialized printed press).
- Active involvement in our **web community** and **educational outreach**.
- Input from community for **ideation** and **projects** in your company through **consultancy** and **workshops** by Protei staff.
- Vehicle for **market research**.
- We design and perform together a **challenge** that is a specific application of Protei, in the lab or in the field addressing environmental issues.



# Visionary Sponsorship €500K+

SPONSORS OPTIONS AND BENEFITS	
<b>Prototypes, Expeditions</b>	
Logo on sail	Large
Complimentary boat	✓
Logo in video	Large
<b>Products</b>	
Logo on Sail	✓
<b>Website</b>	
Logo on front page	✓
Logo on sponsor page	Large
Logo provided for your website	✓
<b>Exhibits &amp; Symposiums</b>	
Logo during exhibition	✓
Logo during demo	✓
Logo on banner & signs	✓
<b>Promotional Materials &amp; Apparel</b>	
Uniforms, T-shirts, publications, handouts.	✓
Links	✓
<b>PR &amp; Marketing &amp; Social Media</b>	
Joint press release	✓
Mentioned in press release	✓
Personal quote provided for your PR	✓
Column in newsletter	✓
Article in newsletter	✓
Mention in newsletter	✓
Logo on social media channels	✓
Mention in social media channels	✓
Dedicated forum or blog	✓
Video placement	Large
<b>Workshop &amp; Consulting</b>	3 Days
<b>Challenge</b>	✓



# Innovator Sponsorship Overview



As an Innovator Sponsor you will benefit with:

- Branding on the **Prototype** sail, presence on the **website**, participation to **events** and our **social media** channels.
- Inclusion in our **promotional material, publications** and **handouts**.
- Global PR and Media Exposure (web, TV, radio, general and specialized printed press).
- Input from community for **ideation** and **projects** in your company through **consultancy** and **workshops** by Protei staff.
- Vehicle for **market research**.



# Innovator Sponsorship €250K-€499K

SPONSORS OPTIONS AND BENEFITS	
<b>Prototypes, Expeditions</b>	
Logo on sail	Medium
Complimentary boat	✓
Logo in video	Medium
<b>Website</b>	
Logo on sponsor page	Medium
Logo provided for your website	✓
<b>Exhibits &amp; Symposiums</b>	
Logo during demo	✓
Logo on banner & signs	✓
<b>Promotional Materials &amp; Apparel</b>	
Uniforms, T-shirts, publications, handouts.	✓
Links	✓
<b>PR &amp; Marketing &amp; Social Media</b>	
Joint press release	
Mentioned in press release	✓
Personal quote provided for your PR	✓
Article in newsletter	✓
Mention in newsletter	✓
Logo on social media channels	✓
Mention in social media channels	✓
Video placement	Medium
<b>Workshop &amp; Consulting</b>	2 days



# Pioneer Sponsorship Overview



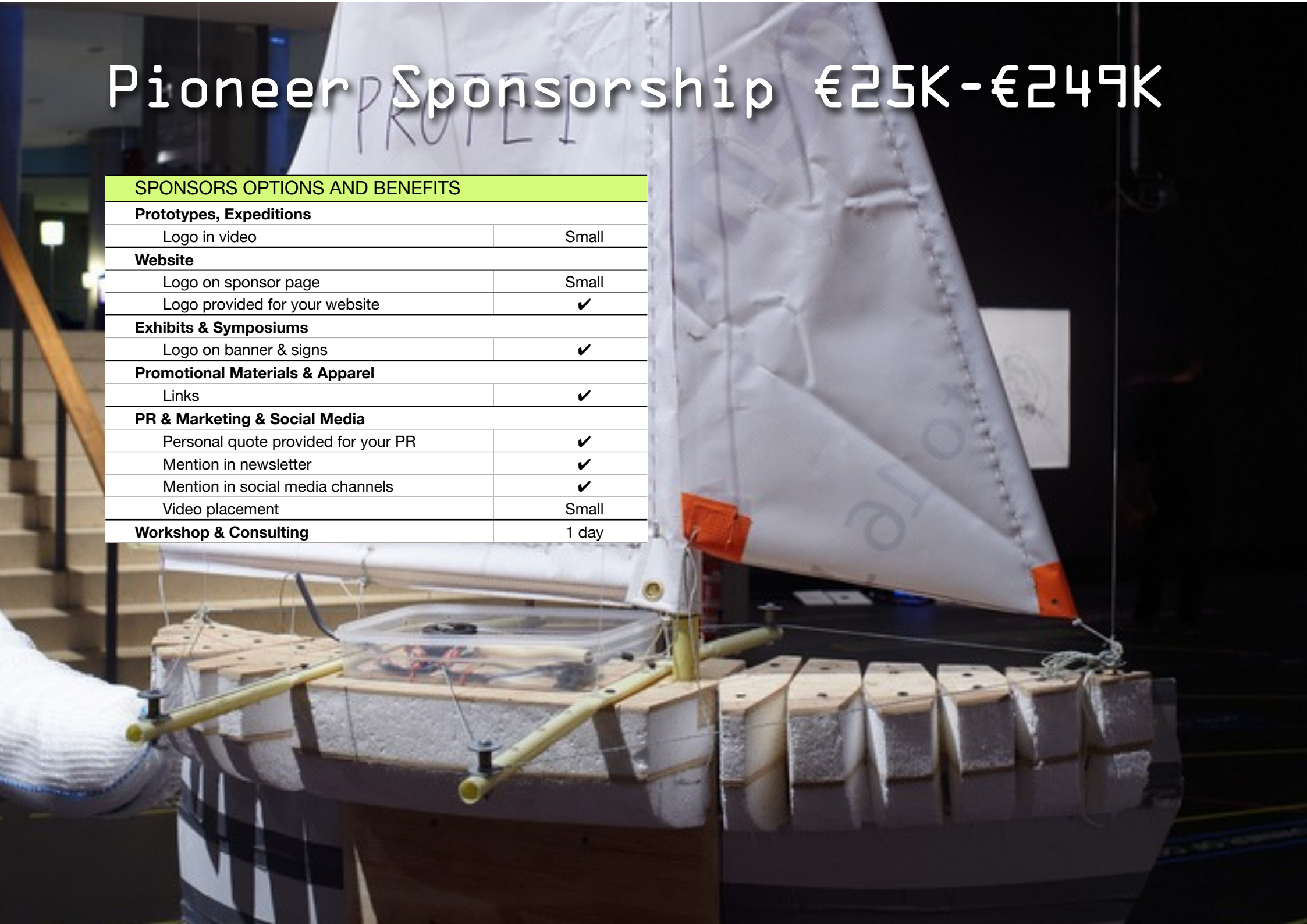
As an Pioneer Sponsor you will benefit with:

- Branding on the **prototype videos**
- Inclusion in our **sponsor page**
- Inclusion in **publications** and **handouts**.
- Global PR and Media Exposure (web, TV, radio, general and specialized printed press).
- Input from community for **ideation** and **projects** in your company through **consultancy** and **workshops** by Protei staff.
- Vehicle for **market research**.



# Pioneer Sponsorship €25K-€249K

SPONSORS OPTIONS AND BENEFITS	
<b>Prototypes, Expeditions</b>	
Logo in video	Small
<b>Website</b>	
Logo on sponsor page	Small
Logo provided for your website	✓
<b>Exhibits &amp; Symposiums</b>	
Logo on banner & signs	✓
<b>Promotional Materials &amp; Apparel</b>	
Links	✓
<b>PR &amp; Marketing &amp; Social Media</b>	
Personal quote provided for your PR	✓
Mention in newsletter	✓
Mention in social media channels	✓
Video placement	Small
<b>Workshop &amp; Consulting</b>	1 day





# Intended Use of Sponsor Funds

We're seeking funding to set up manufacturing as we transition from research prototype to product. Funds would immediately contribute towards :

- Prototype fabrication & testing (Research)
- Manufacturing, tools, materials, space (Product)
- Web Development & services (Community website)
- Administration, legal matters, accounting, taxes.
- Marketing and promotion of the project.

Further funding would allow us to :

- Develop a more comprehensive website, in environmental sciences in particular for education and outreach. Support a few PhD researchers.
- Organize events and support local groups.
- Perform non-core improvements to projects such as advanced documentation, multi-language website and real-time environmental data gathering and analysis.

We are in the process of separating research and manufacturing in 2 different entities. Research will be done in OpenH2O non-profit on one side, and on the other side Protei Inc (tech startup) would mainly focus on manufacturing. The openness and transparency of research are guaranteed by Open-H2O while Protei remains a very lean and competitive manufacturer.

Your sponsorship will allow Protei inc to meet these expenses as well as expand our capability to maintain our leadership in ocean research as an open source community.





# Large Public Events

- 2010**
- Tokyo Midtown DESIGN TOUCH, Japan. (3000+ visitors)
  - Datapolis, Prag, Czeck Republic.
  - INDAAF "Blur", Incheon, Korea. (5000+ visitors)  
Weather Tunnel, International Triennial of Media Art, Museum of Contemporary Art,
  - Beijin, China (3000 people/day for a month)

- 2011**
- Cultura Digital Brasil, Rio,Brasil.
  - NetFab, Ensenada, Mexico.  
Wereld van Witte de With Festival, Rotterdam, Netherlands
  - (4000 people/day for 3 days)
  - Open hardware summit 2011, New York, USA (1500 audience)
  - Maker Faire NYC, USA
  - Maker Faire Shenzhen & Beijing, China.
  - ISEA 2011, Istambul, Turkey.  
VIDA Awards for Artificial Intelligence and bio-mimicry,
  - Fundacion Telefonía, Madrid, Spain.

- 2012**
- Strata Big Data Conference, New York, USA.
  - Science Gallery, Trinity College, Dublin, Ireland.  
V2\_ Institute for the Unstable Media, Summer Sessions,
  - Rotterdam, NL ,
  - Eyebeam Surface Tension Exhibition, NYC, USA.
  - ARS Electronica "Hybrid Art" Honorary Mention, Linz, Austria.  
TEDxSummit: 1700 attendants, youtube views 20,000,
  - ted.com: 160,000+ views, Doha, Qatar.
  - Dutch Electronic Art Festival Rotterdam,Amsterdam, NL
  - International Conference on Information Technology, Istanbul
  - CIGAC, Rio, Brasil
  - Aug 11 TEDxItaewon, Seoul, Korea. (1500 attendees)
  - Sept 17, 18 PICNIC Amsterdam, NL
  - Sept 18 International Sailing Robotics Conference Cardiff, UK
  - Sept 20 Savannah Ocean Exchange, USA.
  - TEDxItaewon Seoul, Korea. (1200 person theater)
  - Oct 6 TEDxParis, France. (1500+ attendees expected).
  - Oct, Trondheim Electronic Arts Center, Norway



- NEMO Science Museum, Transnatural festival, Amsterdam.
  - Dutch Design Week, Eindhoven NL (150'000 visitors)
  - Nov 11-16 BBC Horizon Filming, Swindon, UK
- 2013**
- BBC Horizon Documentary, 2.5 Million views
  - Jan 9, San Diego USA
  - Jan 15, Hilo Hawaii, USA
  - Jan 27, Yokohama, Japan
  - Jan 30, Kobe, Japan
  - Feb 3, Shanghai, China
  - Feb 7, Hong Kong
  - Feb 12, Ho Chi Minh, Vietnam
  - Feb 20, Singapore
  - Feb 25, Rangoon, Burma
  - March 6, Cochin, India
  - March 18, Port Louis, Mauritius
  - March 25, Cape Town, South Africa
  - April 6, Accra, Ghana
  - April 18, Casablanca, Morocco
  - April 25, Barcelona Spain
  - More events to come ...



The logo for BBC Horizon, featuring the letters 'B', 'B', and 'C' in white on a black background, followed by the word 'Horizon' in white on a blue background with a bokeh effect.

# Horizon

Series exploring topical scientific issues and their effects for the future



Protei is being featured on BBC Horizon , the longest and most respected scientific TV program across the globe.

Graham Strong is creating a documentary focusing on scientific and technological innovations shaping tomorrow's world.

Our segment has been filmed in London Oct 31st where we explained the key technologies integrated into Protei and the concept of radical openness as a driver for innovation.

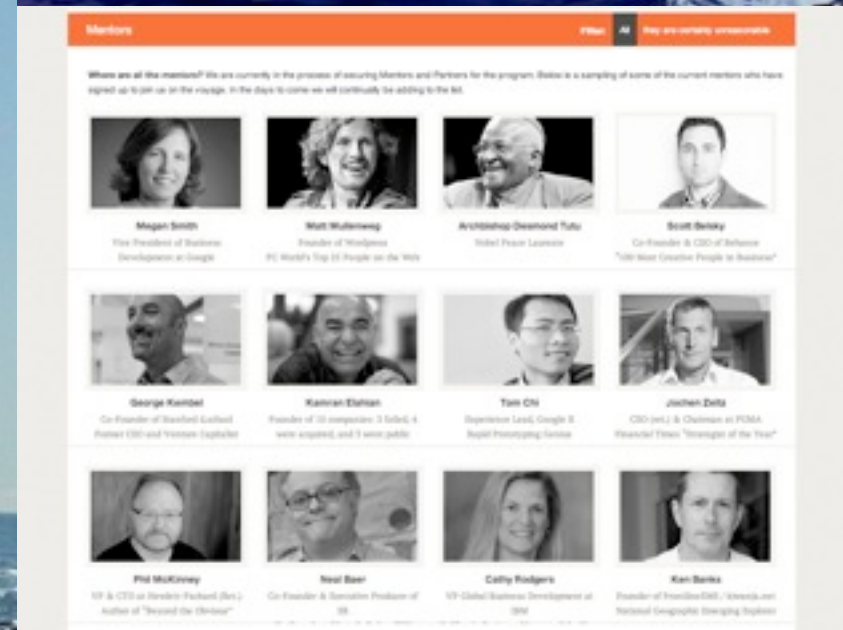
Millions will see Protei on TV in January / February 2013. BBC2 reaches ~2.5 million people prime time. In addition of this, if the film gets bought by Discovery International, tens of millions more will be able to learn about our work and your brand.





Protei is selected to participate in 'Unreasonable at Sea'

- Mentor driven accelerator for technology ventures solving our world's greatest social and environmental challenges
  - Protei is one of 10 ventures chosen (from 100s who applied) for this highly prestigious program
  - 20 world-class entrepreneurs and innovators mentors participating
  - Set to sail for 100+ days January 2013 visiting 14 countries exploring emerging markets.
  - Protei team will be conducting ocean research about plastic in the ocean, radioactivity and more.
  - A full feature documentary is in preparation
- We will present Protei to a specialist audience and demonstrate Protei publicly Protei in the waters of every port we will dock.





# Our Supporters

## Academic Institutions

Stanford University (USA)

MIT (USA)

ITP (USA)

T/u Eindhoven (NL)

Syddansk University (DK)

Hongik University (KR)

Goldsmiths University London (UK)

Southampton University (UK)

CIGAC (Universidade Federale of Campina Grande) (BR)

Universidade Federale of Rio de Janeiro (BR)

## Partners

Open\_Sailing ([www.opensailing.net](http://www.opensailing.net))

V2\_ Institute for Unstable Media ([v2.nl](http://v2.nl))

DNV ([www.dnv.com](http://www.dnv.com))

Amorphica, Mexico ([amorphica.com](http://amorphica.com))

RandomWalks, Korea ([randomwalks.org](http://randomwalks.org))

Hofman and Zonen ([florentijnhofman.nl](http://florentijnhofman.nl))

TED ([ted.com](http://ted.com))

TEDxMidAtlantic ([tedxmidatlantic.com](http://tedxmidatlantic.com))

Kaag Watersport Academy ([dekaag.nl](http://dekaag.nl))

Creole.com ([creole.com](http://creole.com))

Goldsmiths University, UK ([gold.ac.uk](http://gold.ac.uk))

MIT Public Service Center ([web.mit.edu/mitpsc/](http://web.mit.edu/mitpsc/))

HTS Consulting ([htsconsulting.com](http://htsconsulting.com))

Louisiana Bucket Brigade ([labucketbrigade.org](http://labucketbrigade.org))

Suzette Toledano Becker ([suzettebecker.com](http://suzettebecker.com))

## Supporters

300+ Kickstarter backers

Florentijn Hofman

KimEngbers

Marnix de Nijs

Diana Wieser

Dana Braff

Jasper van Maede

Jean-Gregoire Kherian

Earl Scionneaux III

Jessica Rohloff

Nae Morita

Nick Kaufmann

Michel Van Dartel





Let's  
Explore  
and  
Protect  
the  
Oceans  
together



Protei

Please contact us if you have questions about Protei  
or our sponsorship opportunity : [sponsor@protei.org](mailto:sponsor@protei.org)