

JOINT DEVELOPMENT AGREEMENT

This Joint Development Agreement ("Agreement"), effective as of January 23, 2018 ("Effective Date"), is by and between Monterey Bay Aquarium Research Institute, a California nonprofit public benefit corporation with its principal place of business located at 7700 Sandholdt Rd, Moss Landing, CA 95039 ("MBARI"), and Woods Hole Oceanographic Institution, a private, nonprofit Massachusetts institution with its principal place of business located at 266 Woods Hole Road, Woods Hole, Massachusetts, 02453 ("WHOI").

I. RECITALS

WHEREAS, MBARI has developed and owns all rights in a long-range autonomous underwater vehicle (LRAUV) system, also known as the Tethys class of AUV (the "Tethys System") and WHOI has expertise as well with respect to underwater exploration;

WHEREAS, WHOI has developed and owns all rights in a concept for an AUV system that could work for a long duration in the mesopelagic zone of the ocean, on low power, monitoring and following slow-moving life in that zone (the "Mesobot" vehicle);

WHEREAS, WHOI has received project funding from the National Science Foundation in connection with developing a Mesobot vehicle capable of detecting fine-scale oceanographic features, tracking and sampling them and other slow-moving midwater targets (the "Mesobot Project");

WHEREAS, the Parties have a mutual desire to develop the Mesobot vehicle and related Technology to help to make ocean exploration less expensive and more available to researchers and explorers globally;

WHEREAS, WHOI and MBARI desire to collaborate in furtherance of the Mesobot Project to use technologies developed for the Tethys System to improve the Mesobot capabilities, as set forth in the attached Statement of Work;
and

WHEREAS, the Parties will share rights and obligations with respect to certain Technology developed hereunder as set forth below;

NOW, THEREFORE, for good, valuable and sufficient consideration that each acknowledges receiving, MBARI and WHOI hereby agree as follows:

II. AGREEMENT

1. DEFINITIONS

Unless otherwise defined herein, all capitalized terms used in the Agreement shall have the meanings set forth in this Section 1:

- 1.1. "Affiliate" means any corporation, company, partnership or other legal entity, which at any time directly or indirectly Controls, is Controlled by or is under the common Control with a Party, but only for so long as such Control exists.
- 1.2. "Background Technology" of a Party means all Intellectual Property Rights and Technology that (a) such Party uses or provides in connection with the activities to be performed under this Agreement, (b) is either owned by such Party or licensed to such Party, and (c) either (i) is in existence on or prior to the Effective Date or (ii) comes into existence after the Effective Date through activity conducted by or on behalf of such Party (x) independent of activity conducted under this Agreement and (y) without use or reference to the Background Technology of the other Party.
- 1.3. "Control", and its correlative forms, for the purposes hereof means the ownership of fifty percent (50%) or more of the issued share capital or the legal power to direct or cause the direction of the general management and policies of the entity in question.
- 1.4. "Foreground Technology" of a Party means all Intellectual Property Rights and Technology conceived, created, developed, reduced to practice, fixed, or made solely by such Party (including for each Party its respective Affiliates, employees or agents) in connection with performing activities under the SOW.
- 1.5. "Intellectual Property Rights" means all embodiments of all present and future right, title and interest in and to all proprietary rights of every kind and nature in (a) patents, patent applications, and other industrial property rights, (b) copyrights, mask work rights, and other rights associated with works of authorship, (c) trade secret rights, (d) indicia of source, trademarks, trade names, domain names, and trade dress and similar rights, and all goodwill therein, (e) Technology, and (f) privacy, publicity, moral rights, and any other intellectual, industrial and proprietary rights of any kind or nature, in each case under the laws of any jurisdiction in the universe, including rights under and with respect to all applications, registrations, extensions, renewals, continuations, continuations-in-part, combinations, divisions, and reissues of the foregoing.
- 1.6. "Joint Technology" means all Intellectual Property Rights and Technology conceived, created, developed, reduced to practice, fixed, or made jointly by both Parties (including for each Party its respective Affiliates, employees or agents) in connection with performing activities under the SOW.
- 1.7. "Party" means either WHOI or MBARI (and "Parties" means WHOI and MBARI).
- 1.8. "Statement of Work" or "SOW" means any statement of work that (a) references this Agreement, (b) is signed by authorized representatives of both Parties and (c)

sets forth, at a minimum, the services to be performed by the Parties. The initial SOW is attached as Exhibit A hereto.

- 1.9. “Technology” means algorithms, designs, discoveries, drawings, formula, know-how, ideas, inventions (whether patentable or not), works, plans, machines, methods, processes, software, firmware, source code, application program interfaces (“apis”), data, databases, techniques, tools, and other technology and information, including all tangible embodiments of any of the foregoing.

2. DEVELOPMENT

- 2.1. Scope of Development. The Parties agree to use reasonable efforts to undertake the development activities expressly set forth in each SOW, in each case in accordance with and on the schedule specified in such SOW.
- 2.2. Costs. Except as may be otherwise set forth in this Agreement and the accompanying SOW, each Party will be solely responsible for bearing any expenses it incurs in connection with its development activities and any other activities supporting or participating in the development effort.

3. PROJECT MANAGEMENT

- 3.1. Senior Scientist Dana Yoerger of Applied Ocean Physics & Engineering at WHOI, and Brett Hobson of MBARI will be the initial “Project Coordinators” under this Agreement. The Project Coordinators will be responsible for day-to-day communications between the Parties regarding the subject matter of this Agreement. Either Party may change its Project Coordinator at any time and from time to time by giving the other Party written notice.
- 3.2. Each Project Coordinator will be responsible for (a) monitoring the schedules and progress of work pursuant to this Agreement, and (b) receiving and submitting requests for information and/or assistance.
- 3.3. The Project Coordinators may mutually alter, clarify or extend work activities to be conducted under the Statement of Work for this Agreement as is reasonable to accomplish this project. For clarity, neither Party’s Project Coordinator may amend, alter, clarify or extend any of the terms or conditions of the Agreement, (other than to alter, clarify or extend specific work activities under the Statement of Work itself). The Project Coordinators have no authority to amend any substantive provision of the Agreement (including any substantive provision in the Statement of Work).
- 3.4. If the Project Coordinators disagree on any issue, and cannot resolve it within thirty (30) days, either Project Coordinator may submit the problem to the Executive Steering Committee (defined in Section 3.5 below).
- 3.5. The “Executive Steering Committee” consists of the General Counsel from WHOI, who is currently Christopher C. Land, and the Director of Engineering Development of MBARI, who is currently Doug Au, and the Project

Coordinators. The Executive Steering Committee shall meet periodically to resolve any major issues raised by the Project Coordinators. With the exception of equitable relief, neither Party will institute legal proceedings regarding a dispute until it has exercised good faith reasonable efforts to achieve resolution through the foregoing procedure.

4. OWNERSHIP OF INTELLECTUAL PROPERTY RIGHTS

- 4.1. Background and Foreground Technology. As between the Parties, each Party will retain exclusive right, title and interest in its Background Technology and Foreground Technology (including all Intellectual Property Rights therein). Except as expressly provided in this Agreement, neither Party has, by virtue of this Agreement or otherwise, any right, title, or interest to or in the other Party's Background Technology or Foreground Technology.
- 4.2. Joint Technology. The Parties will jointly own, and have undivided right, title and interest to all Intellectual Property Rights in any Joint Technology ("Joint IP"), subject to the terms and conditions of this Agreement (including but not limited to, Sections 5, 6, and 7.5 below). Each Party may exercise its ownership rights in and to the Joint IP and Joint Technology, including the right to license and sublicense or otherwise to exploit, transfer or encumber its ownership interest, without an accounting or obligation to, or consent required from, the other Party (but subject to the terms of Section 7.5 below). Each Party hereby assigns and agrees to assign, on behalf of itself, its Affiliates and their respective employees and other agents, to the other Party a joint and undivided interest in and to all Joint IP and Joint Technology. Inventorship for patentable Joint Technology shall be determined in accordance with the patent laws of the United States (Title 35, United States Code). Each Party acknowledges and agrees that, except as expressly provided in this Agreement, no license is granted to it hereunder in any Intellectual Property Rights, Background Technology or Foreground Technology of the other Party that may be necessary to use or otherwise exploit any Joint IP or Joint Technology, and that the other Party in its sole discretion may grant or decline to grant any licenses or rights in its Intellectual Property Rights, Background Technology or Foreground Technology.
- 4.3. Further Assurances. Each Party agrees to take such actions and execute such documents as are requested by the other Party to effect the assignment of rights set forth in this Section 4, including providing documents in such recordable form as is deemed required or necessary. Each Party will have executed valid written agreements with each of its Affiliates, employees and subcontractors involved in the performance of this Agreement which contain provisions sufficient to effect the transfer of a joint interest in any Joint Technology, including all Intellectual Property Rights therein, developed by such Affiliates, employees and other agents as contemplated by this Section 4.
- 4.4. Government Rights. Each Party acknowledges that the U.S. federal government retains a royalty-free, non-exclusive, non-transferable license to practice any

government-funded invention claimed in any patent rights in Joint Technology as set forth in 35 U.S.C. §§ 201-211, and the regulations promulgated thereunder, as amended, or any successor statutes or regulations.

5. PROSECUTION AND MAINTENANCE OF INTELLECTUAL PROPERTY

- 5.1. WHOI's Rights. WHOI, by counsel it so chooses, has the first right, but not the obligation, to file, prosecute and maintain with the U.S. Patent and Trademark Office or any similar office or agency, at its sole expense, any application for patent protection of an invention within Joint IP. WHOI will cause its intellectual property counsel to provide MBARI with a list of the countries in which it has filed and/or intends to file applications. Such list shall be provided to MBARI at least sixty (60) days prior to the expiration of the corresponding United States priority date to allow MBARI to reasonably suggest that additional countries be added to the list or that one or more countries be deleted from the list. WHOI agrees to file applications, at its sole cost and expense, in the additional countries reasonably requested by MBARI unless it otherwise notifies MBARI under this Section 5.
- 5.2. MBARI's Rights. If WHOI decides not to pursue patent protection as provided in Section 5.1 above with respect to any particular invention or country, then, reasonably in advance of any deadline for filing and/or maintenance of the applicable patent or patent application in Joint IP, WHOI will give notice to MBARI of its determination not to file such an application for and/or cease prosecution and/or maintenance of such patent or patent application on a country-by-country basis and MBARI shall have the right, in its sole discretion, to file an application for, and/or continue prosecution and/or maintenance of such Joint IP at its own expense.
- 5.3. Cooperation / No Impact on Joint Ownership. In connection with the prosecution and/or maintenance of Joint IP in accordance with Sections 5.1 or 5.2 set forth above, the Party controlling such prosecution or maintenance shall keep the other Party reasonably informed of developments in any such prosecution or maintenance and such other Party shall reasonably cooperate, and cause its Affiliates, employees and agents to reasonably cooperate, with the controlling Party at the controlling Party's expense. The prosecution or maintenance of patent protection for any invention in any country by WHOI or MBARI, pursuant to Sections 5.1 or 5.2, shall not have any effect on the other Party's joint ownership interest in and to any such invention or patent.
- 5.4. Solely-Owned Technology. A Party having solely-owned Intellectual Property Rights may, at its sole discretion and expense, file a patent application or register a copyright thereon and/or take such other steps as may be necessary to acquire and maintain patent or copyright rights or any other Intellectual Property Rights therein.

6. ENFORCEMENT AND DEFENSE

- 6.1. Notice of Infringement. Each Party shall provide written notice to the other Party promptly after becoming aware of any suspected infringement of any Joint IP, or any declaratory judgment action or any other action or proceeding alleging invalidity, unenforceability or non-infringement of the Joint IP that may come to their attention. MBARI and WHOI shall consult each other in a timely manner concerning any appropriate response to such infringement or action or proceeding and neither Party will take any action with respect to any such suspected infringement without the concurrence of the other Party.

7. LICENSES

7.1. Background Technology Development License.

- (a) MBARI Technology. Subject to the terms and conditions of this Agreement, MBARI grants WHOI a limited, personal, non-exclusive license for the term of this Agreement to use its Background Technology solely for purposes of performing its activities as stated in a Statement of Work. The licenses granted in this Section 7.1(a) will expire automatically upon expiration or termination of this Agreement
- (b) WHOI Technology. Subject to the terms and conditions of this Agreement, WHOI grants MBARI a limited, personal, non-exclusive license for the term of this Agreement to use its Background Technology solely for purposes of performing its activities as stated in a Statement of Work. The licenses granted in this Section 7.1(b) will expire automatically upon expiration or termination of this Agreement

7.2. Foreground Technology License. Subject to the terms and conditions of this Agreement, each Party grants to the other Party a personal, non-transferable, perpetual, irrevocable, royalty-free, non-exclusive license to use its Foreground Technology solely for non-commercial research and educational purposes.

7.3 Reservation of Rights. Nothing contained in this Agreement confers or will be construed to confer any rights by implication, estoppel or otherwise, under any Intellectual Property Rights or to any Technology, other than the rights expressly granted in this Agreement. All rights not expressly granted by a Party under this Agreement are hereby reserved.

7.4. Independent Development Work. Nothing in this Agreement shall prevent or limit either Party from independently developing (alone or on behalf of a third party) or acquiring products or autonomous underwater vehicles or systems similar to the Tethys System, Mesobot or other underwater systems; provided that this sentence does not authorize either Party to infringe any Intellectual Property Rights of the other or to use or reference any of the other Party's Confidential Information in connection with any such activities.

- 7.5. Commercialization. If either Party learns of any commercialization opportunity with respect to any Joint Technology, it shall notify the other. Neither Party will take any further action with respect to such opportunity without, first, discussing with the other Party an approach to such opportunity and, if appropriate, how the Parties may share in any royalties or revenues associated with the Joint Technology with respect to such opportunity.

8. **CONFIDENTIALITY**

- 8.1 Confidential Information. The term “Confidential Information” shall mean, subject to the exceptions set forth in Section 8.2 below, any information or data disclosed or made available prior to the Effective Date or during the Term by either Party (the “Disclosing Party”) to the other Party (the “Receiving Party”), which the Disclosing Party has marked or identified as confidential, or which the Disclosing Party identifies as confidential in writing within thirty (30) days of disclosure to the Receiving Party; provided, however, that reports and/or information related to or regarding the Disclosing Party’s business plans, business methodologies, strategies, Technology (which, in the case of MBARI, includes all Technology associated with the Tethys System and its manufacture, and in the case of WHOI, includes all Technology associated with the Mesobot vehicle and its manufacture), specifications, development plans, customers, prospective customers, billing records, and products or services shall be deemed Confidential Information of the Disclosing Party even if not so marked or identified, unless such information is the subject of any of the exceptions set forth in Section 8.2 below. In addition, the terms of this Agreement shall be deemed the Confidential Information of both Parties.
- 8.2 Notwithstanding the foregoing, “Confidential Information” shall not include any information that: (a) is or becomes available to the public (other than as a result of disclosure by Receiving Party or its representatives prohibited by this Agreement); (b) is made available to Receiving Party by a third party who is lawfully in possession of such information, and who is not in violation of any confidentiality obligation in favor of Disclosing Party; (c) the Receiving Party can show by written record was available to or in possession of Receiving Party (free of any confidentiality obligation in favor of Disclosing Party known to Receiving Party at the time of disclosure or availability) prior to disclosure of such information by Disclosing Party to Receiving Party or (d) is independently developed by the Receiving Party without use of or reference to the Disclosing Party’s Confidential Information.
- 8.3 Obligations. The Receiving Party agrees not to disclose the Confidential Information of the Disclosing Party to any person or entity, except for (a) its employees who are required to have access to the Confidential Information in connection with the exercise of its rights and performance of its obligations under this Agreement and (b) financial and legal advisors who have a need to know such Confidential Information. The Receiving Party agrees not to use the Confidential Information of the Disclosing Party other than in connection with the performance

of the Receiving Party's obligations under this Agreement. The Receiving Party agrees that it shall treat the Disclosing Party's Confidential Information with the same degree of care as it accords to its own similar Confidential Information, provided that in no event shall the Receiving Party exercise less than reasonable care. The Receiving Party agrees to promptly advise the Disclosing Party in writing of any unauthorized disclosure, or any misappropriation or misuse by any person, of the Disclosing Party's Confidential Information of which the Receiving Party may become aware. Upon termination or expiration of this Agreement, any Confidential Information of the Disclosing Party which are in the Receiving Party's possession or control, and all copies thereof, will, at the Disclosing Party's option, either be: (i) promptly returned to the Disclosing Party; or (ii) destroyed by the Receiving Party (with the Receiving Party providing written certification of such destruction). If the Receiving Party is compelled by law to disclose Confidential Information of the Disclosing Party, the Receiving Party shall provide the Disclosing Party with prior notice of such compelled disclosure (to the extent legally permitted) and reasonable assistance, at Disclosing Party's cost, if the Disclosing Party wishes to contest the disclosure

- 8.4 Irreparable Injury. Receiving Party acknowledges that a breach by it of any of the terms of this Section 8 would cause irreparable harm to the Disclosing Party for which Disclosing Party could not be adequately compensated by money damages. Accordingly, Receiving Party agrees that, in addition to all other remedies available to Disclosing Party in an action at law, in the event of any breach or threatened breach by the Receiving Party of the terms of this Section 8, the Disclosing Party shall, without the necessity of proving actual damages or posting any bond or other security, be entitled to seek injunctive relief, including, but not limited to, specific performance of the terms of this Section 8.

9. LIMITATION OF LIABILITY

- 9.1. NOTWITHSTANDING ANYTHING ELSE IN THIS AGREEMENT OR OTHERWISE AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, AND EXCEPT AS NOTED IN THIS SECTION 9.1, NEITHER PARTY OR ITS LICENSORS OR AFFILIATES SHALL BE LIABLE OR OBLIGATED UNDER THIS AGREEMENT OR UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY (A) FOR ANY INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES, (B) FOR ANY COST OF PROCUREMENT OF SUBSTITUTE GOODS, TECHNOLOGY, SERVICES OR RIGHTS, OR (C) FOR LOSS OF PROFITS OR REVENUE. HOWEVER, IF A PARTY (OR ITS AFFILIATES) NEGLIGENTLY OR INTENTIONALLY BREACHES THEIR RESPECTIVE CONFIDENTIALITY OBLIGATIONS OR MAKES ANY USE OF THE OTHER PARTY'S TECHNOLOGY OR PURPORTS TO EXERCISE ANY RIGHTS TO THE OTHER PARTY'S INTELLECTUAL PROPERTY RIGHTS NOT EXPRESSLY GRANTED HEREUNDER, SAID BREACHING PARTY (ON BEHALF OF ITSELF OR ITS AFFILIATES) MAY BE LIABLE FOR

ANY AND ALL TYPES OF DAMAGES AND REMEDIES AVAILABLE TO THE OTHER PARTY AT LAW OR IN EQUITY ARISING FROM SUCH A BREACH, WITHOUT LIMITATION OF ANY KIND (INCLUDING ANY OF THE LIMITATIONS CONTAINED IN SUBSECTIONS (A)-(C) ABOVE); PROVIDED, HOWEVER, THAT IN NO EVENT SHALL PUNITIVE DAMAGES BE RECOVERABLE FOR SUCH BREACH. IN ADDITION, THE LIMITATIONS CONTAINED IN THIS SECTION 9.1 WILL NOT LIMIT LIABILITY FOR BODILY INJURY OF A PERSON.

- 9.2. BASIS OF BARGAIN. EACH PARTY RECOGNIZES AND AGREES THAT THE WARRANTY DISCLAIMERS AND LIABILITY AND REMEDY LIMITATIONS IN THIS AGREEMENT ARE MATERIAL, BARGAINED FOR BASES OF THE AGREEMENT AND THAT THEY HAVE BEEN TAKEN INTO ACCOUNT AND REFLECTED IN DETERMINING THE CONSIDERATION TO BE GIVEN BY EACH PARTY UNDER THE AGREEMENT AND IN THE DECISION BY EACH PARTY TO ENTER INTO THIS AGREEMENT.

10. WARRANTIES AND DISCLAIMER

- 10.1. Mutual Representations and Warranties. Each Party represents and warrants to the other Party that, as of the Effective Date, (a) it is a nonprofit entity organized and existing under the laws of its jurisdiction of organization with full power and authority to enter into and perform this Agreement; (b) this Agreement has been duly authorized by all necessary corporate action and constitutes the binding obligation of such Party enforceable in accordance with its terms, except as such enforceability may be limited by bankruptcy laws or other laws affecting the rights of creditors generally; (c) the person(s) executing this Agreement on such Party's behalf has actual authority to bind it to this Agreement; and (d) such Party's execution and performance of this Agreement does not and will not violate or conflict with any provision of such Party's governing corporate instruments or of any commitment, agreement or understanding that such Party has or will have to or with any person or entity.
- 10.2. DISCLAIMER. ALL TECHNOLOGY AND RIGHTS PROVIDED, AND ALL ACTIVITIES PERFORMED OR TO BE PERFORMED HERUNDER, ARE PROVIDED "AS IS, AS AVAILABLE AND WITH ALL FAULTS". EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY (OR ITS LICENSORS) MAKES ANY WARRANTIES TO THE OTHER PARTY, OR TO ANY OTHER PERSON OR ENTITY, WITH RESPECT TO ANY TECHNOLOGY OR RIGHTS PROVIDED OR SERVICES PROVIDED OR TO BE PROVIDED HEREUNDER AND EACH PARTY HEREBY DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, QUIET ENJOYMENT, OR FITNESS FOR A PARTICULAR PURPOSE.

11. TERM AND TERMINATION

- 11.1. Term. The term of this Agreement will begin on the Effective Date and, unless earlier terminated pursuant to Section 11.2, will conclude on the later to occur of (a) the first anniversary of the Effective Date and (b) completion of all activities and obligations to be performed as set forth in the Mesobot Project deliverables, unless extended by mutual written agreement of the Parties.
- 11.2. Termination. Without prejudicing any remedies available under this Agreement or at law or in equity, a Party may terminate this Agreement:
- (a). upon thirty (30) days' notice if the other Party materially breaches this Agreement, unless the breach is cured within the notice period or diligent efforts to effect such cure are commenced during the period and are continued until the cure is completed, which shall be within a reasonable time; or
 - (b). if the other Party shall file any petition under Chapters 7, 10, or 11 of Title 11 of the United States Bankruptcy Code, or the equivalent thereof in any country, or shall file a voluntary petition in bankruptcy court, or is adjudicated bankrupt or insolvent, or if any receiver shall be appointed for its business or property, or if any trustee in bankruptcy or insolvency shall be appointed under the laws of the United States government or of any of the several states or of the government of any country.
- 11.3. Effect of Termination. Upon termination or expiration of this Agreement, (a) neither Party will be obligated to continue to perform any services under any existing SOW, and (b) the licenses granted under Section 7.1 shall immediately terminate. Each Party will be entitled to all remedies available to it under this Agreement or by law or in equity with respect to any breach of this Agreement by the other Party; provided, however, that (i) a bankruptcy as described in Section 11.2(b) shall not in and of itself constitute breach and (ii) if either Party terminates this Agreement pursuant to Section 11.2(a) as a result of the other Party's failure to perform its development obligations, such termination shall be the non-breaching Party's sole and exclusive remedy, and the breaching Party shall have no other liability with respect to such breach.
- 11.4. Survival. Sections 3.5, 4, 5, 6, 7.2, 7.3, 7.4, 7.5, 8, 9, 10.2, 11.3, 11.4 and 12 shall survive the expiration or termination of this Agreement.

12. MISCELLANEOUS

- 12.1. Relationship of the Parties. Except as otherwise expressly provided herein: (a) each Party will be deemed to be an independent contractor and not an agent, joint venturer, or representative of the other Party; (b) neither Party may create any obligations or responsibilities on behalf of or in the name of the other Party; and (c) neither Party will hold itself out to be a partner, employee, franchisee, representative, servant, or agent of the other Party.

- 12.2. Non-Solicitation. During the term of this Agreement and for one year thereafter, neither Party will encourage or solicit any employee, subcontractor, or consultant of the other Party to leave the employ of such Party.
- 12.3. Assignment. Neither Party shall have any right or ability to assign, delegate or transfer to a third party any obligations or benefit under this Agreement, either in whole or in part, whether voluntarily or by operation of law, without the written consent of the other Party (and any unauthorized purported assignment will be void); provided, however, that either Party may assign and transfer this Agreement and its rights and obligations hereunder to any third party who succeeds to substantially all its business or assets, by merger or purchase, without the consent of the other Party. Any permitted assignment or transfer is conditioned on the assignee, transferee or successor-in-interest, as applicable, agreeing in writing to be bound by all of the assigning or transferring Party's obligations and restrictions of this Agreement.
- 12.4. Notices. Any notice, consent, approval, or other communication to be given hereunder must be in writing and will be delivered (as elected by the Party giving such notice): (a) personally; (b) by postage prepaid registered or certified airmail, return receipt requested; (c) by express courier service; (d) by facsimile with a confirmation copy deposited prepaid with an express courier service; or (e) by email. Unless otherwise provided herein, all notices will be deemed to have been duly given on: (i) the date of receipt (or if delivery is refused, the date of such refusal). Each Party may change its address for purposes hereof on not less than three (3) days' prior notice to the other Party. Notice hereunder will be directed:

If to WHOI, to:

Woods Hole Oceanographic Institution
266 Woods Hole Road
Woods Hole, MA 02453
Attn: Office of Legal Affairs
Email: cland@whoi.edu and
legalaaffairs@whoi.edu

If to MBARI, to:

Monterey Bay Aquarium Research Institute
7700 Sandholdt Road
Moss Landing CA 95039
Attn: CFO, Basilio Martinez
Email: basilio@mbari.org

- 12.5. Governing Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California without regard to the conflicts of laws provisions thereof. In any action or proceeding to enforce rights under this Agreement, the prevailing Party will be entitled to recover costs and attorneys'

fees. The United Nations Convention on Contracts for the International Sale of Goods will not apply to this Agreement. Suits and actions may be brought in any court having jurisdiction.

- 12.6. Force Majeure. Any delay or failure of either Party to perform its obligations hereunder as the result of an event or occurrence beyond the reasonable control of the Party and without its fault or negligence, including acts of God, actions by any governmental authority (whether valid or invalid), fires, floods, windstorms, explosions, riots, natural disasters, wars, sabotage, inability to obtain power, material, equipment or transportation, or court injunction or order, shall be excused; provided that written notice of such delay (including the anticipated duration of the delay) shall be given by the affected Party to the other Party as soon as possible after the event or occurrence.
- 12.7. Cumulative Remedies; No Third Party Beneficiaries. The rights and remedies of the Parties hereto will be cumulative (and not alternative). No provisions of this Agreement, express or implied, are intended or will be construed to confer upon or give to any person other than the Parties any rights, remedies, or other benefits under or by reason of this Agreement.
- 12.8. Compliance with Law. The Parties will at all times comply with all applicable foreign, federal, state, and local laws, rules and regulations relating to the execution, delivery and performance of this Agreement, including any occupational health and safety or employment regulations to the extent applicable to this Agreement. Each Party agrees that it will not export or re-export, resell, ship, or divert or cause to be exported or re-exported, resold, shipped, or diverted directly or indirectly any product, technology or information it obtains or learns pursuant to this Agreement (or any direct product thereof) to any country for which the government (or any agency thereof) of the United States, or any foreign sovereign government with competent jurisdiction requires an export license or other governmental approval without first obtaining such license or approval.
- 12.9. Waiver. The failure of either Party at any time to require performance by the other Party of any provision of this Agreement shall in no way affect the right to require such performance at any time thereafter, nor shall the waiver of either Party of a breach of any provision of this Agreement constitute a waiver of any succeeding breach of the same or any other provision.
- 12.10. Amendment. This Agreement may not be amended, modified, or supplemented by the Parties in any manner, except by an instrument in writing signed by WHOI and MBARI.
- 12.11. Severability. If the application of any provision or provisions of this Agreement to any particular facts or circumstances is held to be invalid or unenforceable by any court of competent jurisdiction, then: (a) the validity and enforceability of such provision or provisions as applied to any other particular facts or

circumstances and the validity of other provisions of this Agreement will not in any way be affected or impaired thereby; and (b) such provision or provisions will be reformed or eliminated without further action by the Parties and only to the extent necessary to make such provision or provisions valid and enforceable when applied to such particular facts and circumstances.

- 12.12. Construction. As used in this Agreement, all terms used in the singular will be deemed to include the plural, and vice versa, as the context may require. The words “hereof”, “herein”, and “hereunder” refer to this Agreement as a whole, including the attached exhibits, as the same may from time to time be amended or supplemented, and not to any subdivision in this Agreement. When used in this Agreement, “including” means “including, without limitation” and “discretion” means sole discretion. Unless otherwise expressly stated, when a Party’s approval or consent is required under this Agreement, such Party may grant or withhold its approval or consent in its discretion. References to “Section” or “Exhibit” will be to the applicable section or exhibit of this Agreement. Descriptive headings are inserted for convenience only and will not be utilized in interpreting the Agreement. This Agreement has been negotiated by the Parties and reviewed by their respective counsel and will be fairly interpreted in accordance with its terms and without any strict construction in favor of or against either Party.
- 12.13. Counterparts and Facsimile. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered will be deemed an original, and such counterparts together will constitute one and the same instrument. The Parties intend that each Party will receive a duplicate original of the counterpart copy or copies executed by it. For purposes hereof, a facsimile or PDF copy of this Agreement, including the signature pages hereto, will be deemed to be an original. Notwithstanding the foregoing, the Parties will deliver original execution copies of this Agreement to one another as soon as practicable following execution hereof.
- 12.14. Publicity: Neither Party will issue any press release or release any publication pertaining to this Agreement or any activities conducted under it without the consent of the other Party; which consent will not be unreasonably withheld or delayed; provided, however, that (i) WHOI shall not be restricted from issuing press releases or releasing publications that do not reference MBARI or the Tethys System (for clarity WHOI may issue press releases or release publications that refer to the Mesobot vehicle or AUV systems generally); and (ii) MBARI shall not be restricted from issuing press releases or releasing publications that do not reference WHOI or the Mesobot vehicle (for clarity, MBARI may issue press releases or release publications that refer to the Tethys System or AUV systems generally).
- 12.15. Entire Agreement. This Agreement, including the exhibits hereto, which are hereby incorporated into this Agreement by this reference, constitutes the entire

agreement between the Parties with respect to the subject matter hereof. It supersedes and replaces all prior or contemporaneous understandings or agreements, written or oral, regarding such subject matter.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed and delivered as of the Effective Date.

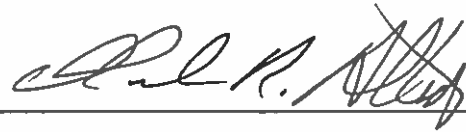
Monterey Bay Aquarium Research Institute

By: 

Name: Chris Scholin

Title: President/CEO

Woods Hole Oceanographic Institution

By: 

Name: Mark R. Abbott

Title: President and Director

EXHIBIT A

WHOI Background Technology

1.0 Issued and Pending Patents & Applications

Title	Inventors	Patent #	Status
Systems and Methods for Tethering Underwater Vehicles	Andy Bowen, Louis Whitcomb, Dana Yoerger, Robert McCabe	7,621,229	Patented
Mechanical Tether System for A Submersible Vehicle	Robert McCabe, Andrew Bowen, Matthew Heintz	9,463,849	Patented
Mechanical Tether System for A Submersible Vehicle	Robert McCabe, Andrew Bowen, Matthew Heintz	9,828,068	Patented
On demand "pop" off ROV Tether and connection	Dana Yoerger	--	In Preparation
WHOI Passive Ballast technology	Kaeli & Austin		In Preparation

2.0 KNOW HOW

- 2.1 "Sentry and Sentry-like" vehicle shape and form (wing-on-edge form) that provides stability in pitch and roll along with reasonable streamlined motion forward, to enable precise tracking capability in a vehicle (further described in REF #1 and WHOI.com).
- 2.2 WHOI Lightweight tether with "pop-off" capability. E.g. After finding the target of interest, the tether may be disconnected at the connection to the vehicle to allow the vehicle to proceed autonomously. Pop-off connectivity allows human control capability, for instance, for preliminary survey and proper target selection with the ability to transition to autonomous control according to specific requirements.
- 2.3 SUPR sampling capability including various subcomponents thereof as licensed to McLane Research Labs further described in REF #2 & #3 and at WHOI.com.

3.0 REFERENCES

Sentry AUV

1. James C. Kinsey ; Dana R. Yoerger ; Michael V. Jakuba ; Rich Camilli ; Charles R. Fisher ; Christopher R. German (2011) Assessing the Deepwater Horizon oil spill with the sentry autonomous underwater vehicle. Intelligent Robots and Systems (IROS), 2011 IEEE/RSJ International Conference on Intelligent Robots and Systems Conference Date: 25-30 Sept. 2011

SUPR Sampler

2. Brier et al. (2012) Sulfur, sulfides, oxides and organic matter aggregated in submarinehydrothermal plumes at 9o50'N East Pacific Rise. Geochimica et Cosmochimica Acta 88, 216-236.
3. Breier J. A., Rauch C. G., McCartney K., Toner B. M., Fakra S. C., White S. N. and German C. R. (2009) A suspended-particle rosette multi-sampler for discrete biogeochemical sampling in low-particle-density waters. Deep Sea Res. Pt. I56 1579–1589.

EXHIBIT B

MBARI INTELLECTUAL PROPERTY WITH POTENTIAL APPLICATION TO MESOBOT PROJECT

1. Long Range autonomous underwater vehicle (LRAUV) (copyright on software and design documents, trade secrets, and know-how):
 - Electronic motherboard, load control back plane, load control cards
 - LRAUV application software, vehicle interface web applications, Local configuration manager (LCM)-based data sharing backseat driver interface, instrument drivers for Seabird conductivity-temperature-density-dissolved oxygen (CTD/DO) sensors, Wetlabs fluorometer and optical backscatter (OBS), Sparton compass, Benthos acoustic modem, Keller depth sensor
 - LRAUV variable buoyancy (VB) system, including one-(1) liter reservoir with volume feedback and a valve with auto-close feature
 - Software to allow autonomous underwater vehicle (AUV) to auto-ballast, and follow isobaric, isopycnal, and isothermal layers
 - Software to perform targeted sampling in, above, and below the chlorophyll maximum layer or any temperature, depth, or density value
2. The specification of a VB drive motor and pump for operation at 1000 psi from MBARI Coastal Profiling Float (CPF) (copyright on software and design documents)
3. Development and field demonstrations of algorithms for tracking jellyfish autonomously (copyright on software and know-how):
 - automated control logic for vehicle, and
 - vision processing algorithms for isolating a jellyfish in a pair of stereo images and determining its location with respect to the vehicle. The algorithms were deployed on ROV *Ventana* (operating in an autonomous mode), and were general such that they could be fielded on other underwater vehicles. Our documented tests demonstrated tracking times of over an hour. These algorithms have formed the starting point for the algorithms being further developed for the Mesobot project.
4. Video Annotation and Reference System (VARS) (copyright: software interface and database system) that provides tools for describing, cataloging, retrieving, and viewing the visual, descriptive, and quantitative data associated with deep-sea video or images
5. Benthic Observation System (BOS) (copyright and know-how)
 - Methods for integration and field testing of two or more stereo camera pairs in single pressure housing (BOS)
 - Specification of a long-line cable telemetry modem (BOS)

EXHIBIT C STATEMENT OF WORK

Table 1. Division of tasks between MBARI, Stanford, and WHOI for the Mesobot project.

Institution	Tasks	Personnel
MBARI	1. Characterize swimming speeds, behavioral response to light, and other behavioral data of selected specimens at MBA (pending approval). These data will be used to help define and validate the mobility and imaging specifications of the Mesobot.	Katja
	2. Implement and test MBARI's baseline bio-target tracking algorithm at MBA. These tests will involve processors and cameras supplied by WHOI and mounted inside tanks with artificial or biological targets.	Katja, Risi
	3. Identify improvements required for the baseline algorithm to achieve a long-term (e.g. 24 hr) bio-target tracking capability.	Risi
	4. Implement the baseline bio-target tracking system on the MiniROV and demonstrate its performance in the test tank using artificial targets.	Risi
	5. Transfer the LRAUV real-time computing infrastructure and variable buoyancy system design to WHOI (e.g., existing hardware and software documentation, engineering drawings, initial board set suitable for bench testing).	Hobson, Stanway
	6. Support the integration of the LRAUV computing infrastructure and variable buoyancy system design to WHOI and Mesobot (e.g., participate in telecons with WHOI engineers).	Hobson, Stanway
Stanford	1. Support all of MBARI's implementation and testing of the bio-target tracking system and its refinements at MBA, in MBARI's seawater test tank, and in the field.	
	2. Develop extensions to the bio-target tracking algorithm (e.g., shape-changing targets and robustness) to enable long-duration tracking of animals based on results of MBA tests.	
	3. Support the integration of the bio-target tracking algorithm on the MiniROV and Ventana including its integration with the ROV's control laws.	
WHOI	1. Design vehicle and integrate components for the Mesobot.	
	2. Provide imaging hardware to MBARI for in-water testing on targets.	
	3. Engineer an interface to the LRAUV motherboard that will enable an external processor to provide real-time commands to the vehicle. The deliverable would include the interface specification, the corresponding code running on the LRAUV motherboard to interact with the external processor, and a GPU running a simulation for testing.	
	4. Develop and test a modified version of MBARI's LRAUV code for the Mesobot.	
	5. Provide documentation to MBARI for any modifications made to LRAUV's code and	

Year 1

		variable buoyancy system for Mesobot implementation. 6. Integrate Stanford/MBARI's bio-target tracking algorithm on the Mesobot.	
Year 2	MBARI	1. Implement updates to the baseline bio-target tracking algorithm for testing on both the MiniROV and Ventana. These updates will be based on refinements developed by Stanford (e.g. to improve robustness and adaptive frame rates). 2. Test updates to the bio-target tracking algorithm using the MiniROV in MBARI's seawater test tank facility using both artificial and biological targets. 3. Test updates to the bio-target tracking algorithm in Monterey Bay (in deep water) on both ROV Ventana and MiniROV (pending availability of ship days). 4. Assist WHOI in the implementation and validation of the bio-target tracking algorithm on the Mesobot hardware. 5. Support LRAUV integration to Mesobot.	Risi Katija, Risi All Risi Hobson, Stanway
	Stanford	1. Continue to support all of MBARI's implementation and testing of the bio-target tracking system and its refinements MBA, in MBARI's test tank, and in the field. 2. Continue to improve the bio-target tracking algorithm to enable long-duration tracking of animals based on the results of tank and field-testing.	
	WHOI	1. Integrate improvements to bio-target tracking algorithm and imaging system on Mesobot. 2. Test Mesobot improvements in the test tank and shallow water (at WHOI or MBARI depending on animal and ship availability). 3. Train staff at WHOI and MBARI in Mesobot operations.	
	MBARI	1. Continue to refine and test the bio-target tracking algorithm. 2. Support WHOI's implementation of the algorithm on the Mesobot. 3. Support field-testing of the Mesobot.	Katija, Risi All All
	Stanford	1. Support field-testing of the Mesobot including modifications to the tracking algorithm.	
Year 3	WHOI	1. Integrate improvements to the Mesobot. 2. Test improvements to Mesobot in test tank and shallow water (at WHOI or MBARI depending on animal and ship availability). 3. Test the Mesobot in deep waters of Monterey Bay Canyon (pending ship availability). 4. Train staff at WHOI and MBARI in Mesobot operations.	