Memorandum of Understanding

Inter-Institutional Agreement between Iowa State University and Washington State University
Inter-Institutional Agreement Between Iowa State University and Washington State University

This Inter-Institutional Agreement ("Agreement") is effective 27th day of February, 2014, by and among Iowa State University (hereinafter referred to as "ISU") and Washington State University (hereinafter referred to as "WSU"), and such other non-profit universities as may have executed the Instrument of Adherence attached hereto as Schedule A upon mutual agreement of all current undersigned institutions, to be known collectively hereinafter as "INSTITUTIONS" or individually as an "INSTITUTION."

WHEREAS, the parties to this Agreement have each received or will be receiving funding to support the National Science Foundation Industry/University Cooperative Research Center for Bioplastics and Biocomposites (hereinafter referred to as "CENTER") in its efforts to perform research to create concepts, methods and tools for the proposed area of science; to stimulate industry innovations; and to provide institutions with strengthened educational and research capabilities.

WHEREAS, the activities of CENTER are funded by (i) the National Science Foundation (hereinafter referred to as "NSF"), (ii) members from industry (hereinafter referred to as 'MEMBERS'), (iii) direct budgetary support from the INSTITUTIONS and (iv) other funds that may be received from time to time.

WHEREAS, INSTITUTIONS are desirous of formalizing certain agreements between them with respect to the subject matter contained herein.

NOW THEREFORE, for and in consideration of the mutual promises and covenants herein contained and intending to be legally bound, INSTITUTIONS hereto agree as follows:

1. Center Governance.
   a. The CENTER will have a common Advisory Board (AB) composed of a representative of each MEMBER and each INSTITUTION; an Academic Advisory Committee and a Research Advisory Committee. Each INSTITUTION shall use a common format for its membership agreement, which shall be substantially in the form of the Center for for Bioplastics and Biocomposites Membership Agreement as set forth in Schedule B. INSTITUTION may make changes to the agreement in so much as said changes do not affect MEMBERS rights as provided in Schedule B. Changes made to the agreement must be submitted in writing and agreed upon by all INSTITUTIONS and NSF. No response by recipient INSTITUTION(s) within the 30-day period will indicate automatic approval by the recipient INSTITUTION(s).

   b. In accordance with the NSF award, the Center Director will be from Iowa State University. Each INSTITUTION shall select a Site Director in accordance with the policies and procedures of each INSTITUTION.

2. Center Funding.
   a. During the first five-year period of the CENTER, each INSTITUTION will receive its own funds directly from NSF, will be responsible for recruiting its own MEMBERS, and will retain membership fees collected from its MEMBERS. INSTITUTION may be directed by IAB to allocate some funds to inter-institutional collaborative research among one or more other INSTITUTIONS. The expectation is that inter-institutional collaborative research projects will constitute approximately 15% of center funds on average, annually.
b. INSTITUTIONS shall jointly pay (in equal shares) for major promotional Center materials, such as brochures, provided however, that each INSTITUTION'S obligation hereunder shall only apply to promotional materials that have been produced with the advance written approval of all participating INSTITUTIONS.

c. Within each INSTITUTION, a separate internal account shall be set up for the operation of the Center. The Director and each Site Director must provide annual budgets based on expected income from all sources to the respective INSTITUTION. These budgets should be made available to the Center Director, the Site Director of the Center and the responsible university officials of such Institution by June 1 of each year.

3. Ownership and Administration of Intellectual Property. “Invention” means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code or which may be copyright protected under Title 17 of the United States Code) that results from work sponsored by CENTER funds developed by the INSTITUTION or INSTITUTIONS (collectively “Intellectual Property”). INSTITUTIONS shall maintain records of all CENTER-funded work, including project titles, primary INSTITUTION, and primary investigators. Subject to the rights of MEMBERS contained in Schedule B, all right, title, and interest in and to all Intellectual Property shall be allocated as follows:

a. Solely Owned INSTITUTION Intellectual Property. All Intellectual Property developed or invented by inventors solely at one INSTITUTION shall belong solely to that INSTITUTION (“INSTITUTION Intellectual Property”).

b. Jointly Owned INSTITUTION Intellectual Property. All Inventions invented jointly by personnel of two or more INSTITUTIONS will belong jointly to each INSTITUTION whose employees are named inventors (“Joint INSTITUTION Intellectual Property”). In each such case, the technology transfer offices of the INSTITUTIONS jointly owning the Intellectual Property shall agree which INSTITUTION shall be the lead INSTITUTION for commercialization purposes. After identifying the INSTITUTION that will administer the Joint INSTITUTION Intellectual Property, the relevant INSTITUTIONS shall negotiate in good faith an Inter-Institutional Intellectual Property Agreement, which agreement shall contain, inter alia, terms and conditions concerning the sharing of royalties and costs associated with the Joint INSTITUTION Intellectual Property, and providing for sharing information related to the Intellectual Property and commercialization efforts. Regarding any such information received by either INSTITUTION with regards to the Intellectual Property, the receiving INSTITUTION shall use reasonable efforts to limit dissemination pending the determination and/or filing of intellectual property protections.

c. Disclosure and Intellectual Property Protections. Each INSTITUTION shall be responsible for the identification and evaluation of its sole INSTITUTION Intellectual Property and for informing all MEMBERS regarding INSTITUTION Intellectual Property as outlined in the Membership Agreement. If MEMBERS and the inventing INSTITUTION(S) agree that patent protection should be sought and if MEMBERS are interested in securing such protection, the MEMBERS will follow the process outlined in Schedule B. If MEMBERS do not notify the INSTITUTION in writing that the MEMBERS are not interested in procuring protection for the Intellectual Property within sixty (60) days from the date of disclosure, the inventing INSTITUTION(S) may determine on its/their own whether protection will be sought, and such INSTITUTION(S) may dispose of the Intellectual Property.

d. INSTITUTIONS having an ownership interest in Joint INSTITUTION Intellectual Property shall jointly review any Joint INSTITUTION Intellectual Property, evaluate its commercial potential and inform MEMBERS regarding the Joint INSTITUTION Intellectual Property as outlined in Schedule B. If MEMBERS and INSTITUTIONS agree that patent protection should be sought and if MEMBERS are
interested in securing such protection, the process will follow that outlined in Schedule B. If MEMBERS are not interested in procuring protection for such Joint INSTITUTION Intellectual Property, INSTITUTIONS will manage the Joint INSTITUTION Intellectual Property according to the terms of the applicable Inter-Institutional Intellectual Property Agreement agreed to by the INSTITUTIONS.

4. License to Use Intellectual Property for Internal Use. With respect to INSTITUTION generated Intellectual Property belonging solely to an INSTITUTION, such INSTITUTION agrees to and does hereby grant to the other INSTITUTIONS, subject to the terms of this Agreement, a nonexclusive, nontransferable, irrevocable, royalty free license for internal, educational and noncommercial research purposes only (without the right to sublicense). This license shall include the right to utilize any information and materials published by CENTER. INSTITUTIONS acknowledge that a separate license agreement may be required by the licensing INSTITUTION in order to convey the rights granted by this paragraph.

5. Publication of Joint INSTITUTION Intellectual Property. Each INSTITUTION with an ownership interest in Joint INSTITUTION Intellectual Property shall have the right to publish research resulting from development of such Intellectual Property. The INSTITUTION desiring to publish such research results shall submit a draft of any such proposed publication to the other INSTITUTION(S) holding ownership interests at least twenty (20) days prior to the submission of the research results for publication. The non-publishing INSTITUTION(S) shall have the right to delay any publication involving its Joint INSTITUTION Intellectual Property for a period of not more than sixty (60) days for the purposes of obtaining patent protection by giving the publishing INSTITUTION written notice before the end of twenty (20) days notice period provided herein. For the purposes of this Agreement, cataloging and placing reports of research results in the library of any INSTITUTION where such results are available to third parties shall be deemed to be a “publication.”

6. Confidential Information.
   a. “CONFIDENTIAL INFORMATION” shall mean any and all information, know-how or data disclosed or provided by one INSTITUTION (hereinafter referred to as “PROVIDER”) to another INSTITUTION (hereinafter referred to as “RECIPIENT”) about the research activities of the CENTER, whether disclosed or provided in oral, written, graphic, photographic, electronic or any other form except for information:
      i. that is or becomes generally known or available to the public without breach of this Agreement;
      ii. that is known to RECIPIENT at the time of disclosure, as evidenced by written records of
          RECIPIENT;
      iii. that is independently developed by RECIPIENT, as evidenced by written records of RECIPIENT;
           or
      iv. that is disclosed to RECIPIENT in good faith by a third party who has an independent right to such
          subject matter and information.
   b. Should RECIPIENT be required by law to disclose CONFIDENTIAL INFORMATION, RECIPIENT shall immediately inform PROVIDER in writing and cooperate with PROVIDER in responding to such requirement.
   c. RECIPIENT shall hold in confidence and not disclose any and all CONFIDENTIAL INFORMATION to any third party, and shall use CONFIDENTIAL INFORMATION solely for activities of the CENTER. RECIPIENT shall have the right to disclose CONFIDENTIAL INFORMATION to employees or agents of its organization (“Representatives”) provided that RECIPIENT causes such Representatives to be bound to the terms of this Agreement.
d. Unless otherwise specified in writing, all CONFIDENTIAL INFORMATION remains PROVIDER property. Upon request of PROVIDER, RECIPIENT shall return or destroy all Confidential Information received from PROVIDER, except for one copy, which PROVIDER may keep solely to monitor its obligations under this Agreement.

e. All CONFIDENTIAL INFORMATION shall be held confidential by RECIPIENT for three (3) years after such information is disclosed to RECIPIENT.

f. Nothing contained in this Agreement shall be construed as an obligation to enter into any further agreement concerning the CENTER or CONFIDENTIAL INFORMATION, or as a grant of a license to the CONFIDENTIAL INFORMATION or to any patent or patent application existing now or in the future.

   a. This Agreement may not be amended or modified except by the execution of a written instrument executed by all of the parties hereto.

   b. In the event that any of the terms, provisions, or covenants contained in this Agreement are held to be partially or wholly invalid or unenforceable for any reason whatsoever, such holding shall not affect, alter, modify, or impair in any manner whatsoever any of the other terms, provisions, or covenants not held to be partially or wholly invalid or unenforceable.

8. Term. The term of this Agreement will be from the date first written above and shall continue for the duration of the CENTER contract with NSF.

9. Counterparts. This Agreement, Schedule A and Schedule B hereto may be executed in any number of counterparts and by any party on separate counterpart, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

10. Entire Agreement. The Agreement is the entire agreement between the parties regarding the subject matter of this Agreement and it supersedes any prior agreements, understanding or discussions with respect to such subject matter.

IN WITNESS WHEREOF, INSTITUTIONS hereto have caused this Agreement to be duly executed by their duly authorized officers as of the day and year set forth next to each signature

IOWA STATE UNIVERSITY
By: Lynne Mumm
Name: Lynne Mumm
Title: Senior Negotiator, Industry Contracts
Date: February 27, 2014

WASHINGTON STATE UNIVERSITY
By: Dan Nordquist
Name: Dan Nordquist
Title: Assistant Vice President
Date: 2/27/12
SCHEDULE A (Form Required to Add another partner Institution)

Instrument of Adherence: (Input name of University)

Reference is made to the Inter-Institutional Agreement by and among Iowa State University and Washington State University dated as of February 27, 2014 and such other parties as have executed and Instrument of Adherence thereto (The “IIA”). Capitalized terms used herein and not otherwise defined have the respective meanings assigned in the IIA.

The undersigned hereby agrees to the terms and conditions of the IIA and to the designation of the undersigned as an INSTITUTION thereunder as of the Adherence Effect Date specified below.

Annex I attached hereto specifies the undersigned’s contact information for administrative matters regarding the IIA.

This Instrument of Adherence may be executed in any number of counterparts and by any party on separate counterpart, each of which shall be deemed an original but all of which together shall constitute one of the same instrument.

Adherence Effective Date: __________________________

(Name of University)

By: ______________________________

Name: ____________________________

Title: ____________________________
Annex I
Contact Information

Name of INSTITUTION: ________________________________

Address: ________________________________

__________________________________________

Contact Person: ____________________________

Telephone No. ____________________________

Facsimile No. ____________________________

Email: ________________________________
SCHEDULE B

Membership Agreement (See other document)
INTER-INSTITUTIONAL AGREEMENT AMENDMENT NO. 1

THIS INTER-INSTITUTIONAL AGREEMENT AMENDMENT NO. 1 ("Amendment"), effective as of February 20, 2017, is by and among Iowa State University ("ISU"), and Washington State University ("WSU"), and such other non-profit university as may have executed the Instrument of Adherence attached to the Agreement as Schedule A.

WHEREAS, the parties previously signed an Inter-Institutional Agreement with an Effective Date of February 27, 2014 ("Agreement"), under which ISU and WSU are cooperating to perform research to create concepts, methods and tools for the National Science Foundation Industry/University Cooperative Research Center for Bioplastics and Biocomposites ("Center"), under the direction of the Center Director; and

WHEREAS, the parties desire to amend the Agreement to update the Center Funding terms to accurately reflect the present means of collection and distributing membership fees.

NOW, THEREFORE, the parties agree as follows:

1. Section 2 of the Agreement
   Action: Update the terms of Section 2.a.
   Amended to read:
   2. Center Funding
      a. During the first five-year period of the CENTER, each INSTITUTION will receive its own funds directly from NSF and will be responsible for recruiting its own members. ISU will manage all Membership agreements, including collection of all membership fees, which will be deposited into a single account for distribution to INSTITUTIONS for research projects selected by the IAB, as specified in the CB2 Operating Procedures.

2. Except as specifically modified in this Amendment, all other provisions of the Agreement remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed and delivered.

IOWA STATE UNIVERSITY

Name: Peter Gudlewski
Title: OIP TT Industry Contracts Negotiator

WASHINGTON STATE UNIVERSITY

Name: Dan Nordquist
Title: Associate Vice President

3/6/2017
3/1/17
Operating Procedures

Center for Bioplastics and Biocomposites (CB²)
NSF Industry & University Cooperative Research Center
Approved by Industry Advisory Board on November 18, 2015
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Article 1 – Introduction

1.1 The following operating procedures will be used to govern the Center for Bioplastics and Biocomposites (CB\(^2\)), a National Science Foundation (NSF) Industry & University Cooperative Research Center (I/UCRC).

1.2 The operating procedures are approved by the Directors Board (consisting of the center director and the site directors for each site and affiliate institution) and the Industry Advisory Board (IAB). The operating procedures can be amended at any time by an affirmative vote of two-thirds of the Directors Board and two-thirds of the members of the IAB. These operating procedures are intended to be flexible and change with the needs of the center.

1.3 The CB\(^2\) is a multiple university consortium comprised of the following affiliated participating universities/sites:

- Iowa State University, Ames, IA (Lead Institution)
- Washington State University, Pullman, WA (Site Institution)

Additional universities may join the center as specified in Article XIII below.

1.4 These operating procedures form a part of the membership agreement (Appendix I) with participating members. If there are any inconsistencies between the operating procedures and the membership agreement, the terms and conditions outlined in the membership agreement take precedence over the operating procedures provided the inconsistent terms of the membership agreement have been approved by two-thirds of the Directors Board and two-thirds of the IAB.

Article II – Definitions

- **Affiliate Institution** is a university member of the center that has not received funding as a research site through the NSF I/UCRC program solicitation.

- **Member(s)** means member companies, member corporations including non-profit and commodity organizations, and member government organizations.

- **Mentor** is a technical sponsor who oversees a center research project. A mentor may be a member of the IAB or another employee from the member organization.

- **Research** means shared research. All research performed within CB\(^2\) is shared research.
• *Center* means CB².

• *Shared Research* means projects funded by members with results shared among the members of the center.

• *Site Institution* means a university that has completed an application and received funding as a research site from the NSF I/UCRC program which requires $150,000 annually in company membership fees from companies recruited by the site.

• *Sponsor* means NSF.

• *University(s) or Participating University(s)* means universities collaborating in the center.

**Article III – Purpose**

**Vision Statement**

3.1 The CB² will conduct industry-relevant fundamental research to facilitate strategies for bioplastics and biocomposites to develop the knowledge that will allow the production of an array of high-value products, including plastics, coatings, adhesives, and composites, from agricultural and forestry feedstocks that are compatible with current industrial manufacturing systems and thereby promote rural development.

**Mission Statement**

3.2 The missions of the CB² are:

• Collaboration with industry to develop fundamental knowledge of bioplastics and biocomposites

• Dissemination of this knowledge through publications, workshops, tradeshows, and other means

• Education of future researchers, engineers, and scientists

**Research Focus**

3.3 CB² research topics will focus on the needs of the members and the capabilities of the universities. Areas of research may include:

• Synthesis and compounding

• Biocomposites

• Biobased products

• Processing

• Modeling
Article IV – Membership

4.1 A company, corporation, government organization, or other organization becomes a member upon execution of the membership agreement (Appendix I) and non-disclosure agreement (NDA) (Appendix II) and paying the membership fee.

4.2 A company, corporation, government organization, or other organization may support the center with a maximum of two full voting memberships.

4.3 The CB² membership fees will be used to support center research. The cost for one full-membership is $30,000/year and the cost for one half-membership is $15,000/year. A large company (+500 employees) is only eligible for a full membership, while a small company (1 to 499 employees) may join the center with a half membership. Any company, non-profit organization, commodity organization, or government agency that pays at least a half-membership is considered a member of the center. To account for normal increases in costs associated with running the center (e.g., student wages, tuition) and reduced funding from the NSF over time, it is expected that the cost of membership will increase by 15% every five years. The Directors Board will assess membership costs and propose increases every five years to enable a meaningful program.

4.4 All entities that receive and use membership fees will provide a cost share match to support center research by limiting the university overhead rate to 0% on member’s cash fees in accordance with the requirements of the NSF I/UCRC program solicitation.

4.5 An in-kind membership is possible upon approval by the center director, all university site directors, and two-thirds of the IAB. A member organization that provides in-kind membership fees in lieu of cash payments will provide a list of categorized items to be considered as its in-kind support for approval. The value of in-kind payments will be based on fair market value. In-kind memberships must be reviewed and approved on an annual basis. Only sites are allowed to request in-kind memberships and are only allowed to have one in-kind membership equal to a full-size membership, $30,000. Thus, a site can request two in-kind half-memberships for two small companies.

4.6 All members will sign the same membership agreement (Appendix I) and associated non-disclosure agreement (Appendix II) unless otherwise approved by the center director and lead site for non-substantive changes, or by the center director, all university site directors, the NSF I/UCRC program management and two-thirds of the IAB representatives for substantive changes.
Article V – Organization

5.1 Members paying membership fees or providing in-kind membership fees will each have one representative on the IAB. An organization will be entitled to one voting representative on the IAB for each paid membership.

5.2 The IAB will select a chair-elect and secretary for a one-year term at the annual site location IAB meeting. After serving one year as chair-elect, a one-year term as chair is served.

5.3 All members will participate in strategic planning for the center. The IAB will assist the participating faculty in identifying pre-competitive, industry-related research projects; recommend research projects for future work; assist the center director and site directors in identifying new members; review the research and educational accomplishments of the center; and recommend restructuring and/or redirecting of on-going programs to meet IAB needs and concerns.

5.4 The center director will be responsible for all center activities and will report directly to his/her supervisor such as the dean at the lead university.

5.5 The site directors will be responsible for center activities at their university and will report directly to their respective university administrators and to the center director for purposes of center business. The site directors will be liaison between the center and the appropriate academic departments of the member universities.

5.6 Project principal investigators will manage specific research projects funded by the center and will report directly to their respective site directors and university administrators for matters related to center-funded activities, and, will provide regular reports to the members supporting their projects. Project principal investigators will be identified in specific project proposals.

5.7 Each site director will be chosen by the participating university.

5.8 A center external evaluator, appointed by the NSF, will assist the center director, site directors, and IAB to organize and operate the center and provide an independent assessment of the operation. The center external evaluator will report directly to the NSF I/UCRC program manager.

5.9 The lead university and each participating university will provide a reasonable level of administrative support for operation of the center. Administrative staff will maintain the center web site including documents accessible to IAB members through a secure system.
Article VI – Administration

6.1 The center director and site directors will work with the IAB on the strategic plan for the center and on recruiting new members.

6.2 The center director, in cooperation with the site directors, will submit an annual operations and research budget to the IAB for review and recommendations. This will be available for review prior to the fall IAB meeting each year.

6.3 Upon recommendation of the IAB, the center and site directors will authorize the use of membership fees by the project principal investigators in support of center research.

6.4 The site directors will work with the appropriate departments on recruiting graduate students for the center and will set standards for student participation, monitor student progress, set goals for recruiting students (especially minority and women), and promote the multidisciplinary nature of the research program.

6.5 Each CB\textsuperscript{2} student (undergraduate, graduate, or postdoctoral) will have a center faculty mentor from his or her institution. The faculty mentor is responsible for advising the student on university, departmental, and center policies.

Article VII – Reports and Interactions

7.1 The center director shall provide at least an annual report to the members and the NSF. This report will be available in electronic form for download over the Internet through a secure login interface.

7.2 For each project funded within the center, the principal investigator shall provide an I/UCRC project description with technical objectives and milestones to the members at the beginning of the project.

7.3 For each project funded within the center, the principal investigator shall provide a written quarterly report to the center director, that will be forwarded to IAB members and the relevant project mentors (see 9.4 below).

7.4 Interim project reports shall be provided to mentors via regular teleconference briefings or short written reports. The form and frequency of reports for each project shall be determined by the principal investigators and the project mentors.
7.5 All administrative issues, concerns, or conflicts regarding the activities of research and reporting are the responsibility of the center director.

7.6 All reports will be provided to members as PDF files and will be marked “confidential.”

7.7 Mentor(s) that determine a PI is not meeting the reporting and progress requirements will alert the center director for possible sequestration of research funding. The chair of the IAB must approve all funding sequestrations and notify members if a project is identified as not meeting the requirements.

7.7.1 The mentor(s) submits the issue(s) to the directors and IAB chair in writing.

7.7.2 The director(s) and IAB chair report the issue(s) to the PI, detailing actions that are required to solve the issue(s) within two weeks.

7.7.3 If the issues are not resolved within the allotted time, the director(s) and IAB chair will formalize action until the issue is resolved.

7.8 Final reports are due to center director 2 weeks after the project ends. The reports should be cumulative and detail all of the results of the project.

7.9 PIs are required to attend or have a CO-PI participate in the 6-month meeting and annual meeting.

7.10 No-cost extension: PI’s requesting a no-cost extension for current CB² projects, below are guidelines for such requests:

7.10.1 The PI is required to submit a one paragraph justification for the request, one month prior to the Fall CB² meeting in writing to the Director.

7.10.2 The PI may ask for a maximum of a 4-month extension.

7.10.3 Any funds remaining after the 4-month period (4/30/xx) will be returned to the center for funding projects the following year.

7.10.4 A final report will be required at the end of the 4-month extension.

Article VIII – Meetings

8.1 The center director, site directors, and the IAB chair, in consultation with the center evaluator and in accordance with NSF guidelines, will establish the schedule of activities
and meetings for the center as well as the agenda for the semi-annual research review meetings.

8.2 The participating universities and IAB members will meet twice a year (spring and fall) to review research results, propose projects, review budgets, and discuss the strategic plan for the center. Typically, the participating universities will host the fall center meetings on a rotating basis with the date and location determined at the previous IAB meeting. Spring meetings will typically be held at an airline hub or related conference location.

8.3 A member may send more than one representative to the IAB meetings, but will only have one voting representative.

8.4 A non-member may attend one meeting as long as there are no objections from any member and as long as the visiting company executes the standard confidentiality agreement. The visiting company will have no rights, such as voting or access to reports. The center director will notify the IAB one week before a meeting, by email, of possible guests, including names, titles and affiliation.

8.5 Meeting agendas will be provided at least two weeks in advance of each meeting. Minutes for open and closed IAB sessions will be taken by the IAB secretary and distributed to the IAB and center evaluator after the meeting. All documents will be supplied as PDF files and marked confidential.

8.6 Center meetings are closed to the public because proprietary information will be discussed. Attendance is limited to faculty, staff, postdoctoral fellows, and students affiliated with the center; representatives of center members; the NSF-appointed center evaluator; and other NSF personnel. Prospective members and university affiliates may attend by invitation of the center director and must sign a CB² confidentiality agreement. Prospective members may attend a maximum of two IAB meetings.

Article IX – Research Project Selection Procedure

9.1 Proposed new projects are reviewed annually by the IAB. On project decisions each IAB member is allocated votes with which to influence project selection and resource allocation priorities. Each member paying a full membership is allocated 10 votes. Each member paying a half-membership is allocated 5 votes. Votes may be distributed across sites and projects in any manner the member selects, from all votes on one project to some votes on many or all projects. Projects with the most votes will be selected for funding irrespective of center site. Project budgets may be adjusted slightly on the basis of available funds.
9.2 The research projects are conducted by students (undergraduate, graduate, and/or postdoctoral), technical staff, and faculty at one or more of the participating universities.

9.3 All center members may participate in the selection and evaluation of research projects. Individual organizations may acquire up to two voting center full-memberships, and therefore will have a corresponding number of voting points. For example, a company that pays for two full memberships will be allocated 20 votes for selection of new research projects.

9.4 Each funded project selected by the IAB will have a minimum of one mentor/technical sponsor from a member institution.

9.5 Members will propose general industry-oriented research topics of interest for consideration. A portfolio of relevant research topics will be compiled based on the interest of the members. These research topics will be posted on a secure web site and will form the basis for cooperative discussions among the faculty and the members. Each participating university will develop a set of pre-proposals consistent with the interest of the members and the mission of the center. The pre-proposals will be posted on a secure web site prior to the fall IAB meeting. At the research review meeting, faculty/student teams will discuss their pre-proposals with IAB members.

**Article X – Publicity**

10.1 A member shall not use the name of any participating university in any publicity, advertising, or news release without prior written approval of an authorized representative of the affected university. Members may request anonymity, but by default, will be listed on the CB² web site and mentioned in public communications regarding CB² and its activities. Center press releases will be coordinated between the center director and participating university press office. Notwithstanding the forgoing, parties may satisfy any reporting requirements of their respective organizations and of NSF.

10.2 Subject to the recommendations of the IAB, the center director shall post descriptions of all CB²-funded research projects on the center web site. The descriptions shall not contain confidential or proprietary information and may be published freely.
Article XI – Publications

11.1 Researchers engaged in CB² research shall be permitted to disclose the methods and results of their research after a review by the members for proprietary materials as outlined in the membership agreement (Appendix I).

11.2 In accordance with the membership agreement and subject to limited restriction, universities reserve the right to publish center information arising out of or resulting from shared research. The notice of intention to publish along with the manuscript will be sent to the primary contact for each member with receipt confirmation requested and posted to the secure center web site 30 days prior. It shall be incumbent upon the requestor to obtain documented evidence that the primary contact for each member company has received the notice. University publication rights remain as per the membership agreement.

11.3 Center data that have been approved for publication may be used in additional publications or forums without additional permission.

Article XII – Benefits

12.1 All members will have non-exclusive rights to the entire CB² shared research portfolio under the conditions outlined in the membership agreement and these operating procedures.

12.2 All members will have an opportunity to directly contribute to CB² research and education programs by serving as industry mentors and/or thesis committee members as appropriate and consistent with the policies and procedures of participating universities.

12.3 All members will have an opportunity to propose specific research problems and focus areas for research.

12.4 Information transfer between the faculty/student research teams and members will be promoted by: (1) direct involvement of the industry advisor on the research team, (2) submission of reports, and (3) research presentations to members.

12.5 Each member that joins the center by paying the membership fee will vote anonymously on the selection of research projects supported by membership fees. They will also be eligible to vote on all other center matters and participate in the evaluation and discussion of research projects.
12.6 Each member that joins the center on an approved in-kind basis will also have voting rights as outlined in 12.5 if approved by two-thirds of the cash paying membership.

**Article XIII – New University Affiliates and Industry Members**

13.1 It is anticipated that new universities may request membership in the CB² as a site or affiliate institution. Each new university requesting membership shall initially obtain concurrence from the center director and site directors prior to submitting a letter of intent to join the CB². Universities requesting membership as a participating university must demonstrate their ability to perform synergistic research within the focused research areas of the center and their willingness to work within the structure, policies, and procedures of CB². Upon concurrence by the center, including the approval of a two-thirds majority of the IAB, the new university requesting membership as a participating university may continue its application following the applicable procedures of the current NSF I/UCRC program solicitation.

13.2 A new university requesting membership into CB² shall review their research objectives and program plans, and obtain and submit within their planning grant proposal a letter of support from the site director at each of the current center university members and from the IAB chair.

13.3 From time to time, new companies, corporations, or organizations may request, or be invited, to join CB² as a member. These new companies or organizations may join CB² upon signing the existing membership agreement and associated Confidentiality Agreement (Appendix II), acceptance of the current operating procedures, and payment of the non-prorated annual membership fee.
Appendix 1

Membership Agreement

This Agreement is made this ENTER DAY day of ENTER MONTH,YEAR by and between Iowa State University (hereinafter called “UNIVERSITY”) and ENTER COMPANY NAME (hereinafter called “COMPANY”) for the Center comprising and acting through the Industry & University Cooperative Research Center for Bioplastics and Biocomposites (CB²), which is defined as all CB² Research Sites funded by the Industry & University Cooperative Research Center Program of the National Science Foundation.

WHEREAS, the parties to this Agreement intend to join together in a cooperative effort to support an Industry & University Cooperative Research Center for Bioplastics and Biocomposites (hereinafter called “CENTER”) led by the UNIVERSITY to maintain a mechanism whereby the UNIVERSITY environment can be used to perform research toward the areas of bioplastics and biocomposites.

WHEREAS, Washington State University and UNIVERSITY have entered into an Inter-Institutional Agreement, in a cooperative effort to establish and support the CENTER, and the CENTER intends to maintain a mechanism whereby the CENTER environment can be used to perform research for the CENTER at Iowa State University and Washington State University and/or future universities (hereinafter collectively called the “COLLABORATING UNIVERSITIES”) in the area of CB².

WHEREAS, ENTER UNIVERSITY NAME was responsible for recruiting COMPANY to the CENTER.

The parties hereby agree to the following terms and conditions:

A. CENTER will be operated by certain faculty, staff and students at the UNIVERSITY and other Research Sites at the other COLLABORATING UNIVERSITIES. For the first five years, the CENTER will be supported jointly by industrial firms, the National Science Foundation (NSF), and the COLLABORATING UNIVERSITIES. It is possible that the UNIVERSITY may receive support from NSF for an additional ten years.

B. Any COMPANY, Federal Research and Development organization, or any Government-owned Contractor Operated laboratory may become a sponsor of the CENTER, consistent with applicable state and federal laws and statutes.

C. COMPANY agrees to contribute one of the following annually in support of the CENTER and thereby becomes a member (please check one).
$30,000 for companies with more or equal to 500 employees. Support at this level counts as ONE FULL MEMBERSHIP and TEN VOTES.

$15,000 for companies with fewer than 500 employees. Support at this level counts as ONE FULL MEMBERSHIP and FIVE VOTES.

Payment of these membership fees shall be made to Iowa State University as one of the following (please check one).

☐ A lump sum due by November 30th each year of sponsorship.

☐ Four equal quarterly installments in November, February, May, and August of each year of sponsorship.

Checks from COMPANY should be mailed to Iowa State University, Sponsored Programs Accounting, 3609 Administrative Services Building, Ames, IA 50011-3609 with a note in the memo section indicating the payment is for CB² membership. Because research of the type to be done by the CENTER takes time and research results may not be obvious immediately, COMPANY should join CENTER with the intention of remaining a fee paying member for at least two years. However, COMPANY may terminate this Agreement by giving UNIVERSITY 90 day’s written notice prior to the termination date. Fees paid by COMPANY as a member are not refundable. UNIVERSITY can terminate this Agreement upon at least thirty (30) days prior written notice to COMPANY if: (a) COMPANY is in breach of this Agreement and fails to cure the breach within this 30-day timeframe; or (b) UNIVERSITY decides to discontinue its involvement in the CENTER; provided, however, that UNIVERSITY agrees that the CENTER will continue to exist, upon mutual agreement of each member, so long as the CENTER has a funding agreement in place with NSF. Termination or cancellation of this Agreement shall not affect the rights and obligations of the parties accrued prior to termination.

D. There will be an Industrial Advisory Board composed of one representative from each member. This board makes recommendations on (a) the research projects to be carried out by CENTER (b) the apportionment of resources to these research projects, and (c) changes in the bylaws.

E. UNIVERSITY reserves the right to publish in scientific or engineering journals the results of any research performed by CENTER. COMPANY, however, shall have the opportunity to review any paper or presentation containing results of the research program of CENTER prior to publication of the paper, and shall have the right to request a delay in publication for a period not to exceed 30 day(s) from the date of submission to COMPANY provided that COMPANY makes a written request and justification for such delay within 30 days from the date the proposed publication is submitted to COMPANY.
F. All patents derived from inventions conceived or first actually reduced to practice in the course of research conducted by the CENTER shall belong to UNIVERSITY and/or relevant COLLABORATING UNIVERSITY(IES). These universities, pursuant to chapter 18 of title 35 of the United States Code, commonly called the Bayh-Dole Act, will have ownership of all patents developed from this work, subject to "march-in" rights as set forth in this Act.

G. UNIVERSITY agrees that all such CENTER sponsors are entitled to a nonexclusive royalty-free license. COMPANY will have the right to sublicense its subsidiaries and affiliates. COMPANIES that wish to exercise rights to a royalty-free license agree to pay patent application and maintenance costs.

H. If only one COMPANY seeks a license, that COMPANY may obtain an exclusive fee-bearing license through one of its agents. COMPANY has the right to sublicense its subsidiaries and affiliates.

I. Copyright registration shall be obtained for software developed by CENTER. COMPANY shall be entitled to a nonexclusive, royalty-free license to all software developed by CENTER. COMPANY will have the right to enhance and to re-market enhanced software with royalties due to CENTER to be negotiated, based on the worth of the initial software, but not to exceed 25% of a fair sale price of the enhanced software product sold or licensed by COMPANY.

J. Any royalties and fees received by a COLLABORATING UNIVERSITY under this Agreement, over and above expenses incurred, will be distributed in accordance with UNIVERSITY intellectual property policy.

K. Neither party is assuming any liability for the actions or omissions of the other party. To the extent allowed by law, each party will indemnify and hold the other party harmless against all claims, liability, injury, damage or cost based upon injury or death to persons, or loss of, damage to, or loss of use of property that arises out of the performance of this agreement to the extent that such claims, liability, damage, cost or expense results from the negligence of a party's agents or employees. Any and all intellectual property and rights granted and/or provided by UNIVERSITY pursuant to this Agreement are on an "AS IS" basis. All implied warranties, including warranties of merchantability and fitness for a particular purpose, are expressly disclaimed. UNIVERSITY shall not be liable to COMPANY or any third party for loss of profits or for incidental, indirect, special or consequential damages, even if UNIVERSITY has been advised of the possibility of such damages or has or gains knowledge of the existence of such damages. COMPANY shall defend, indemnify and hold harmless UNIVERSITY and its trustees, officers, employees, attorneys and agents ("UNIVERSITY Parties") from and against any and all liability, damage, loss or expense (including reasonable attorney's fees and expenses) incurred by or imposed upon any or all UNIVERSITY Parties in connection with any claim, suit, action or demand arising out of or relating to any exercise of
any right or license granted or provided to COMPANY or its subsidiaries or affiliates under this Agreement under any theory of liability (including without limitation, actions in the form of tort, warranty, or strict liability, or violation of any law, and regardless of whether such action has any factual basis).

L. Any official notice, invoice, and other correspondence between the parties under this Agreement shall be in writing and delivered by no less than First Class U.S. Mail service or facsimile transmission addressed to the other party’s administrative contact as follows:

<table>
<thead>
<tr>
<th></th>
<th>COMPANY</th>
<th>CB(^2) Administrative</th>
<th>ISU: Business Matters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td>Dr. David Grewell</td>
<td>Lynne Mumm</td>
</tr>
<tr>
<td>Title</td>
<td></td>
<td>Director, CB(^2)</td>
<td>Senior Negotiator, Industry Contracts</td>
</tr>
</tbody>
</table>
| Address        |                              | 1201 Sukup Hall
Ames, IA  50011          | 310 Lab of Mechanics
Ames, IA 50011             |
| Phone          |                              | 515 294 2036                    | 515 294 4740                      |
| Fax            |                              | 515 294 2255                    | 515 294 0778                      |
| Email          |                              | cb2@iastate.edu                 | industry-contracts@iastate.edu     |
IN WITNESS WHEREOF, UNIVERSITY and COMPANY have caused this Agreement to be executed by their duly authorized officials, to be effective as of the Sponsorship Effective Date indicated below Affiliate’s signature, which day and month in subsequent years in which AFFILIATE adheres to the terms of this Agreement shall be called the anniversary date of this Agreement.

COMPANY:

______________________________ / __________________________
Name: Date
Title:

IOWA STATE UNIVERSITY
Read and understood: Agreed and accepted:

______________________________ / __________________________
Name: David Grewell Date Name: Lynne Mumm Date
Title: Professor and Director, CB² Title: Senior Negotiator
Appendix II

Confidentiality Agreement

Schedule A

Reference is made to the CB² Confidentiality Agreement between Iowa State University of Science and Technology ("ISU") and Washington State University; and COMPANY members of the CENTER (the “Confidentiality Agreement”).

Capitalized terms used herein and not otherwise defined have the respective meanings assigned in the Confidentiality Agreement.

The undersigned hereby agrees to the terms and conditions of the Confidentiality Agreement and to the designation of the undersigned as a COMPANY thereunder as of the Effective Date specified below.

This Schedule A may be executed in any number of counterparts and by any party on separate counterpart, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

Company Information

Company Name:

Address:

City: State: Zip:

Authorized Company Official

Name:

Title:

Effective Date:

Contact Information for Administrative Matters

Contact Name:

Phone Number:

Email Address:
Proposal Development Process

Center for Bioplastics and Biocomposites (CB²)
February 2017
Proposal Development Process

CB² has developed a comprehensive 6-month long selection process for new projects that consists of the following steps:

1. Both industrial members and faculty are asked to submit ideas for new projects prior to the spring meeting. These will be referred to as seed concepts and should include a descriptive title and a one-paragraph text. Each company can submit up to three seed concepts and PIs can submit up to one. The seed concepts are due to the center director five business days prior to the spring meeting.

2. During the spring meeting, the IAB and PIs will review and discuss the seed concepts. During the review process the participants will reduce the number of seed concepts by identifying and combining redundancies, and/or similar seed concepts. In addition, the IAB will rank the importance of the seed concepts using a voting procedure based on IAB voting rights (small company 5 votes, large company 10 votes). The number of seed concepts that will be used for the final call of proposals will be approximately 1.5 times the number of IAB member companies. Each seed concept will be identified into one of the center’s thrust categories and one IAB member will be identified as the primary contact for the seed concept. Other IAB members can serve as co-contact for the seed concept and support the primary contact. The seed concepts will be released by the center no later than two weeks after the spring meeting.

3. All previously funded projects shall not be subject to the ranking process and shall go to the podium presentation at the fall meeting.

4. Projects may receive a maximum of three years of funding, but must re-compete for funding each year.

5. It is HIGHLY recommended that the PIs work directly with the primary contacts of the seed concepts to prepare proposals for initial web-based voting. The initial proposals will be due early August.

6. The IAB will vote using a web-based process to down-select the final proposals to be promoted to a podium presentation at the fall meeting. Voting will close early October.

7. A standard PowerPoint format (five to ten-slides) will be employed and a two-page description are to be produced and provided by each proposing team.

8. At the IAB meeting, a structured review process will be used to obtain further input from members, and IAB members will vote to define funding priorities. Large members receive 10 votes and small members 5 votes that they distribute among the different projects.

9. In general, the projects receiving the highest numbers of votes are then selected as research topics for incoming students depending on available funding levels.