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## 2024 Greener Cattle Initiative Request for Applications

Match is Optional for This Funding Opportunity

### Key Dates

Pre-Application (Letter of Intent) Open: February 28, 2024, at 12:00pm ET

Pre-Application Due: April 3, 2024, by 5:00pm ET

***NOTE: An approved pre-application with an invitation to submit a full application is required for submission.***

Full Application Invitation: May 1, 2024

Full Application Due: June 12, 2024, by 5:00 PM ET

Award Notification: Fall 2024

Anticipated Project Start Date: Early 2025

The Greener Cattle Initiative ([GCI](#)) announces a request for applications (RFA), facilitated by the Foundation for Food & Agriculture Research (FFAR) and invites applications for cutting edge research to benefit farmers, consumers, and the environment. GCI encourages projects that facilitate transformative strategies and innovation. Previous RFA applicants and awardees are eligible to submit applications.

### **I. Initiative Objective and Application Requirements:**

The broad objective of the GCI is to support research efforts to identify and develop new practices and technologies, or validate existing practices and technologies, that enable the sustainable decrease in enteric methane emissions from cattle. The GCI recognizes that fundamental research may be the basis for future breakthroughs and commercially viable solutions.

### **Research Areas Supported**

The GCI will consider applications addressing one or more of the following:

- Delivery mechanisms of non-vaccine enteric methane mitigation technologies (*inclusive of oral, parenteral, or topical administration; for example: boluses, liquids, drenches, formulated supplements, free choice supplements, injection, etc.*)
- Impact of applying interventions early in life to reduce enteric methane emissions later in life or in offspring (*inclusive of calf microbiome, colonization, fetal programming, etc.*)
- Combined impacts of administering multiple enteric methane mitigation technologies to examine additive, synergistic or antagonistic effects
- Long-term and longitudinal studies to evaluate lasting effects of enteric methane mitigation technologies on mitigation, animal health and productivity (*inclusive of full lactations or multiple lactations*)

The GCI will not consider applications addressing:

- Development of greenhouse gas reporting frameworks, sustainability indexes, modeling or quantification protocols for enteric emissions offsets, or life cycle assessments
- Genetic improvement of forages or concentrate feeds
- Replacement/removal of livestock in food systems
- Policy recommendations
- Soil carbon sequestration
- Vaccine development
- Testing products without a researched and proven scientific basis or merit
- Technologies, intervention or strategies that counteract current beneficial practices

All research must be conducted in accordance with standard research compliance requirements, such approval from the relevant Institutional Animal Care and Use Committee (IACUC) or similar. If human subjects are involved, the research team should be trained in culturally appropriate methods to reach the target population and must have Institutional Review Board (IRB), or similar, approval for the project.

### **Additional Guidance to Applicants:**

Projects should have the potential for transforming the field of enteric methane research and agricultural sustainability globally and must demonstrate a high probability to be commercially viable, economically feasible and socially responsible without negatively impacting animal health and welfare, productivity, product quality, and consumer and environmental safety.

Applicants are strongly encouraged to address the following elements in submitted applications:

- Impact of the proposed research on enteric methane emissions
- Potential to meet or exceed relevant animal, human and environmental health and safety regulations
- Impact of the approach on quality and safety of food products derived from animals
- Explanation of how the proposed approach may contribute to transformative change
- Estimation of the current technology readiness level (TRL) for the approach
- Potential to provide ancillary benefits to producers that are not based on carbon-trading (such as enhancing performance/efficiency, product volume or quality)
- Potential to be implemented at a scale into existing dairy and beef production systems globally, if validated/approved by regulatory authorities
- Potential of the proposed strategy to accelerate the development of new enteric methane interventions
- Where appropriate, estimated time to commercialization of proposed strategy and cost of commercialization
- Potential consumer acceptability of proposed strategy
- Reproducibility of proposed work
- Where appropriate for strategies closer to market, a socioeconomic analysis identifying potential challenges or barriers to adoption

## **II. Eligibility**

GCI welcomes applications from all domestic and international higher education institutions, non-profit and for-profit organizations, and government-affiliated research agencies.

Any individual(s) with the skills, knowledge, and resources necessary to perform the proposed research as Program Director(s)/Principal Investigator(s) may apply through their home institution or organization.

## **III. Funding Availability and Award Information**

A maximum request of up to US \$5 million are available for all proposed projects. Projects up to 3 years in length are eligible for funding.

Matching funds are optional for this funding opportunity. Successful applications will receive annual disbursements contingent upon meeting reporting requirements, if applicable (see Post Award Management below). FFAR reserves the right to request modifications to the workplan, methodology and scope of proposed work that may affect the total award amount.

Key budget considerations are noted below, and additional budgetary guidelines can be found on FFAR's [website](#). Applicants are encouraged to contact [FFAR's Grants Team](#) to discuss any concerns.

#### Funding Restrictions:

- A maximum of 10% of the total award may be used for [indirect costs](#).
- Reasonable budgets work in favor of the applicant. Budgets that are not commensurate with proposed work or poorly justified likely will negatively affect the overall evaluation of the application.

#### Intellectual Property:

- Applicants are expected to review and abide by the Data-Sharing and Intellectual Property rules laid out in Addendum A.

## **VII. Application Components**

As previously noted, all applicants must submit their application through FFAR's online Grant Management System, which requires completing each section before advancing to the next.

### **Pre-Application Components**

- Organization Information
- Authorized Organizational Representative (AOR) Information
- Grant Administrator Information
- Governmental/Legislative Contact Information
- Program Director or Principal Investigator (name, affiliation, contact information)
- Key Project Personnel – name(s), affiliation, expertise, project role
- Project Title (*up to 50 words*)
- Project Timeline
  - Proposed project start date
  - Proposed project duration (*in calendar months*)
- Geographic Location(s) of Research
- Project Key Words (*up to 20 words*)
- Project Description
  - What challenge or existing paradigm is the project addressing? (*up to 250 words*)
  - How will the project address the stated challenge and advance understanding of an understudied research topic or information gap? (*up to 250 words*)
  - What innovative outcomes will the project generate? Describe how the project will solve challenges to food supply or sustainable agriculture. (*up to 250 words*)
  - Why is the GCI ideally positioned to fund this project? (*up to 250 words*)
- Budget
  - Total GCI funding request
  - Total proposed budget
  - Total existing matching contributions (*if applicable*)

- Matching Contributor Information (*if applicable*)
- Optional Attachments
  - Additional Key Personnel

## Full Application Components

### *Required components*

- Organization Information
- Authorized Organizational Representative (AOR) Information
- Grant Administrator Information
- Press Contact Information
- Governmental/Legislative Contact Information
- Program Director or Principal Investigator (name, affiliation, contact information)
- Key Project Personnel – name(s), affiliation, expertise, project role
- Project Title (*up to 50 words*)
- Project Timeline
- Geographic Location(s) of Research
- Project Abstract (*up to 250 words*): Describe, in simple, nontechnical terms, the overall goals of the proposed project, the potential significance of the results, and the impact of the work on advancing the food and agriculture sector.
- Project Suitability (*up to 250 words*): Why is the GCI ideally positioned to fund this project?
- Project Goals and Objectives (*up to 250 words*): Goals are specific aims that the project is trying to accomplish each year. Objectives are measurable actions that will be taken to achieve the corresponding Goal. These goals and objectives will also be used when submitting and evaluating progress reports and assessing project success.
- Project Description and Approach – text only (*up to 1500 words*)
  - A summary of the knowledge that has laid the groundwork for this project, including any relevant preliminary work or data that has informed the development of the project.
  - A description of how the research or outreach addresses an intractable challenge in an innovative way.
  - A detailed account of the procedures or methodology you will use to achieve the goals and supporting objectives. The account must have enough information for a panel of experts to judge the merit of the project.
  - Techniques to be used, including their feasibility and rationale.
  - How data will be analyzed or interpreted.
  - A summary of potential risks to the proposed project.
  - A description of how the project is relevant to the RFA.
- Anticipated Outcomes or Outputs (*up to 500 words*): Clearly describe how the project, if successful, will have a major impact on the food and agriculture sector. Summarize how the proposed research creates new paradigms or challenges

existing ones. This section should communicate the potential impact of the project should the goals of the project be achieved, including any potential commercialization of results.

- Project Data Management and Dissemination Plan (*up to 250 words*): FFAR requires that, where possible, project data and results be shared broadly. To facilitate data and results sharing, a proposal submitted to FFAR must include a Data and Results Management Plan which should include a communication plan to amplify outcomes to stakeholder audiences. Plans should include a description of what type of data are expected, how those data will be preserved and stored; and how data and results will be accessed and shared in a timely manner. Even in the unlikely case in which no data or informational results will be produced, a plan must be submitted which states, “No data are expected to be produced.” However, overarching results are still expected to be shared.
- Project Barriers (*up to 250 words*): Barriers to adoption of the research outcome(s) (*Note: GCI strongly encourages applicants to address social and economic factors in the project design, evaluation processes, and outcomes, where applicable.*)
- Proposed budget
  - Key Personnel Information
  - Total proposed budget
  - Total GCI funding request
  - Total existing matching contributions, if applicable
  - Budget Narrative (*up to 500 words*): Provide a brief overview of the budget by task or objective, in parallel to the approach outlined in the project's description. Address costs related to personnel, equipment, and facilities, and analytics.
  - Budget Justification by year (*up to 500 words*)
- Matching Funder Information (*if applicable*)
- Organizational Assurances

**Required Attachments:** Failure to provide these attachments will result in the application's disqualification.

- [Budget Form](#)
- [Current and Pending Support](#)
- Project timeline (by year)
- References Cited, which will not count toward total word limit.
- [P.I. and Key Personnel Biosketch](#): five-page limit per individual listed as P.I. or key personnel in the project
- Supporting figures, tables, graphics, or equations, which will not count towards total word limit.
- Three-slide summary or description of the project

**Optional Attachments:**

- Matching Funds Contribution Letters
- Additional Key Personnel
- Letters of Support

## **V. How to Apply**

LOIs and invited full proposals must be submitted by the deadline date through FFAR's online application Grant Management System. Applications submitted outside of this System will not be considered.

To start a new application, please click [here](#). If you are a new user, register for an account by Clicking the "Create Account" button located under the email address field on the left side of the home page. Once you log in, you may begin working on your application. Please be sure to save your work often by clicking on "Save and Finish Later." To access a saved application, please do so through the [Grant Management Account](#).

Only applications submitted by the deadline through FFAR's Grant Management System will be accepted and considered eligible for evaluation. To be fair to all our applicants, FFAR will not grant extensions to applicants who missed the deadlines posted in the [Key Dates](#) section.

## **VI. Additional Information**

### **Review Process**

*Pre-Application Review:* Submitted pre-applications undergo an internal review by the GCI Steering Committee to assess if the project is relevant to the RFA and that the application demonstrates the potential to meet the evaluation criteria. Those applications deemed to have significant potential for advancing GCI's objective will be invited by the GCI Steering Committee to submit a full application. ***Applicants must submit a pre-application to be eligible to submit a full application.***

*Full Application Review:* Full applications will undergo a peer-review process. First, each submission will be assigned to an external technical review panel of at least three subject matter experts. In the second stage, the GCI Steering Committee will provide funding recommendations based on the external peer reviews and a comparative evaluation of how well submissions meet the Initiative's objectives. The GCI Steering Committee will then review positive funding recommendations and make final selection decisions.

All external reviewers must agree and adhere to the terms outlined in FFAR's [Conflict of Interest Policy](#) and [Non-Disclosure Agreement](#). The GCI Steering Committee will make reasonable efforts to ensure that applications are not assigned to reviewers with a real or apparent conflict with the applicant, institution or project personnel. Reviewers with a conflict of interest will be recused from evaluating or participating in the related discussions. Each stage of the review will be conducted confidentially, and as such, the GCI Steering Committee will be responsible for protecting the confidentiality of the contents of

the applications.

#### **IV. Evaluation Criteria**

All applications will be screened for relevance, accuracy, completeness, and compliance with the GCI guidelines stated in this RFA. Pre-applications must demonstrate the potential to meet the evaluation criteria. Full applications then will be evaluated on the following criteria:

##### ***Qualifications and Research Environment***

- Has the Principal Investigator assembled a qualified research team with access to the appropriate field and laboratory facilities?
- Does the application identify how/why GCI is uniquely positioned to fund this project?

##### ***Project Description and Approach***

- Are the goals and objectives adequate to address the challenge?
- Does the application include appropriately thorough, tractable, and feasible methods?
- Does the application identify potential pitfalls and include an adequate risk evaluation and mitigation plan?

##### ***Anticipated Outcomes and Outputs***

- Does the application adequately describe the potential impact and applied relevance of the research?
- How significant, i.e., transformative, are the potential outcomes of the project? Will the results impact both beef and dairy production? Will the results be relevant to a specific region or to global production systems?
- Is the budget justified by the work and are potential outcomes outlined?

##### ***Data Management and Dissemination; Overcoming Barriers to Adoption***

- Does the application include an adequate data management plan with a commitment to public access?
- Does the proposed project address 'public good' by making data open and accessible to the public while adhering to GCI intellectual property terms (**Greener Cattle Initiative Addendum A**), creating unique economic development opportunities or contributing to food and agriculture workforce development?
- Does the application emphasize scalability and present a plan for disseminating the project outcomes?
- Does the application address socioeconomic challenges and/or barriers to adoption regarding the proposed project?

#### **Award Administration**



***Selection Notice:*** Following the full application review process, the Principal Investigator and the authorized organization representative listed on the project will be officially notified by email of the status of the application. If an application is selected for funding, GCI reserves the right to request additional or clarifying information for any reason deemed necessary.

***Intent to Fund Notification:*** GCI (through FFAR) will notify applicants of their awards by email. The notice will not constitute an award or obligate funding from GCI until there is a fully executed Grant Agreement.

***Requirement to Demonstrate Matching Funds:*** Matching funds are OPTIONAL for this funding opportunity. If the applicant provides matching funds, the applicant agrees to identify and certify matching funds annually before disbursement of award funds. The match share is intended to supplement, not supplant existing funding for the Principal Investigator. The applicant will abide by FFAR's [Matching Funds Guidelines](#) to meet FFAR's matching requirements.

## **Post-award Management**

***Grant Period:*** Upon receipt of the Grant Agreement, the grantee should confirm the project's start and end dates. Once signed, the start date cannot be changed. Grantees may use GCI funds only on project expenditures on or after the Grant Agreement is fully executed or with prior approval of pre-award expenditure. Charging expenditures to the grant before the fully executed date is strictly prohibited. Likewise, grantees may not use GCI funds after the end date except to pay allowable project costs committed on or before that date.

A grantee may request a no-cost extension of up to 6 months to complete the work's planned scope. The request must be communicated to GCI and submitted through the FFAR Grant Management System at least thirty (30) days before the end date of the grant. The request must justify the need for the extension, include a summary of the unobligated, remaining funds and provide a plan for fulfilling the project's terms. If a no-cost extension request is approved, GCI will issue an amendment to the Grant Agreement. This extension will not be approved merely for using unexpended funds.

***Semi -Annual Reporting Requirements:*** Grantee must provide semi-annual update presentations to the GCI Steering committee, as well as progress reports. The semi-annual reports should include activities performed under the grant, highlighting project accomplishments, and an account of expenditures.

***Final Report Requirements:*** Within 90 days of completing the project, the grantee shall provide a final project report. This report should address the project objectives outlined in the original grant application, describe any modifications to the project objectives and scope, describe the final project accomplishments and include a final project accounting of all grant funds. Publication and data-sharing should be addressed as outlined in **Greener Cattle Initiative**

## **Addendum A.**

*Scientific Integrity:* GCI strives to advance knowledge and the application of science to address challenges related to sustainable agriculture. GCI's ability to pursue its objective depends on the integrity of the funded science projects. All GCI grants must be conducted with the highest standards of scientific integrity.

## **VIII. Application Assistance**

For questions related to the online submission system, please contact FFAR's Grant Management team at [grants@foundationfar.org](mailto:grants@foundationfar.org).

For questions related to the Greener Cattle Initiative, please email [GreenerCattleInitiative@FoundationFAR.org](mailto:GreenerCattleInitiative@FoundationFAR.org). We only accept scientific or programmatic and grants inquiries by email.

This addendum is provided to share rules about Data-Sharing and Intellectual Property set forth in the Program Agreement governing the Greener Cattle Initiative that are pertinent to potential awardees.

### **Definitions**

Capitalized terms used in this Agreement not otherwise defined herein shall have the meanings set forth below:

- 1.1 “Affiliates” means with respect to a Party, any person or entity controlling, controlled by, or under common control with that Party. For the purpose of this definition of “Affiliate,” “control” meaning in this context the direct or indirect ownership of more than fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) of the voting stock/shares of a company, or the power to nominate more than fifty (50%) of the directors, managers, or individuals exercising authority in the governance of such entity.
  
- 1.3 “Confidential Information” has the meaning set forth in Section 11.1 (Confidential Information): Confidential Information. Any and all information disclosed or submitted orally, in writing or in other tangible form under confidentiality to one Party (the “Receiving Party”) by any other Party (the “Disclosing Party”), that is reasonably understood to be confidential under the facts and circumstances of disclosure or is designated as confidential by the Disclosing Party, shall hereinafter be referred to as the “Confidential Information” of the Disclosing Party. For clarity, all information disclosed by one Participant to another Participant that is related to a Project (including any disclosure of a Participant’s Background IP) shall be deemed Confidential Information of the Disclosing Party. Each Receiving Party shall receive and maintain the Disclosing Party’s Confidential Information in confidence, and shall not disclose any of Disclosing Party’s Confidential Information to any Third Party other than with the Disclosing Party’s advance written consent. No Party shall use the Confidential Information of any other Party for any purpose other than as required to perform or exercise its rights hereunder, or in furtherance of the Project’s objectives. The Receiving Party may disclose the Disclosing Party’s Confidential Information to the Receiving Party’s and its Affiliates’ employees and consultants requiring access thereto for the purposes of this Agreement provided that such employees and consultants are under like obligations with respect to Disclosing Party’s Confidential Information by virtue of their employment or other relationship with the Receiving Party. Each Receiving Party agrees to take commercially reasonable steps necessary to ensure that the Disclosing Party’s Confidential Information shall be maintained in confidence including (without limitation) such steps as it takes to prevent the disclosure of its own proprietary and confidential information of like character. All of Disclosing Party’s Confidential Information is and shall remain the sole and exclusive property of the Disclosing Party. The foregoing obligations of confidentiality and non-use shall survive, and remain in effect for a period of five (5) years from, the termination or expiration of this Agreement.

1.8 “Intellectual Property” means all forms of intellectual property rights (anywhere in the world, whether statutory, common law or otherwise) including, without limitation, (i) patent rights, patent applications, rights to file patent applications, utility model rights, rights to register utility models, design patent rights, design patent applications and the right to file design patent applications; (ii) copyrights, copyright registrations and applications for copyright registrations; (iii) rights to authorship and moral rights; (iv) invention rights, rights to trade secrets and rights to know-how and expertise, discoveries, information, data and material, and all derivatives, modifications and improvements thereof; (v) rights to trademarks; and (vi) all other intellectual property rights that may exist anywhere in the world, including, in each case whether unregistered, registered or comprising an application for registration or certification or regulatory approval, and all rights and forms of protection of a similar nature of having equivalent or similar effect to any of the foregoing.

1.9 “Invention” refers to any invention, which is capable of being protected by a patent and which is either conceived, developed and reduced to practice, or conceived, developed, and merely requires constructive reduction to practice, by the Research Institution in the course of the Project, or any invention, which is capable of being protected by a patent, other than the Results, which is conceived and developed in the performance of the Project, and either reduced to practice, or merely requires constructive reduction to practice, by the Research Institution in the course of further research based on the Results, not being the Project, but when such claimed invention necessarily incorporates the Results of the Project.

1.10 FFAR and DRI have developed a collaborative Program, the Greener Cattle Initiative, with the purpose set forth in Article II (Program) of this Agreement (hereinafter referred to as the “GCI” or the “Program”).

1.12 “Steering Committee” refers to the committee with responsibility for the overall governance and guidance of the Program (and the specific responsibilities set forth in this Agreement), comprised of one individual representative from each Participant.

1.13 “Participant” means (a) FFAR, (b) DRI, or (c) any other company, commodity group, producer association, industry trade group, business association, sector association, industry body, industrial firm, public institution, non-profit organization, federal research and development organization, foreign organization, or governmental agency which agreed, accepted, and signed the Program Agreement in the form set forth on Exhibit A (Form of Program Agreement for Additional Participants) and paid the agreed contribution, if applicable.

1.14 “Project” refers to a specific research project within the scope of the Program with specific aims and goals related to Enteric Methane mitigation.

- 1.15 “Project Agreement” has the meaning set forth in Section 9.3 (Project Agreement): FFAR shall agree to Intellectual Property terms in a written agreement to be entered into by FFAR and a Research Institution for a specific Project, which can be in the form of a Grant Agreement, a Master Services Agreement, or any other appropriate form of agreement (the “Project Agreement”).
- 1.16 “Project Funders” means, with respect to a given Project, FFAR, DRI, and Co-Funders which participate in a Project through cash or in-kind contributions, subject to the terms of the applicable Project Agreement. FFAR and DRI shall be deemed a Project Funders for each Project and shall be represented by an employee of each entity.
- 1.17 “Project Team” refers to the Research Institution’s and/or Project Funder’s scientific personnel participating in a Project pursuant to a Project Agreement.
- 1.18 “Project-specific Inventions” has the meaning set forth in Section 9.3(a): Unless otherwise approved by the Steering Committee, under each Project Agreement, all inventions made solely by a Project Funder’s personnel participating on a Project Team for the applicable Project will be assigned to such Project Funder, and any inventions made jointly by such Project Funder’s personnel together with the personnel of another Project Funder or Research Institution participating in such Project will be assigned jointly to such Project Funder and such other Project Funders or Research Institution (the “Project-specific Inventions”) in the manner described in the Project Agreement.
- 1.19 “Registered Intellectual Property” means all forms of registered Intellectual Property and applications therefor including, but not limited to, patents, patent applications, utility models, applications for utility models, design patents and design patent applications.
- 1.20 “Research Institution” refers to a Third Party (other than a Participant) receiving a grant from the Program in order to pursue a particular Project. For the avoidance of doubt, a Research Institution may be a research institution or university, under a sponsored research agreement, individual contractors, or any company (whether for-profit, not-for-profit, public or private), in each case whether located in the United States or in any other country. For the avoidance of doubt, any third-party consultants engaged by the Research Institution in connection with a particular Project are not considered to be a Research Institution for purposes of this Agreement.
- 1.21 “Results” refers to the inventions, data, information, materials and other findings of the Project(s).
- 1.22 “Third Party” means an entity which is not DRI or FFAR.

### **Article VIII Publication and Data-Sharing**

All Results gained in a Project will be made publicly available through publications and appropriate data sharing mechanisms, including publication by the Research Institutions

participating in any Project. As used in this Article VIII (Publication and Data-Sharing), the term “publication” shall extend to any form of public release, including but not limited to posters and oral presentations. All publications to be made by any Research Institution or any Project Funder under a Project Agreement will be subject to review by the other Project Funders to determine if any of such Project Funder’s Confidential Information is disclosed, and if there are any Inventions disclosed. All publications will be provided to all Project Funders for review at least 30 days prior to publication and will be subject to a delay of up to an additional 60 days to facilitate filing for patent protection on any Intellectual Property. The publishing party also will remove any of the Project Funders’ Confidential Information on such Project Funder’s request. All publications shall include proper notice of copyright and trademarks if appropriate.

### **Article IX Intellectual Property**

(b) Each Project Agreement will include the following terms:

(viii). Licenses to Project-specific Inventions. For each Project:

- A. With respect to any Intellectual Property (including Project-specific Inventions) and Results developed under a Project Agreement, each Project Funder contributing to a Project and Research Institution hereby agrees to disclose to the Founding Participants such Intellectual Property and Results developed under such Project Agreement and grants to each Founding Participant an irrevocable (except as otherwise provided upon termination of the Agreement or the Project Agreement), worldwide, non-exclusive, royalty free license to such Intellectual Property (including Project-specific Inventions) and Results developed under the applicable Project Agreement, for internal research use by such Founding Participant, including use by: (i) Third Parties performing research on behalf of such Founding Participant and (ii) such Founding Participant’s bona fide research collaborators).
- B. With respect to any Intellectual Property (including Project-specific Inventions) and Results developed in a Project Agreement, each Project Funder or each Research Institution participating in a Project Agreement hereby grants to each Founding Participant, for a period not to exceed twelve (12) months from written notice as described above of each Project-specific Invention to a Founding Participant (the “Non-Exclusive Option Period”), as a potential licensee, a non exclusive option to obtain an irrevocable, worldwide, non-exclusive, royalty-bearing license for the Intellectual Property (including Project-specific Inventions) and Results developed through the applicable Project Agreement and owned by such Project Funder or Research Institution for commercial use. Following the expiration of the Non-Exclusive Option Period, if no Founding Participant has exercised its option to obtain a non-exclusive license as mentioned above, the applicable Project Funder or Research Institution will grant a Founding Participant, on a first come-first-served basis, for a period not to exceed twelve (12) months from the expiration of the Non-Exclusive Option Period (the “Exclusive Option Period”), an option to obtain a worldwide, exclusive, royalty-bearing license to

practice the Intellectual Property (including Project-specific Inventions) and Results developed through the applicable Project Agreement and owned by such Project Funder or Research Institution for commercial purposes.

- C. If a commercial license agreement is not concluded within the Non- Exclusive Option Period and the Exclusive Option Period, and no further written agreement is reached to extend the period of negotiation, the Project Funder or Research Institution shall have no further obligations to each Founding Participant who does not receive the above listed license(s) with respect to said Invention(s), except that for six (6) months after such period the Research Institution shall not grant such a license on more favorable conditions to any third parties outside the Founding Participants. For a period of twenty-four (24) months after receipt of an Invention Notice by the Founding Participants, the Project Funder or Research Institution shall inform the Founding Participants if a third party outside the Founding Participants is interested in a commercial license to an Invention developed by the Research Institution in the performance of the Project. Upon request by any Founding Participant within sixty (60) days following receipt of written notice that a third party is interested in a license, the Project Funder or the Research Institution will delay granting of such a license.
- D. In case any of the Founding Participants has shown an interest in the commercial use of such patentable Inventions, the Project Funder or Research Institution shall, in good faith, take into account the input provided by the interested Founding Participants with regard to the filing, prosecution, maintenance and defense of such Inventions, including without limitation with regard to the wording of claims, the countries in which patents shall be filed and the overall patent strategy. However, final decisions related to these matters shall remain with the applicable Project Funder or Research Institution, in its discretion.
- E. Notwithstanding the above, in case the applicable Project Funder or Research Institution is not willing to file or continue with the prosecution of a patent or patent application for the Inventions for certain or all countries, the Project Funder or Research Institution shall only offer rights in such Invention to the inventor(s) unless otherwise legally or contractually required (potentially including obligations to the U.S. Government). Inventorship of any Invention subject to a Project Agreement will be determined in accordance with U.S. patent laws.