

**MEMORANDUM OF UNDERSTANDING**

**Between**

**JEFFERSON SCIENCE ASSOCIATES, LLC**

**THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY**

**And**

**IDAHO STATE UNIVERSITY**

**PURPOSE:**

Jefferson Science Associates, LLC. acting as the management and operating contractor for the Thomas Jefferson National Accelerator Facility (JSA/Jefferson Lab or JLab), for the U.S. Department of Energy, located at 12000 Jefferson Avenue, Newport News, Virginia 23606, and Idaho State University (ISU), located at Pocatello, Idaho, USA, jointly execute this Memorandum of Understanding (MOU) in order to facilitate their joint interest in collaboration on nuclear physics research using the Super BigBite Spectrometer (SBS) facility in JLab's Hall A.

This memorandum outlines the terms and conditions by which JSA/Jefferson Lab agrees to collaborate with Idaho State University in areas of common interest to promote scientific understanding of the fundamental building blocks of nature. Specifically, JSA/Jefferson Lab and Idaho State University agree to collaborate on scientific research using the facilities to be built as part of the SBS facility in JLab's Hall A, including the design of a prototype module and the supporting frames, and the overall coordination of the Coordinate Detector construction project of the SBS.

**TERMS AND CONDITIONS:**

1. Each Party enters into this collaborative agreement on a best effort basis without guarantees of quality or completion of the collaboration.
2. Neither Party shall have any liability to the other for any consequential, indirect, or incidental damages from any cause whatsoever.
3. It is understood by both Parties that the scope and execution of this MOU is governed by JSA's prime contract with the United State Department of Energy and that the terms and conditions of that prime contract supersede any express or implied agreements between JSA and Idaho State University as stated in this MOU.

## **RESPONSIBILITIES OF THE PARTIES:**

In accordance with the purpose of this MOU:

JSA/Jefferson Lab hereby agrees to:

- Provide an appropriate on-site work environment including space, computer access, necessary training, etc. as required for all User scientists;
- Provide a sufficiently detailed Statement of Work describing the goals and expectations;
- Keep key University personnel informed of overall project status and requirements for the joint scope of work, and;
- Develop and provide the forum for regular progress updates by the University personnel.

Idaho State University agrees to:

- Provide overall coordination of the entire Coordinate Detector project of the SBS;
- Provide \$15,000 in funding of its work on the design and development of a prototype module of the Coordinate Detector of the SBS;
- Design one detector plane and provide input to the design of the supporting frames.

## **SPECIAL CONSIDERATIONS:**

1. At all times during this project, each party's staff will remain the responsibility of that party.
2. All Idaho State University staff and students shall comply with the Environment, Safety, Health and Quality (ESH&Q) policy of the Laboratory at which the work is being performed, including compliance with all necessary training requirements to participate in this project.
3. All Idaho State University staff shall have the necessary insurance/workers compensation coverage for work at a different and/or out of state work site.
4. Each party assumes responsibility and liability for the acts and omissions of its staff and students temporarily assigned and acting within the scope of their employment for project work under this MOU.
5. Neither Party shall have any liability to the other for any consequential, indirect, or incidental damages from any cause whatsoever.
6. Funding – Funding intent of the parties: As set forth above, ISU intends to provide funding in the amount of \$15,000 for its work in the design and development of a prototype module of the Coordinate Detector of the SBS.

This MOU is not intended as a mechanism to obligate or commit funds or as the basis for the transfer of funds from one party to another. If a commitment, obligation, or transfer of funds is required, a specific contractual agreement, or other reimbursable arrangement shall be developed between JSA/Jefferson Lab and ISU to provide specific funding, obligation, or billing data.

No contractual agreement or other reimbursable arrangement will be issued unless funding is available to support the collaborative work and no work will be performed until an agreement is executed.

JSA/Jefferson Lab's continued performance under this MOU is subject to the availability of funds and nothing required herein commits the U.S. Department of Energy to appropriate funds hereto. JSA also reserves the right to redirect funding based on the budgetary needs of Jefferson Lab.

**KEY PERSONNEL:**

- Dr. Mahbub Khandaker (Principal Investigator) at Idaho State University
- Dr. Bogdan Wojtsekhowski, a staff scientist in Hall A at Jefferson Lab, will coordinate activities under this contract from the Jefferson Lab side and he will be the primary scientific point of contact for the collaboration between Jefferson Lab and Dr. Mahbub Khandaker's research group at Idaho State University on the design of a prototype module and the overall coordination of the construction of the Coordinate Detector.
- Dr. John LeRose, a staff scientist in Hall A at Jefferson Lab, will assist in the coordination of activities from the Jefferson Lab side and he will be the primary management point of contact for the collaboration between Jefferson Lab and Dr. Mahbub Khandaker's research group at Idaho State University as regards schedule, cost, and budget.

**TERM OF AGREEMENT:**

The MOU shall remain in effect for a term of four (4) years from the latest date upon which all Parties have executed same, unless extended or terminated.

**MODIFICATION AND TERMINATION:**

This MOU sets forth the entire and complete agreement between Parties and may be modified only by written mutual agreement. This MOU may be terminated prior to its expiration by any of the Parties upon written notice to the other Party communicated not less than sixty (60) days in advance.

**PERSONAL PROPERTY / EQUIPMENT:**

Any transfer or loan of equipment will be implemented under a separate agreement.

**INTELLECTUAL PROPERTY RIGHTS:**

If a SUBJECT INVENTION is developed solely by an employee(s) of JSA/Jefferson Lab, then all rights to such SUBJECT INVENTION shall belong to JSA/Jefferson Lab.

If a SUBJECT INVENTION is developed solely by an employee(s) of Idaho State University, then all rights to such SUBJECT INVENTION shall belong to Idaho State University.

If a SUBJECT INVENTION is jointly developed by the Parties, then all rights to such SUBJECT INVENTION shall jointly belong to the developing Parties. The Parties will work together to negotiate, under a separately written Joint Ownership Agreement, who will take the lead in licensing activity, who will pay for the preparation and filing of patent applications covering jointly developed inventions in one or more countries, who will prosecute such applications, who will maintain such applications during prosecution, and who will maintain any resulting patents.

Patent applications covering jointly developed SUBJECT INVENTION(S) that also include a JSA/Jefferson Lab inventor shall contain the following statement:

*“This invention was made with Government support under Contract DE-AC05-06OR23177 awarded by the United States Department of Energy. The Government has certain rights in the invention.”*

Specifically, The Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the joint inventions developed under the JSA/Jefferson Lab contract with the U. S. Department of Energy.

**PUBLICATIONS:**

Papers and publications may result from this collaboration. Each party will acknowledge the other in any paper or publication resulting from this collaboration in a manner customary for scholarly publication. All publications (to include presentations) developed by either party under this MOU will be submitted to the other party for review at least 45 days prior to the submission for publication. If the other party submits comments in writing during such 45 day period, the parties will work together in good faith to resolve them. If no written comments are received within the 45 day period, the submitting party may assume that the other party has no comments.

**EXPORT CONTROL:**


Each Party will be responsible for fulfillment of applicable U.S. Export Control Laws and Regulations.

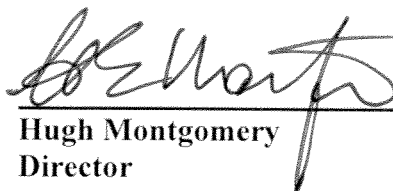
**ACCEPTANCE:**

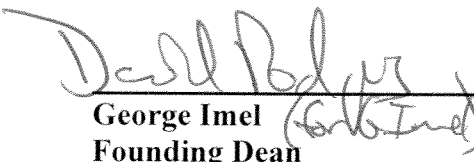
The terms and conditions of the agreements between Idaho State University and JSA/JLAB, as set forth in this MOU, are hereby accepted:


**For Idaho State University:**


**For JSA/Jefferson Lab:**


  
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Howard Grimes                      7.1.13  
Vice President for Research      Date  
Office of Research


  
\_\_\_\_\_  
Hugh Montgomery                      7/19/2013  
Director                                      Date

  
\_\_\_\_\_  
George Imel                      6/13/13  
Founding Dean                      Date  
College of Science & Engineering

  
\_\_\_\_\_  
Rolf Ent                                      07/15/13  
Associate Director for Physics      Date

  
\_\_\_\_\_  
Mahbub Khandaker                      06/13/2013  
Professor and Chair of Physics      Date

  
\_\_\_\_\_  
Cynthia Keppel                      7/5/13  
Hall A Group Leader                      Date

  
\_\_\_\_\_  
Robert McKeown                      7/18/13  
Deputy Director of Science              Date