

**Memorandum of Understanding
between the GlueX Collaboration,
Jefferson Lab
and Institution**

27 April, 2004
Draft Version 3

1 Introduction

This Memorandum of Understanding (MOU) outlines the activities and responsibilities of the Institution (ABC) Group within the Jefferson Lab (JLab) GlueX collaboration. It describes the commitments of all three parties to the successful completion of the GlueX experiment and is subject to regular review and updating by all three parties. The manpower commitment and deliverables described in this document are contingent on continued funding of the ABC group.

The goal of the GlueX experiment is a mapping of the spectrum of gluonic excitations with the ultimate objective being a quantitative understanding of the nature of confinement in QCD. To achieve this goal a hermetic detector, the GlueX spectrometer, optimized for amplitude analysis, will be constructed in a new experimental hall (HALL D). A tagger facility will produce 9GeV linearly polarized photons via coherent bremsstrahlung radiation of 12GeV electrons through a diamond wafer. To achieve 12GeV photons CEBAF will be upgraded to 12GeV with additional cryomodules, modified arcs and an additional arc. Critical Decision 0 (CD-0) for the upgrade and GlueX was awarded by the Department of Energy (DOE) in April, 2004. The GlueX collaboration was formed in 1998. The fourth and most recent version of the GlueX Design Report was issued in 2002. The project has been reviewed externally and by the JLab PAC. The GlueX management has been in place since 2000 with a Spokesman, Deputy-spokesman, HALL D group leader and an elected Collaboration Board.

This MOU does not constitute a contractual obligation on the part of any collaborating GlueX institution or JLab. No contractual obligations shall arise except pursuant to appropriate written authorizations by each party. All foregoing work is subject to the appropriate written contractual agreement of the parties.

2 Institutional Commitments to GlueX

2.1 Commitments to GlueX R&D

2.2 Hardware Deliverables for GlueX

2.3 Software Deliverables and Support for GlueX

2.4 Support for Running The GlueX Experiment

2.5 Support for Analysis of GlueX Data

2.6 Theoretical Support to GlueX

2.7 Collaboration Responsibilities

3 Funding and Infrastructure

3.1 Institution

The Institution group will provide funds associated with support of personnel and travel to carry out the tasks outlined in this MOU.

The Institution group will provide written time lines for the completion of various phases of the project and written reports on the outcome of each of these various phases.

3.2 The GlueX Collaboration

3.3 Jefferson Lab

- JLab will retain ownership of all deliverables as specified under individual contracts and MOUs.
- JLab is responsible for all engineering aspects of GlueX and all aspects of the detector integration that require legal and certified engineer approval.
- JLab assumes all legal liabilities related to ABC provided and installed equipment while located on JLab property.
- JLab will provide reasonable assistance to the ABC group to assure smooth flow of information regarding DOE procedures and protocols as they affect the funding of the work agreed between JLab and Institution.
- JLab will provide physical space to ABC personnel and for their equipment to facilitate their work on GlueX. The ABC group will convey

such requirements to JLab with reasonable advance notice in the spirit of good relations and sound planning.

- Official contact between the ABC group and JLab will be through the HALL D project management office and its JLab appointed staff.

4 Personal

1. The contact person for the Institution group is XXXX.
2. The following personnel are included in the ABC GlueX group:

Person	Positions	Percent of Research Effort
xxxx	Post Doc	xx%
yyyy	Graduate Student	xx%
zzzz	Professor	xx%
qpqp	Technician	xx%
pqpq	Engineer	xx%

The percentages refer to the approximate percentage of research time to be spent by the person on all GlueX activities during FY2004–FY2006 time period. These commitments will be updated as the project matures.

5 Special Considerations

- 1 The GlueX collaboration will have final responsibility for the acceptance of all deliverables and retains the right, to terminate or renegotiate this MOU if the technical requirements, performance, physical specifications, time schedules and costs cannot be met by the Institution group.
- 2 The GlueX collaboration retains the right to assign additional manpower and/or additional groups to this project if it is deemed that this is necessary for timely and within budget completion of the project.
- 3 The continuation of this agreement is dependent on the approval for continuing funding for all parties in the MOU.
- 4 This agreement may be amended as necessary.
- 5 The Institution group, the GlueX Collaboration management and the JLab management of GlueX agree to commit themselves on a collegial, open and effective working relationship for the benefit of the project.

SIGNATURE PAGE

Prof. Curtis A. Meyer
Contact Person
Carnegie Mellon University

Date

Prof. Alex Dzierba
Spokesperson
GlueX Collaboration

Date

Dr. Elton Smith
JLab HALL D Group Leader
Jefferson Lab

Date