**APPENDIX SEVEN**

**Security Characteristics and Functionality of**

**Contractor’s INFORMATION RESOURCES**

The specifications, representations, warranties and agreements set forth in Proposer’s responses to this **APPENDIX SEVEN** will be incorporated into the Agreement.

**“Information Resources”** means any and all computer printouts, online display devices, mass storage media, and all computer-related activities involving any device capable of receiving email, browsing Web sites, or otherwise capable of receiving, storing, managing, or transmitting Data including, but not limited to, mainframes, servers, Network Infrastructure, personal computers, notebook computers, hand-held computers, personal digital assistant (PDA), pagers, distributed processing systems, network attached and computer controlled medical and laboratory equipment (i.e. embedded technology), telecommunication resources, network environments, telephones, fax machines, printers and service bureaus. Additionally, it is the procedures, equipment, facilities, software, and Data that are designed, built, operated, and maintained to create, collect, record, process, store, retrieve, display, and transmit information.

“**University Records**” means records or record systems that Proposer (1) creates, (2) receives from or on behalf of University, or (3) has access, and which may contain confidential information (including credit card information, social security numbers, and private health information (**PHI**) subject to Health Insurance Portability and Accountability Act (**HIPAA**) of 1996 (Public Law 104-191), or education records subject to the Family Educational Rights and Privacy Act (**FERPA**).

**General Protection of University Records**

1. Describe the security features incorporated into Information Resources (ref. **Section 5.3.4**) to be provided or used by Proposer pursuant to this RFP.

2. List all products, including imbedded products that are a part of Information Resources and the corresponding owner of each product.

3. Describe any assumptions made by Proposer in its proposal regarding information security outside those already listed in the proposal.

*Complete the following additional questions if the Information Resources will be hosted by Proposer:*

4. Describe the monitoring procedures and tools used for monitoring the integrity and availability of all products interacting with Information Resources, including procedures and tools used to, detect security incidents and to ensure timely remediation.

5. Describe the physical access controls used to limit access to Proposer's data center and network components.

6. What procedures and best practices does Proposer follow to harden all systems that would interact with Information Resources, including any systems that would hold or process University Records, or from which University Records may be accessed?

7. What technical security measures does the Proposer take to detect and prevent unintentional, accidental and intentional corruption or loss of University Records?

8. Will the Proposer agree to a vulnerability scan by University of the web portal application that would interact with Information Resources, including any systems that would hold or process University Records, or from which University Records may be accessed? If Proposer objects, explain basis for the objection to a vulnerability scan.

9. Describe processes Proposer will use to provide University assurance that the web portal and all systems that would hold or process University Records can provide adequate security of University Records.

10. Does Proposer have a data backup and recovery plan supported by policies and procedures, in place for Information Resources? If yes, briefly describe the plan, including scope and frequency of backups, and how often the plan is updated. If no, describe what alternative methodology Proposer uses to ensure the restoration and availability of University Records.

11. Does Proposer encrypt backups of University Records? If yes, describe the methods used by Proposer to encrypt backup data. If no, what alternative safeguards does Proposer use to protect backups against unauthorized access?

12. Describe the security features incorporated into Information Resources to safeguard University Records containing confidential information.

*Complete the following additional question if Information Resources will create, receive, or access University Records containing PHI subject to HIPAA:*

13. Does Proposer monitor the safeguards required by the HIPAA Security Rule (45 C.F.R. §164 subpts. A, E (2002)) and Proposer's own information security practices, to ensure continued compliance? If yes, provide a copy of or link to the Proposer’s HIPAA Privacy & Security policies and describe the Proposer's monitoring activities and the frequency of those activities with regard to PHI.

**Access Control**

1. How will users gain access (i.e., log in) to Information Resources?

2. Do Information Resources provide the capability to use local credentials (i.e., federated authentication) for user authentication and login? If yes, describe how Information Resources provide that capability.

3. Do Information Resources allow for multiple security levels of access based on affiliation (e.g., staff, faculty, and student) and roles (e.g., system administrators, analysts, and information consumers), and organizational unit (e.g., college, school, or department? If yes, describe how Information Resources provide for multiple security levels of access.

4. Do Information Resources provide the capability to limit user activity based on user affiliation, role, and/or organizational unit (i.e., who can create records, delete records, create and save reports, run reports only, etc.)? If yes, describe how Information Resources provide that capability. If no, describe what alternative functionality is provided to ensure that users have need-to-know based access to Information Resources.

5. Do Information Resources manage administrator access permissions at the virtual system level? If yes, describe how this is done.

6. Describe Proposer’s password policy including password strength, password generation procedures, password storage specifications, and frequency of password changes. If passwords are not used for authentication or if multi-factor authentication is used to Information Resources, describe what alternative or additional controls are used to manage user access.

*Complete the following additional questions if Information Resources will be hosted by Proposer:*

7. What administrative safeguards and best practices does Proposer have in place to vet Proposer's and third-parties' staff members that would have access to the environment hosting University Records to ensure need-to-know-based access?

8. What procedures and best practices does Proposer have in place to ensure that user credentials are updated and terminated as required by changes in role and employment status?

9. Describe Proposer's password policy including password strength, password generation procedures, and frequency of password changes. If passwords are not used for authentication or if multi-factor authentication is used to Information Resources, describe what alternative or additional controls are used to manage user access.

**Use of Data**

*Complete the following additional questions if Information Resources will be hosted by Proposer:*

1. What administrative safeguards and best practices does Proposer have in place to vet Proposer's and third-parties' staff members that have access to the environment hosting all systems that would hold or process University Records, or from which University Records may be accessed, to ensure that University Records will not be accessed or used in an unauthorized manner?

2. What safeguards does Proposer have in place to segregate University Records from system data and other customer data and/or as applicable, to separate specific University data, such as HIPAA and FERPA protected data, from University Records that are not subject to such protection, to prevent accidental and unauthorized access to University Records ?

3. What safeguards does Proposer have in place to prevent the unauthorized use, reuse, distribution, transmission, manipulation, copying, modification, access, or disclosure of University Records?

4. What procedures and safeguards does Proposer have in place for sanitizing and disposing of University Records according to prescribed retention schedules or following the conclusion of a project or termination of a contract to render University Records unrecoverable and prevent accidental and unauthorized access to University Records? Describe the degree to which sanitizing and disposal processes addresses University data that may be contained within backup systems. If University data contained in backup systems is not fully sanitized, describe processes in place that would prevent subsequent restoration of backed-up University data.

**Data Transmission**

1. Do Information Resources encrypt all University Records in transit and at rest? If yes, describe how Information Resources provide that security. If no, what alternative methods are used to safeguard University Records in transit and at rest?

*Complete the following additional questions if Information Resources will be hosted by Proposer:*

2. How does data flow between University and Information Resources? If connecting via a private circuit, describe what security features are incorporated into the private circuit. If connecting via a public network (e.g., the Internet), describe the way Proposer will safeguard University Records.

3. Do Information Resources secure data transmission between University and Proposer? If yes, describe how Proposer provides that security. If no, what alternative safeguards are used to protect University Records in transit?

**Notification of Security Incidents**

*Complete the following additional questions if Information Resources will be hosted by Proposer:*

1. Describe Proposer’s procedures to isolate or disable all systems that interact with Information Resources in the event a security breach is identified, including any systems that would hold or process University Records, or from which University Records may be accessed.

2. What procedures, methodology, and timetables does Proposer have in place to detect information security breaches and notify University and other customers? Include Proposer’s definition of security breach.

3. Describe the procedures and methodology Proposer has in place to detect information security breaches, including unauthorized access by Proposer’s and subcontractor’s own employees and agents and provide required notifications in a manner that meets the requirements of the state breach notification law.

**Compliance with Applicable Legal & Regulatory Requirements**

*Complete the following additional questions if Information Resources will be hosted by Proposer:*

1. Describe the procedures and methodology Proposer has in place to retain, preserve, backup, delete, and search data in a manner that meets the requirements of state and federal electronic discovery rules, including how and in what format University Records are kept and what tools are available to University to access University Records.

2. Describe the safeguards Proposer has in place to ensure that systems (including any systems that would hold or process University Records, or from which University Records may be accessed) that interact with Information Resources reside within the United States of America. If no such controls, describe Proposer’s processes for ensuring that data is protected in compliance with all applicable US federal and state requirements, including export control.

3. List and describe any regulatory or legal actions taken against Proposer for security or privacy violations or security breaches or incidents, including the final outcome.