Submitted Questions
RFP: #02-080315RFP-01

• Could you please provide more information as to desired pricing structure? As a standard, we charge an annual fee for software, hosting, maintenance and upgrades (all for 1 annual cost). Since you are asking for a 1 year contract, are there plans and budget to renew for service into year 2, year 3 etc.?
  o Yes. As per above, the proposal contract is to develop an educational technology platform in downstream processing. The initial development period as defined in the final contract is to be funded by the Department of Labor (DOL). There are no plans to renew the services or extend beyond the initial contract.
  o More specifically, once developed, this platform is to be self-sustaining and is to require no additional costs to maintain beyond the initial contract. The 3rd party solution for server/hosting/database will provide upgrades as necessary (free of charge) to maintain the platform.

• How many users do you plan on deploying this to?
  o Virtual modules in downstream processing are to benefit biomanufacturing trainees and student participants across the c3bc and the nation. It is anticipated that 300-3000 users per year will make use of this educational tool.

• What is your current LMS, if any? This will allow us to outline the implementation process much better.
  o Blackboard is a common LMS and currently in use at Montgomery County Community College. The vendor is welcome to provide a 3rd-party technology solution that provides a rich and immersive e-learning environment and permits rendering of industrial biomanufacturing processes with capabilities of server/hosting/database, and a webpage. An example of said platform is CourseSites by Blackboard.

• Can course creation be considered mutually exclusive to LMS services? We often create content for clients not using D2L as their LMS.
  o Yes, but there will be only a single contract initiated, so the proposal must contain both course creation and technology components that support content management capabilities for login, assessment, and simple curation.

• What is the expected run-time or instructional length of the eLearning materials/modules? (i.e., how long would it take an average learner to take the course material)?
  o The expected run time is approximately 45-90 minutes of user participation on the e-learning platform.

• Is the type of development for the interactive experience expected to be HTML5/JavaScript or Flash or Storyline 2?
  o The interactive experience is to be recommended by the vendor based upon the resources and timelines of the project (about 6 months of total development).
• Would interactivity expected be in line with level 3?
  o The level of interactivity (low versus high) refers to the graphical interface with the user, as the graphical display depends upon the level of user interaction (see diagram to the right). A low level refers to a simple, ‘click-and-read’ feedback model. A high level refers to real-time feedback, more similar to simulations and games.
  o Yes, the level expected for this RFP is moderate to midrange level, not simulation-based. This proposal request is for mid-level feedback with ‘multi-variable’ input within three to four modules topics (areas for Robust Graphical Interface, RGI). For example, the user would be able to interact and zoom in from a high ‘real-world’ level to an atomic level and demo activities on the macromolecular level, such as ligand/resin binding events. The potential learning modules for mid-level RGI are detailed in the process workflow elements, Appendix B section on pages G-2 and G-3 in the RFP, and include chromatography (3) and TFF (1).

• How are assessments intended to be tracked? Would each of the activities be scored individually to add up to a final completion score or a single overall score per module?
  o A single final completion score is to be tracked.

• Are open source JavaScript libraries or frameworks acceptable for the backend code development of the interactives?
  o As per technology, ‘open source’ is acceptable (creative commons by license).

• Do you have any examples of the expected level of graphical interface required for the interactivities? (screenshot or sample webpage)
  o Yes, NCBioNetwork.org has a comparable video series on downstream processing. This is a useful reference guide for our proposal. Please see the purification module, part3:
    o http://www.ncbionetwork.org/educational-resources/instructional-videos/bioprocessing-part-3-purification

• What is the timeframe for the completed development?
  o As per above, the target is for approximately 6 months of development activities.

• What level of support is required for the course development assets such as HTML/SCORM/Interactions?
  o The development of these virtual modules in downstream processing are to be funded by the Department of Labor (DOL). As such, this educational technology is to be SCORM compliant, ADA compliant, and compatible with the Creative Commons, the CCBY licensing requirement. Moreover, this platform is to be freely and publically accessible to interested educators, faculty, and students at the conclusion of the project.
  o This technology is to follow the Shareable Content Object Model (SCORM) model to aid integration of online learning products with Learning Management System (LMS) software.
  o This SCORM compliant system should consist of following four components:
- Learning Management System (LMS) or LMS-like system to manage the user and track the progress through the content.
- Asset specific media such as educational content, HTML files, graphics/images, or video.
- Shareable Content Object (SCO) - a collection of assets that form a learning activity.
- Content aggregation and curation, which is an overall library of related content and shareable content objects.
  - This educational technology platform is to be part of a sequence of online learning activities/modules in downstream processing that can be launched from an LMS or LMS-like platform. In this virtual learning sandbox, there is to be a linkage across the training modules and curation to track the user’s progress.

- **Please define “subcontract” as used in section 31 on page B-15.**
  - To pay a person or company to do some of the work that you have been given a contract to do.
    - If the awarded vendor wishes to parse out some of the work, the college must approve prior to subcontracting. This project is funded by federal grant dollars, as such, prior to monies being paid to any person or company, the college is required to research and provide documentation that the persons and vendors are not considered excluded, suspended, or disbarred.

- **Regarding the Proposal Form, when does the College wanting to commence the contract?**
  - The target date for commencing development activities is September 1, 2015.

- **Though the scope of services as per this solicitation is to provide Virtual eLearning Platform, is MCCC open to accept proposals from vendors that provide custom eLearning content?**
  - Yes. As per above, additional ‘custom’ educational content is welcome and permissible as long as it has been vetted and authorized for use by the current educational representatives of the proposal.

- **‘Compliance with the DOL TAA c3bc federal grants...’ (reference is to listed specifications on Pg. F-5, Section F. 3 (d)). Is this an eligibility criteria for the vendors to respond to this solicitation?**
  - As for compliance, the development of these virtual modules in downstream processing are to be funded by the Department of Labor (DOL). As such, this educational technology is to be SCORM compliant, ADA compliant, and compatible with the Creative Commons, the CCBY licensing requirement. Moreover, this platform is to be freely and publically accessible to interested educators, faculty, and students at the conclusion of the project.
  - As for compliance, once developed, the technology platform, all its products (real or virtual), and associated products are the property of the c3bc as represented by Montgomery County Community College, as referenced in the “OWNERSHIP” clause #36 of RFP, #02-080315RFP-01.

- **Is it required that the Virtual e-Learning Platform to serve as an open source platform? Please clarify.**
  - The product is required to be ‘open source’ acceptable (creative commons by license).
This Virtual e-Learning Platform to be ‘open’ in the sense that it is to be readily accessible and will serve the educational needs of biomanufacturing trainees and student participants across the c3bc and the nation.

- **Do the vendor needs to provide free-of-charge services for maintenance and upgrades to the technology solution for the subsequent years after completion of the initial One/first year?**
  - Yes. As per above, the development of these virtual modules in downstream processing are to be funded by the Department of Labor (DOL). As such, this educational technology is to be SCORM compliant, ADA compliant, and be compatible with the Creative Commons, the CCBY licensing requirement. Moreover, this platform is to be freely and publically accessible to interested educators, faculty, and students at the conclusion of the project.
  - More specifically, this platform is to be self-sustaining and is to require no additional costs to maintain beyond the initial contract. There are no plans to renew services or extend the initial contract.
  - The 3rd party solution for server/hosting/database will provide upgrades as necessary (free of charge) to maintain the platform.

- **Is an LMS hosting environment recommended?**
  - Yes, it is recommended.

- **Is data integration with the LMS hosting environment required?**
  - Yes. As per above, curation is expected in order to collect user/password, participation status (% completed), and assessment completion status (yes or no).

- **Please clarify technical support and updates/fixes requirements?**
  - Technical support is expected as necessary to put forth a functional educational platform within the anticipated target date of 6 months. This platform is to be self-sustaining and will be expected to have any updates built-in to the technology solution.

- **Please confirm 4 modules/VR exercises?**
  - This proposal request is for mid-level feedback with ‘multi-variable’ inputs within three to four modules topics. These are detailed in the process workflow elements, Appendix B section on pages G-2 and G-3 in the RFP, and would include 3 chromatography (affinity, intermediate, polishing) and 1 TFF.

- **What types of interactivity does you foresee having in each of the areas?**
  - Yes, as detailed above, the level of interactivity expected for this RFP is moderate to midrange level within three to four modules topics (areas for Robust Graphical Interface, RGI). The potential learning modules for mid-level RGI are detailed in the process workflow elements, Appendix B section on pages G-2 and G-3 in the RFP, and include chromatography (3) and TFF (1).
  - In the chromatography modules for example, the user would be able to interact and zoom in from a high ‘real-world’ level to an atomic level and demo activities on the macromolecular level, such as ligand/resin binding events. Alternatively, the user would
be prompted to initiate the processes of loading, washing, and eluting protein. The user could then be asked to comment on data readings (Are they within spec?) and based upon these readings would be promoted to proceed or not.

- **What is the difference between high level interactivity and lower level interactivity?**
  - See above and refer to the diagram with associated response.

- **For all 4 modules, it includes only 45-60 minutes of e-learning or each module is 45-60 minutes?**
  - The expected run time is approximately 45-90 minutes of user participation on the e-learning platform. The four high level activities might each be approximately 6-10 minutes each depending on the amount of content and the branching pathway.

- **The VR exercises would be supplements to the textbook. Would the vendor be responsible for porting textbook chapters to e-learning?**
  - The vendor would be responsible for working with the content supplied by the c3bc development team to have the content (textbook, other) integrated onto the platform and accessible to the user.