

Date: December 2, 2020

SERVICE DESCRIPTION

Proposal to provide a laboratory information management system for Dr. Lauren Stadler, Rice University, Houston, Texas (client).

WORK SCHEDULE

- Project start date <u>January 2, 2021</u>
- *Project completion date <u>February 2, 2021</u>

PAYMENT SCHEDULE

- Hourly rate is \$150/hour
- The client shall pay contractor \$<u>0</u> as a deposit for project commencement.
- The payment of \$15,000 USD shall be paid at the completion of the project. Payment is due within 30 days of invoice (NET30).
- Payment should be made payable to <u>Big Rose Web Design</u>, <u>LLC</u> and mailed to <u>6914 Aldo Leopold Way</u>, Middleton, WI 53562

^{*}The project completion date is subject to change based on the availability of data and materials for the database from the client.

PERMISSIONS AND RELEASES

Big Rose Web Design, LLC will design a website for the Client by providing the design and programming services listed below. Except as expressly set forth in this agreement, the parties hereby specifically disclaim any representations or warranties, express or implied, regarding the services, including any implied warranty of merchantability or fitness for a particular purpose or implied warranties arising from course of dealing or course of performance. UNDER NO CIRCUMSTANCES SHOULD EITHER PARTY BE LIABLE TO THE OTHER PARTY OR ANY THIRD PARTY FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR EXEMPLARY DAMAGES (EVEN IF THAT PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES), ARISING FROM ANY PROVISION OF THIS AGREEMENT SUCH AS, BUT NOT LIMITED TO, LOSS OF REVENUE OR ANTICIPATED PROFIT OR LOST BUSINESS, COSTS OF DELAY OR FAILURE OF DELIVERY, OR LIABILITY TO THIRD PARTIES ARISING FROM ANY SOURCE.

VENDOR MATERIALS

Notwithstanding anything in this Agreement to the contrary, Vendor (Big Rose Web Design, LLC) retains all of its right, title, and interest in and to (including, without limitation, the unlimited right to use) (i) all materials owned by or licensed to Vendor prior to, or independent from, the performance of the Services under this Agreement, and all modifications thereof, and (ii) all generic or proprietary information, ideas, methodologies, software, applications, proprietary Vendor databases consisting of information owned by Vendor, processes or procedures, trade secrets and know-how used, created, or developed by Vendor in the general conduct of its business ("Vendor Content") and none of the foregoing shall constitute Work Product hereunder.

EQUAL OPPORTUNITY EMPLOYER

Big Rose Web Design, LLC is a minority owned Equal Opportunity Employer and does not discriminate in recruitment, hiring, transfer, promotion, compensation, development, and termination of its employees on the basis of race, color, sex, age, marital status, sexual orientation, national origin, handicap, religious beliefs, veteran's status or other protected category as required by applicable Federal, State and local laws. Customer likewise represents that it will not discriminate in the referral or acceptance of Consultants hereunder on the basis of race, color, sex, age, marital status, national origin, handicap, religious beliefs, veteran's status or other protected category as required by applicable federal, state and local laws.

WORK PRODUCT DESCRIPTION

Big Rose Web Design, LLC will provide the client with a customized database that is designed to store their scientific data. Big Rose Web Design, LLC claims no ownership or rights to the contents of the database and places no restrictions on the use, duplication, or modification of the database. The source code and all supporting files that constitute the Web Interface that is provided to interact with the client database(s) are pre-existing and proprietary material and shall not constitute Work Product.

In reference to Section 2.1 of the Professional Services Agreement: Big Rose Web Design, LLC retains all rights and ownership of the source code and supporting files that constitute the Web interface.

Description Cost

LIMS interface and database \$15,000

TOTAL: \$15,000

LIMS Interface

Big Rose Web Design, LLC will create a custom-designed laboratory information management system for the client with the following features:

• **Data Interaction**: An intuitive, standards-compliant user interface will be provided to enable users to interact with their data. Data can be added, edited, and deleted by users depending on their user level. User privileges can only be set by an administrator. There are three user levels available:

View only: Users can view data but cannot add, edit, or delete data.

Read/Write: Users can view, add, edit, but not delete data.

Administrator: Users can view, add, edit, and delete data. Admin users can also manage access to the database for new or existing users.

- Data Connections: The data in various books (i.e., tables) are related to similar data in other books via the use of data-specific IDs. At the Project View level, this allows users to see all data in all books that belong to a particular Project. Likewise, visualizations of related data are shown in other books. Users do not have to specify data connections, they are applied automatically.
- Data Input/Export: Data can be batch uploaded to the database via comma-delimited files (CSVs).
 Templates are automatically generated for each book to facilitate batch upload. Reports and data searches can be exported from the database as CSV files. In addition, all data from the database can be exported as TXT or CSV files.

A sample receiving process and barcode system will be integrated into the data input workflow. Users will also be able to connect directly to the database from *R or other *scripts that support MySQL integration. Special users with limited credentials will be created and provided to the client for this purpose.

*The software/scripting language must have integrated MySQL dBase connection support for this functionality. ODBC drivers may be required for the operating system environment being used to run these programs. ODBC drivers may not be available for all operating systems. We do not provide support for ODBC drivers or any third-party software. We only provide access credentials to the database for use with these programs/scripts.

• **Reports**: Numerous custom reports can be created to provide views of the data per the specifications of the client. These reports can include quality control of data, visualization of specific data sets, or other data views that the client requires for their downstream workflow(s).

A status report will be created to manage the Sample processing pipeline, which will show in real-time what downstream processes have been completed for each sample. This will be visualized as a table that will show the completion status of each step in the workflow. In addition, email based QC/reports can be provided per the clients needs.

Database

Big Rose Web Design, LLC will create a custom database for the client. Data is searchable and can be uploaded or exported as CSV files. The database will include books (i.e., tables) to store multiple types of scientific data specified by the client.

Data tables and fields provided by the client include:

Project

Project id, PI, Requester, Requester Email, Description, Comments

Acquisition

Project id, id, Processed by, Site, Date/time, Acquisition id, Sample id, Spike id, Spike volume, Weight, Container, Storage location, Freezer id, Comments

BCV Stock

Project id, id, Spike id, Date Prepared, Prepared by, Storage Location, Freezer ID, Comments

Concentration

Project id, id, Acquisition id, Sample id, Tube id, Processed by, Date/time, Storage Location, Volume filtered, Filter start time, Filter end time, Storage location, Comments

Extraction

Project id, id, Acquisition id, Sample id, Tube id, Plate id, Processed by, Date/time, Extraction method/kit, Kit lot #, Elution volume, Plate map (if 96 well), Storage location, Comments

Quantification

Project id, id, Plate id, Processed by, Date/time, Output data (csv file), Kit lot #, Plate map, Target(s), Primer/probe aliquot, Thermocycler id, Droplet reader id, Template dilution, Comments

Storage

Project id, id, Tube id, Acquisition id, Sample id, Sample Type, Sample Volume, Box Type, Freezer id, Rack, Rack Position, Comments

Transfer Table

Project id, id, Plate id, Sample id, Well position

Facility Lookup

Facility Symbol, id, Facility Name, Comments

Note: This list of tables is subject to change based on the client's needs. "id" is an internal index used by the database to differentiate records.

The Lab database also includes organizational books such as:

Library Book: Repository for laboratory manuscripts and papers of interest.

Documents Book: Manage an array of laboratory documents including chemical and biosafety documents, internal organization documents, and other document types specified by the client. Files can be uploaded in multiple formats including PDF, DOC, TXT, PPT, etc.

Protocol Book: Manage laboratory protocols. Protocols can be uploaded in multiple file formats including PDF, DOC, TXT, XLS, PPT, etc.

Script Book: Repository for programming scripts used for data management and analysis.

Presentation Book: Manage laboratory presentations. Presentations can be uploaded in multiple file formats including PDF, DOC, JPG, PPT, etc.

Admin Book: Manage contact information for laboratory personnel. This also provides the administrative interface to assign user access privileges for database and website data.

Audit Book: View all changes made to records in the database. The audit book records all changes automatically and cannot be altered by any user.

Hosting, Training and Security

Hosting and Data Backup

Big Rose Web Design, LLC does not provide website hosting services. We will work with the Rice IT
Administrators to install the new website/database(s) on their hosting platform of choice. The LIMS
requires a Linux Apache MySQL PHP (LAMP) server environment.

- We will work with the clients IT administrators to help configure and install the website at no charge to the client.
- Automatic backup services should be setup and managed by Rice IT Administrators.

Security

- We recommend the use of an SSL certificate to provide secure transactions between their users and their website. SSL certificates will be setup and managed by Rice IT staff.
- Domain registration and management should be provided by the Rice IT Administrators
- Restricted access to the server and web interface, which will be limited to authorized personnel only, will be setup and managed by Rice IT Administrators and will use the Rice University authentication and authorization system.
- Restricted access to the database server will be setup and managed by Rice IT Administrators using the campus authentication system.
- Access to the LIMS from outside of campus should be restricted to static VPN access only.

Training and Content Upload Templates

- We will provide virtual content editing training sessions for the client(s) at no charge. No in-person training will be provided due to the COVID 19 pandemic.
- Upload templates for data management will be provided at no charge to the client. These are generated automatically based on the structure of a given data table. Any changes to a table are automatically conferred to the template.

This proposal may not be modified unless in writing and signed by both Parties. This document and any attachments hereto constitute the entire agreement between the Parties.

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(Signature)	(Signature)
Steven Giles, PhD	Lauren Stadler, PhD
(Printed Name)	(Printed Name)
Date: <u>December 14</u> , 20 <u>20</u>	Date:December 14_, 2020