**Dallas Lab Website Updates**

**Scope of Work**

**Site Structure**

The website will consist of the following pages:

**Main Pages**

**Home Page** (dallas-lab-website.html)

**Individual Research Pages**

* Functional Optimization of Ingredients and Processes
* Milk Bioactive Peptides
* Protein Digestion and Absorption
* Bitter Peptides in Dairy Products
* Infant Nutrition and Digestion

**Research Overview**

* Proteomic Analysis
* Peptidomic Analysis
* Functional Analysis
* In Vitro Digestion
* Data Analysis
* Expert Consultation
* Scoping Review Articles
* Hosting Expert Panel

**Project Submission** (start-project.html)

**About Us** (about.html)

**Contact** (contact.html)

**Page-by-Page Requirements**

**1. Home Page (**[**dallas-lab-website.html**](https://kuhfeldrf.github.io/dallasdemo/dallas-lab-website.html)**)**

* **Content Components**
* **Header**: Navigation menu with links to all main sections
* **Hero Section**: keep current milk background and, I like the “unraveling the biology …” perhaps we can add some subtitle to better explain what we do. AI’s suggestion is “Specialized research and analysis services for human and bovine milk bioactivity, with applications for infant and adult health.” I will put more though into this. @Dave if you can think of a good subtitle please insert.
* **Research Tabs**: Overview of research areas with interactive tabs with links to page with more information.
* **Services Grid**: Overview of services areas with interactive tabsareas along with a like to a page with all services
* **Recent Publications**: Publication carousel with visual, details and links instead of just a list of references
* **Call to Action**: Contact/project submission prompt
* **Testimonials**: Client testimonial carousel

**2. Services Overview ()**

**3-9. Individual Service Pages**

Create detailed pages for each service category:

**Content Components (for each service page)**

**Header**: Navigation menu

**Service Title & Overview**: Detailed description of the service

**Service Details**: Comprehensive information about methodologies, applications, and benefits

**Equipment Used**: Details about relevant equipment and technologies

**Example Applications**: Case studies or examples of service applications

**Pricing Information**: Service costs and options

**Related Services**: Links to complementary services

**Call to Action**: Contact for quotes or project submission

**Footer**: Contact information, quick links, copyright

**Content Needs (for each service page)**

Detailed service descriptions

Equipment photographs and specifications

Example results or case studies (if available)

Current pricing information

**10. Research Overview (research.html)**

**Content Components**

**Header**: Navigation menu

**Research Introduction**: Overview of the lab's research focus

**Research Areas**: Cards or sections for each research area with links to detailed pages

**Key Publications**: Highlighted publications for each area

**Footer**: Contact information, quick links, copyright

**Content Needs**

Research area descriptions

Representative images for each research area

Key publication citations and links

**11-15. Individual Research Pages (research/[research-area].html)**

Create detailed pages for each research area:

**Content Components (for each research page)**

**Header**: Navigation menu

**Research Title & Overview**: Detailed description of the research area

**Key Findings**: Major discoveries or contributions in this area

**Methodologies**: Research approaches and techniques

**Applications**: Practical applications of the research

**Publications**: Relevant publications with citations and links

**Collaborators**: Research partners (if applicable)

**Footer**: Contact information, quick links, copyright

**Content Needs (for each research page)**

Detailed research descriptions

Representative images

Publication lists with abstracts

Collaborator information (if applicable)

**16. Project Submission (start-project.html)**

**Content Components**

**Header**: Navigation menu

**Process Overview**: Step-by-step explanation of project submission and execution

**Submission Form**: Detailed form for project inquiries

**Footer**: Contact information, quick links, copyright

**Interactive Elements**

Form validation

Form submission handling

**Content Needs**

Process descriptions

Form field requirements

**17. About Us (about.html)**

**Content Components**

**Header**: Navigation menu

**Lab Overview**: History and mission of the Dallas Lab

**Team Members**: Profiles of key personnel

**Facilities**: Information about lab facilities and equipment

**Institutional Affiliation**: Information about Oregon State University affiliation

**Footer**: Contact information, quick links, copyright

**Content Needs**

Lab history and mission statement

Team member bios and photos

Facility descriptions and photos

**18. Contact (contact.html)**

**Content Components**

**Header**: Navigation menu

**Contact Information**: Address, phone, email

**Contact Form**: For general inquiries

**Map**: Lab location

**Footer**: Contact information, quick links, copyright

**Interactive Elements**

Form validation

Form submission handling

Interactive map

**Content Needs**

Contact details

Google Maps API key (if using Google Maps)

**Implementation Plan**

**Phase 1: Design and Content Preparation**

Finalize site architecture and navigation flow

Complete content creation for all pages

Prepare and optimize all images

Create wireframes and design mockups

**Phase 2: Development**

Set up GitHub repository with GitHub Pages configuration

Implement HTML/CSS structure for all pages

Develop interactive components (carousels, tabs, accordions)

Implement responsive design

Set up form handling

**Phase 3: Testing and Refinement**

Cross-browser testing

Mobile responsiveness testing

Performance optimization

Content review and proofreading

**Phase 4: Deployment and Launch**

Final content updates

Deploy to production environment (GitHub Pages)

Set up analytics

Post-launch monitoring

**Content Management Notes**

Use this document to:

Add detailed content for each page section

Update service offerings and pricing

Expand research descriptions

Refine team member information

When adding content, please:

Mark new content with [NEW] at the beginning of the section

Mark content for review with [REVIEW] at the beginning of the section

Mark content as final with [FINAL] at the beginning of the section

**Timeline**

**Content Preparation**: 2 weeks

**Development**: 3 weeks

**Testing and Refinement**: 1 week

**Deployment**: 1 day

Total estimated time: 6 weeks

**Budget Considerations**

Development costs

Image acquisition (stock photos if needed)

Form handling service subscription

Ongoing maintenance

**Contact**

For questions or additions to this document, please contact [Project Manager Name] at [email address].

**Content Sections to Complete**

**Home Page Hero Section**

[DRAFT]**Headline**: Unraveling the Biology of Human and Animal Milk**Subheadline**: Specialized research and analysis services for human and bovine milk bioactivity, with applications for infant and adult health.**Call to Action**: Learn about our services

**Research Area: Functional Optimization of Ingredients and Processes**

[DRAFT]**Overview**: Our research focuses on optimizing dairy processing methods to enhance bioactive protein preservation and functionality. We investigate various processing parameters and their effects on protein structure and bioactivity.

**Key Research Topics**:

Heat treatment optimization

Spray drying process development

Storage condition effects

Novel processing technologies

**Applications**:

Enhanced preservation of bioactive proteins

Improved infant formula development

Functional dairy ingredient creation

Process optimization for manufacturers

**Equipment Used**:

[List equipment]

**Key Publications**:

[Add publications]

**Service: Mass Spectrometry Analysis**

[DRAFT]**Overview**: Comprehensive protein and peptide analysis using advanced mass spectrometry techniques

to identify, quantify, and characterize components in milk and dairy products.

**Service Details**:

Protein identification and quantification

Post-translational modification analysis

Peptide mapping

Comparative proteomics

**Equipment Used**:

Orbitrap Fusion Lumos

Q Exactive HF-X

Nano-LC System

**Applications**:

Milk protein composition analysis

Processing effects on protein structure

Quality control and standardization

Novel protein discovery

**Pricing**:

[Add current pricing]