1. This Agreement is entered into between the State Agency and the Grantee named below:

STATE AGENCY'S NAME
Governor's Office of Planning and Research, hereinafter referred to as “State”

GRANTEE'S NAME
Kern Community College District, hereinafter referred to as “Grantee”

2. The term of this Agreement is: June 30, 2020 through July 31, 2022

3. The maximum amount of this Agreement is: $500,000.00 (Five hundred thousand dollars and no cents)

4. The parties agree to comply with the terms and conditions of the following exhibits, which are by this reference made a part of the Agreement.

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IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

GRANTEE

Kern Community College District

GRANTEE’S NAME (if other than an individual, state whether a corporation, partnership, etc.)

BY (Authorized Signature)  DATE SIGNED (Do not type)

PRINTED NAME AND TITLE OF PERSON SIGNING
Tom Burke, Chancellor of Kern Community College District

ADDRESS
2100 Chester Avenue, Bakersfield, CA 93301

STATE OF CALIFORNIA

AGENCY NAME
Governor's Office of Planning and Research

BY (Authorized Signature)  DATE SIGNED (Do not type)

PRINTED NAME AND TITLE OF PERSON SIGNING
Scott Morgan, Chief Deputy Director

ADDRESS
1400 Tenth Street, Sacramento, CA 95814

California Department of General Services Use Only

Exempt per:
SCM Vol. 1, 4.06
Exhibit A – Scope of Work

Project Summary & Scope of Work

☐ Contract  ☒ Grant

Does this project include Research (as defined in the Terms and Conditions)?  ☒ Yes  ☐ No

PI Name:  Craig Hayward

Project Title:  *Increasing Student Flow and Success Along Intersegmental STEM Program Pathways*

Project Summary/Abstract

This project aims to expand the existing Program Pathways Mapper (PPM) system in order to facilitate transfer between community colleges and UC campuses. PPM provides an interactive, pathway-based visualization of the course catalog paired with brief, easy-to-understand career data as well as videos illustrating the nature of degree programs. The Program Pathways Mapper visually clarifies student pathways through college, facilitating transfer and degree completion, particularly for students who are first-generation college students with little social capital or “college knowledge.” Additionally, these clarified STEM program pathways help college and university personnel be more effective, consistent, and intentional in their support of student completion goals. The project will connect UC and community college faculty members together to create vetted and effective program maps that ensure that the lower division coursework and learning outcomes of transfer programs are in close alignment with the subsequent two years of upper-division work at the university.

For this project, a team including participants from Bakersfield College, Merced College, and the University of California, Merced will develop a prototype of PPM for UC transfer. The work will include: 1) developing clear, aligned lower-division and upper-division program maps between the partner institutions; 2) developing a personalized online course (“UC STEM Transfer Experience”) in the Canvas LMS that adapts to students' program of study and helps students learn how to navigate STEM programs from beginning to completion; and 3) undertaking the technical work to extract, clean, and load curricular data so that program maps are represented in a clear visual style that enhances confidence and persistence among transfer students as well as first-time freshmen.

The prototype PPM for UC Transfer is projected to have over 30,000 student users by the end of the project period.
Scope of Work

I. Overview

In 2018, Assembly Bill 1809 established the California Education Learning Lab ("Learning Lab"). Housed at the Governor’s Office of Planning and Research, the Learning Lab hosts competitive grant opportunities for intersegmental faculty teams to increase learning outcomes and close equity gaps across California’s public higher education segments. Learning Lab grant opportunities in 2019-2020 focus on curricular and pedagogical innovations and improvements that combine educational technologies with the science of learning to improve student success in online and hybrid STEM “gateway” courses across California’s public higher education segments.

II. Problem Statement

Too few California community college students transfer into Science, Technology, Math, and Engineering (STEM) programs at the University of California. The transfer process and coursework requirements are confusing to students. It is imperative that more California community college students complete STEM programs and successfully transfer to the UC for California and the United States to remain globally competitive.

Students accumulating too many units has historically been a widespread problem among community college transfer students, particularly those pursuing STEM programs of study. Course catalogs contain all of the necessary information for students to successfully navigate a program pathway—in theory. In reality, the lists of possible options as well as prerequisites and antirequisites can be very intimidating and difficult, particularly for first generation students. Additionally, even though some course selections may be technically correct, they may be poor choices for a variety of practical reasons that most students would have little insight into.

STEM fields, with their long sequences of requisite sequences, are often particularly problematic for college students. Simple missteps in sequencing often add additional semesters or even years to a student’s time to completion resulting in wasted time, unnecessary unit accumulation, and increased risk for changing majors or simply dropping out. Additionally, research has shown that when students are able to perceive a clear pathway to and through college, including transfer, degree completion, and future employment, they experience increased program retention, completion, and long-term success.

The Program Pathways Mapper provides program maps that clearly mark out viable, well-considered sets and sequences of courses that have been developed and approved by discipline faculty in consultation with advisors and counselors. The distillation of these individuals’ experience into a clear, always available online resource has already resulted in powerful effects.

At Bakersfield College, for instance, as students have leveraged the pathway knowledge represented in the PPM, the number of excess units accumulated at graduation has steadily declined (see figure below). The PPM went live mid-way through the 2018-2019 academic year, while PDF versions of the college’s most popular transfer maps were put on the college website approximately one year earlier.
III. Goals and Objectives

In this project, Bakersfield College (BC), Merced College (MC), and the University of California, Merced (UCM) will collaborate to expand the existing Program Pathways Mapper (PPM) system, which is already in use at 33 California community colleges, in order to facilitate transfer between community colleges and UC campuses. The PPM features an interactive, pathway-based visualization of the traditional course catalog paired with brief easy-to-understand career data as well as videos illustrating the nature of the program. Tens of thousands of community college students have already used the PPM to attain a deeper understanding of their potential options as they explore available college programs. Early research from Bakersfield College, the originator of the PPM (in partnership with Concentric Sky and the Chancellor’s Office), has shown that as usage of program maps has increased students’ course-taking has become more focused as represented by the increasing on-path percentage statistics.

The PPM visually clarifies student pathways through college, facilitating transfer and degree completion for college students, particularly those who are first-generation college students with little social capital or “college knowledge.” These clarified STEM program pathways help college and university personnel be more effective, consistent, and intentional in their support of student completion goals. The project will connect UC and community college faculty members together to create vetted and effective program maps that ensure that the lower division coursework and learning outcomes of transfer programs are in close alignment with the subsequent two years of upper-division work at the university.

In addition, faculty teams will develop a personalized online course in Canvas that adapts to students’ program of study and presents a varied experience depending on student background, experience, and performance. Via the UC STEM Transfer Experience course students will learn exactly how to navigate STEM programs from beginning to completion. The course will comprise modules on navigating transfer both procedurally as well as in terms of content, standards, and faculty expectations. Because the course will be co-taught by university and community college professors, students will experience a greater sense of belonging and a sense that their goals are realistic and attainable.

In sum, this project aims to achieve the following:

- Promote institutional change via collaborative, faculty-led intersegmental program mapping teams
- Develop a course that provides a personalized learning experience for STEM transfer students, bridging normative knowledge and culture from one institution to another.
- Develop a UC prototype of the Program Pathways Mapper platform.
- Load all STEM transfer program pathways for UCM, BC, & MC into the Program Pathways Mapper
• Evaluate usage and impact
• Disseminate and scale

In addition, the project team has identified the following long-term benchmarks:

• Within three years of PPM implementation, two-year and three-year completion rates at BC and MC will increase by 25%.
• The number of units accumulated at degree completion for BC and MC will drop significantly, meeting the target established by the Chancellor’s Vision for Success (i.e., 79 units or less).
• 60% of BC and MC transfer-in students will complete within two years of transfer to UC Merced (the current two-year graduation rate for community college transfers is 48%).

IV. Implementation Plan

This proposal contains two major areas of work: 1) the cultural and 2) the technical. The cultural work centers on bringing together professors from the both University of California, Merced and from Bakersfield College and Merced College to work collaboratively and align course maps of lower-division, community college coursework with upper-division, university coursework. By the end of 2021, these program maps will be available on the web 2/47 for students, parents, counselors, and others to learn from.

In addition, three faculty leaders from the partner campuses will develop the online course, The UC STEM Transfer Experience, in the Canvas LMS which will be co-taught by university and community college professors in order to help science students who are transferring from community college connect their knowledge and learning to the standards and approaches that they will encounter at the university level. The course will provide contextualized knowledge specific to the STEM discipline pathway that the student is on. The class provides a ground of exchange that identifies and smooths structural, procedural, and contextual barriers to persisting on the STEM transfer path to program completion.

Technical experts from Concentric Sky will serve as key consultants, augmenting the grant’s core team of educational leaders from the three institutions. The Concentric Sky technical team will collaborate with the university and college leads to extract, clean, and load curricular data so that the maps and courses developed by the faculty teams can be represented in a clear visual style that enhances confidence and persistence among potential STEM transfer students. The technical team will develop three tools to translate curriculum data into accessible program maps:

1) The PPM Data Cleanup Tool (DCT) will correct inconsistencies and errors among curriculum data that originate from various typical sources such as any UC system degree & course databases, the CCC Chancellor’s Office Curriculum Inventory (COCI), local curriculum management systems (e.g., Peoplesoft, eLumen, Courseleaf, Digiarc), and the college catalog.

2) Once a single source of truth is established for a university’s or college’s curriculum data, that data will be made available in the PPM Authoring Tool (AT). The AT is a web application that allows college staff to easily build visual program maps. The AT includes functionality that allows an admin-level user to review all approved programs at all participating colleges. Program maps for multiple years can be stored within the AT, and maps in progress can be shared between users to simplify collaboration. At the completion of this project, each map will be capable of connecting to multiple institutions, facilitating the display of articulating pathways among the CCC, CSU, and UC systems.

3) Once a college has approved a set of program maps, those can be easily published to the web for inclusion in a college’s website as part of the PPM Student Experience (SE) app. The SE app is designed for scale and is able to support exploration by the general public of the program pathways for thousands of institutions, well beyond the current goal of scaling up across all 10 UCs, 23 CSUs, and 115 CCCs.
In order to coordinate these strands of work there will be weekly meetings of the project leads from UC Merced, Bakersfield College, Merced College, and Concentric Sky. These weekly meetings will include other personnel as appropriate to the current project activities. Weekly meetings will provide an opportunity to plan, review, and provide feedback on new work, check on the status of prior work, request assistance, and provide guidance to ensure the project is on track to attain objectives in a timely manner.

In addition, Bakersfield College and the University of California, Merced, will host three partnership convenings, one each in Fall 2020, Spring 2021 and Fall 2021. The goals are the following:

- Promote and inform the significance of clearly mapped and accessible transfer pathways for prospective and current participants, to all stakeholders (BC, MC, UC Merced, and community).
- Expand the understanding of the alignment of general education and major/program course requirements, as well as the acceptance of transfer credit and degrees from community colleges.
- Enhance and simplify the transfer process by promoting communication among faculty stakeholders to clarify paths to Baccalaureate completion.
- Explore and discuss key metrics for student transfer success.
- Achieve agreement on the alignment of term-by-term program maps that can be shared with students, faculty, outreach staff, and community members to clearly show how to progress from program entry to Bachelor degree completion from any of the partner institutions.
- Distill the clarified knowledge of effective UC STEM transfer pathways into The UC STEM Transfer Experience course to enable it to develop and support growing cohorts of STEM transfer students.

The first convening will bring together representatives from admissions, financial aid, support programs, academic advisors and counselors, who will discuss and formulate clear program maps as well as new practices to better serve students. Faculty coordinators and other project personnel will develop and share curriculum for use in summer engagement academies that aim to increase interest and participation in STEM programs among underrepresented students. These curricular tools will present additional recruitment points and the use of project-based learning to increase engagement of community college students with STEM research projects during their freshman and sophomore years—in combination with clear pathways to degrees and careers—will get students on the path early to STEM transfer and degree completion. The UC STEM Transfer Experience core curriculum development team will be identified and work on the course will begin.

The second convening, in spring 2021, will bring together department deans, chairs, and faculty to discuss best practices focused on enhancing and developing the educational pathways among the participating campuses. This convening will be critical to maintaining the momentum of the program mapping work, as faculty, faculty chairs, and deans of both colleges are responsible for program and course updates and/or revisions. Any changes in program or course curriculum will affect transfer agreements, and therefore must be recorded and updated in the respective transfer pathway.

The third convening in Fall 2021 will celebrate the launch of the new program mapper and will provide an update on the curriculum approval process of the UC STEM Transfer Experience course. All stakeholders will review the PPM for accuracy and functionality and connect sustainability practices to institutional processes such as program review.
V. Data Collection/Analysis/Interpretation

Data collection and analysis

Within-institution evaluation

The evaluation of effectiveness will include, for each participating institution, a pre/post comparison of:

- # of STEM transfers
- # of Black, Latino/a, and Native American STEM transfers
- # of transfers overall
- # of Black, Latino/a, and Native American transfers overall
- Units accumulated at award
- % of students attempting 15 units in their first term
- % of units that successfully transfer from community college to UC
- % of transfer students completing a Baccalaureate within two years
- % of CC students completing degrees and/or transferring within two years
- % of UC and CC students’ coursework that corresponds to classes on the program map for their major both before and one-year after PPM implementation.

Appropriate statistical tests will be used to evaluate changes and trends in these metrics over a period of five years following implementation, beginning in 2021-2022 with a baseline year of 2020-2021.

Interinstitutional evaluation

Comparison across colleges will rely on publicly available data to complete a trend analysis comparison (i.e., difference-in-differences) of key metrics from among UC campuses that have implemented PPM and those that have not yet implemented PPM. The evaluation will report on the following metrics on the number of STEM transfers, number of Black, Latino/a, and Native American STEM transfers, number of transfers overall, number of Black, Latino/a, and Native American transfers overall, and percent of transfer students to UC Merced completing a Baccalaureate within two years

Scaling will allow for more robust comparisons among those institutions that have implemented versus those that have not yet implemented.

VI. Expected Milestones/Deliverables

Short-Term Outcomes

- Engage Merced College faculty and staff as full partners in the project. Timeline: July/August 2020
- The collection, analysis, and reconciliation of UC Merced local curriculum data and UC state data (programs, courses, course lists, and general education areas). Timeline: January 2021
- A revision to the Program Pathways Mapper to enable intersegmental maps for Bakersfield College and Merced College with transfer to UC Merced, allowing students to see the full pathway to graduation. With this functionality, UC Merced will author and publish maps for those STEM programs that connect to Bakersfield College’s and Merced College’s UC Transfer Pathway programs. The display of intersegmental maps will be accessible to the public on the web from all three participating institutions’ websites. Similar to the way that Assist.org is designed to support articulation officers, the intersegmental program mapper site will support current and prospective students as well as their families, by showing clear, term-by-term course maps that lead to Associate and Bachelor degree completion. These STEM UC Transfer Pathway maps will be authored & published in May/June of 2021.
• Though the initial focus will be on STEM program maps and pathways, all Baccalaureate program maps will be developed and published as part of the overall project. Additional non-STEM program maps will be authored and published by October 2021.
• Launch of the UC STEM Transfer Experience online course at Bakersfield College and Merced College. Timeline: January of 2022.

Features and Functionality Requirements

• Ability for map authors to incorporate links to outside websites to enable them to direct students to schedule appointments with counselors or register for classes. Timeline April 2021
• UC Merced, Bakersfield College, and Merced College will publish all intersegmental maps for programs that transfer to UC Merced, allowing students to see the full pathway to graduation. Timeline September 2021
• A robust search functionality. Timeline October 2021
• The ability to display any badges from an Open Badges system to identify which courses qualify for badge credentials providing incentive for students to earn badges and track progress toward earning a degree. This feature will require a Discovery phase to help establish expectations and requirements for the integration of digital badges to the Program Pathways Mapper. The initial set of badges to be incorporated will represent course-level student learning outcomes (SLOs). This effort will lay the groundwork for a successful design and development phase. Timeline: November 2021

Project Timeline and Activities

| Month 1: Jul 2020 | Kickoff Meeting, Team Onboarding, Est. Weekly Meetings, Identify Curriculum Data |
| Month 2: Aug 2020 | Project Planning, Convening One Prep |
| Months 3-4: Sept - Oct 2020 | Requirements Gathering, Data Acquisition, Consolidation of BC program maps, Convening One |
| Months 5-6: Nov - Dec 2020 | Requirements Gathering, Wireframe Design, Data Analysis and Cleaning |
| Month 7: Jan 2021 | Follow-up on Convening One, Wireframe Design |
| Month 8: Feb 2021 | Planning for Convening Two, UI Design, Data Modelling |
| Month 9: Mar 2021 | Convening Two Prep, Consolidation of Remaining Program Maps, Codebase Development |
| Month 10: April 2021 | Convening Two, Codebase Development |
| Months 11-12: May - June 2021 | Authoring UC STEM programs and STEM UC Transfer Maps, Collect Baseline Data, Codebase Development |
| Months 13-14: Jul - Aug 2021 | Authoring Additional Program Maps, Codebase Development |
| Month 17: Nov 2021 | Planning Next Steps, Baseline Data Report |
| Months 18-24: Dec - June | Usage and Impact Analysis/Evaluation; Final Report Preparation |
By the 11th month of the project, the UC Merced team will have published 100% of its STEM Baccalaureate maps and at least 50% of its non-STEM Baccalaureate maps. Data collection and evaluation will continue through the second year of the grant and beyond.

VII. References


Exhibit A1 - Deliverables

SCHEDULE OF DELIVERABLES

List all items that will be shared with the State under the proposed Scope of Work. Include all reports, including draft reports for State review, and any other Deliverables, if requested by the State and agreed to by the Parties.

If use of any Deliverable is restricted or is anticipated to contain preexisting Intellectual Property with any restricted use, it will be clearly identified in Exhibit A4, Use of Preexisting Intellectual Property & Data.

Unless otherwise directed by the State, the Principal Investigator shall submit all Deliverables to the Program Officer (Tristan Stein) at learninglab@opr.ca.gov.

The deliverables are described in the following table. Please refer also to Expected Milestones and Deliverables section under Scope of Work.

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<th>Milestone or Deliverable</th>
<th>Description</th>
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<td>Deliverable</td>
<td>Compilation of UC Merced program maps, BC &amp; MC UC STEM transfer maps</td>
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<td>Deliverable</td>
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<td>Q2:FY20/21</td>
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<td>Deliverable</td>
<td>UC Prototype Project Requirements Document</td>
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<td>Baseline Report</td>
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<td>07/31/22</td>
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<td>YEAR 2 FINAL DEBRIEF – ZOOM</td>
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<td>07/31/22</td>
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</tbody>
</table>
**Exhibit A2 – Key Personnel**

List Key Personnel as defined in the Agreement starting with the PI, by last name, first name followed by Co-PIs. Then list all other Key Personnel in alphabetical order by last name. For each individual listed include his/her name, institutional affiliation, and role on the proposed project. Use additional consecutively numbered pages as necessary.

<table>
<thead>
<tr>
<th>Last Name, First Name</th>
<th>Institutional Affiliation</th>
<th>Role on Project</th>
<th>Email Address</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PI:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craig Hayward</td>
<td>Bakersfield College</td>
<td>Design &amp; Evaluation Lead</td>
<td><a href="mailto:Craig.hayward@bakersfieldcollege.edu">Craig.hayward@bakersfieldcollege.edu</a></td>
</tr>
<tr>
<td><strong>Co-PI(s) – if applicable:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Zimmerman</td>
<td>UC Merced</td>
<td>STEM Faculty Lead</td>
<td><a href="mailto:jzimmerman6@ucmerced.edu">jzimmerman6@ucmerced.edu</a></td>
</tr>
<tr>
<td>James McGarrah</td>
<td>Bakersfield College</td>
<td>STEM Faculty Lead</td>
<td><a href="mailto:james.mcgarrah@bakersfieldcollege.edu">james.mcgarrah@bakersfieldcollege.edu</a></td>
</tr>
<tr>
<td><strong>Other Key Personnel (if applicable):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Merced College</td>
<td>STEM Faculty Lead</td>
<td></td>
</tr>
<tr>
<td>Erica Menchaca</td>
<td>Bakersfield College</td>
<td>Program Mapper Faculty Lead</td>
<td><a href="mailto:Erica.menchaca@bakersfieldcollege.edu">Erica.menchaca@bakersfieldcollege.edu</a></td>
</tr>
</tbody>
</table>
# Exhibit A3 – Authorized Representatives

## AUTHORIZED REPRESENTATIVES AND NOTICES

The following individuals are the authorized representatives for the State and the Grantt under this Agreement. Any official Notices issued under the terms of this Agreement shall be addressed to the Authorized Official identified below, unless otherwise identified in the Agreement.

<table>
<thead>
<tr>
<th>State Agency Contacts</th>
<th>Grantee Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agency Name:</strong> Governor’s Office of Planning and Research</td>
<td><strong>Grantee Name:</strong> Bakersfield College</td>
</tr>
<tr>
<td><strong>Contract Project Manager (Technical)</strong></td>
<td><strong>Principal Investigator</strong></td>
</tr>
<tr>
<td>Name: Tristan Stein</td>
<td>Name: Craig Hayward</td>
</tr>
<tr>
<td>Address: California Education Learning Lab 1400 Tenth Street Sacramento, CA 95814</td>
<td>Address: Office of Institutional Effectiveness 1801 Panorama Drive Bakersfield, CA 93305</td>
</tr>
<tr>
<td>Telephone: 916-327-8085</td>
<td>Telephone: (949) 940-631</td>
</tr>
<tr>
<td>Email: <a href="mailto:Tristan.Stein@opr.ca.gov">Tristan.Stein@opr.ca.gov</a></td>
<td>Email: <a href="mailto:craig.hayward@bakersfieldcollege.edu">craig.hayward@bakersfieldcollege.edu</a></td>
</tr>
</tbody>
</table>

### Designees to certify invoices under Section 14 of Exhibit C on behalf of PI:
1. Lori Ortiz, Executive Secretary, lori.ortiz@bakersfieldcollege.edu
2. Sonya Christian, President, sonya.christian@bakersfieldcollege.edu

<table>
<thead>
<tr>
<th>Authorized Official (contract officer)</th>
<th>Authorized Official</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Quin Elliott</td>
<td>Name: Tom Burke</td>
</tr>
<tr>
<td>Address: Governor’s Office of Planning and Research 1400 Tenth Street Sacramento, CA 95814</td>
<td>Address: KCCD 2100 Chester Ave Bakersfield, CA 93301</td>
</tr>
<tr>
<td>Telephone: 916-322-1493</td>
<td>Telephone: 661-336-5104</td>
</tr>
<tr>
<td>Email: <a href="mailto:Quin.Elliott@opr.ca.gov">Quin.Elliott@opr.ca.gov</a></td>
<td>Email: <a href="mailto:tburke@kccd.edu">tburke@kccd.edu</a></td>
</tr>
</tbody>
</table>

### Send notices to (if different):

<p>| Name: Lark Park | Name: Craig Hayward |
| Director | Dean of Institutional Effectiveness |
| Address: California Education Learning Lab 1400 Tenth Street Sacramento, CA 95814 | Address: Office of Institutional Effectiveness 1801 Panorama Drive Bakersfield, CA 93305 |
| Telephone: 916-324-9750 | Telephone: (949) 940-6531 |
| Email: <a href="mailto:Lark.Park@opr.ca.gov">Lark.Park@opr.ca.gov</a> | Email: <a href="mailto:craig.hayward@bakersfieldcollege.edu">craig.hayward@bakersfieldcollege.edu</a> |</p>
<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th>Administrative Contact</th>
</tr>
</thead>
</table>
| **Name:** Beth Hotchkiss  
**Program Analyst** | **Name:** Lori Ortiz  
**Executive Secretary** |
| **Address:** California Education Learning Lab  
1400 Tenth Street  
Sacramento, CA 95814 | **Address:** 1801 Panorama Drive  
Bakersfield, CA 93305 |
| **Telephone:** 916-323-2629 | **Telephone:** (661) 395-4662 |
| **Email:** Beth.Hotchkiss@opr.ca.gov | **Email:** Lori.Ortiz@bakersfieldcollege.edu |

<table>
<thead>
<tr>
<th>Financial Contact/Accounting</th>
<th>Authorized Financial Contact/Invoicing/Remittance</th>
</tr>
</thead>
</table>
| **Name:** OPR Accounts Payable | **Name:** Cathi Jacob  
**Grant Accounting Manager** |
| **Address:** Governor’s Office of Planning and Research  
1400 Tenth Street  
Sacramento, CA 95814 | **Address:** KCCD  
2100 Chester Ave  
Bakersfield, CA 93301 |
| **Telephone:** 916-323-9158 | **Telephone:** (661) 336-5105 |
| **Email:** accountspayable@opr.ca.gov | **Email:** cjacob@kccd.edu |

Designees for invoice certification in accordance with Section 14 of Exhibit C on behalf of the Financial Contact:

1. <Name>, <Title>, <EmailAddress>
2. <Name>, <Title>, <EmailAddress>
3. <Name>, <Title>, <EmailAddress>
Exhibit A4 – Use of Intellectual Property & Data

**USE OF INTELLECTUAL PROPERTY & DATA**

*If either Party will be using any third-party or pre-existing intellectual property (including, but not limited to copyrighted works, known patents, trademarks, service marks and trade secrets) “IP” and/or Data with restrictions on use, then list all such IP/Data and the nature of the restriction below. If no third-party or pre-existing IP/Data will be used, check “none” in this section.*

A. **State: Preexisting IP/Data to be provided to the Grantee from the State or a third party for use in the performance in the Scope of Work.**

<table>
<thead>
<tr>
<th>Owner (Name of State Agency or 3rd Party)</th>
<th>Description</th>
<th>Nature of restriction:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. **Grantee: Restrictions in Preexisting IP/Data included in Deliverables identified in Exhibit A1, Deliverables.**

<table>
<thead>
<tr>
<th>Owner (Name of Grantee or 3rd Party)</th>
<th>Description</th>
<th>Nature of restriction:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield College</td>
<td>Program Pathways Mapper (PPM) cf. Provisional Patent Application No. 62811359</td>
<td>Pre-existing software platform that is being modified to support project deliverables. Overall ownership of the PPM remains with Bakersfield College. UC Merced is granted permission to use, access &amp; contribute to the development of the PPM.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. **Anticipated restrictions on use of Project Data.**

*If the Grantee PI anticipates that any of the Project Data generated during the performance of the Scope of Work will have a restriction on use (such as subject identifying information in a data set) then list all such anticipated restrictions below. If there are no restrictions anticipated in the Project Data, then check “None” in this section.*

<table>
<thead>
<tr>
<th>Owner (Grantee or 3rd Party)</th>
<th>Description</th>
<th>Nature of Restriction:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Craig Hayward, Ph.D.
Research and Data Systems Leader

A proven leader and problem solver, I develop tools, research, and communication campaigns that **leverage data** to provide **insight** and create the urgency necessary to **dramatically increase student success** and completion. Much of my work has focused on clarifying the centrality of structure and sequence completion in successful student journeys, both for developmental sequences (e.g., English, math, and ESL) and for entire program pathways. I focus on **clarity of design, insight, and communication** to empower change agents and scale innovation that drives improved student outcomes.

**Highlights include:**

- **Program Pathways Mapper:** Empowering faculty & staff to develop and communicate clear program maps that help students understand and visualize program catalog information. [http://bit.ly/Program-Mapper](http://bit.ly/Program-Mapper)
- **The Basic Skills Cohort Progress Tracker:** Designed this highly used interactive tool that makes the concepts of student throughput and attrition visible and accessible. [http://bit.ly/BSCPT_throughput](http://bit.ly/BSCPT_throughput)
- **The Transfer Velocity Project:** Developed an interactive tool and journal article that provided new insights into the transfer function and the origin of equity gaps in transfer. [http://bit.ly/Transfer-Velocity](http://bit.ly/Transfer-Velocity)

**Skills & Competencies**
Leadership, Communication, Presentation, Design thinking, Guided Pathways, Research design, Statistical analysis, Qualitative research, Survey design, Innovative design, Writing, Editing, Strategic planning, Enrollment management, Trend analysis, Report design, Project management, Grant application & evaluation, Data infrastructure design

**Professional Experience**

2017 – Present  Dean of Institutional Effectiveness/College Institutional Researcher  Bakersfield College, California

2012 – 2016  Director of Research, Planning and Accreditation  Irvine Valley College, Irvine, California
2010 – 2011  **Interim Dean of IT, Planning & Research**  
Cabrillo College, Aptos, California

2007 – 2012  **Director of Planning, Research & Knowledge Systems**  
Cabrillo College, Aptos, California

2003 – 2005  **Statistics Instructor**  
Mendocino College, Ukiah, California

2002 – 2007  **Director of Institutional Research**  
Mendocino College, Ukiah, California

**Education**

**Ph.D. in Human Development**  
University of California, Irvine

**M.S. in Social Ecology**  
University of California, Irvine

**B.S. in Journalism with concentrations in French and Psychology**  
Boston University

**Select Papers and Publications**

[https://doi.org/10.1177/0091552119840705](https://doi.org/10.1177/0091552119840705)


Biosketch for Dr. James McGarrah

Bakersfield College Co-PI: James McGarrah, Professor of Chemistry

Professor McGarrah completed a Ph.D. in Chemistry at the University of Rochester in 2003. He has been a faculty member since 2006. He joined the faculty at Bakersfield College in 2017. His synergistic activities include: 1.) Performed external assessment on an NSF DUE (Award Number 1140655) Integrated Knowledge-Based Experiences for First-Year Biology and Chemistry Laboratories in June of 2014. As a part of the external assessment team he provided feedback to the investigators at SUNY ESF on their new curricular innovation and evaluated its initial efficacy two years into the program. 2.) At Bakersfield College he has served as the faculty lead for STEM Completion Coaching Community and coordinates meetings with faculty, counseling and student success services in order to promote STEM student transfer and completion.

Education
University of California, San Diego, CA Chemical Physics B.S., 1995
University of Rochester, Rochester, NY Chemistry M.S., 1999
University of Rochester, Rochester, NY Chemistry Ph.D. 2002
Northwestern University, Evanston, IL Photochemistry 2003 - 2006

Appointments
2017-present Professor of Chemistry, Bakersfield College, Bakersfield, CA
2014-2017 Lecturer / Instrumentation Specialist, Union College, Schenectady, NY
2007-2014 Assistant Professor, State University of New York at Geneseo, Geneseo, NY
2006-2007 Visiting Assistant Professor, Barnard College, New York, NY

Professional Service
2019-present Faculty Lead of STEM Completion Coaching Community at Bakersfield College
2016-2017 Faculty Chair of Student Affairs Committee at Union College

Publications (*Student author). (15 peer reviewed publication, h-index = 5)


Synergistic Activities

(1) Performed external assessment on an NSF DUE (Award Number 1140655) Integrated Knowledge-Based Experiences for First-Year Biology and Chemistry Laboratories in June of 2014. As a part of the external assessment team we provided feedback to the investigators at SUNY ESF on their new curricular innovation and evaluated its initial efficacy two years into the program.

Mulfort (co-PI). I took an undergraduate student to Argonne National Laboratories in the summer of 2012 where we performed research in collaboration with Karen Mulfort, a staff scientist at Argonne.

**Collaborators & Other Affiliations**

*Other than Bakersfield College collaborators*
Mary Carroll (Union College), Karen L. Mulfort (Argonne National Laboratories), James G. McLean (SUNY Geneseo)

*Graduate and Postdoctoral Advisors.*
PhD Advisor: Richard Eisenberg (University of Rochester, Emeritus Professor)
Postdoctoral Advisor: Joseph Hupp (Northwestern University)

*Thesis Advisor and Postgraduate-Scholar Sponsor*
Mentored 19 undergraduate students in independent research projects and 6 advised undergraduate thesis projects.
Biosketch for Dr. James Zimmerman

UC Merced Co-Pl:

James Zimmerman, Teaching Professor of Physics and Interim Vice Provost and Dean for Undergraduate Education

Description of Co-Pl's background & qualifications:

James Zimmerman currently serves as the Interim Vice Provost and Dean for Undergraduate Education at the University of California-Merced. A nuclear scientist with a deep passion for learning and teaching, James has participated in faculty professional development activities at the local, national, and international level. In his wide-ranging academic career as both faculty member and administrator, James has developed into a leader who can build consensus, motivate, and put good ideas into operation. He enjoys the challenge of aligning constituents toward the essential institutional goals of developing, managing, and resourcing exceptional and innovative undergraduate learning environments for a diverse student population. At UC Merced, James has led or contributed to several on-going initiatives:

Enrollment Strategy Committee (Chair). The Enrollment Strategy Committee was formed to create comprehensive strategy in undergraduate admissions and retention. The committee works within campus and systemwide planning parameters, policy, and law to recommend five-year goals and fall, spring, and summer targets for both admissions and for retention to the Chancellor. In collaboration with PROC and school executive committees, the Enrollment Strategy Committee monitors how well the campus meets its enrollment targets.

Innovative Learning Technology Initiative – Merced Online and Hybrid (MOH) courses. Center for Engaged Teaching and Learning (CETL) and Academic and Emerging Technology (AET) staff have ensured through the organizational structure of MOH that every faculty restructuring their face-to-face course into an alternative modality concern themselves with the specific strengths that a diverse student population bring to the table.

Task Force on Teaching Effectiveness. A task force was initiated by the UC Merced Vice Provost for the Faculty in 2017 to examine the role that bias plays in Student Evaluations of Teaching (SET). While the work of this task force was incomplete, James has continued this research with other UC Teaching and Learning Center directors. Our collective literature review, evaluations, and suggestions have been cataloged in a white paper that has been shared with UCOP leadership.

Supporting Inclusive pedagogies across the Schools. Small CETL faculty pedagogical grants were utilized with great success to mobilize UC Merced faculty interested in fundamentally changing the way we teach high-enrollment undergraduate courses. This initial investment in money, training, and collaboration has led to the development of a Merritt Writing Program Latinx Author list and associated professional development activities, an undergraduate
course in bilingual medical terminology, two successful campus-wide grant proposals (NSF-Advance and HHMI Inclusive Excellence), as well as another (NSF-I USE) in progress.
Grantee will provide current & pending support information for Key Personnel identified in Exhibit A2 at time of proposal and upon request from State agency. The “Proposed Project” is this application that is submitted to the State. Add pages as needed.

The project team is currently concluding a one-year $396,000 grant from College Futures Foundation to develop a prototype of the Program Pathways Mapper for use in the CSU system. The grant has expended its funds and will be finalizing work over the next six weeks.
Exhibit A7

Third Party Confidential Information

Confidential Nondisclosure Agreement

(Identified in Exhibit A, Scope of Work – will be incorporated, if applicable)

If the Scope of Work requires the provision of third party confidential information to either the State or the Universities, then any requirement of the third party in the use and disposition of the confidential information will be listed below. The third party may require a separate Confidential Nondisclosure Agreement (CNDA) as a requirement to use the confidential information. Any CNDA will be identified in this Exhibit A7.

Not Applicable
# Exhibit B - Budget

## Budget for Project Period

**Principal Investigator (Last, First):**

Hayward, Craig

**Composite Budget for the Entire Proposed Project Period from 07/01/2020 to 06/30/2022.**

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Year 1 07/01/2020 - 06/30/2021</th>
<th>Year 2 07/01/2021 - 06/30/2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel: Salary and fringe benefits</strong></td>
<td>$18,757</td>
<td>$69,025</td>
<td>$87,782</td>
</tr>
<tr>
<td>Travel</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Materials &amp; Supplies</td>
<td>$3,500</td>
<td>$1,500</td>
<td>$5,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Consultant(s)</td>
<td>$262,072</td>
<td>$145,146</td>
<td>$407,218</td>
</tr>
<tr>
<td>Subrecipient(s)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Other Direct Costs</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>ODC #1</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>ODC #2</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>ODC #3</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>ODC #4</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<tr>
<td>ODC #5</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>ODC #6</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL PROJECT DIRECT COSTS</strong></td>
<td>$284,329</td>
<td>$215,671</td>
<td>$500,000</td>
</tr>
<tr>
<td><strong>TOTAL PROJECT INDIRECT COSTS</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL COSTS PER YEAR</strong></td>
<td>$284,329</td>
<td>$215,671</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COSTS FOR PROPOSED PROJECT PERIOD</strong></td>
<td></td>
<td></td>
<td>$500,000</td>
</tr>
</tbody>
</table>

*This row should only reflect the host institution’s indirect costs; subawardee indirect costs should be included within their totals in the Subrecipient(s) line. Total indirect costs for the project must be less than 8% of project total direct costs.*

**Justification:** *See Exhibit B - Follow the budget justification instructions*

**Annual Budget Flexibility:** Prior approval required for budget changes between approved budget categories above the thresholds identified: *Lesser of 10% or $10,000.*
Principal Investigator (Last, First):
Hayward, Craig

**Anticipated Program Income for the Entire Proposed Project Period from 07/01/2020 to 06/30/2022.**

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>07/01/2020</td>
<td>07/01/2021</td>
<td></td>
</tr>
<tr>
<td></td>
<td>06/30/2021</td>
<td>06/30/2022</td>
<td></td>
</tr>
<tr>
<td>ANTICIPATED PROGRAM INCOME</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

*Anticipated Program Income is an estimate of gross income earned by the Grantee that is directly generated by a supported activity and earned only as a result of the State funded project, and this fact is known by the Grantee at time of proposal. Anticipated Program Income is an estimate of potential income and not a guarantee of income to support the project.*

*Page 2 of Exhibit B will only be incorporated in the Agreement when Program Income is anticipated and proposed.*

*Program Income is subject to Section 14.D of Exhibit C of this Agreement.*

If known, provide source(s) of Program Income:

<table>
<thead>
<tr>
<th>Source</th>
<th>Estimated Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Exhibit B1**

**Budget Justification**

The Budget Justification will include the following items in this format.

### Personnel

**Sample Table:**

<table>
<thead>
<tr>
<th>Personnel Name</th>
<th>Role on Project</th>
<th>Percent Effort</th>
<th>Year 1 Salary</th>
<th>Year 1 Benefits</th>
<th>Year 2 Salary</th>
<th>Year 2 Benefits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erica Menchaca</td>
<td>Faculty Program Mapping Expert</td>
<td>20%</td>
<td>$0</td>
<td>$8,028</td>
<td>$21,422</td>
<td>$8,124</td>
<td>$37,664</td>
</tr>
<tr>
<td>James McGarrah</td>
<td>STEM lead at BC</td>
<td>20%</td>
<td>$0</td>
<td>$0</td>
<td>$20,390</td>
<td>$8,002</td>
<td>$28,392</td>
</tr>
<tr>
<td>Lori Ortiz</td>
<td>Admin Support</td>
<td>15%</td>
<td>$6,911</td>
<td>$3,819</td>
<td>$7,083</td>
<td>$3,914</td>
<td>$21,727</td>
</tr>
</tbody>
</table>

Note: Salaries & Benefits for Erica Menchaca & James McGarrah are low in Year 1 relative to the percent of effort because they are being subsidized by a supplemental $50,000 funding stream in addition to the grant award. However, their percent of effort on the grant will be at a consistent 20% level for the duration of the grant period.

### Travel

- **Not Applicable**

### Materials and Supplies

- $2,400 SmartSheet subscription for Project Management ($100/mo. for 24 mos)
- $800 Four (4) Printer/Scanners for Co-PIs & faculty leads (due to remote workplace)
- $300 Printer Ink
- $300 Paper, Envelopes, Pens, Labels, Folders
- $1,200 Two (2) Chromebooks for mobile access

**$5,000 Total**

### Equipment

- **Not Applicable**

### Consultant Costs

- **Consultant #1**: James Zimmerman at UC Merced will coordinate UC Merced faculty members’ participation in the collaborative faculty convenings where training and work on the shared intersegmental program mapping will occur. Will also collaborate on the design and development of the UC STEM Transfer Experience course. Cost = $54,518, percent of effort = 15%

- **Consultant #2**: STEM Faculty Lead for Merced College will coordinate Merced College’s faculty members’ participation in the collaborative faculty convenings where training and work on the shared intersegmental program mapping will occur. Will also collaborate on the design and development of the UC STEM Transfer Experience course. Cost = $27,700, stipend for 395 hours @ $70/hr.

- **Consultant #3**: Concentric Sky will provide the following services required to deliver the technical components of the project for the following agreed upon costs (total cost for the technical components of the project will be $325,00):

  1. Requirements - $12,750 – The project lead, user experience lead and developer will meet with various stakeholders to gather the project requirements. The team will identify the business needs, end-user needs,
data needs and technical needs required for a successful implementation of the Program Pathways Mapper at UC Merced with intersegmental connections to its community college partners, Merced College and Bakersfield College.

2. UX Audit – $35,400 – The user experience lead will work with the project stakeholders to produce a report identifying all improvements, additions and adjustments that will need to be made to the current Program Pathways Mapper in order to meet the requirements as laid out during the initial phase.

3. Wireframes - $44,950 – The user experience lead, along with the lead developer will produce a series of wireframes that document the desired user experience. New features and functionality will be detailed, reviewed and revised per project stakeholder feedback. Wireframes will be a low-fidelity representation of the proposed changes to the user experience.

4. Mockups - $13,200 – The lead user interface designer will bring the wireframes to life by applying the existing look and feel to the new features and functionality creating high-fidelity mockups that show exactly what the new application will look like, and where possible, how it will perform.

5. Codebase - $218,700 – Upon approval of the user experience and user interface design, the lead developer will guide a team of developers to bring these to life. This effort will comprise writing code, unit testing, quality assurance testing and deployment.

For comparison, technical development for a Program Pathways Mapper prototype for CSU transfer was funded through a $396,000 grant from the College Futures Foundation – these funds supported the development of program mapping capabilities, a data cleanup tool, and user experience interface. For the current project, the funds going to Concentric Sky will support substantial enhancements to PPM’s data handling (to make prerequisite processing more robust and to allow for handling new data types, including badging, and UC data sources), as well as to significant enhancements to the Data Cleanup Tool, to the Authoring Tool, and to the user interface/experience.

Subawardee (Consortium/Subrecipient) Costs
   Not Applicable

Other Direct Costs
   Not Applicable

Indirect (F&A) Costs
   Not applicable
Exhibit B2 – Invoice Elements
Invoice and Detailed Transaction Ledger Elements

In accordance with Section 14 of Exhibit C – Payment and Invoicing, the invoice, summary report and/or transaction/payroll ledger shall be certified by the Grantee’s Financial Contact and the PI (or their respective designees).

Invoicing frequency

☐ Quarterly  ☑ Bi-Annually

Invoicing signature format

☐ Ink  ☑ Facsimile/Electronic Approval

Summary Invoice – includes either on the invoice or in a separate summary document – by approved budget category (Exhibit B) – expenditures for the invoice period, approved budget, cumulative expenditures and budget balance available

- Personnel
- Equipment
- Travel
- Subawardee – Consultants
- Subawardee – Subcontract/Subrecipients
- Materials & Supplies
- Other Direct Costs
  - TOTAL DIRECT COSTS (if available from system)
- Indirect Costs
  - TOTAL

Detailed transaction ledger and/or payroll ledger for the invoice period

- Grantee Fund OR Agency Award # (to connect to invoice summary)
- Invoice/Report Period (matching invoice summary)
- GL Account/Object Code
- Doc Type (or subledger reference)
- Transaction Reference#
- Transaction Description, Vendor and/or Employee Name
- Transaction Posting Date
- Time Worked
- Transaction Amount

---

1 If this information is not on the invoice or summary attachment, it may be included in a detailed transaction ledger.

2 For salaries and wages, these elements are anticipated to be included in the detailed transaction ledger. If all elements are not contained in the transaction ledger, then a separate payroll ledger may be provided with the required elements.
## Exhibit C
### Terms & Conditions
#### (OPR-220)

Table of Contents

**Section:**

1. Definitions
2. Approval
3. Amendment
4. Liability
5. Conflict of Interest
6. Dispute Resolution
7. Termination
8. Confidential Information
9. Key Personnel
10. Requirements Associated with Funding Sources
11. Subawards
12. Budget Contingency
13. Travel
14. Payment & Invoicing
15. Prior Approval Requirements and Budget Flexibility
16. Audit
17. Right to Publish
18. Data Rights
19. Copyrights
20. Use of Name and Publicity
21. Access to State Facilities or Computing Systems
22. Notices
23. Subject Headings
24. Force Majeure
25. Nondiscrimination
26. Governing Law
27. Severability
28. Entire Agreement
29. Order of Precedence
30. Definitions
1. **Definitions**
   Refer to definitions at end of document.

2. **Approval**
   This Agreement is of no force or effect until signed by both Parties. Grantee may not commence performance until notified by OPR to start work.

3. **Amendment**
   No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the Parties and approved as required. No oral understanding or agreement not incorporated in the Agreement is binding on any of the Parties.

4. **Liability**
   A. To the extent permitted by law, the Grantee shall defend, indemnify and hold harmless the State, its officers, employees, agents, and any contracted non-profit program administrator retained by the State from and against any and all liability, loss, expense, attorneys’ fees, or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys’ fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the Grantee, its respective officers, agents or employees.

   B. To the extent permitted by law, the State shall defend, indemnify and hold harmless the Grantee, its officers, employees and agents from and against any and all liability, loss, expense, attorneys’ fees, or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorneys’ fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the State, its respective officers, agents, employees, or any contracted non-profit program administrator retained by the State.

   C. If the Grantee provides funds to any Subawardee, excluding any agency or department of the United States, to accomplish any of the work of this Agreement, the Grantee shall first enter into a written agreement with each Subawardee by which the Subawardee agrees to indemnify and hold harmless the State of California, the State and its officers, agents, employees, and any contracted nonprofit program administrator retained by the State from any and all liabilities, losses, claims, demands, damages, or costs, including without limitation litigation costs and attorney’s fees, resulting from or arising out of the Subawardee’s performance under its agreement with the Grantee, but only in proportion to and to the extent such liability, loss, expense, attorneys’ fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the Subawardees, its respective officers, agents or employees. The foregoing does not limit any breach of contract action that the State may have against the Grantee.

5. **Conflict of Interest**
   A. Conflict of Interest
      1) State intends to avoid any real or apparent conflict of interest on the part of the Grantee, Subawardees, or employees, officers and directors of the Grantee or Subawardee. Thus, State reserves the right to determine, in its reasonable discretion, whether any information, assertion or claim received from any source indicates the existence of a real or apparent conflict of interest; and, if a conflict is found to exist, to require the Grantee to submit additional information or a plan for resolving the conflict, subject to State review and prior approval.

      2) Conflicts of interest include, but are not limited to:
         (a) An instance where the Grantee or any of its Subawardees, or any employee, officer, or
director of the Grantee or any Subawardee receiving information in connection with the performance of services hereunder has an interest, financial or otherwise, whereby the use or disclosure of information obtained while performing such services would result in private or personal benefit.

(b) An instance where, in connection with the performance of services hereunder, the Grantee’s or any Subawardee’s employees, officers, or directors use their positions for purposes that are, or give the appearance of being, motivated by a desire for private gain for themselves or others, such as those with whom they have family, business or other ties.

B. Disclosure of Current and Pending Support
The Grantee will be required to submit a completed Current and Pending Support form (Exhibit A6) to the State with its Proposal. Upon request from the State, Grantee will submit an updated Current and Pending Support form within thirty (30) calendar days of the request from the State.

C. Evaluation
If either Party becomes aware of a known or suspected conflict of interest pursuant to paragraphs A or B above, the knowledgeable Party shall inform the other Party, and the Grantee will be given an opportunity to submit additional information or to resolve the conflict. Within twenty (20) calendar days from the date of notification of the conflict, the Grantee will provide additional information sufficient to fully evaluate the nature and effects of the potential conflict. If a conflict of interest is determined to exist by the State in its reasonable discretion and cannot be resolved to the satisfaction of the State, the conflict will be grounds for terminating the Agreement for good cause pursuant to Section 7 of this Agreement. The State may, at its discretion upon receipt of a written request from the Grantee, authorize an extension of the timeline indicated herein.

6. Dispute Resolution

A. The State’s Contract/Program Manager and the Grantee’s Principal Investigator shall attempt to informally resolve any disputes under this agreement.

B. If either Party determines that the dispute cannot be informally resolved, either Party may submit to the other Party in writing a description of the dispute and the desired outcome.

C. The State’s Authorized Official, as designated in Exhibit A3, or designee and the Grantee’s Director of Contracts and Grants Administration or designee shall meet to review the issues. A written decision signed by the Party receiving the notice of dispute shall be returned to the other Party within thirty (30) working days of the receipt of the notice of dispute, or as otherwise agreed between the Parties, in writing.

D. If both Parties cannot agree upon a resolution after following the processes described in this Agreement, both Parties retain the right to bring a lawsuit or seek any other legal or equitable remedy either Party may have.

Pending the final resolution of any dispute arising under this Agreement, Grantee agrees to diligently proceed with the performance of this Agreement, including the delivery of goods or the provision of services or research in accordance with the terms of this Agreement, unless the dispute involves the Grantee’s continued performance under this Agreement. The Grantee’s failure to diligently proceed in accordance with the State’s instructions shall be considered a material breach of this Agreement. State agrees to continue payment for costs not under dispute.

E. If payment for services performed by Grantee is part of the dispute, to the extent it is legally able to
do so, the State will ensure that funds remain available for this purpose and do not revert prior to the conclusion of the dispute resolution process.

F. This dispute resolution process does not preclude either Party from exercising its right to terminate this Agreement pursuant to Section 7.

7. Termination
   A. The State’s Authorized Official may terminate this Agreement with or without cause upon thirty (30) calendar days written notice to the Grantee. Upon receipt of the State’s notice of termination, the Grantee shall take reasonable efforts to limit or terminate all financial commitments and will not incur new obligations under this Agreement. In accordance with the Invoice Provision of this Agreement the State shall reimburse the Grantee for costs incurred up to the effective date of termination and for costs incurred due to Non-cancellable Obligations, up to the undisbursed balance of funds authorized in this Agreement.

   B. The Grantee’s Authorized Official may terminate this Agreement for Good Cause and upon thirty (30) calendar days written notice to the State of the cause for termination. Upon submission of the Grantee’s notice of termination, the Grantee shall take reasonable efforts to limit or terminate all financial commitments and will not incur new obligations under this Agreement. In accordance with the Invoice Provision of this Agreement the State shall reimburse the Grantee for costs incurred up to the effective date of termination and for costs incurred due to Non-cancellable Obligations, up to the undisbursed balance of funds authorized in this Agreement.

   C. Good Cause is defined as impossibility of performance or frustration of purpose. Good cause does not include material breach or termination for convenience.

   D. In the case of early termination, the Grantee will submit, within ninety (90) days of the termination date, an invoice and a report covering services up to the termination date. Any Deliverable as described in this Agreement, that is fully or partially completed up to the termination date (work product), will be provided to the State.

   E. Upon receipt of the invoice, progress report, data, and work product, a final payment will be made to the Grantee. This payment shall be for all costs incurred in accordance with this Agreement, and shall include labor and materials purchased or utilized (including all Non-cancellable Obligations) up to the termination date, and pro rata share of indirect costs as specified in the budget (Exhibit B).

   F. If either Party notifies the other of a material breach, the breaching Party will have fifteen (15) calendar days to respond with a remedy to correct the breach. The receiving Party has fifteen (15) calendar days to accept or reject the proposed remedy or offer an alternative remedy. Upon approval of the proposed remedy, the breaching Party has thirty (30) calendar days to implement the cure. In the event the breaching Party does not cure the breach within the thirty-day period, the non-breaching Party may terminate for cause immediately upon written notice. All notifications, acceptances and rejections must be submitted in writing.

   G. Pursuant to a Governor’s Executive Order or equivalent directive, such as a court order or an order from a federal or state regulatory agency, the State may issue a Suspension Notice. The Notice must identify the specific Executive Order or directive and the Agreement number(s) subject to suspension. Work charged to the State must stop immediately upon receipt of the Notice. The Grantee retains the right to reimbursement of costs incurred to date, including non-cancellable obligations, and reserves the right to seek reimbursement through administrative or legal action.

   H. The Grantee shall include in any agreement with any subawardee retained for work under this
Agreement a provision that entitles the Grantee to suspend or terminate the agreement with the subawardee for any reason on written notice and on the same terms and conditions specified in this section.

8. **Confidential Information**
   
   A. Protection of Personally Identifiable Information
   
   Except as otherwise provided by law, information or data that personally identifies an individual or individuals shall be protected in accordance with California Civil Code Sections 1798, et seq., and other relevant State or Federal statutes and regulations. The Parties shall comply with California Civil Code Sections 1798, et seq. and other relevant State or Federal statutes and regulations in safeguarding all such information or data which comes into their possession under this agreement in perpetuity, and shall not release or publish any such information or data except as permitted by law.

   B. Confidentiality of Third Party Provided Information
   
   Third Parties may provide Confidential Information to the State or directly to the Grantee for use by the Grantee in the performance of the **Scope of Work**. Any such information will be defined by the State in the Scope of Work as “Third-Party Confidential Information” and requirements for treatment of such information will be set forth in Exhibit A, Scope of Work. In addition, such third party may also request a separate Confidential Nondisclosure Agreement (CNDA). If applicable, a CNDA for this purpose will be provided as Exhibit A7.

   C. Trade Secrets
   
   Both Parties agree that they will not provide or make accessible to either Party any third-party **Trade Secrets** without first informing the receiving Party and obtaining prior written consent to accept and protect such information in perpetuity or until the information disclosed under this Agreement ceases to be a Trade Secret.

   D. Other Confidential Information
   
   Any other information considered confidential by the disclosing Party will be clearly marked by the disclosing Party in writing, as “**Confidential Information**”, and sent only to the designated representative of the receiving Party. Any confidential information conveyed orally to the receiving Party by the disclosing Party shall be followed by a written communication within fourteen (14) days that said information will be considered “Confidential Information.” Neither Party will disclose Other Confidential Information unless it is necessary to the Scope of Work or is otherwise required by law. Except as required by law and/or by court order, the receiving Party will not disclose Confidential Information for a period of five (5) years from the termination of this Agreement, or such time period mutually agreed upon by both Parties. At the end of said five year period or upon request from the State, Grantee will return or destroy Confidential Information.

   The receiving Party will take all appropriate measures to protect the confidentiality of such information while in its possession. In the event that Grantee is required to disclose Confidential Information to a **Consultant** and/or **Vendor** in order to fulfill the Scope of Work, the Grantee will require the Consultant and/or Vendor to comply with terms at least as stringent as Grantee’s obligations hereunder and as required by law.

   Notwithstanding any other provision in this Agreement, both Parties are subject to the California Public Records Act (“CPRA”), Government Code Section 6250 et seq. Education Code Section 72690 applies to **CSU Auxiliaries**. Grantee will advise Subawardees of these facts.

   E. Special Conditions for Security of Confidential Information
   
   Grantee will comply with applicable State and Federal statutes and regulations and policies
regarding information security. Additional legal and regulatory requirements regarding security of Confidential Information, and requirements regarding use and disposition thereof, may be provided by the State and are specified in Exhibit E.

F. The confidentiality obligations herein do not apply to information that (i) was known to the receiving Party prior to its receipt from the disclosing Party, (ii) is independently developed by the receiving Party, or (iii) becomes available to the general public at any time through no fault of the receiving Party.

9. **Key Personnel**

Any change in the Key Personnel identified in Exhibit A2, Scope of Work, shall require prior approval of the State. The State shall not unreasonably delay its determination whether to provide such approval. The Grantee will provide any documentation required to facilitate the State’s determination of whether or not to approve the proposed change in Key Personnel.

10. **Requirements Associated with Funding Sources**

A. This Agreement is subject to any additional requirements imposed on the State agency by applicable law (including, but not limited to, bond, proposition and federal funding). These additional requirements and applicable funding sources are set forth in the following Exhibits, which are attached and incorporated by this reference in Exhibit D.

B. If the Grantee is a subrecipient, as defined in 2 CFR § 200.93, and the External Funding Entity is the federal government, the awarding State agency will provide to the Grantee the name of the federal agency, the federal award identification number (if available), the federal award date, the Catalog of Federal Domestic Assistance (CFDA) program number (if available and applicable), the total amount awarded to the State agency, and identify whether or not the award from the federal government to the State agency is research and development (R&D). The State acknowledges that in the case of federal funds, the Grantee must comply with the applicable Federal regulations. The Grantee will identify whether or not the award between the State agency and the Grantee is R&D.

C. Notwithstanding the foregoing, this Agreement shall be governed by the laws of the State of California as to interpretation and performance.

11. **Subawards**

A. The Grantee will perform the work contemplated with resources available within its own organization and no portion of the work shall be subawarded except for Subawards expressly identified in the proposal, the Scope of Work or the Budget, or any amendments to the foregoing. The Grantee will incorporate into any Subaward for work identified in this Agreement any provision applicable to the particular Subawardee, including, but not limited to the following:

1) Conflict of Interest
2) Confidential Information
3) Budget Contingency
4) Patents (if applicable)
5) Copyrights (if applicable)
6) Data Rights (if applicable)
7) Audits
8) Invoicing and Payment
9) Indemnification
10) Any other provisions required by statute, regulation or source of funds applicable to this Agreement.

This subsection 11.A. shall not apply to “Sub-Agreements” with the United States Department of
Energy National Laboratories.

B. The Grantee shall be responsible for establishing and maintaining written agreements with and making payments to Subawardees for work performed in accordance with the terms of this Agreement. Nothing contained in this Agreement, or any subsequent Amendment to this Agreement, shall create any contractual relationship between the State and any Subawardee, and no Subawardee shall relieve the Grantee of its responsibilities and obligations hereunder. The Grantee shall provide copies of Subaward documents upon request by the State.

C. Any substitution or addition of Subawardees identified in this Agreement must be approved in writing by the State in advance of assigning work to substitute or new Subawardees. Grantee acknowledges that, if applicable, the State must comply with State Contracting Manual (SCM Volume I) Section 3.06, which applies to all Subawards. The State will decide whether to seek authorization to allow the Grantee to proceed with the proposed substitute or additional Subawardee, and the Grantee will provide assistance to the State upon request in order to meet these requirements.

D. This section applies to any Subawardee that provides assistance to the Grantee under this Agreement regardless of time or dollars expended.

E. Vendors are not considered to be a Subawardee and are subject to the normal terms and conditions of the Grantee’s procurement process.

12. **Budget Contingency**

   A. It is mutually understood between the Parties that this Agreement may have been written before ascertaining the availability of congressional or legislative appropriation of funds, for the mutual benefit of both Parties in order to avoid program and fiscal delays that would occur if this Agreement were executed after that determination was made.

   B. This Agreement is valid and enforceable only if sufficient funds are made available to the State by the United States Government or the California State Legislature for the purpose of this program. In addition, this Agreement is subject to any additional restrictions, limitations, conditions, or any statute enacted by the Congress or the State Legislature that may affect the provisions, terms, or funding of the Agreement.

   C. It is mutually agreed that if Congress or the California State Legislature does not appropriate sufficient funds for the program, the State has the option to terminate the Agreement in accordance with Section 7 or to amend this Agreement to reflect any reduction in funds.

13. **Travel**

   A. Travel and reimbursement for Grantee employee travel costs shall be in accordance with the Grantee’s travel policy in effect as of the date the cost is incurred. The Grantee’s travel policy is found at: https://files.bakersfieldcollege.edu/committees/AIQ/Evidence/midterm15/Standards/S.66.pdf. The Grantee will immediately inform the State in writing of any changes in its travel policy. Lodging rates shall be reasonable.

   B. Reimbursement for travel by employees of a Subawardee of the Grantee shall be reimbursed at actual cost not to exceed the Federal rates in effect as of the date the costs are incurred. Federal rates are available on the US General Services Administration website at http://www.gsa.gov/portal/category/21287.

   C. The Budget shall identify all travel and the costs of travel, including travel by subawardees, and shall
itemize the rate, estimated cost and destination of the travel. The Budget Justification and/or Scope of Work shall identify the travelers and purpose of the travel. Travel identified in this manner is considered approved upon execution and approval of the Agreement. Travel not identified in the Budget and/or Scope of Work shall require prior written (including fax or email) authorization from the State Contract Project Manager. The need for actual travel not identified in the proposed Budget and/or Scope of Work must be justified and all technological avenues of communication (e.g., teleconferencing, videoconferencing, or web conferencing) must be explored before travel will be approved.

D. If State policy regarding out-of-state travel changes during the period of this Agreement, it is the responsibility of the State to inform the Grantee, and the Parties will work together in good faith to amend this Agreement, as necessary.

14. Payment & Invoicing

A. Reimbursement

1) The total amount of funds disbursed under this Agreement shall not exceed the total amount in item 3 on STD 213. Subject to the Budget Contingency clause of this Agreement, the amounts payable for each fiscal year, if applicable, will be identified in Exhibit B.

2) Costs for this Agreement shall be computed in accordance with the Generally Accepted Accounting Principles (GAAP). The State will reimburse direct and indirect costs in accordance with Exhibit B.

3) State shall reimburse salaries and wages based upon the approved budget (Exhibit B) and the actual payments made with the following caveat: Grantee must retain supporting documentation that shall substantiate actual costs and shall be available for review by the State upon request. Supporting documentation may include, but not be limited to, time reports and/or calendar entries.

4) Indirect Costs shall be calculated in accordance with the Grantee budgeted indirect costs in Exhibit B, Budget, which for the purposes of this agreement shall be no greater than eight percent and shall include all ancillary fees charged by the Grantee. Subject to Exhibit D, the rate in effect for the first year of a multi-year project will be the rate used for the entire project. If additional funds (not previously appropriated or budgeted) are awarded, the proposed budget for these additional funds may include a different indirect cost rate as mutually agreed between the parties.

5) Nothing herein contained shall preclude a ten-percent payment withhold pursuant to Section 10346 of the Public Contracts Code.

B. Expense Allowability / Fiscal Documentation

Grantee will maintain financial records and supporting documentation of all costs incurred in the performance of this Agreement. If the State agency or State Controller’s Office requires clarification of any expenditure prior to payment of an invoice, Grantee will provide documentation of such expenditure to support its allowability. If any expenditures are disputed by the State, pending resolution, State agrees to pay all other undisputed invoiced costs.

1) Equipment purchases shall comply with Department of General Services State Contracting Manual (SCM) Section 7.29 – Equipment Purchases, if applicable.

For the purposes of this Agreement, “damage” as used in paragraph B of SCM 7.29 – Equipment Purchases is defined as physical harm that is sustained by the equipment that prevents its functioning as
designed or manufactured.

2) Grantee will maintain financial documentation in accordance with Section 16, Audit.

C. Invoicing
1) For services satisfactorily rendered in accordance with the Scope of Work and Budget, and upon receipt and approval of invoices, State agrees to reimburse the Grantee for actual allowable expenditures. Approval of invoices shall not be withheld based on scientific differences between Grantee and State in the interpretation of the research data and final conclusions.

2) Invoices shall be submitted electronically by email only to accounts payable@opr.ca.gov with a cc to LearningLab@opr.ca.gov and any other email addresses designated by the California Educational Learning Lab. Invoices shall be submitted in arrears every 6 months. Invoices must include the following certification for State certification to the State Controller’s Office, in compliance with SAM 8422.1:

   This bill has been checked against our records and found to be the original one presented for payment and has not been paid. We have recorded this payment so as to prevent a later duplicate payment.

   Signed: ____________________________ State Agency Accounting Officer

3) Invoices shall:
   a. Bear the Grantee’s name as shown on the Agreement
   b. Include the Agreement number
   c. Identify the billing and/or performance period covered by the invoice and provide a detailed transaction ledger, including payroll detail, for the same period
   d. Provide Grantee invoice contact, telephone number and/or email address
   e. Be prepared in accordance with the approved cost categories identified in Exhibit B and the elements contained in Exhibit B3
   f. Be certified in ink or by an electronically scanned copy of a signature by the Grantee’s Authorized Financial Contact (or designee) identified in Exhibit A3 as true, correct, and the sole bill for the charges invoiced.

4) A copy of the invoice/detailed transaction ledger shall be certified in ink or by an electronically scanned copy of a signature by the PI or designee (such designee shall be identified in Exhibit A3) for costs incurred, with the following statement: “I have reviewed the expenditure detail for this invoice to determine the allowability of the charges to this project and certify that the salaries and wages included on this invoice and ledger are an accurate representation of actual time worked.” This certified document may be transmitted electronically to the State’s Contract Project Manager (Technical) identified in Exhibit A3.

5) The Grantee shall submit a final financial report accounting for the grant expenditures and any final invoices and evaluation to the State no later than one hundred eighty (180) calendar days after the agreement completion date.

D. Program Income
1) The Grantee shall account for Program Income related to projects funded by this Agreement on Exhibit B, Page 2.
2) At the discretion of the State, as identified in Exhibit B, Page 2, Program Income may be used to support total project costs, to further eligible project or research program objectives, or to finance the non-state funded portion of the project or program.

3) After the execution of this Agreement, if the Grantee becomes aware of Program Income not identified in Exhibit B, Grantee will notify the State promptly by submitting a revised Exhibit B, Page 2, Program Income, pursuant to Section 15. Prior Approval Requirements and Budget Flexibility.

4) Within sixty (60) days of the program event the Grantee will provide the State with a preliminary accounting of program event revenues and expenditures. When the work under this Agreement is completed and if applicable the Grantee will reduce the total amount of the final invoice to the State by any Program Income exceeding total project expenditures. Unless agreed to otherwise by the Parties, net revenue from this project shall be remitted by the Grantee to the State with the final closeout or accounting of project expenditures.

15. **Prior Approval Requirements and Budget Flexibility**

   A. Prior Approval Requirements
   
   The following changes require prior approval of the State Contract Project Manager, whether or not the change has a budgetary impact.
   
   1) Change in Scope of Work
   2) Change in Key Personnel
   3) Inclusion of restricted use data or copyrighted works in Deliverables
   4) Travel not included in the approved Budget
   5) Substitution or addition of Subawardees

   B. Budget Flexibility
   
   Budget revisions between identified budget categories in cost reimbursement agreements that are within the total Agreement amount, comply with the Prior Approval Requirements, above and do not change the Scope of Work or substitute Key Personnel, as defined in this Agreement, are allowed as described below:
   
   1) Up to 10% of each annual budget amount or $10,000, whichever is less, is allowed with approval of the State’s Contract Project Manager, or as otherwise agreed to by the Parties and documented on Exhibit B.
   
   2) Exceeding 10% or $10,000, whichever is less, of the last approved budget require the State’s Contract Project Manager’s prior approval and may require a formal amendment to this Agreement. The Grantee will submit a revised budget to the State for approval.

   Budget transfers that would cause any portion of the funds to be used for purposes other than those consistent with the original intent of this Agreement are not allowed.

   C. Revisions and/or changes pursuant to this Section 15 may require a formal amendment to this Agreement.

16. **Audit**

The Grantee agrees that the awarding State agency, the California State Auditor, or their designated representative shall have the right to audit and/or review, and copy any records and supporting documentation pertaining to the performance of this Agreement if it exceeds $10,000. The Grantee agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of record retention is stipulated in Exhibit D. If any litigation, claim, or audit
begins prior to the expiration of the retention period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved and final action taken. Grantee agrees to refund to the State any amounts claimed for reimbursement and paid to Grantee which are later disallowed by the State after audit or inspection of records.

17. **Right to Publish**

A. Subject to any restrictions on the publication, disclosure, dissemination and use of Confidential Information or use of data set forth in this Agreement or under any applicable law, the Grantee shall have the right to publish, disclose, disseminate and use, in whole and in part, any data and information received or developed under this Agreement.

B. The Grantee will provide publications, presentations and other public releases resulting from work performed under this Agreement to the State for review at least thirty (30) calendar days prior to publication and will identify the proposed recipient(s). During the first twenty (20) calendar days of such review period, the State may provide notice to the Grantee that it intends to rebut some or all aspects of the presentation, publication or other media release. The State will then have thirty (30) calendar days from the date of notice to prepare and submit such rebuttal to the recipient(s) identified by the Grantee. Within the review period, the State may provide feedback to the Grantee; the Grantee will give good faith consideration to such feedback, but has no obligation to make any changes in said material, other than the removal of any material whose disclosure is prohibited or restricted by this Agreement or by any applicable law. Any of the above referenced time periods maybe modified upon agreement of both Parties. Neither Party may unreasonably deny such requests.

C. At the State’s sole discretion, the State will require the Grantee to use one of the following disclaimers in any publication, presentation or other public release:
1) “This project was funded by the <Agency>. The contents may not necessarily reflect the official views or policies of the State of California.”

2) “This project was funded by the <Agency>. The contents do not represent the official views or policies of the State of California.”

D. **Terms & Conditions Required for State-Funded Research Grants**

The Parties shall comply with Government Code 13989 et seq, including but not limited to:

1) The Grantee is responsible for ensuring that any publishing or copyright agreements concerning submittal of peer-reviewed manuscripts fully comply with Government Code section 13989 et seq.

2) For a peer-reviewed manuscript accepted for publication, the Grantee shall ensure that the peer-reviewed manuscript be available no later than 12 months after the official date of publication on a publicly accessible repository approved by the State, including but not limited to:

(a) CSU ScholarWorks at the Systemwide Digital Library ([http://www.calstate.edu/library/](http://www.calstate.edu/library/)) or

(b) UC California Digital Library ([https://www.cdlib.org/](https://www.cdlib.org/)), or


3) The Grantee shall instruct the PI to report to the State the final disposition of the peer-reviewed manuscript, including but not limited to:

(a) whether it was published,

(b) where it was published,
(c) when it was published,
(d) when the 12 month period after publication expires; and
(e) where the manuscript will be available for open access.

4) The State shall retain information regarding all issued research grants that resulted in published works.

18. **Data Rights**
   A. **Preexisting Data** of each Party that will be included as a Deliverable under this Agreement will be identified in Exhibit A4. Preexisting Data of the State may only be used by the Grantee for purposes of the Scope of Work of this Agreement, unless such data is otherwise publicly available.

   B. At the State’s expense for actual cost of duplication and delivery, Grantee shall deliver additional **Project Data** that is specifically requested by the State.

   C. The State shall have the unrestricted right to use the **Deliverable Data** and delivered **Project Data**, subject to applicable use and disclosure restrictions identified in Exhibit A4 and other provisions in this Agreement, including but not limited to, Right to Publish, Confidential Information, Copyright, Patents and Use of Name and Publicity.

   D. The Grantee shall have the unrestricted right to use **Project Data**, subject to applicable use and disclosure restrictions identified in Exhibit A4 and other provisions in this Agreement, including but not limited to, Right to Publish, Confidential Information, Copyrights, Patents and Use of Name and Publicity.

19. **Copyrights**
   A. All rights in copyrightable works first created by the Grantee in the performance of the Scope of Work, Exhibit A, under this Agreement are the property of the Grantee. Unless restricted under Exhibit A4, the Grantee shall grant the State a fully paid-up, royalty-free, nonexclusive, sublicensable, irrevocable license to use, reproduce, prepare derivative works, and distribute copies of the Deliverables identified in Exhibit A1, to fulfill the State’s government purposes.

   B. Notwithstanding the above, if the purpose of the Scope of Work is specifically to create a copyrightable work for use by the State and that fact is indicated in Exhibit A1, which may be amended upon mutual agreement of the Parties, then all rights in such copyrightable work will be the property of the State, subject to a reserved right for the Grantee to use the copyrightable work for educational and research purposes and to allow other educational and nonprofit institutions to do so for educational and research purposes.

   C. Upon written request and subsequent amendment, the State may request delivery of computer software that is not identified on Exhibit A1, but was first created in the performance of the Scope of Work. To the extent the Grantee is legally able to do so, Grantee shall grant a fully paid-up, royalty-free, nonexclusive, sublicensable, irrevocable license to use, reproduce, prepare derivative works, and distribute copies, to fulfill the State’s government purposes, subject to restrictions, if any, identified in Exhibit A4.

20. **Use of Name and Publicity**
    Neither Party will use the name of the other Party or its employees in any advertisement, press
release, or publicity with reference to this agreement or any product or service resulting from this agreement, without prior written approval of the other Party.

21. **Access to State Facilities or Computing Systems**
   If Grantee access to State agency facilities or computing systems is required, a separate agreement between the individual accessing the facility or system and the State agency may be necessary, and is referenced in Exhibit F.

22. **Notices**
   All notices permitted or required under this Agreement shall be in writing and shall be delivered in person or transmitted to the mailing address or email address of the Party as specified in Exhibit A3 of this Agreement.

23. **Subject Headings**
   Headings within this Agreement are for convenient reference only and have no effect in limiting or extending the language of the provisions to which they refer.

24. **Force Majeure**
   Neither Party shall be liable to the other for any delay in or failure of performance, nor shall any such delay in or failure of performance constitute default, if such delay or failure is caused by “Force Majeure.” As used in this section, “Force Majeure” is defined as follows: Acts of war and acts of god such as earthquakes, floods, and other natural disasters such that performance is impossible.

25. **Nondiscrimination**
   California Government Code section 12990(c) requires that every state contract and subcontract for public works or for goods or services contain a nondiscrimination clause prohibiting discrimination on the bases of legally protected classes. The Department of Fair Employment and Housing is the state agency charged with enforcing California’s civil rights laws, and requires the following language be included in these terms and conditions. With respect to this section, “contract” means this Agreement; “contractor” means Grantee; and “subcontract” means Subaward.

   During the performance of this contract, contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status.

   Contractors and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code, § 12900 et seq.) and the applicable regulations promulgated thereunder (Cal. Code Regs., tit. 2, § 11000 et seq.). The applicable regulations of the Fair Employment and Housing Council implementing Government Code section 12990, set forth in Subchapter 5 of Division 4.1 of Title 2 of the California Code of Regulations are incorporated into this contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

   Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

26. **Governing Law**
This Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

27. **Severability**
The invalidity or unenforceability of any provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

28. **Entire Agreement**
This Agreement constitute(s) the entire agreement between the Parties with respect to its subject matter and constitutes and supersedes all prior agreements, representations and understandings of the Parties, written or oral.

29. **Order of Precedence**
Any inconsistency in the provisions under this Agreement shall be resolved by giving precedence in the following order:

1. Exhibit D – Additional Requirements Associated with Funding Sources, when applicable
2. Exhibit G – Negotiated Alternate Terms, when applicable
3. Exhibit C – Terms & Conditions (OPR-220)

**Definitions**

**Administrative Contact (State):** Individual responsible for the day-to-day administration of the Agreement.

**Administrative Contact (Grantee):** Individual responsible for the day-to-day administration of the Agreement.

**Agreement:** Agreement means a contract or grant between the state and the Grantee for research, training, or service.

**Authorized Financial Contact:** Grantee representative authorized to sign invoices to State agencies.

**Authorized Official:** An individual authorized to enter into an agreement, amend an agreement, or receive notices on behalf of the Grantee or State as stipulated in the Agreement. The Grantee’s Authorized Official is usually located in the campus’ contract & grant or sponsored project office. The State’s Authorized Official is usually located in the agency’s contracting office.

**Confidential Information:** Information, the disclosure of which is restricted or prohibited by any provision of law. Some examples of “confidential information” include, but are not limited to, public social services client information described in California Welfare and Institutions Code Section 10850, and “personal information” about individuals that is non-disclosable under California Civil Code Section 1798.3 of the Information Practices Act (IPA), or any information identified as confidential by the parties, in accordance with Section 8 of this agreement.

**Consultant:** An independent consultant is an individual not employed by the Grantee of proven professional or technical competence who provides primarily professional or technical advice to the Grantee and the Grantee does not control the manner, means or methods of performance.

**Contract Project Manager:** State agency representative responsible for oversight of the technical completion of the project, identified in Exhibit A3.
**CSU Auxiliary Organization** *(when applicable)*: A CSU Auxiliary Organization authorized to receive and administer externally funded projects on behalf of the Trustees of the California State University, pursuant to CCR Title 5, Division 5, Chapter 1, Subchapter 6, Article 2, Section 42500 (*5 CCR § 42500*).

**Data**: Information, regardless of the form or medium including, but not limited to drawings, lists, findings, computations, notes, diagrams, data files, statistical records and other research data.

**Preexisting Data**
1. State: Data that is already possessed or owned by the State.
2. Grantee: Data that is already possessed or owned by the Grantee.
3. 3rd Party: Data that is provided by a third party to the State or the Grantee for use under this Agreement.

**Project Data**: Data that is first produced in the performance of this Agreement by the Principal investigator or the Grantee’s project personnel. Project Data does not include a researcher’s laboratory notebook, but does include Project Data contained therein.

**Deliverable Data**: Project Data that is identified in the Scope of Work, Exhibit A1, and required to be delivered to the State.

**Deliverables**: Items identified in the Scope of Work, Exhibit A1, and required to be delivered to the State.

**Direct Costs**: Direct costs are those costs that can be identified specifically with a particular sponsored project, an instructional activity, or any other institutional activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy. Direct costs may include, but are not limited to, salary, fringe benefits (including graduate student tuition and fees), equipment, subawards, travel, supplies, other expenses and rental charges. Costs incurred for the same purpose in like circumstances must be treated consistently as either direct or indirect costs. Where an institution treats a particular type of cost as a direct cost of sponsored agreements, all costs incurred for the same purpose in like circumstances shall be treated as direct costs of all activities of the institution.

**Financial Contact/Accounting (State)**: Individual responsible for processing invoices from Grantee for payment.

**Independent Contractor**: An independent entity performing work for the Grantee, where the Grantee has the right to control only the result of the service, not the manner of performance.

**Indirect Costs**: Indirect costs (IDC) are valid expenses of conducting research, instruction, and other sponsored activities at Grantee, but are incurred for common or joint objectives and, therefore, cannot be identified readily and specifically with a particular project or program. Building use, facilities operation & maintenance costs, equipment use & depreciation and general administrative expenses are examples of costs that are usually treated as IDC.

**Institutional Base Salary**: Institutional Base Salary is the annual compensation paid by the Grantee for an employee’s appointment, whether that individual’s time is spent on research, teaching, or other activities.

**Key Personnel**: The PI and other individuals who contribute to the scientific development or execution of a project in a substantive, measurable way, whether or not they receive salaries or compensation under the agreement. The Grantee identifies key personnel in each proposal.

**Notices Contact**: See Authorized Official.
Non-cancellable Obligations: Allowable costs that have been properly budgeted in Exhibit B incurred through the date of termination, but cannot be reversed at the point of termination.

Party(ies): Party or Parties shall mean the Grantee campus or the State agency as the parties to this Agreement, and does not apply to any third party or other entity.

Principal Investigator: The Principal Investigator (PI) is defined as the individual(s) judged by the Grantee to have the appropriate level of authority and responsibility and has been designated in the Grantee’s proposal to the State to direct the project or program supported by the Agreement.

Program Income: Gross income earned by the Grantee that is directly generated by a supported activity and earned only as a result of the State funded project.

Research: investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.

Scope of Work: The proposed and/or approved project and deliverables outlined by the Grantee’s PI to accomplish the State’s funding goals.

State: An agency or department of the State of California that is funding the Scope of Work.

Subaward: Agreement issued to a Subawardee to perform a portion of Scope of Work.

Subawardee: An entity other than the Grantee that performs a portion of the Scope of Work, as identified in this Agreement, and includes the following: Subrecipient, subcontractor, consultant and independent contractor.

Subcontractor: See Subrecipient.

Subrecipient: A collaborating entity of the Grantee that is responsible for programmatic decision making and completing a portion of the Scope of Work.

Trade Secret: "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and, (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. (Civil Code Section 3426.1)

Vendor: A dealer, distributor, merchant or other seller providing goods or services necessary for the Grantee’s performance, but not an integral part of the Scope of Work. Vendors are not considered a Subawardee and are subject to the normal terms and conditions of the Grantee’s procurement process.
Exhibit D- Additional Requirements Associated with Funding Sources
(if applicable)

If the Agreement is subject to any additional requirements imposed on the funding State agency by applicable law (including, but not limited to, bond, proposition and federal funding), then these additional requirements will be set forth in Exhibit D. If the Grantee is a subrecipient, as defined in 2 CFR 200 (Uniform Guidance on Administrative Requirements, Audit Requirements and Cost Principles for Federal Financial Assistance), and the external funding entity is the federal government, the below table must be completed by the State agency. (Please see sections 10.A and 10.B of the Exhibit C.)

State Agency to Complete (Required for Federal Funding Source):

<table>
<thead>
<tr>
<th>Federal Agency</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Federal Award Identification Number</td>
<td></td>
</tr>
<tr>
<td>Federal Award Date</td>
<td></td>
</tr>
<tr>
<td>Catalog of Federal Domestic Assistance (CFDA) Number and Name</td>
<td></td>
</tr>
<tr>
<td>Amount Awarded to State Agency</td>
<td></td>
</tr>
<tr>
<td>Effective Dates for State Agency</td>
<td></td>
</tr>
<tr>
<td>Federal Award to State Agency is Research &amp; Development (Yes/No)</td>
<td></td>
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</tbody>
</table>

Grantee to Complete:

Research and Development (R&D) means all research activities, both basic and applied, and all development activities that are performed by non-Federal entities. The term research also includes activities involving the training of individuals in research techniques where such activities utilize the same facilities as other R&D activities and where such activities are not included in the instruction function.

This award ☑ does ☐ does not support Research & Development.

Pursuant to Government Code Section 65059.2(f), courses and course series, and technology and technology platforms developed or redesigned with Learning Lab funds shall be available as open education resources. As used in this agreement, “open educational resources” are any educational resources released under one of the Creative Commons licenses (or its equivalent). Under the terms of this agreement, grantees agree to release all resources developed with Learning Lab grant funds under one of the Creative Commons licenses other than CC-BY. “Open educational resources” include, but are not limited to, full courses, course materials, modules, textbooks, faculty-created content, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

It is the intent of this grant agreement that open educational resources that are developed with Learning Lab grant funds be made available at no cost or substantially low cost to students attending public higher education institutions.
Exhibit E – Special Conditions for Security of Confidential Information

(if applicable)

If the Scope of Work or project results in additional legal and regulatory requirements regarding security of Confidential Information, those requirements regarding the use and disposition of the information, will be provided by the funding State agency in Exhibit E. (Please see section 8.E of Exhibit C.)

Not Applicable
Exhibit F – Access to State Facilities or Computing Resources

(if applicable)

If the Scope of Work or project requires that the Universities have access to State agency facilities or computing systems and a separate agreement between the individual accessing the facility or system and the State agency is necessary, then the requirement for the agreement and the agreement itself will be listed in Exhibit F. (Please see section 21 of Exhibit C.)

Not Applicable
Exhibit G – Negotiated Alternate OPR Terms

An alternate provision in Exhibit G must clearly identify whether it is replacing, deleting or modifying a provision of Exhibit C. The Order of Precedence incorporated in Exhibit C clearly identifies that the provisions on Exhibit G take precedence over those in Exhibit C.

While every effort has been made to keep the OPR-220 as universal in its application as possible, there may be unique projects where a given term in the OPR-220 may be inappropriate or inadequate, or additional terms may be necessary.

1. Grantee agrees to use templates to be developed by the Learning Lab in consultation with the grantee for invoicing, expenditure reporting and submission of written reports.

2. Any funds that are unexpended at the end of the grant agreement may be retained by grantee for activities that further the grant project or the Learning Lab program, with approval by the Contract Officer, or his or her designee.

3. OPR shall advance 6-months of reserve funding on a pro-rata basis against the total eligible grant amount upon receiving signed grant agreement and an invoice from the grantee for that amount.

4. Regardless of the advancement of any funds to the grantee made under this agreement, the Contract Officer shall review invoices, expenditure reports, requests for budget change approval, grant agreement amendments, and other requests from grantee, and grantee shall make requests directly to the Contract Officer, but retain the “Annual Budget Flexibility” (lesser of 10% of each annual budget amount or $10,000) included in the original agreement, and otherwise comply with Section 4 of this Exhibit.

5. Project team agrees to either 1) provide project materials and resources for posting onto Learning Lab’s webpage, or 2) maintain a project page, as appropriate project materials and resources become available. Project team agrees to participate in cohort discussions/activities via Zoom on a not more frequent than quarterly basis. Project team agrees to share project materials with OER aggregator sites (like Merlot), upon request by the Learning Lab, at the conclusion of the project.

6. All expenditure for travel and project-led conferences/convenings shall require prior approval by the State Contract Project Manager. Funds allocated for travel and for hosting project-led conferences/convenings, as specified in the approved Budget, will be held by OPR pending approval by the State Contract Project Manager and are subject to further negotiation. In addition, the Grantee agrees to heed state or local public health agency and campus directives, including all non-essential travel restrictions.

7. In the event of sustained disruption of in-person classes or of the in-person portion of classes, the project team will make every effort to continue with project implementation using available technologies. The project team will document in reports where it was necessary to make adjustments to the implementation plan on account of the disruption, how the implementation plan was adjusted, and how those adjustments potentially impact analysis of results.

8. The State may delegate program administration of the California Education Learning Lab to a non-profit entity at any time during the agreement. The State shall notify the University in writing of any resulting changes to the State Agency Contacts listed in Exhibit A3. All other terms and conditions of this agreement will remain in effect and unchanged.