STATE OF CALIFORNIA

PRINTED NAME AND TITLE OF PERSON SIGNING

1616 Capitol Avenue, Suite 74.262, MS 1802, P.O. Box 997377, Sacramento, CA

Timothy Bow, Procurement Office

ADDRESS

95899

ST	ANDARD AGREEMENT						
STD 213 (Rev 02/20) AGREEMENT 19-11143							
	STATE CONTROLLER'S OFFICE IDENTIFIER 4265 1911143 REGISTRAT				TION NUMBER		
1.	This Agreement is entered into	between the State	e Agency and the Co	ntractor nam	red below:		
STATE AGENCY'S NAME							
	California Department of Publ	ic Health, hereina	fter referred to as "S	State"			
	CONTRACTOR'S NAME						
	Regents of the University of C	alifornia, San Fran	cisco, hereinafter re	ferred to as '	"University"		
2.	The term of this Agreement is: Jur	ne 20, 2020	through	June	30, 2022		
3.	The maximum amount of this Agreement is: \$	8,931,518					
4.	The Parties agree to comply win a part of the Agreement.	th the terms and c	onditions of the follow	wing Exhibits	, which by this	reference	are made
	Exhibit A – A7: A–Scope of Work; A1–Deliverables; A2–Key Personnel; A3–Authorized Representatives; A4–Use of Intellectual Property & Data; A5–Resumes/Biosketch; A6–Current & Bending Support: A7 Third Both Confidential Information (if annihilate)						
	Current & Pending Support; A7-Third Party Confidential Information (if applicable) Exhibit B – B–Budget; B1–Budget Justification; B2– Subawardee Budgets (if applicable); B3– 5 page(s) Invoice Elements						
	Exhibit C* – University Terms and Conditions Check mark additional Exhibits below, and attach applicable Exhibits or provide internet link:						20
	Exhibit D – Additional				illeriiet iiik.	1	page(s)
	☐ Exhibit E – Special Co					3	page(s)
	☐ Exhibit F – Access to		_375			1	page(s)
	☐ Exhibit G − Negotiated					1	page(s)
find	ms shown with an Asterisk (*) are he d these documents on the <u>University</u> bsites.	ereby incorporated b	y reference and made	part of this ag he <u>California L</u>	reement as if att Department of Ge	ached here eneral Ser	eto. You can
IN	WITNESS WHEREOF, this Agreer	nent has been exe	cuted by the Parties h	nereto.			
	C	CONTRACTOR			California Depa		
CONTRACTOR'S NAME (if other than an individual, state whether a corporation, partnership, etc.) Services Use Only					<u> </u>		
The Regents of the University of California. San Francisco							
	BY (Authorized Signature) Catherine Lagarde 6/22/2020						
-	© Catherine Lagards 6/22/2020 PRINTED NAME AND TITLE OF PERSON SIGNING						
	Catherine Lagarde, Contract Specialist/Contracts and Grants Officer						
	DRESS	,			*		
33	33 California Street, Suite 315, S						
		E OF CALIFORN	IA				
	ENCY NAME	Total					
	lifornia Department of Public He (Authorized Signature)	aitn	DATE SIGNED	(Do not tuna)			
- 1			I DATE SIGNED	LOU HOLLYDE!			,

Exempt per:

EO N-25020 / GC 1102

Exhibit A - Scope of Work

Project Summary & Scope of Work
PI Name: George W. Rutherford, M.D., M.A.
Project Title: COVID-19 Modeling and Contact Tracing
Project Summary/Abstract Briefly describe the long-term objectives for achieving the stated goals of the project.
The California Department of Public Health (CDPH) is working to determine the combination of non-pharmaceutical interventions (NPIs) that will meet California's public health and economic goals in addition to tracking the right data to provide an early warning system.
CDPH has also developed and implemented a comprehensive contact-tracing program, California Connected (CalCONNECT). The program consists of three main efforts: 1) Expanding a diverse and trained workforce of contact tracers; 2) Development of a statewide contact tracing data management and communication platform; 3) Development of a Virtual Training Academy, in partnership with the University of California, San Francisco (UCSF) and the University of California, Los Angeles (UCLA) to provide training specific for contact tracers, case investigators, and supervisors. In addition to this, there are coordinated efforts in additional work streams, including media/communications, policy and development, and local health jurisdiction outreach and technical assistance.
If Third-Party Confidential Information is to be provided by the State:
Performance of the Scope of Work is anticipated to involve use of third-party Confidential Information and is subject to the terms of this Agreement; OR
A separate CNDA between the University and third-party is required by the third-party and is incorporated in this Agreement as Exhibit A7, Third Party Confidential Information.

Scope of Work

CDPH will provide support to leadership for adaptive decision making on suppression on COVID-19, considering both public health and economic goals. This is achieved by continuously updating a menu of NPI options and their estimated effectiveness and monitoring key metrics during pandemic suppression. Furthermore, adherence to non-pharmaceutical interventions will be monitored through mobility and other data. The goals and objectives for CDPH's contact tracing program, California Connected, include hiring of staff with public health, clinical, surveillance and/or informatics experience. Objectives include development and review of local, state, and federal policies and guidance in the ongoing implementation of contact tracing efforts; use of public health or clinical subject matter expertise in development of data platform script, functionality, and policies; and programmatic and public health input in ongoing development of training curriculum based on local/state needs.

Exhibit A1 - Deliverables

SCHEDULE OF DELIVERABLES

GOAL 1: The Epidemiologists will collect, analyze and disseminate data on the status of the COVID-19 pandemic and healthcare capacity to support state and local decisions on the control of COVID-19 in California.

Deliverable	Description	Due Date
Monitoring pandemic	Support variance process with data, choosing metrics and cut points, building the infrastructure to get those data; analyzing it, producing county snapshots, supporting data requests, and reports at both Agency and the Governor's Office.	
Work with counties to improve county snapshots/revise metrics	with counties to Implement an early warning system weaving together multiple data sources including sentinel surveillance, bio-sense, influenza	

GOAL 2: The Junior Statistician, Modelers, and Epidemiologists will produce model estimates of the impact of COVID-19 in California using internal and external models and disseminate results to state and local decision makers to aid the mitigate the effects of COVID-19 in California.

Modeling Pandemic	County-specific modeling results to 58 counties as well as open- sourcing code to allow interested parties to adapt tool to their own use.	Term of Contract
	Analytics book (model results and insights) that goes to the Governor's Office weekly meetings.	Term of Contract
	University of California led modeling consortium.	Term of Contract
	Health economics modeling (DALYs etc.).	Term of Contract
	Infectious disease models tied to economic models C.	Term of Contract

Goal 3: Provide leadership and subject matter expertise, guidance, medical review and interpretation of evidence on non-pharmaceutical interventions, including contact tracing, isolation, and quarantine.

Deliverable	Description	Due Date
Guidance	Reviews and incorporates CDC guidance on contact tracing, isolation and quarantine into CDPH guidance.	Term of Contract
	Reviews and incorporates COVID-19 testing and scientific advances into California Connected policy and processes.	Term of Contract
	Modify case management and medical monitoring procedures based on CDC guidelines.	Term of Contract

Goal 4: Develop and improve existing systems to support contact tracing efforts and linkage to testing.

Deliverable	Description	Due Date
Policy / Guidance Reviews and incorporates COVID-19 testing and scientific		Term of Contract
	advances into California Connected policy and processes.	
Process Improvement Member of Test-Trace Integration Workgroup and leads e		Term of Contract
	on improving time from test request to test result.	Term or contract

investigator.	Process Improvement	Member of Test-Trace Integration Workgroup and leads efforts on improving time from positive test to notification of case investigator.	Term of Contract
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Goal 5: Provide leadership, examine, and apply evidence, guidelines, and processes.

Deliverable	Description	Due Date
Policy/Guidance	Provides leadership and direction for developing and updating key processes related to public health, communicable disease control, and contact tracing.	Term of Contract
Communication	Work with local, regional, or state stakeholders.	Term of Contract
Guidance	Evaluate and revise isolation steps to be consistent with latest biomedical evidence of COVID-19 infectiousness.	Term of Contract

Goal 6: Examine and develop policies specific to contact tracing efforts, aligned with existing local, state, and federal policies.

Deliverable	Description	Due Date
Communication/Policy	Meet regularly and work with CDPH leadership in Science Branch	Term of Contract
1000	and Division of Communicable Disease Control (DCDC).	
Communication/Policy	Meet regularly with the California Conference of Local Health	Term of Contract
	Officers and County Health Executives Association of California	
	representatives to review and edit policies specific to contact	
	tracing program.	
Policy development	Develop policies specific to the contact tracing data	Term of Contract
	management platform (e.g. interjurisdictional transfers, data	
	sharing, symptom monitoring) that are aligned with local, state,	
	and federal policies. Work closely with internal and external	
	stakeholders to develop policy.	
Policy development	Review and implement policies to ensure health and racial	Term of Contract
- And	equity; ensure program processes and policies align with efforts	to entre the section of the
	for hard to reach populations.	

Goal 7: Provide leadership for statewide contact tracing data management platform.

Deliverable	Description	Due Date
Protocols and Scripts	Works with product owner and other team leads on developing and ongoing updates of standard operating procedures (SOP) and scripts for users of the CalCONNECT data management platform to ensure consistency with national, state, local public health recommendations, privacy considerations.	
Dashboard oversight	Works with reporting and analytics team to ensure contact tracing dashboards are relevant, accurate, and timely to allow for monitoring and evaluation of contact tracing effort.	Term of Contract
Platform development	Provides ongoing recommendations and input to product owner and platform development team based on feedback from stakeholders at state and local levels including users, epidemiologists, policy makers, and others.	Term of Contract

California Reportable Disease Information Exchange (CalREDIE) interoperability	Provides clinical/epidemiologic input to CalREDIE interoperability team to ensure relevant public health surveillance information is flowing between CalREDIE and CalCONNECT with accuracy and at an appropriate frequency.	Term of Contract			
The following Deliverables are subject to Section 19. Copyrights, paragraph B of Exhibit C					
N/A					

Unanticipated Tasks:

In the event that additional work must be performed which was completely unanticipated and is not specified in the Scope of Work, but which in the opinion of both parties is necessary to the successful accomplishment of the general Scope of Work outlined, the procedures outlined in this Section will be employed. For each item of unanticipated work not specified in the Scope of Work, a Work Authorization will be prepared.

It is understood and agreed by both parties to this Contract that all of the terms and conditions of this Contract shall remain in force with the inclusion of any such Work Authorization. Such Work Authorization shall in no way constitute a Contract other than as provided pursuant to this Contract nor in any way amend or supersede any of the other provisions of this Contract.

Each Work Authorization shall consist of a detailed statement of the purpose, objective, or goals to be completed, along with the classification(s) of the personnel to be made available by the Contractor. The Work Authorization will Identify all significant materials to be developed and delivered to the State as well as identification of all significant materials to be delivered by the State to the Contractor, an estimated schedule for the provisions of these services by the Contractor, completion criteria for the work to be performed, and estimated work hours required to accomplish the purpose, objective, or goals.

All Work Authorizations must be in writing prior to beginning work and signed by the Contractor and the State.

The State has the right to require the Contractor to stop or suspend work on any Work Authorization.

Personnel resources will not be expended (at a cost to the State) on task accomplishment in excess of estimated work hours required unless the procedure below is followed:

- 1. If, in the performance of the work, the Contractor determines that a Work Authorization to be performed under this Contract cannot be accomplished within the estimated work hours, the Contractor will immediately notify the State in writing of the Contractor's estimate of the work hours, which will be required to complete the Work Authorization in full. Upon receipt of such notification, the State may:
 - (a) Authorize the Contractor to expend the estimated additional work hours or service in excess of the original estimate necessary to accomplish the Work Authorization (such an authorization is not unreasonably to be withheld), or
 - (b) Terminate the Work Authorization, or
 - (c) Alter the SOW of the Work Authorization in order to define tasks that can be accomplished within the remaining estimated work hours.
- 2. The State will notify the Contractor in writing of its election within seven (7) calendar days after receipt of the Contractor's notification. If notice of the election is given to proceed, the Contractor may expend the estimated additional work hours or services. The State agrees to reimburse the Contractor for such additional work hours.

Exhibit A2 – Key Personnel

KEY PERSONNEL

Last Name, First Name	Institutional Affiliation	Role on Project
PI:		
Rutherford, George	University of California, San Francisco	Principal Investigator for contract. Oversees performance of project objectives and deliverables.
Co-PI(s) – if applicable:		e e
Lopez, Georgina	University of California, San Francisco	The Director of Finance and Administration is fiscally and administratively responsible for the overall operations on fiscal and organization changes that impact budget, organization structure staffing, space, and to ensure effort and financial management are coordinated with the California Department of Public Health.
Other Key Personnel (if applicable):		
Langston, Donna	University of California, San Francisco	Oversees the financial tracking and all budget work related to the project. Provides reporting in consultation with DCDC.

Exhibit A3 – Authorized Representatives

AUTHORIZED REPRESENTATIVES AND NOTICES

The following individuals are the authorized representatives for the State and the University 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.

State Agency Contacts		University Contacts		
Agency Name: California Department of Public Health Contract Project Manager (Technical)		University Name: The Regents of the University of California, San Francisco		
		Principal Investigator		
Name:	Terry McIntire	Name:	George Rutherford, MD	
	Contract Manager		Director, Prevention and Public Health Group	
Address:	Division of Communicable Disease Control	Address:	Global Health Sciences, Mission Hall	
	1616 Capitol Avenue, MS 7300		550 16 th Street, Box 1224	
	Sacramento, CA 95814		San Francisco, CA 94143	
Telephone:	(916) 552-8617	Telephone:	(415) 476-5781	
Fax:	(916) 552-8973	Fax:	(415) 476-5348	
Email:	Terry.mcintire@cdph.ca.gov	Email:	George.Rutherford@ucsf.edu	
		Designees to	o certify invoices under Section 14 of Exhibit C	
Authorized (Official (contract officer)	Authorized	Official	
Name:	Amy Kile-Puente, Assistant Division Chief	Name:	Catherine Lagarde	
Address:	Division of Communicable Disease Control		Contract Specialist/Contracts and Grants	
	1616 Capitol Avenue, MS 7300		Officer	
	Sacramento, CA 95814	Address:	Office of Sponsored Research University of	
Telephone:	(916) 552-8623		California, San Francisco	
Fax:	(916) 552-8973		3333 California Street, Suite 315	
Email:	Amy.kile-puente@cdph.ca.gov		San Francisco, CA 94143	
		Telephone:	(415) 476-9692	
		Fax:	Not Available	
Send notice:	s to (if different):	Email:	Catherine.Lagarde@ucsf.edu	
Name:		Send notice	s to (if different):	
Address:		95900	10	
Telephone:		Name:		
Email:		Address:		
		Telephone:		
		Email:		

Administrative Contact

Name:

Terry McIntire

Contract Manager

Address:

Division of Communicable Disease Control

P.O. Box 997377, MS 7300

Sacramento, CA 95899-7377

Telephone: (916) 552-8617

Fax:

(916) 552-8973

Email:

Terry.mcintire@cdph.ca.gov

Name:

Terry McIntire

Financial Contact/Accounting

Contract Manager

Address:

Division of Communicable Disease Control

P.O. Box 997377, MS 7300

Sacramento, CA 95899-7377

Telephone: (916) 552-8617

(916) 552-8973

Fax: Email:

Terry.mcintire@cdph.ca.gov

Administrative Contact

Name:

Georgina Lopez

Director of Finance and Administration

Address:

Institute for Global Health Sciences

550 16th Street, Box 1224

San Francisco, CA 94143

Telephone: (415) 476-5576

Fax:

(415) 476-5348

Email:

Georgina.Lopez@ucsf.edu

Authorized Financial Contact/Invoicing/Remittance

Name:

Hyun-Ok (Ellyn) Woo

Financial Manager

Address:

Institute for Global Health Sciences

550 16th Street, Box 1224

San Francisco, CA 94143

Telephone: (415) 476-5578

(415) 476-5348

Fax: Email:

Ellyn.Woo@ucsf.edu

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

1. Donna Langston, Financial Analyst,

Donna.langston@ucsf.edu

2. Kevin Wong, Analyst, Controllers Office

KwongY.Wong@ucsf.edu

UCSF Remittance Address

Name:

Mary Catherine Gaisbauer

Assistant Controller, CGA

Address: UCSF Main Depository

PO Box 748872

Los Angeles, CA 90074-4872

Telephone: (415) 476-2126

Fax:

N/A

Email:

MC.Gaisbauer@ucsf.edu

Exhibit A4 – Use of Intellectual Property & Data

copyrighted works, kno	wn patents, trademarks, service ma n IP/Data and the nature of the restr	tellectual property (including, but not limited to rks and trade secrets) "IP" and/or Data with restiction below. If no third-party or pre-existing IP/L
State: Preexisting IP/ performance in the S		rsity from the State or a third party for use in
None or List	1	;
Owner (Name of State Agency or 3 rd Party)	Description	Nature of restriction:
	, , , , , , , , , , , , , , , , , , ,	
Deliverables.	Ů	ed in Deliverables identified in Exhibit A1,
University: Restriction Deliverables. None or List Owner (Name of University or 3rd Party)	Ů	ed in Deliverables identified in Exhibit A1, Nature of restriction:
Deliverables. None or List Owner (Name of University or		·
Deliverables. None or List Owner (Name of University or 3rd Party) Anticipated restriction of the University PI antivill have a restriction of	Description ns on use of Project Data. cipates that any of the Project Data in use (such as subject identifying in the are no restrictions anticipated in	·

Exhibit A5 - RÉSUMÉ/BIOSKETCH

RÉSUMÉ/BIOSKETCH

Rutherford, George W., M.D., M.A.

POSITION TITLE: Salvatore Pablo Lucia Professor of Epidemiology, Preventive Medicine, Pediatrics and History; Vice Chair, Department of Epidemiology and Biostatistics; Head, Division of Infectious Disease Epidemiology

EDUCATION/TRAINING:

Institution and Location	Degree (if applicable)	Completion Date MM/YYYY	Field of Study
Stanford University, Palo Alto, CA	A.B., B.S.	1974, 1975	Classics, Chemistry
Stanford University, Palo Alto, CA	M.A.	1975	History
Duke University, Durham, NC	M.D.	1978	Medicine

Personal Statement

The purpose of this application is to propose a series of activities to maximize sustained responses to the HIV epidemic. I have 30 years' experience in HIV epidemiology and prevention and have worked extensively in highly impacted countries in Africa. I am the Principal Investigator of a series of cooperative agreements with CDC that support strategic information activities, including monitoring and evaluation, for PEPFAR. In SUSTAIN I will lead the systf3matic review and knowledge management activity. I was the founding Coordinating Editor for the Cochrane Collaboration's HN/AIDS Review Group and have authored more than 20 systematic reviews. I have also worked extensively on WHO HIV guidelines, including the soon-to-be released case-based surveillance guidelines and the still-in-progress guidelines on using cascades to monitor national and local progress to epidemic control.

Current position and honors

1997-now Salvatore Pablo Lucia Professor of Preventive Medicine, Epidemiology and Pediatrics; Head, Division of Infectious Disease Epidemiology; Vice Chair, Department of Epidemiology and Biostatistics, University of California, San Francisco.

Honors

2002 F. Marian Bishop Educator of the Year Award, Association of Teachers of Preventive Medicine 2009 Holly Smith Award for Exceptional Service to the School of Medicine, UCSF.

Selected Peer-reviewed Publications (from 235 peer-reviewed publications)

- 1. Cherutich P, Kim A, Kellogg TA, Sherr K, Waruiru A, de Cock K, Rutherford GW. HIV viral suppression in Kenya: data from a population-based study. PLoS One 2016; 11:e0154318. PMID: 27192052
- 2. Kim AA, Mukui I, N'gan'ga L, Katana A, Koros D, Waicwe J, De Cock KM; KAIS Study Group. Progress in reversing the HIV epidemic through intensified access to antiretroviral therapy: results from a nationally representative population-based survey in Kenya, 2012. PLoS One 2016; 11:e0148068. PMID 26930291
- 3. Rutherford GW, Anglemyer A Early initiation of antiretroviral therapy prevents HIV transmission to seronegative sexual partners. Evid Based Med 2017; 22:29. PMID 27852628.

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Georgina Lopez

POSITION TITLE: Director of Finance and Administration

EDUCATION/TRAINING:

Institution and	Degree	Completion Date	Field of Study
Location	(if applicable)	MM/YYYY	
College of San Mateo	A.S.	06/00	Accounting/Finance

Personal Statement

One of the objectives of this contract is manage and oversee all human resource and financial activities. I have extensive experience in managing large extramurally funded grants and contracts from multiple agencies. I have conducted training in financial management, change management, compliance, and research administration both at UCSF and in offsite locations. I have also served as a mentor for a number of years in the UCSF Academic Business Officers Group Mentors hip program.

Positions and Honors

Positions and Employment

12/98 -8/99 Administrative Analyst, University of California San Francisco (UCSF), Dept. of Epidemiology & Biostatistics;

9/99 -11/00 Senior Administrative Analyst, UCSF, Dept. of Epidemiology & Biostatistics;

12/00 -6/03 Principal Analyst I, UCSF, Dept. of Epidemiology & Biostatistics, Institute for Global Health;

7/03 -5/04 Principal Analyst 11, UCSF, Dept. of Epidemiology & Biostatistics, Institute for Global• Health;

5/04 -12/05 Interim MSO, UCSF, Dept. of Epidemiology & Biostatistics and Finance and Administrative Director of Organized Research Unit - Institute for Global Health;

6/05 -11/06 MSO, IV, UCSF, Institute for Global Health (IGH), Women's Global Health Imperative (WGHI), Global Health Sciences;

12/06 -06/12 MSO, Finance and Administration Manager, UCSF, Institute for Global Health (IGH), the AIDS Research Institute (ARI), Global Health Sciences (GHS), MSPII;

07/12 -present Director of Finance and Administration, UCSF, Institute for Global Health Sciences (IGHS), the AIDS Research Institute (ARI), and the Department of Epidemiology and Biostatistics (DEB).

Other Experience and Professional Memberships

12/06-09/07 Startup team member for the Clinical and Translational Sciences Institute (CTSI) \$100 million award in partnership with the CTSI Board of Directors, develop basic reporting and financial systems for CSTI startup.

Honors

2005 Holly Smith Award for Exceptional Service to the School of Medicine, UCSF 2018 Chancellor Award for Exceptional University Management, UCSF

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Research Support

Bill & Melinda Gates Foundation OPP1107312 Walker (PI) 06/01/14-05/31/19

Preterm Birth Initiative East Africa

The Preterm Birth Initiative (PTBi) East Africa works in selected sites in Kenya, Uganda and Rwanda to reduce morbidity and mortality from preterm birth by strengthening facility-based care from pregnancy through labor, delivery, and immediate postnatal period.

Role: Finance manager

California Department of Public Health 17-10035 Rutherford (PI) 12/01/17-11/30/22

Tuberculosis (TB) Risk Reduction Project

To assist the TB Control Branch with support to local health departments in maintaining a statewide TB disease reporting surveillance system, perform analyses of surveillance data, create, and disseminate surveillance summary reports. Provide support and improve TB program management capacity for 61 California local health jurisdictions.

Role: Project Manager

California Department of Public Health 13-10010 Rutherford (PI) 7/1/13-6/30/18

CDPH Immunization Branch

To provide support to local health departments in the vaccine distribution, disease investigation, outreach and education, and implementation of local and/or regional automated immunization registry systems. Role: Manager

Donna Langston

POSITION TITLE: Financial Analyst Manager

EDUCATION/TRAINING:

Institution and Location	Degree (if applicable)	Completion Date MM/YYYY	Field of Study
Arizona State University, Tempe, AZ	B.A.	05/77	Sociology/Gender Studies
College of Notre Dame	M.P.A.	05/94	Public Administration/English

Personal Statement

The position of Financial Analyst manager functions as the centralized administrative authority for facilitation of the grant/contract process through maintaining productive communication with representatives of multiple venues, funding agency, University departments, Controller's Office, Office of Sponsored Research, and the respective Research Service Coordinator for award activities. In coordination with GHS program staff, it is my priority to provide current and projected key data in a timely manner through the mechanism of financial/budgetary reports and support documentation as required by Federal, State and private funding agencies domestic and international origin.

Positions and Honors

Positions and Employment

12/88 - 7/99 Administrative Analyst, University of California San Francisco (UCSF), Dept. of Radiation Oncology;

07/99 - 07/01 Senior Administrative Analyst, UCSF, Dept. of Cellular and Molecular Biology;

07/01 - 2/10 Principal Analyst I, UCSF, Dept. of Epidemiology & Biostatistics, Women's Health Clinical Research Center;

02/10 - present Financial Analyst Manager, UCSF, Institute for Global Health Sciences (IGHS).

Other Experience and Professional Memberships

08/91-05/94 Teaching Assistant/English Literature

Honors

1977 magna cum laude, Arizona State University 1994 magna cum /aude, College of Notre Dame Dean's List National Phi Beta Kappa Society

California Department of Public Health 13-10010 Rutherford (PI) 7/1/13-6/30/18

CDPH Immunization Branch

Page 15 of 29

To provide support to local health departments in the vaccine distribution, disease investigation, outreach and education, and implementation of local and/or regional automated immunization registry systems. Role: Financial Manager

California Department of Public Health 13-10010 Rutherford (PI) 7/1/15-6/30/21

STD Prevention Training Center

Role: Financial Manager

National Institute of Health- Fogarty Cohen (PI) 4/4/12-6/30/22

University of California Global Health Institute Program for Fellows and Scholars:

This project will train pre-doctoral scholars and post-doctoral fellows from UC San Francisco, UC San Diego,
UC Los Angeles, UC Davis and 28 international collaborating institutions from low- and middle-income
countries in a wide range of pressing and emerging global health issues. This program will be highly relevant,
as it will engage trainees in an intensive 11-month project conducted at an international site. The program
will produce multidisciplinary global health leaders and strengthen the network of research and training
across UC campuses and its international partnering institutions.

Role: Financial Manager

Exhibit A6 – Current & Pending Support

CURRENT & PENDING SUPPORT

University 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.

PI: Rutherf	7				
(currently active or pending approval)	Award # (if available)	Source (name of the sponsor)	Project Title	Start Date	End Date
Proposed Project	19-11143	California Department of Public Health	COVID-19 Monitoring and Contact Tracing	6/20/2020	6/30/2022
CURRENT	18-10444	California Department of Public Health	STD and Viral Hepatitis Prevention and Control	1/1/2019	12/31/2023
CURRENT					
PENDING					
A CONTRACTOR OF SECTION AND ASSESSMENT					
Co-PI: Lope	z, Georgina				
Status	Award #	Source	Project Title	Start Date	End Date
Proposed Project	19-11143	California Department of Public Health	COVID-19 Monitoring and Contact Tracing	6/20/2020	6/30/2022
CURRENT	18-10444	California Department of Public Health	STD and Viral Hepatitis Prevention and Control	1/1/2019	12/31/2023
CURRENT	17-10035	California Department of Public Health	Tuberculosis Control and Prevention	12/1/2017	11/30/2022
Langston, I	Donna				
Status	Award #	Source	Project Title	Start Date	End Date
Proposed Project	19-11143	California Department of Public Health	COVID-19 Monitoring and Contact Tracing	6/20/2020	6/30/2022
CURRENT	18-10444	California Department of Public Health	STD and Viral Hepatitis Prevention and Control	1/1/2019	12/31/2023
CURRENT	18-10092	California Department of Public Health	Immunization	7/1/2018	6/30/2023

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.

N/A

Exhibit B - Budget

Budget for Project Period

Principal Investigator (Last, First):

Rutherford, George

COMPOSITE BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD 06/20/2020 to 06/30/2022

From:	6/20/2020	6/20/2021		
То:	6/19/2021	6/30/2022		
BUDGET CATEGORY	Year 1	Year 2		TOTAL
PERSONNEL: Salary and fringe benefits.	\$3,410,752	\$3,510,648		\$6,921,400
Operating Expenses	\$36,000	\$36,000	88	\$72,000
MATERIALS & SUPPLIES	\$0	\$0		\$0
EQUIPMENT	\$0	\$0		\$0
OTHER DIRECT COSTS (ODC) Subject to IDC Calc				
Centralized HR Support	\$23,592	\$23,592		\$47,184
Data/Network/Computer	1992	8		
Recharge	\$10,236	\$10,236		\$20,472
IT Field Services Support	\$13,728	\$13,728		\$27,456
ODC #4	\$0	\$0		\$0
ODC#5	\$0	\$0		\$0
ODC #6	\$0	\$0		\$0
TOTAL DIRECT COSTS	\$3,494,308	\$3,594,204		\$7,088,512
Indirect (F&A) Costs F&A Base Rate	\$0	\$0		\$0
26%	\$908,518	\$934,488		\$1,843,006
TOTAL COSTS PER YEAR	\$4,402,826	\$4,528,692		
TOTAL COSTS FOR PROPOSED PROJECT PERIOD				\$8,931,518

^{*} MTDC = Modified Total Direct Cost

JUSTIFICATION. See Exhibit B1 - Follow the budget justification instructions.

Funds Reversion Dates: Unless otherwise specified as following, fund reversion dates are three years from fiscal year end of year funded

Annual Budget Flexibility (lesser of % or Amount)

Prior approval required for budget changes between approved budget categories above the thresholds identified.

% 10.00%

Or

Amount \$10,000

Exhibit B1

Budget Justification

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

Personnel

Name. Starting with the Principal Investigator list the names of all known personnel who will be involved on the project for each year of the proposed project period. Include all collaborating investigators, individuals in training, technical and support staff or include as "to be determined" (TBD).

Role on Project. For all personnel by name, position, function, and a percentage level of effort (as appropriate), including "to-be-determined" positions.

Staffing Changes. Any changes to the staffing identified below may be made with mutual written consent between both parties.

- 1. George Rutherford, Principal Investigator
 - Role on Project: Principal Investigator (Academic) provides oversight, overall management and general direction to the project. Dr. Rutherford will provide intellectual contributions and critical review of the program design, data collection tools, implementation, and data analysis (2% FTE)
- 2. Georgina Lopez, UCSF Contract Manager
 Role on Project: Co-Principal Investigator (Academic) oversees the negotiation, execution, performance,
 modifications, and termination of contracts with DCDC administrators, State of California, and the University of
 California, San Francisco (15% FTE)
- 3. Donna Langston, UCSF Contract Administrator
 Role on Project: As the UCSF Contract Administrator, Donna Langston maintains the financial tracking and progress of this program. Ms. Langston will monitor and review payment activities, invoices, and provide ongoing support to DCDC for purchasing and compliance to their funding and budgets (20% FTE)
- 4. Charmaine Bautista, UCSF Contract Supervisor
 Role on Project: As the UCSF Contract Supervisor, Charmaine Bautista supervises and provides analysis of terms and conditions of existing vendor contract purchases and agreements. In addition, Ms. Bautista monitors high-value purchases (52%)
- 5. Romy Bernard-Rodriguez, UCSF Contract Travel Coordinator Role on Project: As the UCSF Contract Travel Coordinator, Romy Bernard-Rodriguez reviews all the program specific travel and reimbursement requests. The effort required for program is above and beyond the normal routine administration because this study involves an extensive review of all reimbursement for audit and compliance purposes in conjunction with the State of California and federal guidelines (50% FTE)
- 6. Rebecca Crowder, Epidemiologist
 Role on Project: Research Data Analyst 3 (Epidemiologist) for Lane 6. She will monitoring the pandemic and work
 with counties to improve county snapshots and revise metrics.
- 7. Priya Shete, Assistant Adjunct Professor
 Role on Project: Medical Consultant/Modeler for Lane 6. She will be working with 58 counties on modeling the pandemic.
- 8. Megha Mehrotra, Epidemiologist Role on Project: Research Data Analyst 4 for Lane 6. She will be working as an epidemiologist and statistician.
- 9. Saul Lowenstein, Research Data Analyst 4 for Indicator 1. He will be working as an informatics epidemiologist.

10. Rosalyn Plotzker

Role on Project: Assistant Professor. She will serve as a member of the Coronavirus Clinical Team with the Science Branch.

- 11. TBD Research Data Analyst 3, Lane 6.
 Role on Project: Statistician and visualizations
- 12. TBD Research Data Analyst 3, Lane 6.
 Role on Project: Epidemiologist and program evaluator
- 13. TBD Research Data Analyst 4, Lane 6.
 Role on Project: Modeler and senior statistician
- 14. TBD Research Data Analyst 3, Indicator 1.
 Role on Project: Program policy and planning.
- 15. TBD Research Data Analyst 4, Indicator 1. Role on Project: Informatics epidemiologist
- 16. TBD Assistant Adjunct Professor, Indicator 1.
 Role on Project: Medical/public health physician.
- 17. TBD Assistant Adjunct Professor, Indicator 1.

 Role on Project: Medical/public health physician.
- 18. TBD Assistant Adjunct Professor, Indicator 1.
 Role on Project: Medical/public health physician
- 19. TBD Research Data Analyst 3
 Role on Project: TBD
- 20. TBD Research Data Analyst 3
 Role on Project: TBD
- 21. TBD Research Data Analyst Role on Project: TBD

Fringe Benefits.

In accordance with University policy, explain the costs included in the budgeted fringe benefit percentages used, which could include tuition/fee remission for qualifying personnel to the extent that such costs are provided for by University policy, to estimate the fringe benefit expenses on Exhibit B.

Fringe benefit costs are calculated using average fringe benefit rates, which include University of California Retirement Plan, Health Plan Contribution, Social Security (FICA), Medicare, Dental, Vision, Worker's Compensation Insurance, Employee Support Program, Unemployment Insurance, Non-Industrial Disability Insurance, Other Post-Employment Benefits, Employee Incentive Award, Benefits Administration rate, and Staff Recognition/Development Program.

Travel

Itemize all travel requests separately by trip and justify in Exhibit B1, in accordance with University travel guidelines. Provide the purpose, destination, travelers (name or position/role), and duration of each trip. Include detail on airfare, lodging and mileage expenses, if applicable.

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Should the application include a request for travel outside of the state of California, justify the need for those out-of-state trips separately and completely.

Contract staff will travel to provide technical assistance as necessary to local health departments.

Materials and Supplies

Itemize materials supplies in separate categories. Include a complete justification of the project's need for these items. Theft sensitive equipment (under \$5,000) must be justified and tracked separately in accordance with State Contracting Manual Section 7.29.

Includes the purchase of office supplies as needed.

Equipment

List each item of equipment (greater than or equal to \$5,000 with a useful life of more than one year) with amount requested separately and justify each.

N/A

Consultant Costs

Consultants are individuals/organizations who provide expert advisory or other services for brief or limited periods and do not provide a percentage of effort to the project or program. Consultants are not involved in the scientific or technical direction of the project as a whole. Provide the names and organizational affiliations of all consultants. Describe the services to be performed, and include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs.

N/A

Subawardee (Consortium/Subrecipient) Costs

Each participating consortium organization must submit a separate detailed budget for every year in the project period in Exhibit B2 Subcontracts. Include a complete justification for the need for any subawardee listed in the application.

N/A

Other Direct Costs

Itemize any other expenses by category and cost. Specifically justify costs that may typically be treated as indirect costs. For example, if insurance, telecommunication, or IT costs are charged as a direct expense, explain reason and methodology.

Includes: Centralized HR support (\$21,912), Data/Network/Computer Recharge (\$9,504), and IT Field Services Support (\$12,744).

Rent

If the Scope of Work will be performed in an off-campus facility rented from a third party for a specific project or projects, then rent may be charged as a direct expense to the award.

N/A

Indirect (F&A) Costs

Indirect costs are calculated in accordance with the budgeted indirect cost rate in Exhibit B.

Indirect costs are at 26% of total costs and includes utilities, maintenance costs, janitorial services, and payroll services for general administrative and department support staff that are not charge directly to the project, including Sponsored Program and Contracts and Grants support staff. The University of California indirect cost rates for state contracts are mandated by the University of California Office of the President.

Exhibit B3 – 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 University's Financial Contact and the PI (or their respective designees).

ti alisa	iction/payron leager shall be certified by the oniversity stillandal contact and the FT (of their respective designees
in	voicing frequency
	Quarterly 🗵 Monthly
ln	voicing signature format
	Ink Facsimile/Electronic Approval
	nary Invoice – includes either on the invoice or in a separate summary document – by approved budget category wit B) – expenditures for the invoice period, approved budget, cumulative expenditures and budget balance ble ¹
•	Personnel
•	Equipment
•	Travel
•	Subawardee – Consultants
•	Subawardee – Subcontract/Subrecipients
•	Materials & Supplies
•	Other Direct Costs

Detailed transaction ledger and/or payroll ledger for the invoice period ²

o TOTAL DIRECT COSTS (if available from system)

- University Fund OR Agency Award # (to connect to invoice summary)
- Invoice/Report Period (matching invoice summary)
- GL Account/Object Code

Indirect Costs

o TOTAL

- 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 – University Terms and Conditions

CMA (AB20) State/University Model Agreement Terms & Conditions UTC-220

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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 University 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):

Federal Agency	Department of Health and Human Services
Federal Award Identification Number	6 NU90TP922071-01-03
Federal Award Date	4/6/2020
Catalog of Federal Domestic Assistance (CFDA)	! !
Number and Name	93.544
Amount Awarded to State Agency	\$59,732,436
Effective Dates for State Agency	3/5/2019 – 3/15/2021
Federal Award to State Agency is Research &	
Development (Yes/No)	No

University 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.
	-

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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.)

- 1. Pursuant to Exhibit C, Section 8. Confidential Information, paragraph A, the Parties shall comply with California Civil Code Sections 1798, et seq., regulations identified in Exhibit E1, when applicable and other relevant State or Federal statutes and regulations in safeguarding restricted or protected information or data which comes into their possession under this Agreement in perpetuity, and shall not use, release or publish any such information or data except as allowed in this Agreement or as permitted by law.
- 2. Pursuant to Exhibit C, Section 17. Right to Publish, paragraph B, the University 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). Within the review period, the State may provide feedback to the University. If the State's review of publications, presentations and other public releases resulting from work performed under this Agreement identifies Confidential Information, as defined in any Exhibit in this Agreement or by any other relevant State or Federal statutes and regulations, the University will remove any such material prior to publication.
- 3. The University shall not publish restricted data that is identified as such on Exhibit A4 of this Agreement, except as otherwise required by law. The obligations of this Exhibit E shall remain in perpetuity until or unless the statutes (Exhibit E1) are altered or changed.

Type of information:		Statutes that make it confidential:
"Personal information" meaning any information that is maintained by an age that identifies or describes an individual including, but not limited to, his or her n social security number, physical descriphome address, home telephone number education, financial matters, and medical employment history. It includes statemed made by, or attributed to, the individual.	l, name, otion, , al or ents	California Information Practices Act (Civil Code §1798 et. seq.); Federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), 42 USC §1320d-2(a)(2), and federal regulations in Title 45 Code of Federal Regulations §160.100 et. seq.
Medical Information	i : :	Confidentiality of Medical Information Act (CMIA), Civil Code §56.10, et seq.
Immunization information	•	Health and Safety Code (H&SC) §120440(d)-(h)
Information related to "special investiga of morbidity and mortality	itions"	H&SC §100330
 HIV/AIDS Mandated Testing Co-morbidity with other STD's ADAP Program PreP Program 		H&SC §§121025-121035 (AIDS Public Health Records Confidentiality Act), and see also H&SC§§ 120820, 120975, 120980, 121015, 121022, 121023, 121075-121125 (AIDS Research Confidentiality Act), 121362 (confidentiality of HIV test results in connection with reports on tuberculosis patients) and 123148. H&SC §120970(i) ADAP and H&SC §120972 PrEP Other statutes apply in criminal cases and in first responder situations.
Hereditary Disorder information		H&SC §124980 (j)
Umbilical Cord Blood		H&SC §124991 (b)(1) and (g),
Prenatal rhesus(Rh)and Hepatitis B resu	ults	H&SC §125105
Genetic disease surveillance/reporting		H&SC §124975 et seq
Electronically collected personal information		Gov. Code §11015.5
Interviews, written reports, and stateme procured in connection with special mo		H&SC §100330

H&SC §§103875, 103885, and 100330
Federal Regulations at 7 CFR §246.26(d)
H&SC §§102230(a)(2), 102425(b), 102425.2, 102426(b), 102430, 102455, 102460, 102465, and 103025
H&SC §124130
H&SC §124130
H&SC §§105440-105459
H&SC §120705 (prenatal blood tests)
H&SC §121362 Confidentiality of HIV test results in connection with reports on tuberculosis patients.
H&SC §103850
H&SC §103865
H&SC §11362.713 (patients' and their primary caregivers' identifying information are deemed "medical information" within the meaning of the Medical Information Act)
B&PC §26067 (information for purposes of the CCTT are confidential and shall not be disclosed for purposes of the Public Records Act except as necessary for city, county, or State employees to perform official duties)
H&SC §§110165, 110370, 111792
B&PC §22954
B&PC §1265(j)(2)(D)
H&SC §1603.1(b)(2)(b)-(e), HSC §1603.1(k)

^{*}This is not a comprehensive list.

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.)

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Exhibit G – Negotiated Alternate UTC Terms (if applicable)

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 UTC as universal in its application as possible, there may be unique projects where a given term in the UTC may be inappropriate or inadequate, or additional terms may be necessary. California Education Code §67327(b) allows for terms to be changed or added, but only through the mutual agreement and negotiation of the State agency and the University campus. If a given term in the UTC is to be changed, the change should not be noted in Exhibit C, but rather noted separately in Exhibit G.

Exhibit B Budget Year 1 June 20, 2020 - June 30, 2021

Original	Average Monthly Rate	FTE	July	August	September	October	November	December	January	February	March	April	May	June	Total
Salaries and Wages (Career Staff)															
Research Data Analyst 3	\$ 6,666.67	20%	\$ 3,333.00	0 \$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00	\$ 3,333.00 \$	39,996.00
Research Data Analyst 3 - TBD	\$ 7,666.67	100%	00.799,7 \$ 6	00.739,7 \$ 0	\$ 7,667.00	\$ 7,667.00	00'299'2 \$	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00 \$	92,004.00
Research Data Analyst 3 - TBD	\$ 7,666.67	100%	00.799,7 \$ 6	00.7567.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00 \$	92,004.00
Research Data Analyst 3 - TBD	\$ 7,666.67	100%	00'.29'.20'	00'29'2' \$ 0	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00 \$	92,004.00
Research Data Analyst 3 - TBD	\$ 7,666.67	100%	, \$ 7,667.00	00'29'2' \$ 0	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00 \$	92,004.00
Research Data Analyst 3 - TBD	\$ 7,666.67	100%	00'.29'.20'	00'29'2' \$ 0	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00 \$	92,004.00
Research Data Analyst 3 - TBD	\$ 7,666.67	100%	00'29'2' \$ 1	00.799,7 \$ 0	\$ 7,667.00	\$ 7,667.00	00'.299'.2 \$	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00	00'.299'.2 \$	\$ 7,667.00	\$ 7,667.00	\$ 7,667.00 \$	92,004.00
Research Data Analyst 4 - TBD	\$ 8,333.33	100%	\$ 8,333.00	00 \$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00 \$	00'966'66
Research Data Analyst 4 - TBD	\$ 8,333.33	100%	\$ 8,333.00	0 \$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00 \$	00'966'66
Research Data Analyst 4 - TBD	\$ 8,333.33	100%	\$ 8,333.00	00 \$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00 \$	99,996.00
Research Data Analyst 4 - TBD	\$ 8,333.33	100%	\$ 8,333.00	45	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00	\$ 8,333.00 \$	00'966'66
Research Data Analyst 4 - TBD	\$ 8,333.33	20%	40-	s	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00	\$ 4,167.00 \$	50,004.00
Data Systems Analyst 3 - TBD	\$ 9,212.41	100%	\$ 9,212.00	0 \$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00	\$ 9,212.00 \$	110,544.00
UCSF Contract Administrator	\$ 2,575.00	20%	\$ 2,575.00	0 \$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00	\$ 2,575.00 \$	30,900.00
UCSF Contract Supervisor	\$ 5,068.00	25%	\$ 5,068.00	00'890'9 \$ 0	\$ 5,068.00	\$ 5,068.00	00'890'9 \$	\$ 5,068.00	\$ 5,068.00	\$ 5,068.00	\$ 5,068.00	\$ 5,068.00	\$ 5,068.00	\$ 5,068.00 \$	60,816.00
UCSF Contract Travel Coordinator	\$ 5,289.00	20%	\$ 5,289.00	0 \$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00	\$ 5,289.00 \$	63,468.00
UCSF Contract Manager	\$ 2,575.00	15%	\$ 2,575.00	0 \$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,575.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00 \$	30,150.00
Subtotal Salaries and Wages (Career Staff)		L	\$ 111,553.00	0 \$ 111,478.00	\$ 111,478.00	\$ 111,478.00	\$ 111,478.00	\$ 111,478.00	\$ 111,553.00	\$ 111,478.00	\$ 111,478.00	\$ 111,478.00	\$ 111,478.00	\$ 111,478.00 \$	\$ 1,337,886.00
Salaries and Wages (Academic Staff)															
Assistant Professor	\$ 13,143.50	100%	, \$ 13,144.00	0 \$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00	\$ 13,144.00 \$	157,728.00
Assistant Adjunct Professor	\$ 16,025.00	-	69	\$ 16,0	\$ 16,025.00	\$ 16,025.00	16,025.00	\$ 16,025.00	\$ 16,025.00	\$ 16,025.00	\$ 16,025.00	\$ 16,025.00	\$ 16,025.00	\$ 16,025.00 \$	192,300.00
Assistant Adjunct Professor - TBD	\$ 16,025.00	100%	\$ 16,025.00	0 \$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	192,300.00
Assistant Adjunct Professor - TBD	\$ 16,025.00	100%	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00 \$	192,300.00
Assistant Adjunct Professor - TBD	\$ 16,025.00	100%	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00	\$16,025.00 \$	192,300.00
Principle Investigator	\$ 400.00	2%	\$400.00	3400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$ 4,800.00
Subtotal Salaries and Wages(Academic Staff)			\$ 77,644.00	0 \$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00	\$ 77,644.00 \$	931,728.00
Temporary Employment Program (TEP)	\$ 12,500.00	100%	\$ 14,825.00	0 \$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00	\$ 14,825.00 \$	177,900.00
Subtotal Salaries and Wages			\$ 204,022.00	0 \$ 203,947.00	\$ 203,947.00	\$ 203,947.00	\$ 203,947.00	\$ 203,947.00	\$ 204,022.00	\$ 203,947.00	\$ 203,947.00	\$ 203,947.00	\$ 203,947.00	\$ 203,947.00	\$ 2,447,514.00
Benefits														\rightarrow	
Fringe Benefits Academic Personnel		35.6%	\$	0 \$ 27,641.00	\$ 27,641.00	-	_	_	_	\$ 27,641.00	_	\$ 27,641.00	_	\$ 27,641.00 \$	
Fringe Benefits Career Staff Personnel		46.5%	6 \$ 51,872.00	0 \$ 51,837.00	\$ 51,837.00	\$ 51,837.00	\$ 51,837.00	_		\$ 51,837.00	-	_	\rightarrow	\$ 51,837.00 \$	9
Fringe Benefits Temporary Staff (TEP)		5.3%	69	S	\$ 786.00	\$ 786.00	\$ 786.00	\$ 786.00	\rightarrow	\$ 786.00	\rightarrow	_	\rightarrow	-	-
Subtotal Benefits			\$ 80,299.00	0 \$ 80,264.00	\$ 80,264.00	$\overline{}$		$\overline{}$	$\overline{}$	\$ 80,264.00	_	_	_	80,264.00	- 1
Subtotal Personnel Services *		A COLUMN	\$ 284,321.00	0 \$ 284,211.00	\$ 284,211.00	\$ 284,211.00	\$ 284,211.00	_			-	_		284,211.00	3,4
Operating Expenses			\$ 1,000.00	00.000,1	\$ 1,000.00	\$ 1,000.00	-	\$ 1,000.00	\$ 1,000.00		_	-	\$ 1,000.00 \$		
Travel			\$ 2,000.00	0 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00	\$ 2,000.00 \$	2,000.00 \$	24,000.00
UCSF Departmental Services											0.0000000000000000000000000000000000000	0.0000000000000000000000000000000000000			
Centralized HR Support (\$1217 per FTE)		19.39	5	S,	\$ 1,966.00	1,966.00	1,966.00	1,966.00	1,966.00	-	1,966.00	1,966.00	1,966.00	1,966.00	
Data/Network/Computer Recharge (\$44/FTE/month)		19.39	39 \$ 853.00	s	\$ 853.00	\$ 853.00	\$ 853.00	\rightarrow	\rightarrow	1	853.00	853.00	853.00	853.00	
IT Field Services Support ITFS (per FTE) (\$59/FTE/month)		19.39	S	0 \$ 1,144.00	\$ 1,144.00	_	\$ 1,144.00	-	1,144.00	1,144.00	1,144.00	1,144.00	1,144.00	1,144.00	1000
Subtotal Operating Expenses			\$ 6,963.00	0 \$ 6,963.00	\$ 6,963.00	_	_		_	6,963.00	6,963.00	_	6,963.00	6,963.00	
Total Direct Costs (PS + OE&E)			\$ 291,284.00	0 \$ 291,174.00	\$ 291,174.00	\$ 291,174.00	\$ 291,174.00	\$ 291,174.00	\$ 291,284.00	\$ 291,174.00	\$ 291,174.00	\$ 291,174.00	\$ 291,174.00 \$	291,174.00 \$	3,494,308.00
Total Indirect Costs (26% of all direct costs)		79%	\$ 75,734.00	\$ 75,705.00	\$ 75,705.00	\$ 75,705.00	\$ 75,705.00	\$ 75,705.00	\$ 75,734.00	\$ 75,705.00	\$ 75,705.00	\$ 75,705.00	\$ 75,705.00 \$	\$ 75,705.00	908,518.00
Total Costs		The state of the s	\$ 367,018.00	367,018.00 \$ 366,879.00	\$ 366,879.00 \$ 366,879.00 \$ 366,879.00	\$ 366,879.00	\$ 366,879.00		\$ 367,018.00 \$ 366,879.00 \$	\$ 366,879.00	\$ 366,879.00 \$	\$ 366,879.00 \$	\$ 366,879.00 \$	366,879.00 \$	4,402,826.00
lotal Costs				3 300,019.00	00'870'000 \$	00.810,000 \$	00'810'000 *		00:010:00	200000000000000000000000000000000000000	200,010,000	200	2000	200000000000000000000000000000000000000	2000

^{*} Personnel salaries and wages are rounded

Exhibit B Budget Year 2 July 1, 2021 - June 30, 2022

	Original	Average Monthly Rate	FIE	July	August	September	October	November	December	January	February	March	April	May	June	Total
1. 110 1	Salaries and Wages (Career Staff)															
1-110-110-110-110-110-110-110-110-110-1	Research Data Analyst 3		%09	\$ 3,433.00	\$ 3,		24	3,433.00	3,433.00				\$ 3,433.00	0000	\$ 3,433.00	\$ 41,196.00
1-1110-1110-1110-1110-1110-1110-1110-1	Research Data Analyst 3 - TBD	100	100%	\$ 7,897.00	00.768,7 \$		1	7,897.00	7,897.00						\$ 7,897.00	\$ 94,764.00
1-1100 S. 786640 How, S. 782700 S. 7	Research Data Analyst 3 - TBD		100%	\$ 7,897.00	\$ 7,897.00			7,897.00	7,897.00		\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 94,764.00
1-11-10-11-1	Research Data Analyst 3 - TBD		100%	\$ 7,897.00	\$ 7,897.00		\$ 7,897.00	7,897.00	7,897.00		\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 94,764.00
1.1.100 2. 10.000 2. 10.	Research Data Analyst 3 - TBD		100%	\$ 7,897.00	\$ 7,897.00		23	7,897.00	7,897.00		\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 94,764.00
	Research Data Analyst 3 - TBD		100%	\$ 7,897.00	\$ 7,897.00		\$ 7,897.00	7,897.00	7,897.00	000	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 94,764.00
4-110-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Research Data Analyst 3 - TBD		100%	\$ 7,897.00	\$ 7,			7,897.00	7,897.00	80	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 7,897.00	\$ 94,764.00
4-170	Research Data Analyst 4 - TBD		100%	\$ 8,583.00	\$ 8,583.00			8,583.00	8,583.00		\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 102,996.00
4-179 (1994) (2) 8, 858.31 (1994) (2) 8, 858.20 (2) 8, 8,858.00 (2) 8, 8,858.00 (2) 8, 8,858.00 (3) 8, 8,858.0	Research Data Analyst 4 - TBD		100%	\$ 8,583.00	\$ 8,583.00		8,583.00	8,583.00	8,583.00	55	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 102,996.00
4.100 5 8.583.3 10%, 5 4.28200 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 8.583.0 5 4.28200 5 4.2	Research Data Analyst 4 - TBD		100%	\$ 8,583.00	\$ 8,583.00		8,583.00	8,583.00	8,583.00	000	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 8,583.00	\$ 102,996.00
4 4 20 5 6 8 8 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8 9 8	Research Data Analyst 4 - TBD		100%	\$ 8,583.00			8,583.00	8,583.00	8,583.00	- 220		\$ 8,583.00			\$ 8,583.00	\$ 102,996.00
9. 2 49829 2 49829 2 5 26440 2	Research Data Analyst 4		20%	\$ 4,292.00			4,292.00	4,292.00	4,292.00		\$ 4,292.00	\$ 4,292.00	10.00		\$ 4,292.00	\$ 51,504.00
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Data Systems Analyst 3			\$ 9,489.00			9,489.00	9,489.00	9,489.00		\$ 9,489.00	\$ 9,489.00	\$ 9,489.00		\$ 9,489.00	\$ 113,868.00
1, 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	UCSF Contract Administrator		_	\$ 2,614.00	\$ 2,614.00		2,614.00	2,614.00	2,614.00		\$ 2,614.00	\$ 2,614.00		\$ 2,614.00	\$ 2,614.00	\$ 31,368.00
Statement Stat	UCSF Contract Supervisor	1	_		\$ 5,144.00	ı		5,144.00	5,144.00		\$ 5,144.00				\$ 5,144.00	s
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	UCSF Contract Travel Coordinator	1	_		2			5,368.00	5,368.00		\$ 5,368.00				\$ 5,368.00	\$ 64,416.00
11,4,5,5,5,0,10,10,10,10,10,10,10,10,10,10,10,10,1	UCSF Contract Manager		┺		S	-	2,581.00	2,581.00	2,581.00						\$ 2,581.00	\$ 30,972.00
State Stat	Subtotal Salaries and Wages (Career Staff)	1	┺		\$ 114,635.00	\$ 114,635.00	114,635.00		114,635.00	1	23			1	\$ 114,635.00	\$ 1,375,620.00
State Stat	Salaries and Wages (Academic Staff)		L													
Segret Tiple 5 (15,000-27) (100%) 8 (16,000-10) 8 (16,000-	Assistant Professor	¢ 13 537 81	+	1	8	13 538 00	13 538 00	1	13.538.00		1000	1			\$ 13.538.00	\$ 162,456.00
Strict S	Assistant Adjunct Professor	\$ 16,608.75	+	1	16	16.609.00	16.609.00	16.609.00	16.609.00	1	322	1				S
Strict S	Accietant Adjunct Professor - TRD	¢ 16 608 75	+		19	16 609 00	16 609 00	16.609.00	16.609.00		0.000	1			1000	s
State Stat	Accietant Adjunct Professor - TBD	¢ 16 608 75	+		16	16 609 00	16 609 00	16 609 00	16 609 00	1000	10	1				S
Control Cont	Accistant Adjunct Professor - TBD	\$ 16 608 75	-	1	16	\$ 16 609 00	16.609.00	16.609.00	16.609.00	1000	100					S
Program (TEP) S 12,500.00 CONS S 14,625.00 S 14,	December of the property of th	\$ 10,000.73	-	1	1	6442 00	00.000	6442.00	6442.00						ı	
Programme Prog	Principle investigator	1		١	8	3412.00	94 12.00	9412.00	80 386 OO	8	8	18	8	8	8	9 5
1,1,1,2,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	Tomografic Configurate Design (TED)		+	1		00,300,00	00,300,00	00,300,00	00,300,00		1	Т				,
nic Personnel 5 200, Bedia Do	Free Free Free Free Free Free Free Free	\$ 12,500.00	_		14	14,825.00	14,825.00	14,825.00	14,825.00		- 1					\$ 177,900.00
Sample S	Subtotal Salaries and Wages				209,	209,846.00	209,846.00	209,846.00	209,846.00		3335	- 1			\$ 209,846.00	\$ 2,518,152.00
Authors Author Authors Autho	Benefits															
Staff Personnel 46.5% S 53.305.00 S 53.305	Fringe Benefits Academic Personnel		35.6%	s	28	28,617.00	28,617.00	28,617.00	28,617.00				28,617.00			s
ray Staff (TEP)	Fringe Benefits Career Staff Personnel		46.5%	s	53,	53,305.00	53,305.00	53,305.00	53,305.00			200	53,305.00	53	\$ 53,305.00	\$ 639,660.00
Figure 5. Seg. 708.00 Seg. 708	Fringe Benefits Temporary Staff (TEP)		5.3%		\$ 786.00	786.00	786.00	786.00				s	786.00			\$ 9,432.00
Figure 5 and 1 and	Subtotal Benefits				\$ 82,708.00	82,708.00	82,708.00	82,708.00					82,708.00		1	s
S 1,000.00 S	Subtotal Personnel Services *	可能なななる	STATE OF	300	292,	292,554.00	4551	292,554.00	4750		100	200	292,554.00	(17)	\$ 292,554.00	\$ 3,5
1 1 1 1 1 1 1 1 1 1	Operating Expenses				-	1,000.00	1,000.00	1,000.00	1,000.00				\$ 1,000.00			s
vices vices <th< td=""><td>Travel</td><td></td><td></td><td></td><td>\$ 2,000.00</td><td>2,000.00</td><td>2,000.00</td><td>2,000.00</td><td>2,000.00</td><td></td><td></td><td></td><td>\$ 2,000.00</td><td></td><td>\$ 2,000.00</td><td>\$ 24,000.00</td></th<>	Travel				\$ 2,000.00	2,000.00	2,000.00	2,000.00	2,000.00				\$ 2,000.00		\$ 2,000.00	\$ 24,000.00
(\$1217] per FTE per FTE <t< td=""><td>UCSF Departmental Services</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	UCSF Departmental Services															
In Facility (See FTE) (SSG)FTE/month) 19.30 \$ 1.144.00	Centralized HR Support (\$1217 per FTE)		19.38	69	\$ 1,966.00	1,966.00	1,966.00	1,966.00	1,966.00			-				s
Expenses Expenses Septemently	Data/Network/Computer Recharge (\$44/FTE/month)		19.38	ss	\$	853.00	853.00	853.00	853.00							s
Expenses 1	IT Field Services Support ITFS (per FTE) (\$59/FTE/month)		19.38	65	-	1,144.00	1,144.00	1,144.00	1,144.00				1,144.00			\$ 13,728.00
S+OE&E) 26% S 77,874.00 S 299,517.00 S 277,391.00 S 377,391.00 S 377,	Subtotal Operating Expenses					6,963.00	6,963.00	6,963.00	6,963.00		350		6,963.00	357		4
26% \$ 77,874.00	Total Direct Costs (PS + OE&E)				\$ 299	299,517.00	299,517.00	299,517.00	299,517.00		100		299,517.00		\$ 299,517.00	\$ 3,594,204.00
\$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00 \$ 377,391.00	Total Indirect Costs (26% of all direct costs)		26%	s	\$ 77,	77,874.00	77,874.00	77,874.00	77,874.00				77,874.00		\$ 77,874.00	\$ 934,488.00
	Total Costs			\$ 377,391.00	\$ 377,391.00	377,391.00	377,391.00	377,391.00	377,391.00	377,391.00	142533	7000	377,391.00	377,391.00	\$ 377,391.00	\$ 4,528,692.00
** December of wages are recorded ** Calaries included 3% Marit Salaries included	* Debarror are separation barrors for a separation for a		**Calari	es include 3% M	erit Salary Adiust	mente										