UW MADISON - BUDGET JUSTIFICATION

PERSONNEL

<u>David Noyce, Ph.D., P.E., Principal Investigator</u> (Federal Effort = .09 months/year. Cost Share Effort= .10 month/year) will be responsible for project oversight, and graduate student supervision.

<u>Xiaopeng Li, Ph.D., Co-principal Investigator</u> (Federal Effort = .75 month/year. Cost Share Effort = .55 month/year) will be responsible for project oversight, items related to conflict prediction and communication, and graduate student supervision.

<u>Sikai Chen, Ph.D., Co-principal Investigator</u> (Federal Effort = .75 month/year. Cost Share Effort = .54 month/year) will be responsible for project oversight, items related to conflict prediction and communication, and graduate student supervision.

<u>Sue Ahn, Ph.D., Co-principal Investigator</u> (Federal Effort = .25 month/year. Cost Share Effort = .12 month/year) will be responsible for project oversight.

<u>TBN, Transportation Engineers (Federal Effort = 9 months/year)</u> TOPS engineers/programmers will support the investigators for the outreach to the public, development of prototype devices and the preparation of memos and reports for the project.

<u>TBN Graduate Student Research Assistants</u> (Federal effort = 2 graduate students approx. 14.2 months/year with 50% appointment. Cost Share = 1 student approx.. 6.2 months/year with 50% appointment) Provide additional background research, prototype development, documentation, and support development of deliverables.

FRINGE BENEFITS

Fringe benefits are calculated on requested salary per the University's federally negotiated Rate Agreement with the Department of Health and Human Services (DHHS). The rate used for the PI is 36.5%; the rate used for academic staff personnel is 36.5%; the rate used for graduate research assistants is 22.5%.

TRAVEL

The requested travel funds will sponsor staff trips for project meetings and testing in Wisconsin and 6 x travelers to attend meetings and conferences in Washington, DC including airfare, GSA lodging and per diems and transportation.

MATERIALS AND SUPPLIES

Device prototype components including sensors and multiple communications/computing devices. Project supplies include (but not limited to): Automation software/hardware, database capacity/storage devices, cell phones, data interfaces. Several technologies will be evaluated and

components with which to fabricate devices will be necessary. Onsite and cloud-based storage and computing will be used.

OTHER

Tuition Remission: \$12,000 per academic year per graduate student base on institutional rates. Project spans 4 academic years. Tuition remission is prorated based on graduate student effort on the project.

INDIRECT COSTS

Facilities and administration (F&A) costs are charged according to the University's federally negotiated rate agreement dated November 21, 2023 (DHHS). The F&A cost rate for on-campus research is 55.5% of Modified Total Direct Cost (MTDC) and excludes tuition remission, 2 CFR 200.33 defined equipment, and the portion of each subaward in excess of \$25,000. Cloud computing charges from specific service vendors are charged at the off-campus rate of 26% MTDC. See attached UW Rate Agreement.

NON-FEDERAL COST SHARE:

UW Madison is providing \$400,348 in cost share including Payroll, Fringe, Tuition Remission, and the associated Indirect costs. This includes \$128,751 in direct costs from the Office of Vice Chancellor for Research, \$140,459 in direct costs for the College of Engineering, and \$131,138 in unrecovered indirect costs.

A-133 Single Audit

A copy of the most recent annual audit in compliance with the Office of Management and Budget (0MB) 2 CFR 200 Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards for the fiscal year ending June 30, 2022 can be found online at: <u>http://legis.wisconsin.gov/lab/media/3564/23-4full_981179.pdf</u>

Results were shared March 31, 2023. No issues were reported during the most recent Single Audit 2021-2022.

SAM UEI: LCLSJAGTNZQ7

The institutional SAM Registration can be found online at: https://rsp.wisc.edu/SAM LCLSJAGTNZQ7.pdf

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: 1396006492A1 ORGANIZATION: University of Wisconsin – Madison 21 North Park Street Suite 6401 Madison, WI 53715 Date: 11/21/2023 FILING REF.: The preceding agreement was dated 06/23/2022

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES							
RATE TYPES: FIXED		FINAL PROV. (PROVISIONAL)			PRED. (PREDETERMINED)		
EFFECTIVE PERIOD							
TYPE	FROM	TO	<u>RATE(%)</u>	LOCATION	APPLICABLE TO		
PRED.	07/01/2023	06/30/2026	55.50	On Campus	Organized Research		
PRED.	07/01/2023	06/30/2026	53.00	On Campus	Instruction		
PRED.	07/01/2023	06/30/2026	38.00	On Campus	Public Service		
PRED.	07/01/2023	06/30/2026	38.50	On Campus	Primate Ctr Core Grant (1)		
PRED.	07/01/2023	06/30/2026	26.00	Off Campus	All Programs		
PROV.	07/01/2026	Until Amended			Use same rates and conditions as those cited for fiscal year ending Jun 30, 2026		

<u>*BASE</u>

Modified total direct costs, consisting of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward (regardless of the period of performance of the subawards under the award). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs.

(1) Wisconsin National Primate Research Center – See Section II – Special Remarks

SECTION I: FRINGE BENEFIT RATES**						
TYPE	<u>FROM</u>	<u>T0</u>	<u>RATE(%)</u>	LOCATION	APPLICABLE TO	
FIXED	7/1/2023	6/30/2024	36.50	All	(1)	
FIXED	1/1/2023	6/30/2024	37.80	All	(2)	
FIXED	7/1/2023	6/30/2024	22.50	All	(3)	
FIXED	7/1/2023	6/30/2024	19.80	All	(4)	
FIXED	7/1/2023	6/30/2024	16.40	All	(5)	
FIXED	7/1/2023	6/30/2024	4.80	All	(6)	
FIXED	7/1/2023	6/30/2024	6.80	All	(7)	
FIXED	7/1/2023	6/30/2024	1.50	All	(8)	
FIXED	7/1/2024	Until Amended			Use same rates and conditions as those cited for fiscal year ending June 30, 2024.	

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:

Salaries and wages of faculty and staff including vacation, holiday and sick leave pay and other paid absences of only the faculty and staff. Rate does not apply to student employees, research or teaching assistants.

- (1) Regular Faculty and Academic Staff
- (2) University Staff
- (3) Research Assistants, Project Assistants, Teaching Assistants, Pre-Doc Fellows and/or Trainees
- (4) Research Associates and Grad Interns
- (5) Post-Doc Fellows and/or Trainees
- (6) Limited Term Employees (LTE's)
- (7) Ad Hoc Program Specialists, Undergraduate Assistants and Undergraduate Interns
- (8) Student Hourly Employees

7/1/2020-6/30/2021

Fringe Benefit rates are only for the UW-Madison campus. Beginning with the fixed rate for FY 2021, UW-Milwaukee submitted it own Fringe Benefit rates.

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. The fringe benefits included in the rate(s) are listed below.

TREATMENT OF PAID ABSENCES:

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences.

OFF-CAMPUS DEFINITION: The off-campus rate will apply for all activities: a) Performed in facilities not owned by the institution and where these facility costs are not included in the F&A pools; or b) Where rent is directly allocated/charged to the project(s). Grants or contracts will not be subject to more than one F&A cost rate. If more than 50% of a project is performed off-campus, the off-campus rate will apply to the entire project.

FRINGE BENEFITS:

FICA Retirement Disability Insurance Worker's Compensation Life Insurance Unemployment Insurance Health Insurance Severance Allowance ERA Administration Income Continuation Insurance

Primate Center Rates:

The Wisconsin National Primate Research Center (WNPRC) has two federally recognized rates. The Office of Research Infrastructure Programs (ORIP) Core Grant rate (A–Rate) and the Non–Core Federal Rate which is the sum of the A–Rate and the WNPRC specific F&A Expenses (B–Rate).

Fiscal Year A-Rate B-Rate Total (Non-Core Federal Rate) 2020 38.0% 17.0% 55.0% 2021 38.0% 17.0% 55.0% 2022 38.5% 17.0% 55.5% 2023 38.5% 17.0% 55.5% 2024 38.0% 17.0% 55.0% 2025 38.5% 17.0% 55.5% 2026 38.5% 17.0% 55.5%

This rate agreement updates both F&A rates and Fringe benefit rates.

The next fringe benefit proposal based on actual costs for the fiscal year ending 06/30/2023 is due in our office by 12/31/2023.

The next F&A proposal based on actual costs for the fiscal year ending 06/30/2025 is due in our office by 12/31/2025.

Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds \$5,000.

SECTION III: GENERAL

A. <u>LIMITATIONS:</u>

The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative cost pools as finally accepted: such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:

This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. <u>FIXED RATES:</u>

If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:

The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. <u>OTHER:</u>

If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:

University of Wisconsin - Madison

(INSTITUTION) Morelas

(SIGNATURE)

Kim Moreland, Assoc. Vice Chancellor (NAME)

for Research Administration (TITLE)

12-14-23

(DATE)

ON BEHALF OF THE GOVERNMENT:

	DEPARTMENT OF HEALTH AND HUMAN SERVICES						
	(AGENCY) Darryl W. Mayes - S DN: ⊂=US, σ=US. Government, ou=HHS, ou=PSC, ou=People, 0.92432 (120000100.11) = 22000131669, cn=Darryl W. Mayes - S Date: 2023 1122 1117211 0-500'						
	(SIGNATURE)						
for	Arif Karim						
	(NAME)						
	Director, Cost Allocation Services						
	(TITLE)						
	11/21/2023						
	(DATE)						
	HHS REPRESENTATIVE:	Olulola Oluborode					
	TELEPHONE:	(214) 767-3261					
	I ELEFTIONE.	(214) /07-3201					

Proposed Budget for 2023 SMART Grant Agency: City of Madison	2025	2026	2027	2028	
9/1/2025-8/30/2029	12 month	12 month	12 month	12 month	
	Year 1 Fed Year 1 UW Cost Sh	re Year 2 Year 2 UW Cost Share	Year 3 Year 3 UW Cost Share	Year 4 /ear 4 UW Cost Shar Total Fed `o	tal UW Cost Shar Total
	Cost Share 0.10 \$ 2,988 \$ 3.	320 \$ 3.048 \$ 3.386	¢ 2.100 ¢ 2.454		Fed Effort LOP Cost Share Effort LOP
1. David Noyce 298,779 0.09 2. Xiaopeng Li 170,958 0.75		320 \$ 3,048 \$ 3,386 147 \$ 14,531 \$ 10,656			
3. Sikai Chen 112,529 0.75		752 \$ 9,565 \$ 6,887	*)- * -)		
4. Sue Ahn 176,806 0.25		857 \$ 5,009 \$ 2,405			
Total Senior Personnel	\$ 31,523 \$ 22,	376 \$ 32,153 \$ 23,334	\$ 32,797 \$ 23,801	\$ 33,452 \$ 24,277 \$ 129,926 \$	5 94,288 \$ 224,213
B. Other Personnel	c.			¢	
1. Post Doctoral Associates2. Other Professionals91,0319.0	\$ - \$ 68,273	\$ 69,639	\$ 71,031	\$ - \$ 72,452 \$ 281,395 \$	S - \$ 281,395 36.00
3. Graduate Student 39,600 14.2		\$ 09,039 377 \$ 49,271 \$ 21,396			
4. Project Asst	\$ -	γ/γ φ τ9,271 φ 21,590	φ 51,755 φ 22,400	\$ - \$ \$ \$	5 67,626 \$ 256,666 56.66 24.76
5. Undergraduate Students	\$ -			\$ -	
6. Secretarial-Clerical	\$ -			\$ -	
7. Other - LTE	\$ -			\$ -	
Total Salaries	\$ 146,721 \$ 43,	253 \$ 151,063 \$ 44,730	\$ 155,563 \$ 46,266	5 \$ 160,226 \$ 47,866 \$ 613,574 \$	6 182,115 \$ 795,689 844
C. Fringe Benefits	\$ 46,980 \$ 12,	030 \$ 48,240 \$ 13,330	\$ 49,540 \$ 13,740) \$	
36.5% *A 1.5% *B5					
19.8% *B1&B4 37.8% *B6					
22.5% *B3 4.8% *B7					
Total S&W + FB	\$ 193,701 \$ 56,	83 \$ 199,303 \$ 58,060	\$ 205,103 \$ 60,006	5 \$ 211,106 \$ 62,036 \$ 809,214 \$	S 236,285 \$ 1,045,499
D. Equipment				s -	
2.				\$ -	
Total Equipment	\$ -	\$ -		\$ -	
E. Travel					
1. Domestic	\$ 2,000	\$ 5,500	\$ 4,000	\$ 4,000 \$ 15,500 \$	6 - \$ 15,500
2. Foreign	\$ -	\$ -		\$ -	
F. Other Direct Costs 1. Materials & Supplies	\$ 9,000	\$ 4.000	\$ 4.000	\$ 4,000 \$ 21,000 \$	S - \$ 21,000
2. Communications	\$ 20,000	\$ 6,000	\$ 4,000 \$ 6,000	\$ 6,000 \$ 38,000 \$	
3. Sensors	\$ 20,000	\$ 2.400	\$ 2,313	\$ 2,000 \$ 26,713 \$	
4. Computing	\$ 25,000	\$ 15,000	\$ 15,000	\$ 15,000 \$ 70,000 \$	
5. Tuition Remission 12000/student	\$ 18,955 \$ 8,	231 \$ 18,955 \$ 8,231	\$ 18,955 \$ 8,231	\$ 18,955 \$ 8,231 \$ 75,819 \$	5 32,924 \$ 108,744 2 x 9 academic months
Total Other Direct Costs	\$ 92,955 \$ 8,	231 \$ 46,355 \$ 8,231	\$ 46,267 \$ 8,231	\$ 45,955 \$ 8,231 \$ 231,532 \$	32,924 \$ 264,456
G. Total Direct Costs	\$ 288,656 \$ 64,	115 \$ 251,158 \$ 66,291	\$ 255,370 \$ 68,237	7 \$ 261,061 \$ 70,267 \$ 1,056,246 \$	S 269,210 \$ 1,325,455
H. Indirect Costs 55.5% MTDC	\$ 149,684 \$ 31,	82 \$ 128,873 \$ 32,223	\$ 131,211 \$ 33,304	<mark>↓ \$ 134,369 \$ 34,430</mark> \$ 544,136 \$	5 131,138 \$ 675,275 excludes tuition remission and equipment
I. Total Costs	\$ 438,340 \$ 95,	596 \$ 380,031 \$ 98,514	\$ 386,581 \$ 101,541	\$ 395,430 \$ 104,696 \$ 1,600,382 \$	\$ 400,348 \$ 2,000,730 \$ 400,095.50 \$ 400,348
Subcontract base	\$ - \$ 54,	\$ 47,504	\$ 48,323	\$ 49,429	