ALASKA STATE LEGISLATURE

LEGISLATIVE BUDGET AND AUDIT COMMITTEE
Division of Legislative Finance

P.O. Box 113200
Juneau, AK 99811-3200
(907) 465-3795
FAX (907) 465-1327
www.legfin.state.ak.us

MEMORANDUM

DATE: August 13, 2010

TO: Legislative Budget and Audit Committee
FROM: David Teal
Director

SUBJECT: Preparation for the August 20, 2010 LB&A Meeting

OMB submitted the following RPLs for consideration at the August 20, 2010 Legislative Budget and Audit Committee meeting. These RPLs, along with Legislative Finance comments, are posted on our web site at http://www.legfin.state.ak.us/

RPL#	Agency	Allocation/Program	Amount	Fund Source
05-1-0036	Education and Early Development	Laura Bush 21st Century Librarian Program Grant	$185,400	Federal Receipts-Operating
06-0-0693	Health and Social Services	Office of Children's Services Title IV-E Increase	$922,000	ARRA Funds - Operating (FY2010)
06-1-0167	Health and Social Services	Food Stamp Program (SNAP)	$669,139	ARRA Funds – Operating
06-1-0173	Health and Social Services	Workforce Development Loan Repayment Funds	$210,853	MHTAAR – Operating
07-1-1018	Labor and Workforce Development	AVTEC Federal Pell Grant Increase and Federal Direct Loan Program	$1,006,800	Federal Receipts – Operating
45-0-0034	University of Alaska	Additional Federal Receipt Authority For University of Alaska (UA), Anchorage Campus	$1,300,000	Federal Receipts - Operating (FY2010)
45-1-1100 ***Capital***	University of Alaska	Combined Request for ARRA Funding	$2,623,211	ARRA Funds – Capital

cc: Senator Meyer
Representative Dahlstrom
Representative Hawker
Representative Neuman
Representative Thomas
Representative Doogan
Representative Stoltze
Representative Tuck
Senator Hoffman
Senator Huggins
Senator Menard
Senator Stedman
Senator Olson
Josh Applebee
Tim Grussendorf
Miles Baker
Linda Hay
Paulyn Swanson
James Armstrong
Pat Davidson
John Bitney

Department of Education & Early Development
Division of Libraries, Archives and Museums (LAM)

Subject of RPL: Laura Bush 21st Century Librarian Program Grant	**ADN/RPL #:** 05-1-0036
Amount requested: $ 185,427	**Appropriation Authority:** Sec 1, Ch 41, SLA 10, Pg 13, Ln 6
Funding source: Federal Receipts - FY2011 Operating	**Statutory Authority:** AS 14.56.030

PURPOSE

The Laura Bush 21st Century Librarian Program supports projects to develop faculty and library leaders, recruit and educate the next generation of librarians, conduct research on the library profession, and support early career research on any area of library and information science by tenure-track, untenured faculty in graduate schools of library and information science. It also supports projects to encourage careers in librarianship, build institutional capacity in graduate schools of library and information science, and to assist in the professional development of librarians and library staff.

This grant award will assist the Alaska State Library in supporting paraprofessional and professional continuing education and training, through organizing and conducting a summit in the spring of 2011. Participants will include 83 libraries, archives and museum staff who are Alaska Native or serve significant Alaska Native populations.

The State Library will be working with a diverse group of for-profit and non-profit organizations to develop a strategic plan that addresses the sustainability of education initiatives, develop a web site to more effectively disseminate continuing education and professional development opportunities, and to deliver three workshops using a variety of traditional and technology-enabled methods. The grant meets the goals approved in the federal 5-year Library Services and Technology Act (LSTA) Plan for the Alaska State Library.

PREVIOUS LEGISLATIVE CONSIDERATION

There was no previous legislative consideration.

TIMING ISSUES

In December 2009, the department submitted an application to the Institute of Museum and Library Services (IMLS) for a Laura Bush 21st Century Librarian Program grant, but did not learn its' status until mid-June when they received the notice of grant award. The timing precluded this request from meeting the deadline for consideration at the June 25, 2010 LB&A meeting. The grant award spans a two-year period, from October 1, 2010 through September 30, 2012.

BUDGETARY ISSUES

LAM currently has an unobligated federal authorization balance of approximately $53,000; however, with receipt of this grant, and a potential increase for the annual Library Services and Technology Act (LSTA) grant in the coming year, the department requests an increase in federal

Agency Contact: Sue Sherif, State Librarian, Libraries, Archives and Museums, (907) 269-6569
Legislative Finance Contact: Danith Watts, (907) 465-5435

authority for the full grant amount of $185,427. An estimate of the balance at the end of FY2011 will be included in the FY2012 budget request.

IMLS funds requested for student support or research projects are not subject to matching requirements. However, all other IMLS funds must be matched on a 1:1 basis. While this grant does have a match requirement, the cost sharing will be met through existing LAM salaries and contributions ($108,460) and other organizations ($49,575) over the two-year period. No new state funds are needed and no new positions will be created.

Approval of this request will give the Alaska State Library the funding to support the Alaska Native Libraries, Archives, and Museums Summit and to plan further continuing education for Summit participants.

Legislative Fiscal Analyst Comment: **This RPL is intended to give sufficient FY11 federal receipt authorization to the Alaska Library and Museums appropriation, Library Operations allocation, to receive the Laura Bush 21st Century Librarian Program Grant and to absorb a potential increase for the annual Library Services Technology Act (LSTA) grant. Approval would increase the FY11 Enacted federal receipts budget of $1,045.5 to $1,230.9. No general funds are required. This grant would fund a contract position for the duration of the grant only.**

INSTITUTE of Museum and Library SERVICES

Official Award Notification for Grants and Cooperative Agreements

Date of Award June 10, 2010

Awardee Name and Address Alaska Department of Education and Early Development Org. Unit: Alaska Division of Libraries, Archives, and 801 West 10th Street, Suite 200 P.O. Box 110500 Juneau, AK 99811-0500	**Librarians for the 21st Century** L21-Continuing Education **Award Number** RE-06-10-0087-10
Authorizing Official Anna Kim Alaska Dept. of Education & Early Development PO Box 110500 Juneau, AK 99811-0500	**Award Period** From October 01, 2010 To September 30, 2012
Project Director Sue Sherif Alaska State Library 344 West Third Avenue, Suite 125 Anchorage, AK 99501	**Total Award Amount** $ 185,427.00 06/10/2010 $185,427.00 Original Award

Basic Award Information

1. The Institute of Museum and Library Services (IMLS) provides this grant support pursuant to 20 USC § 9101 et seq.

2. The award is made in support of the purposes set forth in the original application or, if noted in the special terms and conditions of the award, in a revised plan of work that has been approved by IMLS program staff.

3. The administration of this grant and the expenditure of grant funds are subject to the special terms and conditions of this award, which appear on the second page of the award notification, and the General Terms and Conditions for IMLS Discretionary Awards. The latter document incorporates by reference the audit requirements of OMB Circular A-133 and the applicable uniform administrative requirements and cost principles promulgated by the Office of Management and Budget. (For further details on the uniform administrative requirements and cost principles, see Articles 3 and 4 of the General Terms and Conditions for IMLS Discretionary Awards.)

4. The first request for payment will indicate the grantee's acceptance of the award.

5. The schedule of due dates for financial and performance reports is attached as the final page of the award notification.

IMLS Authorizing Official Signature Joyce Ray	**Name and Title** Joyce Ray Associate Deputy Director for Library Services
Accounting code: **CFDA Number:** 45.313	**TIN No. - 926001185** **DUNS No. - 809386824**

AWARDEE: Alaska Division of Libraries, Archives and Museums
AWARD NUMBER: RE-06-10-0087

IMLS CONTACTS

Questions related to changes in project activities, personnel, and budgets or the extension of the grant period should be addressed to either Kevin Cherry, Senior Program Officer, Office of Library Services, 202-653-4662 or kcherry@imls.gov.

or

Mary Alice Ball, Senior Program Officer, Office of Library Services, 202-653-4730 or mball@imls.gov.

Questions related to the processing of payments, notices of overdue reports, interest earned on grant funds, and audit requirements should be addressed to Grants Administration 202-653-4737 or grantsadmin@imls.gov.

SPECIAL TERMS AND CONDITIONS OF THE AWARD

The budget submitted with the application is approved. Changes in this budget will be subject to the limitations set forth in Article 8 of the *General Terms and Conditions for IMLS Discretionary Awards.*

The indirect costs rate(s) or the administrative fee used in the approved budget to calculate overhead costs may be applied against direct project costs to determine total project costs.

The grantee is required to cost share project expenses at no less than the level indicated in the approved budget.

INSTITUTE of Museum and Library SERVICES

Connecting People to Information and Ideas

June 15, 2010

Ms. Anna Kim
Director, Administrative Services
Alaska Department of Education and Early Development
Alaska Dept. of Education & Early Development
PO Box 110500
Juneau, AK 99811-0500

Dear Ms. Kim:

It gives me great pleasure to notify you that your proposal has been selected to receive a 2010 Laura Bush 21st Century Librarian Program Grant.

This year we received 110 applications requesting more than $68,242,619. At this time, we have selected 38 projects to receive funding, totaling $22,625,088. The projects selected for funding were identified by reviewers as examples of those that would significantly increase the number of students enrolled in master's and doctoral-level LIS programs, attract high school and college students to librarianship, conduct research to support the successful recruitment and education of the next generation of librarians and the work of new LIS faculty, and enhance curricula within graduate schools of library and information science, as well as programs of continuing education for librarians and library staff.

Enclosed you will find a letter from Joyce Ray, Associate Deputy Director for Library Services, providing details about the terms and conditions of this award. Please review her letter and the enclosed forms and materials carefully and follow the instructions they contain.

Congratulations on successfully completing this year's Laura Bush 21st Century Librarian Program competition. I am delighted that the Institute of Museum and Library Services is able to provide support for this project.

Sincerely,

Marsha L. Semmel
Acting Director

Enclosures
cc: Sue Sherif

June 15, 2010

Ms. Anna Kim
Director, Administrative Services
Alaska Department of Education and Early Development
Alaska Dept. of Education & Early Development
PO Box 110500
Juneau, AK 99811-0500

Dear Ms. Kim:

Grant Award Number: RE-06-10-0087-10

Congratulations on your 2010 Laura Bush 21st Century Librarian Program grant award. This package contains the information you will need to manage your award:

1. Grant Award Notification and
2. Grant General Terms and Conditions

The Grant Award Notification and Grant General Terms and Conditions contain important information about complying with the terms of the award. Please read all of this information carefully. The amount of your award, the dates of the award period and the grant award number we have assigned are provided in the Grant Award Notification. **In all correspondence with IMLS about your award, including reports and requests for reimbursement, please reference your grant award number.**

You will also need to visit the IMLS web site (http://www.imls.gov/recipients/recipients.shtm) for financial and reporting forms you will need to manage your award:

1. SF 3881, ACH (Automated Clearing House) Enrollment Form, to be completed and returned immediately;
2. SF 270, Request for Advance or Reimbursement, to be submitted each time you request a payment;
3. SF 272, Federal Cash Transactions Report, to be filed quarterly for those who use the advance payment method;
4. SF 425, Federal Financial Report, to be submitted annually; and
5. Interim and Final Performance Reporting Instructions for IMLS Discretionary Awards.

The completed SF 3881, Automated Clearinghouse Enrollment (ACH) Form, must be signed by your institution's Authorizing Official and returned to us in order to set up the disbursement process. You must also submit a completed SF 270, Request for Advance or Reimbursement, each time you request a payment.

As specified in the General Terms and Conditions for IMLS Discretionary Awards, you must submit a semi-annual narrative program report and an annual financial report. All official correspondence must be signed by your Authorizing Official.

In an effort to help grantees better describe their grant activities, IMLS is supporting a short Web-based course called *Shaping Outcomes*, which provides useful information about outcomes-based planning and evaluation for museums and libraries. For more information about this course, visit http://www.shapingoutcomes.org, or contact outcomes@iupui.edu. The course is offered as a self-paced online tutorial at no charge or as an instructor-mediated distance-learning course for a registration fee of $150. You may use some of the funds allocated for IMLS travel to support participation. IMLS will provide information about meetings for which IMLS travel funds may also be used at a later date.

We are copying the Project Director for this project and enclosing three additional items in that packet:

1) a description of the review process that was used in making funding decisions;
2) copies of panel review comments for this application;
3) Information on how to use the Grantee Communications kit from the IMLS Director of Policy, Planning, Research and Communications.

It is a requirement that your institution credit the Institute of Museum and Library Services in all publications and activities relating to the use of your award. Your public recognition of IMLS support encourages others to apply, and we appreciate your cooperation.

We also encourage you to establish a Web site for your project to explain your project goals and report on your progress. It is a great way to publicize your project and to share information with your colleagues. Please notify your program officer of your URL so that we can link to it from the IMLS Web site.

We urge the Project Director to consider comments from reviewers as their suggestions could, in many cases, result in stronger projects. After reviewing all of the enclosed documents pertaining to your award, if you have any questions, please contact your program officers, Kevin Cherry at (202) 653-4662 (e-mail kcherry@imls.gov) or Mary Alice Ball at (202) 653-4730 (e-mail mball@imls.gov).

We look forward to following the progress of your project and to sharing information about it with others who will benefit from your work.

Sincerely,

Joyce Ray

Joyce Ray
Associate Deputy Director for Library Services

Enclosures

cc: Sue Sherif

BUDGET FORM: Section B, Summary Budget

	$ IMLS	$ Cost Share	$ TOTAL COSTS
1. Salaries and Wages	$40,000.00	$99,947.00	$139,947.00
2. Fringe Benefits	$0.00	$30,582.00	$30,582.00
3. Consultant Fees	$4,050.00	$0.00	$4,050.00
4. Travel	$21,794.00	$8,480.00	$30,274.00
5. Supplies and Materials	$2,300.00	$2,000.00	$4,300.00
6. Services	$16,525.00	$2,075.00	$18,600.00
7. Student Support	$96,525.00	$8,000.00	$104,525.00
8. Other Costs	$0.00	$0.00	$0.00
TOTAL DIRECT COSTS (1-8)	$181,194.00	$151,084.00	$332,278.00
9. Indirect Costs	$4,233.00	$6,951.00	$11,184.00
TOTAL COSTS (Direct and Indirect)	$185,427.00	$158,035.00	$343,462.00

Project Funding for the Entire Grant Period

1. Grant Funds Requested from IMLS	**$185,427.00**
2. Cost Sharing:	
a. Applicant's Contribution	**$108,460.00**
b. Kind Contribution	**$49,575.00**
c. Other Federal Agencies*	**$0.00**
d. TOTAL COST SHARING	**$158,035.00**
3. TOTAL PROJECT FUNDING (1+2d)	$343,462.00
Percentage of total project costs requested from IMLS	**53.9 %**

*If funding has been requested from another federal agency, indicate the agency's name:
NA

OMB Number 3137-0071; Expiration Date: 7/31/2010. Estimated burden for both detailed and summary budget forms: 3 hours.

Department of Health and Social Services
Office of Children's Services
Components: Foster Care Base Rate, Foster Care Augmented Rates, Subsidized Adoptions and Guardianships, and Residential Child Care

Subject of RPL: Title IV-E ARRA FMAP	**ADN/RPL #:** 06-0-0693
Amount requested: $ 922,000	**Appropriation Authority:** Ch12, SLA 2009, Sec1, pg 21, ln 11-12 & 16-18
Funding source: Federal (ARRA) receipts - FY2010 Operating	**Statutory Authority:** AS 47.40

PURPOSE

The Office of Children's Services (OCS) FY10 federal American Recovery and Reinvestment Act (ARRA) Title IV-E FMAP budget authority is insufficient to receive all eligible receipts. This request will increase the level budget authority in several components to fully collect earned ARRA federal revenue.

PREVIOUS LEGISLATIVE CONSIDERATION

The authority to collect ARRA federal revenue was first appropriated by the Legislature in FY2009 in response to the temporary enhanced levels of federal reimbursement that impacted multiple statewide programs including Medicaid and Foster Care. In FY2010 and FY2011 $1,023,600 ARRA was authorized for the allocations as indicated in the table below. Previous RPLs for this activity have not been considered.

TIMING ISSUES

When the ARRA increases to the Federal Medical Assistance Percentage (FMAP) were announced, the primary federal focus was on the implementation of the Medicaid ARRA enhanced reimbursement rate. ARRA funding in OCS is earned because FMAP is also used to calculate reimbursement rates for the Administration for Children and Families Title IV-E program, but little was known about how ARRA would be applied to foster care. Our best guess as to how ARRA would impact our Title IV-E programs fell short by about 15% in FY2010.

Approval of this request now will allow for the appropriate accounting of FY2010 ARRA federal revenue as Title IV-E reimbursements. Claiming occurs quarterly, and any request within the operating budget process outside of this one will be too late for FY2010.

Legislative Fiscal Analyst Comment: **Unlike Medicaid—for which an enhanced FMAP rate reduced the need for GF—the general fund savings (in OCS) due to the change in reimbursement rate were offset by increases in costs. The Department has sufficient authorization for general funds and federal receipts, but has insufficient ARRA authorization. If this RPL is not approved, the Department will be unable to properly account for revenue and expenditures when the books are closed at the end of FY10, forcing the department to ask the legislature to ratify the expenditure of ARRA funds.**

BUDGETARY ISSUES

This request is the result of under-estimating Title IV-E participation amounts prior to the issuance of implementation instructions for ARRA and increased costs related to increased numbers of adoptions and guardianships. There were 266 new adoptions in FY2008, 343 in FY2009, and 305 in FY2010. Costs increased by $2.4 million over that same time period. OCS was able to cover increased general fund expenditures and federal receipt authority within the division, but was not able to cover the increased ARRA authority needed. Other increases occurred in Foster Care Special Needs ($400,000) and Foster Care Base Rates ($70,000) from FY2009 to FY2010.

This federal ARRA receipt authority is needed to match increased general fund costs in OCS grant lines and will not replace the need for existing general funds. The amount of ARRA authorization requested is based on FY2010 projected expenditures plus a small margin of error for potential additional eligible federal ARRA revenue. This request does not impact staffing levels.

Component	FY10 Authorized	FY10 Estimated Claiming	Difference	Requested Increase
Foster Care Base Rate	243.6	452.2	208.6	225.0
Foster Care Augmented Rates	0.0	3.9	3.9	5.0
Foster Care Special Needs	0.0	15.0	15.0	15.0
Subsidized Adoptions	780.0	1,436.3	656.3	675.0
Residential Child Care	0.0	1.4	1.4	2.0
Totals	**1,023.6**	**1,908.8**	**885.2**	**922.0**

The ARRA program operates on a federal fiscal year and the Department of Health and Social Services anticipates it will be extended through FFY2011. A FY2011 supplemental request for federal ARRA authority for this program is also anticipated.

Agency Contact and Telephone:
Alison Elgee, 465-1630

OMB Approved: _____ Date: _____

		Appropriation	General	Other
	Allocations	**Items**	**Funds**	**Funds**
Children's Medicaid Services	11,960,100			
Children's Services Management	7,272,300			
Children's Services Training	1,824,800			
Front Line Social Workers	41,976,200			
Family Preservation	12,628,800			
Foster Care Base Rate	17,246,000			
Foster Care Augmented Rate	1,776,100			
Foster Care Special Need	5,515,800			

It is the intent of the legislature that $100,400 of this appropriation be used to provide funding for start-up and operational expenses to the Dillingham Therapeutic Foster Home.

Subsidized Adoptions & Guardianship	23,401,600			
Residential Child Care	3,101,200			
Infant Learning Program Grants	4,200,700			
Children's Trust Programs	589,700			
Health Care Services		**708,374,000**	**208,393,900**	**499,980,100**
Adult Preventative Dental Medicaid Services	7,288,400			

It is the intent of the legislature that the Adult Preventative Dental Medicaid Services not over spend authority granted by authorizing statute and adjust benefits available to individual participants as necessary to maintain and conduct the program throughout the entire fiscal year.

Medicaid Services	656,918,100			
Catastrophic and Chronic Illness Assistance (AS 47.08)	1,471,000			
Health Facilities Survey	1,546,800			

AR 25115-10 PA Admin ARRA Authorization Audit Trail

COA Year	2010
Appropriation Number	22920
Appropriation Term Yr	2010
Appropriation Name	CHILDREN'S SERVICES
Account Type(s)	RR
Account Number	51118
Posting Type(s)	5,6,7
Posting Month(s)	1 - 18

Chart of Account Yr: 2010

Appropriation: 23225-10 FSTR CARE BASE RATE

RR

51118

05

Account	Document Num	Trans Code	Date Processed	P M	Input RD Code	CC Code/SY	Transaction Description	Total Authorized
51118 - FED ECON STIMULUS	GB10062310363	520-50	06/23/09	01	00200	06213600-10	Foster Care Base Rate	-243,600.00

TOTAL APPROPRIATIOI 23225-10 FSTR CARE BASE RATE **-243,600.00**

AR 25115-10 PA Admin ARRA Authorization Audit Trail

Chart of Account Yr: 2010

Appropriation: 23240-10 SUB ADOPT & GUARD

RR

51118

05

Account	Document Num	Trans Code	Date Processed	P M	Input RD Code	CC Code/SY	Transaction Description	Total Authorized
51118 - FED ECON STIMULUS	GB10062310366	520-50	06/23/09	01	00200	06213800-10	Subsidized Adoptions & Guardianship	-780,000.00

TOTAL APPROPRIATIOI 23240-10 SUB ADOPT & GUARD **-780,000.00**

AR 25115-10 PA Admin ARRA Authorization Audit Trail

Chart of Account Yr: 2010

Appropriation: 24101-10 CHILD MEDICAID SVCS

RR

51118

05

Account	Document Num	Trans Code	Date Processed	PM	Input RD Code	CC Code/SY	Transaction Description	Total Authorized
51118 - FED ECON STIMULUS	GB10062310357	520-50	06/23/09	01	00200	06214360-10	Children's Medicaid Services	-613,700.00

06

Account	Document Num	Trans Code	Date Processed	PM	Input RD Code	CC Code/SY	Transaction Description	Total Authorized
51118 - FED ECON STIMULUS	AA22303290001	520-50	08/14/09	02	06318	06214360-10	ADN600059 DHSS HB199 SEC12, PG17, LN24	-110,400.00
	AA23011300002	520-50	05/21/10	11	06233	06214360-10	ADN 600528 FY10 SUPPLEMENTAL	-78,500.00

TOTAL APPROPRIATIOI 24101-10 CHILD MEDICAID SVCS **-802,600.00**

TOTAL COA YR 2010 **1,826,200.00**

REPORT TOTAL: **,826,200.00**

AR AUTH(EXCL RST)& BALANCE (LESS ACT&ENC) RRN:0244676 RSN:07581 08/04/2010
APPROPRIATION RESTRICTED REVENUES BY ACCOUNT
22920-10 CHILDREN'S SERVICES ORIG:10 APPROPRIATIONS ( ) FN:
COA:2011

	ENTITY NUMBER - DESCRIPTION	ORG SUP RP	ITD BALANCE
S**	50000 TOT RESTRICTD REVENU	63,890,500-	23,302,250-
S**	50006 REST REVS-PRECLOSING	63,890,500-	23,302,250-
S**	50007 OPERATING REST REVS	63,890,500-	23,302,250-
S**	54005 PROGRAM RECEIPTS TOT	2,951,200-	586,554-
S**	51063 STAT DESIG PROG REC	408,500-	290,430-
S**	51073 RECEIPT SUPPRTD SVCS	2,542,700-	296,124-
S**	57002 FED GRANTS IN AID	55,647,700-	20,445,609-
S**	51010 FEDERAL RECEIPTS	53,821,500-	24,488,921-
S**	51118 FED ECON STIMULUS	1,826,200-	223,886
S**	51145 TITLE 20	0	3,819,426
S**	59000 INTERGOVERNMENTAL	5,291,600-	2,270,087-
S**	51015 INTERAGENCY RECEIPTS	5,291,600-	2,270,087-

Includes Medicaid

FOR NEXT SECTION ENTER==> NUMBER _____ YEAR ____ LEVEL LIMIT __
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12--
CONT QUIT RR PFKYS HELP

Department of Health and Social Services
Division of Public Assistance, Administration Component

Subject of RPL: Food Stamp Program (SNAP)	**ADN/RPL #:** 06-1-0167
Amount requested: $669,139	**Appropriation Authority:** Ch17, SLA2009, Sec 1, pg 3, ln 14 (HB199)
Funding source: Federal Authority (ARRA) – FY2011 Operating	**Statutory Authority:** AS 47.25.975

PURPOSE

The Division of Public Assistance (DPA), Public Assistance Administration component is requesting an additional $669,139 in American Recovery and Reinvestment Act (ARRA) federal authority for Alaska's Supplemental Nutrition Assistance Program (SNAP), which is known in the state as the Food Stamp Program.

Over the past year, similar to the growth seen across the nation, DPA has faced a dramatic increase in the number of applications for service as a result of the weakened economy and increased rates of unemployment. The number of households receiving food stamp benefits in Alaska has increased from 29,000 in June 2009 to over 32,000 in June 2010 (19%). This unprecedented growth in the food stamp caseload has strained DPA's ability to keep up with adequate levels of customer service, timeliness and accuracy of decisions, and other program performance expectations. This funding supports the long-term plans of the division to improve business process efficiency and ensure that public assistance program benefits are delivered timely and accurately.

The Division will purchase contractual services that will continue its efforts to improve business practices and customer service through "LEAN" process management tools and techniques. The "LEAN" process, which looks at critical business practices, will enable DPA to create capacity to manage increasing caseloads which is expected to avoid or limit requests for additional positions.

PREVIOUS LEGISLATIVE CONSIDERATION

During the 2009 legislative session, $462,000 in ARRA funds were appropriated for SNAP administrative costs in FY2009 and FY2010 (Ch 17, SLA 2009 (HB199)).

TIMING ISSUES

These funds must be spent or obligated by 9/30/2011. If authority is not received for this funding request, the division will not be able to utilize the additional federal ARRA funds intended to help states manage increased workloads with existing manpower by continuing its efforts to streamline business processes and improve efficiency in benefit delivery.

Approval is needed now to enable the Division to complete the required work in FY2011 and before the end of the grant award period.

BUDGETARY ISSUES

Authority to receive the additional ARRA funding was not anticipated during the FY2011 Governor's budget process. The federal agency originally indicated that the funding for these administrative services would be received as regular federal revenue, not as federal ARRA revenue. Currently, an additional

$669,139 in additional federal ARRA funding is available to the state as indicated in the Department of Defense (DOD) Appropriation bill and the attached grant award documents from the United States Department of Agriculture. The previous $462,000 of ARRA funding appropriated under Chapter 17, SLA 2009 (HB199) has been fully obligated.

The funds will primarily be spent in the contractual services line. The Division spent FY2009 and FY2010 appropriation funds to improve Food Stamp program benefit accuracy and business processes.

If approved, the division expects to have accomplished its purpose of improving methods of operation to the point that additional initiatives can be accomplished within current funding levels.

These federal ARRA and Defense Appropriations Act funds are 100% federal and do not require any state match. If the authority for the additional funds is not approved, any costs for business process improvements that must be undertaken will be paid for through existing Food Stamp administrative funds which require a 50% general fund match.

Legislative Fiscal Analyst Comment: **There are no technical problems with this RPL.**

Agency Contact and Telephone:
Alison Elgee, Assistant Commissioner: 907-465-1630

OMB Approved: _____ Date: _____

USDA

FEB 12 2010

United States
Department of
Agriculture

Food and
Nutrition
Service

3101 Park Center Dr
Alexandria, VA
22302-1500

SUBJECT: The Department of Defense Appropriations Bill
State Administrative Funding Chart

TO: Regional SNAP Program Directors:

Section1002 of Pub. L. 111-118, the Department of Defense (DoD) Appropriations Act, 2010, appropriated $400 million to be allocated to State agencies for the costs associated with administering the Supplemental Nutrition Assistance Program (SNAP). These are 100 percent Federal funds and do not require a State match. The $400 million is intended to help address the growing strain on existing resources related to administering SNAP. States are to use the funds to supplement, not supplant, current State funds for SNAP.

Distribution of funds will be based on the attached allocation table based on the formula described below and reflect the full $400 million provided by P.L. 111-118. Funds made available under this initial allocation shall remain available until September 30, 2010. Pursuant to section 1002 (c) of Pub. L 111-118, funds not obligated by States at the end of fiscal year 2010 will be recovered and reallocated for FY 2011. States are encouraged to obligate funds in FY2010. All funds must be obligated by September 30, 2011.

Funds are distributed based on a participation formula, with 75 percent of the amount available allocated to State agencies based on the share of each State's participating households over the most recent 12 months for which data is available. These allocations are adjusted for participation in disaster SNAP programs, as specified in the legislation. The remaining 25 percent of the amount available is allocated based on the increase in the number of households over the same 12 month period.

State agencies will need to report DOD appropriation funds in Column 29 on the regular SF-269, Financial Status Report. Reporting of these funds will begin on the 2nd Quarter Report. All State agencies should have their 2nd Quarter reports certified in the Food Programs Reporting System (FPRS) by May 5, 2010.

If you have any immediate questions, please contact Jane Duffield on 703.605.4385.

Karen J. Walker
Director
Program Accountability and Administration Division

Distribution of SAE funds in DoD Appropriations Bill

State/Territory	TOTAL
Alabama	$7,604,236.00
Alaska	669,139.00
Arizona	10,074,580.00
Arkansas	4,219,540.00
California	29,952,171.00
Colorado	3,957,287.00
Connecticut	3,711,242.00
Delaware	1,109,315.00
District of Columbia	1,483,702.00
Florida	29,956,606.00
Georgia	14,922,967.00
Guam	247,606.00
Hawaii	1,494,246.00
Idaho	1,559,843.00
Illinois	16,663,648.00
Indiana	7,209,731.00
Iowa	3,295,396.00
Kansas	2,644,114.00
Kentucky	7,353,099.00
Louisiana	7,289,370.00
Maine	2,469,819.00
Maryland	5,877,330.00
Massachusetts	9,126,837.00
Michigan	18,769,308.00
Minnesota	4,513,197.00
Mississippi	5,441,250.00
Missouri	8,836,869.00
Montana	1,093,660.00
Nebraska	1,473,183.00
Nevada	2,966,489.00
New Hampshire	1,082,235.00
New Jersey	6,074,714.00
New Mexico	3,287,809.00
New York	31,509,075.00
North Carolina	13,256,615.00
North Dakota	579,507.00
Ohio	16,271,966.00
Oklahoma	5,328,410.00
Oregon	8,458,451.00

Pennsylvania	15,480,193.00
Rhode Island	1,501,575.00
South Carolina	7,685,885.00
South Dakota	873,956.00
Tennessee	12,764,495.00
Texas	27,175,575.00
Utah	2,263,726.00
Vermont	1,020,726.00
Virginia	8,032,089.00
Virgin Islands	184,743.00
Washington	10,869,664.00
West Virginia	3,295,395.00
Wisconsin	6,712,263.00
Wyoming	305,153.00
US	**$400,000,000.00**

United States Department of Agriculture
Food and Nutrition Service

Western Region

August 20, 2009

Reply to Attn of: SNAP- Administrative Notice 09- 54 SNAP-2-GEN

Subject: SNAP – American Recovery and Reinvestment Act State Administrative Funding Charts for FY 2010

To: SNAP Directors

On March 6, 2009, FNS allocated the fiscal year (FY) 2009 funds under the American Recovery and Reinvestment Act (ARRA) of 2009. This is to allocate the funds for FY 2010. As directed by the ARRA, the 2010 allocations are being made by following the FY 2009 methodology and calculations are based on the same participation timeframe (12 months ending November 2008). The Act provides for $150 million in FY 2010. Four million will be reserved for FNS expenses for management and oversight, and monitoring the integrity and evaluation of the stimulus changes. The remaining $146 million is being allocated to the States for FY 2010.

- Attached is the stimulus allocation chart showing the allocation amount.

These funds are intended for use in administering SNAP. Distribution of funds will be based on this allocation table. If you have any questions regarding your State allocation please contact your state program officer.

/s/

DAVID H. BAILEY, Chief
Program Operations and Investigations
Supplemental Nutrition Assistance Program
Western Region

Attachment

Stimulus Allocation for SNAP for FY 2010

State	100% State Administrative Grant FY 2010
Alabama	$2,568,449
Alaska	$233,228
Arizona	$3,398,182
Arkansas	$1,426,140
California	$10,907,248
Colorado	$1,229,462
Connecticut	$1,272,422
Delaware	$382,584
District of Columbia	$531,204
Florida	$10,240,708
Georgia	$5,213,286
Guam	$87,476
Hawaii	$554,322
Idaho	$537,259
Illinois	$6,095,955
Indiana	$3,081,028
Iowa	$1,342,008
Kansas	$858,548
Kentucky	$2,883,551
Louisiana	$2,694,816
Maine	$923,725
Maryland	$2,088,695
Massachusetts	$3,361,519
Michigan	$6,250,997
Minnesota	$1,401,033
Mississippi	$1,908,145
Missouri	$3,274,279
Montana	$336,943
Nebraska	$449,207
Nevada	$878,346
New Hampshire	$355,595
New Jersey	$2,258,657
New Mexico	$1,121,959
New York	$12,264,142
North Carolina	$4,662,580
North Dakota	$206,873
Ohio	$5,575,266
Oklahoma	$1,665,993
Oregon	$2,829,391
Pennsylvania	$5,704,263
Rhode Island	$476,014
South Carolina	$2,887,562
South Dakota	$263,421
Tennessee	$4,510,820
Texas	$13,987,018
Utah	$693,212
Vermont	$307,230
Virginia	$2,644,228
Virgin Islands	$52,278
Washington	$3,459,900
West Virginia	$1,235,764
Wisconsin	$2,337,039
Wyoming	$90,030
US	$146,000,000

7/28/2009
File: STIMULUSAlloc2010

Department of Health and Social Services
Division of Health Care Services, Health Planning & Infrastructure

Subject of RPL: Workforce Development Loan Repayment Funds	**ADN/RPL #:** 06-1-0173
Amount requested: $210,853	**Appropriation Authority:** Ch41, SLA2010, Sec1, pg22, ln20
Funding source: MHTAAR - FY2011 Operating	**Statutory Authority:** AS 37.14.001-099 and AS 47.30

PURPOSE

The Department of Health and Social Services, Division of Health Care Services and the Alaska Mental Health Trust Authority (Trust) request expenditure authority in the amount of $210,853 in Mental Health Trust Authority Authorized Receipts (MHTAAR) to match federal US Department of Health and Human Services Health Resources and Services Administration (HRSA) State Loan Repayment funds through the Division of Health Care Services. These funds contribute to the state portion of the SHARP loan repayment program, which recruits health care practitioners willing to work in high-need areas in exchange for help in student loan debt relief.

PREVIOUS LEGISLATIVE CONSIDERATION

Trustees of the Alaska Mental Health Trust Authority approved this expenditure at its July 7, 2010 Executive Committee meeting. It was not included in the Mental Health Budget bill. DHSS and the Trust are supportive of attracting and retaining health care practitioners in high-need Alaskan areas.

TIMING ISSUES

The recommended FY2011 MHTAAR increment is necessary in order to fully utilize the currently available $600,000 of Federal HRSA grant funds. For each Federal dollar, a matching non-federal dollar must be available. Alaska's SHARP program is in the process of fielding applications from 23 practitioners, across a broad spectrum of primary care occupations, with each practitioner working on a two-year service contract.

If this funding to match the Federal HRSA grant is not in the State budget by the beginning of September, 2010, the Federal funding availability will be cut by this amount; and health-care practitioner loans of $421,706 cannot be finalized. This will have a direct negative impact on health care services in high-need areas of Alaska.

BUDGETARY ISSUES

This project and funding is aligned with the department's goal to manage an integrated and comprehensive behavioral health system based on sound policy, effective practices, and open partnerships. The funding will enable the department and division's contribution to the goals of making health care accessible to all Alaskans and to protect Alaskan's health, safety, and quality of life. There are no current general fund impacts. In addition, there will be no impact on positions or staff months.

Legislative Fiscal Analyst Comment: **There is sufficient federal authority available for planned expenditures; this RPL adds the required state matching funds. There are no technical problems with this RPL.**

Agency Contact and Telephone:

Delisa Culpepper, COO, Alaska Mental Health Trust Authority & Alison Elgee, DHSS, 465-1630

OMB Approved: _____ Date: _____

3745 Community Park Loop
Suite 200
Anchorage, AK 99503
Main line: (907) 269-7967
FAX: (907) 269-7966

The TRUST
The Alaska Mental Health Trust Authority

Memo

To: Dr. Doolittle, Executive Committee Chair

From: Delisa Culpepper, Chief Operating Officer

Date: July 2, 2010

Re: **Change of Intent** : 1. Carryover of $45, 853 FY 10 Loan Repayment Funds
2. Change of fund source from Authority Grant to MHTAAR for $165,000 of FY 10 Workforce Development Loan Repayment funds.

Request: Change of Intent for the Workforce Development Loan Repayment funds for FY 10.

1. Carryover of $45,853 of FY 10 MHTAAR Loan Repayment funds to FY 11; and
2. Change of fund source from Authority Grant to MHTAAR for $165,000 of FY 10 Loan Repayment funds.

History See attached memo's from the Department of Health and Social Services.

STATE OF ALASKA

Department of Health & Social Services
Division of Health Care Services
Health Planning & Systems Development

SEAN PARNELL, GOVERNOR

PO Box 110660
Juneau, Alaska 99811-0660

Telephone: (907)465-3091
Fax: (907)465-6861

MEMORANDUM

DATE: 06/28/2010

TO: William Hogan, Commissioner

THRU: Paloma Harbour, Budget Analyst IV

FROM: Alison Elgee, Assistant Commissioner

SUBJECT: SHARP - Request to carry AMTHA SFY'10 match funds into SFY'11

This is to request the carry-forward to SFY'11 of $45,853 of AMHTA-provided SFY'10 matching funds (CoLo #06214079) for the SHARP loan repayment program.

For SFY'10, the Trust committed $200,000, and of that an earlier carry-forward request has already been submitted for $150,000. This HRSA-sponsored program is just getting started, and there have been numerous processes to install. However, for our initial cohort of 14 practitioners, all of the required two-year contracts (MOAs) have now been offered & signed, with 9 of 14 practitioners starting in June, and the remainder starting in early SFY'11 (Q1). Of this first cohort, the initial group of 9 practitioners will garner a total LRP cost of $8,293 for June'10, with 50% (i.e. $4,147) of that expensed to Trust funds.

The Trust, through Delisa Culpepper, will similarly pose this request to AMHTA Trustees, when that group meets on July 7th. Ms. Culpepper indicates that DHCS will similarly need to submit a "revised program" document to Legislative Budget Audit (LBA) when it meets (late July or early August).

CC: Michelle Lisper
Bobby Miles
Kevin Casperson

Alaska SHARP Program

Section of Health Planning & Systems Development
Division of Health Care Services

Brief overview of the SHARP project:

The Alaska State Loan Repayment Program (SHARP) is a HRSA-sponsored effort to help encourage selected healthcare practitioners to work in Alaska. This is done by making loan repayments (LRPs) on behalf of practitioners while they provide healthcare services in high-need areas. The budget for these practitioner LRPs is $1,200,000, with 50% from HRSA, and the other 50% from "non-federal match," the later composed of $400,000 from AMHTA, and $200,000 from other sources. The entire $1,200,000, including the above stated non-federal match, is for practitioner loan repayments. Neither HRSA nor AMTHA provide admin funding.

What does the SHARP project do?

Considerable nationwide evidence indicates that healthcare practitioners are finishing their training programs with substantial & increasing educational debt. Further, many of these providers are quite willing to work in high-need areas &/or with high-need populations in exchange for help in relief-of-debt. Nationally, this workforce "support-for-service" strategy does increase practitioner recruitment and retention. Alaska's SHARP program is in the process of fielding 23 practitioners, across a broad spectrum of primary care occupations, with each practitioner working on a two-year service contract.

Why is carry-over funding being requested?

DHSS received approval for a September 2009 start-up, well into SFY 2010. Further, the program start-up proved complex with numerous processes to install, much as was anticipated. For SFY'10, the Trust committed $200,000, and of that an earlier carry-forward request has already been submitted for $150,000. Nonetheless, for our initial cohort of 14 practitioners, two-year contracts (MOAs) have now been offered & signed, with 9 of 14 practitioners having started in June, and the remainder starting in early SFY'11 (Q1). Of this first cohort, the initial group of 9 practitioners will garner a total LRP cost of $8,293 for June'10, with 50% (i.e. $4,147) of that expensed to Trust funds. Therefore, this is to request a carry-forward of $45,853 of AMHTA-provided SFY'10 matching funds (#06214079) for the SHARP program into SFY 2011.

What will carry-over funding accomplish?

We plan that all 23 practitioner slots will be filled, and thus that all federal and non-federal LRP funds will be spent over years. We are aware that state funds and receipts typically cannot be encumbered (per se) in one fiscal year, for subsequent spending in the next. Therefore, approval of this request for the carry-forward of AMTHA funding in the added amount of $45,853 into SFY 2011 will allow our Alaska SHARP program to fully use the HRSA-provided federal funds, and to actually place all 23 practitioners for their 2-year commitments.

STATE OF ALASKA

SEAN PARNELL, GOVERNOR

Department of Health & Social Services
Division of Health Care Services
Health Planning & Systems Development

PO Box 110660
Juneau, Alaska 99811-0660

Telephone: (907)465-3091
Fax: (907)465-6861

MEMORANDUM

DATE: 06/30/2010

TO: Delisa Culpepper, Chief Operating Officer, AMHTA
THRU: Patricia Carr, Section Chief, HPSD DHCS
FROM: Robert Sewell, Program Manager, SHARP Program

SUBJECT: SHARP - Request to AMTHA for other match funds in SFY'11

This is a request to AMHTA for provision of other matching funds during SFY'11 in the amount of $165,000 for the SHARP loan repayment program.

The Alaska State Loan Repayment Program (SHARP) is a HRSA-sponsored effort to help encourage selected healthcare practitioners to work in Alaska. This is done by making loan repayments (LRPs) on behalf of practitioners while they provide healthcare services in high-need areas. The budget for these practitioner LRPs is $1,200,000, with 50% from HRSA, and the other 50% from "non-federal match."

The main reason for this request is that two expected sources of non-federal matching funds have, in fact, not materialized. While due diligence was exercised during the revenue-commitment stage of planning the SHARP (FFY'09) grant, changes in the availability of other federal options adversely affected the readiness of those two sources (agencies) to contribute. On balance, this means that the SHARP program requires $210,854 in added match-funding in order to (a) fully use the currently available $600,000 from our in-hand HRSA grant funds, and (b) field the full cohort of at least 23 primary care clinicians.

The Trust, through Delisa Culpepper, is asked to pose this request to AMHTA Trustees, when that group meets on July 7th. Similarly, DHCS is considering submission of request for revised program document & receipt authority to Legislative Budget Audit (LBA) when it meets in late July or early August.

CC: Bobby Miles
Kevin Casperson
Alison Elgee
Lucas Lind

Attachments:
Trust letters, re: match (4/10/09) (5/24/10)
Statement of background & rationale
Budget analysis &scenarios

ALASKA MENTAL HEALTH TRUST AUTHORITY

EXECUTIVE COMMITTEE MEETING

Teleconference

July 7, 2010

11:30 a.m.

Alaska Mental Health Trust Authority
3745 Community Park Loop, Suite 200
Anchorage, Alaska

Trustees present:

William Doolittle, Chair
Laraine Derr
Paula Easley
Larry Norene
Tim Schuerch

Staff present:
Jeff Jessee
Delisa Culpepper
Marie Trueblood

PROCEEDINGS

DR. DOOLITTLE: We're going to convene the Executive Committee meeting. The meeting of the Executive Committee is convened, and we have two issues. At a minimum, probably three issues.

The first is the change of intent.

Do you want to deal with that?

MS. CULPEPPER: I will take this one. We have a change of intent before you for loan repayment funds for the workforce. These are all previously budgeted in FY10. Some of them were in MHTAAR already, and have not been able to be obligated in time to meet the June 30th deadline. And the rest of it is money that we want to move from Authority grant into MHTAAR to be allowed to be a match for the rest of the federal money that they lost a match for that some people who committed in partnership with all of us in this grant have not come through, and there's $165,000 left of funds from the feds that we could use, needs to be obligated by the end of August, and we don't have any other way. So we had some money we're

going to use as a match for a future federal grant, which right now is not going to happen for another year because of technical difficulties. And so we want to be able to make use of the federal funds, and we're proposing to take that money from Authority grant funds to MHTAAR and use it as the match for the federal funds so that we can obligate it by the end of August.

To do that, we needed to do both of these now. These both have to go out to LB&A. They need to sign new -- they won't be able to sign contracts by the end of August if we don't do this.

I asked to have this in this meeting. Attached you'll find the memos from the DHSS program that went to the Commissioners and others explaining both the carryover of the $45,000 in additional funds for FY10 funds to '11, and then the -- asking for the additional 165,000.

MS. DERR: Who didn't come through?

MS. CULPEPPER: Two community health centers that committed to matching funds

and they --

MS. DERR: Who is it?

MS. CULPEPPER: Fairbanks and -- I can't remember who the other one was. And what happened with both of them was that there were new federal funds that came out directly in the federal loan repayment, and their people all got those loans, and in some cases got more than we were offering. And so they took those, and because of that, they didn't see their staff really needed or would be eligible to apply for anymore. And so then they backed out of providing the additional match to the State funds.

MS. DERR: I guess my problem is why should we -- I mean, if they've got the funds, why do we have to step up --

MS. CULPEPPER: We can give the money back to the feds, but to tell you the truth, looking at all the applications that came in in the first round -- there was a very short first round because of the way everything went, it was only open for, like, three weeks, there wasn't enough time for people to get their applications in and finalize things.

There were a whole list of people that were behavioral health. We got quite a few, a psychiatrist, a lot of master's-level counselors that got state loans. There are more out there that could use it. We've let them know, as always, that our funds need to go predominantly to behavioral health. While still there, I still prefer for us to match the federal funds, since ours are there and have there been there for two years waiting. I prefer we do it so we can open another -- right now -- round of loans that would be available to be signed by the 1st of September.

DR. DOOLITTLE: Normally, when we have an MHTAAR funding, it is in our budget and approved by the Legislature.

MS. CULPEPPER: Yes.

DR. DOOLITTLE: What variance are we facing here in this to go from Authority to MHTAAR, and what other steps must we take?

MS. CULPEPPER: They will have to take the -- the 45,000 was already there in MHTAAR. They will have to get permission to carry it from one year to another. The 165,000 --

DR. DOOLITTLE: They being who?

MS. CULPEPPER: DHSS.

They will have to take a revised program, an RPL, to LB&A to ask permission for the Authority to receive the money.

But for the 165, they will have to get new authority from LB&A to receive and spend the MHTAAR in FY11.

DR. DOOLITTLE: So it may come to pass that the $165,000 will become moot?

MS. CULPEPPER: Yes.

DR. DOOLITTLE: That they won't get approved.

MS. CULPEPPER: If LB&A fails to approve it -- and I can't see that they will. It's our funding. It's going to match the same amount of federal funding that we have. We'll lose it if we don't take advantage of that, I don't see that they'll say "no" to that. If we don't do it in the time period by the middle of August, we will lose the ability to use the federal funds. Then I don't think it's worthwhile for us to stick our money in if it's not matched.

MS. DERR: Why would you say

that?

MS. CULPEPPER: I think that, you know, we could possibly start -- do some things on our own or hold it for another year to see whether we either get another federal grant eventually, or there's been some talk of our going ahead and moving away from the federal program because the feds have more restrictions on them than we would like, and that ties to our money, and just start our own state program which we had the bill in the Legislature to do this year and we didn't do.

It's a decision for the future that we still have to make about whether or not we want to -- and Commissioner Hogan and I talked about this -- you know, hitch ourselves to a wagon of doing our own state programs and our funds matching other general fund money, and I want to -- I want us to match something, whether it's federal money or state money. There's no chance of getting state money right now because the budget's already set for '11. We can get the federal money right now, so I'm willing to do that. But if we didn't get federal money, I would hold it until we can see

if we could leverage some state money to match our funds. But the issue is we already have money in FY12 in the budget for this. So this is kind of like a bubble of money that's been sitting there. We fully funded it in FY10, but the FY9 money sat there because of our problem with ACPE when they stopped wanting to administrate our money. We ended up with a bubble of $200,000. We only need 165 of that because that's all the federal money that's left.

At this point, it's, you know, do some right now and knowing that we already have money in the '12 and '13 budget we'll continue to either match state funds and we have put -- you'll see when we go forward with the money -- requests for '12 and '13 that we put in for requests for matching funds and general funds.

MS. DERR: My concern more is the people backing out on their commitments. I mean, we've had this problem with the University, and so we keep stepping in and saying, okay, we know you said that you were going to put money in, and now you're not going to put money in, so we step up and we do it.

When do we trust people -- when do we make people follow through on their commitments?

MS. CULPEPPER: That's a hard question. Normally when we had problems with the University it's been because of the Legislature not funding something. And that's hard for us to direct the Legislature. It's also, I think, even more difficult for us to force a private nonprofit to go forward.

Now, do I think -- being on their advisory council now, I wouldn't recommend that we count on nonprofit matches in the future. Because it's obvious that, you know, we don't have leverage in order to force them to do it.

MS. DERR: Do we have a commitment from them?

MS. CULPEPPER: We do.

MS. DERR: Isn't that a contract?

MS. CULPEPPER: I don't know.

MS. DERR: If you have a commitment from somebody that they're going to do that?

MR. JESSEE: Well, I don't know. I'd have to look at it to see how legally binding it is. They're probably at the

point --

MS. CULPEPPER: By the time we do that, it will be too late to use the federal funds.

MR. JESSEE: We'll run out of resources to get a judgment and outweighed --

MS. CULPEPPER: It's a matter of timing right now, because the federal funds have to be --

MR. JESSEE: These nonprofits were offering to supply the match because they were going to use the employee for their employees. They weren't kicking in the big pot. They were kicking in their share of what they were going to get. When it turned out they didn't need anything.

MS. DERR: It's just kind of people thumb their noses at us, "Okay, we got a little more this other way. Sorry for you guys." And I don't know at what point in time the Mental Health Trust says, "We've got this letter of commitment, are you going to stand behind us?"

MS. CULPEPPER: It's actually not us, it's the State DHSS that has the letter of

commitment. We were just another partner with them. We've been meeting our commitments and it's just been a matter of, you know, they weren't forcing us to do this. We had a discussion, and I had to decide whether or not I thought our Beneficiaries or our professionals would benefit if we went out to another round, and -- or let the money go.

MR. JESSEE: I think your point's well taken. I think going forward as we get into these partnerships, we maybe need to be a little clearer to people, that, look, if you're a partner, then we're putting this out there on the assumption that you're going to deliver. If you don't deliver, then you should have no expectation that we're going to come in and save the day.

MS. DERR: With that, I would move that we -- the request to carry forward fiscal year '11 funds of $45,853 for the loan repayment program.

MS. EASLEY: I will second that.

MS. CULPEPPER: Could you amend that to FY10 funds to FY11?

MS. DERR: That's okay.

DR. DOOLITTLE: Does the seconder accept that amendment?

MS. EASLEY: Yes.

DR. DOOLITTLE: Without objection, that motion passes.

MS. DERR: Secondly, I would move that we put $165,000 of workforce development funds from Authority grant to MHTAAR for the loan repayment funds.

MS. EASLEY: Second.

DR. DOOLITTLE: Question. This is dependent on the LB&A making that happen?

MS. CULPEPPER: Yes, yes.

DR. DOOLITTLE: With that discussion, without objection, the motion passes.

MS. EASLEY: Will all the 24 positions -- will there be 24 practitioners all together?

MS. CULPEPPER: We're thinking, there are 14 that were funded in the first round. Of those, more than half of those were directly our positions.

We're thinking that this might fund up to another seven to nine, depending on

Department of Labor and Workforce Development
Alaska Vocational Technical Center Component

Subject of RPL: AVTEC Pell Grant Increase and Federal Direct Loan Program	**ADN/RPL #:** 07-1-1018
Amount requested: $1,006,800	**Appropriation Authority:** Sec 1 Ch 41 SLA 2010 Pg 30 Ln 29
Funding source: Federal Receipts – FY2011 Operating	**Statutory Authority:** AS 44.31.020 (7)

PURPOSE

The Department of Labor and Workforce Development, Alaska Vocational Technical Center (AVTEC) component requests $1,006,800 of additional federal grants line authorization to accommodate an increase in federal Pell Grant awards to students and the William D. Ford Federal Direct Loan Program for new federal student loans starting July 1, 2010. Approval of this request would increase the total FY2011 federal authorization for AVTEC from $493,200 to $1,500,000.

Students apply for Federal Title IV Pell Grants through the Free Application for Federal Student Aid (FAFSA) process. The students are the actual recipients of the federal funds, with AVTEC being a pass-through agency. The US Department of Education (DOE) has increased the maximum Federal Title IV Pell Grant award to post-secondary students in FY2011 by $300 per award. Also, starting in FY2010, DOE has started authorizing a second Pell Grant award for students who received a Pell Grant award earlier in the year, this will occur again in FY2011 and future fiscal years. Pell Grant awards for AVTEC students in FY2011 are expected to total approximately $600,000.

With enactment of the Health Care and Education Reconciliation Act (HCERA) of 2010, all Title IV eligible post-secondary institutions must use the William D. Ford Federal Direct Loan Program (direct loans) for new federal student loans starting July 1, 2010. Similar to the Pell Grant awards, students will apply through the FAFSA process and will be the actual recipients of the federal funds, with AVTEC being a pass-through agency. After July 1, 2010, AVTEC will certify the direct loans online and disburse the funds for AVTEC students. At this time it is anticipated that the direct loans for AVTEC students in FY2011 will total approximately $700,000-$800,000.

An additional $100,000 in federal grants line authority has been built into this request due to uncertainty as to what the actual volume of the direct loans and Pell Grant awards will be.

PREVIOUS LEGISLATIVE CONSIDERATION

In FY2010, AVTEC requested and was granted an additional $18,200 in federal authorization for the changes to the Pell Grants awards (RPL#: 07-0-1149). There have been no previous department requests or legislative appropriations for the direct loans to run through AVTEC.

Legislative Fiscal Analyst Comment: **An FY10 RPL request for $18,200 for the same purpose was requested (and approved) at the June 25, 2010 LB&A Committee meeting. At that time, the LB&A Committee was alerted that the Department would be submitting another RPL request for FY11. The Committee may receive an FY11 RPL request for Pell Grant funding from the University once funding sources (i.e., federal receipts versus ARRA funding) become clearer.**

TIMING ISSUES

The budgeted federal authorization for Pell Grant awards was sufficient prior to FY2010, when DOE first issued a second round of Pell Grant awards. The issuance of second Pell Grant awards will continue into the future with no known sunset date. The effective date for the direct loans program is

July 1, 2010. AVTEC will be responsible for certifying and disbursing direct loans to students. These changes cannot be absorbed within the existing federal authorization.

If AVTEC does not receive the increased authorization the funds available for future training activities will be reduced. There may also be an issue relating to not disbursing the Pell Grant awards and direct loans which could jeopardize AVTEC's qualification as a Title IV funding institution. Losing Title IV Pell Grant award authorization and direct loans for AVTEC students could reduce the number of Alaskans seeking vocational and technical training at AVTEC because of financial limitations.

Although federal regulations regarding the second Pell Grant award were finalized on October 29, 2009, the actual federal authorization shortfall was not known in time to be incorporated in the FY2011 budget. Training for AVTEC staff on the changes was not received until April and May 2010. HCERA was not signed until March 30, 2010 and on April 2, 2010 AVTEC received a letter from DOE providing a high level description of its provisions.

BUDGETARY ISSUES

Providing Federal Title IV Pell Grant awards and direct loans is aligned with AVTEC's mission to provide training to prepare state residents for jobs that are Alaska's future. Having the opportunity to receive Pell Grant awards and/or direct loans allows students to pay for much of their training costs.

Since DOE will reimburse AVTEC for all Pell Grant awards, the federal authorization to receive and disburse these funds will not increase AVTEC's operational costs. AVTEC is a pass-through agency from DOE to post-secondary students.

The Pell Grant award and direct loan changes continue into the foreseeable future. Therefore, the department will submit a related FY2012 federal grants line authorization budget request for AVTEC.

Agency Contact and Telephone: Guy Bell, 465-2702

OMB Approved:

To obtain the discharge, the recipient (or his or her representative) is required to provide the Department:

A written statement from his or her commanding or personnel officer certifying that the recipient is on active duty status in the U.S. Armed Forces, the date on which that service began, and the date the service is expected to end; and a copy of his or her official military orders and military identification.

The Department would notify a TEACH Grant recipient of the decision reached on his or her request for a partial or full discharge of the teaching service obligation. The grant recipient is responsible for fulfilling any teaching service obligation that is not discharged.

We estimate that the final regulations will increase burden for institutions in OMB Control Number 1845–0083. The Department will submit an 83–C incorporating the changes after the final regulations have published.

Federal Pell Grant Program

Two Federal Pell Grants in an Award Year

Section 690.67(a)—Student Eligibility for a Second Scheduled Award

The final regulations amend § 690.67(a) to provide that a student is eligible for a second Scheduled Award if the student is enrolled for credit or clock hours attributable to the student's second academic year in the award year, and is enrolled as at least a half-time student in a program leading to a bachelor's or associate degree or other recognized educational credential (such as a postsecondary certificate or diploma), except as provided for students with intellectual disabilities. To the extent that the institution will be reporting these second Scheduled Award Pell disbursements via the Common Origination and Delivery (COD) system, there will be some additional burden for institutions.

We estimate that the regulations will increase burden for institutions by 47,432 hours in OMB Control Number 1845–NEW5.

Section 690.67(b)—Transfer Students

The final regulations in § 690.67(b) provide that an institution determine the credit or clock hours that a transfer student has earned at a prior institution during the award year based on the Federal Pell Grant disbursements that the student received at the prior institution during the award year in relation to the student's Scheduled Award at that prior institution. The credit or clock hours that the student would be considered to have earned would be in the same proportion to credit or clock hours in the current institution's academic year as the disbursements that the student has received at the prior institution in the award year are in proportion to the student's Scheduled Award at the prior institution.

To the extent that the institution will be reviewing the transfer records of these students and subsequently reporting second Scheduled Award Pell disbursements via the Common Origination and Delivery (COD) system, there will be some additional burden for institutions.

We estimate that the final regulations will increase burden for institutions by 14,400 hours in OMB Control Number 1845–NEW5.

Section 690.67(c)—Special Circumstances

The final regulations in § 690.67(c) provide that in a payment period where there is insufficient remaining eligibility from the first Scheduled Award to make full payment for the payment period, a financial aid administrator may waive the requirement that a student complete the credit or clock hours in the student's first academic year in the award year due to circumstances beyond the student's control. The financial aid administrator is required to make and document the determination on an individual basis.

To the extent that the institution will be documenting these special circumstances and subsequently awarding second Pell grants, the institutions will be reporting the second Pell disbursements via the Common Origination and Delivery (COD) system, there will be some additional burden for institutions.

Section 690.67(d)—Nonapplicable Credit or Clock Hours

The final regulation in § 690.97(d) states that, in determining a student's eligibility for a second Scheduled Award in an award year, an institution may not use credit or clock hours that the student received based on Advanced Placement (AP) programs, International Baccalaureate (IB) programs, testing out, life experience, or similar competency measures.

To the extent that institutions will be making determinations about the applicability of AP, IB, or other non-applicable courses, institutions will subsequently award second Pell grants and thereafter report Pell disbursements via the Common Origination and Delivery (COD) system, thus there will be some additional reporting burden for institutions.

We estimate that the final regulations will increase burden for institutions by 2,032 hours in OMB Control Number 1845–NEW5.

Section 690.64—Payment Period in Two Award Years

The final regulation in § 690.64 states that, if a student is enrolled in a crossover payment period as a half-time or less-than-half-time student, the current requirements generally apply.

If a student is enrolled as a three-quarter-time or full-time student, an institution must consider the payment period to be in the award year in which the student would receive the greater payment for the payment period based on the information available at the time that the student's Federal Pell Grant is initially calculated. If the institution subsequently receives information that the student would receive a greater payment for the payment period by reassigning the payment to the other award year, the institution is required to reassign the payment to the award year providing the greater payment within specified time frames.

A student may request that the institution place the payment period in the award year that can be expected to result in the student receiving a greater amount of Federal Pell Grants over the two award years in which the payment period is scheduled to occur. If the student makes that request, the institution must assign the payment period to that award year.

To the extent that the institution will be reviewing enrollment status in each of the two award years and making determinations about which award year must be used and subsequently reporting these second Scheduled Award Pell disbursements via the Common Origination and Delivery (COD) system, there will be some additional burden for institutions.

We estimate that the final regulations will increase burden for institutions by 33,881 hours in OMB Control Number 1845–NEW5.

Section 690.63(h)—Payment From Two Scheduled Awards

Under the final regulations in § 690.63(h), if a student is eligible for the remaining portion of a first Scheduled Award in an award year and for a payment from the second Scheduled Award, the student's payment would be calculated using the annual award for his or her enrollment status for the payment period. The student's payment would be the remaining amount of the first Scheduled Award being completed plus an amount from the second Scheduled Award in

the award year up to the total amount of the payment for the payment period.

We estimate that the final regulations will increase burden for institutions by 8,471 hours in OMB Control Number 1845–NEW5.

Part 692 Leveraging Educational Assistance Partnership Program

Section 692.21(k)—Notification to Students of LEAP Grant Funding Sources

The final regulations require that the State program notify eligible students that grants under the LEAP Grant Program are (1) LEAP Grants and (2) funded by the Federal Government, the State, and, where applicable, other contributing partners.

The implementation of the final regulations for the changes to LEAP and the introduction of the GAP program will increase burden to States. We estimate that the burden in these final regulations will be associated with the application and performance report forms under development. These forms will be developed after the final regulations are published to ensure that the forms comport with the finalized requirements. The new forms will be submitted to OMB for approval under OMB Control Number 1845–NEW7.

Section 692.100—Requirements a State Must Meet To Receive GAP Funds

The final regulations in § 692.100 describe the requirements that a State must meet to receive an allotment under this program including submitting an application on behalf of a partnership and serving as the primary administrative unit of the partnership. Under § 692.100(a)(6), a State must include in its application the steps it plans to take to ensure, to the extent practicable, that students who receive a LEAP Grant under GAP would persist to degree completion.

Under § 692.100(a)(8) a State GAP Program is required to notify eligible students that the grants they receive under GAP are LEAP Grants and that the grants are funded by the Federal Government, the State and where applicable, other contributing partners.

The implementation of the final regulations for the changes to LEAP and the introduction of the GAP program will increase burden to States. We estimate that the burden in these final regulations will be associated with the application and performance report forms under development. These forms will be developed after the final regulations are published to ensure that the forms comport with the finalized requirements. The new forms will be submitted to OMB for approval under OMB Control Number 1845–NEW7.

Section 692.101—Requirements That Must Be Met by a State Partnership

The final regulations in § 692.101(b)(2) provide that a degree-granting institution of higher education that is in a partnership under the GAP Program must recruit, admit, and provide institutional grant aid to participating eligible students as agreed to with the State agency.

The implementation of the final regulations for the changes to LEAP and the introduction of the GAP program will increase burden to States. We estimate that the burden in these final regulations will be associated with the application and performance report forms under development. These forms will be developed after the final regulations are published to ensure that the forms comport with the finalized requirements. The new forms will be submitted to OMB for approval under OMB Control Number 1845–NEW7.

Section 692.111—Purposes for Which a State May Use Its GAP Grant

The final regulations in § 692.111 provide that each State receiving an allotment shall annually notify potentially eligible students in grades 7 through 12 in the State, and their families, of their potential eligibility for student financial assistance, including a LEAP Grant under GAP, to attend a LEAP-participating institution of higher education.

The notice shall include information about early information and intervention, mentoring, or outreach programs available to the student. The notice shall provide a nonbinding estimate of the total amount of financial aid that an eligible student with a similar income level may expect to receive, including an estimate of the amount of a LEAP Grant under GAP and an estimate of the amount of grants, loans, and all other available types of aid from the major Federal and State financial aid programs. The final notice will also include any additional requirements that the State may require for receipt of a LEAP Grant under GAP.

The implementation of the final regulations for the changes to LEAP and the introduction of the GAP program will increase burden to States. We estimate that the burden in these final regulations will be associated with the application and performance report forms under development. These forms will be developed after the final regulations are published to ensure that the forms comport with the finalized requirements. The new forms will be submitted to OMB for approval under OMB Control Number 1845–NEW7.

Consistent with this discussion, the following chart describes the sections of the final regulations involving information collections, the information being collected, and the collections that the Department will submit to the Office of Management and Budget for approval and public comment under the Paperwork and Reduction Act.

Regulatory section	Information section	Collection
668.14(b)(31)	Providing that an institution that conducts a teach-out at a site of a closed institution may, under certain conditions, establish that site as an additional location (see sections 487(f) and 498 of the HEA).	OMB 1845–0022. There will be an increase in burden of 160 hours.
668.18	Establishing requirements under which an institution must readmit servicemembers to the same academic status they had when they last attended the institution (see section 484C of the HEA).	OMB 1845–NEW1. There will be a new collection. A separate 60-day **Federal Register** notice will be published to solicit comments. There will be an increase in burden of 1,513 hours.
668.23(d)(4)	Adds new requirements to include in the audited financial statement footnote the non-Federal and Federal revenue that was included in the 90/10 calculation.	OMB 1845–0038. There will be an increase in burden of 165 hours.
668.28	Establishing new requirements for determining how proprietary institutions calculate the amount and percent of revenue derived from sources other than Title IV, HEA program funds (see section 487(d) of the HEA).	OMB 1845–NEW2. There will be a new collection. A separate 60-day **Federal Register** notice will be published to solicit comments. There will be an increase in burden of 3,088 hours.

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF POSTSECONDARY EDUCATION

DCL: GEN-10-05
PELL-10-02

APR 2 2010

THE ASSISTANT SECRETARY

Subject: Enactment of the Student Aid Provisions of the Health Care and Education Reconciliation Act of 2010

Summary: This letter provides the higher education community with a high level description of two of the major Federal student aid provisions of the recently enacted Health Care and Education Reconciliation Act of 2010.

Dear Colleague:

As I am sure you are aware, on March 30, 2010, President Obama signed the Health Care and Education Reconciliation Act of 2010 (HCERA) (Public Law 111-152), that, among other things, makes significant changes to the Federal student aid programs authorized by Title IV of the Higher Education Act of 1965, as amended (the HEA). Over the next weeks and months we will be providing the financial aid community with details on those provisions. The purpose of this letter is to provide high level discussions on the provisions of the HCERA that impact the Federal Pell Grant Program and those that end the authority for lenders to make new loans under the Federal Family Education Loan (FFEL) Program.

Federal Pell Grant Program

The HCERA amends the HEA to provide for more stable and predictable funding for the Federal Pell Grant Program. It also modifies, beginning with the 2010-2011 Award Year, the calculation for determining an individual student's Pell Grant award. The HCERA increases the maximum Expected Family Contribution (EFC) for Pell Grant eligibility for the 2010-2011 Award Year to 5273. Note that the 2010-2011 Pell Grant Payment and Disbursement Schedules published on January 13, 2010, (see DCL P-10-01) established 4617 as the maximum EFC for Pell Grant eligibility. We expect to post to our IFAP Web Site revised 2010-2011 Pell Grant Payment and Disbursement Schedules sometime next week. Until then, institutions may wish to defer packaging students until the revised schedules are available.

Title IV Federal Student Loan Programs

The HCERA provides that, after June 30, 2010, no new student loans will be made under the Federal Family Education Loan (FFEL) Program. Therefore, beginning July 1, 2010, all new subsidized and unsubsidized Stafford Loans made to students, PLUS loans made to parents and to graduate/professional students, and consolidation loans made to borrowers, can only be made under the William D. Ford Federal Direct Loan (Direct Loan) Program. The Federal Perkins Loan Program is not affected by the HCERA.

It is important to note that if the first disbursement of a FFEL loan was made by the lender on or before June 30, 2010, the second and any subsequent disbursements of that loan, even if the subsequent disbursement(s) will be made after June 30, 2010, must be made by the FFEL lender. FFEL lenders that make a first disbursement are obligated to make the subsequent disbursement(s) as provided in the loan certification provided by the institution. This is a longstanding regulatory requirement. If, for example, an institution certifies a FFEL loan for a loan period of May 17, 2010 through August 15, 2010, and the FFEL lender makes the first disbursement of that loan prior to July 1, 2010, the FFEL lender must make the second disbursement at the mid-point of the loan period – on or about July 16, 2010 in this example. Similarly, if a FFEL lender makes the first disbursement of a loan for a borrower-based loan period that, for example, begins on June 1, 2010 and ends on December 31, 2010, it must make the second disbursement at the mid-point of the loan period – on or about August 31, 2010.

It would be prudent for institutions to confirm with those FFEL lenders who have made loans to their students in the past whether those lenders will make first disbursements for loans that the institution may certify for enrollment periods that begin prior to July 1, 2010 but may have a subsequent disbursement date(s) after June 30, 2010.

Institutions that are not currently participating in the Direct Loan Program and who have not begun making preparations to do so should contact the Department's Federal Student Aid (FSA) office as soon as possible in order to avoid disruption in the delivery of needed student loan funds to students and their families. Contacts should be directed to our School Relations Team at (800) 848-0978, or by e-mail at DLEnrollment_FSA@ed.gov.

Note: The HCERA makes special provisions for institutions located outside the United States to participate in the Direct Loan Program. These institutions should contact the Foreign Schools team at FSA.Foreign.Schools.Team@ed.gov or by calling (202) 377-3168, and attend, if possible, one of the training opportunities being offered in the coming months to assist foreign institutions in the transition to the Direct Loan Program.

Sincerely,

Daniel T. Madzelan
Delegated the Authority to Perform
the Functions and Duties of the
Assistant Secretary for
Postsecondary Education

University of Alaska Anchorage

Subject of RPL: Additional Federal Receipt Authority for University of Alaska (UA), Anchorage Campus	ADN/RPL #: 45-0-0034
Amount Requested: $1,300,000	Appropriation Authority: Sec. 1, Ch. 12, SLA 2009, Page 43, Line 8
Funding Source: Federal Receipts – Operating	Statutory Authority: AS 14.40.40

PURPOSE

The University of Alaska Anchorage (UAA) is requesting $1.3 million in additional federal receipt authority from $23.3 million to $24.6 million. The additional authority will enable UAA to record the additional federal revenue and federal expenditures in FY10.

As part of the FY10 budget submission process to the State, UA was requested to remove unrealizable non-general fund budget authority by reducing the federal receipts and university receipts budget authorities. UAA's federal receipts authority was reduced by $4.7 million. That reduction, along with the multiple appropriation structure in FY10, took away UA's flexibility to move receipt authority across appropriations. As a system, UA has not exceeded its federal receipt authority. UA's FY10 federal receipt authority is $131.6 million and actual federal receipts are $120.5 million; leaving an authorized federal receipt balance of $11.1 million.

Legislative Fiscal Analyst Comment: **This RPL is intended to avoid the ratification process. UAA has already spent the money in question, leaving the legislature with three choices:**

1. **Violate the Constitution by permitting money to leave the treasury without appropriation;**
2. **Ratify the overexpenditure during the FY12 budget cycle; or**
3. **Increase authorization via the RPL process.**

Based on the aims of simplicity, timeliness and full disclosure, Legislative Finance recommended the RPL route to the University. Although an RPL for a completed fiscal year is unusual, FY10 books remain open through August, and the RPL process appears to be the most efficient means to resolve the issue.

PREVIOUS LEGISLATIVE CONSIDERATION

This is a new request for FY2010 and was not considered by the Finance Committee during previous legislative sessions.

TIMING ISSUES

The University was aware that in FY10 federal receipt authority would be very close at UAA due to the increased Pell activity of almost $1.0 million. Projections for federal grant activity indicated that existing authority levels would be sufficient. However, the actual spend rate on federal projects exceeded historical averages, therefore causing the need for additional authority. Grants awards are typically for multiple years, with multiple factors that can affect the spend rates.

In recognition of the lack of flexibility under the multiple appropriation structure, as part of the FY11 budget, the legislature moved funding authority equal to 3 percent of university receipts and federal receipts from each appropriation into a system-wide appropriation for distribution by the Board of Regents, as necessary. This change should help address any receipt authority issues that may occur in FY11.

Agency Contact: Michelle Rizk, (907) 450-8187
Legislative Finance Contact: Danith Watts, (907) 465-5435

BUDGETARY ISSUES

All of the federal projects are directly aligned with the University of Alaska's long term plans and mission for the University of Alaska Anchorage: "The mission of the University of Alaska Anchorage is to discover and disseminate knowledge through teaching, research, engagement, and creative expression."

No State general funds will be used, nor is any match required. This request adds an additional $1.3 million to the University's existing federal authority contained within Sec. 1, Ch. 12, SLA 2009.

Agency Contact: Michelle Rizk, (907) 450-8187
Legislative Finance Contact: Danith Watts, (907) 465-5435

University of Alaska

Subject of RPL Combined request for ARRA Funding	ADN/RPL #: 45-1-1100
Amount Requested: $2,623,211	Appropriation Authority: Sec. 4, Ch. 17, SLA 2009, Page 9, Lines 12-16
Funding Source: Federal Stimulus: ARRA 2009 – FY2011 Capital	Statutory Authority: AS 14.40.40

PURPOSE
The requested federal stimulus receipt authority will allow the University of Alaska to accept the following awards:

UAF-NSF: MRI-R2: Acquisition of a Configurable Supercomputer for Arctic Research in the amount of $1,481,252 for the budget period 08/01/2010 through 07/31/2013, award OCI-0960175.

UAF-NIH: Novel, subtype selective potentiators of nicotinic acetycholine receptors in the amount of $325,757 for the budget period of 9/01/2010 through 8/31/2011, year two of award 5R01NS066059-02.

UAA-NIH: Location-Based Monitoring and Intervention for Alcohol Use Disorders in the amount of $812,278 for the budget period 9/01/2010 through 8/31/2011, award 5RC2AA019422-02.

UAF-USGS: Novel ANSS Alaska Seismic Station Upgrade in the amount of $3,924 for the budget period of 07/01/2010 through 9/15/2011, award G09AC00496-amended.

PREVIOUS LEGISLATIVE CONSIDERATION
The projects were not previously considered. They are new or amended multi-year federal awards received after February 25, 2010 and have not been requested as part of the University's budget.

TIMING ISSUES
On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009, which authorized short-term federal spending, designed to stimulate the American economy. Federal stimulus receipt authority was not included in the FY2010 budget because ARRA funding was not available for application until February 17, 2009.

BUDGETARY ISSUES
These projects are directly aligned with the University of Alaska's long term plans and mission for the University of Alaska Fairbanks: "The University of Alaska Fairbanks, the nation's northernmost Land, Sea and Space Grant University and international research center, advances and disseminates knowledge through teaching, research and public service with an emphasis on Alaska, the circumpolar North and their diverse peoples. UAF – America's Arctic University – promotes academic excellence, student success and lifelong learning" and the University of Alaska Anchorage: "The mission of the University of Alaska Anchorage

is to discover and disseminate knowledge through teaching, research, engagement, and creative expression,"

No State General Funds will be used, nor is any match required. The federal stimulus funds will be expended during the period FY2011 through FY2014. This request adds an additional $2,623,211 to the University's existing federal economic stimulus authority for competitive, discretionary, and incentive grants capital project appropriation contained within Sec. 4, Ch. 17, SLA 2009.

A copy of the award documents are attached.

Legislative Fiscal Analyst Comment: **This RPL requests approval to spend additional stimulus funds received through a competitive process; no stimulus funds will be diverted from other Alaska projects and no general funds are required. As of June 25, 2010, the University of Alaska has been awarded and the Legislative Budget & Audit Committee has approved 66 grants totaling $189.4 million in stimulus funds for capital, plus $5.2 million for operating related to Federal College Work Study and Federal Pell Grants. There are also 37 proposals pending (totaling $61.5 million) for federal ARRA funds.**

ARRA Stimulus Funds

Subject: Award Id : 0960175, PI: Newby
From: lfuqua@nsf.gov
Date: 24 Jul 2010 08:13:27 -0400
To: fygrcon@uaf.edu
CC: dgaawd@nsf.gov

Award Date: July 24, 2010
Award No. OCI-0960175
Proposal No. OCI-0960175

Ms. Maggie Griscavage
Director, Office of Grants and Contracts
University of Alaska Fairbanks
Administrative Services Center
3295 College Road
Room 109
Fairbanks, AK 99709-3705

Dear Ms. Griscavage:

The National Science Foundation hereby awards a grant of $1,481,252 to University of Alaska Fairbanks Administrative Services Center for support of the project described in the proposal referenced above as modified by revised budget dated April 19, 2010 and NSF.

This project, entitled "MRI-R2: Acquisition of a Configurable Supercomputer for Arctic Research," is under the direction of Gregory B. Newby, Matthew S. Olson, T. Scott Rupp, Vikas S. Sonwalkar.

This award is effective August 1 , 2010 and expires July 31, 2013.

This award is funded under the American Recovery and Reinvestment Act of 2009 (ARRA) (Public Law 111-5) and is subject to the ARRA Terms and Conditions, dated May, 2009, available on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=arra0509.

The awardee is advised that key award information necessary for use in preparation of the 1512 Quarterly Recipient Report (See Article 2) can be found on Research.gov, using the Research Spending and Results Service. From the main page of Research.gov, click the Research Spending and Results link to navigate to the search page. Type in the applicable Award ID Number into the Awardee or Award Information box and click Search. A help sheet (http://www.nsf.gov/bfa/dias/policy/arra/helpsheet.pdf) that illustrates the location of many of the requisite responses is available for use by the recipient community also is available.

Detailed guidance regarding ARRA Recipient Reporting policies, procedures, and deadlines is available on the following websites:

http://www.recovery.gov; and
http://www.federalreporting.gov.

NSF-specific ARRA reporting guidance and tools are available on our Recovery Act website (http://www.nsf.gov/recovery/reporting.jsp).

This grant is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is also subject to Research Terms and Conditions (RTC, dated July 2008) and the NSF RTC Agency-Specific Requirements

(dated January 2010) are available at http://www.nsf.gov/awards/managing/rtc.jsp. This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase V Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots..

This award is subject to the provisions of NSF 09-561, Major Research Instrumentation Program (MRI-R2) Recovery and Reinvestment.

The grantee may allow access to the instrumentation to non-Federal outside organizations for a fee, if excess time is available on the equipment. However, the grantee shall not use this equipment to provide services to such organizations for a fee that is less than private companies charge for equivalent services. In addition, the users as outlined in the proposal must have the highest priority when allocating instrument access time.

The attached budget indicates the amounts, by categories, on which NSF has based its support.

Please view the project reporting requirements for this award at the following web address [https://www.fastlane.nsf.gov/researchadmin/prsLoginHome.do?awdID=0960175].

The cognizant NSF program official for this grant is Robert L. Pennington, (703) 292-8970.
The cognizant NSF grants official contact is Kim M. Bub, (703) 292-4331.

Sincerely,

Larry Fuqua
Grants and Agreements Officer

CFDA No. 47.082
fygrcon@uaf.edu

OCI-0960175 000
SUMMARY PROPOSAL BUDGET

Person MOS	cal	acad	sumr	Funds granted By NSF
A. (12.00) Total Senior personnel	0.00	0.00	0.00	$0
B. Other Personnel				
1. (0.00) Post Doctoral associates	0.00	0.00	0.00	$0
2. (8.00) Other professionals	32.00	0.00	0.00	$264,024
3. (0.00) Graduate students				$0
4. (0.00) Secretarial-clerical				$0
5. (0.00) Undergraduate students				$0
6. (0.00) Other				$0
Total salaries and wages (A+B)				$264,024
C. Fringe benefits (if charged as direct cost)				$126,605
Total salaries wages and fringes (A+B+C)				$390,629
D. Total permanent equipment				$935,000
E. Travel				
1. Domestic				$0
2. Foreign				$0
F. Total participant support costs				$0
G. Other direct costs				
1. Materials and supplies				$18,240

2. Publication costs/page charges	$0
3. Consultant services	$0
4. Computer (ADPE) services	$0
5. Subcontracts	$0
6. Other	$3,945
Total other direct costs	$22,185
H. Total direct costs (A through G)	$1,347,814
I. Total indirect costs	$133,438
J. Total direct and indirect costs (H+I)	$1,481,252
K. Residual funds / Small business fee	
1. Residual funds (if for further support of current projects AAG I.D.2 and I.D.3)	$0
2. Small business fee	$0
L. Amount of this request (J) or (J-K1+K2)	$1,481,252
M. Cost sharing	$0

MRI-R^2: Acquisition of a Configurable Supercomputer for Arctic Research: Project Summary

We propose to provide a broadly accessible instrument – a research supercomputer – for investigation of phenomena related to the Arctic. The instrument will be utilized by researchers from a number of domains, including geophysical science, mathematics, biology, supercomputing research, and engineering. The instrument will be located at America's Arctic University, the University of Alaska Fairbanks (UAF). It will be operated primarily by UAF's Arctic Region Supercomputing Center, which will bring years of experience operating supercomputers for the US Department of Defense to focus on the academic research needs of UAF. The instrument will be purpose-designed to support multiple modalities of use. In addition to batch jobs for parallel processing, the instrument will enable long-running serial applications, interactive computing, visualization, and data-intensive computing. High capacity hierarchical storage will maintain the extremely large datasets required by many researchers. The management and sustainability plans provide for effective and equitable sharing of the instrument, as well as upgrades and continued operation into the future.

Broader impacts of this proposal will derive mainly from the scientific work that the instrument will enable. There is a significant community of researchers at UAF that utilizes computational methods for discovery, yet without a shared large-scale computational instrument with a mission to support them. The proposed instrument will provide for qualitative and quantitative improvements to their productivity. Qualitatively, as a result of decreased time to solution enabled by the supercomputer, scientists will be able to expand the realm of their models to encompass more phenomena of interest, potentially incorporating work from other domains. Quantitatively, increased computational and storage capacity will provide for increased verisimilitude, through higher resolution, shorter time steps, and incorporation of more complicated processes. The importance of the Arctic for understanding global climate change and its many influences is a driving force in bringing together these researchers, to address common interests from different angles, to share results widely through publications and presentations, and to integrate research and instrument use in the classroom. As a minority serving institution in an EPSCoR state, UAF will leverage the instrument to provide opportunities for involvement of minorities and underrepresented groups in teaching, research and outreach.

Intellectual merit of the proposal is derived from the many scientific areas that will benefit from the instrument. Advances are envisioned in geophysical phenomena, including increased understanding of high-latitudes roles for climate change, the atmospheric sciences, the oceans, ice sheets, and sea ice. In biology and ecology, advances are envisioned in population genetics, marine ecosystems, and Boreal ecosystems. In the human sphere, advances are anticipated in human-ecosystem interaction and the influence on human infrastructure, on integration of datasets for native language study, and understanding of environmental influences on air and water quality. Engineering concerns, ranging from analysis of next-generation supercomputers to radio wave propagation, will see rapid progress. Supercomputing research on system design and performance, mathematical modeling of complex systems, and other meta-research will be directed at the instrument and its uses. The instrument will enable scientific progress on many fronts that are now hampered by the lack of large-scale modern computational resources with a focus on UAF's diverse needs. Intellectual merit will also come from the supercomputing research enabled by the instrument: best practices to design, manage, allocate, maintain and enhance a large computational and storage resource, for a diverse set of campus users. For the scientific areas, research will be both normative and transformative. Transformative results are part of the instrument design proposal, by providing a rich and useful resource for collaboration, not just for individual research projects. Through a democratic resource allocation process, a trans-disciplinary user advocacy group and regular scientific symposia, the existing intellectual environment at UAF (and its collaborators) will become broader, deeper, and with enhanced understandings of shared research themes and methods.

MRI-R^2: Acquisition of a Configurable Supercomputer for Arctic Research: Budget Justification

Updated April 19 upon request by the NSF.

1. Senior personnel and fringe benefits

A. Arctic Region Supercomputing Center (ARSC)

Systems programmer/analyst to take overall leadership in the instrument's management, implementation and daily operation, storage, security and other aspects, at 57.6% time in year 1, 54.4% in year 2. Benefits rate of 44.1% and leave rate of 20.2%.

User consultant, to provide software installation and maintenance, guide implementation of user group requests, and determine policies and schedule for downtime and upgrades, at 54.4% time in years 1 & 2. Benefits rate of 57%, leave rate of 21.3%.

Accounts and allocations specialist to allocate, monitor and maintain usernames and policies, provide basic end-user training, report on instrument utilization, and insure fairness in access policies, at 1/8 time in years 1-3. Benefits rate of 44.1% and leave rate of 20.2%.

A 3% inflation rate is included for all ARSC and IAB personnel.

B. Institute of Arctic Biology (IAB)

Information services professional grade II to provide systems programming, maintenance, software installation, porting, performance tuning and related activities with non-exclusive focus on bioinformatics users and their applications, at 30% time in years 1 & 2. Benefits rate of 44.1% and leave rate of 20.2%.

2. Commodities

Funding for computer supplies related to instrument management, maintenance and usability, also items purchased separately from the instrument equipment. To include software and related support contracts (OS software, compilers, application software, libraries, debuggers), cables, cabinets and isobases (earthquake mitigation), keyboard-video-mouse units, and replacement parts such as disk drives and memory not covered under warranty or support contract.

Budget category 4014 includes general computer supplies. $10,000 for year 1, $8,240 for year 2. Software is budgeted under contractual services, and includes compilers, libraries, security software, management software, etc. not included with the instrument's purchase price. $2,000 for years 1 & 2.

3. Equipment

Supercomputer: all components of the major research instrument as described in the project description and response to the NSF's request for clarification. Exact specification will be subject to UAF's procurement policies, which may include an open bid process. Specifications will also be subject to the best available price/performance of equipment at the time of procurement. Our target for year 1: $525,000 for base system with approximately 1024 processor cores, InfiniBand interconnect, 2-3GB memory/core, and shared parallel filesystem. Utility servers for login nodes, management, data movement, and node provisioning. Three to six large memory nodes (128GB or greater) for large memory and SMP jobs. For year 2: $210,000 to expand base system with approximately 512 additional next-generation processor cores, also additional utility servers featuring GPUs as application accelerators. Pricing is to include delivery, 3 years warranty and support, and basic software such as the operating system, compilers, a batch scheduler, and management software.

Storage subsystem: For Year 1 only, a shared high-performance filesystem to integrate with hierarchical storage (already available at ARSC) and cluster-based parallel storage. Suitable for data intensive computing with multi-terabyte datasets (proposal sections A, J and N). $200,000 is budgeted, and expected to yield at least 50TB of very high performance shared disk, network-attached to the cluster and to selected external hosts (such as user desktop workstations). Depending on pricing and available configurations, the $200,000 may be applied to expand the storage capabilities of the Supercomputer listed above, or it may be a separate purchase.

In preparation for this proposal, as recommended by the RFP, ARSC obtained quotes for budgetary planning from Dell, Supermicro, Sun, Panasas, Penguin Computing and other vendors. More recently, ARSC was engaged in procurement of another smaller, but otherwise similar, instrument, and received pricing details from multiple vendors. For pre-release processors and other system elements, exact pricing and specifications are approximate. UAF will engage in a formal procurement process to obtain the most competitive price/performance ratio to meet or exceed this proposal's requirements.

4. Indirect costs

The UAF negotiated federal rate for ARSC is 29%. The UAF negotiated federal rate for the IAB is 45.1%. Indirect costs apply to all budgeted expenses other than equipment.

Notice of Award

RESEARCH **Issue Date:** 08/03/2010

Department of Health and Human Services
National Institutes of Health
NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE

ARRA Stimulus Funds

THIS AWARD IS ISSUED UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AND IS SUBJECT TO SPECIAL HHS TERMS AND CONDITIONS AS REFERENCED IN SECTION III

Grant Number: 5R01NS066059-02

Principal Investigator(s):
Marvin Kenneth Schulte, PHD

Project Title: Novel, subtype selective potentiators of nicotinic acetycholine receptors

AIAH SANKOH
UNIVERSITY OF ALASKA FAIRBANKS
GRANTS & CONTRACTS ADMINISTRATION
109 ADMIN SERVICES CENTER
P.O. BOX 757880
FAIRBANKS, AK 997757270

Award e-mailed to: fygrcon@uaf.edu

Budget Period: 09/01/2010 – 08/31/2011
Project Period: 09/15/2009 – 08/31/2011

Dear Business Official:

The National Institutes of Health hereby awards a grant in the amount of $325,757 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to UNIVERSITY OF ALASKA FAIRBANKS in support of the above referenced project. This award is pursuant to the authority of 42 USC 241 42 CFR 52 and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Acceptance of this award including the "Terms and Conditions" is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

Each publication, press release or other document that cites results from NIH grant-supported research must include an acknowledgment of NIH grant support and disclaimer such as "The project described was supported by Award Number R01NS066059 from the National Institute Of Neurological Disorders And Stroke. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute Of Neurological Disorders And Stroke or the National Institutes of Health."

Award recipients are required to comply with the NIH Public Access Policy. This includes submission to PubMed Central (PMC), upon acceptance for publication, an electronic version of a final peer-reviewed, manuscript resulting from research supported in whole or in part, with direct costs from National Institutes of Health. The author's final peer-reviewed manuscript is defined as the final version accepted for journal publication, and includes all modifications from the publishing peer review process. For additional information, please visit http://publicaccess.nih.gov/.

Award recipients must promote objectivity in research by establishing standards to ensure that the design, conduct and reporting of research funded under NIH-funded awards are not biased by a conflicting financial interest of an Investigator. Investigator is defined as the Principal Investigator and any other person who is responsible for the design, conduct, or reporting of NIH-funded research or proposed research, including the Investigator's spouse and dependent children. Awardees must have a written administrative process to identify and manage financial conflict of interest and must inform Investigators of the conflict of interest policy and of the Investigators' responsibilities. Prior to expenditure of these awarded funds, the Awardee must report to the NIH Awarding Component the existence of a conflicting interest and within 60 days of any new conflicting interests identified after the initial report. Awardees must comply with these and all other aspects of 42 CFR Part 50, Subpart F. These requirements also apply to subgrantees, contractors,

or collaborators engaged by the Awardee under this award. The NIH website http://grants.nih.gov/grants/policy/coi/index.htm provides additional information.

ARRA Stimulus Funds

If you have any questions about this award, please contact the individual(s) referenced in Section IV.

Sincerely yours,

James Washington
Grants Management Officer
NATIONAL INSTITUTE OF NEUROLOGICAL DISORDERS AND STROKE

Additional information follows

SECTION I – AWARD DATA – 5R01NS066059-02

ARRA Stimulus Funds

Award Calculation (U.S. Dollars)

Federal Direct Costs	$259,469
Federal F&A Costs	$66,288
Approved Budget	$325,757
Federal Share	$325,757
TOTAL FEDERAL AWARD AMOUNT	$325,757

AMOUNT OF THIS ACTION (FEDERAL SHARE) $325,757

SUMMARY TOTALS FOR ALL YEARS		
YR	THIS AWARD	CUMULATIVE TOTALS
2	$325,757	$325,757

Fiscal Information:

CFDA Number:	93.701
EIN:	1926000147A1
Document Number:	RNS066059Z
Fiscal Year:	2010

IC	CAN	2010
NS	8484915	$325,757

NIH Administrative Data:
PCC: SILBESSC / OC: 414E / **Processed**: WASHINGTOJ 07/29/2010

SECTION II – PAYMENT/HOTLINE INFORMATION – 5R01NS066059-02

For payment and HHS Office of Inspector General Hotline information, see the NIH Home Page at http://grants.nih.gov/grants/policy/awardconditions.htm

SECTION III – TERMS AND CONDITIONS – 5R01NS066059-02

This award is based on the application submitted to, and as approved by, NIH on the above-titled project and is subject to the terms and conditions incorporated either directly or by reference in the following:

a. The grant program legislation and program regulation cited in this Notice of Award.
b. Conditions on activities and expenditure of funds in other statutory requirements, such as those included in appropriations acts.
c. 45 CFR Part 74 or 45 CFR Part 92 as applicable.
d. The NIH Grants Policy Statement, including addenda in effect as of the beginning date of the budget period.
e. This award notice, INCLUDING THE TERMS AND CONDITIONS CITED BELOW.

(See NIH Home Page at 'http://grants.nih.gov/grants/policy/awardconditions.htm' for certain references cited above.)

ARRA TERM OF AWARD: This award is subject to the HHS-Approved Standard Terms and Conditions for the American Recovery and Reinvestment Act of 2009. Approved text for NIH awards can be found at http://grants.nih.gov/grants/policy/NIH_HHS_ARRA_Award_Terms.pdf. Recipients should pay particular attention to the special quarterly reporting requirements required by Section 1512 of the Recovery Act as specified in Term #2.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase V Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

Carry over of an unobligated balance into the next budget period requires Grants Management Officer prior approval.

In accordance with P.L. 110-161, compliance with the NIH Public Access Policy is now mandatory. For more information, see NOT-OD-08-033 and the Public Access website: http://publicaccess.nih.gov/.

This award represents the final year of the competitive segment for this grant. Therefore, see the NIH Grants Policy Statement (12/1/2003 version) for closeout requirements at: http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part8.htm#_Toc54600151.

A final Financial Status Report (FSR) (SF 269) must be submitted through the eRA Commons (Commons) within 90 days of the expiration date; see NIH Guide Notice NOT-OD-07-078 for additional information on this electronic submission requirement. The final FSR must indicate the exact balance of unobligated funds and may not reflect any unliquidated obligations. There must be no discrepancies between the final FSR and the Payment Management System's (PMS) Federal Cash Transaction Report (SF-272).

Furthermore, unless an application for competitive renewal is submitted, additional grant closeout documents consisting of a Final Invention Statement and Certification form (HHS 568), (not applicable to training, construction, conference or cancer education grants) and a final progress report must also be submitted within 90 days of the expiration date.

NIH also strongly encourages electronic submission of the final progress report and the final invention statement through the Closeout feature in the Commons. If the final progress report and final invention statement are not submitted electronically, copies of the HHS 568 form may be downloaded at: http://grants.nih.gov/grants/forms.htm.

Submissions of the final progress report and HHS 568 may be e-mailed as PDF attachments to the NIH Central Closeout Center at: deascentralized@od.nih.gov

Paper submissions of the final progress report and the HHS 568 may be faxed to the NIH Central Closeout Center at 301-480-2304 or mailed to the NIH Central Closeout Center at the following address:

NIH/OD/OER/DEAS
Central Closeout Center
6705 Rockledge Drive, Room 2207
Bethesda, MD 20892-7987 (for regular or U.S. Postal Service Express mail)
Bethesda, MD 20817 (for other courier/express mail delivery only)

The final progress report should include, at a minimum, a summary of progress toward the achievement of the originally stated aims, a list of significant results (positive and/or negative), a list of publications and the grant number. If human subjects were included in the research, the final progress report should also address the following:

- Report on the inclusion of gender and minority study subjects (using the gender and minority Inclusion Enrollment Form as provided in the PHS 2590 and available at http://grants.nih.gov/grants/forms.htm).
- Where appropriate, indicate whether children were involved in the study or how the study was relevant for conditions affecting children (see "Public Policy Requirements and Objectives-Requirements for Inclusiveness in Research Design-Inclusion of Children as Subjects in Clinical Research" in the PHS 398 at URL http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part5.htm#_Toc54600090)
- Describe any data, research materials (such as cell lines, DNA probes, animal models), protocols, software, or other information resulting from the research that is available to be shared with other investigators and how it may be accessed.

Note, if this is the final year of a competitive segment due to the transfer of the grant to another institution, then not all the requirements stated above are applicable. Specifically a Final Progress Report is not required. However, a final FSR is required and should be submitted electronically as noted above. In addition, if not already submitted, the Final Invention Statement is required and should be sent directly the assigned Grants Management Specialist.

Treatment of Program Income:
Additional Costs

SECTION IV – NS Special Terms and Conditions – 5R01NS066059-02

ARRA Special Quarterly Reporting Requirements:

The recipient must submit quarterly reports via FederalReporting.gov (http://www.federalreporting.gov). These quarterly reports must be signed by an approved signing official from the grantee administrative/business office.

CALENDAR quarters are as follows (regardless of budget start date):

ARRA activity in JAN/FEB/MAR must be reported no later than April 10.
ARRA activity in APR/MAY/JUN must be reported no later than July 10.
ARRA activity in JUL/AUG/SEP must be reported no later than Oct 10.
ARRA activity in OCT/NOV/DEC must be reported no later than Jan 10.

For example: An ARRA grant with a budget period starting 6/1/2010 will have to submit quarterly reports on or before 7/10/2010 (1st quarter report); 10/10/2010 (2nd quarter report); 1/10/2011 (3rd quarter report); and 4/10/2011 (4th quarter report.)

The necessary contents of the ARRA quarterly report can be found under the terms and conditions listed at http://grants.nih.gov/grants/policy/NIH_HHS_ARRA_Award_Terms.pdf

These funds should not be used to pay the salary of an individual at a rate in excess of Executive Level I ($199,700 in Fiscal Year 2010) per year.

Where consortia are included, they are to be established and administered as described in the NIH Grants Policy Statement (NIH GPS). The referenced section of the NIH Grants Policy Statement is available at: http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part12.htm.

In accordance with the Notice: NOT-OD-02-017 entitled, ?GRADUATE STUDENT COMPENSATION? published on December 10, 2001, in the NIH Guide for Grants and Contracts, total direct costs (salary, fringe benefits and tuition remission) for graduate students are provided at a level not to exceed the NIH maximum allowable amount (zero level of the Ruth L. Kirschstein National Research Service Award stipend in effect at the time of the competing award). Support recommended for future years has been adjusted accordingly, if applicable. The full guide Notice describing the level of compensation allowed for a graduate student can be found at: (See: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-047.html).

Where model sharing is applicable, the grantee is to adhere to the NIH Policy on Sharing of Model Organisms For Biomedical Research issued May 7, 2004 (http://grants.nih.gov/grants/guide/notice-files/NOT-OD-04-042.html).

For additional information, you may access the NIH home page at http://www.nih.gov/ and the NINDS Home Page at http://www.ninds.nih.gov

STAFF CONTACTS

The Grants Management Specialist is responsible for the negotiation, award and administration of this project and for interpretation of Grants Administration policies and provisions. The Program Official is responsible for the scientific, programmatic and technical aspects of this project. These individuals work together in overall project administration. Prior approval requests (signed by an Authorized Organizational Representative) should be submitted in writing to the Grants Management Specialist. Requests may be made via e-mail.

Grants Management Specialist: Melissa R Copeland
Email: mh601f@nih.gov **Phone**: 301-496-7460 **Fax**: 301-451-5635

Program Official: Shai D Silberberg
Email: silberbs@ninds.nih.gov **Phone**: 301-496-1917

SPREADSHEET SUMMARY

Facilities and Administrative Costs	*Year 2*
F&A Cost Rate 1	45.1%
F&A Cost Base 1	$146,981
F&A Costs 1	$66,288

UAF OSP Office of Sponsored Programs

PROPOSAL ROUTING FORM (FORM OSP-001)

THIS BOX IS FOR OSP USE ONLY

In: 5/1/09 Out: 5/4/09 Rush ☐

Submitted: 5/4/09 In-Hand ☐

To OGCA: _____ IRT ☐

Version FY2007 – Replaces All Previous Versions
Complete the Entire Form Per the Instructions
Minimum of five (5) business days for review

(1) The Basics

(a) **Proposal S0000** 11635

(b) Sponsor Due Date: _____

(c) Unit Due Date: _____

(d) Unit Proposal Number: IAB 2009-034rv

(e) Program Guidelines: ☐ Attached or URL: _____

(2) Project Background Information (a) Title: Novel, subtypes selective potentiators of nicotinic acetylcholine receptors - REVISION

(b) Sponsor: NIH - R01 Revision (c) Div./Prog.: ARRA R01 (d) Start Date: 7/1/09 (e) End Date: 06/30/11

(f) Sponsor Type: ☑ Federal ☐ State ☐ University/Inst. ☐ Private/Found. ☐ Industry/Corporate

(g) Activity Type: ☑ Organized Research ☐ Training/Instruction ☐ Other Spons. Activity ☐ Off-Campus

(h) Project Type: ☐ NC ☐ NN ☐ PP ☐ RC ☐ RN ☑ RV ☐ XN

(i) Mechanism: ☑ Grant ☐ Contract ☐ CA ☐ RSA

(j) Proposal Format: ☑ Electronic ☐ Paper

(k) Is UAF a Subaward Recipient? ☐ Yes ☑ No
Prime Sponsor:

(l) Does the Project Contain Subawards? ☑ Yes ☐ No
Subaward(s) To: VCU Virginia Commonwealth University

(m) Any Equipment Budgeted? ☐ Yes ☑ No

(n) Is Tuition Budgeted for Grad. Students? ☑ Yes ☐ No

(o) Peer Review: ☐ Internal ☐ External

(p) Is Project EPSCoR Related? ☐ Yes ☑ No

(q) Is Project Alaska Specific? ☐ Yes ☐ No

(r) Banner Research Theme Code(s): NAM00

(s) D-Level Org. Code: D61A3

(t) Related Proposal in Banner: S0000

(3) Personnel	Last Name	First Name	Phone	Unit	UAF ID#	FTE	E-Class
(a) PI	Schulte	Marvin	5327	IAB	30713103	.25	F9
(b) Co-I #1							
(c) Co-I #2							
(d) Co-I #3							
(e) Unit Contact	Baker	Deseree					
(f) Fiscal Officer							

(4) Ethics and Regulatory Compliance Check if the project involves any of the following:

(a) ☑ Use of Vertebrates? **IACUC#** ~~05-68~~ 08-71

(b) ☐ Research on Human Subjects? **IRB#** See attached

(c) ☐ Use of Radiation, Lasers, or Significant Chemical Hazards?

(d) ☐ Use of Biohazards? **LBC#**

(e) ☐ Potential for Tech. Transfer, Patent, Copyright, Trademark, or Licensing?

(f) ☐ Material Transfer Agreements?

(g) ☐ Potential for Program Income?

(h) ☐ Conflicts of Interest?

(i) ☐ Research Restrictions?

(j) ☐ Import or Export of Data, Goods, or Services? **ITSC#** 05/08/09

(k) ☑ Confidential or Classified Information? **ITSC#**

Pre-Approved for OGCA Award Setup
Gary, OSP Director Date

(5) Budget Information Any matching/cost sharing (M/CS) **requires** completion of the M/CS Form

(a) F&A Rate Percentage:		45.100 %
(b) Indirect Cost Rate Code:		FRn451
(c) Distribution Code:		FIAB01
(d) Modified TDC (MTDC)	$	318,754
(e) Total Direct Costs (TDC)	$	515,111
(f) F&A Cost Recovery	$	143,758
(g) Total Sponsor Request	**$**	658,869
(h) M/CS UAF	$	0
(i) M/CS Third Party	$	0
(j) M/CS Total	**$**	0

(6) Project Space Requirements A "Yes" answer on either of these items **requires** completion of the Space Request Form and consultation with Facilities Services or Campus and Space Planning for budgeting and approval as necessary. Attach any relevant documentation received from Facilities Services or Campus and Space Planning to the proposal.

(a) Project requires new space/construction? ☐ Yes ☑ No (b) Project requires renovation(s) of existing space? ☐ Yes ☑ No

(7) Investigator Certification (If additional signature space is needed, attach another form) Read, Sign, and Date: By signing this form, (1) I agree to accept responsibility for the scientific & ethical conduct of this project and to provide the required progress reports if a grant is awarded as a result of the application; (2) I certify that I am not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from current transactions by any federal department or agency; (3) I agree to be bound by the terms & conditions of the sponsored award agreement which supports this activity; (4) I certify that this proposed project is my original work; (5) I understand & will abide by all UA policies and procedures; (6) I certify that all information provided on this form & on any attached documents related to this application is true, accurate & complete to the best of my knowledge, and (7) that that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.

PI: _____ Date: 4/5 Co-I: _____ Date: _____

Co-I: _____ Date: _____ Co-I: _____ Date: _____

(8) Unit Approvals Read, Sign, and Date: By signing this form, I certify to the best of my knowledge that: (1) The PI listed is eligible to be a PI per UAF's PI Policy or an exemption has been requested; (2) PI and Co-I workloads are within 100% of effort; (3) Unit resources in this application are available and allocated; (4) All space considerations in the project have been accounted for; and (5) The proposal application and budget are in compliance with sponsor/agency, state, federal, and university policies & regulations.

Lead Unit Dean/Director: _____ Date: 4/30/09 Fiscal Review: _____ Date: 4/24/09

Coll. Unit Dean/Director: _____ Date: _____ Fiscal Review: _____ Date: _____

Coll. Unit Dean/Director: _____ Date: _____ Fiscal Review: _____ Date: _____

(9) UAF Final Approvals Read, Sign, and Date: By signing this form, I certify that this proposal has been reviewed according to the UAF Uniform Proposal Review Policy, has passed review and to the best of my knowledge meets all applicable sponsor/agency, state, federal, and university policies, regulations, and standards.

OSP Pre-Award Admin.: _____ Date: 5/4/09 AOR Approval: _____ Date: 05/04/09

Office of Sponsored Programs
PROPOSAL ROUTING FORM
(FORM OSP-001)

THIS BOX IS FOR OSP USE ONLY
In: _____ Out: _____ Rush ☐
Submitted: _____ In-Hand ☐
To OGCA: _____ IRT ☐

Version FY2007 – Replaces All Previous Versions
Complete the Entire Form Per the Instructions
Minimum of five (5) business days for review

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(g) Activity Type: ☑ Organized Research ☐ Training/Instruction ☐ Other Spons. Activity ☐ Off-Campus

(h) Project Type: ☐ NC ☐ NN ☐ PP ☐ RC ☐ RN ☑ RV ☐ XN

(i) Mechanism: ☑ Grant ☐ Contract ☐ CA ☐ RSA

(j) Proposal Format: ☑ Electronic ☐ Paper

(k) Is UAF a Subaward Recipient? ☐ Yes ☑ No
Prime Sponsor:

(l) Does the Project Contain Subawards? ☑ Yes ☐ No
Subaward(s) To: VCU Virginia Commonwealth University

(m) Any Equipment Budgeted? ☐ Yes ☑ No

(n) Is Tuition Budgeted for Grad. Students? ☑ Yes ☐ No

(o) Peer Review: ☐ Internal ☐ External

(p) Is Project EPSCoR Related? ☐ Yes ☐ No

(q) Is Project Alaska Specific? ☐ Yes ☐ No

(r) Banner Research Theme Code(s):

(s) D-Level Org. Code:

(t) Related Proposal in Banner: **S0000**

(3) Personnel	Last Name	First Name	Phone	Unit	UAF ID#	FTE	E-Class
(a) PI	Schulte	Marvin	5327	IAB	30713103	.25	F9
(b) Co-I #1							
(c) Co-I #2							
(d) Co-I #3							
(e) Unit Contact	Baker	Deseree					
(f) Fiscal Officer							

(4) Ethics and Regulatory Compliance Check if the project involves any of the following:

(a) ☑ Use of Vertebrates? **IACUC#** 05-68
(b) ☐ Research on Human Subjects? **IRB#**
(c) ☐ Use of Radiation, Lasers, or Significant Chemical Hazards?
(d) ☐ Use of Biohazards? **LBC#**
(e) ☐ Potential for Tech. Transfer, Patent, Copyright, Trademark, or Licensing?
(f) ☐ Material Transfer Agreements?
(g) ☐ Potential for Program Income?
(h) ☐ Conflicts of Interest?
(i) ☐ Research Restrictions?
(j) ☐ Import or Export of Data, Goods, or Services? **ITSC#**
(k) ☑ Confidential or Classified Information? **ITSC#**

(5) Budget Information Any matching/cost sharing (M/CS) requires completion of the M/CS Form

(a) F&A Rate Percentage: 45.100 %
(b) Indirect Cost Rate Code: FRn451
(c) Distribution Code: FIAB01
(d) Modified TDC (MTDC) $ 318,754
(e) Total Direct Costs (TDC) $ 515,111
(f) F&A Cost Recovery $ 143,758
(g) Total Sponsor Request $ 658,869
(h) M/CS UAF $ 0
(i) M/CS Third Party $ 0
(j) M/CS Total $ 0

(6) Project Space Requirements A "Yes" answer on either of these items requires completion of the Space Request Form and consultation with Facilities Services or Campus and Space Planning for budgeting and approval as necessary. Attach any relevant documentation received from Facilities Services or Campus and Space Planning to the proposal.
(a) Project requires new space/construction? ☐ Yes ☑ No (b) Project requires renovation(s) of existing space? ☐ Yes ☑ No

(7) Investigator Certification (If additional signature space is needed, attach another form) Read, Sign, and Date: By signing this form, (1) I agree to accept responsibility for the scientific & ethical conduct of this project and to provide the required progress reports if a grant is awarded as a result of the application; (2) I certify that I am not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from current transactions by any federal department or agency; (3) I agree to be bound by the terms & conditions of the sponsored award agreement which supports this activity; (4) I certify that this proposed project is my original work; (5) I understand & will abide by all UA policies and procedures; (6) I certify that all information provided on this form & on any attached documents related to this application is true, accurate & complete to the best of my knowledge; and (7) that that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.

PI: _____ Date: 4/30/09 Co-I: _____ Date: _____
Co-I: _____ Date: _____ Co-I: _____ Date: _____

(8) Unit Approvals Read, Sign, and Date: By signing this form, I certify to the best of my knowledge that: (1) The PI listed is eligible to be a PI per UAF's PI Policy or an exemption has been requested; (2) PI and Co-I workloads are within 100% of effort; (3) Unit resources in this application are available and allocated; (4) All space considerations in the project have been accounted for; and (5) The proposal application and budget are in compliance with sponsor/agency, state, federal, and university policies & regulations.

Lead Unit Dean/Director: _____ Date: _____ Fiscal Review: _____ Date: 4/24/09
Coll. Unit Dean/Director: _____ Date: _____ Fiscal Review: _____ Date: _____
Coll. Unit Dean/Director: _____ Date: _____ Fiscal Review: _____ Date: _____

(9) UAF Final Approvals Read, Sign, and Date: By signing this form, I certify that this proposal has been reviewed according to the UAF Uniform Proposal Review Policy, has passed review and to the best of my knowledge meets all applicable sponsor/agency, state, federal, and university policies, regulations, and standards.

OSP Pre-Award Admin.: _____ Date: _____ AOR Approval: _____ Date: 05/04/09

Budget Justification:
Dr. Marvin K. Schulte
University of Alaska Fairbanks

Salaries:
3 month's salary is requested for the PI, Dr. Marvin Schulte. Salary calculations include a 4.5% increase per year and a 1.5% leave reserve. Dr. Schulte will oversee the project, assist students in experimental development and execution, prepare publications and submit annual progress reports to NIH.

Salary support for 2 graduate students in Dr. Schulte's laboratory is also requested. Salaries are based on 9 months academic (50%) + 2 months summer – (full time). Graduate students will evaluate compounds provided by Dr. Glennon's laboratory (Aim2) and conduct all experiments described for Aim 1 of the proposal.

Benefits:
Staff benefits are calculated according to UAF's proposed negotiated benefit rate for FY09 which are calculated at 32.1 percent for faculty and 7.9 percent for graduate students (summers only). Student health insurance is estimated at $1,500 annually per student. The rate proposal can be viewed at
http://www.alaska.edu/controller/costanalysis/negotiated.html.

Travel:
Domestic travel for the PI and graduate students to attend one national scientific meeting per year, such as Society for Neuroscience is requested. Travel includes, airfare, lodging and per diem for approximately five days (approzimately $2,600 per trip). Travel from the PI's laboratory to the collaborator's laboratory in Virginia once per year is additionally requested. The estimated total cost for domestic travel is $21,672 for the 2 year grant period (approximately $2,700 per trip).
Travel costs reflect the increased costs of travel from Alaska.

Materials and Supplies:
$69,355 is requested for the 2 year period of the proposal for Laboratory materials and supplies and research animals. The request is largest in year 1 ($37,479) due to the high cost of molecular biology reagents associated with development and testing of mutant receptors. Costs decrease in year 2 to reflect a heavier emphasis on electrophysiology and testing of new compounds ($31,876). Animal costs are included in the supply budget for the purchase of research animals (Xenopus Laevis) and to purchase food for frogs at about $400 per year.

Other:
- Publication costs for manuscripts generated from this work ($1,200/year)
- Consortium Agreement with Virginia Commonwealth University including consortium F&A ($196,647/ 2 years)
- Software License: maintenance of software related to molecular modeling and ligand docking- Sybyl, Tripos, Inc. ($1,500/year)
- Graduate student tuition is estimated at $5,900 per student per year with an 8 percent annual increase.
- Animal housing (per diem) is estimated at $3000 per year.
- Registration is included for PI and grad students to attend/present at a Neuroscience meeting ($400/year).

UAF OSP
Office of Sponsored Programs

Subrecipient Commitment Form (Form OSP-007)

(1) Project Information	
(a) Subrecipient: Virginia Commonwealth University	(e) UAF PI: Marvin Schulte
(b) Subrecipient PI: Richard A. Glennon	(f) Proposal Title: Novel subtype selective potentiators of nicotinic acetylcholine receptors
(c) Prime Sponsor: NIH	
(d) Start & End Date: 7/1/09 - 6/30/14	(g) UAF Banner Number: S0000 11635

(2) Documentation

The following documents are included with our subaward proposal submission and covered by the certifications below

- (a) ☑ Statement of Work (required)
- (b) ☑ Budget and Budget Justification (required)
- (c) ☑ This Subrecipient Commitment Form, completed and signed by the Authorized Organizational Representative (required)
- (d) ☐ Small/Disadvantaged Business Subcontracting Plan, in agency-required format
- (e) ☑ Biographical Sketches of all Key Personnel, in agency-required format
- (f) ☐ Other Support of all Key Personnel, in agency-required format
- (g) ☐ Other:
- (h) ☐ Other:
- (i) ☐ Other:

(3) Certifications

(a) Facilities & Administrative (F&A) Rates included in this proposal have been calculated based on:

- ☑ Our federally-negotiated F&A rates for this type of work, or a reduced F&A rate that we hereby agree to accept. (If this box is checked, a copy of your current F&A rate agreement must be provided to UAF by the time a subaward is issued.)
- ☐ Other rate (Please specify in the Notes/Comments section below the basis on which this rate has been calculated.)

(b) Fringe Benefit Rates included in this proposal have been calculated based on:

- ☑ Rates consistent with or lower than our federally-negotiated rates. If this box is checked, a copy of your benefit rate agreement must be provided to UAF by the time a subaward is issued.
- ☐ Other rates (Please specify in the Notes/Comments section below the basis on which these rates have been calculated.)

(c) Human Subjects (IRB) ☐ Yes ☑ No

If yes, a copy of the IRB protocol approval and approved consent form is required. To avoid delays, please forward these documents to the UAF Office of Sponsored Programs as soon as they are available. (Just-In-Time): A copy of these approved documents must be provided to UAF before any subaward can be issued.

If yes, have all key personnel involved completed Human Subjects Training? ☐ Yes ☐ No

(d) Animal Subjects (IACUC) ☐ Yes ☑ No

If yes, a copy of the IACUC protocol approval is required. To avoid delays, please forward these documents to the UAF Office of Sponsored Programs as soon as they are available. (Just-In-Time): A copy of these approved documents must be provided to UAF before any subaward can be issued.

(e) Conflict(s) of Interest

- ☑ Subrecipient hereby certifies that is has an active and enforced conflict of interest policy that is consistent with the provision of 42 CFR Part 50, Subpart F "Responsibility of Applicants for Promoting Objectivity in Research." Subrecipient also certifies that, to the best of Subrecipient's knowledge, (1) all financial disclosures have been made related to the activities that may be funded by or through a resulting agreement, and required by its conflict of interest policy; and (2) all identified conflicts of interest have or will have been satisfactorily managed, reduced or eliminated in accordance with Subrecipient's conflict of interest policy prior to the expenditures of any funds under any resultant agreement.
- ☐ Subrecipient does not have an active and/or enforced conflict of interest policy and hereby agrees to abide by UAF's policy. See http://www.uaf.edu/osp/policy/sfcoi.html for the text of UAF's policy and related forms/procedures.

(f) Matching/Cost Sharing (M/CS) ☐ Yes ☑ No

M/CS amounts and justification should be included in the subrecipient's budget.

(g) A-133 Audit Status

Does the subrecipient obtain an annual audit in accordance with OMB Circular A-133? ☑ Yes ☐ No

If yes, has the audit been completed for the most recent fiscal year? ☑ Yes ☐ No

Were any material findings reported applicable to this subaward? (If yes, explain in the Notes/Comments section below.) ☐ Yes ☑ No

If no, does the subrecipient receive federal funding of at least $500,000 per year? ☐ Yes ☐ No

Is the subrecipient a: ☐ Non-profit entity ☐ Foreign entity ☐ For profit entity

(4) Notes/Comments

(5) Approvals for Subrecipient

By signing this form, I certify that the above information, certifications and representations have been read, are understood, and are accurate and true to the best of my knowledge. The appropriate programmatic and administrative personnel involved in this application are aware of pertinent federal regulations and policies, and we are prepared to establish a subaward agreement with the University of Alaska Fairbanks that ensures compliance with such regulations and policies should this proposal be funded.

(a) Authorized Organizational Representative:

Signature Date

Name and Title

Virginia Commonwealth University

Name of Subrecipient Organization

Office of Sponsored Programs Box 980568, VCU

Address

Richmond, VA 23298-0568

City, State, ZIP

(804)828-6772 (804)828-2521

Phone Fax

ospgreen@vcu.edu

E-mail

(b) Subrecipient Principal Investigator:

Signature 4/23/09 Date

Richard A. Glennon PhD; Professor

Name and Title

Virginia Commonwealth University

Name of Subrecipient Organization

Dept Med Chem, School of Pharmacy Box 980540

Address

Richmond, VA 23298-0540

City, State, ZIP

(804)828-8437 (804)828-7404

Phone Fax

glennon@vcu.edu

E-mail

Note: Any work begun or expenses incurred prior to execution of a subaward agreement is at the subrecipient's own risk.

Form Approved Through 11/30/2010 OMB No. 0925-0001

Department of Health and Human Services
Public Health Services

Grant Application

Do not exceed character length restrictions indicated

LEAVE BLANK—FOR PHS USE ONLY		
Type	Activity	Number
Review Group		Formerly
Council/Board (Month, Year)		Date Received

1. TITLE OF PROJECT *(Do not exceed 81 characters, including spaces and punctuation.)*
Novel Subtype selective potentiators of nicotinic acetylcholine receptors

2. RESPONSE TO SPECIFIC REQUEST FOR APPLICATIONS OR PROGRAM ANNOUNCEMENT OR SOLICITATION ☐ NO ☐ YES
(If "Yes," state number and title)
Number: Title:

3. PROGRAM DIRECTOR/PRINCIPAL INVESTIGATOR		New Investigator ☒ No ☐ Yes
3a. NAME (Last, first, middle) Glennon, Richard A.	3b. DEGREE(S) BS MS PhD	3h. eRA Commons User Name RAGLENNON
3c. POSITION TITLE Professor/Chairman	3d. MAILING ADDRESS *(Street, city, state, zip code)* School of Pharmacy Box 980540 Virginia Commonwealth University Richmond, VA 23298-0540	
3e. DEPARTMENT, SERVICE, LABORATORY, OR EQUIVALENT Department of Medicinal Chemistry		
3f. MAJOR SUBDIVISION School of Pharmacy		
3g. TELEPHONE AND FAX *(Area code, number and extension)* TEL: 804-828-8487 FAX: 804-828-7404	E-MAIL ADDRESS: glennon@vcu.edu	

4. HUMAN SUBJECTS RESEARCH	4a. Research Exempt	If "Yes," Exemption No.
☒ No ☐ Yes	☒ No ☐ Yes	
4b. Federal-Wide Assurance No.	4c. Clinical Trial ☒ No ☐ Yes	4d. NIH-defined Phase III Clinical Trial ☒ No ☐ Yes

5. VERTEBRATE ANIMALS ☒ No ☐ Yes	5a. Animal Welfare Assurance No.

6. DATES OF PROPOSED PERIOD OF SUPPORT *(month, day, year—MM/DD/YY)*		7. COSTS REQUESTED FOR INITIAL BUDGET PERIOD		8. COSTS REQUESTED FOR PROPOSED PERIOD OF SUPPORT	
6a. From	Through	7a. Direct Costs ($)	7b. Total Costs ($)	8a. Direct Costs ($)	8b. Total Costs ($)
07/01/09	6/30/11	$64,478	$96,395	$131,536	$196,647

9. APPLICANT ORGANIZATION	10. TYPE OF ORGANIZATION
Name: Virginia Commonwealth University Address: 800 East Leigh Street PO Box 980568 Richmond, VA 23298-0568	Public: → ☐ Federal ☒ State ☐ Local Private → ☐ Private Nonprofit For-profit → ☐ General ☐ Small Business ☐ Woman-owned ☐ Socially and Economically Disadvantaged
	11. ENTITY IDENTIFICATION NUMBER 1546001758A1 DUNS NO: 10-530-0446 Cong. District: 3rd

12. ADMINISTRATIVE OFFICIAL TO BE NOTIFIED IF AWARD IS MADE	13. OFFICIAL SIGNING FOR APPLICANT ORGANIZATION
Name: Susan E. Robb, CRA	Name: Susan E. Robb, CRA
Title: Asst. VP for Research Administration	Title: Asst. VP for Research Administration
Address: Office of Sponsored Programs 800 East Leigh Street, Suite 113 PO Box 980568 Richmond, VA 23298-0568	Address: Office of Sponsored Programs 800 East Leigh Street, Suite 113 PO Box 980568 Richmond, VA 23298-0568
Tel: (804) 828-6772 FAX: (804) 828-2521	Tel: (804) 828-6772 FAX: (804) 828-2521
E-Mail: ospgreen@vcu.edu	E-Mail: ospgreen@vcu.edu

14. APPLICANT ORGANIZATION CERTIFICATION AND ACCEPTANCE. I certify that the statements herein are true, complete and accurate to the best of my knowledge, and I accept the obligation to comply with Public Health Services terms and conditions if a grant is awarded as a result of this application. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.

SIGNATURE OF OFFICIAL NAMED IN 13 *(Do not accept "Per" signature.)*	DATE
Richard A. Glennon	5/1/09

NOVEL SUBTYPE SELECTIVE POTENTIATORS OF NICOTINIC ACETYLCHOLINE RECEPTORS

Dr. Richard A. Glennon

Scope of work at Virginia Commonwealth University

Virginia Commonwealth University will provide Dr. Marvin Schulte (UAF) with target compounds necessary to successfully accomplish the goals of this project. The compounds will be synthesized in the laboratory of Dr. R. A. Glennon, isolated, purified, and characterized as proposed. Sufficient quantities (a minimum of 10 mg, but more commonly >50 mg) of each target compound will be sent as water-soluble salts (where possible) to UAF for evaluation. The strength of this collaboration is that it promises to identify agents that can selectively potentiate the actions of acetylcholine (ACh) at $\alpha4\beta2$ nicotinic ACh receptors. Prior attempts to develop direct-acting $\alpha4\beta2$-selective nicotinic ACh receptor agonists have not met with much success and this novel allosteric approach represents an exciting alternative.

From:	commons@od.nih.gov
To:	fyosp@uaf.edu; ffmks@uaf.edu;
Subject:	eRA Commons: Just in Time Submitted for Grant Application: 1R01NS66059-1 to the NIH
Date:	Friday, May 08, 2009 11:34:34 AM

A Just in Time Submission was submitted by Signing Official: ANDREW MICHAEL PARKERSON-GRAY to the NIH for grant application: 1R01NS66059-1 associated with Principal Investigator Schulte, Marvin K using the NIH Commons.

The Just In Time information submitted to NIH is available for review in the Grant Detail section of the Commons Status module. To access this information, go to Status, retrieve the grant application and click on the Application Id link available in the result set.
If you have any questions about this email, please contact ANDREW MICHAEL PARKERSON-GRAY
at fyosp@uaf.edu, who initiated this action.

If you have any questions about this email, please contact the eRA Help Desk at our preferred method of contact http://ithelpdesk.nih.gov/eRA/ or call 1-866-504-9552 (tty: 301-451-5939) or commons@od.nih.gov <mailto:commons@od.nih.gov>.

Please access the NIH Commons at https://commons.era.nih.gov/commons/

From: NINDS Databot
To: ffmks@uaf.edu;
Subject: NINDS - ARRA JUST-IN-TIME
Date: Tuesday, May 05, 2009 12:37:15 PM

Dear Dr. Schulte:

We are pleased to inform you that your grant application 1R01NS066059-01, Novel, subtype selective potentiators of nicotinic acetycholine receptors is being considered for funding under the American Recovery and Reinvestment Act of 2009. The Act includes special reporting requirements including the number of jobs created and retained through the awarding of this grant. Grantees should be aware of additional terms for award for ARRA-funded projects: http://grants.nih.gov/grants/policy/NIH_HHS_ARRA_Award_Terms.pdf

In accordance with NIH Just-In-Time procedures, the following information is requested in order to complete the administrative review of this award. Form Page references are from the PHS 398 application kit: http://grants.nih.gov/grants/funding/phs398/phs398.html

- **Detailed Budget**: In order to address the Act's expectations for accountability and transparency, NIH is requiring all grants awarded using Recovery Act funds to submit a detailed budget. This budget does not require any additional budget justification; however, we would expect that the budget detail would reflect the anticipated personnel costs as outlined in the selected application plus appropriate category amounts for other budget categories and would reflect the modular amount requested for each year. Make sure you list the same people and other items in the detailed budget as in your original budget to avoid creating discrepancies we will need to resolve. The detailed budget can be submitted using either the SF424(R&R) Budget Component or the PHS 398 Form Pages 4 & 5, whichever is easier for your institution to quickly generate.

- **Other Support: NINDS also requires an update of active and pending "other support,"** for key personnel (use Format Page 7).

•**Vertebrate Animal Assurance (if applicable)**: Provide a copy of the current Vertebrate Animal Assurance, which includes the IACUC approval date and animal welfare assurance number (including those for subcontracts involving animals).

•**Checklist:** A completed Checklist, as provided in the application kit, a detailed calculation of Facilities & Administration (F&A) Costs (listed as INDIRECT COSTS under Item 3 of the Checklist) must be provided and include itemization of exclusions for each year of the project. This calculation may be shown in the space provided on the form or as an attachment, if more space is required.

•**Protection of Human Subjects Assurance Identification/IRB Certification/Declaration of Exemption Form (if applicable):** indicating up-to date IRB approval, which must be active at the time of the proposed project start date. (IRB approvals are valid for 12 months.) Please submit IRB approvals for all performance sites. http://www.hhs.gov/ohrp/humansubjects/assurance/filasur.rtf

•**Required Education in the Protection of Human Subjects:** (see the NIH Guide Notice OD-00-039; June 5, 2000) http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html The NIH requires a letter that includes the names of the key personnel who are responsible for the design and conduct of the study; the title of the education program completed by each named personnel plus a one sentence description of the program. This letter must be signed by the principal investigator and co-signed by an institution official.

•If the **targeted numbers of human subjects** are not recorded on any other application please provide the expected numbers you plan to enroll over the full course of the study, for each gender and demographic group specified in the table below. Please give these figures in actual numbers, not percentages http://grants1.nih.gov/grants/funding/phs398/enrollment.pdf

•**Authorizing Signatures** (for faxes only – N/A for eRA Commons submission): The original signatures of both the principal investigator and an official authorized to sign for the applicant organization must be included in a cover letter and submitted with the above documents. Please be aware that if these documents are submitted via the NIH Commons, this cover letter is no longer necessary.

•**In addition to the above for R01 applications only requiring negotiating reductions in order to receive ARRA funds --** If your Specific Aims must be deleted or significantly renegotiated, send a MS Word file with these exact headers for each of the following sections documenting the change. These headers must include the word "Section." Use all headers even if there is no text.:

- o Revised Abstract Section
- o Revised Specific Aims Section
- o Revised Public Health Relevance Section

If you have not submitted the information we encourage you to do so by using the Just-In-Time submission feature of the NIH commons found in the Commons Status section. For information on the Commons, see: https://commons.era.nih.gov/commons/index.jsp. Otherwise, please fax the information to **(301) 451-5537**.

This letter does not represent an intention of the NINDS to fund this project.

Sincerely,

Tijuanna Decoster, MPA
Chief Grants Management Officer
National Institute of Neurological Disorders and Stroke
6001 Executive Blvd.
Room 3254, MSC 9537

Rockville, Maryland 20852

**** This is an Automated Email - Please DO NOT REPLY directly to this message. ****

UNIVERSITY OF ALASKA
FAIRBANKS
Office of Sponsored Programs
909 Koyukuk Drive, Suite 212, P.O. Box 757270, Fairbanks, Alaska
99775-7270

May 4, 2009

Shai D. Silberberg
Program Director, Channels, Synapses, and Circuits Cluster
NINDS Neuroscience Center, Room 2131
6001 Executive Boulevard
Bethesda, MD 20892-9531
Courier: Rockville, MD 20852-9531
Phone: 301.496.0656, Fax: 301.402.1501
email: SilberbS@ninds.nih.gov

UAF proposal "Novel, subtype selective potentiators of nicotinic acetylcholine receptors" originally submitted in response to NIH solicitation PA 07-070 - Research Project Grant R01, is now being revised as an ARRA 2-year R01. The Principal Investigator from UAF is Dr. Marvin K. Schulte. UAF requests $658,869 over a 2 year period beginning July 01, 2009.

The appropriate administrative and programmatic personnel at UAF are aware of all pertinent federal and sponsor regulations and policies, and UAF is prepared to enter into an agreement with the NIH that ensures compliance with all such regulations and policies, should this proposal be funded. Our revised proposal documents and our revised budget for this R01 are attached.

Should an award be made to UAF, any documents and/or payments should be forwarded to the UAF Office of Grants and Contracts Administration, P.O. Box 757880, Fairbanks, AK 99775-7880, email: fygrcon@uaf.edu, phone: (907) 474-7301, fax: (907) 474-5506.

Please note that, as a state institution of higher education, the University of Alaska Fairbanks is tax exempt. Our employer identification number is 92-6000147.

Questions regarding the project should be directed to Dr. Marvin K. Schulte, phone: (907) 474-5237, email: ffmks@uaf.edu.

If you need additional information or have questions about this application, please feel free to contact me directly (907) 474-1851, email: fyosp@uaf.edu.

Sincerely,

Andrew Parkerson-Gray
Director, Office of Sponsored Programs

Form Approved Through 11/30/2010 OMB No. 0925-0001

Department of Health and Human Services
Public Health Services

Grant Application

Do not exceed character length restrictions indicated.

LEAVE BLANK—FOR PHS USE ONLY		
Type	Activity	Number
Review Group		Formerly
Council/Board (Month, Year)		Date Received

1. TITLE OF PROJECT *(Do not exceed 81 characters, including spaces and punctuation.)*
Novel, subtypes selective potentiators of nicotinic acetylcholine receptors

2. RESPONSE TO SPECIFIC REQUEST FOR APPLICATIONS OR PROGRAM ANNOUNCEMENT OR SOLICITATION ☐ NO ☒ YES
(If "Yes," state number and title)
Number: PA-07-070 Title: Research Project Grant (Parent R01), revised to 2-year R01 with ARRA funds

3. PROGRAM DIRECTOR/PRINCIPAL INVESTIGATOR — New investigator ☒ No ☐ Yes

3a. NAME (Last, first, middle)	3b. DEGREE(S)	3h. eRA Commons User Name
Schulte, Marvin K.	B.S., M.S., Ph.D.	mkschulte

3c. POSITION TITLE
Associate Professor

3d. MAILING ADDRESS *(Street, city, state, zip code)*
PO Box 757000
Fairbanks, Alaska 99775-7000

3e. DEPARTMENT, SERVICE, LABORATORY, OR EQUIVALENT
Institute of Arctic Biology

3f. MAJOR SUBDIVISION

3g. TELEPHONE AND FAX *(Area code, number and extension)*
TEL: 907 474 5237 FAX:

E-MAIL ADDRESS:
ffmks@uaf.edu

4. HUMAN SUBJECTS RESEARCH	4a. Research Exempt	If "Yes," Exemption No.
☒ No ☐ Yes	☐ No ☐ Yes	

4b. Federal-Wide Assurance No.	4c. Clinical Trial	4d. NIH-defined Phase III Clinical Trial
	☐ No ☐ Yes	☐ No ☐ Yes

5. VERTEBRATE ANIMALS ☐ No ☒ Yes — 5a. Animal Welfare Assurance No A3837-01

6. DATES OF PROPOSED PERIOD OF SUPPORT *(month, day, year—MM/DD/YY)*		7. COSTS REQUESTED FOR INITIAL BUDGET PERIOD		8. COSTS REQUESTED FOR PROPOSED PERIOD OF SUPPORT	
From	Through	7a. Direct Costs ($)	7b. Total Costs ($)	8a. Direct Costs ($)	8b. Total Costs ($)
07/01/09	06/30/11	$256,917	$335,230	$515,111	$658,869

9. APPLICANT ORGANIZATION
Name University of Alaska Fairbanks
Address
PO Box 757880
Fairbanks, Alaska 99775-7880

10. TYPE OF ORGANIZATION
Public: → ☐ Federal ☒ State ☐ Local
Private: → ☐ Private Nonprofit
For-profit: → ☐ General ☐ Small Business
☐ Woman-owned ☐ Socially and Economically Disadvantaged

11. ENTITY IDENTIFICATION NUMBER
92-6000147
DUNS NO 615245164 Cong. District AK-001

12. ADMINISTRATIVE OFFICIAL TO BE NOTIFIED IF AWARD IS MADE
Name Maggie Griscavage
Title Director, Office of Grants & Contracts Administration
Address PO Box 757880
109 Administrative Services Center
Fairbanks, Alaska 99775-7880
Tel: 907 474 7301 FAX: 907 474 5506
E-Mail: fygrcon@uaf.edu

13. OFFICIAL SIGNING FOR APPLICANT ORGANIZATION
Name Andrew Parkerson-Gray
Title Director, Office of Sponsored Programs
Address PO Box 757270
Fairbanks, Alaska 99775-7270
Tel: 907 474 6000 FAX: 907 474 5444
E-Mail: fyosp@uaf.edu

14. APPLICANT ORGANIZATION CERTIFICATION AND ACCEPTANCE. I certify that the statements herein are true, complete and accurate to the best of my knowledge, and accept the obligation to comply with Public Health Services terms and conditions if a grant is awarded as a result of this application. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.

SIGNATURE OF OFFICIAL NAMED IN 13. *(In ink. "Per" signature not acceptable.)*

DATE 08/06/09

Program Director/Principal Investigator (Last, First, Middle): Schulte, Marvin K.

DETAILED BUDGET FOR INITIAL BUDGET PERIOD
DIRECT COSTS ONLY

FROM: July 1, 2009 THROUGH: June 30, 2010

PERSONNEL (Applicant organization only)		Months Devoted to Project				DOLLAR AMOUNT REQUESTED (omit cents)		
NAME	ROLE ON PROJECT	Cal. Mnths	Acad. Mnths	Summer Mnths	INST.BASE SALARY	SALARY REQUESTED	FRINGE BENEFITS	TOTAL
Marvin Schulte	PD/PI	3			103,542	26,274	8,434	34,708
TBD	Student		9	2	32,500	27,700	2,188	29,888
TBD	Student		9	2	32,500	27,700	2,188	29,888
SUBTOTALS →						81,674	12,809	94,483

CONSULTANT COSTS	
EQUIPMENT *(Itemize)*	
SUPPLIES *(Itemize by category)* Lab Supplies: $34,079 Animals and Animal food: $400.00 Equipment maintenance, supplies and repair: $3000	37,479
TRAVEL	10,580
PATIENT CARE COSTS — INPATIENT	
PATIENT CARE COSTS — OUTPATIENT	
ALTERATIONS AND RENOVATIONS *(Itemize by category)*	
OTHER EXPENSES *(Itemize by category)* Journal Publication Costs: $1,200; Animal Housing: $3,000; Tripos modeling software annual license fee; $1,500; Student Services: Tuition (2 graduate students): $11,880; Society for Neuroscience fee: PI $250, Students: $150.	17,980
CONSORTIUM/CONTRACTUAL COSTS — DIRECT COSTS	64,478
SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD *(Item 7a, Face Page)*	$ 225,000
CONSORTIUM/CONTRACTUAL COSTS — FACILITIES AND ADMINISTRATIVE COSTS	31,917
TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD	$ 256,917

BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD
DIRECT COSTS ONLY

BUDGET CATEGORY TOTALS		INITIAL BUDGET PERIOD (from Form Page 4)	ADDITIONAL YEARS OF SUPPORT REQUESTED			
			2nd	3rd	4th	5th
PERSONNEL: *Salary and fringe benefits. Applicant organization only*		94,483	96,044			
CONSULTANT COSTS						
EQUIPMENT						
SUPPLIES		37,479	31,876			
TRAVEL		10,580	11,092			
PATIENT CARE COSTS	INPATIENT					
	OUTPATIENT					
ALTERATIONS AND RENOVATIONS						
OTHER EXPENSES		17,980	18,930			
CONSORTIUM/ CONTRACTUAL COSTS	DIRECT	64,478	67,058			
SUBTOTAL DIRECT COSTS *(Sum = Item 8a, Face Page)*		225,000	225,000			
CONSORTIUM/ CONTRACTUAL COSTS	F&A	31,917	33,194			
TOTAL DIRECT COSTS		256,917	258,194			

TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PROJECT PERIOD	$ 515,111

JUSTIFICATION. Follow the budget justification instructions exactly. Use continuation pages as needed.

Supplies: Lab Supplies: $34,079- year 1, $28,476-year2; Animals and Animal food: $400.00; Equipment maintenance, supplies and repair: $3,000

Other Direct costs:

Journal Publication Costs: $1,200/year; Animal Housing: $3,000/year; Tripos modeling software annual license fee; $1,500/year; Student Services: Tuition (2 graduate students): $11,880-year1, $12,830-year2; Society for Neuroscience fee: PI $250/year, Students: $150/year.

Program Director/Principal Investigator (Last, First, Middle): Schulte, Marvin K.

CHECKLIST

TYPE OF APPLICATION *(Check all that apply.)*

☐ NEW application. *(This application is being submitted to the PHS for the first time.)*

☒ RESUBMISSION of application number: 1R01NS066059-01
(This application replaces a prior unfunded version of a new, renewal, or revision application.)

☐ RENEWAL of grant number: _____
(This application is to extend a funded grant beyond its current project period.)

☐ REVISION to grant number: _____
(This application is for additional funds to supplement a currently funded grant.)

☐ CHANGE of program director/principal investigator.
Name of former program director/principal investigator: _____

☐ CHANGE of Grantee Institution. Name of former institution: _____

☐ FOREIGN application ☐ Domestic Grant with foreign involvement List Country(ies) Involved: _____

INVENTIONS AND PATENTS *(Renewal appl. only)* ☐ No ☐ Yes
If "Yes," ☐ Previously reported ☐ Not previously reported

1. PROGRAM INCOME ***(See instructions.)***
All applications must indicate whether program income is anticipated during the period(s) for which grant support is request. If program income is anticipated, use the format below to reflect the amount and source(s).

Budget Period	Anticipated Amount	Source(s)

2. ASSURANCES/CERTIFICATIONS ***(See instructions.)***
In signing the application Face Page, the authorized organizational representative agrees to comply with the policies, assurances and/or certifications listed in the application instructions when applicable. Descriptions of individual assurances/certifications are provided in Part III and listed in Part I, 4.1 under Item 14. If unable to certify compliance, where applicable, provide an explanation and place it after this page.

3. FACILITIES AND ADMINSTRATIVE COSTS (F&A)/ INDIRECT COSTS. See specific instructions.

☐ DHHS Agreement dated: _____ ☐ No Facilities And Administrative Costs Requested.

☐ DHHS Agreement being negotiated with _____ Regional Office.

☒ No DHHS Agreement, but rate established with Office of Naval Research Date 03/14/2008

CALCULATION* *(The entire grant application, including the Checklist, will be reproduced and provided to peer reviewers as confidential information.)*

a. Initial budget period:	Amount of base $	173,642	x Rate applied	45.10%	% = F&A costs	$	78,313
b. 02 year	Amount of base $	145,112	x Rate applied	45.10%	% = F&A costs	$	65,446
c. 03 year	Amount of base $		x Rate applied	0.00%	% = F&A costs	$	
d. 04 year	Amount of base $		x Rate applied	0.00%	% = F&A costs	$	
e. 05 year	Amount of base $		x Rate applied	0.00%	% = F&A costs	$	
					TOTAL F&A Costs	$	143,758

*Check appropriate box(es):

☐ Salary and wages base ☒ Modified total direct cost base ☐ Other base *(Explain)*

☐ Off-site, other special rate, or more than one rate involved *(Explain)*

Explanation *(Attach separate sheet, if necessary.)*:

4. DISCLOSURE PERMISSION STATEMENT: If this application does not result in an award, is the Government permitted to disclose the title of your proposed project, and the name, address, telephone number and e-mail address of the official signing for the applicant organization, to organizations that may be interested in contacting you for further information (e.g., possible collaborations, investment)? ☒ Yes No

Program Director/Principal Investigator (Last, First, Middle): Schulte, Marvin K. : VCU Sub-contract

DETAILED BUDGET FOR INITIAL BUDGET PERIOD
DIRECT COSTS ONLY

FROM 07/01/2009 THROUGH 06/30/2010

PERSONNEL (*Applicant organization only*)		Months Devoted to Project				DOLLAR AMOUNT REQUESTED (*omit cents*)		
NAME	ROLE ON PROJECT	Cal. Mnths	Acad. Mnths	Summer Mnths	INST.BASE SALARY	SALARY REQUESTED	FRINGE BENEFITS	TOTAL
Glennon, Richard A.	PD/PI	.05			187,000	7,480	2,453	9,933
TBN	Postdoc	12			36,000	36,000	2,844	38,844
SUBTOTALS →						43,480	5,297	48,777

CONSULTANT COSTS		
EQUIPMENT (*Itemize*)		
SUPPLIES (*Itemize by category*) Chemicals & Solvents (including NMR and chromatography solvents) ($6,000) Consumables (including pipettes, small glassware, NMR tubes, columns) ($7,000)		13,000
TRAVEL		
PATIENT CARE COSTS	INPATIENT	
	OUTPATIENT	
ALTERATIONS AND RENOVATIONS (*Itemize by category*)		
OTHER EXPENSES (*Itemize by category*) Postdoctoral health insurance ($2301) Services (NMR, CHN, Mass spec) ($400)		2,701

CONSORTIUM/CONTRACTUAL COSTS	DIRECT COSTS	
SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD (*Item 7a, Face Page*)		$ 64,478
CONSORTIUM/CONTRACTUAL COSTS	FACILITIES AND ADMINISTRATIVE COSTS	31,917
TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD		$ 96,395

BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD
DIRECT COSTS ONLY

BUDGET CATEGORY TOTALS		INITIAL BUDGET PERIOD (from Form Page 4)	ADDITIONAL YEARS OF SUPPORT REQUESTED 2nd	3rd	4th	5th
PERSONNEL: *Salary and fringe benefits. Applicant organization only.*		48,777	50,729			
CONSULTANT COSTS						
EQUIPMENT						
SUPPLIES		13,000	13,520			
TRAVEL						
PATIENT CARE COSTS	INPATIENT					
	OUTPATIENT					
ALTERATIONS AND RENOVATIONS						
OTHER EXPENSES		2,701	2,809			
CONSORTIUM/ CONTRACTUAL COSTS	DIRECT					
SUBTOTAL DIRECT COSTS *(Sum = Item 8a, Face Page)*		64,478	67,058			
CONSORTIUM/ CONTRACTUAL COSTS	F&A					
TOTAL DIRECT COSTS						

TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PROJECT PERIOD $ 131,536

JUSTIFICATION. Follow the budget justification instructions exactly. Use continuation pages as needed.

Dr. Glennon will oversee all synthetic aspects of the project, whereas the postdoctoral fellow will be responsible for conducting all proposed synthesis. Appropriate chemicals (including solvents, solvents for chromatography, and HPLC solvents), supplies, and consumables are requested for the synthetic effort, and services (NMR, CHN analysis, and mass spec charges) are required to characterize target structures and determine purity.

Program Director/Principal Investigator (Last, First, Middle): Schulte, Marvin K.: VCU Sub-contract

CHECKLIST

TYPE OF APPLICATION *(Check all that apply.)*

☐ NEW application. *(This application is being submitted to the PHS for the first time.)*

☐ RESUBMISSION of application number: _____
(This application replaces a prior unfunded version of a new, renewal, or revision application.)

☐ RENEWAL of grant number: _____
(This application is to extend a funded grant beyond its current project period.)

☐ REVISION to grant number: _____
(This application is for additional funds to supplement a currently funded grant.)

☐ CHANGE of program director/principal investigator.
Name of former program director/principal investigator: _____

☐ CHANGE of Grantee Institution. Name of former institution: _____

☐ FOREIGN application ☐ Domestic Grant with foreign involvement List Country(ies) Involved: _____

INVENTIONS AND PATENTS *(Renewal appl. only)* ☐ No ☐ Yes
If "Yes," ☐ Previously reported ☐ Not previously reported

1. PROGRAM INCOME ***(See instructions.)***
All applications must indicate whether program income is anticipated during the period(s) for which grant support is request. If program income is anticipated, use the format below to reflect the amount and source(s).

Budget Period	Anticipated Amount	Source(s)
	$0.00	

2. ASSURANCES/CERTIFICATIONS ***(See instructions.)***
In signing the application Face Page, the authorized organizational representative agrees to comply with the policies, assurances and/or certifications listed in the application instructions when applicable. Descriptions of individual assurances/certifications are provided in Part III and listed in Part I, 4.1 under Item 14. If unable to certify compliance, where applicable, provide an explanation and place it after this page.

3. FACILITIES AND ADMINSTRATIVE COSTS (F&A)/ INDIRECT COSTS. See specific instructions.

☒ DHHS Agreement dated: June 18, 2008 ☐ No Facilities And Administrative Costs Requested.

☐ DHHS Agreement being negotiated with _____ Regional Office.

☐ No DHHS Agreement, but rate established with _____ Date _____

CALCULATION* *(The entire grant application, including the Checklist, will be reproduced and provided to peer reviewers as confidential information.)*

a. Initial budget period:	Amount of base $	64,478	x Rate applied	49.50	% = F&A costs	$	31,917
b. 02 year	Amount of base $	67,058	x Rate applied	49.50	% = F&A costs	$	33,194
c. 03 year	Amount of base $		x Rate applied		% = F&A costs	$	
d. 04 year	Amount of base $		x Rate applied		% = F&A costs	$	
e. 05 year	Amount of base $		x Rate applied		% = F&A costs	$	
					TOTAL F&A Costs	$	65,111

*Check appropriate box(es):

☐ Salary and wages base ☒ Modified total direct cost base ☐ Other base *(Explain)*

☐ Off-site, other special rate, or more than one rate involved *(Explain)*

Explanation *(Attach separate sheet, if necessary.)*:

4. DISCLOSURE PERMISSION STATEMENT: If this application does not result in an award, is the Government permitted to disclose the title of your proposed project, and the name, address, telephone number and e-mail address of the official signing for the applicant organization, to organizations that may be interested in contacting you for further information (e.g., possible collaborations, investment)? ☒ Yes ☐ No

Schulte M.K.

ACTIVE

1) 1R01NS057366-01A2 (Schulte) 7/15/2008 – 6/30/2011 3 calendar
NIH/NINDS $857,277 (3 years) (Total Direct + Indirect)
Title: "Microcantilever Biosensors Based on Ligand Gated Ion Channel Receptors"

The major goals of this project are to develop biosensor molecules based on LGIC proteins and the Acetylcholine Binding Protein for use in Microcantilever and other biosensor platforms. Enhancement of Microcantilever perfomance is also a key goal of this project. Collaborator: Dr. Heifeng Ji, Drexel University.

No Overlap

Note: A Diversity Supplement of $115,000 (Direct + Indirect) was awarded on the parent grant 1R01NS057366 to Maegan Weltzin (PH.D. Student). **04/01/2009 - 03/31/2011**. The goal of the supplemental grant was to produce soluble analogs of the alpha4 and beta2 nicotinic subunits.

PENDING

1) Recovery Act Limited Competition: NIH Challenge Grants in Health and Science
(Schulte - Consortium/CoPI) 7/01/2009 – 6/30/2011 2 calendar
National Institutes of Health $ 269,032 (Consortium, Direct+Indirect)
"Chemically and mechanistically novel antidepressants".
PI: Dr. Malgorzata Dukat, Virginia Commonwealth University
No Overlap

2) NOT-OD-09-056 - ARRA Administrative Supplement.
Parent Grant: 1R01NS057366-01A2 7/01/2009 - 6/30/2011 0 calendar
NIH/NINDS $423,023 (Total Direct + Indirect)
Title of Parent grant: "Microcantilever Biosensors Based on Ligand Gated Ion Channel Receptors"

The major goal of this supplemental project is to incorporate a fluorescent protein into the primary sequence of the AChBP to create a conformationally sensitive fluorescent AChBP.

No Overlap

GLENNON, R.A.

PENDING

R01 DA 0164200-27 PI= Glennon) 4/1/2009 – 3/30/2010
NIH/NIDA $ No cost extension
Chemical/Behavioral Studies on Hallucinogenic Agents

The major goals of this project are to identify the structure-activity relationships and mechanisms of action of arylalkylamine hallucinogens, stimulants, and related designer drugs. No overlap with current proposal.

R01 (PI = Dukat, Glennon) 9/10/2009 – 8/31/2011
NIH $966,751
"Chemically and Mechanistically Novel Antidepressants"
The major goals of this project are to synthesize and investigate a novel class of serotonergic agents (that do not interact with the serotonin transporter) as potential antidepressants. No overlap with current proposal.

Abstract:

Nicotinic receptors have been implicated in a broad range of neurological disorders including Alzheimer's disease (AD), Schizophrenia, Autism, Frontal Lobe Epilepsy,Parkinson's disease, Tourette Syndrome and Attention Deficit Disorder. Given the increasing awareness of the role of nicotinic receptors in neurological disorders, it is not surprising that there is intense interest in developing therapeutics aimed at altering the expression or function of this important receptor family. A novel strategy for targeting nAChR subtypes is the identification of "unconventional" or allosteric modulators. Highly selective modulators would be extremely valuable in investigating disease processes and as potential therapeutic drugs. Unfortunately, currently available potentiating agents typically display broad selectivity (although there have been some recent advances in α7selective potentiators). The recent discovery of a natural product obtained from the Bryozoan, Flustra foliacea provides an exciting opportunity to develop a new class of selective modulatory agents. This compound (d-formylflustrabromide – dFBr) is a highly selective positive allosteric modulator of $\alpha4\beta2$ nAChRs. Along with our collaborators, we have synthesized dFBrand evaluated its action on $\alpha4\beta2$ receptors. This compound displays a number of properties that make it an ideal lead molecule. Our data suggest that dFBr would provide selective amplification of ACh responses with little change in response kinetics. The primary aims of this proposal are to: 1) Characterize the interaction of the dFBr class of compounds with the $\alpha4\beta2$ receptor and 2) Synthesize and characterize new, optimized dFBr type ligands. These independent but mutually synergistic aims are focused on developing a fundamental understanding of dFBr action and interaction with this important receptor. We have already made significant progress in both aims. Preliminary mutagenesis data indicates a putative binding site at a subunit interface equivalent to the benzodiazepine binding site of GABA receptors and we have identified an improved dFBr analog in our preliminary synthetic studies that retains the ability to potentiate $\alpha4\beta2$ receptors but without the inhibitory component at high concentrations that is a problem with dFBr itself. The current proposal expands our studies to characterization of dFBr's actions on the $\alpha4\beta2$ receptor, mapping the binding domain and developing a refined dFBr pharmacophore.

Public Health Relevance:

This project aims to develop new drugs for the potential treatment CNS disorders. Disorders potentially treatable by these agents include Alzheimer's disease, Autism and Schizophrenia.

Reviewers Comments:

Overall the reviewers were very positive about this proposal indicating it was "focused and well written, with a clear and compelling hypothesis" Preliminary data were considered strong with an important opportunity to develop useful pharmacological tools targeting nicotinic $\alpha4\beta2$ receptors. Primary concerns expressed by the reviews are described below along with our comments addressing these issues.

RESPONSE

"***Proposal suffers from lack of a longer term plan to create a useful CNS accessible compound for behavioral testing. Criteria for structural modifications for oral bioavailability, metabolic stability, attractive pharmacokinetics, and brain entry are not discussed.***" These comments are certainly true. And, these issues are not something about which we are unaware or unconcerned. However, in our opinion, it is of greater importance, at this stage of the investigation, to identify what agents possess the desired pharmacological action before considering factors such as oral bioavailability and pharmacokinetic properties. As stated in the proposal, our immediate goal is to "*further identify structural features that contribute to the positive allosteric effect*" of dFBr. We are using a systematic "deconstruction-reconstruction-elaboration" approach to determine what structural features are required for activity. This will aid in the formulation of a pharmacophore with the synthesis of a minimal number of compounds. Once this has been achieved, our intent is to address metabolic stability, pharmacokinetics, and related properties during the "elaboration" step.

Our laboratory has worked with tryptamine derivatives for >35 years, and is acquainted with their chemical and metabolic stability, and bioavailability. We have synthesized many hundreds of tryptamine-related agents and have examined them in in vitro (isolated tissue) and/or in vivo (rodent behavioral) assays. We have employed a variety of strategies to, for example, increase their lipophilicity to ensure brain penetration, or to hinder their metabolism (e.g. incorporation of bulky amine substituents, introduction of substituents α to the amine, conformational constraint including the terminal amine). Indeed, some of the proposed studies will provide clues as to whether such structural modifications are feasible with retention of the desired activity. For example, compound **24** possesses a bulky amine substituent, and compound **25** incorporates the terminal amine into a ring system; both of these compounds will be more lipophilic and substantially less prone to metabolism than dFBr (**1**). The "elaboration" step will also explore newer structural scaffolds. This, however, must await the results of the studies currently proposed.

"***It is not clear how many compounds will be synthesized and at what rate.***" "***...what is the iterative decision cycle time for SAR evolution?***" Specific synthetic targets were described in the proposal. Obviously, unexpected exciting findings also will be exploited; various contingencies were mentioned in the proposal but, at this time, it is unknown how structural variation will influence the desired action. Our goal is (and always has been) to achieve a desired action with a minimum of synthesis. The rate of synthesis is very difficult to predict; some targets can be made in one or two steps whereas others require longer, more complicated schemes. Compounds **11b** and **12b** recently have been prepared, and the synthesis of **11a** and **12a** are underway. Compound **17a** has also been prepared now. Typically, because of the target design process, each compound will add to the SAR in a broad manner; for example, comparing data from **1** with that of **17**, it can be determined whether electron withdrawing or electron donating groups at the 6-position are optimal. Our intent is to obtain pharmacological data as quickly as the targets are prepared so that the information can be used to quickly optimize the desired action.

"***...the research team should consider the inclusion of someone with expertise to apply the discoveries to some models of efficacy beyond ion conductances***". We agree with the concept but, here too, such studies seem premature. The Glennon laboratory has extensive experience with rodent behavioral assays (including the use of drug discrimination studies with rats trained to discriminate nicotine from vehicle), and has collaborated with other investigators on a variety of pharmacological projects. Such

studies are definitely planned for the future. But, the immediate goal is to determine what/how structural features of dFBr contribute to its PAM effect and inhibitory actions, and to optimize the former.

"The personnel actually carrying out this challenging work do not appear to have sufficient experience or sufficient direct mentor/supervisor access."

Dr. Schulte's laboratory has significant experience in conducting the types of studies outlined in aim 1 of the proposal using exactly the personnel requested in the budget. We have been very successful in elaborating novel binding site structures as indicated by numerous publications in this area and acknowledged by the reviewers. Two graduate students will be committed full time to conducting the experiments and Dr. Schulte will be directly supervising training. It should be noted that much of the experimental approach described utilizes two electrode voltage clamp in *Xenopus* oocytes; a technique we commonly teach undergraduates within a couple of weeks. We recently expanded from 2 to 4 recording stations and all four stations are fully automated greatly facilitating the analysis of test compounds and mutant receptors. Site directed mutagenesis is ongoing on other projects in the laboratory in addition to this one and two experienced graduate students will be available to assist students in these areas. In addition, Dr. Schulte has devoted a minimum of 25% of his time to focusing on this project and has an appointment (including summer research) that permits him to a total of 75% of his time to the laboratory. It is difficult to see how this level of commitment on his part would be considered insufficient "mentor/supervisor access."

A. Hypothesis and Specific Aims:

A1: Introduction to Revised Proposal:

The spectrum of nicotinic acetylcholine receptor (nAChR) subtypes expressed in the CNS is altered in many neurological disorders including Alzheimer's disease, Autism and Schizophrenia. It is well established that compounds capable of selectively modulating nAChR subtypes would be valuable agents in the study and treatment of these diseases. However, only a few selective nAChR modulators have been developed. The recent discovery of an $\alpha4\beta2$ selective positive allosteric modulator in the Bryozoan, *Flustra Foliacea* provides an exciting opportunity to develop a new class of selective modulatory agents. Dr. Glennon's laboratory has synthesized desformylflustrabromide (dFBr)) and we have characterized its action on nAChRs. **Our data demonstrate that important properties of dFBr that make it an ideal lead molecule for developing subtype selective, allosteric modulators of neuronal nAChRs:**

a) dFBr increases the apparent efficacy of ACh on $\alpha4\beta2$ receptors by 300%.

b) It is selective for the $\alpha4\beta2$ nicotinic receptor (nAChR) subtype.

c) The potency of the dFBr lead compound is relatively high (180 nM).

d) *At concentrations below 1mM, response kinetics are retained in the presence of dFBr.*

Other nAChR potentiating ligands (APLs) have been identified including galantamine and physostigmine. These compounds have been shown to benefit Alzheimer's and autistic patients. Galantamine is an acetylcholinesterase inhibitor and a non-selective nAChR potentiator. While useful in generally increasing nicotinic tone in the CNS, APLs typically lack receptor subtype selectivity, do not increase ACh efficacy and alter response kinetics.

Preliminary data supports our hypothesis that dFBr interacts with the nAChR at a binding site that is structurally equivalent to the benzodiazepine binding site on GABA receptors. As such, it represents a novel class of nAChR modulators selective for heteromeric nAChRs.

A2: Revised Specific Aims Section:

Aim 1: Characterize the interaction of dFBr type ligands with the $\alpha4\beta2$ receptor.

Study 1.1: Functional effects of dFBr on $\alpha4\beta2$ receptors.

a) *Is partial agonist efficacy altered similar to acetylcholine efficacy at $\alpha4\beta2$ receptors?*

b) Is dFBr action selective for high or low affinity $\alpha4\beta2$ receptors?

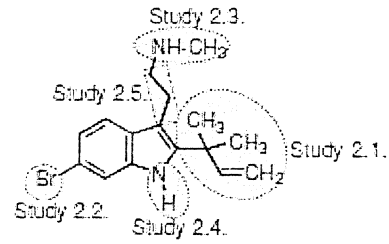
c) Are there common pathways for Zn^{2+} and dFBr potentiation?

Study 1.2. What are the roles of the $\beta2^+$ and $\alpha4^-$ subunit faces in binding and/or function of dFBr?

Aim 2. Synthesize and characterize new, optimized dFBr type ligands.

The purpose of aim 2 is to optimize the actions of dFBr (**1**) as a positive allosteric modulator of the ACh response via $\alpha4\beta2$ nACh receptors. The structure of **1** will be *deconstructed* as much as possible to determine what features are responsible for activity. Optimal substituents will be re-incorporated during *reconstruction*, and any hypotheses developed during these stages will then be examined during an *elaboration* process. We now propose to further identify structural features that contribute to the positive allosteric effect.

Study 2.1. Continued deconstruction of the 2-position chain.
Study 2.2. Role of the 6-bromo group.
Study 2.3. The terminal amine.
Study 2.4. Ring nitrogen atom.
Study 2.5. Tryptamine chain length.
Study 2.6. Reconstruction.



A3: Changes from original Aims:

Reduction of the grant period from 3 years to 2 years will have some impact on the scope of the research included in the proposal but is not expected to have a major impact on the fundamental goals of the project. Since the third year was expected to be devoted to expansion of the scope of the research based on findings within the first two years much of this work can be included in a renewal or future proposal. Thus the general aims of the proposal remain unchanged although the scope of both aims is slightly altered. The following specific changes were made from the original proposal:

Aim 1:

The original proposal outlined 3 studies intended to address the interaction of dFBr with nAChRs. Since the submission of the proposal in October 2008, we have made significant progress on the goals outlined for Study 1.1. We recently submitted a manuscript addressing the functional effects of dFBr on $\alpha4\beta2$ receptors including the effect of dFBr on the partial agonists described in the proposal (nicotine, choline, cytisine - study 1.1a). We have moved on to study 1.1b and c. These goals will be addressed during year 1 of the proposal. Study 1.2 will also remain in the revised proposal and will form a major component of our efforts during years 1 and 2. Study 1.3 was originally considered to be a major component of year 3 studies and will be eliminated from the revised project. Study 1.3 was designed to use our findings from the $\alpha4\beta2$ receptor studies to explore the nature of the selectivity of dFBr on other nAChR subtypes. While this addresses an important issue, these experiments can be included in a future proposal.

Aim 2:

It was our intention to exploit some of the leads identified from compounds synthesized during the first two years by synthesizing additional compounds in the third year. Notice: we had some contingencies built into the proposal. This will no longer be possible if the project is scaled back to two years. However, a two-year project should not have adverse impact on the synthesis of compounds that were specifically targeted. Furthermore, the synthesis of three targets has been completed and two others are underway. What we had originally planned for the third year could be included in a future proposal. Also, by then, we should be in a much better position to address other issues of concern, such as pharmacokinetics and brain penetration, because data will be available on where we can incorporate appropriate substituents.

UNIVERSITY OF ALASKA FAIRBANKS

(907) 474-7800
(907) 474-5444 fax
fyiacuc@uaf.edu
www.uaf.edu/iacuc

Institutional Animal Care and Use Committee
909 N Koyukuk Dr. Suite 212, P.O. Box 757270, Fairbanks, Alaska 99775-7270

February 6, 2009

To: Marvin Schulte, PhD
Principal Investigator

From: Erich H. Follmann, PhD
IACUC Chair

Re: IACUC Assurance Application

The University of Alaska Fairbanks Institutional Animal Care and Use Committee (IACUC) reviewed the following Assurance at their December 1, 2008, meeting. This Assurance was approved pending receipt of a revised assurance addressing the committee's questions. The assurance received on January 29, 2009 was determined to be satisfactory; therefore I am pleased to issue approval.

Protocol#: 08-71

Title: *Allosteric Modulation of Ligand Gated Ion Channels*

Received: November 24, 2008 (orig)
January 29, 2009 (rev)

Approved: February 6, 2009

Review Due: February 6, 2010

The PI is responsible for acquiring and maintaining all required permits and permissions prior to beginning work on this assurance. Failure to obtain or maintain valid permits is considered a violation of an IACUC assurance, and could result in revocation of IACUC approval.

INSTRUCTIONS REGARDING AN APPROVED *ASSURANCE OF ANIMAL CARE*

Communication of Assurance:

All lab animals and captive wildlife used under this *Assurance* **must** be identified with the assigned IACUC number by using cage cards, door cards, or some ready method of identifying pens or paddocks with this *Assurance*.

Access to the Approved Assurance:

It is required that a readily accessible copy of the approved *Assurance* be kept in the laboratory and/or office. The PI is responsible for ensuring that all personnel working on this project read, understand and follow the methods and procedures identified in this *Assurance*.

Life Span of the Assurance and Reporting Requirements:

All *Assurances* are valid for 12 months after approval and must be kept current with respect to new methods or techniques as they evolve. Notification from the IACUC will be sent the month prior to the annual anniversary of the approval of the *Assurance* of a Continuing Review Form due. The Continuing Review Form serves as an annual report to the IACUC regarding this *Assurance*. Continuing Reviews may occur for 2 years after the initial approval date. In the third year a Rationale for Continued Use of Animals must be completed and a new *Assurance* application must be submitted if the work is to be ongoing.

Formal Training Requirement for Personnel Working with Live Vertebrates:

Personnel working with live vertebrates must complete the appropriate module(s) of the University's web-based training program in animal care and use. All individuals performing manipulations on vertebrates (handling, capture, blood collection, surgery, etc.) must demonstrate proper training, experience, and capability. A principal investigator is responsible for insuring that all individuals working on his/her protocol have completed both the required IACUC web based training modules and appropriate protocol specific training. It is the Institution's responsibility to ensure that proper training is made available. Contact the Office of Research Integrity for more information about UAF training programs.

Notifying Funding Agencies about IACUC Protocol Review:

Please notify the Research Integrity Administrator if a letter confirming IACUC review and approval is required by a funding agency. Please provide the necessary contact information to the Administrator: fyiacuc@uaf.edu.

Additional Information:

Visit the IACUC web site, http://www.uaf.edu/iacuc , or contact any member of the IACUC or the Office of Research Integrity.

RESEARCH PROJECT
Department of Health and Human Services
National Institutes of Health
NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

Issue Date: 08/10/2010

THIS AWARD IS ISSUED UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 AND IS SUBJECT TO SPECIAL HHS TERMS AND CONDITIONS AS REFERENCED IN SECTION III

Grant Number: 5RC2AA019422-02

Principal Investigator(s):
Patrick L Dulin (contact), BA
Vivian M Gonzalez, PHD

Project Title: Location-Based Monitoring and Intervention for Alcohol Use Disorders

Dr. Dulin, Patrick L
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Award e-mailed to: ayosp@uaa.alaska.edu

Budget Period: 09/01/2010 – 08/31/2011
Project Period: 09/30/2009 – 08/31/2011

Dear Business Official:

The National Institutes of Health hereby awards a grant in the amount of $812,278 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to UNIVERSITY OF ALASKA ANCHORAGE in support of the above referenced project. This award is pursuant to the authority of 42 USC 241 42 CFR 52 and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Acceptance of this award including the "Terms and Conditions" is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

Each publication, press release or other document that cites results from NIH grant-supported research must include an acknowledgment of NIH grant support and disclaimer such as "The project described was supported by Award Number RC2AA019422 from the National Institute On Alcohol Abuse And Alcoholism. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute On Alcohol Abuse And Alcoholism or the National Institutes of Health."

Award recipients are required to comply with the NIH Public Access Policy. This includes submission to PubMed Central (PMC), upon acceptance for publication, an electronic version of a final peer-reviewed, manuscript resulting from research supported in whole or in part, with direct costs from National Institutes of Health. The author's final peer-reviewed manuscript is defined as the final version accepted for journal publication, and includes all modifications from the publishing peer review process. For additional information, please visit http://publicaccess.nih.gov/.

Award recipients must promote objectivity in research by establishing standards to ensure that the design, conduct and reporting of research funded under NIH-funded awards are not biased by a conflicting financial interest of an Investigator. Investigator is defined as the Principal Investigator and any other person who is responsible for the design, conduct, or reporting of NIH-funded research or proposed research, including the Investigator's spouse and dependent children. Awardees must have a written administrative process to identify and manage financial conflict of interest and must inform Investigators of the conflict of interest policy and of the Investigators' responsibilities. Prior to expenditure of these awarded funds, the Awardee must report to the NIH Awarding Component the existence of a conflicting interest and within 60 days of any new conflicting interests identified after the initial report. Awardees must comply with these and all other

aspects of 42 CFR Part 50, Subpart F. These requirements also apply to subgrantees, contractors, or collaborators engaged by the Awardee under this award. The NIH website http://grants.nih.gov/grants/policy/coi/index.htm provides additional information.

If you have any questions about this award, please contact the individual(s) referenced in Section IV.

Sincerely yours,

Judy Fox
Grants Management Officer
NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

Additional information follows

SECTION I – AWARD DATA – 5RC2AA019422-02

Award Calculation (U.S. Dollars)

Federal Direct Costs	$609,352
Federal F&A Costs	$202,926
Approved Budget	$812,278
Federal Share	$812,278
TOTAL FEDERAL AWARD AMOUNT	$812,278
AMOUNT OF THIS ACTION (FEDERAL SHARE)	$812,278

SUMMARY TOTALS FOR ALL YEARS		
YR	THIS AWARD	CUMULATIVE TOTALS
2	$812,278	$812,278

Fiscal Information:

CFDA Number:	93.701
EIN:	1926000147B2
Document Number:	RAA019422Z
Fiscal Year:	2010

IC	*CAN*	*2010*
AA	8484896	$406,139
OD	8490018	$406,139

NIH Administrative Data:
PCC: AC E / **OC**: 414E / **Processed**: SIMONSJ 08/07/2010

SECTION II – PAYMENT/HOTLINE INFORMATION – 5RC2AA019422-02

For payment and HHS Office of Inspector General Hotline information, see the NIH Home Page at http://grants.nih.gov/grants/policy/awardconditions.htm

SECTION III – TERMS AND CONDITIONS – 5RC2AA019422-02

This award is based on the application submitted to, and as approved by, NIH on the above-titled project and is subject to the terms and conditions incorporated either directly or by reference in the following:

a. The grant program legislation and program regulation cited in this Notice of Award.
b. Conditions on activities and expenditure of funds in other statutory requirements, such as those included in appropriations acts.
c. 45 CFR Part 74 or 45 CFR Part 92 as applicable.
d. The NIH Grants Policy Statement, including addenda in effect as of the beginning date of the budget period.
e. This award notice, INCLUDING THE TERMS AND CONDITIONS CITED BELOW.

(See NIH Home Page at 'http://grants.nih.gov/grants/policy/awardconditions.htm' for certain references cited above.)

ARRA TERM OF AWARD: This award is subject to the HHS-Approved Standard Terms and Conditions for the American Recovery and Reinvestment Act of 2009. Approved text for NIH awards can be found at http://grants.nih.gov/grants/policy/NIH_HHS_ARRA_Award_Terms.pdf. Recipients should pay particular attention to the special quarterly reporting requirements required by Section 1512 of the Recovery Act as specified in Term #2.

In accordance with P.L. 110-161, compliance with the NIH Public Access Policy is now mandatory. For more information, see NOT-OD-08-033 and the Public Access website: http://publicaccess.nih.gov/.

This award provides support for one or more clinical trials. By law (Title VIII, Section 801 of Public Law 110-85), the "responsible party" must register "applicable clinical trials" on the ClinicalTrials.gov Protocol Registration System Information Website. NIH encourages registration of all trials whether required under the law or not. For more information, see http://grants.nih.gov/ClinicalTrials_fdaaa/

This award represents the final year of the competitive segment for this grant. Therefore, see the NIH Grants Policy Statement (12/1/2003 version) for closeout requirements at: http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part8.htm#_Toc54600151.

A final Financial Status Report (FSR) (SF 269) must be submitted through the eRA Commons (Commons) within 90 days of the expiration date; see NIH Guide Notice NOT-OD-07-078 for additional information on this electronic submission requirement. The final FSR must indicate the exact balance of unobligated funds and may not reflect any unliquidated obligations. There must be no discrepancies between the final FSR and the Payment Management System's (PMS) Federal Cash Transaction Report (SF-272).

Furthermore, unless an application for competitive renewal is submitted, additional grant closeout documents consisting of a Final Invention Statement and Certification form (HHS 568), (not applicable to training, construction, conference or cancer education grants) and a final progress report must also be submitted within 90 days of the expiration date.

NIH also strongly encourages electronic submission of the final progress report and the final invention statement through the Closeout feature in the Commons. If the final progress report and final invention statement are not submitted electronically, copies of the HHS 568 form may be downloaded at: http://grants.nih.gov/grants/forms.htm.

Submissions of the final progress report and HHS 568 may be e-mailed as PDF attachments to the NIH Central Closeout Center at: deascentralized@od.nih.gov

Paper submissions of the final progress report and the HHS 568 may be faxed to the NIH Central Closeout Center at 301-480-2304 or mailed to the NIH Central Closeout Center at the following address:

NIH/OD/OER/DEAS
Central Closeout Center
6705 Rockledge Drive, Room 2207
Bethesda, MD 20892-7987 (for regular or U.S. Postal Service Express mail)
Bethesda, MD 20817 (for other courier/express mail delivery only)

The final progress report should include, at a minimum, a summary of progress toward the achievement of the originally stated aims, a list of significant results (positive and/or negative), a list of publications and the grant number. If human subjects were included in the research, the final progress report should also address the following:

- Report on the inclusion of gender and minority study subjects (using the gender and minority Inclusion Enrollment Form as provided in the PHS 2590 and available at http://grants.nih.gov/grants/forms.htm).
- Where appropriate, indicate whether children were involved in the study or how the study was relevant for conditions affecting children (see "Public Policy Requirements and Objectives-Requirements for Inclusiveness in Research Design-Inclusion of Children as Subjects in Clinical Research" in the PHS 398 at URL http://grants.nih.gov/grants/policy/nihgps_2003/NIHGPS_Part5.htm#_Toc54600090)
- Describe any data, research materials (such as cell lines, DNA probes, animal models), protocols, software, or other information resulting from the research that is available to be shared with other investigators and how it may be accessed.

Note, if this is the final year of a competitive segment due to the transfer of the grant to another institution, then not all the requirements stated above are applicable. Specifically a Final Progress Report is not required. However, a final FSR is required and should be submitted electronically as noted above. In addition, if not already submitted, the Final Invention Statement is required and should be sent directly the assigned Grants Management Specialist.

This award is funded by the following list of institutes. Any papers published under the auspices of this award must cite the funding support of all institutes.

National Institute On Alcohol Abuse And Alcoholism (NIAAA) Office Of The Director, National Institutes Of Health (OD)

Treatment of Program Income:
Additional Costs

SECTION IV – AA Special Terms and Conditions – 5RC2AA019422-02

INFORMATION: This award provides the final year of funding under the American Recovery and Reinvestment Act of 2009 (ARRA) which is subject to the ARRA Terms of Award referenced in Section III.

ARRA funds provided under this award are not available for carryover into any award funded by non-ARRA funds. Any ARRA funding remaining at the end of the project period for this award mustbe reported as an unobligated balance.

RESTRICTION: The present award is being made without a currently valid certification of Institutional Review Board (IRB) approval for this project with the following restriction: Only activities that are clearly severable and independent from activities that involve human subjects may be conducted pending the National Institute on Alcohol Abuse and Alcoholism's (NIAAA) acceptance of the certification of IRB approval.

No funds may be drawn down from the payment system and no obligations may be made against Federal funds for research involving human subjects for any period not covered by an IRB approval consistent with 45 CFR Part 46.

STAFF CONTACTS

The Grants Management Specialist is responsible for the negotiation, award and administration of this project and for interpretation of Grants Administration policies and provisions. The Program Official is responsible for the scientific, programmatic and technical aspects of this project. These individuals work together in overall project administration. Prior approval requests (signed by an Authorized Organizational Representative) should be submitted in writing to the Grants Management Specialist. Requests may be made via e-mail.

Grants Management Specialist: Heather P. Olusoga
Email: Heather.Olusoga@nih.gov **Phone**: 301-443-8767 **Fax**: 301-443-3891

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SPREADSHEET SUMMARY
GRANT NUMBER: 5RC2AA019422-02

INSTITUTION: UNIVERSITY OF ALASKA ANCHORAGE

Facilities and Administrative Costs	*Year 2*
F&A Cost Rate 1	34%
F&A Cost Base 1	$596,840
F&A Costs 1	$202,926

SPECIFIC AIMS

This proposal is consistent with the research priorities of RFA-OD-09-004 (RC2), "Expanding and Personalizing Treatment Options for Alcohol Disorders". NIAAA's RFP guidelines suggest a particular interest in the development of technological innovations aimed at providing services to large numbers of people, and especially those who are earlier in the course of an alcohol use disorder or have a milder severity. We believe that this proposal is an exact match with this research objective.

A wide gap exists between the number of individuals needing alcohol abuse treatment and the number actually receiving it. Many factors account for this gap, including treatment availability and affordability, individuals wanting to independently solve their problems with alcohol, and stigma associated with receiving treatment. Due to their potential to circumvent these treatment barriers, technological innovations hold promise for increasing dramatically the number of individuals who receive treatment services. For example, recent research has indicated that readily-accessible web-based alcohol interventions are effective in reducing alcohol consumption among problem drinkers. However, such web-based interventions are limited to the extent that they are not sensitive to, or available within, the everyday environment in which drinking or relapse occurs. This lack of immediacy is particularly a concern as research has demonstrated consistently that cues, such as locations where an individual has previously drank, are strong triggers for continued alcohol use or relapse and that these cues often overwhelm an individual's rational decision-making abilities. To address these concerns and to make interventions more readily available and accessible, our approach is to use emerging technologies to develop a tool that helps to intervene in actual high-risk locations. The primary aim of this project is to develop such a tool, the Location-Based Monitoring and Intervention - Alcohol (LBMI-A), a system that utilizes recent advances in GPS-enabled smartphones. The LBMI-A will be programmed to alert users when they are entering their geographically defined high-risk areas for relapse and provide an immediate psychosocial intervention (e.g., by sending a text message to a support person). Other LBMI-A features will include assessment and feedback reports, alcohol use self-monitoring and feedback functions, and skills modules (e.g., coping skills). We propose to develop this technological treatment tool in conjunction with a software company, Medical Data Services (MDS), which is currently developing a variety of GPS-based smartphone applications.

The primary aim of this proposal is to develop a GPS-enabled smartphone alcohol use disorders intervention, the LBMI-A. This development and pilot project will be broken into five phases, each with a specific objective:

Phase 1: Initial intervention is developed. This stage will entail development of the assessment, feedback, and intervention aspects of the LBMI-A. The treatment modality will be a combination of cognitive behavioral and motivational enhancement therapies. This phase will take approximately 3 months.

Phase II: Technological aspects of the LBMI-A are developed. The intervention developed in Phase I will be used by MDS (supervised by Chris Beall, MDS Chief Technology Officer) to develop a Windows Mobile smartphone application. This phase will take approximately 6 months.

Phase III: Alcoholism treatment experts review the LBMI-A and it is revised accordingly. After the application is available on GPS-enabled smartphones, it will be provided to three alcoholism treatment experts (Dr. Gerard Connors, Dr. Stephen Maisto, and Dr. Paul Stasiewicz) for 2 weeks so that they may provide a review of the intervention, including recommendations for modifications to the LBMI-A. Reviewer feedback will be used to improve the LBMI-A intervention content and MDS will make the necessary modifications to the programming. This phase will take approximately 2 months.

Phase IV: The LBMI-A is feasibility/pilot tested. Young adults (18- to 30 year-old) with mild to moderate severity of alcohol dependence will be randomized to use the LBMI-A for 6 weeks (n = 30) or to a waitlist control group (n = 30). This phase will examine the feasibility of the LBMI-A system by examining its actual use by alcohol dependent individuals, as well as pilot test the LBMI-A by examining treatment outcomes. This phase will take approximately 7 months.

Phase V: Final version of LBMI-A is produced. User interface data collected in Phase IV regarding components used and participants' feedback regarding user friendliness will be used to provide MDS with needed modifications. MDS will then develop a final version of the LBMI-A. The results of the feasibility/pilot study will be disseminated. An R01 grant proposal will be prepared to test the LBMI-A in an efficacy trial, using a rigorous randomized-control design with long-term follow-up. Up to 6 months will be devoted to this phase.

Location-Based Monitoring and Intervention for Alcohol Use Disorders

Research Area

This proposal is focused on the Recovery Act Limited Competition for NIH Grants. Research and Research Infrastructure "Grand Opportunities", RFA-OD-09-004 (RC2): Expanding and Personalizing Treatment Options for Alcohol Disorders. We are addressing two components of this FOA. The primary component addressed in this proposal is the "use of new technologies for delivering treatment services, including internet, smartphones, text messaging, telephone care, tele-medicine with video capacity, and others". The proposed project will develop an alcohol intervention delivered via a GPS-enabled smartphone. This project also addresses a second key component of this FOA: "Development and testing of innovative methods of providing services to large numbers of people, especially those with milder illness and/or at an earlier stage of illness". It is estimated that in the U.S. there are 16 million individuals with an alcohol disorder who cannot or are not willing to attend a formal treatment program. We are proposing to develop a self-administered intervention tool that can provide treatment to these individuals, and would be particularly well-suited for younger individuals and those with a lesser severity of alcohol dependence or alcohol abuse.

The primary goal of this project is to combine recent advances in telecommunications (GPS enabled smartphones) with empirically-supported alcohol interventions to produce an effective, portable, self-administered, and ecologically sensitive intervention that can be utilized by individuals with alcohol use disorders who might not otherwise receive any treatment. This system, the *Location-Based Monitoring and Intervention - Alcohol* (LBMI-A), will provide a leap forward in technological applications in the alcoholism field as it will provide interventions based on empirically-supported alcoholism treatments in the user's everyday environment and, most importantly, when and where they are in high-risk for alcohol consumption or relapse.

To accomplish this goal, we will first select and adapt the most appropriate, empirically-supported alcohol interventions for integration into the LBMI-A intervention. Medical Data Systems (MDS), the software company with whom we are collaborating, will then integrate this intervention into a GPS-enabled smartphone with a Windows Mobile platform, including a server system that at any time can provide uploads and downloads. Once the initial development is complete, the system will be provided to three alcoholism treatment and relapse experts, Dr. Gerard Connors, Dr. Steven Maisto, and Dr. Paul Stasiewicz. These treatment experts will provide an initial test and review of the LBMI-A intervention. Their feedback will guide a first round of modifications to the LBMI-A, which will subsequently be pilot tested with a group young adults (18 to 30 years old) with mild to moderate alcohol dependence. This feasibility and pilot study will focus on user interface issues (e.g., ease of use) and treatment outcomes. Results from the feasibility and pilot study will guide a second round of modifications to the LBMI-A. We will follow the currently proposed 2-year development and pilot study with an R01 for a full scale clinical trial of the LBMI-A as a stand-alone or adjunct tool for alcohol abuse and dependence treatment.

The Challenge and Potential Impact

Current Treatment Gap

It is estimated that in the U.S. there are approximately 18.7 million individuals over the age of 12 that meet the criteria for alcohol abuse or dependence; less than 10% of these individuals are treated and even amongst those individuals who meet criteria for alcohol dependence, only approximately 20% receive treatment (Grant et al., 2007). The tremendous gap between those in need and those receiving treatment argue for an urgent need to develop new and innovative strategies that have the potential to circumvent previously intractable treatment barriers, particularly in light of the tremendous costs to U.S. society associated with alcohol dependence (Cohen et al., 2007).

The alcoholism treatment field has not adequately utilized technological applications in the service of providing treatment to the large number of individuals with alcohol use disorders who choose not to (or are not able to) attend a treatment facility. The overall purpose of the LBMI-A is to provide a bridge between this treatment gap and the recent trend in information technology and telecommunications to deliver information and services to individuals at any time, in any location. The next meaningful step in delivering technologically-based alcoholism intervention services is to provide interventions to individuals in the natural contexts in which they drink or relapse, which is the overall purpose of the LBMI-A.

Barriers to Treatment. Research has pointed to a number of personal and treatment related factors that function as barriers to engaging in alcohol treatment. These treatment barriers largely relate to problems

with treatment access, including poor or inadequate availability of services; lack of insurance and treatment expense; and pragmatic issues, such as the need for childcare during treatment, work-related complications and transportation problems (Tucker, 1995). Studies suggest that these factors are likely to be even more of a barrier in rural, minority and female populations (Weisner, 1993). Treatment access has been discussed in terms of affordability, availability, accessibility and acceptability, all of which are diminished in a rural setting (Booth & McLaughlin, 2000). These barriers function to create and maintain the gap between those that need alcohol treatment and those that actually receive it.

While treatment-related barriers have been shown to be influential, recent research has indicated that the most powerful barriers to addiction treatment are related to personal attitudes about attending a treatment facility. Particularly hindering to individuals in need of treatment is the stigma associated with attending a treatment facility and being labeled by others as an "alcoholic", which can threaten an individual's sense of control and self-esteem. A number of studies highlight the centrality of stigma and subsequent fear of being embarrassed by others' reactions as barriers to attending alcohol treatment facilities (e.g., Saunders, Zygowicz & Angelo, 2006). Regardless of whether or not individuals believe that treatment will be effective in resolving or ameliorating their alcohol related problems, research also has shown that many people prefer to independently solve alcohol use problems instead of attending a treatment facility (Tucker, 1995).

Generalization Issue. Another impediment to the success of treatment for alcohol disorders is that it has been most often been situated in a clinician's office or in another therapeutic environment, such as an Alcoholics Anonymous meeting. The primary limitation of these treatment modalities is that much of what leads to continued alcohol use or relapse relates to situational cues in the individual's environment that are outside of the treatment context (Carter & Tiffany, 1999). Alcohol-related contextual cues (people, places and situations reminiscent of alcohol use) have been shown to be classically conditioned with alcohol effects and subsequently produce increased craving and physiological arousal, resulting in strong urges to use the drug of addiction. These cues have the potential to overwhelm an individual's coping resources, many of which are newly developed during the course of treatment (Goldman, 1999).

A further difficulty associated with formal treatment is that coping skills and other interventions are taught during treatment sessions, or in sequestered inpatient facilities, with the hope that patients will implement these skills in contexts that carry a high-risk for relapse. A significant impediment to using these newly acquired and often cognitively mediated coping skills to resist alcohol cravings is that frontal lobe impairment is often associated with addictions. Neurobiological studies indicate that frontal lobe functioning is dysregulated among substance addicted individuals, such that in the presence of drug-related stimuli, their executive functioning centers (rational decision-making structures) essentially become "hijacked" in the service of obtaining the relevant drug (Kavilas & Volkow, 2005).

Given the treatment barriers and generalization issues associated with typical alcoholism treatment, new treatment modalities are needed that can be delivered in an individual's everyday environment, when and where the strong temptations to drink are present. An intervention system that is particularly sensitive to an individual's high-risk environments for alcohol use could help that individual learn to maintain control of drinking desires when their coping and overall judgment is most likely impaired by situational cues to drink. Interventions delivered in an individual's everyday environment hold the potential to overcome many of the current barriers to alcohol treatment because (1) they do not require an individual to overcome the stigma associated with attending a treatment program, (2) take advantage of their desire to independently solve their alcohol problem, and (3) would negate the need to physically attend a treatment facility. These attributes would likely lead to a much higher proportion of the alcohol abusing population receiving necessary treatment.

Use of Technology in Alcohol Treatment: A Promising Direction

A number of web-based alcohol treatment programs have been shown to be effective in reducing alcohol consumption, particularly among younger populations (Bewick et al., 2008), and have resulted in meaningful alcohol use reductions among problem drinkers without the guidance of a counselor (Hester & Miller, 2006). While using technological tools to treat alcohol abuse and dependence is a new research area and more studies are needed, it appears that immediate, personalized, and normative feedback are vital ingredients (Hester & Miller, 2006; LaBrie et al., 2008). Internet-delivered, normative feedback and education regarding protective drinking strategies has been shown to result in significantly less drinking among heavy-drinking college students (Neighbors et al., 2009). A web-based intervention strategy that provided alcohol use assessment, individualized feedback and an intervention to develop a plan of behavior change was found to reduce drinking by 50% and reduction in drinking was maintained at 12-month follow-up (Hester, Squires &

Delaney, 2005). Lieberman and Huang (2008) provided findings that suggest that non-treatment seeking problem drinkers are highly receptive to using an interactive alcohol-reduction oriented web-site and that such technology can increase motivation to change.

These findings indicate that web-based technological tools that exist outside of treatment facilities hold promise for interventions that will aid in reducing the disparity between those in need of alcohol treatment and those who receive it. A new direction in the use of technology to bring about change in alcohol misuse that may prove effective uses ecological momentary assessment methods and handheld modern telecommunication services. A study by Collins, Kashdan, and Gollnisch (2003) using Interactive Voice Recognition (IVR) combined with a cell phone provides a key finding regarding whether or not people will use handheld technology in their everyday drinking environment. The study found that this cell phone-based method of self-monitoring was reliable in assessing alcohol consumption in real time. The study also suggested that participants used the cell phone in a manner consistent with the instructions and appeared to record drinking episodes when they actually took place. Interactive Voice Recognition and other handheld technologies have recently been shown to be effective for purposes beyond that of data collection. Interactive Voice Recognition as a mode of alcohol treatment has been shown to be effective in reducing relapse rates subsequent to receiving alcoholism treatment (Mundt, Moore, & Bean, 2006). Weitzel et al. (2007) found that a treatment system that sent the user text messages about drinking consequences resulted in a greater reduction in drinking than a system that simply monitored use.

These advances are very encouraging and argue for the effectiveness of modern technological tools as an alternative to office-based alcohol intervention, but they have yet to take full advantage of the technology that is currently available. The aforementioned technology-based innovations have used cell phone monitoring, text messaging, and interaction with websites. A modern GPS-enabled smartphone can do all of these things and adds another key feature, it knows the location of the user. A system that accesses the internet, cellular network, and knows that a user has entered a high-risk environment for alcohol use could be used to provide interventions during the exact moments in which such services are needed most. The focus of this proposal is to develop such a system for alcohol addiction.

The Current Project

The primary aim of this project is to develop and assess the feasibility of a new technologically-driven alcohol intervention that utilizes GPS-enabled smartphones; the LBMI-A. A key feature of the LBMI-A will be its ability to alert users when they are entering their geographically-defined high-risk areas for relapse (e.g., within a certain radius of their favorite bar). In addition to an audible alert, the system will respond by providing an individual with coping strategies for avoiding relapse and will be able to mobilize external social support through automated text messages or phone calls. This feature is expected to be a vital addition to the overall system as research has demonstrated a link between social support provided by concerned friends and family members and a reduced risk for alcohol relapse (Groh et al., 2007). Other LBMI-A features will include assessment and feedback reports, alcohol use self-monitoring, and skills modules (e.g., coping skills).

The LBMI-A will perform eight specific functions:

1. Assess the individual's alcohol use and problems and provide personalized, normative feedback.
2. Aid the individual in setting alcohol use goals (either abstinence or moderation), monitor progress toward goals, and provide regular progress reports.
3. Monitor amount and locations of alcohol use and provide regular feedback.
4. Provide skills modules to teach coping skills for both internally and externally triggered alcohol cravings.
5. Identify high-risk locations for alcohol use through geographic identification of previous sites in which the individual drank and locations identified by the individuals as high-risk for future drinking, as well as locations associated with a high density of local bars and clubs (identified via services such as Google Maps).
6. Alert the individual through an alarm function when he or she is entering a high-risk area for alcohol use as assessed by the smartphone GPS capabilities.
7. Provide immediate interventions and strategies that help the individual avoid or cope with high-risk situations based on geographical boundaries being crossed, as assessed by the GPS capabilities of the LBMI-A. For example, sending a text message to a supportive significant other or an Alcoholics

Anonymous sponsor to alert them of the individual's need for external support and suggesting coping strategies for high-risk situations (e.g., avoid, escape, distract, or endure).

8. Provide strategies for managing alcohol use cravings on demand. When the user indicates they are experiencing cravings the LBMI-A it will generate a list of coping strategies that could be used to avoid alcohol use and provide reminders of reasons for change (e.g., picture of loved ones or user generated list of reasons).

We believe that The LBMI-A represents a novel, groundbreaking innovation in the alcohol treatment field for a number of reasons:

- This type of technological application currently does not exist. A thorough literature and internet search for similar treatment tools produced nothing that was similar to the proposed intervention.
- There are other technological tools that are address alcohol treatment, but they are not immediately responsive to the environments in which the individual is most at risk for problematic drinking. The LBMI-A takes the alcohol treatment field in an entirely new direction by providing ecologically valid interventions when and where the individual needs them most.
- This tool would utilize contemporary telecommunications and GPS technology. The LBMI-A capitalizes on the recent technological trend to provide information and services to individuals wherever and whenever they are needed.
- The LBMI-A will allow continuous monitoring of alcohol use and the extent to which the various LBMI-A functions are used. This information will be used to evaluate the treatment efficacy of the LBMI-A system and to elucidate which functions are more or less helpful in reducing alcohol consumption, resulting in a continuous product enhancement research tool.
- The functionality of the LBMI-A could be easily changed in order to accommodate specific research or clinical needs. It could, for instance, be used solely to monitor amount and location of alcohol consumption within the context of an alcohol use disorder treatment clinical trial. The primary technological advantage of this system over IVR is that the LBMI-A user would not need to make a telephone call to report alcohol consumption. The LBMI-A would send the information directly to a database the moment the drinking was reported.

The Potential Impact

The LBMI-A has the potential to create a tremendous impact in the field of alcohol treatment. As indicated earlier, in the U.S. there are over 18 million individuals with alcohol abuse or dependence. This tool could have a number of applications, including being a standalone self-help treatment tool, an adjunctive tool for individuals currently in treatment, or an aftercare tool to aid in the prevention of relapse. As an adjunctive tool for individuals currently in treatment, the LBMI-A could be used to support behavioral treatment goals. For example, aiding individuals in avoiding high-risk situations via the alert function, providing reminders of skills learned in treatment in real-world settings in which cravings and relapse actually occur, and providing aid in seeking social support for abstinence or reduction goals when high-risk situations are encountered. The LBMI-A could be particularly useful for the large number of individuals (approximately 16 million in the U.S.) who are in need of treatment for an alcohol use disorder, but due to personal or treatment-related factors who are unwilling or unable to obtain treatment (Saunders, Zygowicz & Angelo, 2006). The LBMI-A also could be very useful for individuals who historically have had difficulty accessing treatment, particularly individuals living in rural areas (with wireless services) and the large number of women who do not receive treatment but are in need of services. It is most likely that this system will initially be primarily utilized by younger individuals who are well accustomed to utilizing modern technology (the "texting generation"), but with some assistance and training, could be taught to older individuals who have not integrated technology into their lives to the same extent as younger individuals.

A potential issue regarding the widespread availability of this treatment protocol relates to the availability of smartphones. As of January 2009, it was estimated that approximately 20% of the U.S. population owns a smartphone and it is forecasted that this percentage will rapidly grow in the future due to their perceived utility and technological superiority over standard cell phones (Sausner, 2009). It is likely that these units will in large part replace cell phones, which are currently owned by over 80% of the population. This treatment tool is designed to be available to those who do not want to attend a treatment facility or are not able

to due to logistic or pragmatic concerns, as well as those individuals who would use it to augment formal alcohol treatments. At a minimum, the LBMI-A could be utilized by as many as 3.6 million individuals across the United States, a figure that is based on the number of individuals with alcohol treatment needs who currently own smartphones.

The Approach

We will develop this tool for use by undertaking a multi-stage approach to develop the initial LBMI-A intervention, the software and server infrastructure that will support it, and then make modifications to the system based on expert reviewer feedback and pilot study participant feedback. In addition, we will undertake an initial examination of the clinical effectiveness of the LBMI-A system in reducing participants' alcohol use and problems.

Implementation Team

This project brings together experienced alcoholism researchers from across the U.S. Multiple PIs, Dr. Patrick Dulin and Dr. Vivian Gonzalez at the University of Alaska Anchorage (UAA) will lead the research team. This core of researchers will bring with them the infrastructure and staff supports of an existing UAA affiliated research center, the Behavioral Health Research and Services (BHRS). The research team will include an expert in technological and telecommunication approaches to alcohol research, Dr. Lorraine Collins, Associate Dean of Research at the University at Buffalo. Three experts in alcohol treatment research also will serve as consultants on the multiple phases of this project: Dr. Gerard Connors, Director of the Research Institute on Addictions; Dr. Paul Stasiewicz, Director of Clinical Research at the Research Institute on Addictions; and Dr. Stephen Maisto, Professor of Psychology at Syracuse University. In addition, Dr. Mark Johnson and Dr. Chris Brems, Co-directors of BHRS will serve as co-investigators and will specifically consult regarding quantitative and qualitative data gathering and analysis.

Phase I, Initial Intervention Development

This phase will entail further development of the assessment, feedback, and intervention aspects of the LBMI-A. The treatment modality of the LBMI-I will be a combination of cognitive behavioral and motivational enhancement therapies. The skills and coping aspects of the treatment will be drawn from treatments, such as the Combined Behavioral Interventional (CBI), that are modified for a self-administered format and to take advantage of the full capabilities of a GPS-enabled smartphone. Smartphone capabilities that will be used to enhance the LBMI-A treatment will include scheduling skills modules using a daily planner program with alerts and reminders for completion, and modifying the materials presented based on geographical location or user identified needs (e.g., the user identifies they are experiencing alcohol cravings). During this phase we will modify aspects of CBI and survey the empirical literature for the most appropriate behavioral techniques for a self-administered treatment format, alcohol assessment and feedback instruments, and strategies for enhancing motivation to change and coping strategies that can be integrated into the system. Table 1 presents the basic components of the LBMI-A treatment content. The treatment content presented to MDS will include directions regarding action sequences that correspond to user input or alert functions. The objective of this phase of the study will be accomplished when the treatment content of the LBMI-A is delivered to the technology team, MDS, for integration into the LBMI-A software. It is anticipated that Phase I will take approximately 3 months.

Table 1. Basic LBMI-A components, their purposes, and examples.

Components	Purpose/Feature	Specific examples of components[1]
Assessment	• Baseline assessment of alcohol use quantity and frequency before beginning LBMI-A • Allow creation of a personal feedback report • Customization of treatment by generating list of most relevant treatment modules	Examples of measures: • Short Index of Problems (SIP) • Important People List and Supportive People Forms (Project COMBINE) • University of Rhode Island Change Assessment (URICA) • Inventory of Drinking Situations (IDS) • Situational Confidence Questionnaire (SCQ) • Penn Alcohol Craving Scale • Decisional Balance • Short Alcohol Dependence Data Questionnaire (SADD)

Components	Purpose/Feature	Specific examples of components[1]
Personal Feedback Report	• Normative feedback to increase awareness of alcohol related problems and consequences Pretreatment Repeated post-treatment • Interpretative information based on scores • "Next steps" recommendations for LBMI-A skills modules to complete	Examples of feedback components: • Number of drinks per week relative to same gender US adult, estimated BAC • Tolerance and dependence levels • Profiles of alcohol related consequences, readiness for change, drinking motivation • identify high-risk situations for alcohol use or relapse
On-going assessment and feedback	• Note progress toward goals • Enhance motivation • Enhance self-efficacy	Examples of on-going assessment and feedback provided: • Graphs of change in frequency of drinking episodes and drinks per drinking day relative to goals • Tracking of progress on completion of treatment modules • Periodic retest of brief measure of alcohol related consequences to note change • Post-treatment assessment and feedback
Skills modules	• All modules available on demand and may be scheduled with reminders to complete • Some modules produced automatically in response to user: when boundary is crossed to high-risk geographical location (e.g., user presented with information regarding methods for coping with external triggers) in response to self-monitoring of alcohol use (e.g., user presented with information regarding coping with and understanding lapses)	Examples of skills modules: • Preparation for change Specifying goals (moderation or abstinence) Specifying a quit or change date Environmental changes (e.g., removing alcohol from home) Alerting SSOs of change effort • Coping with cravings and urges External triggers (avoid, escape, distract, or endure) Internal triggers (letting go, enduring) • Coping with and understanding lapses • Mood management skills • Social support for sobriety • Coping with social pressure to drink • Social and recreational change • Reminder of user generated reasons for change effort, including uploaded personal photos. by user on demand automatically when boundary is crossed
Supportive significant other (SSO) involvement	• Increase social support for user's abstinence or moderation	• Not imposed • Psychoeducational information PDFs that may be printed for distribution to SSOs and other sources of social support for change (e.g., mutual self-help sponsor) • Text alerts to SSOs and/or other support person during high-risk situations

[1]The final components that will make up the LBMI-A will be decided upon based on a thorough review of the treatment literature, which will be completed in Phase 1, and based on reviewer feedback. BAC= blood alcohol concentration

Phase II, Technological Development

During this phase, the smartphone application will be developed by Medical Data Services (MDS), supervised by Chris Beall, MDS Chief Technology Officer. Medical Data Services is a software company specializing in GPS-related applications based in Anchorage, Alaska, that has begun the initial stages of developing the LBMI-A from a conceptual and technological standpoint, and as such, is the current owner of this system. MDS is the only company to undertake this project for a number of reasons. First, MDS has the exclusive license (through U. S. patent # 6,459,372 B1) for devices that alert a GPS-enabled cell phone user that they have crossed a pre-specified boundary. Second, MDS is currently building templates for applications that provide location-based information and alerts in a number of other venues and has significant expertise in this field. Finally, in order for the LBMI-A to become widely available, it must be integrated with wireless services and commercial applications, requiring the involvement of a commercially-oriented company familiar with this type of distribution. MDS Chief Technology Officer, Chris Beall, has outlined several key components related to the development of the software and its integration into smartphone systems:

- The application will initially be developed for use with a Windows Mobile smartphone device. Windows Mobile is currently the most appropriate platform because it accommodates continually running applications in the background of the device. If our study results are encouraging, applications for other platforms (e.g., Google Android, Blackberry, iPhone) will be developed.
- The system will require User Interface (UI) on a mobile device that allows the user to select options from a list (e.g., beverage type and quantity).
- Data that is entered into the LBMI-A (e.g., alcohol use, time and location) by a user will be uploaded to a secure Amazon EC2 server.
- Pre-programmed action suggestions will be integrated to the server which will subsequently be delivered through the device UI and a web portal.
- The system will provide feedback to the user through the device UI and web portal about drinking levels and progress toward goals on a regular basis.
- The system will accommodate pre-programmed high-risk locations (e.g., locations with a high density of bars, which will downloaded from service such as Google Maps) as well as user-defined high-risk drinking locations.
- An audible alert (special ringtone) and visual alert (flashing icon on mobile device screen) will be developed for use when the user is within a programmable distance of a high-risk location.
- The system will require presentation of user choices regarding how to respond to a high-risk location alarm. An automatic alert (e.g., text message) to a supportive significant other or mutual self-help sponsor will be available as an option that is programmed on the server and executable by mobile device.
- The system will continually and confidentially upload (via wireless cellular connection) and store which aspects of the system are being accessed and alcohol use data on the Amazon EC2 server. A web link will be developed for uploading data from the LBMI-A. All data related to the user's interactions with the system will be stored and used for subsequent research purposes and to inform software improvement updates.

The objective of this phase of the study will be reached when the intervention developed in Phase I is available for use on a Windows Mobile smartphone device and are delivered to the research team for initial review and testing. MDS has indicated that Phase II will require approximately 6 months development time, during which they will be in communication with the research team about various options regarding integrating the psychosocial aspects of the LBMI-A system.

Phase III, Review of LBMI-A by Alcoholism Treatment Experts and Subsequent Revision

After the application is available on a Windows Mobile smartphone device, it will be provided to 3 alcohol treatment experts who will provide reviews of the LBMI-A intervention developed in Phase I. Given reviewers' expertise in treatment and factors associated with relapse, they will also be capable of making valuable suggestions for modifications to enhance the therapeutic impact of the LBMI-A system. Based on expert reviewer feedback, the LBMI-A will be modified before feasibility and pilot testing with alcohol dependant young adults. It is anticipated that this phase will last approximately 2 months.

Reviewers will include:

Gerard J. Connors, Ph.D., Director and Senior Research Scientist, Research Institute on Addictions, University at Buffalo, State University of New York. Dr. Connors is an experienced clinical researcher who has been actively involved in controlled clinical trials for alcohol use disorders and is an expert on factors effecting relapse.

Stephen A. Maisto, Ph.D., Professor and Senior Scientist, Center for Health and Behavior and the Department of Psychology, Syracuse University. Dr. Maisto is nationally recognized for his work in developing and assessing alcohol interventions and treatment programs and is an expert on factors effecting relapse.

Paul Stasiewicz, Ph.D., Director of the Clinical Research Center and Senior Research Scientist, Research Institute on Addictions, University at Buffalo, State University of New York. Dr. Stasiewicz is an experienced

researcher in the area of alcohol abuse, alcohol cravings, cue exposure, and the application of basic behavioral research to the development of new clinical interventions.

Review period. Expert reviewers will use the device for a period of two weeks with instructions to simulate an alcohol dependent client in order to test the full capabilities of the LBMI-A. They will be asked to consider a full range of client characteristics, based on their treatment experience, that may affect users' experience with the LBMI-A (e.g., varying levels of frustration tolerance, alcohol dependence symptomatology, and associated features). Reviews also will be asked to consider their knowledge of factors effecting treatment outcomes and relapse when reviewing the LBMI-A.

Initial assessment of LBMI-A. At the end of the two week period the reviewers will complete questionnaires and key informant interviews conducted by research staff to gather feedback regarding:

- Content of the assessment, personal feedback report, and other treatment components.
- Potential treatment aspects not addressed in the system that may be beneficial to incorporate.
- Ease of use, comprehensiveness, and presentation of the intervention components to the user.
- Whether the capabilities of the GPS-enabled smartphone are being used to their full advantage with the treatment that is initially designed.
- Problems associated with the use of the LBMI-A.
- Suggestions for improvement.

LBMI-A modifications. To improve the potential treatment impact of the LBMI-A, the PIs will modify the LBMI-A treatment content based on the expert reviewers' feedback. The MDS technology team will be provided with information regarding these needed changes and will modify the software accordingly. The objective of this phase of the project will be reached when MDS has made the modifications and has provided the research team with an improved version for use in a feasibility and pilot study.

Phase IV, LBMI-A Feasibility and Pilot Testing

The primary aim of this phase of the project is to examine the feasibility of the LBMI-A system for use in alcohol disorders treatment by examining its actual use by alcohol dependent young adults and the target populations' experience with the LBMI-A (user interface). This feasibility and pilot study will provide valuable data to further develop the LBMI-A based on feedback from the target population for whom the device is being developed. We also will pilot test the therapeutic efficacy of the LBMI-A during this phase of the project. This phase of the study will take approximately 7 months.

Sixty alcohol dependent, young adults will be recruited to participate in the feasibility and pilot study. Participants will be randomized to the LBMI-A for 6 weeks (n = 30) or to a 6-week waitlist control group (n = 30). Young adults (18- to 30-year-olds) will be selected who have a DSM-IV diagnosis of alcohol dependence, are not currently engaged in alcohol or substance abuse treatment, have a basic working knowledge and familiarity with information technology (e.g., ability to use the internet and cellular phones), and are at least minimally motivated to change their alcohol use (see Table 2 eligibility criteria 5).

Following the 6-week LBMI-A use period, all participants, including waitlist control participants who are eventually exposed to the LBMI-A treatment, will be intensively interviewed by research staff regarding their subjective impressions of: (1) the LBMI-A user interface (i.e., functionality of the Window Mobile program), (2) the presentation and perceived usefulness of the various treatment components, and (3) their suggestions for changes to the user interface and the treatment components. Participants will complete outcomes measures to pilot test the treatment effect of the LBMI-A in terms of both between group (LBMI-A compared with waitlist control) and within group (pre- and post-LBMI-A exposure differences in alcohol consumption and related variables). The pilot study also will provide data regarding participants' actual use of the various treatment components based on LBMI-A internal logs and use data that is uploaded to the server in real time will be examined.

Questions to be addressed relating to feasibility:

1. To what extent did participants access each of the treatment modules, and particularly those that were recommended based on the assessment?

2. To what extent did participants engage in daily self-monitoring?
3. How many of the devices were lost to participants owing to factors such as attrition (without returning the LBMI-A) and the LBMI-A being lost or damaged by participants?

Questions to be addressed relating to user interface:

1. To what extent did participants utilize the different components of the LBMI-A?
2. How frequently did participants record their alcohol use when and where it was actually occurring?
3. Was the LBMI-A user friendly? For example, did participants report that it was easy to understand the LBMI-A instructions regarding assessment and intervention strategies?
4. What were their experiences with the alert functions of the LBMI-A and how many locations did they add? Did they find them to be useful or an annoyance? Did the participants elect to have a friend or support person texted or called when they were in a high-risk location? What was the result of using the alert function?
5. Did participants access modules related to coping with cravings or use the suggested coping skills when they were experiencing alcohol cravings? Did the participants indicate that the strategies helped them to avoid alcohol consumption?
6. What were the aspects of the LBMI-A that they reported to be helpful in reducing alcohol consumption overall? What aspects of the LBMI-A would they change, eliminate, or add?

Questions to be addressed relating to therapeutic efficacy:

1. Did the participants evidence a within subjects reduction in alcohol consumption over time?
2. Did the LBMI-A group differ from the waitlist control group at post-treatment on number of drinking days, heavy drinking days, and other alcohol related variables (e.g., negative consequences)?
3. Was use of certain LBMI-A components (e.g., audible and text alert functions) associated with reductions in alcohol use or alcohol-related negative consequences?

General Procedures:

Participant Eligibility. Basic eligibility criteria are: (1) being a young adult between the ages of 18 and 30 years of age, (2) alcohol dependence, (3) basic proficiency in the use of technology (e.g., internet and cellular phones), (4) having a minimum 6th grade reading level, (5) evidence of at least minimal motivation for treatment, and (6) living in an area with cell phone coverage. Participants who evidence severe alcohol dependence will be excluded from the study and referred elsewhere for appropriate treatment. See Table 2 for eligibility and exclusionary criteria.

Table 2. *Eligibility criteria*

Eligibility criteria	Exclusion Criteria
1. Male or female between the ages of 18 and 30 years of age.	1. DSM-IV criteria for bipolar disorder, schizophrenia, dementia, or who evidence current psychosis.
2. Current DSM-IV diagnosis of alcohol dependence.	2. Engaging in any form of additional substance abuse treatment (except Alcoholics Anonymous or other mutual self-help).
3. Basic proficiency in the use of technology (e.g., internet, cellular phones)	3. DSM-IV diagnoses of other drug abuse or dependence (except marijuana or nicotine).
4. Have a minimum 6th grade reading level	4. More that 21 days abstinence.
5. Adequate motivation to engage in self-administered treatment.[1]	5. Legal mandate to attend treatment.
6. Live in an area with cell phone coverage (e.g., Anchorage).	6. Need for detoxification.
	7. Evidence of severe alcohol dependence, as indicated by a score 30 or above on the Severity of Alcohol Dependence Questionnaire.

[1]Defined as individuals who score positively (above 0) on the action stage of change subscale and negatively on the precontemplation stage of change subscale of the Readiness to Change Questionnaire Treatment Version.

Participant recruitment and screening. Participants will be recruited from a variety of sources including newspaper and radio advertisements in Anchorage, Alaska, and the surrounding areas. Following either verbal or signed (in person screening) informed consent, participants will be screened by telephone or in person for basic eligibility (e.g., AUDIT administered) and as appropriate, scheduled for an assessment of study eligibility.

Eligibility assessment. In order to assess participants for eligibility, trained psychology masters-level research assistants will conduct in-person interviews with potential participants (e.g., substance abuse treatment history, demographics, technology usage) and administer the following: the Severity of Alcohol Dependence Questionnaire, the Readiness to Change Questionnaire Treatment Version, the Structured Clinical Interview for DSM-IV for Axis I Disorders (SCID-I), the Slosson Oral Reading Test, and an alcohol and drug Timeline Followback interview (90 day version). The Timeline Followback interview also will provide a baseline assessment of alcohol use. Those not meeting criteria will be referred elsewhere for appropriate treatment.

Additional baseline measurement and on going assessment. The LBMI-A will administer a number of measures (see Table 1 for examples of assessment constructs/measures). Participants will complete these measures under research assistant supervision following the eligibility assessment. Additionally, the LBMI-A will assess daily alcohol use throughout the 6-week trial period. Each aspect of the participant's use of the LBMI-A will be recorded in internal logs and continuously uploaded onto a server via its cellular capabilities. This information will include the components accessed as well any self-monitoring or alert functions.

Post-treatment assessment. At the end of the 6-week trial period the LBMI-A will have a post-treatment assessment module to be completed by users. The LBMI-A post-treatment assessment will be comprised of the same measures completed during the initial LBMI-A assessment. The LBMI-A will provide participants a post-treatment personalized feedback report that is similar to the baseline feedback report, but also will note changes made over the course of treatment. The LBMI-A system will prompt users to complete the post-treatment assessment at the end of the 6-week trial period and the results will be automatically transmitted to the server. If the LBMI-A post-treatment assessment is not completed by a participant prior to their scheduled in person post-treatment interview (see below), than it will be administered during the in person interview appointment on the LBMI-A.

Participants will be scheduled for a key informant interview and an in person post-treatment assessment interview with a research assistant within one week of completing the 6-week trial. The key informant interview will address the questions related to user interface noted above, including issues relating to LBMI-A user friendliness, impact of the alert functions, which treatment modules or aspects were most helpful to their change efforts, which aspects of the LBMI-A were least helpful, and changes they believe would improve the system. Finally, participants will complete a post-treatment Alcohol Timeline Followback interview that covers the 6 weeks of LBMI-A treatment. While participants will self-monitor and record their alcohol use, completion of self-monitoring activities will likely not be 100%. The TLFB interview data will be compared with the self-monitoring data that was uploaded to the server over the 6 weeks of LBMI-A use.

Initial participant training in the use of LBMI-A system. After meeting eligibility criteria, participants will be given the LBMI-A and instructed to complete the initial LBMI-A assessment under the supervision of a research assistant. This will serve as a training period for participants in the use of the LBMI-A and will allow for an evaluation of how facile the system is for naïve users. Participants will be trained on the use of the LBMI-A to a minimum proficiency before being given the device to use independently during the 6-week trial period. Participants also will be instructed to call a research assistant if problems arise in the use of the LBMI-A over the 6-week trial period.

Participant compensation. Given the intense nature of the feasibility and pilot study (continuous self-monitoring and interaction with the smartphone), each participant will receive up to a total of $720 for participation. This will include $60.00 for each of the baseline and outcome assessments completed. For each week that participants evidence usage of the LBMI-A they will be compensated slightly increasing amounts ($75, $85, $95, $105, $115, $125). This level of payment is similar to those made in previous studies of ecological momentary assessment by our consultant Dr. R. Lorraine Collins (e.g., Collins et al., 2003). Although we would like to ensure that participants are using the LBMI-A, so that they may provide feedback and an initial assessment of the effectiveness of the program, we also would like to assess the naturalistic use of the LBMI-A by alcohol dependant individuals to meet their own treatment goals. Therefore, use requirements in order to obtain the incentive payments will be kept to a minimal level.

Data Analysis:

Key informant interviews. Key informant interviews will be transcribed and qualitative data analyses will begin immediately after transcription. The purpose of the key informant interviews will be to identify constructs and items to guide improvements to the LBMI-A user interface and treatment content. NVivo8 qualitative analytic software will be employed during this phase of the data analysis. Initial analyses will be descriptive and used to articulate key dimensions and issues reported by participants with a particular view towards aspects of the LBMI-A that they found particularly helpful, unhelpful or difficult to use. Qualitative analytic procedures will follow commonly used guidelines for assessing themes, domains, issues, and items. The process is iterative, moving between data collection, analysis, and integration, with data incorporated from different sources at each step to build a systematic picture of phenomena. More sophisticated analyses include axial and selective coding procedures drawn from grounded theory and analysis of narrative structures to create a grid of themes, domains, and contents. More detailed analyses to examine interrelationships and patterns among responses will occur as greater understanding evolves. This iterative approach, in which analyses unfold as each step reveals new insights, is typical in qualitative procedures. Dr. Chris Brems will provide consultation and expert guidance regarding all aspects of the qualitative data gathering and subsequent analysis.

Treatment outcome. Data comparisons will be made within subjects between pre- and post-treatment measures of alcohol use (drinks per drinking day, number of drinking days, heavy drinking days). These comparisons also will be made post-treatment between the LBMI-A group and the waitlist control group; these groups also will be compared on other alcohol related outcome variables (e.g., alcohol related consequences). It is anticipated that following this LBMI-A development study, future studies will provide more definitive and robust indications of the effectiveness of the LBMI-A as an adjunct to formal treatment or as a stand-alone tool for individuals who are uninterested in formal treatment. Dr. Mark Johnson will provide specific guidance regarding all quantitative data collection, storage and analysis.

User interface data. As mentioned previously, the LBMI-A system will store data on all interactions that the user has had with the system during the 6-week trial. This data will be provided to the research team by MDS for an analysis of the LBMI-A functions that were used most and least by participants. Functions that were very seldom used by participants will be cross-referenced with information from qualitative interviews with a view towards eliminating or modifying those particular functions.

Phase V. Final Product Development and Dissemination of Results

Based on the data gathered from Phase IV, the research team will generate modifications to the LBMI-A system. MDS will then make a third round of modifications to the Windows Mobile smartphone device and provide a final version of the LBMI-A to the research team to be used in future studies. Results from the feasibility study will then be prepared for publication in peer-reviewed journals and presentation at relevant conferences. The focus of these publications and presentations will be on feasibility findings, preliminary outcome results, retention of participants, a thorough description of the LBMI-A treatment system, and findings related to user interface with the LBMI-A.

We will use the results from the feasibility and pilot study in the preparation of an R01 grant proposal to test the LBMI-A in an efficacy trial using a rigorous randomized-control design with long-term follow-up.

Timeline, Milestones, Expected Measurable Outcomes and Deliverables

Time Frame	Purposes	Methods	Products
Phase I: Initial Intervention Development			
Months 1-3	• Develop LBMI-A intervention by integrating empirically supported interventions (e g., coping skills, assessment, and normative feedback)	• Thorough literature review regarding assessment and intervention methods, including currently developed technological approaches to reducing alcohol consumption • Consultation with Drs. Connors, Maisto, and Stasiewicz	• Specific assessment, feedback, and interventions for integration into the LBMI-A system • An outline of action sequences that the LBMI-A will perform, delivered to MDS for initial product development

Time Frame	Purposes	Methods	Products
Phase II: Technological Development			
Months 4-9	• MDS will develop the LBMI-A software and integrate specified LBMI-A functionality provided by the research team • MDS will integrate an Amazon EC2 server for LBMI-A uploads, downloads and data storage	• Methods of Information Technology development will be executed by MDS • New software engineers will be employed by MDS for this project	• An initial version of the LBMI-A on Windows Mobile smartphones will be delivered to the research team • MDS will provide an instruction manual and a training session to the research team
Phase III: Review of LBMI-A by Alcoholism Treatment Experts and Subsequent Revision			
Months 10-11	• To refine and improve the LBMI-A based on alcoholism treatment expert feedback	• Provide LBMI-A enabled Windows Mobile smartphones to treatment experts • Treatment experts will use LBMI-A for two weeks and provide feedback • Research team will analyze feedback from reviewers • MDS will make necessary modifications	• Research team will provide MDS with requested modifications to the LBMI-A • A modified version of LBMI-A on a Windows Mobile Smartphone delivered by MDS to the research team for use in Phase IV
Phase IV: LBMI-A Feasibility and Pilot Testing			
Months 12-18	• Feasibility study of smartphone intervention o Analysis of use, loss, and satisfaction with LBMI-A • User interface study o Analysis of LBMI-A components accessed and used • Pilot study of efficacy in reducing participants' alcohol consumption	• Recruit 60 participants with mild to moderate alcohol dependence via newspapers and radio advertising • Participants randomized to LBMI-A or 6-week waitlist control • Pre- and post-treatment assessment • Analyze qualitative and quantitative data	• Technical report addressing user interface findings with specific recommendations for LBMI-A modifications • Pilot study alcohol use outcomes • Specific guidelines provided to MDS for final modification of LBMI-A
Phase V: Final Product Development and Dissemination of Results			
Months 19-24	• Modify LBMI-A software in accordance with Phase IV results • Disseminate findings • Develop R01 clinical effectiveness proposal	• MDS will make a final set of changes to LBMI-A software • Research team will write manuscripts and develop conference presentations	• Final Version of LBMI-A on a Windows Mobile smartphone device • Publications and conference presentations of findings • R01 Clinical Effectiveness grant written and submitted

Resource Sharing Plan

The PIs take seriously their commitment to advancing knowledge in the scientific community and the role that data sharing takes in this endeavor. Equally important, the investigators recognize the potential vulnerabilities of individuals who participate in research and have put considerable energy into enhancing the ethical rigor of our proposed project through our study methods, recruitment processes, consent processes, confidentiality protections, and monitoring procedures.

During the first year of funding, explicit policies and procedures will be developed to govern data sharing. These policies and procedures will provide guidance and direction on sharing data through publications and presentations and responses to external requests for data. For each of these issues, explicit guidelines will be established to protect the rights of research participants. In all cases, there will be timely release and sharing of de-identified data; in no cases will this occur later than the acceptance for publication of the main findings from the final dataset.

Within reason, we will honor all requests from external investigators for access to our data. However, all data requests will be carefully evaluated to insure that the data are sought for scientifically-sound reasons, that the individual requesting the data is professionally qualified, and that the data to be shared are properly de-identified so as to protect the rights of participants. When de-identifying the data, care will be taken to remove both identifiers while maintaining the scientific integrity of the data. Removing both direct and indirect identities will be undertaken to insure that even deductive disclosure of identity is unlikely. Data sharing agreements also will be required to insure that the data will be used only for research purposes.

This project will be completed in collaboration with Medical Data Services (MDS), a private software development company. MDS has explicitly indicated that they will retain proprietary rights to all software stemming from this project and will not freely share the software and other technological aspects of the LBMI-A system. However, MDS has indicated that they will share all user interface data with researchers and has agreed that the UAA research team can freely publish and present data at conferences without their prior approval.

The PIs commit to compliance with NIH policies regarding sharing of unique research resources and compliance with the NIH *Principles and Guidelines for Recipients of NIH Research Grants and Contracts on Obtaining and Disseminating Biomedical Research Resources* (64 FR 72090, December 23, 1999). As such, the LBMI-A tool will be available to qualified researchers for subsequent research.

9-2092
OPS/OAFA (Rev 1/2000)

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
ARRA ASSISTANCE MODIFICATION

USGS
science for a changing world

1 MODIFICATION NUMBER	2 AWARD NUMBER	3 REQUISITION NUMBER
0002	___ Grant No.: __X__ Cooperative Agreement No: G09AC00496	10-ARRA-E078 ATN: ARRA-SE0005P2

4 RECIPIENT	5 ISSUED BY
Name & Address: University of Alaska P.O Box 757880 Fairbanks, Alaska 99775-7880 Andrew Parkerson-Gray Phone: 907-474-7314 HHS PMS Subaccount code: G09AC00496	Name & Address: U.S. Geological Survey Office of Acquisition and Grants 12201 Sunrise Valley Drive, MS205 Reston, VA 20192 Margaret Eastman, Contracting Officer Telephone: (703) 648-7366 FAX: (703) 648-7901 E-mail: mrussell@usgs.gov

6 APPLICATION TITLE & DATE

No Change

7 AWARD PERIODS	8 FISCAL DATA
Modification Budget Period: _____**Remains Unchanged** _____**Revised to: Date of Contracting Officer signature on Modification No. 0002 through 09/15/2011** Total Project Period: __X__ **Remains Unchanged** _____**Revised to:** Effective Date: Date of Signature by USGS Contracting Officer	2009/2010-RA02-00E23(SARAD) 411C $3,924.00 DCN: G09AC00496

9 DESCRIPTION OF MODIFICATION

1. The purpose of Modification No. 0002 is to (1) provide supplemental funds to the Recipient in the amount of $3,924.00 for the purchase of antennas and cables for the 22 Spread Spectrum radios supplies as GFE and (2) to revise four of the seismic stations sites to be upgraded.

2. Upgrading of stations DOT, GCSA, TRAP, and CHUM would be replaced by Stations GHI, HIN, GLI, and PWL as set forth in the recipient's proposal, dated June 29, 2010.

3. This award is increased from $529,025.00 by $3,924.00 to $532,959.00 (cumulative amount).

--Modification Continued on Next Page --

Check one: ____ Continuation/renewal (B) __X__ Revision (C) _____ Closeout (D)

10 AUTHORIZED SIGNATURES

G Griscavage 7-14-2010 Recipient's Signature Date	Margaret Eastman 7-21-10 Contracting Officer's Signature Date
TYPED NAME AND TITLE G. Maggie Griscavage, Director Office of Grants & Contracts Administration	Margaret Eastman, Contracting Officer TYPED NAME AND TITLE

4. RECAPITULATION

Basic Award	$500,484.00
Modification No. 0001 Funds	28,551.00
Funds Hereby Obligated	3,924.00
Total Funds Obligated	$532,959.00

5. All other terms and conditions remain unchanged.

- End of Modification No. 0002 -

ANSS Alaska Seismic Station Upgrade- Supplement for Antennas and Four Alternate Site Selections.

This supplemental proposal is being submitted following discussions with the Program Office for two reasons. First, top purchase needed antennas for the 22 Spread Spectrum radios supplied as GFE equipment, and second to revise four of the Seismic Station sites to be upgraded under the original proposal.

The 22 GFE Intuicom spread spectrum radios were delivered without and antennas or antenna cables. We will require one 900Mhz yagi antenna with cable for each radio. From a recent purchase we will be able to obtain the antennas for $3,326 and the cables for $174, for a total of $3,500, plus $100 for shipping.

As discussed with Bill Leith and Harley Benz, we are formally requesting alternate sites for four of the 17 Seismic Stations that are being upgraded with ARRA Stimulus funds. Please note that our choice of alternate sites were on the upgrade list from the original RFP.

The four stations we are to change include DOT, GCSA, TRAP, and CHUM. As explained in our discussions, TRAP and CHUM were sites of opportunity. They are not sites with particularly good ground response, but were strategically located in a gap covering area at a telecom concentration node allowing free telemetry over an existing phone line. We believe that these sites are best left as they are, allowing the higher quality equipment to be used at more competent rock sites (described below).

GCSA started as a PEPP site that has been upgraded by our partnership with a school, and hence is located at the Galena City School Alaska (i.e. GCSA). This site is difficult to upgrade and maintain the interaction to their display program, as well as being in a 20 foot borehole that the GFE supplied Trillium 120 will not fit into.

DOT is a site that has additional funding from CREST, and could benefit by waiting for an upgrade through the CREST funding next year. In addition, this site is also a 20-foot borehole, and would not easily accept the Trillium 120.

From our remaining stations that were candidates for upgrade as part of the RFP, together with Harley Benz we settled on the following for stations:

For TRAP -> we agreed on GHO as it nearby and a very good reliable site, again with access to free telemetry.

For GCSA, CHUM, and DOT -> we agreed on the three following stations from the Prince William Sound region: HIN, GLI, and PWL. The stations HIN and GLI will have access to telemetry through the community college in Valdez at no cost, and PWL will use an existing cell phone modem supplied by AEIC.

There is no need for any additional funding for these 4 alternate station sites.

BUDGET JUSTIFICATION

Salaries:

No salary time is requested in this supplemental proposal.

Materials & Supplies:

Funds of $3,500 are requested for 900Mhz yagi antennas with cables (22 at $159/each).

Other Direct Costs:

$100 is included for shipping the antennas.

Indirect Costs:

Facilities and Administrative (F&A) Costs are calculated at 9.0% of the Modified Total Direct Costs (MTDC) per specification of the program manager. MTDC includes Total Direct Costs minus tuition, stipends, scholarships, subaward amounts over $25,000, and equipment. A copy of the agreement is available at: http://www.alaska.edu/cost-analysis/negotiation-agreements/.