# **EXHIBIT B.4(A)**



## **Arkansas Department of Higher Education**

423 Main Street, Suite 400 • Little Rock, Arkansas • 72201-3818 • (501) 371-2000 • Fax (501) 371-2001

Asa Hutchinson Governor Maria Markham, Ph.D. Director

May 2, 2019

Dr. Kelly Damphousse, Chancellor Arkansas State University 504 University Loop Jonesboro, AR 72467

**RE:** Temporary Approval to Fill Provisional Positions

Dear Dr. Damphousse:

Due to federal grant timing restrictions and the immediate need to fill positions, please accept this letter as approval from the Department of Higher Education to fill the approved provisional positions listed below on a temporary basis until the next regularly scheduled meeting of the Arkansas Legislative Council – Personnel Subcommittee.

Positions Approved: Research Assistant – 1 Research Associate - 1

If you have any questions, please contact me at <u>nick.fuller@adhe.edu</u>.

Sincerely,

Nicholas Fuller Deputy Director

Cc: Lori Winn

S19039

## SUBAWARD AGREEMENT

between

## KANSAS STATE UNIVERSITY

and

## ARKANSAS STATE UNIVERSITY - JONESBORO

This SUBAWARD AGREEMENT is entered into by and between Kansas State University, 2 Fairchild Hall, 1601 Vattier Street, Manhattan, Kansas 66506-1103 (hereinafter referred to as UNIVERSITY), an educational institution of the State of Kansas, and Arkansas State University-Jonesboro, PO Box 2760, State University, Arkansas 72467 (hereinafter referred to as SUBRECIPIENT), an agency of the State of Arkansas, and an institution of higher education.

WHEREAS, UNIVERSITY is the recipient of Grant Award No. 2017-70006-27262 (hereinafter referred to as the PRIME AGREEMENT) and included herein as Appendix A, funded by the U.S. Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA) (hereinafter referred to as SPONSOR), under CFDA# 10.329 – Crop Protection and Pest Management, for the project entitled "Developing and Implementing a Diversified Integrated Pest Management Program to Prevent Stored Product Insect Infestation" (hereinafter referred to as the PROJECT); and

WHEREAS, UNIVERSITY desires the assistance of the SUBRECIPIENT to perform work within the scope of the PRIME AGREEMENT; and

WHEREAS, SUBRECIPIENT has skilled personnel and the facilities to undertake portions of this PROJECT and agrees to participate in the PROJECT as set forth in this SUBAWARD AGREEMENT for the consideration stated herein.

NOW, THEREFORE, the parties hereto mutually agree to the following terms and conditions:

#### **ARTICLE I - GENERAL PROVISIONS**

This SUBAWARD AGREEMENT is issued under the authority of the PRIME AGREEMENT mentioned above and all applicable requirements, regulations, provisions, and terms and conditions of the PRIME AGREEMENT are hereby incorporated by reference and are made a part of this SUBAWARD AGREEMENT with the same force and effect as if they were given in full text. This SUBAWARD AGREEMENT subject to Research Terms and Conditions and NIFA Agency Specific Terms and Conditions(10/16) at: (<u>http://nifa.usda.gov/terms-and-conditions</u>) and General Provisions found in Title 2: 2 CFR Part 400; 2 CFR Part 415; 2 CFR Part 416; 2 CFR Part 418; 2 CFR Part 422; and, Title 7: 7 CFR Part 3430 – all incorporated by reference (<u>http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR</u>).

This SUBAWARD AGREEMENT is subject to the United States Federal Funding Accountability and Transparency Act (FFATA or Transparency Act – P.L. 109-282, as amended by section 6202(a) of P.L. 110-252). For all SUBAWARD AGREEMENTs in an amount of \$25,000 or more, the SUBRECIPIENT must have a Dun & Bradstreet 9-digit DUNS number for reporting purposes. In addition, the SUBRECIPIENT must be registered in the System for Award Management (SAM) database (https://www.sam.gov), to facilitate the capture of the data elements required under FFATA. Execution of this SUBAWARD AGREEMENT is dependent upon SUBRECIPIENT providing their DUNS number to UNIVERSITY, along with confirmation of registration in the SAM. (See enclosed FFATA Information Request Form.)

## **ARTICLE II - KEY PERSONNEL**

SUBRECIPIENT's performance of the work, as described in Appendix B, shall be under the direction of Dr. Tanja McKay, Director of Environmental Sciences, Professor of Entomology, Arkansas State University - Jonesboro. No diversion, substitution, or replacement of this individual or substantial reduction in the level of effort of this individual, shall be made without the prior written approval by an authorized representative of UNIVERSITY.

UNIVERSITY's performance of the PROJECT work pursuant to the PRIME AGREEMENT will be under the direction of Dr. Kun Yan Zhu, University Distinguished Professor, Department of Entomology, Kansas State University.

## **ARTICLE III - PERIOD OF PERFORMANCE**

The Period of Performance for this SUBAWARD AGREEMENT shall begin on April 1, 2019 and shall terminate on August 31, 2020. Renewal or extension of this SUBAWARD AGREEMENT is subject to the continuation of the PRIME AGREEMENT and upon mutual agreement of both parties, which shall be provided for in writing and signed by authorized representatives of both parties. No charges will be paid or reimbursed which are incurred prior to the beginning date, or subsequent to the termination date of this SUBAWARD AGREEMENT.

## **ARTICLE IV - SCOPE OF WORK**

SUBRECIPIENT shall supply necessary facilities, labor, materials, and any other items required to accomplish the work to be performed under this SUBAWARD AGREEMENT as described in the Scope of Work, attached to this SUBAWARD AGREEMENT as Appendix B.

## **ARTICLE V - CONSIDERATION AND PAYMENT**

UNIVERSITY will reimburse the SUBRECIPIENT for costs provided for in the attached Subaward budget, Appendix C, not to exceed SUBAWARD AGREEMENT total of \$71,515.00.

UNIVERSITY shall reimburse SUBRECIPIENT no more frequently than monthly for allowable project costs. All invoices shall be submitted using SUBRECIPENT's standard invoice, but at a minimum shall include current and cumulative costs, Subaward Agreement No. S19039, and certification as required in 2 CFR 200.415(a), as detailed below, or a comparable representation thereof.

"By signing this invoice, I certify to the best of my knowledge and belief that the invoice is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise."

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Invoices that do not reference the UNIVERSITY Subaward Agreement number shall be returned to the SUBRECIPIENT. Invoices and questions concerning invoice receipt and payments should be directed to the UNIVERSITY's financial contact information as shown in the following paragraph. A final invoice, marked "Final," shall be submitted within sixty (60) days after the termination date of this agreement.

Invoices may be submitted electronically or via paper hard copy to the following address:

Sponsored Programs Accounting Division of Financial Services Kansas State University 2323 Anderson Avenue, Suite 600 Manhattan, KS 66502 Voice: 785.532.6207 / Fax: 785.532.3640 <u>spaaccts@k-state.edu</u>

UNIVERSITY will make payment to SUBRECIPIENT promptly after receipt and approval of certified invoices.

## **ARTICLE VI -- WORK PROGRESS**

It is imperative that the tasks and/or activities to be completed under this SUBAWARD AGREEMENT progress in a timely manner. Failure to progress in a timely manner could result in a delay in payments to SUBRECIPIENT, or in the most serious case, termination of this SUBAWARD AGREEMENT. SUBRECIPIENT and UNIVERSITY shall work diligently to communicate and resolve any work delay issues.

## **ARTICLE VII – BUDGET MODIFICATIONS**

SUBRECIPIENT is authorized to transfer funds between budget categories, which do not require prior approval, in accordance with SPONSOR's requirements.

In considering invoices submitted to UNIVERSITY that reflect a variance from the original approved Subaward budget, Appendix C, the signature of the SUBRECIPIENT's authorized representative shall be an indication of SUBRECIPIENT's certified approval of such budget modifications.

Any budget category transfers that would require SPONSOR and/or UNIVERSITY approval should be coordinated through UNIVERSITY. Such requests, with supporting information, may be submitted electronically or via paper hard copy and should be directed to:

Attn: Rex Goff PreAward Services Kansas State University 1 Fairchild Hall 1601 Vattier Street Manhattan, KS 66506-1103 voice: 785.532.6804 / fax: 785.532.3201 email: rgoff@k-state.edu

## ARTICLE VIII - TITLE TO EQUIPMENT

No equipment purchases are authorized under this SUBAWARD AGREEMENT. Equipment is defined as tangible, nonexpendable, personal property having a useful life of more than one (1) year and an acquisition cost of \$5,000 or more per unit.

## **ARTICLE IX - FINANCIAL RECORDS AND AUDITS**

SUBRECIPIENT shall maintain financial records, supporting documents and other records pertaining to all costs and charges incurred under this SUBAWARD AGREEMENT for the period of time required by the SPONSOR, but not less than a minimum of three (3) years after the termination of this Agreement. If any litigation claim or audit is started before the expiration of this retention period, the records shall be retained until all litigation, claims or audit findings have been resolved.

SUBRECIPIENT agrees to comply with the requirements of the Single Audit Act and 2 CFR 200, Subpart F – Audit Requirements and shall supply to UNIVERSITY a copy of SUBRECIPIENT's most recent Single Audit, if applicable.

SUBRECIPIENT further agrees to provide UNIVERSITY with copies of any independent auditor's reports which present instances of non-compliance with federal laws and regulations which bear directly on the performance or administration of this SUBAWARD AGREEMENT. In cases of such non-compliance, SUBRECIPIENT shall provide copies of responses to auditor's reports and a plan for corrective action.

SUBRECIPIENT agrees that UNIVERSITY and governmental auditors shall have access for audit purposes to any books, documents, papers, and records which are pertinent to the PROJECT at any reasonable time during the agreement and retention periods.

With respect to work performed pursuant the Scope of Work issued under this SUBAWARD AGREEMENT, SUBRECIPIENT shall be subject to the lower-tier PROJECT monitoring by UNIVERSITY, in accordance with 2 CFR Part 200. Monitoring activities may take various forms such as, reviewing reports submitted by SUBRECIPIENT, reviewing supporting documentation substantiating charges claimed, performing site visits to review SUBRECIPIENT's financial and programmatic records pertinent to the PROJECT and to observe operations. SUBRECIPIENT further agrees that any audit exceptions for this SUBAWARD AGREEMENT, which are noted by governmental or UNIVERSITY auditors shall be the sole responsibility of the SUBRECIPIENT. SUBRECIPIENT shall reimburse UNIVERSITY for the total of all disallowed costs for which the SUBRECIPIENT has received payment from UNIVERSITY.

SUBRECIPIENT shall submit to UNIVERSITY a copy of its currently approved Federal Facilities and Administrative Cost Rate (F&A) Agreement, if applicable.

### ARTICLE X - PROGRESS REPORTS AND RECORDS

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SUBRECIPIENT will render progress and final reports as requested and as directed by UNIVERSITY Project Director, Dr. Kun Yan Zhu, in order to ensure UNIVERSITY's compliance with any SPONSOR reporting requirements. During the term of this SUBAWARD AGREEMENT, representatives of the SUBRECIPIENT will consult with representatives of UNIVERSITY as requested, to discuss progress and results, as well as on going plans of the PROJECT.

SUBRECIPIENT shall maintain original project records as directed by UNIVERSITY and as required by SPONSOR, which must be available for inspection by authorized representatives of UNIVERSITY and/or SPONSOR, for the period of time required by the SPONSOR, but not less than three (3) years after the termination of this Agreement.

## ARTICLE XI - NATURE OF RELATIONSHIP

SUBRECIPIENT is an independent contractor and shall not act as an agent for UNIVERSITY, nor shall it be deemed to be an employee of UNIVERSITY for any purpose whatsoever. SUBRECIPIENT shall not enter into any agreement nor incur any obligations on behalf of UNIVERSITY, nor commit UNIVERSITY in any manner without prior written consent by an authorized representative of UNIVERSITY.

Consistent with SUBRECIPIENT's independent contractor status, UNIVERSITY shall not be liable for taxes, Worker's Compensation, unemployment insurance, employer's liability, employer's FICA, social security, withholding tax, or other taxes or withholding for or on behalf of SUBRECIPIENT or any other person employed by SUBRECIPIENT in performing services under this Agreement. All such costs shall be SUBRECIPIENT's responsibility, and SUBRECIPIENT will be responsible for all claims, liabilities, costs, fees, or losses of any kind or nature whatsoever related thereto, to the extent allowed by law.

#### ARTICLE XII - PUBLICITY

Neither party shall use the name of the other party, nor the name of any member of the project staff in any publicity or advertisement, whether with respect to this agreement or any other related matter, without the prior written approval of an authorized representative of the other party. Acknowledgement of funding is a factual statement and shall not be considered to be publicity or an advertisement and shall not be restricted by this requirement.

#### **ARTICLE XIII - PUBLICATIONS AND COPYRIGHTS**

Results of the project conducted under this SUBAWARD AGREEMENT may be published jointly by UNIVERSITY and SUBRECIPIENT or by either party separately, always giving due credit to the other party. However, SUBRECIPIENT shall submit a copy of any proposed publications to UNIVERSITY, thirty (30) days prior to such publication for informational purposes.

Copyrights to copyrightable materials first created solely by SUBRECIPIENT or the SUBRECIPIENT's personnel, in the performance of the PROJECT shall vest in the SUBRECIPIENT. SUBRECIPIENT acknowledges that the U.S. Federal government has an irrevocable, royalty-free, non-exclusive license to reproduce, distribute, translate, and use all such copyrighted material for governmental purposes.

Furthermore, SUBRECIPIENT shall grant to UNIVERSITY an irrevocable, royalty-free, non-transferable, non-exclusive license to use, reproduce, make derivative works, display, and perform publicly, any copyrights or copyrighted material (including any computer software and its documentation and/or databases), first developed and delivered under this SUBAWARD AGREEMENT, to the extent required to fulfill PROJECT obligations to the SPONSOR.

#### ARTICLE XIV - PATENTS

If patentable discoveries result from the work sponsored under this Agreement, patent rights will be vested in accordance with United States Patent Law, 37 CFR Part 401 and the terms and conditions of the PRIME AGREEMENT. SUBRECIPIENT acknowledges that the SPONSOR reserves, on behalf of the U.S. Federal government, an irrevocable, royalty-free, non-exclusive, non-transferrable license to practice or have practiced for governmental purposes, any such patentable discoveries or inventions.

SUBRECIPIENT will ensure that they and all of their employees who perform any part of the work under this SUBAWARD AGREEMENT and who may be reasonably expected to make inventions agree in advance to assign their rights in such inventions to the SUBRECIPIENT. SUBRECIPIENT shall promptly disclose any potentially patentable inventions to SPONSOR, pursuant to the requirements of the PRIME AGREEMENT. SUBRECIPIENT shall submit a final report of inventions no later than sixty (60) days after the expiration of the SUBAWARD AGREEMENT to the following address:

> Sponsored Programs Accounting Division of Financial Services Kansas State University 2323 Anderson Avenue, Suite 600 Manhattan, KS 66502 Voice: 785.532.6207 / Fax: 785.532.3640 spaaccts@k-state.edu

#### **ARTICLE XV - INCORPORATION**

All applicable provisions, regulations, and terms and conditions of the PRIME AGREEMENT, Appendix A, are hereby incorporated and made a part of this SUBAWARD AGREEMENT. All requirements imposed upon UNIVERSITY by the SPONSOR shall be imposed upon the SUBRECIPIENT unless otherwise provided for in this Agreement or under the terms of the PRIME AGREEMENT.

The Contractual Provisions Attachment (Form KSU-146a, Rev. 3-18), which is attached hereto as Appendix D, is hereby incorporated in this SUBAWARD AGREEMENT and made a part thereof as a requirement of the State of Kansas.

## **ARTICLE XVI - ASSURANCES AND CERTIFICATIONS**

## Occupational Health and Safety

SUBRECIPIENT shall act responsibly in matters of occupational health and safety and shall take all necessary and appropriate safety measures in performing under this SUBAWARD AGREEMENT. SUBRECIPIENT shall comply with all applicable federal, state, and local laws relating to occupational health and safety.

## Hazardous Material

SUBRECIPIENT certifies and agrees to require and maintain records regarding the training of employees in the handling, use, transport or disposal of hazardous materials. Where work on the PROJECT involves hazardous material, SUBRECIPIENT shall comply with all federal, state and local laws and regulations concerning the transportation, handling, and disposal of such materials. Compliance with the provisions of this clause by lower tier SUBRECIPIENTs will be the responsibility of SUBRECIPIENT.

## Program for Enhancement of Contractor Employee Protections (41 U.S.C. 4712)

SUBRECIPIENT is hereby notified that they are required to: inform their employees working on any Federal award that they are subject to the whistleblower rights and remedies of the program; inform their employees in writing of employee whistleblower protections under 41 U.S.C. §4712 in the predominant native language of the workforce; and include such requirements in any agreement made with a subcontractor or subgrantee.

## Debarment and Suspension (2 CFR 200.213 and 2 CFR 180)

This SUBAWARD AGREEMENT is subject to the SUBRECIPIENT's signing of USDA Form AD-1048, Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transactions, attached hereto as Appendix E. Any change in the debarred or suspended status of SUBRECIPIENT during the life of this agreement must be reported immediately to UNIVERSITY.

## Promoting Objectivity in Research (COI):

SUBRECIPIENT must designate herein which Financial Conflicts of Interest policy (COI) will apply:

## **X** SUBRECIPIENT's

If SUBRECIPIENT is applying its own COI policy, by execution of this SUBAWARD AGREEMENT, SUBRECIPIENT certifies that its policy complies with the requirements of the SPONSOR.

## UNIVERSITY's (Policy located online at <a href="http://www.k-state.edu/conflict/policies/">http://www.k-state.edu/conflict/policies/</a>.)

SUBRECIPIENT shall report any financial conflict of interest to UNIVERSITY. Any financial conflicts of interest identified shall, when applicable, subsequently be reported to the SPONSOR. Such report shall be made before the expenditure of funds authorized in this SUBAWARD AGREEMENT and within forty-five (45) days of any subsequently identified COI.

### Export Control Compliance

Information, products, services and/or technical data originating in the United States, which may be provided or disclosed, under this SUBAWARD AGREEMENT, or developed pursuant to the work completed under this SUBAWARD AGREEMENT utilizing such technical information, may be subject to required and continuing U.S. Government approvals, clearances, regulations, and export/import and re-export requirements, including the U.S. Department of State International Traffic In Arms Regulations (Title 22, CFR Parts 120-130), the U.S. Department of Commerce Export Administration Regulations (Title 15, CFR 730-774), and any other U.S. Government regulation applicable to the export/import, re-export, or disclosure of such controlled technical data (or the products thereof), including the prohibition of the provision of such controlled technical information or data (or the products thereof) to certain proscribed persons, entities or countries. SUBRECIPIENT acknowledges and agrees that it must comply with all such U.S. regulations regarding export/import, re-export or disclosure and will obtain any and all such registrations, licenses, agreements, approvals and/or certifications, as may be required by U.S. regulations for the export of the products, services, and/or technical data being provided or developed under this Agreement before initiating any such transfer or disclosure.

Furthermore, SUBRECIPIENT agrees that, as a condition of SUBRECIPIENT's receipt of technical information or data under this SUBAWARD AGREEMENT that are subject to U.S. Export controls, SUBRECIPIENT hereby certifies and guarantees that such information will not be re-exported to those restricted countries listed in the Export Administration Regulations or retransferred to other persons, parties or entities that are not authorized to receive the technical information without prior written approval the U.S. federal government. Any such re-export or retransfer of controlled technical information or data may be subject to further U.S. Government approvals and any re-export or retransfer contrary to U.S. federal government regulations is prohibited.

#### Misconduct in Science

By signing this Agreement, the SUBRECIPIENT certifies that it has established administrative policies associated with prevention, detection, and handling of misconduct in science allegations as stipulated in the SPONSOR's implementing regulations (USDA regulations found at 2 CFR Part 422, NSF at 45 CFR Part 620, NASA at 14 CR Part 1275, and US DHHS at 42 CFR Part 93, Subpart A).

#### Responsible Conduct of Research (RCR)

By signing, the Authorized Organizational Representative of SUBRECIPIENT is certifying that they have a plan in place to provide appropriate training and oversight in the responsible and cthical conduct of research (RCR) to any undergraduates, graduate students and postdoctoral researchers who will be supported by either NSF or USDA to conduct research. Additionally, US DHHS requires that all trainees, fellows, participants, and scholars receiving support though any NIH training, career development award, research education grant, and dissertation research grant must receive instruction in responsible conduct of research.

SUBRECIPIENT shall require that the language of this certification be included in any award documents for all agreements at all tiers.

#### **ARTICLE XVII - TERMINATION**

Either party may terminate this Agreement provided the other party receives written notification specifying the terminating party's intent, thirty (30) days prior to the termination date. In the event of early termination of this Agreement, UNIVERSITY shall pay for costs and noncancelable commitments incurred through the date of termination. Reimbursement for incurred costs and obligations will not exceed the total estimated consideration and payment as shown in Article V.

#### **ARTICLE XVIII - MODIFICATION**

This document and its Appendices constitute the entire agreement between the parties relative to the subject matter. Any change to the terms of this agreement shall be valid when the change is made in writing and approved by the authorized representatives of the parties hereto.

#### ARTICLE XIX – COUNTERPARTS

This SUBAWARD AGREEMENT may be executed in one or more counterparts. Delivery of an executed counterpart of this Agreement by facsimile or a .pdf data file or other scanned executed counterpart by email shall be equally as effective as delivery of a manually executed counterpart of this Agreement. Each duplicate and counterpart shall be equally admissible in evidence, and each shall fully bind each party who executed it. The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may be used. The parties agree they will have no rights to challenge the use or authenticity of this document based solely on the absence of an original signature.

In Witness Whereof, the parties hereto have executed this agreement as of the date and year of the last signature below.

UNIVERSITY

Paul R. Lowe Associate Vice President for Research Director, PreAward Services

4/10/2019

Date

SUBRECIPIENT

IN Part Lawrence

Thomas Risch, Ph.D. Interim Associate Vice Chancellor of Research

Date

<u>71-6000556</u> Subrecipient FEIN

\_\_\_\_\_073510067 DUNS Number

## INSTITUTION OF HIGHER EDUCATION NEW PROVISIONAL POSITION REQUEST

#### INSTITUTION Arkansas State University

#### BOARD APPROVAL DATE 5/31/2018

REQUESTED CLASS CODE/TITLE	# of Positions	PROPOSED POSITION SALARY FY19	DEPARTMENT/PROGRAM ASSIGNMENT				
Research Assistant	1	\$30,000	Biological Sciences/Pam				
			Harrell for Dr. McKay				
SOURCE OF PROJECT	TOTAL	APPROPRIATION LIM SALARY	POSITION				
FUNDING	FUNDING	FY19	FUNDING DATES				
USDA (United States Department of Agriculture)/NIFA (National Institute of Food and Agriculture)	\$71,515	\$68,994	4/01/2019 - 8/31/2020				
NOTE: For new request, complete Narrative Project Description and Narrative Position Description (page 2). For renewal request, complete this form (page 1) and attach a copy of page 1 and 2 of the original approval. If the renewal request is for a position that was continued into this fiscal year, attach the page of the continuation approvals for this fiscal year that contains the position.							
Lori Winn INST PERSONNEL REPRESENTATIVE	3/15/19 DATE	Dr. Kelly Damphousse INST PRESIDENT/CHA	Dr. Kelly Damphousse 3/15/19 INST PRESIDENT/CHANCELLOR DATE				
	Of	ficial Use Only					
<pre>// Approved as follows</pre>			/ / Disapproved				
CLASS CODE/TITLE		<u># of Positions</u>	SALARY				
Research Assistant		1	FY19 <b>\$68,994</b>				
ITEM NUMBER		APPROVED THROUGH					
107		June 30, 2019					
Chandra Robinson	3/18/19	Nicholas Fuller	3/18/19				
ADHE PERSONNEL REPRESENTATIVE	DATE		UCATION MANAGER DATE				
POSITIONS AUTH 300	POSITIC	NS APPROVED <u>296</u> POSITIONS	REMAINING <u>4</u>				

## JUSTIFICATION FOR POSITION NEED:

Use of novel attract-and-kill technology, and long-lasting insecticide netting to prevent infestations from occurring for primarily wheat and rice facilities. Consultation with and transfer of knowledge to stakeholders in the stored product industry, that may include presenting at Rice Technical Group meetings and other venues appropriate for communicating the findings of the study to relevant stakeholders.

#### NARRATIVE PROJECT DESCRIPTION:

Semi-field experiments using rice to assess the ability of attract-and-kill (AK) and insecticide netting to prevent stored product pests from infesting the grain. In addition, this would include assessing the efficacy of these two mechanisms in preventing the immigration of stored product pests in commercial rice facilities. Research Assistant to be hired to complete the field and laboratory work component of this project under the guidance of the Dr. Tanja McKay, Principal Investigator.

## NARRATIVE POSITION DESCRIPTION:

Minimum Qualifications include:

Must meet the minimum requirements of a BS in Biology, Environmental Sciences, or a related field. Field and laboratory experience are preferred.

## **INSTITUTION OF HIGHER EDUCATION** NEW **PROVISIONAL POSITION REQUEST**

## INSTITUTION Arkansas State University

BOARD APPROVAL DATE 5/31/2018

REQUESTED CLASS CODE/TITLE	PROPOS # of Positions		POSITION SALARY FY19	DEPARTMENT/PROGRAM ASSIGNMENT			
Research Associate	1	Ş	\$45,000	College of Agriculture Sherry Ellis			
SOURCE OF PROJECT FUNDING	TOTAL FUNDING	APPROPRI	ATION LIM SALARY FY19	POSITION FUNDING DATES			
Bioremediation Grant	\$146,016	\$	115,251	1/01/2019-12/14/2019			
NOTE: For new request, complete Narrative Project Description and Narrative Position Description (page 2). For renewal request, complete this form (page 1) and attach a copy of page 1 and 2 of the original approval. If the renewal request is for a position that was continued into this fiscal year, attach the page of the continuation approvals for this fiscal year that contains the position.							
Lori Winn	4/24/19		Dr. Kelly Damphousse	4/24/19			
INST PERSONNEL REPRESENTATIVE			INST PRESIDENT/CHANCELLOR DATE				
Official Use Only							
// Approved as follows				/ / Disapproved			
CLASS CODE/TITLE			# of Positions	SALARY			
Research Associate			1	FY19 <b>\$115,251</b>			
ITEM NUMBER			APPROVED THROUGH				
108			June 30, 2019				
				./0=//0			
Chandra Robinson ADHE PERSONNEL REPRESENTATIVE	4/25/19 DATE	_	Nichoals Fuller ADHE HIGHER ED	4/25/19 UCATION MANAGER DATE			
POSITIONS AUTH <u>300</u> POSITIONS APPROVED <u>297</u> POSITIONS REMAINING <u>3</u>							

## JUSTIFICATION FOR POSITION NEED:

This project comprises collaborative efforts between Non-Land-Grant Colleges of Agriculture (NLGCA), Arkansas State University, and the University of Arkansas Little Rock, which are designed to enhance the capacity for follow-on funding research that has impact on Arkansas' agriculture economy. Additionally, this project focuses on educating a minority student at the Mass Spectrometry (MS) level and at least two underrepresented minority undergraduate students to increase their representation in STEM disciplines, enhancing A-Stat's reputation for providing a unique experience in support of agriculture, renewable resources and the environment. This project audience comprises first and foremost minority participants in science encouraging a diverse workforce for the next generation of investigators into solutions for agriculture, resources, and environmental clean up. A second audience comprises the companies that are seeking solutions to remediate waste streams from manufacturing and for agricultural chemical run-off mitigation. Potentially, the results, publications and patents from this project and the research beyond this initial grant could reach the Environmental Protection Agency (EPA), promoting new policies for waste remediation for water and/or soils.

## NARRATIVE PROJECT DESCRIPTION:

The post doctoral researcher, Maria Elena Gonzalez Romero will perform experiments with current graduate and undergraduate students to develop analytical techniques for High Performance Liquid Chromatography (HPLC) and Liquid Chromatography—Mass Spectrometry (LCMS) to identify products from the remediation experiments with several textile dyes. She has been working with my other students throughout the last 8 - 10 months on similar projects, training them and supporting their work, as well as developing her own data sets.

## NARRATIVE POSITION DESCRIPTION:

PhD and at least one (1) year experience in HPLC and Mass Spectrometry.