

# SCBGP PROJECT PROFILE TEMPLATE

## DEFINITION OF A PROJECT

A project is a set of interrelated tasks with a cohesive, distinct, specified and defined goal. It follows a planned, organized approach over a fixed period and within specific limitations (cost, performance, quality, etc.). Additionally, it uses resources that are specifically allocated to the work of the project and usually involves a team.

Projects are different from other ongoing operations in an organization because, unlike operations, projects have a definitive beginning and end – they have a limited duration. One way to think about this is that a project has an overarching goal that you want to accomplish through a series of individual activities or tasks. Examples of projects could include researching new cultivars or marketing apples through a targeted promotional campaign.

Activities or tasks that could be a part of such projects might include hiring personnel, purchasing special equipment, holding an educational workshop, planting specialty crops or distribution product promotional materials.

## INSTRUCTIONS

1. Complete the profile below, describing how you will fulfill the goals and objectives of your project and provide key details.
2. Transfer data to the related sections in the ISDA online GMS system under your account for this opportunity.

## PROJECT TITLE

*Provide a descriptive project title in 15 words or less in the space below.*

Extension Food Safety Training and GAPs Programming for Indiana Specialty Crop Growers

## DURATION OF PROJECT

Start Date: 10/1/2021 End Date: 9/30/2024

## PROJECT PARTNER AND SUMMARY

*Include a project summary of 250 words or less suitable for dissemination to the public. A Project Summary provides a very brief (one sentence, if possible) description of your project. A Project Summary includes:*

1. *The name of the applicant organization that if awarded a grant will establish an agreement or contractual relationship with the State department of agriculture to lead and execute the project,*
2. *A concise outline the project's outcome(s), and*
3. *A description of the general tasks to be completed during the project period to fulfill this goal.*

### FOR EXAMPLE:

For example, the ABC University will mitigate the spread of citrus greening (Huanglongbing) by developing scientifically-based practical measures to implement in a quarantine area and disseminating results to stakeholders through grower meetings and field days.

Purdue Extension, in collaboration with other agencies, will develop and deliver food safety programming to specialty crop growers in Indiana. In addition to current educational offerings that assist specialty crop growers in achieving

compliance with the Food Safety Modernization Act Produce Safety Rule (21 CFR 112), educators will develop practical, research-based trainings that may be offered across the state. Trainings and other educational offerings will be developed at the Purdue Extension Food Safety Training Hub, located near Vincennes. Purdue Extension will also develop and manage a cost-share program aimed at encouraging specialty crop growers to obtain third-party GAPs certifications after successfully passing a third-party audit. As a component of the overall project, applied research will be conducted to determine suitability of various materials to serve as food contact surfaces for vehicles used to transport specialty crops. While emphasis will be placed on materials that may be used in cantaloupe and watermelon production, it is anticipated that results will be applicable to other specialty crops. This project will be conducted over a 3-year period.

## PROJECT PURPOSE

### PROVIDE THE SPECIFIC ISSUE, PROBLEM OR NEED THAT THE PROJECT WILL ADDRESS

The health benefit of consuming fresh fruits and vegetables has been well documented. However, fresh produce has been implicated in many foodborne illness outbreaks. It is estimated that the percentage of foodborne illness outbreaks attributable to fresh produce may approach 46% (Painter et al, 2013).

Good agricultural practices (GAPs) are practices used by specialty crop growers to reduce the risk of crop contamination and subsequent outbreaks of foodborne illness. Since 2009, Purdue Extension has provided food safety (i.e. GAPs) training to specialty crop growers. During that time, many growers have come under regulation by the Food Safety Modernization Act Produce Safety Rule (21 CFR 112) (PSR). Regulatory requirements, increases in buyer-driven food safety requirements, the need understand and implement best practices in production, and the uniqueness of individual farms have continued to necessitate the development and delivery of a variety of educational programs to Indiana specialty crop growers.

Purdue Extension has developed and delivered a variety of educational programs and services to fruit and vegetable growers in Indiana, both individually and in collaboration with the Indiana State Department of Agriculture (ISDA) and the Indiana State Department of Health (ISDH). The primary vehicle through which education has been accomplished has been the offering, on a statewide basis, of the Produce Safety Alliance grower training, required by specialty crop growers who are covered by the PSR. Purdue Extension has also undertaken applied research in order to determine and inform growers of on-farm food safety best practice. Efforts to address these needs also include development of the Purdue Extension Food Safety Training Hub (PEFSTH), a 7,100 ft.2 facility opened in November 2019 with the goal of becoming a regional focal point for food safety and GAPs training.

A continued need to determine research-based best practice for on-farm food safety, the need for continuing education among growers, and the sheer number of production types found among Indiana specialty crop farms have created additional demand for research and research-based outreach beyond needs generated by the PSR. Concurrently, demand for buyer-driven 3rd party audits and GAPs certifications have increased. GAPs certifications are an industry construct and are separate from any regulatory requirements to which growers may be held. Audits, and subsequent certifications, are seen by produce buyers as a method of 3rd party verification of food safety practices on individual farms. Increasingly, successful passage of a 3rd party audit is a requirement that must be met in order for specialty crop growers to gain access to wholesale markets.

The purpose of this project is to undertake various related activities that, in the aggregate, will meet the needs of Indiana specialty crop growers with regard to issues of produce food safety. The activities undertaken in this project will involve applied research, development of courses and other educational offerings, assistance with preparation for 3rd party audits, and outreach to assist specialty crop growers in achieving regulatory compliance.

Questions of best practice arise where a body of conclusive research is lacking. Applied research that shapes or defines understanding of best practice, coupled with aggressive outreach, enhances competitiveness of specialty crops by minimizing the risk of on-farm contamination by a foodborne pathogen and subsequent market-devastating outbreaks. Appropriateness of materials for use as a food contact surface is one such area where questions of best

practice arise. The PSR gives general guidance and sets a minimum standard. However, growers frequently question the appropriateness of materials for use in harvest containers, postharvest transport vehicles, and packing lines.

Of considerable issue among cantaloupe and watermelon growers in Indiana is the identification and use of appropriate materials in transport vehicles. According to most recent data, watermelon production in Indiana is valued at \$46,898,000 (USDA, 2020). Cantaloupe production was estimated to be valued at \$7,616,000 in 2015 (USDA, 2015). The data indicate a decline of 40% from a high of \$12,698,000 in 2011 (USDA, 2012). The majority of the decrease in value stems from an outbreak of foodborne illness linked to Indiana-grown cantaloupe in 2012. As a result, Indiana watermelon and cantaloupe growers are keenly aware of food safety issues and have been proactive in identifying possible contamination risks. Carpeting and straw, historically used in transport vehicles such as wagons and school busses to cushion and protect melons, have been eliminated. Unfortunately, watermelon and cantaloupe growers have been unsuccessful in identifying ideal materials for their replacement. Various materials are used, without scientific validation that the material is ideal or performing according to expectations.

The applied research component of this project seeks to examine the fitness of various materials for use as a food contact surface in transport vehicles such as wagons or busses. Ideally, materials would be identified that could serve as coverings or linings. While this research would primarily benefit growers of watermelon and cantaloupe, best practice information gained would be applicable to other specialty crops that tend to be transported in large quantities to packing facilities such as sweet corn, pumpkins and squash, and tomatoes.

Regulatory compliance is of utmost importance and will continue to be a major focal point of food safety programming. As a component of this project, we propose to increase the number of PSA grower trainings offered statewide, as the demand for this program has continued to increase. The need for food safety education and information among specialty crop growers frequently extends beyond classes that enable specialty crop growers to meet minimal regulatory standards. This will be addressed by the development of new or novel educational offerings for specialty crop growers. These programs will address specific components of produce food safety and will provide information and education beyond training required by the PSR. The Purdue College of Agriculture, along with Vincennes University, the ISDA, and the ISDH, have made significant investments to develop the PEFSTH. The uniqueness of the facility, which contains a cooler, laboratory, classroom, and large postharvest area with research-scale washing/packing equipment, lends itself to development and delivery of myriad educational offerings.

We propose development of three specific educational offerings that will benefit Indiana specialty crop growers. In Year 1, a recordkeeping course would be developed and offered to specialty crop growers on a statewide basis. Recordkeeping has been identified by growers as an area of challenge. This course would provide best-practice information that would facilitate better, more convenient, and more complete keeping of required records for on-farm food safety. In Year 2, we propose the development of a cleaning and sanitation course. This course would take advantage of facilities and equipment at the PEFSTH. Participants would be able to participate in both a classroom component and a practical, hands-on component, working with research scale wash/pack equipment found at the facility. In Year 3, a third-party audit class would be offered. This would involve training growers in one of many possible food safety audit protocols against which a third-party audit could be conducted. Depending on buyer requirements, specialty crop growers may be required to be audited using any number of protocols. Initially, we plan to offer training in the Harmonized GAPs and PrimusGFS protocols, as these are most commonly required by produce buyers.

Developed classes will be delivered at the PEFSTH. Additionally, classes will be developed such that they may be offered on a statewide basis. Based on grower demand, we anticipate offering each developed class at five locations across Indiana (Central, SW, NW, NE, and SE regions). Classes will also be developed such that they may be customized to benefit growers of specific specialty crops. As examples, recordkeeping forms and templates could be customized for growers of tomatoes, watermelon, cantaloupe, or lettuce. Cleaning and sanitation courses could address general sanitation or be customized for growers of melons, apples, peaches, tomatoes, potatoes, etc.

This project will also address the need of Indiana specialty crop growers to pass third-party audits and subsequently obtain their GAPs certification. Third-party audits are being required of growers of all sizes as an industry-driven condition of access to markets. Current efforts focus on direct one-on-one interaction with specialty crop growers

through consultations, assistance with written food safety plan preparation, and mock auditing services (as a means of preparing growers for the real audit). Due to expense, audits may be cost-prohibitive for growers. Anecdotal data from growers indicate a minimum expense of \$1,500 for a third-party audit using a lower-level audit such as the Harmonized GAPs or USDA GAP/GHP protocol. Expense for more audits using more in-depth protocols, such as PrimusGFS, may easily be several thousand dollars. As a component of this project, current activities and services will be supported and enhanced. Also, Indiana specialty crop growers will be provided financial assistance in the form of a cost-sharing program that will reimburse growers a portion of their audit expenses, thereby reducing the financial burden of obtaining an audit and subsequent GAPs certification. A similar program has been conducted previously (see Continuation Project Information section). The primary focus of the cost-sharing program will be to encourage growers to obtain their initial GAPs certification. Certifications are good for one year. Consequently, a secondary focus would be to assist growers in maintaining their certifications once they are obtained. We envision a program whereby specialty crop growers enroll prior to the beginning of the growing season. Growers would be required to show proof of successfully passing a third-party audit as a condition of receiving funds. Funds would be distributed with emphasis on reimbursing those growers who have received their initial GAPs certification. Remaining funds would then be distributed among growers who have re-certified during the growing season.

This project seeks to directly benefit specialty crop growers. The estimated number of direct beneficiaries has been listed. Participation in the program will be open to all growers who meet appropriate criteria, including socially disadvantaged and beginning farmers. Food safety education is of direct benefit to specialty crop growers. When an outbreak of foodborne illness is linked to a specialty crop, all growers who produce the commodity in question experience loss through negative publicity, loss of sales, and long-term decreases in production and value. If efforts are successful in preventing an outbreak of foodborne illness in any specialty crop, in addition to growers, almost every citizen in the State of Indiana who consumes fresh produce would be a potential beneficiary.

#### References –

Painter, JA, Hoekstra, RM, Ayers, T., Tauxe, RV, Braden, CR, Angulo, FJ, Griffin, PM. 2013. Attribution of foodborne illnesses, hospitalizations, and deaths to food commodities by using outbreak data, United States, 1988-2008. *Emerg Infect Dis* [Internet]. <https://www.cdc.gov/foodborneburden/attribution-image.html#foodborne-illnesses>.

U.S. Department of Agriculture. 2015. State Agricultural Overview. National Ag Stats Serv. Available from [http://www.nass.usda.gov/Quick\\_Stats/Ag\\_Overview/stateOverview.php?state=INDIANA](http://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=INDIANA) [Accessed 03/25/21].

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U.S. Department of Agriculture. 2020. State Agriculture Overview. National Ag Stats Serv. Available from [https://www.nass.usda.gov/Quick\\_Stats/Ag\\_Overview/stateOverview.php?state=INDIANA](https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=INDIANA) [Accessed 03/25/2021].

#### PROVIDE A LISTING OF THE OBJECTIVES THAT THIS PROJECT HOPES TO ACHIEVE

*Add more objectives by copying and pasting the existing listing or delete objectives that aren't necessary.*

**Objective 1:** Examine fitness of various materials for use as a food contact surface in harvest containers and transport vehicles (determination of best practice).

**Objective 2:** Development of new or novel educational programs that may be offered to Indiana specialty crop growers.

**Objective 3:** Assist growers in successfully passing third-party audits and subsequently obtaining GAPs certifications.

**Objective 4:** Assist growers in achieving regulatory compliance with the Produce Safety Rule.

## PROJECT BENEFICIARIES

Estimate the number of project beneficiaries: ..... 500

Does this project directly benefit socially disadvantaged farmers as defined in the RFA? Yes  No

Does this project directly benefit beginning farmers as defined in the RFA? Yes  No

## STATEMENT OF ENHANCING SPECIALTY CROPS

By checking the box to the right, I confirm that this project enhances the competitiveness of specialty crops in accordance with and defined by the Farm Bill. Further information regarding the definition of a specialty crop can be found at [www.ams.usda.gov/services/grants/scbgp](http://www.ams.usda.gov/services/grants/scbgp).

## CONTINUATION PROJECT INFORMATION

Does this project continue the efforts of a previously funded SCBGP project? Yes  No

*If you have selected "yes", please address the following:*

### DESCRIBE HOW THIS PROJECT WILL DIFFER FROM AND BUILD ON THE PREVIOUS EFFORTS

Previous projects were initiated in 2011, 2014, and 2017. These projects addressed food safety for specialty crops and were focused on both training and determination of best practice for management of inputs. Previous efforts enabled the development of training materials and facilitated the introduction of GAPs to specialty crop growers, as well as enabled third-party GAPs audits at reduced cost. Since that time, the PSR has come into existence, necessitating specific training for growers that are covered by the rule. Concurrently, the need for GAPs certifications as a means of accessing markets has increased. Awareness of food safety issues generated by previous projects has increased growers' desire for best practice information.

This project will differ significantly from previous projects. Significant time and resources were expended in previous projects to inform specialty crop growers of the need for GAPs and for produce food safety. This has created widespread awareness of food safety issues among Indiana specialty crop growers. Our project will focus on development and delivery of food safety programming, without expending resources to introduce topics or concepts. Our proposed project will build on previous efforts by expanding the food safety programming for specialty crop growers to meet the demand generated by regulation, industry, and previous projects. Former endeavors have provided an excellent infrastructure upon which to build additional food safety programming for specialty crop growers.

### PROVIDE A SUMMARY (3 TO 5 SENTENCES) OF THE OUTCOMES OF THE PREVIOUS EFFORTS

Previous efforts have been extremely successful in generating an awareness of food safety issues among Indiana specialty crop growers. Additionally, previous efforts have provided a programming infrastructure that this project will enhance and have provided valuable insights into best practice for input management. Infrastructure development culminated in the opening of the Purdue Extension Food Safety Training Hub (PEFSTH), located near Vincennes, IN, in 2019. The PEFSTH provides a base from which food safety programming may be extended to specialty crop growers across the state.

### PROVIDE LESSONS LEARNED ON POTENTIAL PROJECT IMPROVEMENTS

### **What was previously learned from implementing this project, including potential improvements?**

Previous projects addressed outreach, best practice, and the difficulty growers faced in obtaining third-party audits. These projects led to a better understanding of grower needs. Also, these projects allowed greater understanding of how best to work with specialty crop growers in the organization and presentation of educational offerings. Perceived barriers to obtaining GAPs certifications were better understood as a result of these projects. A better understanding of input management and a clearer understanding of best practice were also gained from previous projects.

### **How are the lessons learned and improvements being incorporated into the project to make the ongoing project more effective and successful at meeting goals and outcomes?**

Previous lessons will be incorporated into the current project. The programming infrastructure and awareness generated by previous projects will allow more efficient dissemination of information. Awareness of food safety among growers, developed by previous outreach, will allow us to more easily develop and deliver educational offerings that go beyond the level of basic information. Laboratory and training facilities will allow us to increase the pace at which best practice is determined and information is given to Indiana specialty crop growers. Understanding of growers' perceived barriers to obtaining GAPs certifications will allow us to develop services, programs, and assistance that overcomes these barriers allowing for more use of time and resources.

### **DESCRIBE THE LIKELIHOOD OF THE PROJECT BECOMING SELF-SUSTAINING AND NOT INDEFINITELY DEPENDENT ON GRANT FUNDS**

This project has a high probability of becoming self-sustaining. Outreach was funded by this program in 2011 and 2014 and has been largely self-sustaining in the interim period. In 2015, Purdue Extension created two positions focused on produce food safety. Continued support from extension and other sources, along with investment in personnel and facilities and grower support, have all increased the sustainability of our endeavors. Our proposed project will allow us to expand current food safety activities for Indiana specialty crop growers, building on a program that has already shown sustainability since initial funding from this program was obtained in 2011. Given the unique location of the FEFSTH, we anticipate that following development and delivery of educational offerings to Indiana specialty crop growers, these will be made available on regional basis, likely in a fee-based format. This too will increase the likelihood that this project will be self-sustaining.

### **OTHER SUPPORT FROM FEDERAL OR STATE GRANT PROGRAMS**

The SCBGP will not fund duplicative projects. Did you submit this project to a Federal or State grant program other than the SCBGP for funding and/or is a Federal or State grant program other than the SCBGP funding the project currently?

**Yes**

**No**

### **IF YOUR PROJECT IS RECEIVING OR WILL POTENTIALLY RECEIVE FUNDS FROM ANOTHER FEDERAL OR STATE GRANT PROGRAM**

#### **Identify the Federal or State grant program(s).**

State and Territory Cooperative Agreement to Enhance Produce Safety in Preparation of Implementation of FDA's Rule: Standards for the Growing, Harvesting, Packing, & Holding of Produce for Human Consumption.

IP# dev-00091628 submitted to IN STATE DEPARTMENT OF HEALTH subcontracted by FOOD AND DRUG ADMINISTRATION.

Third-Party Audit Assistance for Indiana Specialty Crop Growers.  
IP# dev-21089828. Submitted to IN STATE DEPARTMENT OF AGRICULTURE.

**Describe how the SCBGP project differs from or supplements the other grant program(s) efforts.**

This project supplements funding from other sources and facilitates the expansion of food safety programming for specialty crop growers. Purdue Extension is subcontracted through the Indiana State Department of Health as part FDA's State and Territory Cooperative Agreement to Enhance Produce Safety in Preparation of Implementation of FDA's Rule: Standards for the Growing, Harvesting, Packing, & Holding of Produce for Human Consumption. This program provides funding for implementation of the Food Safety Modernization Act Produce Safety Rule (21 CFR 112). This includes both education and regulatory functions. This is accomplished jointly by Purdue Extension, the Indiana State Department of Agriculture, and the Indiana State Department of Health. As PSR compliance dates have passed and inspection of Indiana specialty crop farms has begun, of necessity, funds have increasingly been used to support regulatory functions. Additionally, conditions of funding limit the scope of educational outreach efforts to PSR education. Our proposed project will allow us to maintain current PSR-related efforts, as well as facilitate development and delivery of trainings that current funding does not support.

As stated previously, the industry-driven annual third-party audits, and subsequent certification ensure adherence to food safety practices and principles beyond basic minimum requirements of the PSR. Successfully passing a third-party audit is now a requirement for specialty crop growers to access many markets. While submitted to ISDA and awaiting funding, the Third-Party Audit Assistance for Indiana Specialty Crop Growers project aims to assist specialty crop growers in successfully instituting on-farm food safety programs and passing an initial third-party audit. This project is limited in scope, as it provides funding for a limited number of growers (preferentially Indiana Grown members) to obtain their initial third-party audit. Our proposed project would facilitate additional training aimed at assisting growers with the establishment of on-farm food safety programs and expand assistance to all growers who are seeking to pass an initial third-party audit. The proposed project would also provide assistance in traveling to farms to provide one-on-one assistance with audit preparation and development of written food safety plans, a requirement of all audit-driven food safety systems.

Funding from current and previous projects has facilitated the establishment of the Purdue Extension Food Safety Training Hub, a facility located near Vincennes, IN that contains over 7,100 ft.2 of space devoted to produce food safety training and research. Our proposed project would provide funding for continued development of the Hub, its capabilities and its class offerings. Supplementary funding would allow the facility to move closer to the goal of becoming an active regional food safety training center for specialty crop growers.

## EXTERNAL PROJECT SUPPORT

*Describe the specialty crop stakeholders who support this project and why (other than the applicant and organizations involved in the project).*

This project is supported by multiple stakeholders. Members of the Indiana specialty crop industry have a keen understanding of the importance of food safety at all levels of production, distribution, and sales. Letters of support from individuals and organizations from all facets of the Indiana specialty crop industry are included with this proposal as proof of support.

Stakeholders support this project because food safety has become an important part of participation in the specialty crop industry at all levels of the supply chain. Outbreaks of foodborne illness linked to produce in Indiana and other states have demonstrated to stakeholders the necessity of adherence to minimum standards at all levels, and have brought to prominence the issue of produce food safety in an on-farm setting, as production is the first, and most critical, link in the supply chain.

## EXPECTED MEASURABLE OUTCOMES

## SELECT THE APPROPRIATE OUTCOME(S) AND INDICATOR(S)/SUB-INDICATOR(S)

You must choose at least one of the eight outcomes listed in the [SCBGP Performance Measures](#), which were approved by the Office of Management and Budget (OMB) to evaluate the performance of the SCBGP on a national level.

### OUTCOME MEASURE(S)

Select the outcome measure(s) that are applicable for this project from the listing below.

- Outcome 1:** Enhance the competitiveness of specialty crops through increased sales (required for marketing projects)
- Outcome 2:** Enhance the competitiveness of specialty crops through increased consumption
- Outcome 3:** Enhance the competitiveness of specialty crops through increased access
- Outcome 4:** Enhance the competitiveness of specialty crops through greater capacity of sustainable practices of specialty crop production resulting in increased yield, reduced inputs, increased efficiency, increased economic return, and/or conservation of resources
- Outcome 5:** Enhance the competitiveness of specialty crops through more sustainable, diverse, and resilient specialty crop systems
- Outcome 6:** Enhance the competitiveness of specialty crops through increasing the number of viable technologies to improve food safety
- Outcome 7:** Enhance the competitiveness of specialty crops through increased understanding of the ecology of threats to food safety from microbial and chemical sources
- Outcome 8:** Enhance the competitiveness of specialty crops through enhancing or improving the economy as a result of specialty crop development

### OUTCOME INDICATOR(S)

Provide at least one indicator listed in the [SCBGP Performance Measures](#) and the related quantifiable result. If you have multiple outcomes and/or indicators, repeat this for each outcome/indicator.

#### FOR EXAMPLE:

##### **Outcome 2, Indicator 1.a.**

Of the 150 total number of children and youth reached, 132 will gain knowledge about eating more specialty crops.

Outcome 6, Indicator 5

150 reported changes in prevention, detection, control, and intervention strategies.

Outcome 7, Indicator 1

1 projects focused on increased understanding of the ecology of fecal indicators and pathogens.

Outcome 7, Indicator 4

3 projects focused on increased understanding of preharvest and postharvest process impacts on microbial and chemical threats.

Outcome 7, Indicator 5

1 growers or producers obtaining on-farm food safety certifications (such as Good Agricultural Practices or Good Handling Practices).

## MISCELLANEOUS OUTCOME MEASURE

In the unlikely event that the outcomes and indicators above the selected outcomes are not relevant to your project, you must develop a project-specific outcome(s) and indicator(s) which will be subject to approval by AMS.

## DATA COLLECTION TO REPORT ON OUTCOMES AND INDICATORS

*Explain how you will collect the required data to report on the outcome and indicator in the space below.*

Outcome 6, Indicator 3. The number of participants who attend developed classes and educational offerings will be tracked and reported. Participants will be given a short test prior to the beginning of events, as well as immediately following events, to estimate short-term knowledge gain. All collected and tabulated data will be used to monitor outcomes. These will be communicated through required reporting, as well as used for internal analysis to insure that the project is meeting defined objectives.

Outcome 7, Indicator 1. Educational offerings focused on understanding of fecal indicators and pathogens will be reported. Outcome 7, Indicator 4. Number of projects and educational offerings that deal with understanding of preharvest and postharvest process impacts on microbial and chemical threats will be recorded and reported.

Outcome 7, Indicator 5. Number of projects focused on growers or producers obtaining on-farm food safety certifications will be recorded and reported. To the best of our ability, numbers of producers obtaining GAPs certifications as a result of the projects will also be recorded and reported. All collected and tabulated data will be used to monitor outcomes. These will be communicated through required reporting, as well as used for internal analysis to insure that the project is meeting defined objectives.

## BUDGET NARRATIVE

*All expenses described in this Budget Narrative must be associated with expenses that will be covered by the SCBGP. If any matching funds will be used and a description of their use is required by the State department of agriculture, the expenses to be covered with matching funds must be described separately. Applicants should review the Request for Applications section 4.7 Funding Restrictions prior to developing their budget narrative.*

Budget Summary	
Expense Category	Funds Requested
Personnel	\$101,144.00
Fringe Benefits	\$37,734.00
Travel	\$24,660.00
Equipment	\$0.00
Supplies	\$38,275.00
Contractual	\$0.00
Other	\$75,000.00
<b>Direct Costs Subtotal</b>	<b>\$276,813.00</b>
<b>Indirect Costs</b>	<b>\$8,304.39</b>
<b>Total Budget</b>	<b>\$285,117.39</b>

## PERSONNEL

*List the organization's employees whose time and effort can be specifically identified and easily and accurately traced to project activities that enhance the competitiveness of specialty crops. See the Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Salaries and Wages, and Presenting Direct and Indirect Costs Consistently under section 4.7.1 for further guidance.*

#	Name/Title	Level of Effort (# of hours OR % FTE)	Funds Requested
1	To Be Determined, Technician	50%	\$62,744.00
2	To Be Determined, Student Worker	3,840 hours	\$38,400.00
3			
4			

<b>Personnel Subtotal</b>	<b>\$101,144.00</b>
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## PERSONNEL JUSTIFICATION

For each individual listed in the above table, describe the activities to be completed by name/title including approximately when activities will occur. Add more personnel by copying and pasting the existing listing or deleting personnel that aren't necessary.

**Personnel 1:** In order to meet the objectives of the proposed project, we are requesting funds to support key personnel. Funding is requested for one-half time technician (50% FTE). This individual will assist with all facets of the project. This includes supporting

**Personnel 2:** Funding is requested for a student worker. This individual will assist during the growing season when laboratory and field work are required. Efforts will primarily be focused on supporting the research component of the project. Use of this position

**Personnel 3:**

**Add other Personnel as necessary**

## FRINGE BENEFITS

Provide the fringe benefit rates for each of the project's salaried employees described in the Personnel section that will be paid with SCBGP funds.

#	Name/Title	Fringe Benefit Rate	Funds Requested
1	To Be Determined, Technician	55%	\$34,654.00
2	To Be Determined, Student Worker	8%	\$3,080.00
3			
4			
<b>Fringe Subtotal</b>			<b>\$37,734.00</b>

## TRAVEL

Explain the purpose for each Trip Request. Please note that travel costs are limited to those allowed by formal organizational policy; in the case of air travel, project participants must use the lowest reasonable commercial airfares. For recipient organizations that have no formal travel policy and for-profit recipients, allowable travel costs may not exceed those established by the Federal Travel Regulation, issued by GSA, including the maximum per diem and subsistence rates prescribed in those regulations. This information is available at <http://www.gsa.gov>. See the Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Travel, and Foreign Travel for further guidance.

#	Trip Destination	Type of Expense (airfare, car rental, hotel, meals, mileage, etc.)	Unit of Measure (days, nights, miles)	# of Units	Cost per Unit	# of Travelers Claiming the Expense	Funds Requested
1	Various County Trips Multiple Locations per year	Mileage	8220	3	\$0.39	1	\$24,660.00
2							
3							
4							
5							
6							
7							

<b>Travel Subtotal</b>	\$24,660.00
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## TRAVEL JUSTIFICATION

For each trip listed in the above table describe the purpose of this trip and how it will achieve the objectives and outcomes of the project. Be sure to include approximately when the trip will occur. Add more trips by copying and pasting the existing listing or delete trips that aren't necessary.

**Trip 1 (Approximate Date of Travel 10/2021):** Please see the attached "Budget Narrative" document that details our requested funding for travel.

**Trip 2 (Approximate Date of Travel MM/YYYY):**

**Trip 3 (Approximate Date of Travel MM/YYYY):**

**Add other Trips as necessary**

## CONFORMING WITH YOUR TRAVEL POLICY

By checking the box to the right, I confirm that my organization's established travel policies will be adhered to when completing the above-mentioned trips in accordance with [2 CFR 200.474](#) or [48 CFR subpart 31.2](#) as applicable.



## EQUIPMENT

Describe any special purpose equipment to be purchased or rented under the grant. "Special purpose equipment" is tangible, nonexpendable, personal property having a useful life of more than one year and an acquisition cost that equals or exceeds \$5,000 per unit and is used only for research, medical, scientific, or other technical activities. See the Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Equipment - Special Purpose for further guidance

Rental of "general purpose equipment" must also be described in this section. Purchase of general purpose equipment is not allowable under this grant. See Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Equipment - General Purpose for definition, and Rental or Lease Costs of Buildings, Vehicles, Land and Equipment.

#	Item Description	Rental or Purchase	Acquire When?	Funds Requested
1				
2				
3				
4				

<b>Equipment Subtotal</b>	\$0.00
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## EQUIPMENT JUSTIFICATION

For each Equipment item listed in the above table describe how this equipment will be used to achieve the objectives and outcomes of the project. Add more equipment by copying and pasting the existing listing or delete equipment that isn't necessary.

**Equipment 1:**

**Equipment 2:**

**Equipment 3:**

## Add other Equipment as necessary

### SUPPLIES

*List the materials, supplies, and fabricated parts costing less than \$5,000 per unit and describe how they will support the purpose and goal of the proposal and enhance the competitiveness of specialty crops. See Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Supplies and Materials, Including Costs of Computing Devices for further information.*

Item Description	Per-Unit Cost	# of Units/Pieces Purchased	Acquire When?	Funds Requested
Course Development Cost	\$18,500.00	1	10/2021	\$18,500.00
FSMA Compliance	\$2,500.00	3	10/2021	\$7,500.00
Contact Surface Research	\$12,275.00	1	10/2021	\$12,275.00
<b>Supplies Subtotal</b>				<b>\$38,275.00</b>

### SUPPLIES JUSTIFICATION

*Describe the purpose of each supply listed in the table above purchased and how it is necessary for the completion of the project's objective(s) and outcome(s).*

Course Development Cost: This funding will be used in the development of 1 educational offering per year during the project. A detailed breakdown and narrative may be found in our uploaded budget narrative document.

FSMA Compliance: This requested funding will support expansion and enhancement of our FSMA compliance efforts and will facilitate additional educational offerings that are required by specialty crop growers. Please refer to our uploaded budget narrative document.

Contact Surface Research: Supplies purchased under this line item will be used in the applied research component of the project. Please see our complete budget narrative in the uploaded budget document.

### CONTRACTUAL/CONSULTANT

*Contractual/consultant costs are the expenses associated with purchasing goods and/or procuring services performed by an individual or organization other than the applicant in the form of a procurement relationship. If there is more than one contractor or consultant, each must be described separately. (Repeat this section for each contract/consultant.)*

### ITEMIZED CONTRACTOR(S)/CONSULTANT(S)

*Provide a list of contractors/consultants, detailing out the name, hourly/flat rate, and overall cost of the services performed. Please note that any statutory limitations on indirect costs also apply to contractors and consultants.*

#	Name/Organization	Hourly Rate/Flat Rate	Funds Requested
1			
2			
3			
4			

<b>Contractual/Consultant Subtotal</b>	<b>\$0.00</b>
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## CONTRACTUAL JUSTIFICATION

Provide for each of your real or anticipated contractors listed above a description of the project activities each will accomplish to meet the objectives and outcomes of the project. Each section should also include a justification for why contractual/consultant services are to be used to meet the anticipated outcomes and objectives. Include timelines for each activity. If contractor employee and consultant hourly rates of pay exceed the salary of a GS-15 step 10 Federal employee in your area, provide a justification for the expenses. This limit does not include fringe benefits, travel, indirect costs, or other expenses. See Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Contractual and Consultant Costs for acceptable justifications.

**Contractor/Consultant 1:**

**Contractor/Consultant 2:**

**Contractor/Consultant 3:**

**Add other Contractors/Consultants as necessary**

## CONFORMING WITH YOUR PROCUREMENT STANDARDS

By checking the box to the right, I confirm that my organization followed the same policies and procedures used for procurements from non-federal sources, which reflect applicable State and local laws and regulations and conform to the Federal laws and standards identified in [2 CFR Part 200.317](#)  [through 326](#), as applicable. If the contractor(s)/consultant(s) are not already selected, my organization will follow the same requirements.

## OTHER

Include any expenses not covered in any of the previous budget categories. Be sure to break down costs into cost/unit. Expenses in this section include, but are not limited to, meetings and conferences, communications, rental expenses, advertisements, publication costs, and data collection.

If you budget meal costs for reasons other than meals associated with travel per diem, provide an adequate justification to support that these costs are not entertainment costs. See Request for Applications section 4.7.2 Allowable and Unallowable Costs and Activities, Meals for further guidance.

Item Description	Per-Unit Cost	Number of Units	Acquire When?	Funds Requested
Audits Cost	\$5,000.00	15	5/2022	\$75,000.00

**Other Subtotal**

## OTHER JUSTIFICATION

Describe the purpose of each item listed in the table above purchased and how it is necessary for the completion of the project's objective(s) and outcome(s).

Funding under this line item will be used to support specialty crop grower efforts in obtaining and passing 3rd party GAPs audits. Please refer to our uploaded budget narrative document for details.

## INDIRECT COSTS

*The indirect cost rate must not exceed 8 percent of any project's budget. Indirect costs are any costs that are incurred for common or joint objectives that therefore, cannot be readily identified with an individual project, program, or organizational activity. They generally include facilities operation and maintenance costs, depreciation, and administrative expenses. See Request for Applications section 4.7.1 Limit on Administrative Costs and Presenting Direct and Indirect Costs Consistently for further guidance.*

Indirect Cost Rate	Funds Requested
3%	\$8,304.39
<b>Indirect Subtotal</b>	
	\$8,304.39

## PROGRAM INCOME

*Program income is gross income—earned by a recipient or subrecipient under a grant—directly generated by the grant-supported activity, or earned only because of the grant agreement during the grant period of performance. Program income includes, but is not limited to, income from fees for services performed; the sale of commodities or items fabricated under an award (this includes items sold at cost if the cost of producing the item was funded in whole or partially with grant funds); registration fees for conferences, etc.*

Source/Nature of Program Income	Description of how you will reinvest the program income into the project to enhance the competitiveness of specialty crops	Estimated Income

<b>Program Income Total</b>	\$0.00
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**J. Scott Monroe**

Food Safety Educator  
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Vincennes, IN 47591  
(812)886-0198; e-mail: [jsmonroe@purdue.edu](mailto:jsmonroe@purdue.edu)

**A. Education:**

Purdue University	Plant Pathology	M.S.	1996
Purdue University	Horticultural Science	B.S.	1993
Vincennes University	Agriculture	A.S.	1991

**B. Positions:**

2015 – present	Food Safety Educator – Purdue Extension
2009 – 2014	Extension Educator ANR/ECD, Purdue Extension – Daviess Co.
2006 – 2009	Assistant Plant Breeder, Abbott & Cobb Seed, Feasterville, PA
2005 – 2006	Security Associate, Compahnia Siderurica Nacional, Terre Haute, IN
2000 – 2005	R&D Director, Melon Acres, Inc., Oaktown, IN
1997 – 2000	Owner and Operator, Carlisle Farm Supply, Carlisle, IN
1997 – 2004	Limited Term Lecturer/Instructor, Vincennes University, Vincennes, IN

**C. Products:**

**Monroe, S.** and Deering, A. 2020. COVID-19 Resources for Agriculture Workers and Employers Available. Purdue Extension Vegetable Crops Hotline no 675.

**Monroe, S.** and Deering, A. 2020. FDA Announces Temporary Policy During the COVID-19 Public Health Emergency. Purdue Extension Vegetable Crops Hotline no. 675.

**Monroe, S.**, Deering, A., and Gary, T. 2020. Management of Farm Labor During the COVID-19 Pandemic. Extension Publication FS-38-W, Purdue Univ. Coop. Ext. Service, W. Lafayette, IN.

Deering, A.J., Chang, J.W., Galagarza, O.A. and **Monroe, J.S.** 2019. Home Food Safety: Use of Readily Available Sanitizers on Cantaloupes. Extension Publication FS-34-W, Purdue Univ. Coop. Ext. Service, W. Lafayette, IN.

**Monroe, J.S.** 2019. FSMA Produce Safety Rule Inspections Will begin in 2019. Purdue Extension Vegetable Crops Hotline no. 654.

**Monroe, J.S.** and Deering, A.J. 2019. The Inspection Process Has Started! Purdue Extension Vegetable Crops Hotline no. 660.

**Monroe, J.S.** and Deering, A.J. 2018-2019. Produce Food Safety IN: Midwest Vegetable

Production Guide for Commercial Growers, ID-56. Purdue University Extension.

**Monroe, J.S.** and Mosiman, A. 2017. Service and companion animals at direct-market venues. Vegetable Crops Hotline, no. 629. Purdue University Extension Newsletter.

**Monroe, J.S.**, O'Donnell, M, and Maynard, E.T. 2017. On-Farm Food Safety for Produce Direct Marketers *Water Quality Testing*. Extension Publication GP-2-W, Purdue Univ. Coop. Ext. Service, W. Lafayette, IN.

**Monroe, J.S.**, Deering, A.J., Heo, Y., Schmitz, H.F., and Clingerman, V.A. 2015. The effect of soil remediation treatments on microbial populations following an extreme flooding event [http://www.centerforproducesafety.org/amass/documents/researchproject/401/CPS%20Finnal%20Report%20RR\\_S.%20Monroe\\_Feb%202016.pdf](http://www.centerforproducesafety.org/amass/documents/researchproject/401/CPS%20Finnal%20Report%20RR_S.%20Monroe_Feb%202016.pdf) [Accessed 09/13/16].

#### **D. Related Activities:**

**Monroe, J.S.** and McCurdy, V. 2020. Strategies for Effective Education and Outreach to Farmers and Stakeholders. Virtual Presentation to North Central Region FSMA Annual Conference.

**Monroe, J.S.** 2019. Using Research to Define Best Practice and the Need for Alternative Methods. Presented at the NC Region BSAAO and Composting Workshop, Ames, IA.

Member of On Farm Readiness Review Team (2018-2020), collaboration of Purdue Extension, Indiana State Department of Health, and Indiana State Department of Agriculture. Conduct grower assessments to determine readiness for Produce Safety Rule compliance.

**Monroe, J.S.** September 2018. Making Sense of the Produce Food Safety Alphabet Soup. The Ohio State University Farm Science Review. London, OH.

Certified Lead Trainer (2016 – present) – Produce Safety Alliance Grower Training Curriculum.

**Monroe, J.S.**, Maynard, E.T., Ellett, J., O'Donnell, M., and Ulery, M. 2016. On-Farm Food Safety for Produce Direct Marketers. Training program developed for delivery to produce direct marketers by extension educators. Presented in 30 Indiana counties.

Assist/present at Indiana Horticulture Congress Food Safety Session 2010-2020.

Current research program investigates microbial dynamics of soil following raw manure application, post-flood remediation of fields for vegetable production, and postharvest sanitation of leafy greens.

### **Amanda J. Deering**

Purdue University, Department of Food Science,  
745 Agriculture Mall Dr., West Lafayette IN 47907-2054  
(765) 494-0512; e-mail: adeering@purdue.edu

#### **A. Education:**

Central Michigan University, Mount Pleasant, MI	Biology	B.S. 2001
Central Michigan University, Mount Pleasant, MI	Plant Biology	M.S. 2004
Purdue University, West Lafayette, IN	Food Microbiology and Food Safety	Ph.D. 2010

#### **B. Positions:**

2020-present	Clinical Associate Professor, Department of Food Science, Purdue University
2015-2020	<u>Clinical Assistant Professor</u> , Department of Food Science, Purdue University
2013-2015	<u>Research Assistant Professor</u> , Department of Food Science, Purdue University
2011-2013	<u>Post-Doctoral Research Assistant</u> , Department of Food Science, Purdue University
2006-2010	<u>Graduate Research Assistant</u> , Department of Food Science, Purdue University
2004-2006	<u>Graduate Teaching and Research Assistant</u> , Department of Botany and Plant Pathology, Purdue University
2001-2004	<u>Graduate Teaching and Research Assistant</u> , Department of Biology, Central Michigan University
2001	<u>Microscopy Facility Assistant</u> , Department of Biology, Central Michigan University
2000-2001	<u>Undergraduate Laboratory Assistant</u> , Department of Biology, Central Michigan University

#### **C. Products**

1. Deering, A.J., Pruitt, R.E., Mauer, L.J., Reuhs, B.L. 2012. Examination of the internalization of *Salmonella* serovar Typhimurium in peanut, *Arachis hypogaea*, using immunocytochemical techniques. *Food Research International*, 45: 1037-1043.
2. Deering, A.J., Pruitt, R.E., Mauer, L.J., Reuhs, B.L. 2011. Identification of the cellular location of internalized *Escherichia coli* O157:H7 in mung bean, *Vigna radiata*, using immunocytochemical techniques. *Journal of Food Protection*, 74: 1224-1230.
3. Deering, A.J., Mauer, L.J., Pruitt, R.E. 2012. Internalization of *E. coli* and *Salmonella* spp. in plants: A review. *Food Research International*, 45: 567-575.
4. McCoy, S., Chang, J. W., McNamara, K. T., Oliver, H. F. and Deering, A. J. 2015. Quality and safety attributes of afghan raisins before and after processing. *Food Science & Nutrition*, 3: 56-64.
5. Deering, A.J., Jack, D.R., Pruitt, R.E., Mauer, L.J. 2015. Movement of *Salmonella* serovar Typhimurium and *E. coli* O157:H7 to Ripe Tomato Fruit Following Various Routes of Contamination. *Microorganisms*, 3: 809-825.
6. Fu, Y., Deering, A.J., Bhunia, A.K., Yao, Y. 2017. Pathogen biofilm formation on cantaloupe surface and its impact on the antibacterial effect of lauroyl arginate ethyl, *Food Microbiology*, 139-144, ISSN 0740-0020, <http://dx.doi.org/10.1016/j.fm.2016.12.020>.

7. Shenoy, A.G., Oliver, H.F., Deering, A.J. 2017. *Listeria monocytogenes* internalizes in romaine lettuce grown in greenhouse conditions. *Journal of Food Protection*, 80(4):573-581. doi: 10.4315/0362-028X.
8. Li, J., Chang, J.W., Saenger, M., Deering, A. 2017. Thymol nanoemulsions formed via spontaneous emulsification: Physical and antimicrobial properties. *Food Chemistry*, 232: 191-197, ISSN 0308-8146, <https://doi.org/10.1016/j.foodchem.2017.03.147>.

#### **D. Related Activities**

1. Industry Scientific Representative, Dole Fresh Vegetables, Inc.: Food and Drug Administration, Chicago, IL. May 19<sup>th</sup>, 2011.
  - Presented data that supported improved sampling methods to determine the efficacy of high acid sanitizers for leafy greens.
2. Food Safety in the Packinghouse: Preparing for a Safe Harvest and Potential Audits. Trainings for Indiana cantaloupe growers. June, 2013-16.
3. Monroe, J.S. and A.J. Deering. June 2016. The Effect of Soil Remediation Treatments on Microbial Populations Following an Extreme Flooding Event, Center for Produce Safety 2016 Annual Meeting, Seattle, WA.
4. A.J. Deering. September 2016. Indiana Environmental Health Association Annual Meeting. The Dark Side of Salad: Movement and Persistence of Human Bacterial Pathogens in Plants. Michigan City, IN.
5. A.J. Deering. September 2016. Postharvest Sanitizers for Fruits and Vegetables. Farm Science Review. London, OH.
6. A.J. Deering. October 2016. Food Safety for Fresh Produce Grown using Aquaponics. Indiana Aquaculture Association. Kokomo, IN.
7. A.J. Deering. October 2016. Brno, Czech Republic, Mendel University. Internalization of Human Pathogenic Bacteria in Plants and Fresh Produce Food Safety.
8. A.J. Deering. November 2016. FSMA and Purdue's Effort for GAPs Training for Indiana Growers. Indiana Food Protection Symposium. Indianapolis, IN.
9. A.J. Deering. January 2017. Postharvest Sanitizers for Fruit and Vegetables. Indiana Horticultural Congress. Indianapolis, IN.
10. A.J. Deering. August 2017. GAPs and GMPs training for the saffron industry in Afghanistan. Bangalore, India.
11. A.J. Deering. September 2017. What growers need to know about FSMA. Farm Science Review. London, OH.

# Extension Food Safety Training and GAPs Programming for Indiana Specialty Crop Growers

## Budget Justification and Narrative

### Personnel

**Personnel 1:** In order to meet the objectives of the proposed project, we are requesting funds to support key personnel. Funding is requested for one-half time technician (50% FTE). This individual will assist with all facets of the project. This includes supporting outreach activities, assisting in development of educational offerings, and functioning as a technician in support of research activities. This individual will also oversee cost-share activities aimed at encouraging and supporting third-party audits.

**Personnel 2:** Funding is requested for a student worker. This individual will assist during the growing season when laboratory and field work are required. Efforts will primarily be focused on supporting the research component of the project. Use of this position seasonally will insure that the proposed project meets objectives in a timely fashion.

### Fringe Benefits

Please see the attached document that explains Purdue University's policies with regard to fringe benefits.

### Travel

Given that classes, assistance, trainings, and other work products developed from this project will be offered on a statewide basis, a significant amount of travel will be involved. Travel has been calculated by project component and project year.

### Course Development

Developed educational offerings (one per year) will be offered on a statewide basis at a minimum of 5 locations. It is assumed that offerings will be presented by the project PI and Co-PI, stationed in Vincennes and West Lafayette, respectively. Given the depth of classes, time anticipated for set-up, and (as of yet) undetermined locations, we assume a need for one night's lodging for the PI and Co-PI for each of the 5 proposed offerings. Additionally, mileage has been estimated. Based on current experience in offering statewide programming, we estimate an average of 250 miles as the maximum one-way distance traveled to deliver any in-state program. Mileage has been budgeted up to 500 miles (round trip) for each class offering for both the PI and Co-PI and has been calculated at the state rate of \$0.38/mile.

Year	Class	Session	PI Lodging	Co-PI Lodging	PI Mileage	Co-PI Mileage	Totals
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1	Recordkeeping	1	\$130	\$130	\$190	\$190	\$640
1	Recordkeeping	2	\$130	\$130	\$190	\$190	\$640
1	Recordkeeping	3	\$130	\$130	\$190	\$190	\$640
1	Recordkeeping	4	\$130	\$130	\$190	\$190	\$640
1	Recordkeeping	5	\$130	\$130	\$190	\$190	\$640
<b>Year 1 Total</b>							\$3,200
2	Cleaning/Sanitizing	1	\$130	\$130	\$190	\$190	\$640
2	Cleaning/Sanitizing	2	\$130	\$130	\$190	\$190	\$640
2	Cleaning/Sanitizing	3	\$130	\$130	\$190	\$190	\$640
2	Cleaning/Sanitizing	4	\$130	\$130	\$190	\$190	\$640
2	Cleaning/Sanitizing	5	\$130	\$130	\$190	\$190	\$640
<b>Year 2 Total</b>							\$3,200
3	3 <sup>rd</sup> party audit protocols	1	\$130	\$130	\$190	\$190	\$640
3	3 <sup>rd</sup> party audit protocols	2	\$130	\$130	\$190	\$190	\$640
3	3 <sup>rd</sup> party audit protocols	3	\$130	\$130	\$190	\$190	\$640
3	3 <sup>rd</sup> party audit protocols	4	\$130	\$130	\$190	\$190	\$640
3	3 <sup>rd</sup> party audit protocols	5	\$130	\$130	\$190	\$190	\$640
<b>Year 3 Total</b>							\$3,200
<b>Category Total</b>							\$9,600

### Third-Party Audit Assistance

Promotion and support of third-party audits requires assistance to growers. Funding is requested to assist specialty crop growers with expenses associated with the actual audit. Additionally, travel funds are requested in order to assist growers with preparation for audits. Prior to passing an initial third-party audit, growers frequently require assistance with preparation of required written food safety plans. Growers also benefit from mock audits, conducted prior to the actual audit. Funds are requested to support assistance to growers as they prepare for third-party audits. Given that these sessions are generally less than one day, with minimal set-up required, we have not requested lodging for the PI and Co-PI under this project component. Also, based on experience and the nature of these consultations, it would not be necessary for both the PI and Co-PI to both participate in individual consultations or mock audits. Our goal is to assist 15 growers with third-party audit preparation. This assumes one visit per assisted grower for written plan assistance or a mock audit. The estimated maximum one-way mileage for any visit/consultation is 250 miles (=500 miles round trip). The state rate of \$0.38/mile is used.

Year	Grower Visit	Visit Type	PI or Co-PI Mileage
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1	1	Written Plan Assistance or Mock Audit	\$190
1	2	Written Plan Assistance or Mock Audit	\$190
1	3	Written Plan Assistance or Mock Audit	\$190
1	4	Written Plan Assistance or Mock Audit	\$190
1	5	Written Plan Assistance or Mock Audit	\$190
1	6	Written Plan Assistance or Mock Audit	\$190
1	7	Written Plan Assistance or Mock Audit	\$190
1	8	Written Plan Assistance or Mock Audit	\$190
1	9	Written Plan Assistance or Mock Audit	\$190
1	10	Written Plan Assistance or Mock Audit	\$190
1	11	Written Plan Assistance or Mock Audit	\$190
1	12	Written Plan Assistance or Mock Audit	\$190
1	13	Written Plan Assistance or Mock Audit	\$190
1	14	Written Plan Assistance or Mock Audit	\$190
1	15	Written Plan Assistance or Mock Audit	\$190
		<b>Year 1 Total</b>	<b>\$2,850</b>
2	1	Written Plan Assistance or Mock Audit	\$190
2	2	Written Plan Assistance or Mock Audit	\$190
2	3	Written Plan Assistance or Mock Audit	\$190
2	4	Written Plan Assistance or Mock Audit	\$190
2	5	Written Plan Assistance or Mock Audit	\$190
2	6	Written Plan Assistance or Mock Audit	\$190
2	7	Written Plan Assistance or Mock Audit	\$190
2	8	Written Plan Assistance or Mock Audit	\$190
2	9	Written Plan Assistance or Mock Audit	\$190
2	10	Written Plan Assistance or Mock Audit	\$190
2	11	Written Plan Assistance or Mock Audit	\$190
2	12	Written Plan Assistance or Mock Audit	\$190
2	13	Written Plan Assistance or Mock Audit	\$190
2	14	Written Plan Assistance or Mock Audit	\$190
2	15	Written Plan Assistance or Mock Audit	\$190
		<b>Year 2 Total</b>	<b>\$2,850</b>
3	1	Written Plan Assistance or Mock Audit	\$190
3	2	Written Plan Assistance or Mock Audit	\$190
3	3	Written Plan Assistance or Mock Audit	\$190
3	4	Written Plan Assistance or Mock Audit	\$190
3	5	Written Plan Assistance or Mock Audit	\$190
3	6	Written Plan Assistance or Mock Audit	\$190
3	7	Written Plan Assistance or Mock Audit	\$190
3	8	Written Plan Assistance or Mock Audit	\$190
3	9	Written Plan Assistance or Mock Audit	\$190

3	10	Written Plan Assistance or Mock Audit	\$190
3	11	Written Plan Assistance or Mock Audit	\$190
3	12	Written Plan Assistance or Mock Audit	\$190
3	13	Written Plan Assistance or Mock Audit	\$190
3	14	Written Plan Assistance or Mock Audit	\$190
3	15	Written Plan Assistance or Mock Audit	\$190
		<b>Year 3 Total</b>	<b>\$2,850</b>
		<b>Category Total</b>	<b>\$8,550</b>

### FSMA Outreach and Compliance

Funding for travel is requested to maintain and/or increase the current number of Produce Safety Alliance grower trainings currently offered across the state. We request funds to conduct an additional 5 classes at various locations across the state. Due to training and certification requirements, and the length of the program (7-8 hours), it is necessary that either the PI or Co-PI attend these offerings. Due to the length of the course and the amount of set-up required, lodging has been requested. Mileage is requested and is calculated as a maximum 250 miles one-way (500 miles round trip) at the state rate of \$0.38/mile.

Year	Class	PI or Co-PI Lodging	PI or Co-PI Mileage	Totals
1	1	\$130	\$190	\$320
1	2	\$130	\$190	\$320
1	3	\$130	\$190	\$320
1	4	\$130	\$190	\$320
1	5	\$130	\$190	\$320
		<b>Year 1 Total</b>		<b>\$1,600</b>
2	1	\$130	\$190	\$320
2	2	\$130	\$190	\$320
2	3	\$130	\$190	\$320
2	4	\$130	\$190	\$320
2	5	\$130	\$190	\$320
		<b>Year 2 Total</b>		<b>\$1,600</b>
2	1	\$130	\$190	\$320
2	2	\$130	\$190	\$320
2	3	\$130	\$190	\$320
2	4	\$130	\$190	\$320
2	5	\$130	\$190	\$320

		<b>Year 3 Total</b>		\$1,600
		<b>Category Total</b>		\$4,800

### **Research**

Funding for travel is requested in support of applied research to determine suitability of materials for use as a food contact surface. This proposed component of the project involves outfitting cantaloupe and watermelon transport vehicles with materials to be tested. Project personnel will be required to inspect transport vehicles on a weekly basis and collect swab samples from the materials. Samples will then be transported to the PEFSTH for analysis. Travel will be necessary to visit the farm on which transport vehicles are located. We request funding such that personnel may travel to farms for sample collection on five consecutive weeks. It is anticipated that transport vehicles will be located in various melon-producing regions of Southern Indiana. We have calculated a potential route of approximately 300 miles that could be used for sample collection. Our funding request for this category was calculated using the estimated mileage over 5 collection trips for three years at the state rate of \$0.38/mile.

Year	Collection Trip	Mileage
1	1	\$114
1	2	\$114
1	3	\$114
1	4	\$114
1	5	\$114
	<b>Year 1 Total</b>	\$570
2	1	\$114
2	2	\$114
2	3	\$114
2	4	\$114
2	5	\$114
	<b>Year 2 Total</b>	\$570
3	1	\$114
3	2	\$114
3	3	\$114
3	4	\$114
3	5	\$114
	<b>Year 3 Total</b>	\$570

	<b>Category Total</b>	\$1,710
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## Travel Summary

<b>Component</b>	<b>Total Travel Requested</b>
Course Development	\$9,600
Third-Party Audit Assistance	\$8,550
FSMA Outreach and Compliance	\$4,800
Research	\$1,710
<b>Total</b>	<b>\$24,660</b>

## Supplies

This project will require acquisition and use of various supplies. Supplies primarily take the form of consumables for use in accomplishing stated objectives. Needed supplies by project component are:

### Course Development

Supplies will be necessary for the development and delivery of novel educational offerings. Our goal in the first year of the project is to develop and deliver a comprehensive class dealing with recordkeeping and managing recordkeeping requirements of the PSR. It is anticipated that this offering will require minimal inputs. However, exact expenses will not be known until course development is underway.

In the second year of the project, our intent is to develop and offer a course dealing with sanitation and cleaning. Again, we cannot accurately anticipate all expenses associated with this endeavor. Existing equipment and facilities at the PEFSTH will be utilized to the greatest extent possible to minimize expense. It is anticipated that, at a minimum, laboratory consumables, sanitizers, and cleaning supplies will be required.

It is anticipated that in Year 3 of the project educational offerings will seek to train specialty crop growers in one or more third-party audit protocols. Audit protocols are proprietary and protocol owners have various standards that individuals must meet prior to training. We have requested additional funding for Year 3 in anticipation of the PI and Co-PI needing to obtain additional training or certification as courses are developed in order to satisfy requirements of protocol proprietors.

Year	Course Offering	Requested Funding for Supplies
1	Recordkeeping	\$1,000
2	Cleaning and Sanitation	\$7,500
3	Third-Party Audit Protocols	\$10,000

	<b>Total</b>	\$18,500
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### **Third-Party Audit Assistance**

Funding for supplies is not requested for this project component. Assistance primarily take the form of one-on-one consultation with growers and working with growers' existing documents.

### **FSMA Outreach and Compliance**

Funding is requested for FSMA outreach and compliance. PSA grower trainings, required by specialty crop growers who are covered by the PSR, may cost up to \$100 per grower. This includes the required manual and completion certificate. Funding is requested to conduct a minimum of 5 PSA grower trainings per year during the course of the project, anticipating 5 growers per training (= \$500 per class).

Year	Training	Number of Growers	Cost per Grower	Extension
1	1	5	\$100	\$500
1	2	5	\$100	\$500
1	3	5	\$100	\$500
1	4	5	\$100	\$500
1	5	5	\$100	\$500
		<b>Year 1 Total</b>		\$2,500
2	1	5	\$100	\$500
2	2	5	\$100	\$500
2	3	5	\$100	\$500
2	4	5	\$100	\$500
2	5	5	\$100	\$500
		<b>Year 2 Total</b>		\$2,500
3	1	5	\$100	\$500
3	2	5	\$100	\$500
3	3	5	\$100	\$500
3	4	5	\$100	\$500
3	5	5	\$100	\$500
		<b>Year 3 Total</b>		\$2,500
		<b>Category Total</b>		\$7,500

## Research

Evaluation of materials for suitability as food contact surfaces will involve testing materials in an on-farm environment. Materials will be sampled for bacterial on a weekly basis. Funding is requested in Year 1 to obtain materials for testing. Additionally, funding is requested for laboratory supplies and consumables in each year. These will be used to collect samples and analyze them at the PEFSTH laboratory. We anticipate repeating this experiment in each of the three years of the project in order to build sufficient data for appropriate statistical analysis.

Year	Item	Item Purpose	Cost
1	TPC Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$250
1	MacConkey Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$250
1	Mannitol Salt Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$200
1	Eppendorf Tubes	Used for handling/diluting samples.	\$400
1	Petri Dishes	Used to grow out samples to enumerate bacteria.	\$900
1	Sample Sponges	For collection of samples from tested materials.	\$750
1	D/E Broth	Used to neutralize sanitizers in samples.	\$150
1	Sodium diphosphate	Used to prepare phosphate buffered saline solutions for sample preparation and dilution.	\$225
1	Sodium monophosphate	Used to prepare phosphate buffered saline solutions for sample preparation and dilution.	\$100
1	Gloves	Used to prevent contamination of samples during collection and analysis.	\$200
1	Materials for testing	Materials to be tested will be purchased prior to use.	\$2,000
	<b>Year 1 Total</b>		<b>\$5,425</b>

2	TPC Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$250
2	MacConkey Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$250
2	Mannitol Salt Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$200
2	Eppendorf Tubes	Used for handling/diluting samples.	\$400
2	Petri Dishes	Used to grow out samples to enumerate bacteria.	\$900
2	Sample Sponges	For collection of samples from tested materials.	\$750
2	D/E Broth	Used to neutralize sanitizers in samples.	\$150
2	Sodium diphosphate	Used to prepare phosphate buffered saline solutions for sample preparation and dilution.	\$225
2	Sodium monophosphate	Used to prepare phosphate buffered saline solutions for sample preparation and dilution.	\$100
2	Gloves	Used to prevent contamination of samples during collection and analysis.	\$200
	<b>Year 2 Total</b>		<b>\$3,425</b>
3	TPC Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$250
3	MacConkey Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$250
3	Mannitol Salt Agar	Dehydrated medium used in petri dishes to enumerate samples.	\$200
3	Eppendorf Tubes	Used for handling/diluting samples.	\$400
3	Petri Dishes	Used to grow out samples to enumerate bacteria.	\$900

3	Sample Sponges	For collection of samples from tested materials.	\$750
3	D/E Broth	Used to neutralize sanitizers in samples.	\$150
3	Sodium diphosphate	Used to prepare phosphate buffered saline solutions for sample preparation and dilution.	\$225
3	Sodium monophosphate	Used to prepare phosphate buffered saline solutions for sample preparation and dilution.	\$100
3	Gloves	Used to prevent contamination of samples during collection and analysis.	\$200
	<b>Year 3 Total</b>		<b>\$3,425</b>
	<b>Category Total</b>		<b>\$12,275</b>

### Supply Summary

Project Component	Total	
Course Development	\$18,500	
Third-Party Audit Assistance	0	
FSMA Outreach and Compliance	\$7,500	
Research	\$12,275	
<b>Total – all supplies</b>	<b>\$38,275</b>	

### Other Budget Items

#### Third-Party Audit Assistance to Growers

Third-party audits, and subsequent GAPs certifications, are being required of growers of all sizes as an industry-driven condition of access to markets. Audits may be cost-prohibitive for growers. Anecdotal data from growers indicate a minimum expense of \$1,500 for a third-party audit using a lower-level audit such as the Harmonized GAPs or USDA GAP/GHP protocol. Expense for audits using more in-depth protocols, such as PrimusGFS, may easily be several thousand dollars. As a means of encouraging audit among growers, a cost-sharing program will be established as a component of this project. The primary focus of the cost-sharing program will be to encourage growers to obtain their initial GAPs certification. Certifications are good

for one year. Consequently, a secondary focus would be to assist growers in maintaining their certifications once they are obtained. Funds are requested for establishment of this program. Our goal is to assist at least 15 Indiana specialty crop growers per year for the duration of the project. Requested funds in each year will cover the minimum cost for 15 lower level audits or will defray costs for upper level audits.

Year	Requested for Cost Sharing Program
1	\$25,000
2	\$25,000
3	\$25,000
<b>Total</b>	<b>\$75,000</b>

# PURDUE

UNIVERSITY

**To:** Regional Campus Vice Chancellors, Business Managers, Fiscal Directors of Housing and Food Services, and Physical Facilities

**RE:** Budgeting Fringe Benefits for Sponsored Programs and Other Chargeable Accounts

**Date:** October 6, 2020

The purpose of this memo is to provide information to assist in budgeting fringe benefit costs for sponsored programs and other accounts chargeable for fringe benefits. The three attachments provide detailed information for budgeting fringe benefit costs.

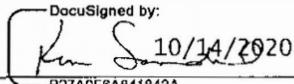
Attachment A outlines the approved charge rates used to estimate future fringe benefit costs. A narrative is provided describing each benefit program included in the total fringe benefit rate.

Attachment B identifies maximum budget rates by staff classification and salary level for the West Lafayette Campus. This table should be used for budgeting and planning fringe benefit costs on all chargeable accounts excluding sponsored program accounts. Attachment B also includes a table detailing the benefit programs applicable to each staff classification.

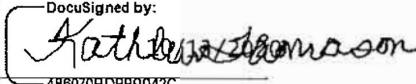
Attachment C designates the fringe benefit budget rates to be used for preparation of all Sponsored Program budgets for proposed work on the West Lafayette campus. These rates are based on an average salary for each employment category. A single rate for each employment category is necessary to assure that fringe benefits are budgeted consistently across the University and for all sponsors.

All questions can be directed to Costing@purdue.edu.

Ken L. Sandel, Senior Director  
Sponsored Program Services

DocuSigned by:  
  
10/14/2020  
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Kathleen Thomason,  
Comptroller

DocuSigned by:  
  
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## Attachments

Initials  DS

cc: Costing Office

**Attachment A**  
**2020-21 Fringe Benefit Budget Rates**

1. **Worker's Compensation**

The established charge rates are as follows:

Classification	Rate	Base
a. Service staff	1.34%	Total budgeted service staff salaries and wages
b. Staff employed in foreign countries	1.96%	Budgeted salaries for overseas periods for staff employed to work in foreign countries
c. Faculty, Administrative, Clerical	0.13%	Total budgeted staff salaries and wages
d. Bus Drivers, Chauffeurs	1.05%	Total budgeted staff salaries and wages
e. Student Flight Instructors	1.68%	Total budgeted staff salaries and wages

NOTE: Classifications d. and e. are not appropriate on sponsored programs.

2. **Unemployment Compensation**

West Lafayette	0.05625% (.0005625/\$1) of the first \$9,500 of annual earnings
- HFS	0.05625% (.0005625/\$1) of the first \$9,500 of annual earnings
Fort Wayne	0.05625% (.0005625/\$1) of the first \$9,500 of annual earnings
PU Northwest	0.05625% (.0005625/\$1) of the first \$9,500 of annual earnings

The rate is applicable to all University employees with the exception of the following:

- a. Purdue student employees who are enrolled in and are attending classes. However, the rate will be applied to students employed during the summer if the student is not enrolled in classes.
- b. Work study students
- c. Graduate students

Unemployment compensation will be \$0.0005625/\$1, and this rate will apply to the first \$9,500 in salaries and wages.

3. **Liability Insurance**

The current charge rate for liability insurance coverage is 0.19% of the total budgeted salaries for all staff and is projected to remain in effect until June 30, 2021.

4. **Long Term Disability Insurance**

The charge rate for Long Term Disability Insurance is 0% of total budgeted salaries for all staff with the exception of graduate students, student labor, and temporary staff.

## **Attachment A**

### **2020-21 Fringe Benefit Budget Rates**

#### **5. Group Life Insurance**

The University will provide and pay for basic life coverage equal to 1.5 times the annual salary. The employees will be able to purchase supplemental optional insurance of 1-8 times the annual salary at their own expenses through payroll deduction. The cost of this additional coverage will not be supported by the university.

The life insurance rate is set at \$1.70/\$1000 of coverage. The cost of any additional coverage will not be supported by the University. Purdue also provides a basic \$15,000 accidental death and dismemberment (AD&D) benefit per employee at a rate of \$0.017/\$1000/month.

#### **6. Health Insurance**

Health benefit premiums are reviewed annually, and rates are set by the Board of Trustees. Purdue's health plan is self-insured through employee and University contributions.

The following internal charge rate should be used for budgeting purposes:

The current annual rate for employer charge portion for health insurance for eligible employees is \$10,999 for calendar year 2020. Human Resources is anticipating that health insurance costs will stay same at \$10,999 for calendar year 2021. For budgeting purposes, the rate of \$10,999 was used for fiscal year 2020-21.

The University contribution is identified with each individual and charged to internal accounts through the payroll charge system.

#### **7. Social Security**

Social Security contributions are made as follows:

For calendar year 2020, contributions are calculated at 6.2% on the first \$137,700. It is anticipated that the contributions for calendar year 2021 will remain the same at 6.2% on the first \$137,700.

Medicare Tax is an additional 1.45% on all salaries.

These contributions are not made on behalf of graduate students or the student labor category.

#### **8. Defined Contribution Plan for Faculty and Administrative Staff**

The University retirement contribution will be 10%. Only faculty and administrative staff who have fulfilled the eligibility requirements will receive this benefit.

#### **9. Retirement Plans for Eligible Non-Exempt Employees**

The PERF plan is a state pension program consisting of two parts. Part I is a Defined Benefit Plan. Part II is the Defined Contribution Plan called the Annuity Savings Account. Extension agents hired before

## **Attachment A**

### **2020-21 Fringe Benefit Budget Rates**

1/01/84 are also eligible for this retirement plan. PERF contributions are determined by the State of Indiana.

#### **PERF**

##### **Part I - Defined Benefit Plan**

Effective 7/1/13, the rate to be used in estimating the Defined Benefit Pension Portion of PERF requirements is 11.20% of total budgeted salaries and wages for clerical, service, operations assistants, and technical assistants.

##### **Part II - Defined Contribution Portion**

The University makes contributions of 3% of pay into each Annuity Savings Account for clerical, service, operations assistants, and technical assistants.

Part I: 11.20% and Part II: 3% are combined to arrive at the total estimate used for budgeting retirement for eligible non-exempt employees which is 14.20%.

#### **Defined Contribution Retirement and Savings Plan**

On May 10, 2013, the University's Board of Trustees approved a plan to place newly hired, non-exempt employees in a defined contribution retirement plan in place of the current PERF plan. Benefits-eligible clerical and service staff members and operations/technical positions hired before September 9, 2013 are covered by the Indiana Public Employee's Retirement Fund (PERF).

New non-exempt employees hired on or after September 9, 2013 will be enrolled in a defined contribution plan called the Retirement and Savings Plan. At the current time, approximately 51% the total of clerical, service operations assistants, and technical assistants employed by the University are enrolled in the Retirement and Savings Plan. Costing will continue to monitor the number of employees enrolled in the Retirement and Saving Plan and determine if adjustments are needed to staff classifications included in Attachment B and Attachment C.

The University base retirement contribution will be 4% and the University will match the employee pre-tax contributions up to 4% for clerical, service, operations assistants, and technical assistants hired on or after September 9, 2013.

#### **10. Staff Fee Remission and Other Fee Remissions**

The staff fee remission represents the reduced tuition fees paid by staff members. The proposed staff remission rate is 0.15% of total budgeted salaries and wages for all staff, except student labor and temporary employees.

The other fee remission amount represents the reduced tuition fees paid by staff members for staff spouses and dependents. The proposed other fee remission rate is 0.35% of total budgeted salaries and wages for all staff, except student labor and temporary employees.

*As a reminder: Beginning 7/1/99, the charging of other fee remissions to federal funds is prohibited.*

The staff fee remission amount **is** included in the rates indicated in Attachment B. The other fee remission amount **is not** included in the rates indicated in Attachment B. When applicable, the other fee remission amount should be budgeted as a separate dollar amount.

## **Attachment A**

### **2020-21 Fringe Benefit Budget Rates**

The graduate student fee remission is a separate direct cost amount and is not included in this rate. These charges are not applicable to regional campuses.

#### **11. Graduate Fee Remissions**

The West Lafayette graduate fee remission charge system is reviewed on an annual basis. As a result of that review, the graduate fee remission charge rate of \$420 per bi-weekly pay period was proposed for 2020-21. The 2020-21 rate of \$420 per pay period will remain in effect until Costing performs its annual Graduate Fee Remission analysis. The annual analysis of the grad fee remit rate will be completed after year end, and if there is a significant difference, the rate will be adjusted accordingly.

The graduate student fee remission is a separate direct cost amount and is not included in the rates in Attachment B. These charges should be budgeted for separately and are not applicable to regional campuses.

The Purdue Northwest (PNW) graduate fee remissions rate is reviewed on an annual basis. As a result of that review, the graduate fee remission charge rate \$319 per bi-weekly pay period was set for 2020-21.

#### **12. Graduate Medical Insurance**

Health insurance costs are charged for Graduate Assistants employed at least .50 FTE. For August 2020 through July 2021, the University contribution of \$1,590 is identified with each individual and is distributed to internal accounts through the payroll charge system.

Graduate Teaching Assistants, Graduate Research Assistants, and Graduate Administrative/Professional appointments are eligible for health insurance. These appointments are in employee group S (Graduate Students) and employee subgroup, pay with benefits.

The University contribution will be distributed in eighteen equal installments for AY payroll area, and the FY payroll area is deducted in twenty-six equal installments. Health insurance for graduate students with greater than 0.50 CUL is included in the rate indicated in Attachment B.

## Attachment B

Purdue University  
2020-21 Fringe Benefit Budget Rates

Salary Level	up to \$14,999	\$15,000 to \$19,999	\$20,000 to \$24,999	\$25,000 to \$29,999	\$30,000 to \$34,999	\$35,000 to \$39,999	\$40,000 to \$44,999	\$45,000 to \$49,999	\$50,000 to \$54,999	\$55,000 to \$59,999	\$60,000 to \$64,999	\$65,000 to \$69,999
<b>Staff Classification:</b>												
Faculty / Administrative	128.45%	91.76%	73.41%	62.40%	55.07%	49.82%	45.89%	42.84%	40.39%	38.39%	36.72%	35.31%
Faculty / Administrative (No Defined Contribution Plan) (1)	118.45%	81.76%	63.41%	52.40%	45.07%	39.82%	35.89%	32.84%	30.39%	28.39%	26.72%	25.31%
Civil Service (Before 01/01/84)	125.00%	88.31%	69.96%	58.95%	51.62%	46.37%	42.44%	39.39%	36.94%	34.94%	33.27%	31.86%
Overseas Faculty	130.28%	93.59%	75.24%	64.23%	56.90%	51.65%	47.72%	44.67%	42.22%	40.22%	38.55%	37.14%
Operations / Technical Assistants	132.65%	95.96%	77.61%	66.60%	59.27%	54.02%	50.09%	47.04%	44.59%	42.59%	40.92%	39.51%
Service Staff	133.86%	97.17%	78.82%	67.81%	60.48%	55.23%	51.30%	48.25%	45.80%	43.80%	42.13%	40.72%
Clerical Staff	132.65%	95.96%	77.61%	66.60%	59.27%	54.02%	50.09%	47.04%	44.59%	42.59%	40.92%	39.51%
Graduate Staff (appointments $\geq$ .50 CUL) (3)	16.37%	11.07%	8.42%	6.83%	5.77%	5.01%	4.45%	4.00%	3.65%	3.36%	3.12%	2.92%
Graduate Staff (appointments < .50 CUL) (4)	0.47%											
Student Labor (2)	0.32%											
Temporary Staff (2)	8.02%											
Salary Level	\$70,000 to \$74,999	\$75,000 to \$79,999	\$80,000 to \$84,999	\$85,000 to \$89,999	\$90,000 to \$94,999	\$95,000 to \$99,999	\$100,000 to \$104,999	\$105,000 to \$109,999	\$110,000 to \$114,999	\$115,000 to \$119,999	\$120,000 to \$124,999	\$125,000 and higher
<b>Staff Classification:</b>												
Faculty / Administrative	34.10%	33.05%	32.13%	31.32%	30.61%	29.96%	29.38%	28.86%	28.38%	27.95%	27.55%	27.17%
Faculty / Administrative (No Defined Contribution Plan) (1)	24.10%	23.05%	22.13%	21.32%	20.61%	19.96%	19.38%	18.86%	18.38%	17.95%	17.55%	17.17%
Civil Service (Before 01/01/84)	30.65%	29.60%	28.68%	27.87%	27.16%	26.51%	25.93%	25.41%	24.93%	24.50%	24.10%	23.72%
Overseas Faculty	35.93%	34.88%	33.96%	33.15%	32.44%	31.79%	31.21%	30.69%	30.21%	29.78%	29.38%	29.00%
Operations / Technical Assistants	38.30%											
Service Staff	39.51%											
Clerical Staff	38.30%											
Graduate Staff (appointments $\geq$ .50 CUL) (3)	2.74%											
Benefits incorporated in above rates (see attachment A for further detail)	Health / Medical	Group Life Insurance	Defined Contribution Plan Retirement	PERF Retirement	Social Security	Long term Disability	Worker's Compensation	Unemploy- ment	Liability	Staff Fee Remission		
Faculty / Administrative	X	X	X		X	X	X	X	X	X	X	
Faculty / Administrative (No Defined Contribution Plan) (1)	X	X			X	X	X	X	X	X	X	
Civil Service (Before 1/01/84)	X	X		X		X	X	X	X	X	X	
Overseas Faculty	X	X	X		X	X	X	X	X	X	X	
Operations / Technical Assistants	X	X		X	X	X	X	X	X	X	X	
Service Staff	X	X		X	X	X	X	X	X	X	X	
Clerical Staff	X	X		X	X	X	X	X	X	X	X	
Student Labor (2)							X			X		
Temporary Staff (2)					X		X	X	X	X		
Graduate Staff (3)	X						X			X	X	
Graduate Staff (4)							X			X	X	
(1) Includes Visiting Staff and Post Doctoral Research appointments												
(2) These rates apply regardless of salary level.												
(3) Grad Insurance (for J APPTS $\geq$ .5 FTE) is rolled into the calculation for Fringe Benefits												
(4) Grad insurance is not applicable for J APPTS < .5 FTE. In this case, there will be a flat rate irrespective of the salary level												

## FRINGE BENEFIT BUDGET RATES FOR SPONSORED PROGRAMS

## RATES FOR 2020-21

Cost Element Category	Employee Group	New Employee Class (SF)	2019-20 Estimated Annual Salary	2020-21 Estimated Annual Salary <sup>6</sup>	Fringe Benefit Budget Rate
Tenured and Tenure Track Faculty (with insurance & Defined Contribution Plans)	C, S, Y, D, E	C, P, Q, R, E, D,B	\$ 123,123	\$ 123,123	27.55%
Visiting Faculty (with out Defined Contribution Plans)	C, S, Y, D, E	C, P, Q, R, E, D,B	\$ 55,181	\$ 55,181	28.39%
Administrative A/P <sup>1</sup> (with Defined Contribution Plans)	A, L	H	\$ 76,939	\$ 76,939	33.05%
Administrative A/P <sup>1</sup> (with out Defined Contribution Plans)	A,L	H	\$ 56,041	\$ 56,041	28.39%
Administrative A/P (with PERF)	O <sup>7</sup>		\$ -	\$ -	0.00%
Administrative A/P (with Defined Contribution Plans)	A	(L,A) = F	\$ 76,939	\$ 76,939	33.05%
Administrative A/P (with out Defined Contribution Plans)	A	(L,A) = F	\$ 56,041	\$ 56,041	28.39%
Overseas Personnel <sup>2</sup> (Use Faculty w/Defined Contribution Plans Gross Pay per FTE)			\$ 123,123	\$ 123,123	29.38%
Clerical	B	(B,O) = J	\$ 37,580	\$ 37,580	54.02%
Service	U	(O,U) = K	\$ 36,395	\$ 36,395	55.23%
Graduate Students <sup>3</sup>	J	S	\$ 44,541	\$ 44,541	4.45%
Graduate Students <sup>4</sup>	J	S	N/A	\$ -	0.47%
Extra Labor <sup>5</sup>	Students & Temporary	V,W,X	\$ -	\$ -	8.02%

<sup>1</sup> Rate category will also be used for Extension Agents (80As)<sup>2</sup> Tenured and Tenure Track Faculty Estimated Annual Salary used to determine the corresponding Overseas Personnel default rate.<sup>3</sup> The Grad Insurance is rolled into the calculation of Fringe Benefits which requires an average Graduate Salary (for G AND 90A APPTS>.5 FTE)<sup>4</sup> The Grad Insurance does not apply to grads (for G AND 90A APPTS<.5 FTE) . In this case, regardless of the salary level, these rates would apply.<sup>5</sup> Attachment B rate for Students and Temporary Staff are 0.38% and 8.25% respectively. To be conservative, the Temporary Staff rate will be utilized for this category.<sup>6</sup> According to the President's announcement, Merit increases for FY21 are postponed indefinitely.<sup>7</sup> This employee group is no longer available: Part of OP/Tech mapped to Support ( SF Class Code J); and part of OP/Tech mapped to Service (SF Class Code K ).

## Sponsored Program Services

### Memorandum

To: Pre-Award, Sponsored Program Services

Re: Budgeting Graduate Student Fringe Benefits for Sponsored Programs

Date: October 16, 2020

On October 6, 2020 information was provided to all Purdue University campuses for budgeting fringe benefits for sponsored programs and other chargeable accounts. For Sponsored Programs Services, this memo provides additional guidance related to implementing the new rates for graduate students.

The rates provided in Attachment C of the above referenced letter are based on an estimated full-time annual salary. Given that the majority of graduate students budgeted on sponsored programs maintain a 50 CUL or less, we need to budget accordingly. Please use the table below to determine the applicable fringe benefit rate for graduate student appointments at varying CUL levels. Please note that the fringe benefit budget rate is based on the budgeted range of \$40,000 - \$44,999 from Attachment B.

Graduate Student Appointment	Fringe Benefit Budget Rate
100 CUL	4.45%
75 CUL	5.77%
50 CUL or 25 CUL with an additional 25 CUL appointment**	8.42%
25 CUL	0.47%
Other Graduate Students without Insurance	0.47%

\*\*If the budget includes a Graduate Student at 25 CUL and it is expected that the Graduate Student will also hold an additional 25 CUL position, fringe benefits should be budgeted using a rate of 8.42%.



10/16/2020

Ken Sandel, Senior Director  
Sponsored Program Services

cc: Kim Hoebel, Managerial Accounting  
Stephanie Willis, SPS



March 19, 2021

Dear Specialty Crop Block Grant Review Committee:

I am writing in support of the Specialty Crop Block Grant proposal *Extension Food Safety Training and GAPs Programming for Indiana Specialty Crop Growers* submitted by Purdue Extension (J. Scott Monroe – PI, Amanda J. Deering – Co-PI).

As **Food Safety Manager/Grower** working as a part of the specialty crops industry in Indiana, we strive for a safe, high-quality product, as do all those involved in our industry. While there is, justifiably, an expectation beyond the farm gate of a safe food supply, this expectation often does not meet with an adequate body of research-based knowledge, educational offerings, or outreach resources that would allow the expectation to be met to its fullest potential.

This is quite vividly demonstrated when seeking information and training that goes above the minimum standard set by the Food Safety Modernization Act Produce Safety Rule. This has also been demonstrated when searching for research-based information dealing with specific suitability of materials for use as food contact surface. Pressing questions abound at all levels of production and postharvest processing. There is also a need for developing, within our organization, competency in several GAPs-related areas beyond what is currently offered by Extension and its collaborators.

Our opinion is that this project would generate useful, research-based information for all Indiana specialty crop growers and allow for more thorough training in on-farm food safety across the entire state. Successful implementation of this project could potentially affect all citizens of our state by helping to insure a more safe and secure food supply, and we encourage its funding.

Sincerely,

Autumn Freeman  
Melon Acres, Inc  
Food Safety Manager

Morning Harvest Produce LLC  
Brenda Hash, Keegan Hash  
7720 West Radcliff Road  
Hardinsburg, IN. 47125  
812-620-3045

March 19, 2021

Dear Specialty Crop Block Grant Review Committee:

I am writing in support of the Specialty Crop Block Grant proposal *Extension Food Safety Training and GAPs Programming for Indiana Specialty Crop Growers* submitted by Purdue Extension (J. Scott Monroe – PI, Amanda J. Deering – Co-PI).

As **Co- Owner of Morning Harvest Produce**, working as a part of the specialty crops industry in Indiana, we strive for a safe, high-quality product, as do all those involved in our industry. While there is, justifiably, an expectation beyond the farm gate of a safe food supply, this expectation often does not meet with an adequate body of research-based knowledge, educational offerings, or outreach resources that would allow the expectation to be met to its fullest potential.

This is quite vividly demonstrated when seeking information and training that goes above the minimum standard set by the Food Safety Modernization Act Produce Safety Rule. This has also been demonstrated when searching for research-based information dealing with specific suitability of materials for use as food contact surface. Pressing questions abound at all levels of production and postharvest processing. There is also a need for developing, within our organization, competency in several GAPs-related areas beyond what is currently offered by Extension and its collaborators.

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Sincerely,

Brenda Hash  
Co- Owner  
Morning Harvest Produce LLC



March 19, 2021

Dear Specialty Crop Block Grant Review Committee:

I am writing in support of the Specialty Crop Block Grant proposal *Extension Food Safety Training and GAPs Programming for Indiana Specialty Crop Growers* submitted by Purdue Extension (J. Scott Monroe – PI, Amanda J. Deering – Co-PI).

As operations manager of Mouzin Brothers Farms working as a part of the specialty crops industry in Indiana, we strive for a safe, high-quality product, as do all those involved in our industry. While there is, justifiably, an expectation beyond the farm gate of a safe food supply, this expectation often does not meet with an adequate body of research-based knowledge, educational offerings, or outreach resources that would allow the expectation to be met to its fullest potential.

This is quite vividly demonstrated when seeking information and training that goes above the minimum standard set by the Food Safety Modernization Act Produce Safety Rule. This has also been demonstrated when searching for research-based information dealing with specific suitability of materials for use as food contact surface. Pressing questions abound at all levels of production and postharvest processing. There is also a need for developing, within our organization, competency in several GAPs-related areas beyond what is currently offered by Extension and its collaborators.

Our opinion is that this project would generate useful, research-based information for all Indiana specialty crop growers and allow for more thorough training in on-farm food safety across the entire state. Successful implementation of this project could potentially affect all citizens of our state by helping to insure a more safe and secure food supply, and we encourage its funding.

Sincerely,

  
Brady Mouzin  
Operations Manager  
Mouzin Brothers Farms  
3/19/21



## North Central Region

Center for FSMA Training, Extension  
and Technical Assistance

March 22, 2021

Dear Specialty Crop Block Grant Review Committee:

I am writing in support of the Specialty Crop Block Grant proposal *Extension Food Safety Training and GAPs Programming for Indiana Specialty Crop Growers* submitted by Purdue Extension (J. Scott Monroe – PI, Amanda J. Deering – Co-PI).

The North Central Regional Center for FSMA Training, Extension, and Technical Assistance was selected by USDA to represent the 12 North Central States (Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Ohio, and Wisconsin) to support the infrastructure of the national food safety program by communicating and coordinating information within the region related to the Food Safety Modernization Act's (FSMA) Produce Safety Rule and Preventive Control Rule. The North Central Regional Center's specific aims are to:

- Objective 1: Expand the successfully established produce safety network within the NCR
- Objective 2: Develop and implement a communication system
- Objective 3: Support for Food Safety Outreach Program Awards
- Objective 4: Review of FSMA add-on materials and alternate curricula
- Objective 5: Professional development for a cadre of regional FSMA trainers
- Objective 6: Technical assistance to growers, processors, and vendors in the NCR

Collaboration amongst educators and researchers is critical to develop effective and meaningful programs for our stakeholders. You have identified Objective 6 as an objective that aligns with the goals of your proposal. Offering new courses at your Training Hub will offer direct technical assistance to Indiana growers. The research on liners and covers for transport vehicles offers new opportunities for technical assistance with growers and also professional development for other FSMA trainers. We look forward to sharing your results with growers and trainers across the region.

The NCR FSMA Center is committed to working with other groups, agencies, and organizations to ensure compliance with FSMA. I wish you the best in your application to the Indiana State Department of Agriculture and look forward to working with you as we ensure our stakeholders achieve the necessary training and support to be compliant with FSMA regulations.

Sincerely,

A handwritten signature in black ink that reads "Joseph M. Hannan".

Joseph M. Hannan



## North Central Region

Center for FSMA Training, Extension  
and Technical Assistance

NCR FSMA director

Iowa State University Extension and Outreach

Commercial Horticulture Field Specialist

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