

LFIR # 2139

1. Project Title	University of Florida Institute of Food & Sciences Quantifying Ecosystems Services with Al
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2. Senate Sponsor Erin Grall

3. Date of Request 02/15/2023

4. Project/Program Description

These funds will provide for the continuation of the development of an artificial intelligence (AI) tool through the formation of a statewide ecosystem services (ES) monitoring network to quantify, validate, and develop ecosystem services delivered by agricultural and natural systems in Florida. This tool will provide decision-support tools to agricultural producers and land managers, and opportunities to market "climate-smart" products. It will also positively impact water quality, water quantity, soil health, carbon sequestration, and other crucial ecosystem services across the continuum between agricultural and natural systems.

5. State Agency to receive requested funds

Board of Governors

State Agency contacted? Yes

6. Amount of the Nonrecurring Request for Fiscal Year 2023-2024

Type of Funding	Amount	
Operations	1,379,564	
Fixed Capital Outlay	0	
Total State Funds Requested	1,379,564	

7. Total Project Cost for Fiscal Year 2023-2024 (including matching funds available for this project)

Type of Funding	Amount	Percentage	
Total State Funds Requested (from question #6)	1,379,564	100%	
Matching Funds			
Federal	0	0%	
State (excluding the amount of this request)	0	0%	
Local	0	0%	
Other	0	0%	
Total Project Costs for Fiscal Year 2023-2024	1,379,564	100%	

8. Has this project previously received state funding? Yes

Fiscal Year	Amount		Specific	Vetoed
(уууу-уу)	Recurring	Nonrecurring	Appropriation #	
2022-23	0	2,017,876	148	No

9. Is future funding likely to be requested?

Yes

1,379,564

a. If yes, indicate nonrecurring amount per year.

b. Describe the source of funding that can be used in lieu of state funding.

N/A

10. Has the entity requesting this project received any federal assistance related to the COVID-19 pandemic?



Yes

If yes, indicate the amount of funds received and what the funds were used for.

University of Florida received federal stimulus funds. Fund spent supporting students financial needs & other COVID related expenses such as PPE. UF/IFAS received funding to reimburse purchase of 4 quarantine quarters for off-campus graduate students at \$78,395.

Complete questions 11 and 12 for Fixed Capital Outlay Projects

11. Status of Construction

a. What is the current phase of the project?

OPlanning ODesign OConstruction

- b. Is the project "shovel ready" (i.e permitted)?
- c. What is the estimated start date of construction?
- d. What is the estimated completion date of construction?

12.	List the owners of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the
	relationship between the owners of the facility and the entity.

13. Details on how the requested state funds will be expended

Spending Category Description		Amount	
Administrative Costs:			
Executive Director/Project Head Salary and Benefits		0	
Other Salary and Benefits		0	
Expense/Equipment/Travel/Supplies/ Other		0	
Consultants/Contracted Services/Study		0	
Operational Costs: Other			
Salary and Benefits	Two postdoctoral associates (2.0 FTE) to serve as project co- directors, 12-month stipends for 10 students (10.0 FTE).	79,524	
Expense/Equipment/Travel/Supplies/ Other	Formation of the AI-MESH network, including travel, computing time, data storage, environmental monitoring equipment, satellite imaging.	1,300,040	
Consultants/Contracted Services/Study		0	
Fixed Capital Construction/Majo	r Renovation:		
Construction/Renovation/Land/ Planning Engineering		0	
Total State Funds Requested (m	ust equal total from question #6)	1,379,564	

14. Program Performance

a. What specific purpose or goal will be achieved by the funds requested?



Develop an artificial intelligence (AI) tool through the formation of a statewide ecosystem services (ES) monitoring network to quantify, validate, and develop ecosystem services delivered by agricultural and natural systems in Florida. The AI tool and monitoring network will provide guidance to policy makers, decision-support tools to to agricultural producers and land managers, and opportunities to market "climate-smart" products.

b. What activities and services will be provided to meet the intended purpose of these funds?

A permanent state-wide ES network established and utilized through time for the continued monitoring of ES delivered by Florida agriculture and natural systems. This digital tool will quantify the delivery of ES across multiple systems and their connection points. Provide education state/nationwide on the productivity and protection of ranchlands and timberlands.

c. What direct services will be provided to citizens by the appropriation project?

Identification and valuation of ecosystem services with a goal of developing incentives and benefits for protecting and maintaining these valuable environmental assets. Examples of these assets include carbon sequestration, water storage, pollinator support, preservation of wildlife as well as other essential services to address the climate crisis.

d. Who is the target population served by this project? How many individuals are expected to be served?

Citizens of the state of Florida will benefit through preservation of natural systems, water and the environment.

e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

Preservation of environmental resources, water quality, quantity and recharge, correspondently helping to address the climate crisis.

f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for the contract?

Standard penalties for the state university system.

15. Requester Contact Information

a. First Name	Scott	Last Name Angle
b. Organization	University of Florida, Institu	te of Food and Agricultural Sciences
c. E-mail Address	jangle@ufl.edu	
d. Phone Number	(850)270-4010	Ext.

16. Recipient Contact Information

a. Organization	University of Florida, Institute of Food and Agricultural Sciences	

b. Municipality and County Statewide

c. Organization Type

□For Profit Entity

□Non Profit 501(c)(3)

□Non Profit 501(c)(4)

□Local Entity



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Other (please specify)

d. First Name	Scott	Last Name	Angle
e. E-mail Address	jangle@ufl.edu		
f. Phone Number	(850)270-4010		

17. Lobbyist Contact Information

a. Name	Mary Ann Hooks
b. Firm Name	
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