

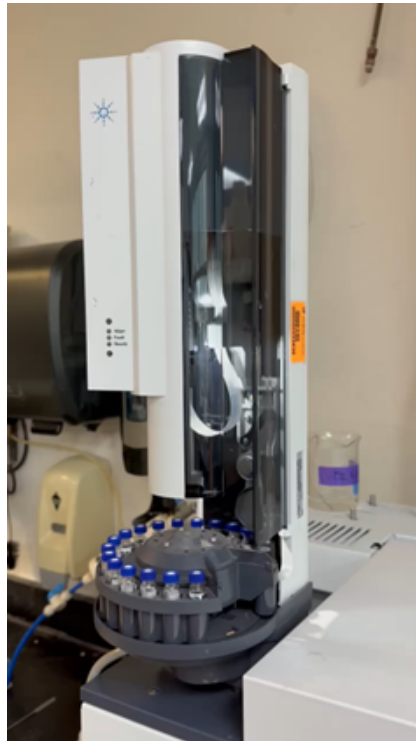
Fee-For-Service
Educational Activity
(FSEA)

Application Approval

**IFAS North Florida Research and
Education Center
Volatile Fatty Acids (VFA)**

Summary of Proposed Fee-for-Service Educational Activities

IFAS North Florida Research and Education Center -
(FSEA) Volatile Fatty Acids (VFA)



1. Summary:

IFAS 's North Florida Research and Education Center (NFREC) is proposing a FSEA for the collection of data for Volatile Fatty Acids (VFA). VFA's are useful in understanding rumen dynamics, evaluating feedstuff, and assessing cattle health and productivity. The service is not readily available outside of the university. A well-known service laboratory offered the analysis several years ago; however, they have discontinued VFA analysis.

The primary location for the FSEA is the Marianna campus. The Marianna location consists of an agronomic unit of ≈ 400 acres and a beef unit of $\approx 1,000$ acres. The NFREC Beef Unit includes numerous acres of pasture management cells for forage data collection, the largest feed efficiency facility in the United States that allows researchers to obtain individual feed intake data on as many as 480 head of cattle, plus the 300 head cowherd provides opportunities to develop and assess additional beef production related research.

This service will strengthen relationships amongst colleagues within the University of Florida, as well as between universities, local producers, and agriculture-related companies, thereby encouraging networking and collaboration, furthering research endeavors, and serving to educate students.



Summary of Proposed Fee-for-Service Educational Activities (FSEA)

IFAS North Florida Research and Education Center -
(FSEA) Volatile Fatty Acids (VFA)

2. Operational:

The FSEA would be operating under the direction of Dr. Nicolas DiLorenzo. The current location of the operations are at the NFREC Marianna Campus, 3925 FL-71, Marianna, FL 32446. The services will take place in Bldg 8023; Rm 112.

Proposed services are as follows:

Short Name	Service Description	Unit of Measure (IE.- Hours, Test, Slide, Daily/Hrly Rate)	Calculates Rates		
			Internal	External Not For Profit	External For Profit
VFA	Analysis of volatile fatty acid concentration in ruminal	Per sample	\$ 10.00	\$ 14.20	\$ 14.20

3. Financial:

The proposed FSEA will be set up within fund 183. The unit is presently receiving institutional support, and any surplus revenue generated would be used to support the activity.

4. Compliance:

Rates will be monitored and reviewed by the Administrative Assistant and Fiscal Assistant. The service center does not recover any equipment depreciation in the proposed rates. Many of the invoices automatically calculate costs based on the established rate and number of cattle. However we are open to use a standardized billing system that UF or IFAS proposes.

5. Additional Information:

More information about the service lines can be found in Appendix I.

Summary of Proposed Fee-for-Service Educational Activities (FSEA)

IFAS North Florida Research and Education Center -
(FSEA) Volatile Fatty Acids (VFA)

Volatile Fatty Acids: VFA

- What are they?
- Short-chain fatty acids
 - Produced by microbial fermentation of feedstuff in the rumen

Why is it important?

- Cattle spend much of the day eating → Consume ~2 – 3% of BW
- Ruminal microorganisms ferment dietary carbohydrates to produce VFA

↳ VFA are absorbed through the rumen wall & transported to the liver → VFA contribute > 60% of the animal's energy requirements (used for maintenance & production)

- Measuring VFA is used as an indicator of:

- Rumen health
- Feed digestion

→ ↑ Rumen health Feed digestion = ↑ Animal production

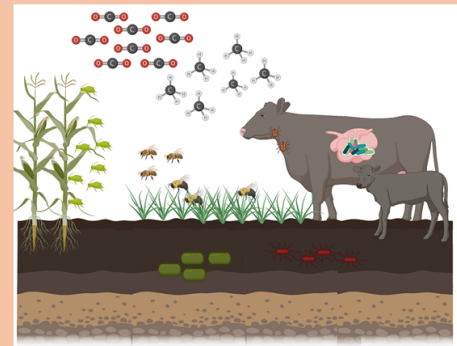


Image credit: F. Tarnonsky; Biorender.com

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Request to Operate a Fee-for-Service Educational Activity (FSEA)

Section 1: To be completed by the requestor - General Information

FSEA Unit Name: University of Florida

College/Unit: North Florida Research and Education Center

Requestor (Name and E-mail): Dr. Tessa Hallford; tschulmeister@ufl.edu

FSEA Primary Contact Name: Dr. Nicolas DiLorenzo

FSEA Primary Contact E-mail: ndilorenzo@ufl.edu

FSEA Primary Contact Phone #: 850-526-1615

FSEA Secondary Contact: Tina Gwin

FSEA Secondary Contact E-mail: tpgwin@ufl.edu

FSEA Secondary Contact Phone: 850-526-1614

Proposed FSEA Chartfield (Fund-Dept) 60770080-183-2100

Start date of the FSEA Activity Immediately

Is a fee currently charged for the services/products? Yes No

How will the department make rates available to UF Community? Rates posted online at: <https://www.dilorenzonutri>
(specify website, etc.)

Will the unit bill grants? (Fund 201/209)
 Yes No Yes - when saving the option is unchecking

Describe the proposed Fee-for-Service Educational Activity

Volatile fatty acids (VFA) are metabolites of ruminal fermentation which vary with feedstuff, among other factors. Data from VFA are useful in understanding rumen dynamics, evaluating feedstuff, and assessing cattle health and productivity. The proposed FSEA is for the determination of VFA concentration, typically from rumen fluid samples, using gas chromatography. The method used to analyze VFA by this lab has been validated, standardized, and published in peer-reviewed journals.

Describe how the proposed activity supports the mission of the University of Florida

As the University of Florida is a premier land-grant university, the proposed activity of the NFREC Marianna Nutrition Lab, which operates under the Institute of Food and Agricultural Sciences, is twofold: 1) uphold the responsibility of UF IFAS Extension in providing research-based education to the public, ensuring the education is backed by the best science available; and 2) uphold the responsibility of UF IFAS Research in discovering new scientific knowledge, encouraging innovative study, and creating applications based on sound science which address challenges facing agriculture, natural resources, and interrelated human systems in Florida, our country, and the world.

Does another unit of the University already provide a same/similar service? Please explain the necessity/ uniqueness of a proposed FSEA service, if already exists on campus.

Yes - a faculty member in the Department of Animal Sciences recently purchased a gas chromatograph

University of Florida

Request to Operate a Fee-for-Service Educational Activity (FSEA)

(GC); however, she does not offer the service and does not analyze samples for other laboratories. This is on main campus.

Location where the service will be provided (please list all locations - building, rooms, etc.)

NFREC, Marianna Bldg 8023; Rm 112

If the Unit proposes to have sales with External Users, please provide a narrative that explains how the service meets the following criteria:

- The service is not readily available outside the university.
- The service has a research purpose or helps educate students.
- The service does not compete with private sector.

The service provided by the NFREC Marianna Nutrition Lab serves to strengthen relationships amongst colleagues within UF, as well as between universities, thereby encouraging networking and collaboration, furthering research endeavors, and serving to educate students and interns currently working in the Nutrition Lab. The service is not readily available outside of the university. A well-known service laboratory offered the analysis several years ago; however, they have discontinued VEA analysis.

How will any potential excess revenues from external users be spent?

To help cover overhead cost of potential equipment replacement - this will be reviewed, tracked and applied only against revenue derived from external sales.

Do you plan to enter into contractual agreements with customers?

- Yes No To explore an agreement with UF General Counsel

Section 2: To be completed by the requestor - Fiscal Operations

Method used to accept collections:

- Cash
- Check
- EFT/Wire
- Credit Card - Machine
- Credit Card - Online
- E2R Between Departments

University of Florida
Request to Operate a Fee-for-Service Educational Activity (FSEA)

Do you plan to maintain a Change or Petty Cash Fund?

- Yes No I don't know

**List any subsidiary systems, other than Peoplesoft, to be used by a proposed FSEA.
(Ex. QuickBooks, I-lab, etc.)**

Invoices are generated using Microsoft Excel on a template created by Dr. Tessa Hallford, which automatically calculates costs based on the established rate and number of samples; however, we are open to using a standardized billing system proposed by UF or IFAS.

Describe the fiscal operations of a proposed unit (controls in place to process the transactions). Example: Segregation of Duties, Monthly Reconciliations, etc.

Tina Gwin will process invoices for payment for services to internal and external customers and process E2R journals for internal payments. Gina Arnett and Tina Gwin will both process deposits for checks received for payment.

Will the unit have on-going support from another funding source?

- Yes No

If yes, please specify Chartfield(s) Appropriations

If yes, Reason for Subsidy:

Personnel cost will be partially subsidized from state appropriation funds.

Please specify a guarantee chartfield that will cover any recurring losses of the FSEA.

Please specify Chartfield: 60770080-181-2100 (Misc Income - that will shift to Fund 179)

Please specify a chartfield that will provide start up funds, if any.

Please specify Chartfield: 60770080-181-2100

Please specify amount: Based on 2 months of operating cost indicated on the proposal.

Will funding require repayment? Yes No

University of Florida

Request to Operate a Fee-for-Service Educational Activity (FSEA)

Section 3: To be completed by approvers:

I have reviewed and am in support of this Request to Operate an Educational Activity. I understand that this activity is in support of the overall mission of the University. I also understand that the management and the oversight of this activity must be performed in accordance with University Policies and Internal Control Standards. I understand that this activity must maintain a positive financial position and hereby recommend approval of this request.

DEPARTMENTAL APPROVALS:

Dept. Chair/Director (Signature):	<u><i>T Dean Pringle</i></u>	DATE: <u>12/13/2024 1:43 PM EST</u>
Dept. Chair/Director (Name):	T Dean Pringle <i>(please print)</i>	
Dean/Vice President (Signature):	<u><i>Meena Thiyagarajah</i></u>	DATE: <u>12/13/2024 11:11 AM EST</u>
Dean/Vice President (Name):	Meena Thiyagarajah <i>(please print)</i>	

University of Florida
Fee-for-Service Educational Activity Rate Calculation
Service Line Description and Proposed Usage

Service Line Description

Short Name	Service Description	Unit of Measure- (IE.- Hours, Test, Slide, Daily/Hrly Rate)	Calculates Rates		
			Internal	External Not For Profit	External For Profit
VFA	Analysis of volatile fatty acid concentration in ruminal	Per sample	\$ 10.00	\$ 14.20	\$ 14.20

Proposed Usage

		Internal		External - Academic				External - Market*		Check Total - should equal zero if all units in column B have been distributed
Short Name	Total Estimated Annual Usage	Your College	Other UF Colleges	Students/Faculty/ Staff in personal capacity	Direct Support Organizations (DSO)	Not-for-profit Organizations	Proposed Markup %	Other (For-Profit Corporations, etc.)	Proposed Markup %	
VFA	8,000	6500	500		250	250	34.10%	500	34.10%	-
	0									-
	0									-
	0									-
	0									-

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Fee-for-Service Educational Activity Rate Calculation
Estimated Salary & Fringes Allocation

		Funding Source										Cost Allocation		Check Total	
Employee Name	Position	Subsidy (Yes/No)	Fund	Department	Type	Salary	Fringe Rate**	Fringe	Total	% Salary to FSEA	Total to FSEA	VFA	% of Time		
Nicolas DiLorenzo	Professor	Yes	103	60770000	FAC	\$ 136,800.54	0.301	41,176.96	177,977.50	1.00%	1,779.78	1,779.78	100%	1,779.78	100%
Tessa Hallford	AFS II	No	183	60770000	TMS	\$52,632.14	0.377	19,842.32	72,474.46	25.00%	18,118.61	18,118.61	100%	18,118.61	100%
Varies	OPS (intern)	No	183	60770000	OPS	\$ 31,200.00	0.042	1,310.40	32,510.40	25.00%	8,127.60	8,127.60	100%	8,127.60	100%
Varies	Grad student	No	183	60770000	GA-R	\$ 25,600.00	0.116	2,969.60	28,569.60	10.00%	2,856.96	2,856.96	100%	2,856.96	100%
Totals						246,232.68		65,299.28	311,531.96		30,882.95	30,882.95		30,882.95	-

University of Florida
Fee-for-Service Educational Activity Rate Calculation
Other Direct Expenses

Description of Service or Supply	Funding Source			Total	Cost Allocation		Check Total - should total 100% and amount in column D	
	Subsidy (Yes/No)	Fund	Account		VFA	% expense		
Gas chromatograph (GC) gases and CO2	No	183	731110	12,911.75	12,911.75	100%	12,911.75	100%
Walk-in freezer alarm	No	183	731100	100.60	100.60	100%	100.60	100%
Analytical balances	No	183	731100	382.35	382.35	100%	382.35	100%
DI water system (8004 & 8023)	No	183	731100	138.64	138.64	100%	138.64	100%
Maintenance	No	183	742100	2,609.24	2,609.24	100%	2,609.24	100%
Pipettes	No	183	731100	2,257.86	2,257.86	100%	2,257.86	100%
Pipette tips	No	183	731100	2,355.55	2,355.55	100%	2,355.55	100%
Gloves	No	183	731100	835.59	835.59	100%	835.59	100%
Chemicals / Reagents	No	183	731100	1,417.97	1,417.97	100%	1,417.97	100%
Bottles / tubes / vials	No	183	731100	9,309.98	9,309.98	100%	9,309.98	100%
Sample Vial Caps	No	183	731100	11,576.74	11,576.74	100%	11,576.74	100%
GC column	No	183	742100	3,674.25	3,674.25	100%	3,674.25	100%
GC consumables	No	183	742100	1,723.38	1,723.38	100%	1,723.38	100%
Labware	No	183	731100	470.17	470.17	100%	470.17	100%
Labels / sharpies / notebooks / labwear	No	183	731100	428.30	428.30	100%	428.30	100%
Safety disposal boxes	No	183	731100	99.93	99.93	100%	99.93	100%
					-	100%	-	100%
					-	100%	-	100%
Totals				50,292.31	50,292.31		50,292.31	

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Fee-for-Service Educational Activity Rate Calculation
Overhead/Indirect Expenses

Account Description	Funding Source			Salary					Expenditure	Total
	Subsidy (Yes/No)	Fund	Type/ Account	Annual Salary	% Directly Related to FSEA	FSEA Salary	Fringe Rate	Fringe	Amount	
Administrative Specialist I	Yes	103	TMS	\$ 57,808.51	2.50%	1,445.21	0.377	544.85		1,990.06
Fiscal Assistant II	Yes	103	TMS	\$ 36,411.54	2.50%	910.29	0.377	343.18		1,253.47
			Totals			2,355.50		888.02	-	3,243.53

University of Florida
Fee-for-Service Educational Activity Rate Calculation
Equipment to be used in a proposed FSEA

Equipment Description	Asset ID	Tag Number	Acquisition Date	Acquisition Cost	Funding Source		
					Fund	Dept	Account
Balance - ME204E; B422659590							
Balance - TR-104; T0124284	000000025549	4910IF122493	12/27/2000	1,278.75	181	60770000	
Centrifuge: Avanti J-E; sys ID 1852359	000000283850	000000283850	2/19/2011	26,014.56	181	60772000	
DI water system							
Freezer: Model LFFH21F7HWJ							
Gas chromatography	000000286433	000000286433	6/30/2011	26,932.96		60775000	
Hot / stir plate							
Ice machine			2/19/2020	3,673.50			
Vortex							
Walk-in freezer	000000291108	000000291108	8/27/2013	16,100.00		60772000	
Dell Latitude 5420	AT0000035753	AT0000035753	7/1/2021	1,200.00		60770000	
Dell Inspiron 3650			3/27/2017	549.98			

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Fee-for-Service Educational Activity Rate
Calculation
Summary of Proposed Rates

VFA

Cost Per Unit: (From Expense Summary)	10.55
Subsidized Cost Per Unit: (From Expense Summary)	9.92

Proposed Rate(s):

Internal	10.00
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External - Academic	14.20
Proposed Academic Markup %	34%
Proposed Academic Markup (\$)	\$ 3.61
Total Proposed Academic Rate	\$ 14.21

External - Market	14.20
Proposed External Markup %	34%
Proposed External Markup (\$)	\$ 3.61
Total Proposed External Rate	\$ 14.21

**University of Florida
Fee-for-Service Educational Activity Rate Calculation
Summary of Expenses**

Allowable Costs:

	VFA	Total
Salary and Wage Expenses (From Salary and Wage Worksheet)	30,882.95	30,882.95
Other Expenses (From Other Expenses Worksheet)	50,292.31	50,292.31
Total Direct Operating Costs	81,175.26	81,175.26
CY Overhead Expenses (From Overhead Expenses Worksheet)		3,243.53
% of Allowable Overhead to Total Direct Operating Costs		4.00%
Overhead Allocation	3,243.53	3,243.53
Total Expenses	84,418.79	84,418.79

Forecasted Units of Good or Service:

Total Number of Units Per Year (From Proposed Usage Worksheet)

8,000.00

Total Cost Per Unit:

\$ 10.55

Salary and Wage Subsidy (From Salary and Wage Worksheet)

1,779.78	1,779.78
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Other Expenses Subsidy (From Other Expenses Worksheet)

-	-
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Total Direct Subsidy

1,779.78	1,779.78
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CY Subsidy Overhead Expenses

	3,243.53
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Subsidy OH Allocation:

	182.24%
3,243.53	3,243.53

Total Subsidy:

5,023.30	5,023.30
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Subsidy Per Unit:

\$ 0.63

Total Expenses after Subsidy

79,395.49	79,395.49
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Cost per Unit After Subsidy:

\$ 9.92

University of Florida
Fee-for-Service Educational Activity
Summary of Projected Financial Plan

	VFA	Total
Revenues		
Internal	70,000.00	70,000.00
External - Academic	7,100.00	7,100.00
External - Market	7,100.00	7,100.00
Total Revenues	\$ 84,200.00	\$ 84,200.00
Subsidy	\$ 5,023	\$ 5,023
Total Revenues and Subsidy	\$ 89,223.30	\$ 89,223.30
Expenses		
	VFA	Total
Salary	30,882.95	30,882.95
Operating Expenses	50,292.31	50,292.31
Operating Overhead	3,243.53	3,243.53
FSEA Overhead	939.55	939.55
Total Expenses	\$ 85,358.34	\$ 85,358.34
Net Excess (Loss)	\$ 3,864.96	\$ 3,864.96