



The Florida Senate

Local Funding Initiative Request

Fiscal Year 2019-2020

LFIR#: 2641

1. Title of Project: Biomedical Research at Mayo Clinic

2. Senate Sponsor: Travis Hutson

3. Date of Submission: 03/27/2019

4. Project/Program Description:

We propose to establish a comprehensive immune monitoring shared resource for research primarily in cancer along with other conditions including neurological diseases, cardiac diseases, gastrointestinal and liver diseases, and rheumatological and auto-immune diseases. The shared resource mission will be to provide standardized, state-of-the-art immune monitoring services at the RNA, protein, and cellular level, including data mining and modeling support for clinical and translational studies. The proposed shared resource will bring new capability to Florida. It is envisioned that the shared resource will serve the research community at Mayo Clinic in Florida and surrounding institutions. In addition to routine services, the shared resource will also have a component that will work to test and develop new technologies for immune monitoring to further enable cutting edge research into the next decades.

5. State Agency to receive requested funds : Department of Health

State Agency Contacted? No

6. Amount of the Nonrecurring Request for Fiscal Year 2019-2020

| Type of Funding | Amount |
|------------------------------------|------------------|
| Operations | 3,000,000 |
| Fixed Capital Outlay | |
| Total State Funds Requested | 3,000,000 |

7. Total Project Cost for Fiscal Year 2019-2020 (including matching funds available for this project)

| Type of Funding | Amount | Percent |
|--|------------------|---------------|
| Total State Funds Requested (from question #6) | 3,000,000 | 100.00% |
| Federal | 0 | 0.00% |
| State (excluding the amount of this request) | 0 | 0.00% |
| Local | 0 | 0.00% |
| Other | 0 | 0.00% |
| Total Project Costs for Fiscal Year 2019-2020 | 3,000,000 | 100.0% |

8. Has this project previously received state funding? No

| Fiscal Year (yyyy-yy) | Amount | | Specific Appropriation # | Vetoed |
|--------------------------|-----------|--------------|-----------------------------|--------|
| | Recurring | NonRecurring | | |
| | | | | |

9. Is future-year funding likely to be requested? No



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

| Spending Category | Description | Amount |
|--|--|------------------|
| Administrative Costs: | | |
| Executive Director/Project Head Salary and Benefits | Director 0.1 FTE (\$75,000/year) | 75,000 |
| Other Salary and Benefits | 0.5 FTE Collaborative Scientist in Biomedical Informatics (\$150,000/year), 0.5 FTE Career Scientist in Immunology (\$150,000/year), and 1 postdoctoral fellow in Informatics (\$90,000/year). | 390,000 |
| Expense/Equipment/Travel/Supplies/Other | Mass cytometry (CyTOF) Equipment (Fluidigm Helios), Attune Flow Cytometer, Nanostring GeoMx DSP unit, ELISA plate washer, ELISpot reader, and Nanostring barcode readers. | 1,500,000 |
| Consultants/Contracted Services/Study | | |
| Operational Costs: | | |
| Salary and Benefits | Laboratory technologists, 2 FTE (\$180,000/year), IT Programmer, 1 FTE (\$150,000/year), and Informatics specialist 0.5 FTE (\$65,000/year). | 395,000 |
| Expense/Equipment/Travel/Supplies/Other | Supplies and equipment. | 625,000 |
| Consultants/Contracted Services/Study | Data services | 15,000 |
| Fixed Capital Construction/Major Renovation: | | |
| Construction/Renovation/Land/Planning Engineering | | |
| Total State Funds Requested (must equal total from question #6) | | 3,000,000 |

11. Program Performance:

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

The use of biologics and other modalities that stimulate, suppress, and/or regulate the immune response is rapidly increasing. Researchers are increasingly addressing the role of the immune system in their respective disease settings requiring expert assistance and resources to measure immune responses. Commensurately, funding agencies have identified immunity and immunotherapy as priority areas of funding. Mayo Clinic's basic, translational, and clinical investigators will benefit by having access to immune monitoring resources and expertise enabling both an enhanced competitiveness for grants and publication of high quality articles. The resource will also enable CERs additional translational and clinical experimentation-based research opportunities. Importantly, the Immunology and Immunotherapy Theme is a key underpinning theme of the Discovery and Translation Labs, which aim to bring laboratory discoveries to patients.

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

Many investigators and clinicians are applying the principles of immunobiology to treat and cure patients. The shared resource will streamline therapeutic development by ensuring access to sophisticated technologies and experimental design. It is expected that services will also be made available to regional universities and



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colleges. In addition to routine services, the shared resource will also have a component that will work to test and develop new technologies for immune monitoring further enabling cutting edge research into the next decades.

c. What are the direct services to be provided to citizens by the appropriations project?

This resource will be made available to research universities and others needing access to specialized immunotherapy monitoring.

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

The target population is Floridians affected by disease, including cancer, for which immunotherapy offers promise.

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

MCF has leading experts in cancer immunology, as evident in multiple clinical trials of cancer vaccines. The informatics pipeline for neoantigen detection was also developed by a MCF Bioinformatics faculty. Expanding this resource will result in scientific discoveries, some of which may be translated into therapies for patients. It will also result in further collaborations with researchers across Florida and the world.

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 in the contract?

A standard grant agreement with the Department of Health is proposed.

12. The owner(s) of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owner(s) of the facility and the entity.

N/A

13. Requestor Contact Information:

- a. **Name:** Layne Smith
- b. **Organization:** Mayo Clinic
- c. **E-mail Address:** smith.layne@mayo.edu
- d. **Phone Number:** (904)953-7334

14. Recipient Contact Information:

- a. **Organization:** Mayo Clinic
- b. **County:** Duval
- c. **Organization Type:**
 - For Profit
 - Non Profit 501(c) (3)
 - Non Profit 501(c) (4)
 - Local Entity
 - University or College
 - Other (Please specify)



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- d. **Contact Name:** Ben Ziemer
- e. **E-mail Address:** ziemer.benjamin@mayo.edu
- f. **Phone Number:** (904)953-7126

15. Lobbyist Contact Information

- a. **Name:** Jim Daughton
- b. **Firm Name:** Metz Husband Daughton
- c. **E-mail Address:** Jim.Daughton@MHDfirm.com
- d. **Phone Number:** (850)205-9000