# Appropriations Project Request  - Fiscal Year 2020-21

**For projects meeting the Definition of House Rule 5.14**

1. Title of Project: Unmanned Aerial Vehicle (UAV) Near Infrared Python Detection Camera
2. Date of Submission: 11/12/2019
3. House Member Sponsor: Mike La Rosa
   Members Copied:

**4. DETAILS OF AMOUNT  REQUESTED:**
   a. Has funding been provided in a previous state budget for this activity?　　　No
      *If answer to 4a is "No" skip 4b and 4c and proceed to 4d, Col. E*
   b. What is the most recent fiscal year the project was funded?
   c. Were the funds provided in the most recent fiscal year subsequently vetoed?
   d. Complete the following Project Request Worksheet to develop your request:

| FY: | Input Prior Year Appropriation for this project for FY 2019-20 (If appropriated in 2019-20 enter the appropriated amount, even if vetoed.) | | | Develop New Funds Request for FY 2020-21 (Requests for additional RECURRING funds are prohibited.) | | |
|---|---|---|---|---|---|---|
| Column: | A | B | C | D | E | F |
| Funds Description: | Prior Year Recurring Funds | Prior Year Nonrecurring Funds | Total Funds Appropriated (Recurring plus Nonrecurring: column A + column B) | Recurring Base Budget (Will equal non-vetoed amounts provided in Column A) | **Additional Nonrecurring Request** | **TOTAL Nonrecurring plus Recurring Base Funds** (Will equal the amount from the Recurring base in Column D plus the Additional Nonrecurring Request in Column E.) |
| Input Amounts: | | | | | 500,000 | 500,000 |

5. Are funds for this issue requested in a state agency's Legislative Budget Request submitted for FY 2020-21? No
    5a. If yes, which state agency?
    5b. If no, which is the most appropriate state agency to place an appropriation for the issue being requested?  Fish and Wildlife Conservation Commission
    5c. Has the appropriate state agency for administering the funding, if the request were appropriated, been contacted?  Yes
    5d. Describe penalties for failing to meet deliverables or performance measures which the agency should provide in its contract to administer the funding if appropriated.

Return the funds (if the camera is not delivered)

6. Requester:
    a. Name: Mike Nichola
    b. Organization: Osceola county, Florida
    c. Email: Mike.Nichola@osceola.org
    d. Phone #: (407)742-2393

7. Contact for questions about specific technical or financial details about the project:
    a. Name: Mike Nichola
    b. Organization: Osceola county, Florida
    c. Email: Mike.Nichola@osceola.org
    d. Phone #: (407)742-2393

8. Is there a registered lobbyist working to secure funding for this project?
    a. Name: Mark Delegal
    b. Firm: Holland and Knight
    c. Email: mark.delegal@hklaw.com
    d. Phone #: (850)425-5685

9. Organization or Name of entity receiving funds:
    a. Name: IMEC USA nanoelectronics design center
    b. County (County where funds are to be expended): Osceola
    c. Service Area (Counties being served by the service(s) provided with funding): Broward, Charlotte, Collier, Glades, Martin, Miami-Dade, Monroe, Okeechobee, Palm Beach

10. What type of organization is the entity that will receive the funds? (Select one)
    ○ For Profit
    ◉ Non Profit 501(c) (3)
    ○ Non Profit 501(c) (4)
    ○ Local Government
    ○ University or College

○ Other (Please describe)

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

The goal is to develop a scalable, and sustainable solution to the eradication of invasive species. This solution can be applied to python detection and then be expanded to include other invasive species (pythons).  Goal is to leverage internal research and development (IRAD) efforts by IMEC USA, and UCF's development of a vehicle-mounted near, near infrared (NIR) python detection camera and integrate an equivalent camera on to an unmanned aerial vehicle (UAV sometime called a drone).

12.  Provide specific details on how funds will be spent. (Select all that apply)

| Spending Category | Description | Nonrecurring (Should equal 4d, Col. E) Enter "0" if request is zero for the category |
|---|---|---|
| Administrative Costs: | | |
| ☐a.  Executive Director/Project Head Salary and Benefits | | |
| ☐b.  Other Salary and Benefits | | |
| ☐c.  Expense/Equipment/Travel/Supplies/Other | | |
| ☐d.  Consultants/Contracted Services/Study | | |
| Operational Costs: | | |
| ☑e.  Salaries and Benefits | IMEC USA will design the camera hardware, software, integrate both on the drone, and will test the system in the laboratory and in the field.  The camera design includes the integation of filters, Illumination design and testing, as well as software development and integration to operate while the drone is flying and operating in the python search process. | 450,000 |

| | | |
|---|---|---|
| ☑f.  Expenses/Equipment/Travel/Supplies/Other | These funds will be used to purchase a high performance, but low cost drone(s), the camera parts needed for integration, software tools, and laboratory testing equipment.  Some of these funds will be used for travel to the Everglades for field testing of the system. | 50,000 |
| ☐g.  Consultants/Contracted Services/Study | | |
| Fixed Capital Construction/Major Renovation: | | |
| ☐h.  Construction/Renovation/Land/Planning Engineering | | |
| TOTAL | | 500,000 |

13.  For the Fixed Capital Costs requested with this issue (In Question 12,   category "h. Fixed Capital Outlay" was selected), what type of ownership will the facility be under when complete? (Select one correct option)

○For Profit
○Non Profit 501(c) (3)
○Non Profit 501(c) (4)
○Local Government (e.g., police, fire or local government buildings, local roads, etc.)
○State agency owned facility (For example: college or university facility, buildings for public schools, roads in the state transportation system, etc.)
○Other (Please describe)

14.  Is the project request an information technology project?
No

15.  Is there any documented show of support for the requested project in the community including public hearings, letters of support, major organizational backing, or other expressions of support?
Yes

15a.  Please Describe:

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There have been numerous stories in the news about the technology.  Organizations are Orlando Sentinel, Wired, Tampa Bay Times, Palm Beach Post (All in Fall of 2019).

16. Has the need for the funds been documented by a study, completed by an independent 3rd party, for the area to be served?
    <u>Yes</u>

    16a.  Please Describe:
          https://myfwc.com/wildlifehabitats/nonnatives/python/

17. Will the requested funds be used directly for services to citizens?
    <u>No</u>

18. What benefits or outcomes will be realized by the expenditure of funds requested? (Select each Benefit/Outcome that applies)

| Benefit or Outcome | Provide a specific measure of the benefit or outcome | Describe the method for measuring level of benefit |
|---|---|---|
| ☐Improve physical health | | |
| ☐Improve mental health | | |
| ☐Enrich cultural experience | | |
| ☐Improve agricultural production/promotion/education | | |
| ☐Improve quality of education | | |
| ☑Enhance/preserve/improve environmental or fish and wildlife quality | This technology will provide a means for finding and eliminating invasive pythons in Everglades and other regions of south Florida. | We will quantify the probability of snake detection as well as false alarm rates for the IMEC USA developed camera versus normal visible cameras and human vision. |
| ☐Protect the general public from harm (environmental, criminal, etc.) | | |
| ☐Improve transportation conditions | | |
| ☐Increase or improve economic activity | | |

| | | |
|---|---|---|
| ☐Increase tourism | | |
| ☐Create specific immediate job opportunities | | |
| ☐Enhance specific individual's economic self sufficiency | | |
| ☐Reduce recidivism | | |
| ☐Reduce substance abuse | | |
| ☐Divert from Criminal/Juvenile justice system | | |
| ☐Improve wastewater management | | |
| ☐Improve stormwater management | | |
| ☐Improve groundwater quality | | |
| ☐Improve drinking water quality | | |
| ☐Improve surface water quality | | |
| ☐Other (Please describe): | | |

19. Provide the total cost of the project for FY 2020-21 from all sources of funding (Enter "0" if amount is zero):

| Type of Funding | Amount | Percent of Total | Are the other sources of funds guaranteed in writing? |
|---|---|---|---|
| 1. Amount Requested from the State in this Appropriations Project Request: | 500,000 | 91.6% | N/A |
| 2. Federal: | 36,000 | 6.6% | Yes |
| 3. State:  (Excluding the requested Total Amount in #4d, Column F) | 10,000 | 1.8% | No |
| 4. Local: | 0 | 0.0% | No |

| 5. Other: | 0 | 0.0% | No |
|---|---|---|---|
| TOTAL | 546,000 | 100% | |

20. Is this a multi-year project requiring funding from the state for more than one year?
<u>No</u>