

TRIUMPH GULF COAST, INC. PRE-APPLICATION FORM

APPLICANT INFORMATION

Name of Individual/Entity/Organization: Andrews Research & Education Foundation

Proposal Title: The Center for Human Healthspan, Resilience and Performance (the Center)

Amount of Triumph Funds Requested: \$4.0 million

Total Estimated Project Costs: \$20 million

Brief Description of Individual/Entity/Organization

The Andrews Research and Education Foundation (AREF) is a non-profit entity established by the Andrews Institute and internationally renowned orthopaedic surgeon Dr. James Andrews. Its purpose is to promote the field of musculoskeletal medicine, research, and education to advance prevention, treatment and rehabilitation of athletic injuries, human performance and to improve quality of life for people of all ages. In partnership with leading industry experts, AREF's interdisciplinary team focuses on clinical, regenerative medicine and biomechanics research. AREF provides a foundation for education, surgical skills training, medical professional training and specialization for high performance training for the military. AREF has grown to be a valued source of educational content, a thought leader in the world of orthopaedic and sports medicine research, and a continuous contributor to the academic and professional world of medicine.

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Proposed Project

Andrews Research and Education Foundation (AREF) will be a co-participant with The Florida Institute for Human and Machine Cognition (IHMC) in the creation of a Center of Excellence focused on Human Healthspan, Resilience and Performance (see the attached Pre-Application prepared and submitted by IHMC). AREF and IHMC already have an existing Affiliation Agreement for Cooperative Research (see attached) and this project will leverage and expand upon the existing affiliation, taking it to the next level through the creation of a Center of Excellence focused on human performance. For purposes of brevity and to avoid duplication, all of the benefits and impacts identified in the IHMC pre-application should be considered and are applicable herein.

The objective of the Center will be to utilize the unique assets and critical mass already existing in NW Florida to initiate and evolve cutting edge research and education with a focus on Human Healthspan, Resilience and Performance. The Center will be poised to be a leader of research excellence in NW Florida with a transformational impact on the local and regional economies. It is anticipated that federal and industry sponsored research grants will fuel new career opportunities

for local residents and drive the national and international recruitment of leading scientists to the Center. Expected grant donors would include the Department of Defense and the National Institute of Health, as an example. The requested contribution from Triumph would be leveraged multiple times through these grants and would attract significant investment of funds into the NW Florida region.

AREF and IHMC are two internationally recognized non-profit entities situated near the border of Escambia and Santa Rosa County. The combination of the multi-disciplinary specialties of each organization within the Center will provide a synergy to leverage and build upon these two renowned organizations to establish national and international prominence in the field of human performance.

Two examples of the type of leading-edge research and education that could emanate from the Center may include augmented or virtual reality based surgical platforms and advanced developments in telemedicine. Augmented or virtual reality would allow training through simulations and a host of other applications, including in-the-field applications.

<https://orthofeed.com/2020/07/14/medacta-to-introduce-nextartm-first-fda-cleared-augmented-reality-based-surgical-platform-for-total-knee-replacement/> Advances in the ability to provide diagnosis and treatment through telemedicine applications will change the face of medicine and will be particularly beneficial in military settings, or other environments where medical personnel and equipment are not immediately in close proximity.

https://journals.lww.com/jbjsjournal/fulltext/2020/06170/telemedicine_in_the_era_of_covid_19_the_virtual.5.aspx

The IHMC pre-application form highlights many significant impacts that will benefit the region, including high wage job creation and access to new federal grants. In addition to those identified in their pre-application, the following benefits are also expected:

- The Center of Excellence provides advanced training opportunities for medical and research professionals.
- The Center will partner with local and statewide universities to create an accelerated certification program to provide physicians, clinicians and researchers additional hands-on clinical and research training to support the growing demand for expertise in the region.
- The Center will become a national/regional “think tank” by providing advance resources and technology to support collaboration of scientists, researchers and clinicians in a centralized hub.
- The Center will promote human performance safety, injury prevention techniques and wellness through education and community outreach.

Amount of Funds Being Sought from Triumph Gulf Coast

The amount of funds requested by AREF to initiate the Center is \$4.0 million, summarized into the following categories:

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| Research, Surgical Skills and Bioskills Lab equipment | \$1,750,000 |
| Education/Fellowship/Training | \$350,000 |
| Community Outreach | \$200,000 |
| Chief Scientist/Research Director | \$400,000 |
| Research professionals (4) | \$775,000 |
| Clinical Research Coordinator (1) | \$125,000 |
| Quality, Education, Fellowship Coordinators (3) | \$300,000 |
| Community Outreach Director | <u>\$100,000</u> |
| TOTAL | <u>\$4,000,000</u> |

Amount and Identity of Other Sources of Funds:

To initiate the Center of Excellence, AREF will be contributing access to the value of patents, technologies, goodwill, know-how, intellectual property and other intangible assets as well as facility, furniture, equipment and professional personnel as part of the total project cost. It is anticipated that IHMC will be making a similar contribution of technologies, know-how, intangible assets and personnel. Also, the City of Gulf Breeze has previously contributed \$400,000 to AREF for its regenerative medicine center that will become part of the Center of Excellence. It is estimated that the value of the initial contributions from AREF and the City of Gulf Breeze is in excess of \$6 million.

Location of the Project:

Escambia/Santa Rosa County

Summary Description of the Proposed Program and How the Proposed Program will be Transformational and Promote Economic Recovery, Diversification and Enhancement of the Disproportionately Affected Counties:

The Center program will utilize Triumph Gulf Coast funds to launch a Human Performance cluster via the establishment of programming (and the associated job creation) for research and education requirements as well as the purchase of human performance research equipment. The Center program will drive transformational change via the seeding of a strong Human Performance Cluster. This cluster will drive economic recovery through new federal investment via grants and contracts (and the associated ripple effect), new job creation, and improved productivity. The impacted counties will be significantly enhanced and recognized with the establishment of the Human Performance cluster creating new synergies and collaborations with other entities and commercial companies to allow increased expansion of efforts within this cluster. The creation and growth of the Human Performance fellowship and other educational programs will provide an entirely new pipeline of highly skilled professionals locating to the region. AREF and IHMC have already identified

internationally recognized senior researchers, research associates, nurse practitioners, and clinical research coordinators in exercise medicine to help manage and execute the mission of the Center.

A summary timeline for the proposed project or program:

We envision a 10-year timeline for the proposed Center program. The concept of a Center of Excellence has been evolving since the execution of the Cooperative Research Affiliation agreement entered into between AREF and IHMC on March 18, 2019. To formally establish the Center, it will be initially seeded with technologies, know-how, goodwill, intellectual property and furnishings, equipment and medical and research professionals from AREF and IHMC. With the additional financial support of Triumph Gulf Coast during the first two years of operation, the Center will establish formal programming, hire personnel, purchase required equipment and begin to attract federal and industry grants focused on human performance. Thereafter the effort will be funded by AREF, IHMC and external grant funds for years 3-10 and in perpetuity. All formal research and education activities will be conducted as soon as programming and equipment are established (no later than year 2).

Please Select the Proposal's Eligibility Category(s)

Pursuant to Section 288.8017, Triumph Gulf Coast, Inc. was created to make awards from available funds to projects or programs that meet the priorities for economic recovery, diversification, and enhancement of the disproportionately affected counties. The disproportionately affected counties are: Bay County, Escambia County, Franklin County, Gulf County, Okaloosa County, Santa Rosa County, Walton County, or Wakulla County. See, Section 288.08012.

1. From the choices below, please check the box that describes the purpose of the proposed project or program (check all that apply):

- Ad valorem tax rate reduction within disproportionately affected counties;
- Local match requirements of s. 288.0655 for projects in the disproportionately affected counties;
- Public infrastructure projects for construction, expansion, or maintenance which are shown to enhance economic recovery, diversification, and enhancement of the disproportionately affected counties;
- Grants to local governments in the disproportionately affected counties to establish and maintain equipment and trained personnel for local action plans of response to respond to disasters, such as plans created for the Coastal Impacts Assistance Program;
- Grants to support programs that prepare students for future occupations and careers at K-20 institutions that have campuses in the disproportionately affected counties. Eligible programs include those that increase students' technology skills and knowledge; encourage industry certifications; provide rigorous, alternative pathways for students to meet high school graduation requirements; strengthen career readiness initiatives; fund high-demand programs of emphasis at the bachelor's and master's level designated by the Board of Governors; and, similar to or the same as talent retention programs created by the Chancellor of the State University System and the Commission of Education, encourage students with interest or aptitude for science, technology, engineering, mathematics, and medical disciplines to pursue postsecondary education at a state university or a Florida College System institution within the disproportionately affected counties;
- Grants to support programs that provide participants in the disproportionately affected counties with transferable, sustainable workforce skills that are not confined to a single employer; and
- Grants to the tourism entity created under s. 288.1226 for the purpose of advertising and promoting tourism and Fresh From Florida, and grants to promote workforce and infrastructure, on behalf of all of the disproportionately

affected counties.

Please Select the Priorities this Proposal's Outcomes will Achieve

1. Please check the box if the proposed project or program will meet any of the following priorities (check all that apply):

- Generate maximum estimated economic benefits, based on tools and models not generally employed by economic input-output analyses, including cost-benefit, return-on-investment, or dynamic scoring techniques to determine how the long-term economic growth potential of the disproportionately affected counties may be enhanced by the investment.
- Increase household income in the disproportionately affected counties above national average household income.
- Leverage or further enhance key regional assets, including educational institutions, research facilities, and military bases.
- Partner with local governments to provide funds, infrastructure, land, or other assistance for the project.
- Benefit the environment, in addition to the economy.
- Provide outcome measures.
- Partner with K-20 educational institutions or school districts located within the disproportionately affected counties as of January 1, 2017.
- Are recommended by the board of county commissioners of the county in which the project or program will be located.
- Partner with convention and visitor bureaus, tourist development councils, or chambers of commerce located within the disproportionately affected counties.