**Concept Paper for Jeffress Trust Awards Program in**

**Interdisciplinary Research**

The Jeffress Trust grants provide seed funding to support one‐year pilot studies that encourage the development of inventive interdisciplinary strategies that integrate computational and quantitative scientific methodologies across a broad range of scientific disciplines.

**Concept Papers due to Office of Research: September 26, 1014 @ 5 p.m.**

**Proposals due to Jeffress: January 2015**

**CONCEPT PAPERS MUST BE SUBMITTED TO** [**limitedsubmissions@odu.edu**](mailto:limitedsubmissions@odu.edu) **TO BE CONSIDERED.**

**Acknowledgement of receipt will come from this e-mail address only.**

**Link to Jeffress Trust guidelines to help with concept paper preparation:**

<http://hria.org/tmfservices/tmfgrants/jeffress.html>

**Concept papers must address the following areas:**

1. Description of project (1 single-spaced page) see below the \*\****Award Selection Criteria*** and ***Research Project Criteria***
2. Abbreviated CV of PI
3. List of collaborators and their affiliations
4. One page or less showing how you meet the eligibility criteria:
5. One-year pilot studies (max $100,000) that encourage the development of innovative interdisciplinary strategies that integrate computational and quantitative scientific methodologies across an eligible scientific discipline: **astronomy, biosciences, chemistry, computer sciences, engineering, environmental sciences, material science, mathematics and physics.**  *Research in social, economic and behavioral sciences, including psychology, are currently outside the scope of Jeffress funding.*
6. Applicants must be **full‐time faculty.** Faculty with primary appointments from medical schools and schools of Osteopathic Medicine in Virginia are not eligible to receive this Award as Principal Investigators. However, they may receive funding as Co-investigators working in collaboration with faculty who do not hold a primary medical school appointment and are strongly encouraged to participate in this interdisciplinary Award. **Applications will be accepted from investigators who have completed no more than seven years of their first faculty appointment as of July 1, 2015**. Eligible candidates will have received this appointment on or between July 1, 2008 and June 30, 2015.
7. Proof of Undergraduate Student Participation. **A proportion of the Award is required to be allotted towards funding undergraduate student research through stipend support.** The Jeffress Memorial Trust is dedicated towards inspiring young creative minds that will contribute to the future scientific research workforce in Virginia. Justified graduate student support may be considered on a case by case basis.

\*\****Award Selection Criteria***

The Scientific Review Committee uses the following criteria to evaluate applications:

* Project’s scientific merit, impact and innovation exploiting computational and quantitative strategies.
* Qualifications of applicant and Co-Investigators (if applicable) to carry out the proposed research
* Research objectives, methodology, data collection and data analyses that are feasible and appropriate to meet the proposal’s goals
* Evaluation of detailed plans for Undergraduate Student Research opportunities in the proposed project

\*\* ***Research Project Criteria***

New burgeoning technologies and research capabilities are being fueled by advances in computational and quantitative science that exploit the power of mathematical modeling

and analytics, accelerating discovery across scientific fields. For example, pioneering mathematical modeling/simulations and analytics capable of mining ever‐growing data sets have already led to significant advances in bioinformatics, astrophysics, mathematical biology, drug development and material science. Furthermore, the development of innovative algorithms and statistical analyses to investigate global weather, seismic and ecological data sets can improve predictive outcomes worldwide to preserve natural resources, increase food production and improve disaster preparedness.