

WV-INBRE Request for Genomics Core Pilot Grant Applications 2014

Letter of Intent Due: **January 22, 2014**
Application Due: **February 18, 2014**
Award Date: **May 1, 2014**

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Section I. Funding Opportunity Description

The WV-INBRE program has funds for the support of biomedical research pilot grants that require the use of genomic analysis technologies. This solicitation is open to applications from investigators at West Virginia University, Marshall University and WV primarily undergraduate institutions (PUI) that are part of the WV-INBRE network. Acceptable technologies include Next Generation Sequencing (NGS) methods such as whole exome sequencing, RNA-Seq, Methyl-Seq, microbiome studies and related high throughput methods. Applications originating from undergraduate institutions may rely on microarray analyses in place of NGS. Funds may be used for the acquisition of NGS/microarray supplies or services as described in Section V.

Programmatic goal: The purpose of these pilot grant awards is to allow investigators to gather preliminary data for NIH RO1, RO3 and other investigator-initiated proposals in the biomedical sciences.

Section II. Award Information

- Estimated Number of Awards in Y14: 3 (2 awards to WV-INBRE primarily undergraduate institutions and 1 to a lead institution).
- Anticipated Funding Amount: \$30,000 (\$10,000 per award)
- Limit on funding per award: \$10,000 (plus indirect costs as detailed in Allowable Costs)
- Future awards/resubmissions: We anticipate issuing NGS pilot awards to lead and primarily undergraduate institutions in each year of WV-INBRE III.
- Proposals must be received no later than 5PM on February 18, 2014.
- Awardees will be notified in late April 2014.
- Awarded funds must be expended by April 30, 2015.

Section III. Eligibility and Application Requirements

All full time tenured or tenure-track faculty members from West Virginia University, Marshall University and primarily undergraduate institutions in the WV-INBRE network are eligible to apply. Applications from nontenure track faculty will not be accepted. WV-INBRE network institutions are Alderson-Broaddus University, Bethany College, Bluefield State College, Concord University, Davis & Elkins College, Fairmont State University, Glenville State College, Shepherd University, University of Charleston, West Liberty University, West Virginia State University, West Virginia Wesleyan College and Wheeling Jesuit University.

WV-INBRE Thematic Considerations: The current research theme for WV-INBRE is Cellular and Molecular Biology with an emphasis on chronic disease in humans. For NGS pilot grant applications, the proposed research plan must address a problem in biomedical science (e.g. cardiovascular disease, cancer, diabetes, obesity, infectious disease). Projects with relevance to chronic disease will be given preference but this aspect is not required.

Required Methods: Applications from investigators at lead institutions must rely on the use of NGS methods. Applications from primarily undergraduate institutions may use either NGS methods or microarray technology. Applications may include use of experimental animals and/or human subjects.

Limit on Number of Proposals: There is no limit on the number of proposals an institution may submit.

Section IV. Application Process and Submission Information

Notification of Intent to Apply: Applicants should email Don Primerano (primeran@marshall.edu) of their intention to apply no later than January 21 2014. In your email, please provide the title of the project a brief summary of the project (3-4 sentences). This information is needed to select application reviewers.

Application Package

The pilot grant application must contain the following sections:

- a) cover page with contact information (fillable word document is attached)
- b) project summary (one paragraph)
- c) a standard NIH biosketch of the Principal Investigator as well as any co-investigators or collaborators (use NIH Biographical Sketch Format Page),
- d) a budget page which shows all supply and other costs (NIH form page 4),
- e) a detailed budget justification. The budget should be given on PHS398 Detailed Budget Page Form page 4. A budget justification should be provided on a separate page or on NIH form page 5.
- f) introduction and background

- g) goals and specific aims
- h) methods of analysis
- i) expected outcomes
- j) relationship of the proposal to future grant applications and
- k) literature cited.

Applications that depend on animals must address the five points of animal welfare and receive IACUC approval before an award can be made. Applications that involve the use of human subjects must include the PHS398 sections for human subject research and have IRB panel approval before an award can be made.

The narratives of sections (f) through (j) must not exceed 3 pages.

NIH forms can be found at <http://grants.nih.gov/grants/funding/phs398/phs398.html>. An application form that includes the biosketch and budget pages is included with this announcement.

Submission process: Please combine all pages of your application into a single pdf and email the document to Don Primerano at primeran@marshall.edu.

Proposal Due Date: All proposals must be received by February 18, 2014 5PM

Section V. Allowable Costs:

Grant funds may only be used for the acquisition of (1) cells, cell lines, or tissues that form the basis of the NGS project, (2) reagents for extraction of RNA or DNA for the preparation of NGS libraries, (3) reagents for preparation of NGS libraries, (4) reagents directly used for NGS sequencing, (5) NGS services through a core facility or private company and (6) other reagent and supply costs that are directly needed for the NGS project. Salaries, equipment, software, publication costs and travel will not be allowed. Mentors and collaborators are allowed but no salary can be committed to their efforts.

Applicants are encouraged to contract with either the MU Genomics Core Facility or WVU Genomics Core Facility for library construction and next generation sequencing service. The two cores have experience in whole genome, whole exome, RNA-Seq and microbiome studies. Applicants may contact Don Primerano, Genomics Core Director, or Steve DiFazio (spdifazio@mail.wvu.edu) for additional information on next gen methods (input requirements, feasibility, cost, etc).

Indirect costs are allowed for non-MU applicants. For non-MU applicants that do not currently have a subaward agreement with MU in place, indirect costs must be based upon the applicant's current indirect cost rate agreement with a cognizant federal agency. Indirect costs will not be allowed for applicants without a rate agreement in place. For non-MU applicants who are current WV-INBRE subawardees, indirect cost rates must be based on the rate established at the time of the subaward. MU awards

will be handled by an internal fund transfer mechanism. Inquiries regarding allowable costs should be made to Don Primerano as described below.

Institutional Matching Funds: Not required or expected

Section VI. Application Review Process

The primary review criteria will be based on (1) relevance to major research themes supported by WV-INBRE (e.g. cardiovascular disease, cancer, infectious disease, etc.), (2) reliance on the use of next generation sequencing technologies (or microarrays for PUI applications) (3) the likelihood of leveraging additional grant funding and (4) the quality of the approach to the specific aims. Applications will initially be reviewed by a review panel consisting of three external NGS experts (one of whom will be External Advisory Committee [EAC] member Dr. Ivana Yang). This panel will make recommendations for funding to the WV-INBRE Administrative Core. The AC will then submit the review panel recommendations to the entire WV-INBRE EAC and the NIH-NIGMS for final approval. The review process will take 8-10 weeks to complete. We expect to notify all applicants in late April or early May 2014.

Section VII. Award Administration Information

Pilot grant award numbers and amounts are dependent on the receipt of the parent grant at the request levels.

Period of pilot grants: All funds must be expended no later than April 30, 2014. Applicants must follow institution regulations regarding deadlines for receipt of supplies.

Recipients of any award with an NGS component will be required to conference with the GC/BC staff before experimentation begins. As part of the annual progress report, pilot grant recipients will be required to submit a progress report and will be asked to present their findings at the WV-INBRE summer research symposium and occasionally at Steering Committee meetings. Dr. Primerano will summarize the progress of the GC and the NGS pilot grant program at the WV-INBRE annual evaluation meetings.

Questions about the application process (eligible projects, allowable costs etc) should be addressed to Don Primerano. He can be contacted by phone (304-696-7338) or by email (primeran@marshall.edu).

Section VIII. WV-INBRE Program Contacts

Program Title: WV-INBRE Next Generation Sequencing Pilot Grant Funding 2014

WV-INBRE Program Officers:

Gary Rankin PhD, WV-INBRE Principal Investigator, 304-696-7313,
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James Sheil PhD, WV-INBRE PhD Program Coordinator, 304-293-7416,
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Donald Primerano PhD, Genomics Core Director, 304-696-
7338 primeran@marshall.edu

Mary Davis, PhD, Bioinformatics Core Co-director, 304-293-3414 mdavis@hsc.wvu.edu

James Denvir, PhD, Bioinformatics Core Co-director, 304-696-7327
denvir@marshall.edu

Section IX. Notification

Notification of awards will be made to the submitting PI and the applicant's organization. PIs whose proposals are declined will be advised as promptly as possible. Copies of review comments will not be provided.

Section X. Responsibilities of pilot grant recipients.

All recipients of WV-INBRE funding are required to provide a written report to the WV-INBRE Administrative Core to be submitted as part of the annual progress report (usually submitted in February). Recipients are expected to summarize the impact and results of their pilot award, final expenditures, significant insights, numbers of graduate and undergraduate students involved in the project, secondary grant proposals to other programs such as federal, private, or state programs and overall success of the award. Recipients may also be asked to make oral or poster presentations at the WV-INBRE symposium or External Advisory Committee meetings. Recipients of awards **must** acknowledge support from WV-INBRE (NIH grant P20GM103434) in all presentations and manuscripts.