



Grant Number: 1R41CA183399-01A1
FAIN: R41CA183399

Principal Investigator(s):
Ruben Rene Gonzalez-Perez, PHD

Project Title: Novel adjuvant therapy for triple negative breast cancer

Lillard, James
President & CEO
Jyant, Inc.
3393 Raes Creek Road
Marietta, GA 300085702

Award e-mailed to: mwilliams@neo-bizsolutions.com

Period Of Performance:
Budget Period: 04/01/2015 – 03/31/2016
Project Period: 04/01/2015 – 03/31/2016

Dear Business Official:

The National Institutes of Health hereby awards a grant in the amount of \$225,000 (see “Award Calculation” in Section I and “Terms and Conditions” in Section III) to JYANT Technologies, Inc. in support of the above referenced project. This award is pursuant to the authority of 42 USC 241 15 USC 638 42 CFR 52 and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Acceptance of this award including the “Terms and Conditions” is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

Each publication, press release, or other document about research supported by an NIH award must include an acknowledgment of NIH award support and a disclaimer such as “Research reported in this publication was supported by the National Cancer Institute of the National Institutes of Health under Award Number R41CA183399. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.” Prior to issuing a press release concerning the outcome of this research, please notify the NIH awarding IC in advance to allow for coordination.

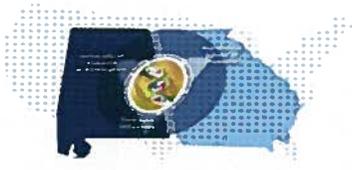
Award recipients must promote objectivity in research by establishing standards that provide a reasonable expectation that the design, conduct and reporting of research funded under NIH awards will be free from bias resulting from an Investigator’s Financial Conflict of Interest (FCOI), in accordance with the 2011 revised regulation at 42 CFR Part 50 Subpart F. The Institution shall submit all FCOI reports to the NIH through the eRA Commons FCOI Module. The regulation does not apply to Phase I Small Business Innovative Research (SBIR) and Small Business Technology Transfer (STTR) awards. Consult the NIH website <http://grants.nih.gov/grants/policy/coi/> for a link to the regulation and additional important information.

If you have any questions about this award, please contact the individual(s) referenced in Section IV.

Sincerely yours,

Alice Chi Wong
Grants Management Officer
NATIONAL CANCER INSTITUTE

Additional information follows



Morehouse School of Medicine/Tuskegee University/UAB Comprehensive Cancer Center Partnership

3 October 2014

Dear Chris Klug (Co-Leader)
(Dr. Reuben Gonzalez-Perez, Contact-PI)

Congratulations, the Scientific Advisory Committee of the Morehouse School of Medicine/Tuskegee University/UAB Comprehensive Cancer Center Partnership has approved your collaborative proposal with Reuben Gonzalez-Perez, "Role of Leptin-Notch Axis in Pancreatic Cancer" for funding.

Final award of your project is contingent upon the receipt of documentation of any IRB, IACUC, and or any other institutional requirements in order to carry out your proposed research. In addition, you must submit a separate **Career Development and Mentoring plan, if you are a junior partner**. Upon receipt of applicable documentation, the program manager at UAB will distribute an award letter and the account number for your component of budget, i.e., for **\$5,000/year**. The lead PI at Morehouse School of Medicine (Dr. Lillard) will send a similar award letter for **\$110,000** to your collaborator (Dr. Gonzalez-Perez) at MSM. All pilot project investigators must provide the Partnership with written progress reports as outlined below.

Progress Review Process for Pilot Research Projects

A Scientific Review Committee (SRC) has been appointed by the Cancer Research Program Co-Leaders to review progress of the Pilot Research Projects. The review Process will consist of:

1. Six months – oral presentation to the Partnership Advisory Committee/SRC and other invited ad hoc reviewers. This provides an opportunity for critiques and course corrections of projects at an early point.
1. Nine months – one page progress report update.
2. One year– a full written report for submission to the SRC.
3. Progress reports should be submitted in NIH format. Prior to submission, all Progress Reports and manuscripts should be routed through Dr. Don Hill, the Partnership's Scientific Writer.

Criteria to be used include:

2. Satisfactory progress according to established time line;
3. Ability to identify research and administrative problems;
4. Continued application of appropriate scientific methods;
5. Approach and interim and final conclusions;
6. Scientific integrity;
7. Scientific publications; and
8. Progress towards overarching research agenda; and
9. Career Development.

Recommendation options, to be communicated to the PI (contact Co-Leader) and to the SRC and Program Advisory Committee, include:

1. Modify the project;
2. Recommend continuation as *pilot* research project;
3. Recommend attempt at transition to competitive peer-reviewed funding; or
4. Terminate

Career Development and Mentoring Plan (If Applicable)

Pursuant to the goals of the Partnership to foster and train young scientists, you must complete and submit a *Career Development and Mentoring Plan*. This plan should include a brief overview of your Career Development Plan and the following items should be addressed: A) Background B) Career Goals and Objectives C) Career Development and Training Activities and D) Training in the Responsible Conduct of Research

In order to assess the long-term value of programs such as this, if required, the Partnership will periodically request information on your research progress. Please provide the Partnership with copies of all publications and the abstracts from grant applications derived from work sponsored by the Partnership.

In compliance with the NIH Public Access Policy (<http://publicaccess.nih.gov/>), you must ensure that any peer-reviewed publications that result from this funding are included in PubMed Central. Each publication, press release, or other document about research supported by an NIH award must include an acknowledgment of NIH award support and a disclaimer such as "Research reported in this publication was supported by the NIH National Cancer Institute award number U54 CA118638 (MSM)/ U54 CA118623 (TU)/ or U54 CA118948 (UAB)."

Once again congratulations on your selection for this award. We look forward to working closely with you to ensure the success of your proposed project and to assist in any way that we can with your career development and your pursuit of research related to racial health disparities. If you have questions, please let Ms. Suzanne Byan-Parker or me know.

Sincerely,



Upendar Manne, MS, PhD
Lead PI of the UAB Component of the Morehouse-Tuskegee-UAB Comprehensive Cancer Center Partnership

I accept this award and agree to the conditions and expectations outlined above in this letter.

Signature (Co-Leader)

Date

CC: Scientific Review Committee
Edward E. Partridge, MD
Isabel Scarinci, PhD, MPH
Mona Fouad, MD, MPH
Timothy Turner, PhD
Roberta Troy, PhD
James Lillard, PhD, MBA
Donald Hill, PhD

Attachment 1

Research Subaward Agreement

Certifications and Assurances

By signing the Subaward Agreement, the authorized official of Subrecipient certifies, to the best of his/her knowledge and belief that:

Certification Regarding Lobbying

1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Subrecipient, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Subrecipient shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying", to the Prime Recipient.

3) The Subrecipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters

Subrecipient certifies by signing this Subaward Agreement that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department or agency.

OMB Circular A-133 Assurance

Subrecipient assures Prime Recipient that it complies with A-133 and that it will notify Prime Recipient of completion of required audits and of any adverse findings which impact this Subaward Agreement. Prime Recipient reserves the right to inspect, upon Prime Recipient's reasonable advance notice and during normal business hours, Subrecipient's physical facilities, all aspects of the Statement of Work undertaken under this Subaward Agreement, and all books, records, and documents of any kind pertaining to the Subaward Agreement. Subrecipient agrees to provide copies of any records, receipts, accounts or other documentation to Prime Recipient in a timely fashion as reasonably requested by Prime Recipient. Subrecipient will keep all usual and proper records and books of accounts in accordance with Generally Accepted Accounting Principles (GAAP) relating to performance of the Statement of Work for a minimum period of three (3) years after the date of receipt of the final payment.

**Attachment 2
Research Subaward Agreement
Prime Award Terms and Conditions
NIH**

Agency-Specific Certifications/Assurances

1. By signing this Research Subaward Agreement Subrecipient makes the certifications and assurances specified in the Research Terms and Conditions Appendix C found at http://www.nsf.gov/bfa/dias/policy/rtc/appc_june11.pdf

General terms and conditions as of the effective date of this Research Subaward Agreement:

1. Conditions on activities and restrictions on expenditure of federal funds in appropriations acts are applicable to this subaward to the extent those restrictions are pertinent. This includes any recent legislation noted on the NIH Award Conditions website: <http://grants.nih.gov/grants/policy/awardconditions.htm>
2. 45 CFR Part 74 or 45 CFR Part 92 as applicable.
3. The NIH Grants Policy Statement, including addenda in effect as of the beginning date of the period of performance.
4. Research Terms and Conditions found at < http://www.nsf.gov/pubs/policydocs/rtc/termsidebyside_june11.pdf > and Agency Specific Requirements found at http://www.nsf.gov/pubs/policydocs/rtc/nih_1210.pdf, except for the following:
 - a. The right to initiate an automatic one-time extension of the end date provided by Article 25(c)(2) of the Research Terms and Conditions is replaced by the need to obtain prior written approval from the Prime Recipient;
 - b. The payment mechanism described in Article 22 and the financial reporting requirements in Article 52 of the Research Terms and Conditions and Article 8 of the Agency-Specific Requirements are replaced with Terms and Conditions (1) through (4) of this Subaward Agreement; and
 - c. Any prior approvals are to be sought from the Prime Recipient and not the Federal Awarding Agency.
5. Title to equipment costing \$5,000 or more that is purchased or fabricated with research funds or Subrecipient cost sharing funds, as direct costs of the project or program, shall unconditionally vest in the Subrecipient upon acquisition without further obligation to the Federal Awarding Agency subject to the conditions specified in Article 34(a) of the Research Terms and Conditions.
6. Treatment of Program Income: Additive Other, Prime Recipient specify alternative from NIH Agreement

NIH-Specific Requirements Promoting Objectivity in Research Applicable to Subrecipients (42 CFR Part 50 Subpart F)

- a) 42 CFR Part 50. 604 requires that institutions conducting PHS-funded research “*Maintain an up-to-date, written, enforced policy on financial conflicts of interest.*” Further, “*If the Institution carries out the PHS-funded research through a subrecipient (e.g., subcontractors or consortium members), the Institution (awardee Institution) must take reasonable steps to ensure that any subrecipient Investigator complies with this subpart by incorporating as part of a written agreement with the subrecipient terms that establish whether the financial conflicts of interest policy of the awardee Institution or that of the subrecipient will apply to the subrecipient's Investigators.*”

Subrecipient must designate herein whether the financial conflicts of interest policy of _____ Prime Recipient Institution, or X Subrecipient Institution (check one) will apply. If applying its own financial conflicts of interest policy, by execution of this Subaward Agreement, Subrecipient Institution certifies that its policy complies with 42 CFR Part 50.

- b) Subrecipient shall report any financial conflict of interest to Prime Recipient’s Administrative Representative, as designated on Attachment 3A. Any financial conflicts of interest identified shall subsequently be reported to NIH. Such report shall be made before expenditure of funds authorized in this Subrecipient Agreement and within 45 days of any subsequently identified financial conflict of interest.

Prime Recipient's Additional Financial Conflicts of Interest reporting requirements:

- Reports of financial conflicts of interest shall include the information listed in §50.605(b)(3)(i)-(vi).
- Subrecipient shall report to the Prime Recipient's Administrative Representative within 45 days of becoming aware that a financial conflict of interest no longer exists.
- Subrecipient shall report to the Prime Recipient's Administrative Representative within 90 days of learning of noncompliance requiring retrospective review if bias was identified. The report shall include the information listed in §50.605(a)(3)(B) (1)-(9).

Special terms and conditions:

1. Copyrights
2. Subrecipient grants / shall grant (check one) to Prime Recipient an irrevocable, royalty-free, non-transferable, non-exclusive right and license to use, reproduce, make derivative works, display, and perform publicly any copyrights or copyrighted material (including any computer software and its documentation and/or databases) first developed and delivered under this Subaward Agreement solely for the purpose of and only to the extent required to meet Prime Recipient's obligations to the Federal Government under its Prime Award.
2. Data Rights
Subrecipient grants to Prime Recipient the right to use data created in the performance of this Subaward Agreement solely for the purpose of and only to the extent required to meet Prime Recipient's obligations to the Federal Government under its Prime Award.
3. Automatic Carry Forward: Yes No

(If No, Carry Forward requests must be sent to Prime Recipient's Administrative Contact, as shown in Attachment 3).

Subrecipient assures by signing this Subaward Agreement, that all Subrecipient's personnel who are responsible for the design and conduct of projects involving human research participants have successfully completed their institutional training in accordance with the NIH Guide, Notice OD-00-39.

Terms and Conditions of Reimbursement

1. Prime Recipient shall reimburse Subrecipient not more often than monthly for allowable costs and verifiable expenses incurred in accordance with the period of performance and budget of this Subaward.
2. All invoices shall be submitted using Subrecipient's standard invoice, but at a minimum must include the following information:
 - Date of invoice
 - Invoice number
 - Current cost (including cost sharing) by category of expenditures
 - Cumulative cost (including cost sharing) by category of expenditure
 - Prime Award No. and Subaward No.
 - Signature of the Authorized Official or Financial Contact, as set forth in Attachment 3B, or authorized designee.

Invoices that do not include this information will be returned to the Subrecipient.

3. Subrecipient hereby certifies that each submitted invoice reflects accurate, allowable and verifiable expenses incurred in accordance with the period of performance and budget of the Subaward.
4. Invoices submitted for payment should be submitted to Prime Recipient's Financial Contact, as set forth in Attachment 3A.

Subrecipient must maintain documentation sufficient to support invoices and at mutually agreed upon times and during normal business hours make such records available to the Prime Recipient for inspection and audit purposes.

Attachment 3A
Research Subaward Agreement

Subaward Number:

000402792-002

Prime Recipient Contacts

Institution/Organization ("Prime Recipient")

Name: The Board of Trustees of the University of Alabama for the University of Alabama at Birmingham

Address: 1720 2nd Avenue South

AB 1170

City: Birmingham

State: AL

ZipCode: 35294-0111

Administrative Contact

Name: Director

Address: Office of Sponsored Programs

1720 2nd Avenue South

AB 1170

City: Birmingham

State: AL

ZipCode: 35294-0111

Telephone: 205-934-5266

Fax: (205) 975-5977

Email: osp@uab.edu

Principal Investigator

Name: Donald J. Buchsbaum, Ph.D.

Address: 1824 6th Ave. So., WTI 630

City: Birmingham

State: AL

ZipCode: 35294-0111

Telephone: 205-934-7077

Fax: 205-975-7060

Email: djb@uab.edu

Financial Contact

Name: Victor Stark

Address: 1824 6th Ave. So., WTI 260A

City: Birmingham

State: AL

ZipCode: 35294-0111

Telephone: 205-934-0022

Fax:

Email: vstark@uab.edu

Authorized Official

Name: Lynn W. Stedman, MBA, Director

Address: Office of Sponsored Programs

1720 2nd Avenue South

AB 1170

City: Birmingham

State: AL

ZipCode: 35294-0111

Telephone: 205-934-5266

Fax: (205) 975-5977

Email: osp@uab.edu

Attachment 3B - Research Subaward Agreement
Subrecipient Contacts

Subaward Number:

000402792-002

Institution/Organization ("Subrecipient")

Name: Morehouse School of Medicine

Address: 720 Westview Drive SW

City: Atlanta

State: GA

ZipCode + 4: 30310-1458

EIN No.: 58-1438873

Institution Type: Private Institution of Higher Education

Is the Performance Site the Same Address as Above? Yes No

If no, is the Performance Site the same as PI address below? Yes No

If no to both questions, please complete 3B page 2 (if ARRA funding use Attachment 4A).

Subrecipient currently registered in CCR? Yes No

DUNS No.:

102005451

Parent DUNS No.:

Is Subrecipient exempt from reporting compensation? Yes No

If no, please complete 3B page 2 (if ARRA funding use Attachment 4A).

Congressional District:

GA-005

Congressional District:

Administrative Contact

Name: Robin Truitt

Address: 720 Westview Dr., SW

City: Atlanta

State: GA

ZipCode: 30310

Telephone: 404-752-1974

Fax:

Email: rtruitt@msm.edu

Principal Investigator

Name: Ruben R. Gonzalez-Perez, Ph.D

Address: 720 Westview Drive

City: Atlanta

State: GA

ZipCode: 30253

Telephone: 404-752-1581

Fax:

404-752-1179

Email: rgonzalez@msm.edu

Financial Contact

Name: F. John Case

Address: 720 Westview Drive SW

City: Atlanta

State: GA

ZipCode: 30253

Telephone: 404-756-6683

Fax:

404-752-1129

Email: jcase@msm.edu

Authorized Official

Name: Sandra Harris-Hooker, PhD.

Address: 720 Westview Drive SW

City: Atlanta

State: GA

ZipCode: 30253

Telephone: 404-752-1725

Fax:

404-752-1103

Email: osra@msm.edu

Attachment 4
Research Subaward Agreement
Reporting Requirements

1. The Subrecipient is required to submit final progress reports to the Prime Recipient's Principal Investigator identified in Attachment 3(A) sixty (60) days after the end of the period of performance.

2. The Subrecipient is required to notify the Prime Recipient's Administrative Contact identified in Attachment 3(A) within sixty (60) days after the sub-recipient's inventor discloses inventions in writing to Subrecipient's personnel responsible for patent matters in accordance with 37 CFR 401.14. Subrecipient will complete DD Form 882 or other Awarding Agency specific form to report inventions. A negative report may not be required at the end of the Period of Performance depending on the Awarding Agency's general terms and conditions.

**Attachment 5A
Research Subaward Agreement
Scope of Work**

Title: *Targeting obesity-pancreatic cancer stem cells link.*

SCOPE

We hypothesize that the inhibition of leptin signaling will reduce pancreatic cancer (PCa) growth and chemoresistance via impairment of proliferation of PCa cancer stem cells (PCSC). Leptin signaling could be a new target for PCa treatment, especially in obesity contexts. To validate our central hypothesis we will determine the impact of novel nanoparticle-bound leptin inhibitors (IONPs-LPrA) and combination therapy with MK-0752 (a Notch inhibitor) on the invasive phenotype and PCSC maintenance in human PCa cell lines. Additionally, we will preliminary investigate the role of leptin-induced Notch axis in tumor growth and PCSC in mouse models for PCa in obesity contexts B57Bl/6J fed high-fat diets (HFD).

These studies are relevant for the design of novel treatments for PCa. Obesity is pandemic and associated with an increased relative risk for the development of PCa. The use of IONPs- LPrA could be a novel way to treat this deadly disease. Moreover, IONP-LPrA2 adjuvant therapy for chemotherapeutics may result in increased efficacy and reduction of drug resistance.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY
820 CHANDLER STREET
FORT DETRICK MD 21702-5014

May 14, 2013

Business Operations Division

Ruben Rene Gonzalez-Perez
Morehouse School of Medicine
Department of Microbiology, Biochemistry, and Immunology
720 Westview Drive SW
Atlanta, GA 30310-1495
rgonzalez@msm.edu

RE: BC123427 - "Targeting Breast Cancer Stem Cells in Triple-Negative Breast Cancer"

STATUS: RECOMMENDED FOR FUNDING

Dear Ruben Rene Gonzalez-Perez:

Congratulations! On behalf of the Department of Defense (DoD) office of the Congressionally Directed Medical Research Programs (CDMRP), I am pleased to inform you that the Fiscal Year 2012 (FY12) Breast Cancer Research Program (BCRP) Idea Award application you submitted was recommended for funding. Funding recommendations were made at a second-tier, programmatic review meeting based on program goals and scientific merit. Please note that awards are subject to negotiations and availability of funds. Additional information on the review process is available in the information paper posted under your eReceipt account.

Additional documentation is needed to start the award process. Your timely submission of all applicable documents in the appropriate formats will expedite this process and the release of funds. A CDMRP Science Officer, who will be your scientific and technical point of contact throughout the life of this award, may contact you for further information regarding various aspects of your application. For example, your Science Officer will contact you about Animal Use and Human Use documents that may be needed for your project. Together, you will set a target date for the submission of your complete animal use or human use appendix documents.

A Grants/Contract Specialist from the US Army Medical Research Acquisition Activity (USAMRAA) will contact the Business Official (person authorized to conduct negotiations) at your institution to begin award negotiations. All official negotiations of the budget, terms, and conditions of any resulting award will be limited to the Business Official of your institution and the USAMRAA Grants/Contract Specialist.

Your performance on any previous CDMRP awards will be considered during negotiations. You are advised to review your current and past awards to ensure that all required information has been submitted, including all technical reporting and regulatory oversight documents, as this may impact the negotiation and award process.

If you are withdrawing your application, please co-sign a letter of withdrawal with an administrator from the Sponsored Programs Office at your institution and upload it under the “Required Award Information” tab on the CDMRP eReceipt website (<https://cdmrp.org>).

To expedite the award process, please answer the post-submission questions found under the “Required Award Information” tab on the CDMRP eReceipt website (<https://cdmrp.org>). You and your institution are responsible for ensuring that there is no duplication of the science, budget, or level of effort in separately funded studies in which you were or currently are involved. If you received funding for any portion of this application from another source, or if any portion of the proposed work has already started, please indicate so under this tab.

After providing the information requested under the “Required Award Information” tab, upload or provide the following, for all sites where the DoD-funded work will be conducted, under the “Required Award Documents” tab by May 29, 2013:

- Facility Safety Assurance documents (required only if the institution is not listed as approved at: https://mrmc.amedd.army.mil/assets/docs/sse/Facility_Safety_Plan_Approved_Institutions.pdf)
- Environmental Compliance documents
- Principal Investigator Safety Assurance documents
- Updated details on all existing and pending support for yourself and key personnel, including the title of the project, goals, specific aims/tasks, estimated start date and end date, level of effort (percentage or calendar months) in the project, and point of contact at the funding agency. Provide a cover letter signed by a sponsored programs official, certifying that this information is current and accurate, and addresses any scientific or financial overlap.

A copy of this notification is being made available to your institution’s Sponsored Programs Office.

Again, congratulations on the recommendation of your application for funding. The CDMRP staff and I look forward to working with you to realize the vision of the BCRP, and we encourage you to share the news of your success with your colleagues and the community. Please direct any questions to the CDMRP at help@cdmrp.org or 301-682-5507.

Sincerely,

Wendy A. Baker
Grants Officer



Grant Number: 1T32HL103104-01

Principal Investigator(s):
ALEXANDER QUARSHIE (contact), MD
GIANLUCA TOSINI

Project Title: MSM Interdisciplinary Sleep/Clinical Cardiovascular Research Training Program

Dr. Sandra Harris-Hooker
Vice President, Senior Associate Dean for Research
Morehouse School of Medicine
720 Westview Drive, SW
Atlanta, GA 303101495

Award e-mailed to: sharris-hooker@msm.edu

Budget Period: 06/01/2010 – 05/31/2011

Project Period: 06/01/2010 – 05/31/2015

Dear Business Official:

The National Institutes of Health hereby awards a grant in the amount of \$249,612 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to MOREHOUSE SCHOOL OF MEDICINE in support of the above referenced project. This award is pursuant to the authority of 42 USC 288 42 CFR 66 and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

Acceptance of this award including the "Terms and Conditions" is acknowledged by the grantee when funds are drawn down or otherwise obtained from the grant payment system.

Each publication, press release or other document that cites results from NIH grant-supported research must include an acknowledgment of NIH grant support and disclaimer such as "The project described was supported by Award Number T32HL103104 from the National Heart, Lung, And Blood Institute. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Heart, Lung, And Blood Institute or the National Institutes of Health."

Award recipients are required to comply with the NIH Public Access Policy. This includes submission to PubMed Central (PMC), upon acceptance for publication, an electronic version of a final peer-reviewed, manuscript resulting from research supported in whole or in part, with direct costs from National Institutes of Health. The author's final peer-reviewed manuscript is defined as the final version accepted for journal publication, and includes all modifications to the publishing peer review process. For additional information, please visit <http://publicaccess.nih.gov/>.

Award recipients must promote objectivity in research by establishing standards to ensure that the design, conduct and reporting of research funded under NIH-funded awards are not biased by a conflicting financial interest of an Investigator. Investigator is defined as the Principal Investigator and any other person who is responsible for the design, conduct, or reporting of NIH-funded research or proposed research, including the Investigator's spouse and dependent children. Awardees must have a written administrative process to identify and manage financial conflict of interest and must inform Investigators of the conflict of interest policy and of the Investigators' responsibilities. Prior to expenditure of these awarded funds, the Awardee must report to the NIH Awarding Component the existence of a conflicting interest and within 60 days of any new conflicting interests identified after the initial report. Awardees must comply with these and all other aspects of 42 CFR Part 50, Subpart F. These requirements also apply to subgrantees, contractors,

or collaborators engaged by the Awardee under this award. The NIH website <http://grants.nih.gov/grants/policy/coi/index.htm> provides additional information.

If you have any questions about this award, please contact the individual(s) referenced in Section IV.

Sincerely yours,

Beckie Chamberlin
Grants Management Officer
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

Additional information follows

17. NAME OF SPECIALTY BOARDS (if applicable)		
18. DEGREE(S) SOUGHT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	If yes, indicate type of degree PHD	
Are you in a dual degree program (e.g., M.D./Ph.D.)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
19. EXPECTED COMPLETION DATE OF DEGREE REQUIREMENTS (if applicable)	05/01/2017	
20. SUPPORT FOR PERIOD OF APPOINTMENT		
Type	Total of this Grant (Omit cents.)	
Stipend /Salary / Other Compensation	\$	22920
Tuition/fees (estimated)	\$	14000
Travel (estimated)	\$	1400
TOTAL	\$	38320
21. STATEMENT OF NONDELINQUENCY ON U.S. FEDERAL DEBT. Is the appointee delinquent on the repayment of any U.S. Federal debt(s)? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES (If "Yes," please explain below.)		
22. CERTIFICATION AND ACCEPTANCE: I certify that the statements herein are true and complete to the best of my knowledge and that I will comply with all applicable Public Health Service terms and conditions governing my appointment. I am aware that any false, fictitious or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.	(a) SIGNATURE OF APPOINTEE	(b) DATE
23. This individual is qualified for this program and is eligible to receive financial support for the period specified above. A copy of this appointment form will be given to the individual.	(a) SIGNATURE OF PROGRAM DIRECTOR Electronically certified via eRA xTrain system by PI	(b) DATE 05/29/2015
(c) TYPED NAME OF PROGRAM DIRECTOR	Quarshie, Alexander	
(d) INSTITUTION'S NAME, ADDRESS, AND PHONE NO. (Street, city, state, zip code)	MOREHOUSE SCHOOL OF MEDICINE MOREHOUSE SCHOOL OF MEDICINE 720 Westview Dr SW ATLANTA, GA 303101495 Phone : 404-752-1725	