

EXPLORATORY/DEVELOPMENT GRANT
Department of Health and Human Services
National Institutes of Health
NATIONAL CANCER INSTITUTE

Issue Date: 05/23/2008



Grant Number: 1R21CA133689-01A1

Principal Investigator(s): KUNWAR SHAILUBHAI, PHD

Project Title: GC-C agonists for colitis-induced CRC

Shailubhai, Kunwar PhD Professor 3805 Old Easton Road Doylestown, PA 18902

Award e-mailed to: acuconati.research@hepb.org

Budget Period: 06/01/2008 – 05/31/2009 **Project Period**: 06/01/2008 – 05/31/2010

Dear Business Official:

The National Institutes of Health hereby awards a grant in the amount of \$239,439 (see "Award Calculation" in Section I and "Terms and Conditions" in Section III) to INSTITUTE FOR HEPATITIS & VIRUS RESEARCH in support of the above referenced project. This award is pursuant to the authority of 42 USC 241 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 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 R21CA133689 from the National Cancer Institute. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Cancer 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 from 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.

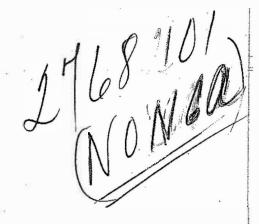
If you have any questions about this award, please contact the individual(s) referenced in Section IV.

Sincerely yours,

Leslie Hickman Grants Management Officer NATIONAL CANCER INSTITUTE

Additional information follows

SUBCONTRACT AGREEMENT Between Institute for Hepatitis and Virus Research And Fox Chase Cancer Center



This Agreement is made between Institute for Hepatitis and Virus Research, a non-profit, research institution an entity with offices at PA Biotechnology Center, 3805 Old Easton Road, Doylestown, PA, 18901. (hereinafter known as "IHVR"), and, Fox Chase Cancer Center, a Pennsylvania non-profit institution with offices at 333 Cottman Avenue, Philadelphia, Pennsylvania 19111 (hereinafter known as "Subcontractor").

WHEREAS, IHVR is the recipient of a grant from the Department of Health and Human Services, National Institute of Health, National Cancer Institute, (hereinafter known as "Prime Award"), which is made a part of this Agreement and attached as Exhibit A: and

WHEREAS, the effort to be performed by Subcontractor under the Prime Award involves an approved collaborative effort between IHVR and Subcontractor;

THEREFORE the parties mutually agree as follows:

1.0 PERIOD OF PERFORMANCE

The period of performance begins June 1, 2008, ("Beginning Date") and shall not extend beyond May 31,2010 ("Ending Date") unless amended in writing by the parties. Subcontractor is not obligated to continue work or provide services and IHVR is not obligated to compensate Subcontractor for expenses incurred or commitments made before the Beginning Date or after the Ending Date.

1.1 STATEMENT OF WORK

IHVR's Project Director for the purpose of technical direction of grant performance is Shailubhai Kunwar, Ph.D.

1.2 ESTIMATED COST

The work defined in the grant will be performed on a cost reimbursement basis in accordance with the terms of this Agreement. The total estimated cost budget which is hereby incorporated into this Agreement, and represents the maximum reimbursement amount unless modified in writing by the parties.

unobligated palance cannot be carried forward into the next budget period.

1.3 REIMBURSEMENT

Subcontractor will submit invoices for reimbursement monthly Invoices will contain language certifying the validity of reported expenditures and be signed by an authorized official of Subcontractor.

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Invoices will list cost elements in the same manner as set forth in Exhibit C, Subcontractor's cost based budget. Invoices will contain, at a minimum, a unique invoice number, the period of incurred costs, and the date of the invoice. Invoices shall include the "Budget", "Amount Previously Billed", and "Total Amount Billed to Date".

Subcontractor will mail invoices to: Patti McAloon, Accounting Manager,

IHVR 3805 Old Easton Road Doylestown, PA 18902

HVR must receive the final invoice, marked "Final", no later than 60 days after the termination date of this Agreement.

Subcontractor agrees to maintain books and records pertaining to all costs incurred in such detail as will properly document all expenses for which reimbursement is claimed. The books of account and other records, which are applicable to this Agreement, shall at reasonable times and upon advance notice be available for inspection and review by IHVR.

All payments are considered provisional and subject to adjustment in the event such an adjustment is necessary as a result of an audit by the Government. Subcontractor assumes sole responsibility for reimbursement to the Prime Sponsor the amount of any expenditures disallowed should an authorized agency rule through audit exception, or some other appropriate means, that Subcontractor expenditures were not made in compliance with the regulations of the Prime Sponsor or the provisions of this Agreement.

1.4 INSPECTION

IHVR has the right, upon reasonable advance notice, to inspect or otherwise evaluate the work performed by Subcontractor. Materials and deliverables furnished and services performed pursuant to this Agreement are subject to inspection and test by IHVR before acceptance. If Subcontractor fails to remedy the deficiencies within thirty (30) days of prior written notice, either party may terminate the agreement in accordance with Section 8 of this Agreement.

1.5 REPORTS

Subcontractor shall submit reports in such quantity and frequency as determined reasonably appropriate by IHVR's Project Director. Such reports shall note progress made toward achievement of the study objectives and any deviation from the schedules, methods, and tasks established in the research proposal and detailed work plan.

1,6 AUDIT AND AVAILABILITY OF SUBCONTRACTOR RECORDS

The parties agree to comply with audit provisions applicable to Commonwealth of PA, Department of Health and Human Services grantees. Subcontractor will complete audits and report Subcontractor's Compliance with the audit provisions attached and identified as Exhibit C.

Subcontractor agrees to permit independent auditors and IHVR agent's access to any records and financial statements as necessary for IHVR to comply with regulations applicable to the

Agreement and to make such records and information available to IHVR during normal business hours upon reasonable request.

Subcontractor agrees to retain all books, records and other documents relative to this Agreement for three (3) years following final payment.

2.0 APPLICABLE PROVISIONS OF PRIME AWARD

Performance of Subcontractor under the Agreement shall conform to the requirements of the Prime Award and applicable federal and state regulations except where noted in this agreement.

2.1 TECHNICAL AND CONTRACTUAL REPRESENTATIVES

Contacts with IHVR, which affect Subcontract costs, schedule, statement of work, or other terms and conditions, shall be made with the authorized contractual representative. No changes to this Agreement shall be binding upon IHVR unless incorporated in a written modification to the Agreement and signed by IHVR's contractual representative. The following authorized representatives are hereby designated for this Agreement:

IHVR:

SUBCONTRACTOR:

Technical:

Shailubhai Kunwar

Project Director

Technical: Margie Clapper

Project Director

Contractual:

James Horan

Chief Operating Officer

Contractual: Joseph Hediger

Senior Vice President

Administrative: Patricia McAloon

Administrative: Linda Zanoni

3.0 KEY PERSONNEL

IHVR and Subcontractor define "Key Personnel" as those individuals who are mutually recognized as essential to the successful completion and execution of this Agreement.

Personnel designated as "Key Personnel" shall be assigned to the extent necessary for the timely completion of the task to which assigned. Any substitution or reassignment involving Subcontractor's "Key Personnel" assigned to this work shall be made only with persons of equal abilities and qualifications and is subject to IHVR's prior written approval.

Subcontractor's Key Personnel are: Shailubhai Kunwar, Ph.D.

4.0 INSURANCE AND INDEMNIFICATION

IHVR and Subcontractor are separate and independent entities and neither is the agent of the other. IHVR and Subcontractor shall provide and maintain for the duration of this Agreement, comprehensive general liability insurance and / or equivalent self-insured retentions, including the foregoing contractual liability, with a combined single limit of at least \$1,000,000 per occurrence. Such insurance will fully protect both IHVR and Subcontractor against any and all liability and claims for damages sustained by any person or entity, caused by, ansing from, or resulting from the performance of Subcontractor under this Agreement. Such insurance shall also provide for the defense of Subcontractor or IHVR in connection with any claims, lawsuits or proceedings brought against either Subcontractor or IHVR. Notwithstanding any provision contained herein, Subcontractor and its employees or agents, is not insured by IHVR, and is not covered under any insurance policy that IHVR has obtained or has in place.

Subcontractor and IHVR hereby each agree to indemnify and hold the other party and their personnel free and harmless from any and all loss, cost, damage, claim, action, or liability on account of the death of or injury to any persons or property occasioned wholly or in part by an act or omission on the part of the indemnifying party or its personnel in the implementation of the Agreement.

Subcontractor shall promptly notify IHVR of any claim against Subcontractor, which is covered by this indemnification provision and shall authorize representatives of Subcontractor to settle or defend any such claim or suit and to represent IHVR in, or to take charge of, any litigation in connection therewith.

5.0 PROPRIETARY INFORMATION, TOOLS, MATERIALS, ETC.

Subcontractor agrees it will keep confidential and not use any material, fixtures, equipment, designs, specifications, drawings, computer programs and software, or other data or information furnished by IHVR for any purpose whatsoever other than as herein specified without IHVR's prior written consent. All materials, fixtures, equipment, designs, sketches, specifications, drawings, computer programs and software, or other data or information furnished by IHVR, whether loaned to Subcontractor or fabricated, manufactured, or otherwise acquired by Subcontractor for the performance of this Agreement and specifically charged to IHVR are the property of IHVR. They are to be marked for identification as IHVR may designate, and upon completion or termination of this Agreement shall be returned to IHVR in good condition, reasonable wear only excepted, unless otherwise directed in writing by IHVR. Subcontractor agrees to replace, at its expense, items not so returned. Subcontractor shall make no charge for any storage, maintenance or retention of such property. Subcontractor shall bear all risk of loss for any of IHVR's property in Subcontractor's possession.

6.0 COPYRIGHTS AND PATENTS

Intellectual property developed under this agreement will be managed, commercialized and licensed pursuant to a separate Intellectual Property Agreement being executed simultaneously with this Agreement.

7.0 RIGHTS IN DATA AND MATERIALS

The results and data developed by this collaborative Agreement are considered mutual to IHVR and Subcontractor. Subcontractor hereby grants to IHVR and to Prime Sponsor an irrevocable,

worldwide, royalty-free, non-commercial, non-exclusive license to use the materials developed by the Subcontractor during the performance of this Agreement. "Materials" shall mean recorded information, regardless of form or medium in which recorded.

There will be no restrictions on the joint publications of part or all of the data and/or discoveries made during the research investigation, except as they may be necessary to protect confidential or proprietary information or to file patents. Any delay in filing patents will not exceed ninety (90) days.

8.0 TERMINATION

In the event of termination of the Prime Award, this Agreement shall automatically terminate as of the termination date of the Prime Award. Additionally, either party has the right to terminate this Agreement by giving thirty (30) days written notice of intent to terminate. Upon receipt of such notification, Subcontractor shall cease incurring costs under this Agreement and take action to cancel all outstanding obligations, which can reasonably be cancelled.

Subcontractor will be reimbursed for any non-cancelable obligations up to the maximum reimbursement amount. Upon payment of such costs, IHVR shall be entitled to, and Subcontractor agrees to deliver, the information and items which, if the Agreement had been completed, would have been required to be furnished to IHVR.

In the event that Subcontractor commits any breach of or default in any of the terms or conditions of the Agreement, and also fails to remedy such default or breach within ninety (90) days after receipt of written notice thereof from IHVR, IHVR may, at its option and in addition to any other remedies which it may have at law or in equity, terminate the whole or any part of this Agreement, and such termination shall be effective on the date of receipt of such notice.

9.0 NOTICE

All notices required by this Agreement shall be made in writing, certified mail, return receipt requested. Notices shall be effective upon their receipt. All notices mailed to IHVR should be addressed to:

James Horan, Chief Operating Officer IHVR 3805 Old Easton Road Doylestown, PA 18902

All notices to Subcontractor should be addressed to:

Linda Zanoni Fox Chase Cancer Center 333 Cottman Avenue Philadelphia, PA 19111

10.0 NONDISCRIMINATION

The Subcontractor certifies that it has an active program for compliance with all applicable state and federal regulations, executive orders and legislation concerning non-discrimination, equal opportunity or affirmative action, and that wherever required, valid assurances of compliance

are on file with the cognizant enforcement agency. The above statement includes, but is not limited to, the following specific acts:

Title IV of the Civil Rights Act of 1964

Executive Order 112426, Part II, Sub-part B, Section 202, paragraphs 1-6

Title VII of the Civil Rights Act of 1964 as amended by the EEO Act of 1972

Section 504 of the Rehabilitation Act of 1973

The Age Discrimination Act of 1976, as amended

Affirmative Action Obligations of Contractors and Subcontractors for Disabled Veterans and Veterans of the Vietnam Era, Sub-part A, Paragraph 60-250.4

Title IX of the Higher Education Act of 1972

11.0 SCIENTIFIC MISCONDUCT AND ASSURANCE

Subcontractor certifies that it has established procedures for dealing with and reporting possible misconduct in science as set forth in 42 CFR Part 50, Subpart A. The term "Scientific Misconduct" means, the fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research.

12.0 DEBARMENT AND SUSPENSION

Subcontractor certifies, to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding award of this Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in Paragraph 2 above;
- (4) Have not within a three-year period preceding award of this Agreement had one or more public transactions (Federal, State or Local) terminated for cause or default.

13.0 CERTIFICATION OF NON-DELINQUENCY ON FEDERAL DEBT

Subcontractor certifies that it is not delinquent on repayment of any federal debt.

14.0 CERTIFICATION OF DRUG-FREE WORKPLACE

Subcontractor certifies that it has implemented an appropriate policy in accordance with the Drug-Free Workplace Act of 1988, 45 CFR Part 76, Subpart F.

15.0 CERTIFICATION REGARDING LOBBYING

Subcontractor certifies, to the best of its knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of Subcontractor, 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 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 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 this Federal contract, grant, loan, or cooperative agreement, the Subcontractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The Subcontractor shall require that the language of this certification be included in the award documents for all subawards at all tiers 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.

16.0 PROCUREMENT STANDARDS

SUBCONTRACTOR agrees to adhere to the requirements of Sections .41 through .48 of OMB Circular A-110, which prescribe standards for use by recipients in establishing procedures for the procurement of supplies and other expendable property, equipment, real property and other services with Federal funds.

17.0 APPLICABLE STATE LAW AND COMPLIANCE

This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania. Subcontractor agrees to comply with the applicable provisions of any federal, state or local law or ordinance and all orders, rules and regulations issued thereunder.

18.0 ASSIGNMENT

Subcontractor may not assign, transfer or subcontract any rights in this Agreement, in whole or in part, without the prior written consent of IHVR.

19.0 ENTIRE AGREEMENT

This Agreement, including all documents incorporated herein by reference, constitutes the entire Agreement and understanding of the parties hereto and shall supersede and replace any and all prior or contemporaneous representations, agreements or understandings of any kind, whether written or oral, relating to the subject matter hereof. No changes to this Agreement shall be

prior or contemporaneous representations, agreements or understandings of any kind, whether written or oral, relating to the subject matter hereof. No changes to this Agreement shall be binding upon either party unless incorporated in a written modification to the Agreement and signed by the parties' contractual representatives.

In witness whereof, the duly authorized representatives of IHVR and Subcontractor have executed this Agreement on the Dates shown.

| Institute for Hepatitis and Virus Research | Fox Chase Cancer Center |
|---|--|
| By: | By: Krlediau |
| James Horan, CPA,MBA Chief Operating Officer | Joseph F. Hedider Senior Vice President and CFO |
| Date: | Date: /0/29/08 |

Issue Date: 07/21/2011



CANCER CENTER SUPPORT
Department of Health and Human Services
National Institutes of Health
NATIONAL CANCER INSTITUTE

SAN MONTO

Grant Number: 2P30CA006927-48

Principal Investigator(s): MICHAEL V SEIDEN, MD

Project Title: Comprehensive Cancer Center Program at Fox Chase

Christopher Nasto VICE PRESIDENT & TREASURER FOX CHASE CANCER CENTER 333 COTTMAN AVENUE PHILADELPHIA, PA 191112434

Award e-mailed to: awardnotices@fccc.edu

Budget Period: 07/21/2011 – 06/30/2012 **Project Period:** 07/21/1997 – 06/30/2014

Dear Business Official:

The National Institutes of Health hereby awards a grant

to FOX CHASE CANCER

CENTER in support of the above referenced project. This award is pursuant to the authority of 42 USC 286a 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 P30CA006927 from the National Cancer Institute. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Cancer Institute or the National Institutes of Health."

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

Sincerely yours,

Amy Connolly Grants Management Officer NATIONAL CANCER INSTITUTE

Additional information follows



CANCER CENTER SUPPORT
Department of Health and Human Services
National Institutes of Health
NATIONAL CANCER INSTITUTE

Issue Date: 07/02/2008



Grant Number: 5P30CA006927-46

Principal Investigator(s): MICHAEL V SEIDEN

Project Title: Comprehensive Cancer Center Program at Fox Chase

CHIEF OPERATING OFFICER FOX CHASE CANCER CENTER 333 COTTMAN AVENUE PHILADELPHIA, PA 19111

Award e-mailed to: awardnotices@fccc.edu

Budget Period: 07/01/2008 – 06/30/2009 **Project Period:** 07/01/1997 – 06/30/2010

Dear Business Official:

The National Institutes of Health hereby awards a grant

to FOX CHASE CANCER

230346

CENTER in support of the above referenced project. This award is pursuant to the authority of 42 USC 286a and is subject to the requirements of this statute and regulation and of other referenced, incorporated or attached terms and conditions.

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Sincerely yours,

Jaime L Montes Grants Management Officer NATIONAL CANCER INSTITUTE

Additional information follows