

Samuel Waxman Cancer Research Foundation

2012 Request for Individual Research Proposals

Reprogramming the Cancer Cell

APPLICATION DEADLINE: March 15, 2012

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SAMUEL WAXMAN CANCER RESEARCH FOUNDATION

Reprogramming the Cancer Cell

SWCRF seeks to develop scientific programs in the form of an Institute Without Walls. These programs span multiple institutions and disciplines and identify the optimal set of investigators to unravel and reverse the abnormal program of growth and differentiation of the cancer cell. We envision that members of the SWCRF Institute Without Walls will continue interactions beyond the term of their grant.

Background

The Samuel Waxman Cancer Research Foundation (SWCRF), founded in 1976, is a non-profit organization dedicated to conducting basic and translational cancer research. Based initially at the Mount Sinai School of Medicine, in 2002 the Foundation increased its reach in the scientific community by the establishment of a competitive grant program. Since then, nearly 200 investigators have been funded to encourage interactive, high-quality research with the intent of developing new therapies or preventive strategies for cancer through the understanding of mechanisms of disease development. The SWCRF also provides ongoing support to research programs at the Shanghai Institute of Hematology. Through collaborative grants, the sharing of information, reagents, technologies and ideas, and the organization of international conferences, we have created an *Institute Without Walls.*

Investigators of the Foundation have long been interested in differentiation therapy of cancerthe notion that *the cancer cell can be re-programmed* to re-acquire aspects of normal cell differentiation including terminal cell division and programmed cell death. In 2012, the Foundation will offer several grants of up to \$100,000 per year to fund novel research along these lines.

Long-term goals

- 1. Collaboration
 - Identifying individual talents, technologies and expertise within your research group that complement other components of the SWCRF
 - Formulating specific plans to augment research programs funded by SWCRF
 - Sharing research materials/reagents/Identification of core resources
 - Authoring joint publications
 - Developing NIH P01s or Collaborative R01s
 - Participation in the International SWCRF Co-Principal Investigator program with investigators in China
 - Participating in SWCRF Institute Without Walls Drug Discovery Program
- 2. Communication

- Attendance at the required annual SWCRF Scientific Review Meeting
- Subgroup meetings
 - ASH
 - AACR
 - International Differentiation Meeting
 - SWCRF supported working groups
 - Secure intranet site to share findings

Research Themes

- 1. Basic and translational research focused on mechanisms of gene regulation that govern critical cell decisions in the process of cell diversification from the tumor initiating cell to the differentiated state
 - a. Example- transcriptional and signal transduction controls on self-renewal of normal and cancer stem cells
- 2. Projects on aberrant gene regulators in malignancy
 - a. Example- transposed transcription factors, mechanisms of disease development and reversal of aberrant transcription factor action
- 3. Research on aberrant epigenetics in malignancy
 - a. Example- what are the pathologically important epigenetic abnormalities "epimutations" in cancer, their underlying mechanisms and leads for novel therapeutic interventions?
- 4. Studies on the cell decisions on cell dormancy versus proliferation
 - a. Example- what signals control the fraction of cells growing in a tissue or a tumor?
- 5. Research on cell life and death
 - a. Example- what changes in gene regulation govern the unlimited lifespan of tumor cells?
 - b. Example- what controls normal terminal cell death? How is this overcome in cancer?

Priority will be given to:

- Proposals addressing promising new areas of study for the applicant, not yet funded by the National Institutes of Health or other major granting agencies.
- Basic studies that will directly impact the understanding of the abnormal program of the cancer cell
- Translational studies with patient specimens; correlative studies of clinical trials.
- Equal consideration will be given to junior (Holders of K08, K99/R00) and senior investigators.

Who Should Apply

Invitations have been sent out to the Directors of NCI-designated cancer centers requesting their submission of applications. One application is permitted for each institution (excluding

individual or collaborative grants from current grantees). Applicants must be established investigators with a tenure-track or tenured appointment holding as Principal Investigator at least one grant from a major funding source such as the NIH, NSF, DOD, ACS. The applicant may hold a K08 grant, a K99/R00 grant or another major career transition grant, such as those from the Burroughs Welcome Foundation or Howard Hughes Medical Institute. The goal of our program is to leverage existing cancer research expertise into translational and collaborative cancer research that otherwise would not be able to be performed without support of this Foundation.

Funding

An initial, two-year grant will consist of:

- Up to \$100,000 per year of direct cost (no indirects)
- Upon completion of two years of funding (assuming satisfactory progress made in each year based on the Scientific Advisory Committee review), review of progress and approval by the grants review committee, a third year of funding may be considered.

Review and Award

All applications are evaluated by the SWCRF Grants Review Committee, comprised of members of the Scientific Advisory Committee and independent outside reviewers. Final review and approval rests with the Board of Directors. Funding of awards is based on the priority score awarded each application, the recommendations of the Grants Review Committee, the Scientific Advisory Committee, alignment of the project with the goals of the SWCRF, and availability of funds. Funding will commence on July 1, 2012.

Terms of Grant

The Foundation will support inter-laboratory efforts through the SWCRF grants upon completion of a two-year review, which may be extended to three years upon demonstration of synergistic collaboration with other SWCRF investigators and approved by its Scientific Advisory Board. Beyond these three year terms the Foundation will consider continued funding through collaborative grants of the Institute Without Walls that may be renewed on an annual basis. In addition, the Foundation will support several working groups through travel grants and provide access to grantees to core facilities of the Foundation.

Other Requirements

In addition to providing a written interim and annual progress report, the individual grantees will be required to make a presentation in May 2013 at an annual scientific review in New York City. Continued funding is contingent upon this attendance. The grantees will be expected to be highly collaborative and freely make available reagents and information resulting from their research to other scientists supported by the Foundation.

<u>Timeline</u>

Late applications will not be accepted

RFA release	December 1, 2011
Grant Application to be sent in hard copy <u>and</u> as a complete PDF file (<u>LESS</u> than 2MB) by email by 6:00pm EST.	March 15, 2012
Review of Applications by Grants Review Committee	March 15 –June 15, 2012
Notification of Funding Decision	July 1, 2012
Funding Period Begins	July 1, 2012

SAMUEL WAXMAN CANCER RESEARCH FOUNDATION INDIVIDUAL GRANTS 2011-APPLICATION PROCEDURES

The Applicant must have faculty status and be a peer-reviewed NIH (K08, K99, or R01 or PO1 project), DOD, ACS *Principal Investigator* <u>– not a co- PI or co- investigator</u>

- 1. Each application requires an endorsing cover letter from the cancer center director indicating how the applicant was selected and the nature of the internal selection process.
- Please submit an original application that is typed, <u>single-spaced, 11 point Arial type with</u> <u>one inch margins</u>.
- 3. Please submit the materials listed below, in the order they are listed:
 - Applicant information (attached)
 - Lay summary (1 page limit)
 - Summary of the proposal and how it relates to the goals of the RFA (1/2 page limit)
 - Specific aims and rationale (1/2 page limit)
 - Background (2 page limit)
 - Preliminary data (2 page limit)
 - Research plan and methods (5 page limit)
 - References (2 page limit)
 - Budget NIH Form (http://grants.nih.gov/grants/funding/phs398/fp4.doc)
 - i. Personnel: Salaries & Wages, Consultant Costs.
 - a. A maximum of \$30,000, including fringe for the PI.
 - ii. Equipment (maximum of \$10,000)
 - iii. Supplies
 - iv. Animal Care
 - v. Other Costs
 - NIH Biosketch (http://grants.nih.gov/grants/funding/phs398/biosketch.doc)
 - NIH Other Support (<u>http://grants.nih.gov/grants/funding/phs398/othersupport.doc</u>)
 - The SWCRF project should not overlap with other sources of support.
- 4. Institutional approval of human experimentation procedures and animal use must be

provided. As in the case of the NIH, IRB and IACUC approval can be obtained on a just in time basis. However, if a clinical trial is proposed a copy of the clinical trial protocol must be submitted with the application. If animal experimentation is proposed, please indicate the reasons for animal use, the approximate number of animals to be used, procedures to avoid pain and suffering of animals and modes of euthanasia as in NIH guidelines.

5. Applications are due according to the timeline.

Please e-mail a PDF of your application (LESS THAN 2MB) and mail one hard copy of your application to:

Carole Asher Samuel Waxman Cancer Research Foundation 420 Lexington Ave., Suite 825 New York, New York 10170 Tel: 646-398-5267 Fax: 212-867-4851 Email: casher@waxmancancer.org

Post-Award Requirements

A) Progress Report

An annual 2-3 page **standardized report** (excluding an Appendix of publications) summarizing progress and expenditures during the past year and goals for the coming year, including a budget for next year's activities is required by <u>April 1</u> each year of the grant, description of collaborations with other SWCRF investigators, and a listing of publications resulting from the award and description of intellectual property that resulted from SWCRF research support. The progress report should include key bullet points for the scientific advisory board to review and the following:

- 1/2 page scientific abstract
- 1/2 page lay summary
- Narrative of progress and next year research plan (2 pages, including key bullet points)
- Appendix of publications

Funds for the next year of support depend upon submission and acceptable review of this progress report by the Scientific Advisory Committee of the SWCRF. At the discretion of SWCRF, funds for the second year of the grant may be withheld based on the progress report.

B) Final Scientific Report

At the completion of the grant period, SWCRF requires a comprehensive scientific report that indicates the project's accomplishments. Two (2) copies of reprints, abstracts or manuscripts in press must be included with the final scientific report.

All final scientific reports must be submitted within sixty (60) days of the termination date of the grant.

C) Interim and Final Financial Report

Interim financial reports are due annually on June 1st. A final report of expenditures must be submitted by the grantee institution within ninety (90) days of the termination of the grant, together with the refund of any unexpended balance. Unexpended funds from an existing grant may only be carried forward to a renewal or an extended grant term with the written permission of the SWCRF.

SWCRF is not responsible for the over-expenditure of grant funds, for commitments against a grant not paid within sixty (60) days after termination, or for expenditures made before the starting date of a grant.

D) Publications

Publications resulting from research supported all or in part by SWCRF must contain the following acknowledgment: "Supported by a grant from the Samuel Waxman Cancer Research Foundation."

Grantees must provide two (2) reprints of all published research to SWCRF.

E) SWCRF Annual Scientific Review

Principal Investigators are required to attend the 2 day annual Scientific Advisory Committee Review and Research Conference and present an oral (unless requested otherwise) and written research summary.

F) Cancellation

A grant may be cancelled by either party upon thirty (30) days written notice. In the event of cancellation by SWCRF, the grantee organization will be reimbursed for all costs incurred and all non-cancelled commitments. In the event of cancellation by the grantee organization, any unexpended or un-obligated funds advanced by SWCRF shall be refunded to the SWCRF.

G) Policy on Intellectual Property

By accepting the award, the applicant organization recognizes that intellectual property (log books, slides, etc.) belong to the Investigator. However, these can be photocopied for the applicant organization if required. The SWCRF is a resource to grantees in the development of any intellectual property that arises from their studies supported by the Foundation. The SWCRF patent policy appears in section I.

H) Publication

Upon acceptance, the Scientific and the Lay Summaries of the grant may be published by SWCRF in written form or on its website. All other parts of the application are considered confidential.

I) Patents

SWCRF, by virtue of the Institute Without Walls and programs of collaborative scientists, is in a position to facilitate the development of scientific observations obtained by funded scientists. SWCRF must be notified by funded scientists of all inventions, discoveries and improvements, collectively "Intellectual Property" (including specifically all domestic and foreign patent applications) that may be derived from SWCRF research support. Thereafter, it may be possible to utilize the expertise and resources available to the SWCRF to synergize the development of Intellectual Property for diagnostic or therapeutic/preventive purposes. Should the SWCRF facilitate this process, the Intellectual Property will remain the joint property of the funded scientist and Parent Institution. However, a portion of the commercial benefit (negotiated milestone payments and royalties) not to exceed 15% must be returned to SWCRF to generate funds for future cancer research support.

The following changes to the grant requires approval by SWCRF:

A) Budget

The budget can be managed on a modular basis and transfers among categories of less than \$25,000 can be done at the investigator's discretion. Re-budgeting of larger amounts **requires prior approval from SWCRF**.

B) Transfer to Another Institution

Grants may be transferred from one organization to another upon **prior written approval from SWCRF.** The Principal Investigator of the grant is responsible for submitting to the SWCRF in a timely manner the following: a letter requesting transfer of the grant, the Principal Investigator's new address, and the address and contact person in the new grants administration office. SWCRF will notify the institution and the Principal Investigator in writing of possible approval. SWCRF must receive a written acceptance of the grant by an authorized official of the new organization. Payments will not be initiated to the new organization until a final financial accounting of all expenditures from the original institution along with a letter releasing SWCRF from further financial obligations for that particular grant from the original institution and a letter acknowledging that the grant has been accepted by the transfer organization has been received by SWCRF.

C) Transfer to a New Principal Investigator

Grants may be transferred from one Principal Investigator to another upon **prior written approval from SWCRF.** When transfer from one Principal Investigator to another is desired, the original Principal Investigator must submit a request in writing that includes: 1) the reason for the requested change; 2) the justification of the ability of the proposed new investigator to complete the project; and 3) the biographical information section of the SWCRF application form and a complete curriculum vitae of the proposed new Principal Investigator. SWCRF will notify the Principal Investigator in writing of its decision.

D) Extension Without Additional Funds

The grant period may be extended for up to one year without additional funds upon **prior written approval from SWCRF.** Requests for extensions should be submitted no less than two (2) months prior to the expiration of the grant period. SWCRF will notify the Principal Investigator in writing of its decision.

Samuel Waxman Cancer Research Foundation Individual Grant Application

APPLICANT INFORMATION

Project Title:

Principal Investigator:		Official Authorized to	Sign for Institution:
Name: Last, First, Middle Initial, Degree		Name: Last, First	
Title		Title	
Institution		Institution	
Department		Mailing Address	
Mailing Address		City, State, Zip	
City, State, Zip		Telephone	Fax
Telephone Fax		Email	
Email			
Application is hereby made to the Sa Research Grant.*	amuel Waxman	Cancer Research Four	ndation for a
Total amount requested: Period:	\$ <u>100,000</u> per y July 1, 2012 –		
Signature of Principal Investigator Date		Signature of Authorized Official	Date
Office to which funds should be d	irected:		
Contact	Department	٦	elephone Number

It is understood that each applicant, by the act of applying for a grant, agrees, if the grant is made, to abide by the Foundation's Grant Policies

Samuel Waxman Cancer Research Foundation Individual Grant Application

	Project Information			
Project Title				
Funding Requested 1st Year	2 nd Year	(3 rd Year)		
Are Human Subjects involved with this	grant? Are vertebrate	e animals involved with this grant?		
Yes No	Yes	No		
If yes, Exemption Number	If yes, IACUC A	Approval Date		
Or IRB Approval Date	Or Animal Welfa	are Assurance Number		
Assurance of Compliance Number				
Fiscal Officer				
Name				
Title				
Institution				
Department				
Mailing Address				
City, State, Zip				

Samuel Waxman Cancer Research Foundation Individual Grant Application

Certification and Signatures

The undersigned reviewed this application for a SWCRF Award and are familiar with policies, terms and conditions of the Foundation concerning this research support and accept the obligation to comply with such policies, terms and conditions.

Applicant Name (typed)	Signature	Date	
Officer Signing for Institution (typed)	Signature	Date	
Fiscal Officer (typed)	Signature	Date	