**CALL FOR PROPOSALS FOR U.S.-CHINA BIOMEDICAL COLLABORATIVE RESEARCH ON CANCER, MENTAL HEALTH, ALLERGY, IMMUNOLOGY AND INFECTIOUS DISEASES INCLUDING HIV/AIDS AND ITS CO-MORBIDITIES**

**TIMELINE:**

Letter of Interest Deadline January 13, 2012

Proposal Submission Deadline: February 21, 2012

Review: March-May 2012

NIH Award Notification: July 2012

**PURPOSE:**

The National Institutes of Health (NIH) of the United States (U.S.) Department of Health and Human Services (DHHS) supports and undertakes international collaborative biomedical research to advance science and expand biomedical knowledge.  Scientific cooperation between the U.S. and the People’s Republic of China was initiated over 30 years ago and has grown rapidly in recent years.  Recognizing that enhanced cooperative biomedical research would be of mutual benefit to the U.S. and China, the NIH Director and the President of the National Natural Science Foundation of China (NSFC) signed a Memorandum of Understanding (MOU) in October, 2010.

NIH and NSFC further signed an Implementing Arrangement (IA) in December 2010 to develop a new U.S.-China Program for Biomedical Research Cooperation. A Joint Working Group (JWG), made up of a specified number of members from both NIH and NSFC, will develop strategic plans for collaboration and facilitate the expedited review and clearance of proposed bilateral projects. Both the NIH and NSFC have allocated funds to support joint activities pursued under this program.

This Notice announces an opportunity for NIH intramural scientists to request funding to develop new collaborations or expand ongoing research efforts with Chinese scientists under the U.S.-China Program for Biomedical Research Cooperation. Proposals that include a short-term scientist exchange are acceptable. Based on the merit of the requests received and the availability of funds, the NIH may award up to $400,000 in FY 2013 to intramural scientists for this effort, and the NSFC has pledged to provide complementary funding to support the Chinese collaborating investigators involved in the research collaborations. The maximum amount for each intramural award is $50,000. NSFC has pledged to match the overall U.S. funding to support the Chinese collaborating investigators involved in the research collaborations.

NCI, NIMH, NIAID, and the Office of AIDS Research have allocated funds for the U.S.-China Program on Biomedical Research Cooperation. Under this program, the NIH will support *any: 1) NIH intramural researcher* working in the area of HIV/AIDS and its co-morbidities; *2) NCI intramural researcher* working in the area of cancer research (unrelated to HIV/AIDS and its co-morbidities); 3) *NIMH intramural researcher* working in the area of mental health (unrelated to HIV/AIDS and its co-morbidities); and *4) NIAID intramural researcher* working on allergy, immunology and infectious diseases (unrelated to HIV/AIDS and it co-morbidities) **who proposes a research collaboration with a Chinese collaborating investigator**.

To support the Chinese collaborating investigators for these projects, NSFC will provide complementary funds to scientists ***who are current or former NSFC grantees***. Funding under this program can be used to support ***either new or expanded research cooperation*** between U.S. and Chinese scientists.

NIH intramural and Chinese collaborating investigators will work together to submit corresponding applications to NIH and NSFC.Applications from U.S. intramural collaborating investigators in response to this funding announcement will be provided to a contact within the office of their IC’s Scientific Director, and reviewed by an *ad hoc* panel of intramural researchers with appropriate scientific expertise. NSFC will publish a corresponding funding announcement (in Chinese) for Chinese collaborating investigators to apply for funding under the joint U.S.-China Program for Biomedical Research Cooperation (see http://www.nsfc.gov.cn/Portal0/InfoModule\_396/More.htm). **The U.S. and Chinese applications must both be determined eligible and responsive by NIH and NSFC to be considered for joint funding under the program.**

Applications from Chinese collaborating investigators will be reviewed in parallel by NSFC using review criteria that are harmonized with NIH review criteria. Chinese applicants will also be required to submit as part of their applications a copy of the NIH proposal provided by their U.S. collaborator. Therefore, it is expected that the Chinese collaborating investigator will contact the NIH intramural scientist and request copies of their proposal in response to this announcement for submission. The NIH will not consider for funding any request that has not met this sharing requirement. The English proposal will also be reviewed confidentially during the NSFC review process. Potential intramural applicants concerned about confidentiality or proprietary information should take this requirement into account before deciding what information to include in the proposal. Funding decisions will be made by NIH and NSFC in consultation with the JWG and with consideration of the research priorities of both countries.

Short-term scientific exchanges can be proposed as a component of the application. Justification for any short-term scientific exchanges should be provided, clearly outlining the need for such an exchange in the context of the research objectives proposed. The short-term scientist exchange proposal must be a component of the proposed research project, and total costs for the research and scientific exchange components should not exceed $50,000 total cost. **A stand alone short-term scientist exchange proposal without a research proposal will not be accepted.**

The short-term-scientist exchange component cannot be used to support Chinese researchers who are already in an NIH intramural laboratory or who have been previously identified for support from other sources. The exchange may be from one week to six months in duration. (Note: This program provides support only for the Chinese researcher; no support will be provided for family members, financial or documentary.) Under this Call for Proposals, NIH intramural scientists are eligible for short-term visits/exchanges to Chinese co-investigator laboratories, which are limited to one month in duration.

**RESEARCH OBJECTIVES:**

The intent of this initiative is to foster, stimulate, and/or expand collaborative basic, translational, and applied research between NIH intramural scientists and eligible Chinese researchers in the areas of: cancer, mental health, allergy, immunology, and infectious diseases including HIV/AIDS and its co-morbidities.

Researchoractivities **not** supported under this Call for Proposals includes:

* Clinical trials of drugs, biologics or diagnostics (see NIH definition of clinical trials in the [Application Guide SF424](http://grants.nih.gov/grants/funding/424/SF424_RR_Guide_General_Adobe_VerB.pdf)) for NIH definitions of clinical research vs. clinical trials, please see: <http://grants.nih.gov/grants/glossary.htm#C>.
* Proposals that are not paired with an eligible NSFC Chinese investigator in China, who submitted a corresponding Chinese application to NSFC.
* Research involving Select Agents (see 42 CFR 73 for the Select Agent list; and 7 CFR 331 and 9 CFR 121 for the relevant animal and plant pathogens).

Examples of research areas that **are** responsive to this announcement include:

**In cancer:**

Studies of:

* The pathobiology of cancers in China and/or the U.S.
* Rare tumors for which the U.S.-China collaboration may help identify sufficient numbers of clinical cases for meaningful study
* Infection-associated cancers
* Cancer genomics, including epigenomic, transcriptomic, proteomic and metabolomic studies; systems biology and structural biology; Cancer nanotechnology; cancer cell and tumor biology; cancer stem cells; microenvironment and metastasis, tumor immunology and immunotherapy, and cancer etiology; inflammation and cancer
* Cancer epidemiology and population science, including: investigations of infectious agents; nutrition; energy balance; environmental and occupational exposures or personal susceptibility factors that may affect cancer risk
* Cancer prevention and screening, including: cost-effective screening; chemoprevention; nutrition and early detection
* Preclinical development of novel cancer therapeutics and imaging agents
* Traditional Chinese medicine to identify novel therapeutics in the pharmacopeia of traditional medical systems as defined by the World Health Organization (<http://www.who.int/medicines/areas/traditional/definitions/en/index.html>); or the use of complementary approaches to improve the therapeutic ratio of standard and investigational anti-cancer therapies; or research on lifestyle modifications (e.g., diet, exercise, mind-body approaches) and their effect on cancer outcomes (e.g., response to conventional cancer therapy, survival)

**In mental health:**

* Analyses of the development, structure, and function of neural circuits with a focus on those most relevant to mental disorders.  These studies could include anatomic and imaging projects in non-human primates.
* Development of novel tools and methodologies, including imaging tools, assays that allow high throughput phenotyping within cell models, and improvements in stem cell techniques to study the molecular and cellular basis of mental disorders
* Preclinical development of novel therapeutics for mental disorders
* Identification of biomarkers with predictive value for diagnosis and treatment
* Studies of the prodrome of schizophrenia

**In allergy, immunology, and infectious diseases:**

* Asthma and allergic diseases, including the roles of environmental pollutants, infections, and allergens.
* Basic immunology and immunity studies.
* Research on infectious diseases (non-HIV/AIDS), in particular malaria, tuberculosis, dengue fever, enterovirus 71, rabies, schistosomiasis, measles, hepatitis, or influenza that address antimicrobial resistance (including mechanisms of resistance); resistance in disease vectors; and immune responses to infectious diseases or vaccines (including the role of immune responses in pathogenesis).

**In HIV/AIDS**:

* HIV/AIDS and its co-morbidities including, but not limited to, co-infections, AIDS-defining and non-AIDS defining malignancies, and complications associated with long-term HIV disease and antiretroviral therapy, including tuberculosis, hepatitis C and hepatitis B, metabolic disorders, cardiovascular disease, conditions associated with aging, and neurologic and neurocognitive disorders.
* Research toward a cure for HIV/AIDS including studies on: HIV reservoirs, latency, and persistence; screening and testing of novel compounds; developing and testing novel approaches combining virologic-, immunologic-, and cellular-based therapies, as well as strategies to activate latent virus; and adherence to treatment regimens, as well as research at the individual, community, and population levels on developing and implementing a cure for HIV/AIDS.

**In all research areas:**

* Short-term scientific exchanges (of U.S. intramural scientists to China or Chinese scientists to NIH) that are a component of the proposed research project

**BUDGET:**

The NIH may award up to $400,000 in FY 2013 to intramural scientists for this effort. The maximum amount for each intramural award is $50,000; however, smaller requests are strongly encouraged. NSFC will provide complementary funds (approximately 300,000 Renminbi (Chinese currency) per project) for the Chinese collaborating investigators of these projects. Five percent of the NSFC total award amounts can be used for indirect costs by Chinese institutions.

**ELIGIBILITY:**

Funding under this program can be used to support ***either new or expanded research cooperation*** with Chinese scientists. Funding under this program will support collaborative research projects only and cannot be used to support research infrastructure (except for small equipment purchases). All NIH intramural Principal Investigators (i.e., tenured Senior Investigator, Tenure-track Investigator, Senior Scientist, Senior Clinician, or Assistant Clinical Investigator) are eligible to submit a research proposal in the area of HIV/AIDS and its co-morbidities. Only NCI intramural investigators are eligible to submit in the area of cancer (unrelated to HIV/AIDS and its co-morbidities), only NIMH intramural investigators are eligible to submit in the area of mental health (unrelated to HIV/AIDS and its co-morbidities) and only NIAID intramural investigators are eligible to submit in research areas of allergy, immunology and infectious diseases (unrelated to HIV/AIDS and its co-morbidities). ***Each intramural scientist may only submit one proposal.***

***In order for the application to be reviewed under this joint program, the U.S. and Chinese applications have to be considered eligible by both NIH and NSFC. The Chinese partner has to carefully follow all of NSFC’s application procedures to be considered eligible.***

For a complete description of eligibility criteria for Chinese applicants, please refer to the corresponding NSFC funding announcement published on its website: http://www.nsfc.gov.cn/Portal0/InfoModule\_396/31674.htm (only in Chinese). Applications are only responsive to this announcement if the Chinese co-investigator submits a corresponding proposal to NSFC.

Short-term scientific exchanges of NIH intramural investigators to China for up to one month can be supported if they are a component of the proposed research project. The host laboratory in China will provide laboratory costs during the exchange; however NIH intramural scientists cannot receive salary or per diem from the Chinese government.

Alternatively, this program can support a Chinese researcher to visit the NIH for a period of one week to six months who: 1) is proficient in spoken and written English; 2) completed at least one year of postdoctoral research experience; and 3) is not already at NIH. No support will be provided for dependents under this program. Travel expenses and salary support must be provided by the home institution; however, NIH will provide health insurance (that does not cover pre-existing conditions) for the visiting Chinese researcher only for the duration of the visit.

**SUBMISSION OF LETTERS OF INTEREST:**

**Intramural investigators *are required to* submit a Letter of Interest (LOI) to be considered for this funding opportunity.** LOIs should be no longer than two pages and should include the following information:

* Name of U.S. Principal Investigator and NIH Institute, name and address of Chinese collaborating investigator and Chinese institution; and
* Brief summary of the intended project, with the roles of each collaborating investigator clearly indicated.

LOIs from all intramural investigators *other than NIMH intramural investigators who are not working in the area of HIV/AIDS and its co-morbidities* are to be submitted online at <https://proposalcentral.altum.com>. **LOIs may be submitted starting on December 19, 2011, but must be received by no later than 5:00 PM Eastern Time on January 13, 2012.**

NIMH intramural investigators who are not working in the area of HIV/AIDS and its co-morbidities should submit LOIs to Dawn Johnson via e-mail (Dawn.Johnson@mail.nih.gov)

**SUBMISSION OF PROPOSALS:**

The English project title should be identical to the English project title submitted by the Chinese co-investigator to NSFC. **Please note that Chinese collaborating investigators will be required to submit the contents of the entire NIH proposal to NSFC (in addition to the NSFC application) for review.** It is expected that the Chinese collaborator will contact the NIH intramural scientist and request copies of their proposal for submission.

Proposals from all intramural investigators *other than NIMH intramural investigators who are not working in the area of HIV/AIDS and its co-morbidities* are to be submitted online at <https://proposalcentral.altum.com>. **Proposals must be submitted no later than 5:00 PM Eastern Time on February 21, 2012.** Late and/or incomplete submissions will not be considered.

NIMH intramural investigators who are not working in the area of HIV/AIDS and its co-morbidities should submit proposals to Dawn Johnson via e-mail (Dawn.Johnson@mail.nih.gov)

**Proposals submitted should include a letter or e-mail affirming the endorsement/approval of the IC Scientific Director or their Designee. Submissions without such endorsement/approval will not be considered.**

The Proposal, **which should not exceed six pages** (excluding abstract, cover letter (face page), references, budget, letter of confirmation, biographical sketches, roles of key staff, letter of confirmation, human subjects documentation, import of biospecimens and SD letter),should be developed in collaboration with the Chinese collaborating investigator and include thefollowing:

* **Cover Letter** (face page):
	+ Principal Investigator (PI) name, NIH IC, and lab ***(Capitalize the family name; for example: Jane DOE)***;
	+ Title of the U.S.-China collaboration project;
	+ Chinese Principal Investigator name ***(Capitalize the family name, and then provide the other given names; for example: DOE Jane)***
	+ Chinese Principal Investigator’s institution
	+ Amount requested (for U.S. portion);
	+ Phone numbers, e-mail addresses, and delivery addresses for the PI;
* **Abstract** of the project that describes the research, need, and significance of the proposed study.
* **Research Plan,** including a brief description of the scope of the overall project, specific aims, research design, methods and data analysis (6 page limit).
* **References**
* **Budget** for the project and justification.  The budget must include details for equipment, supplies and services, in addition to any other budget items such as scientific exchanges; but no costs for personnel salaries are allowed. The equipment purchase must not exceed $25,000 over the one-year award. **Each application should include two budgets: one requesting NIH funding (for the U.S. side expenses) and one budget requesting NSFC funding (for the Chinese side expenses in Chinese currency).**
* **Letter of confirmation** (three page limit) co-written and co-signed by the U.S. and Chinese collaborating investigators.
	+ The first section of the letter of confirmation should describe specific responsibilities of the U.S. PD/PI and Chinese partner, detailing available resources, including which collaborative partner is contributing which resources, and a plan for how resources will be shared (e.g., individual contributions of specific reagents, patient samples, compounds, and access to populations for epidemiologic studies); and state that the U.S. PI will provide a complete English copy of the proposal in English to their Chinese counterpart.
	+ The second section of the letter of confirmation should address the benefit of U.S.-China collaboration for the project, explaining why there is a need for international collaboration, what is the synergy between the collaborating groups, and how the project will achieve intellectual balance between the respective partners
	+ The third section of the letter should include a discussion of future plans for expanding, extending, or otherwise continuing the joint research.
* **Biographical Sketch** for the Principal Investigator (PI) and Chinese Co-PI. (two-page limit per person)
* **Roles of Key Staff** (three page limit)
* **Human Subjects/ Vertebrate Animal documentation** (if applicable).
	+ Include a current Human Subjects/IRB or Vertebrate Animals/IACUC approval letter, if available. Otherwise, this will be required at the time of funding. All appropriate IRB and IACUC approvals must be in place prior to an award being made.
	+ When appropriate, details should be provided on the protection of human subjects and inclusion of women, children, and minorities.
	+ The Chinese collaborating site is also required to comply with human and animal assurances and certifications. If human subjects or Vertebrate Animal research will be conducted in China, provide the Federalwide Assurance (FWA) number for the Chinese IRB and a brief (0.5-page) plan for obtaining IRB approval in China.
* **Import of Biospecimens** (if applicable):
* Include a written statement indicating whether or not biospecimens from China will be imported to the U.S.
* If the proposed research requires exporting of biospecimens from China, specify the type of biospecimens to be exported and provide evidence that you have already applied for the required Chinese government approval to export these materials (half-page limit). Also please specify whether or not the work can be completed if this approval is not granted. No funds will be awarded until you have approval to export samples outside of China or you indicate that the work can be performed within China.

* **Letter or e-mail of approval from the SD**

**Proposals incorporating any short-term scientist exchanges also must include:**

* A letter of application that includes a brief description of the visit including a timeline, specific goals, how the visit relates to the proposed research project and how it will promote or enhance collaborations between the NIH intramural laboratory and the Chinese counterpart (one page limit).
* A description of the collaborative research project to be undertaken in the sponsor's laboratory, specifying what is to be accomplished and indicating tentative dates for the visit (three page limit).
* A letter of invitation from the chief of the hosting laboratory.
* A short curriculum vitae, including full contact information, identification of three scientists willing to serve as references, and no more than five publications.
* When the exchange is for Chinese investigator to come to an NIH intramural laboratory, the visit may be from one week to six months in duration.
	+ The NIH will provide Chinese researchers accepted into this program with the necessary resources to cover per diem and laboratory supplies and reagents while at the NIH laboratory.
		- **NSFC will pay for travel for all Chinese researchers.**
		- **Salary support would be provided by the Chinese participant’s home institution.**
		- The program provides health insurance during the short- term visit. Coverage is for the awardees only and does not cover pre-existing conditions.
		- The Chinese investigator will receive a letter from NIH with which to apply for a visa at the U.S. Embassy or Consulate in China.
	+ Chinese investigators must include a letter of assurance by the candidate that he/she will return to China at the end of the exchange.
	+ The candidates must have a minimum of one-year postdoctoral experience in related research.
	+ Candidates also must be proficient in spoken and written English.
* NIH intramural scientists also can participate in the short-term scientist exchange component; however, this exchange may not exceed one month.
	+ **The NIH scientist cannot receive salary or per diem from the Chinese government.**
	+ The Chinese laboratory would provide the resources to cover supplies and reagents for the NIH intramural investigator while in the Chinese laboratory.

**REVIEW:**

Review will be managed by the appropriate I/C SD office and applications will be reviewed by *ad hoc* experts with the appropriate expertise in cancer, mental health, allergy/immunology, or infectious diseases including HIV/AIDS and its co-morbidities.

Reviewers also will examine the appropriateness of the budget in consideration of the study proposed and the research environment for the scientific projects.

Applications will be evaluated on the following criteria:

**Significance.** Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

**Investigator(s).** Are the PD/PIs, collaborators, and other researchers well suited to the project? If Early Stage Investigators or New Investigators, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? Do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?

**Innovation.** Does the proposed research challenge and seek to shift current understanding or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

**Approach.** Are the overall strategies, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?

If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?

**Environment.** Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

**INQUIRIES:**

***For applications from NCI/CCR PIs: (in scientific areas other than HIV/AIDS and its co-morbidities)***

***Janelle Cortner (******jc328z@nih.gov******)***

***For applications from NCI/DCEG PIs (in scientific areas other than HIV/AIDS and its co-morbidities):***

***Marianne Henderson***

***NCI/DCEG***

***hendersm@mail.nih.gov***

***For applications from NIAID PIs (in scientific areas other than HIV/AIDS and its co-morbidities):***

***Mark Pineda***

***mpineda@niaid.nih.gov***

***For applications from NIMH PIs (in scientific areas other than HIV/AIDS and its co-morbidities):***

***Dawn Johnson***

***Dawn.Johnson@mail.nih.gov***

***For applications from all NIH PIs working in the area of HIV/AIDS and its co-morbidities***

***Bob Eisinger and Joan Romaine***

***OAR-Initiatives@nih.gov***