



## 2012 Request for Proposals (RFP) CMB Open Competition Research Programs Health Policy and Systems Sciences

### Invitation for Proposals

The China Medical Board (美国中华医学基金会) invites faculty members and investigators from eligible universities in China (listed at the end of this RFP) to submit research proposals for funding in the field of health policy and system sciences (HPSS). This RFP continues CMB's efforts to promote academic excellence in HPSS through developing open competition research programs (OC) in China. This note describes the background, application process, and management of CMB-OC.

### Background

The CMB has supported philanthropic work in China and Asia for nearly a century. CMB established the Peking Union Medical College from 1914-1951 and supported medical universities in 16 countries across East and Southeast Asia from 1951-1981. Since 1981, CMB has been assisting 13 Chinese medical universities in strengthening their faculty, research, and education programs. Recently, CMB has extended eligibility for grant support to additional universities.

Over the course of the 20<sup>th</sup> century, health in China has advanced significantly. However, China nevertheless confronts many challenges in providing universal, high quality, and affordable health care to its people. China's ongoing health reform policies aim to improve health system performance to address new and re-emerging health challenges. Success of these reform policies requires academic support in the forms of targeted research and educational activities that generate knowledge and produce high-quality health professionals.

Since 2008, the CMB has awarded 80 grants, totaling nearly US \$26 million, to Chinese universities for HPSS-related research and education initiatives. These HPSS-focused programs have continued the CMB's long tradition in capacity building. They include:

- *HPSS high-level promotional efforts* such as Westlake Forums (<http://www.regonline.com/builder/site/default.aspx?EventID=934954>), partnership with *The Lancet* to publish China-themed issues, and China's hosting of the 2nd Global Symposium on Health Systems Research (<http://www.hsr-symposium.org/>).
- *Development of Centers of Excellence* as the institutional basis for HPSS research and education, including support for the Peking University China Center for Health Development Studies ([www.cchds.pku.edu.cn](http://www.cchds.pku.edu.cn)), the Sun Yat-sen Center for Migrant Health Policy ([cmhp.sysu.edu.cn](http://cmhp.sysu.edu.cn)), and Sichuan's Center for Western China Health Policy.
- *Development of CMB-Collaborating Programs (CPs)* as faculty-led program clusters to tackle specific health challenges and policy and systems responses.
- *Capacity strengthening of researchers* through CMB fellowships and training programs. This category of programming includes fellowships managed by the Institute of International Education ([www.iiebeijing.org/cmb/cmb.html](http://www.iiebeijing.org/cmb/cmb.html)) to support overseas advanced

study in HPSS; “Project 991,” managed by Peking Union Medical College, which offers research grant opportunities coupled with continuous mentoring and methodology training; and the open competition research grants, many of which are awarded to junior faculty.

For more information about CMB’s current China work, please follow our **Sina Weibo @China Medical Board**. Our official website, [www.chinamedicalboard.org](http://www.chinamedicalboard.org), is under development so as to improve CMB communication with grantees.

## Open Competition

The primary purpose of the CMB Open Competition (CMB-OC) in research is to improve HPSS research capacity in China by identifying and supporting competent faculty members regardless of seniority.

Last year, in the first round of RFP for OCs, CMB approved 12 out of 99 proposals from 17 eligible universities, including projects in mental health intervention, childhood obesity intervention, occupational insurance, health technology assessment, antibiotics use, rural physicians training, and hypertension and chronic disease intervention. Last year’s OCs were awarded to a relatively junior group of researchers; the age group of the PIs ranged from 29-51 years, with a mean age of 40 years. A synopsis of all approved 2011 OC grants is included in Addendum I. All 2011 OC PIs will be invited to report on their projects at the upcoming “Westlake Summer Youth Workshop.” This event, supported by CMB and organized by Zhejiang University, will allow PIs to receive technical inputs and network with each other. CMB is continuing to develop mentoring and training opportunities for the OC project teams.

This year’s OC award competition will continue to offer grant opportunities of **US \$25,000-150,000 per research project** in HPSS. This RFP will prioritize projects that will generate knowledge, advance education, and/or produce innovative applications in the following broad areas of HPSS:

- Emerging health challenges in China, especially research and educational activities involving disease burdens, policies and programs in non-communicable diseases (including mental health, cancer, diabetes, respiratory diseases, hypertension, and cardio-vascular diseases), and risk factors such as obesity and tobacco use.
- Health policies and health systems responses to address health challenges, such as those related to health financing, human resources, primary and hospital care delivery systems, health technology assessment, pharmaceutical policies and health informatics.

## Eligibility to Apply

Any faculty member from the schools listed in Addendum II may apply for grants under this open competition. We **especially encourage** junior faculty or post-doctoral fellows who are staff/faculty members at the eligible institutions to apply. Final selection of the funded CMB-OC projects will be highly competitive, so eligibility does **not** guarantee funding.

## Proposal Submission

This RFP process will be implemented in **two steps**. In the first step, applicants should submit a 1-2 page abstract of the proposal for initial review. In the next step, the PIs of projects considered suitable will be invited to develop complete proposals for final review. Abstracts and proposals

should be submitted in English through the respective university's CMB liaison office, which will screen the content and submit the proposals to the CMB.

Each eligible institution can submit up to **five** abstracts. In addition, any faculty member who has participated in one of the following CMB programs is eligible to submit one project abstract which will not count into the five-abstract quota.

- Awardees of CMB faculty development and next generation fellowship through IIE, and
- Trainees of CMB 991 in-China training in HPSS.

The RFP encourages multidisciplinary research and educational programs that engage faculty and students within and beyond the faculty of medical sciences. Joint applications by faculty members from complementary schools and by Chinese and foreign investigators are welcome.

## Timeline in 2012

April 30	Submission of abstract
June 30	CMB decision on abstracts for consideration
July 31	Submission of full proposal
December 31	CMB announcement of funding decisions

## Proposal Abstract

An abstract of 1-2 pages must include the following:

- *General information:* University, project title, PI(s) and their leadership and/or academic titles, amount of funding required, and duration of the project.
- *Project justification:* Explanation of the project's importance to China, to your locality, to your university, and/or to yourself. Where appropriate, you may integrate this with the project content description.
- *Project content:* Clear statement of the main problem addressed by the project, goals and objectives, specific activities that will be undertaken to achieve the goals, analytic methods, expected results and products, timetable, and estimated budget. As a collaborating program, the budget may be flexibly structured to offer optimal agility for the PI to pursue his/her priority domain or theme in HPSS.

Abstracts should be accompanied by the current CV of the Principle Investigator. This CV should be no more than three pages and include the PI's date of birth, major educational and professional experiences, up to five selected publications, previous participation in CMB activities, and list all HPSS-related research funding received from funding agencies, including CMB.

## CMB Review

Most provisionally accepted proposals will require revisions based on comments generated by the CMB review prior to final acceptance. PIs of selected abstracts may be sent comments on the abstract to assist them in focusing their full-length proposals. CMB's decisions about which projects to support will be based on the quality, relevance, and topical significance of the revised proposal. In particular, the following aspects will be examined during the review:

- Topical importance of the project as explained in its “justification;”
- Soundness of the research design and appropriate methods used;
- Feasibility of the projects;
- Potential of the PI to achieve academic excellence;
- Demonstration of multidisciplinary work;
- Cost-effectiveness in producing key knowledge and educational products given the requested budget;
- Linkage and alignment of the project to a CMB-supported center (Peking University China Center for Health Development Studies, the Sun Yat-sen Center for Migrant Health Policy, or Sichuan’s Center for Western China Health Policy) and/or CMB-Collaborating programs (CMB-CP) not necessary, but a plus.

The process is highly competitive and merit-based. Consequently, some schools may be awarded more than one grant, while others may not receive any awards.

It is CMB policy that all research and education products, including original datasets generated by its grant support, should be widely shared and accessible to the public. CMB is considering developing a data-sharing electronic platform to improve ease of access to original datasets.

## Grants Management

In naming project abstracts or proposals, please follow the standard format: “School Abbreviation + PI’s Name + OC.” An example is FudanLindaZhouOC.

Each participating university has designated a “**CMB liaison officer(s)**” (listed in Addendum II) who will serve as the point-of-contact between the university and CMB in grant management issues.

The CMB liaison officer at each university should send all abstracts and proposals to **Linda Zhou** (周娜), CMB’s Grant Manager (lzhou@cmbfound.org, 010-5969 5071-805). Technical inquiries should be directed to **Roman Xu** (徐东), CMB Beijing Office Director (rxu@cmbfound.org, 010-5969 5071-801).

## CMB Newsletter and Weibo

Organizations or individuals who are interested in receiving CMB announcements and news can subscribe to an electronic “**CMB Newsletter**” by participating in a survey at <http://www.websurveymaster.com/s/dbaab0e9>. Alternatively, you can choose to follow our Sina Weibo @China Medical Board, where all of our formal announcements, including review results, will be timely posted.

## **Addendum I**

### **2011 CMB Open Competition Awards**

#### **1) Mental Health Intervention in Western Rural China (11-063)**

PI: Yuhong ZHANG, Ningxia Medical University

This three-year project plans to add a mental health component to an ongoing experiment on health system reform in five mountainous counties in Ningxia that is being conducted in collaboration with Professors William Hsiao and Winnie Yip. The mental health project includes an initial prevalence study and a subsequent assessment of the effects of providing public education and changing the provider payment model on the utilization and quality of mental health services.

Mental health is one of the key targets of the new public health package financed by the central government but it remains unclear how this target will be achieved, particularly in poor rural areas. This project by a well-respected international team of researchers in a locale that has been well characterized in prior research will develop and test one model for overcoming the obstacles of stigma, low rates of care-seeking for psychological problems and lack of training of rural health professionals.

#### **2) School-based Intervention against Childhood Obesity (11-064)**

PI: Haijun WANG, Peking University Health Science Center

This project over three years is a cluster-randomized trial in 12 primary schools in urban areas of Beijing of a school-based policy intervention aimed at promoting a healthy diet and increased physical activity. The school-specific intervention policies, which will be based on the results of evaluations conducted during the pilot study, will be developed with the active participation of school principals, teachers, doctors and canteen staff. The main outcomes-to be assessed after 12 months-will be changes in BMI and other physical parameters in 150 students in grades 3-5 at each of the 12 schools.

Childhood obesity is clearly a growing problem in urban China that will have major long-term health consequences. This study is novel in that it is the first in China to consider what can be done about the school environment to address the problem. When conducting the study the investigators will need to assess the fidelity of the application of the policy changes and overcome resistance to committing the time and other resources needed to implement the desired environmental changes.

#### **3) Promoting Pregnant Women's Health (11-065)**

PI: Jun ZHU, Sichuan University

This three-year project intends to develop a nationally representative, real-time monitoring system for serious (near-fatal) obstetric events that can be used to improve obstetric quality and promote relevant policies. Standardized methods will be used to collect information on all pregnant and post-partum women in 120 representative hospitals at county level or above for a one-year period.

This project by a very influential group in the field with the authority to engage all maternity hospitals around the country has the potential of being a “game-changer” that could help focus activities and resources where they are needed.

#### **4) Insurance for Occupational Diseases and Accidents (11-066)**

PI: Hengjin DONG, Zhejiang University

This study over three years aims to assess the perceived willingness of workers and employers in industries with high rates of occupational diseases or accidents to change from the current industry-based health insurance scheme to a community-based insurance scheme that would provide improved coverage for occupational diseases and injuries. Information about preferences is obtained by

proposing hypothetical scenarios to 3,000 survey respondents from seven industries in Zhejiang Province.

Industry-based health insurance schemes are clearly not sufficient to cover the needs of workers in China who work in high-risk environments. And moving these workers into health insurance programs jointly sponsored by government and industry will be a complicated process. This study, the details of which need to be further elaborated in a pilot study, will help identify potential pathways for making this conversion.

#### **5) Health Technology Assessment and Policy Making (11-067)**

PI: Yingyao CHEN, Fudan University

This study over three years uses qualitative and quantitative methods to assess enabling and impeding factors that affect the translation of evidence from Health Technology Assessment (HTA) into health policy. The study uses drugs, high-cost medical devices (stents and hip replacement) and hi-tech medical equipment (CT and MRI) as case studies to assess the relationship between HTA research findings and policy. Surveys and in-depth interviews with HTA researchers and policy-makers at the provincial and national level will be used to develop measures of the effectiveness of translation of research findings into health policy.

This is a theoretically and methodologically sound project by an international collaborative group that has extensive experience in Health Technology Assessment. The high-status of the researchers should help overcome the problem of getting access to key informants (policy makers) and ensuring that the information they provide is unbiased. This work will help formulate a China-specific model of Knowledge Translation that can promote the development and testing of interventions aimed at strengthening the role of research results in policy-making.

#### **6) Rational Antibiotics Use in Rural China (11-068)**

PI: Qiang SUN, Shandong University

The study over three years will assess antibiotic usage that includes a survey of residents, in-depth interviews with health care providers and an analysis of prescription data in 24 village clinics, 12 township hospitals, and 3 county hospitals in rural Shandong. Its findings will be used to devise an educational intervention for health care providers aimed at improving the rational use of antibiotics. After implementing the intervention for 12 months in half of the sites the baseline assessments will be repeated and changes between intervention and control communities will be compared.

Inappropriate use of antibiotics is a serious problem in rural China that has been difficult to resolve, largely due to the difficulty of changing public and professional attitudes about ‘appropriate’ use. The pilot study will help assess the validity of the data collection procedures and, most importantly, help define operational criteria for ‘rational use’ of antibiotics in the context of rural China. The authors and their international collaborators integrate three sources of data about the problem that will make it possible to assess post-intervention changes in the knowledge, attitudes and behaviors about antibiotic use of both providers and consumers.

#### **7) Integrated Rural Healthcare Services (11-069)**

PI: Liang ZHANG, Tongji School of Medicine, Huazhong University of Science and Technology

This three-year project is a quasi-experimental study conducted in four rural townships in Chongqing Municipality that aims to develop and test two interventions aimed at improving the integration and effectiveness of rural health care services. The interventions include 1) improved coordination of services between county hospitals, township hospitals and rural clinics; and 2) the adoption of a DRG payment system. To assess the effectiveness of the interventions patients with hypertension, stroke,

coronary heart disease and diabetes will be followed for 3 years and the course and outcome of their illness will be compared between the intervention and control sites.

Poor service coordination is a major problem that limits the effectiveness of rural health care reform. The current study aims to identify the enabling and inhibiting factors that influence rural service coordination and, based on this knowledge, develop and test an intervention focused on these factors. The authors need to be more specific about the interventions they intend to implement, but this can be clarified during the pilot phase of the study.

#### **8) Training Rural Physicians on Mental Depression (11-070)**

PI: Liang ZHOU, Central South University

The three-year project aims to improve the outcome of training rural physicians about mental depression by adding a two-hour behavioral rehearsal component to the standard six-hour didactic course. The goal is to make rural clinicians more likely to refer (not treat) persons with possible depression for a mental health assessment at the nearest township-level hospital. Four hundred rural physicians from three counties in Hunan will be randomly assigned to standard training or standard training plus behavioral rehearsal and differences in changes in knowledge and clinical skills (assessed by using trained proxy patients) between the groups will be compared.

The central government is very interested in expanding the role of primary care providers in the provision of mental health services, particularly in rural areas. The current proposal—by an experienced researcher from a well-known center—compares two training models for doing this, and hopes to show the added benefit of including behavioral rehearsal in training packages for rural physicians (which may also be useful for training other content to rural physicians). But referring patients for a mental health assessment is only one small part of the bigger problem of why so few rural residents with depression receive adequate care; the authors will subsequently need to show that increased referrals actually leads to improved community mental health.

#### **9) Hospital-Community Joint Chronic Diseases Intervention (11-071)**

PI: Dongfu QIAN, Nanjing Medical University

This project over two and a half years, using Type II diabetes and Grade 3 hypertension as target conditions, employs surveys, in-depth interviews, focus groups, document reviews, and service utilization records to compare the quality and efficiency of three types of collaborative models between hospitals and community health centers (CHCs) in urban areas of Jiangsu Province: 1) ownership of the CHCs by the hospital; 2) management of the CHCs by the hospital; and 3) independent management of the CHCs and hospital. One typical hospital-CHCs pair of each type is selected and 150 patients with diabetes and 150 with hypertension are recruited from each CHC for detailed assessment

CHCs are expected to manage more and more of the chronic disease burden in China but its unclear what type of collaborative relationship with hospitals works best, so this study addresses an important topic. The heavy dependence of the study on respondent's subjective reports necessitates close attention to the comparability of the samples, the appropriateness of the definitions of 'quality' and 'efficiency' and the reliability and validity of the instruments used to assess these outcomes.

#### **10) Training for Increasing Adherence of Hypertension Therapy (11-072)**

PI: Hui LI, Shandong University

The three-year study will be based in 12 of the 17 Shandong villages that participated in a large hypertension study in 2009. Findings from an initial qualitative study about gender-specific factors that influence hypertension control in the elderly will be used to develop training packages for village doctors. In four villages the village doctors will not be given supplemental training, in four villages they will be given two days of training about gender-related issues followed by one-day booster

courses every three months, and in four villages they will be given gender-specific training and additional training about the medical technicalities of hypertension control. In each village 100 hypertension patients 55-75 years of age will be followed for twelve months; the main outcome will be comparison of changes in blood pressure between the three groups.

Most hypertension treatment studies in China are focused on young and middle-age men but rates of serious complication are much higher in the elderly and are as common in women with hypertension as in men with hypertension. Improving identification, care-seeking and treatment compliance in the elderly—particularly elderly females—is, thus, an important goal. But physician awareness is only one of many factors that influence blood pressure in the elderly so the authors need to assess and, to the extent feasible, address the many other factors that could limit the effectiveness of this brief educational intervention for village doctors.

### **11) Evaluating Rural Medical Insurance System (11-073)**

PI: Peiyuan QIU, Sichuan University

This study at over three years is a replication of 2007 European Union-funded project on the effects of the New Cooperative Medical Scheme (NCMS) policy on utilization of health services and family poverty due to catastrophic medical expenses. It will assess changes in these effects in Fushun County, Sichuan—one of the four counties that participated in the initial study—after the per capita government subsidy increased from 50 RMB to 150 RMB. Using the same instruments as the original study, household surveys will be conducted in same 3,000 households that participated in the initial study and in-depth interviews will be conducted in households where 2010 medical expenditures exceeded 40% of their 2010 disposable incomes.

The NCMS has rapidly expanded the number of rural residents with health insurance but the level of coverage has been insufficient to help families with catastrophic medical expenses. This follow-up study—by a young researcher who participated in the original study—has the great advantage of being able to rely on the strong methodology of the original study. Lacking a comparison county that did not have the increases in government subsidy, the author will not be able to claim a causal link between the three-fold increase in government subsidies and any improvements in utilization and decreases in catastrophic medical expenses; but the study is, nevertheless, well worth doing.

### **12) Integrated Methadone Treatment (11-074)**

PI: Jing GU, Sun Yat-sen University

The three-year project will develop and assess a method of adding psycho-social support services provided by social workers to current Methadone Maintenance Treatment (MMT) programs with the goal of decreasing the high drop-out rates from these programs. Dropout rates, abstinence (compliance) rates and psychological symptoms over a six-month period will be compared between 200 clients who receive standard MMT at two randomly selected MMT centers in Guangzhou to those of 200 clients who receive standard MMT *plus* adjunctive psycho-social support at two other MMT centers.

Heroin abuse is one of the most common methods of transmitting HIV in China so the government has recently built hundreds of MMT centers around the country to address this problem, but recidivism rates are quite high. This well-designed study will adapt Western methods of providing psycho-social support to heroin abusers for use in China and assess the incremental benefit of this social worker-administered intervention. The authors need to add a cost-effectiveness component to the study.



## Addendum II

### Eligible Institutions (in alphabetic order) & Liaison Officers

Institute	Liaison	Title	Email	Phone
<b>Central South University</b>	Wu Zhigang	Associate Professor Vice Director International Cooperation Office	wbxiangya@xysm.net	86-731-8877945 /4805209
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<b>Fudan University</b>	Zhu Chouwen	Associate Professor Deputy Director Foreign Affairs Office	cwzhu@fudan.edu.cn	86-21-54237421 86-21-65642041
	Lv Yuping	Chief CMB Affairs Office	yplu@fudan.edu.cn	86-21-65642260
<b>Harbin Medical University</b>	Yang Libin	Professor Deputy Director Institute for Medical Education	aaronylb@gmail.com	86-451- 86669493
<b>Huazhong University of Science and Technology</b>	Wang Haikun	Program Officer International Exchange Center	whk107@yahoo.com.cn whk22@hotmail.com 896026943@qq.com	86-27-87548857
<b>Jiujiang University Medical Center</b>	Xia Xiulong	Vice Dean	xiulongxia@yahoo.com.cn	86-792-8312633
<b>Nanjing Medical University</b>	Xu Shan	Director Office of International Communication and Cooperation	xushan@njmu.edu.cn	86-25-86862011
<b>Ningxia Medical University</b>	Teng Jing	Professor Director Collaboration and Exchange Department	teng-jing@x263.net	86-13895175550
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<b>Sichuan University</b>	Deng Hong	Professor Deputy Director Office of International Projects	deng_hong@tom.com	86-28-85403072
<b>Tibet University Medical College</b>	Labasang zhu	Program Officer	iron.tiger.hog@gmail.com	86-1820801429
<b>Xi'an Jiaotong University</b>	Zhou Yuling	Deputy Director International Exchange and Cooperation	zhouyl@mail.xjtu.edu.cn	86-29-82655058
<b>Zhejiang University</b>	Yu Hai	CMB Program Director	yuhai@zju.edu.cn	86-571- 88208060
<b>Sun Yat-sen University</b>	Gu Wenli	Deputy Director	guwenli@mail.sysu.edu.cn	86-20-84111982