FORUM ON HEALTH, ENVIRONMENT AND DEVELOPMENT:

CELEBRATING 10 YEARS OF WORK
FORHEAD
健康、环境与发展论坛
FOREWORD

China’s rapid economic development has lifted millions of people out of poverty, but it has also caused serious environmental degradation that poses long and short term risks to public health. Understanding and addressing these impacts requires knowledge from many disciplines and the engagement of multiple actors across government and society.

FORHEAD was formed in 2008 to promote interdisciplinary collaboration across the natural, medical and social sciences on interactions between environment, health and development in China. Since then, we have used a package of activities to nurture and support communication and collaboration among researchers and other professionals working in this field. Over 10 years, more than 750 people have participated in FORHEAD activities.

The network was launched through a collaboration between the Social Science Research Council’s (SSRC) China Environment and Health Initiative (CEHI) and four Chinese research institutions (the Institute of Geographic Sciences and Natural Resources Research of the Chinese Academy of Sciences, the College of Environmental Economics of Beijing University, Kunming Medical University, and the College of Humanities and Development of the China Agricultural University). Since then, researchers from many other institutions across China have joined us and played an active role in organizing FORHEAD activities. FORHEAD has also collaborated with government agencies at the national and local level, and with NGOs.

Environment and health across the disciplines:

FORHEAD is supported primarily by the Rockefeller Brothers Fund.
STRENGTHENING KNOWLEDGE, CAPACITY AND CONNECTIONS

FORHEAD has worked through a package of interlinked activities, including small grants for interdisciplinary, problem-driven research, a Summer Institute to strengthen interdisciplinary methods, and an annual conference to share new research findings. As our program has matured, we have formed more focused working groups and organized activities for different users of research. Currently our focus is on publications and bringing FORHEAD’s work to a broader audience within China and internationally.

SMALL GRANTS FOR COLLABORATIVE RESEARCH

Over 10 years, FORHEAD has given more than 90 small grants to Chinese researchers and NGOs, to support interdisciplinary projects on environment and health. Topics have included the environment and health impacts of rural mining and industry, agricultural intensification and the health risks posed by waste treatment and air pollution.

Projects have involved analysis of macro-level data, but also fieldwork in communities in 10 different provinces in China. Some projects have focused on particular populations, including migrants, garbage pickers, construction workers and rural women.

Topics for small grants research projects
SNAPSHOTS OF SELECTED SMALL GRANT PROJECTS

FORHEAD made multiple grants to researchers from nine different disciplines to explore the environmental, health and livelihood impacts of lead and zinc mining in Hunan.

A village in Guangdong with pollution from multiple metal mining was part of a study of “cancer villages” by Chen Ajiang and his team from Hohai University.

The environmental NGO Panshi has worked extensively on the treatment of solid waste. FORHEAD supported a study of pollution from a waste incinerator.

Lu Jingfang of China Agricultural University researched integrated agriculture in Guizhou. This village had successfully revived traditional crop varieties and farming methods.
SNAPSHOTS OF SELECTED SMALL GRANT PROJECTS

The Yunnan Health and Development Research Association studied villagers' perceptions of environmental health risks from a local fertilizer factory.

Yang Lichao of Beijing Normal University researched the environmental health risks facing garbage pickers in Guizhou.

Su Shipeng of Fujian Agriculture and Forestry University, studied the impact of intensive pig farming on water quality.

A multi-disciplinary team organized by FORHEAD examined the progress of Shenqiu County, Henan in moving to a more sustainable development path.
THE FORHEAD SUMMER INSTITUTE

The FORHEAD Summer Institute is an intensive, one-week introduction to interdisciplinary approaches to environment, health and development. It is attended by the short list of applicant teams for the small grant program and other early career researchers. More than 200 people have attended institutes from 2008 through 2016 in Kunming, Xiamen, Guangzhou, Shantou, Guiyang, Fuzhou and Huairou.

At the Institute, senior researchers explain the methods and debates characteristic of their discipline, and the contribution they can make to our understanding of environmental impacts on health and tradeoffs between health concerns and livelihoods. Right, Yang Lichao of Beijing Normal University discusses her ethnographic work on garbage pickers.

The team visit an organic farm outside Guiyang in 2014. Other fieldtrips have included an organic tea plantation in Fuzhou and a joint venture egg production facility in Pinggu District of Beijing.
SPECIAL PROJECTS AND WORKING GROUPS

In order to understand the ways in which interactions between environment, health and development change over time, and bring in different disciplinary expertise as it is needed to understand these evolving challenges, FORHEAD has supported research in several sites over up to 10 years. This had deepened our understanding of the challenges associated with different development strategies in rural areas, and the tensions between economic development, environmental protection and health.

Starting in 2009, an interdisciplinary FORHEAD team has investigated the impact of lead and zinc mining on health and rural livelihoods in a mountainous rural area of Hunan. Researchers from medical geography, ecology and land use, public health, rural development, social psychology, anthropology, soil science, food science and public administration have participated.

Mining causes pollution from multiple heavy metals, which are a risk to health through food, water and dust, as well causing subsidence and the depletion of water resources.

Team members meet to prepare a survey covering rural livelihoods, land use and perceptions of risks to health from mining.

FORHEAD researchers explain to villagers the ways in which heavy metals affect health through the food chain and ways for reducing risk through soil management and diet.
FORHEAD’s work on food began with a focus on food safety. In collaboration with the Renmin University School of Law we produced an interdisciplinary report on food safety, analyzing the landscape of different problems, their drivers, their distribution across different geographies and populations, and the governance landscape.

Later, we expanded the scope to include interactions between food safety and nutrition, and also the interaction between physical and social systems in generating food safety risks. This work is presented in a special issue of the Journal of Ecology and Resources with articles from across the natural, medical and social sciences. An expanded version will be available in Chinese in early 2019. Our current work focuses on the environmental, health and development dimensions of the pork industry.
AIR POLLUTION

The quality of China’s air has been the subject of intense public concern for many years and since 2013 the government has been waging a “war” against pollution. While it may seem to be purely a matter of stronger environmental policy, understanding the complex composition, sources and health effects of air pollution within and across different regions of China continues to present many thorny scientific problems. And tackling air pollution involves multiple sectors, from industry and energy to transportation and agriculture. Because the sources of air pollution include labour intensive industries, household heating and personal vehicles, controlling it also has impacts on urban employment and rural livelihoods that must also be addressed.

FORHEAD’s air pollution working group has recently completed a report that unpacks these multiple dimensions of air pollution with analysis from across the natural, medical and social science disciplines.

In December 2017, FORHEAD held a workshop in collaboration with the Long Institute of the University of California, Irvine, enabling us to engage with American and European researchers working on air pollution.
The FORHEAD annual conference in Beijing is an opportunity for researchers from across the disciplines to present their latest research, identify key questions for future research and network across disciplinary and professional boundaries.

The conference is held at the Institute of Geographic Sciences and Natural Resources Research in Beijing. This year’s meeting will offer an overview of progress and challenges in combating environmental health problems over the last 40 years, as well as a review of FORHEAD’s work.
PUBLICATIONS

This pair of English and Chinese language publications present FORHEAD’s initial review of the state of research on interactions between environment, health and development across the disciplines.

Right, FORHEAD collaborated with the Yunnan Health and Development Research Association to translate key articles on environment and health in the international literature.

Left, this edited volume gives a regional analysis of interactions between environment, health and economy across China. It shows that while in some regions there is synergy across these dimensions of development, in others there are tensions and tradeoffs.

Research conducted under the small grants program has been published in books and in Chinese and English language journals, including the Bulletin of Environmental Contamination and Toxicology, the China Journal, The China Quarterly, Evidence and Policy, Environmental Monitoring and Assessment, the Journal of Environmental Policy and Planning, the Journal of Environmental Psychology, the Kunming Medical Studies Journal, Population Studies (人口学), Thammasat Review of Economic and Social Policy, World Development and Xuehai (学海), as well as university and professional association bulletins. The FORHEAD small grants supported more than 10 doctoral dissertations and at least 20 MA theses.
WORKING WITH PARTNERS

FORHEAD teams have worked with many partners in government, as well as with NGOs. Below, the Fujian University of Agriculture and Forestry team discusses pig farming and water pollution with village leaders, animal husbandry experts and third party environmental service providers.

Below, a multidisciplinary team meets with county leaders in Shenqi, Henan to discuss the work of different agencies related to environment and health.

In Fenghuang, FORHEAD researchers collaborated with the local Centre for Disease Control to understand risks to health from metal mining. In 2016. Above, some of the team took part in a training on food safety.