



Michigan Medicine
Peking University Health Science Center

北京大学医学部 - 密西根大学医学院
临床与转化医学联合研究所



JOINT INSTITUTE *for Translational and Clinical Research*

When West Meets East: A Unique Partnership Model for International Research

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Michigan Medicine - PKUHSC

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At what level is international research happening in your institution? Choose the highest level if multiple ones apply.

Faculty **A**

Department **B**

School/College **C**

Institute/Center **D**

University **E**

None to my knowledge **F**

Agenda

- Background
- Joint institute collaboration platform
- Key metrics
- Collaboration spin-offs
- New initiatives & Strategic plan 2.0

Michigan Medicine & China: A History of Collaboration

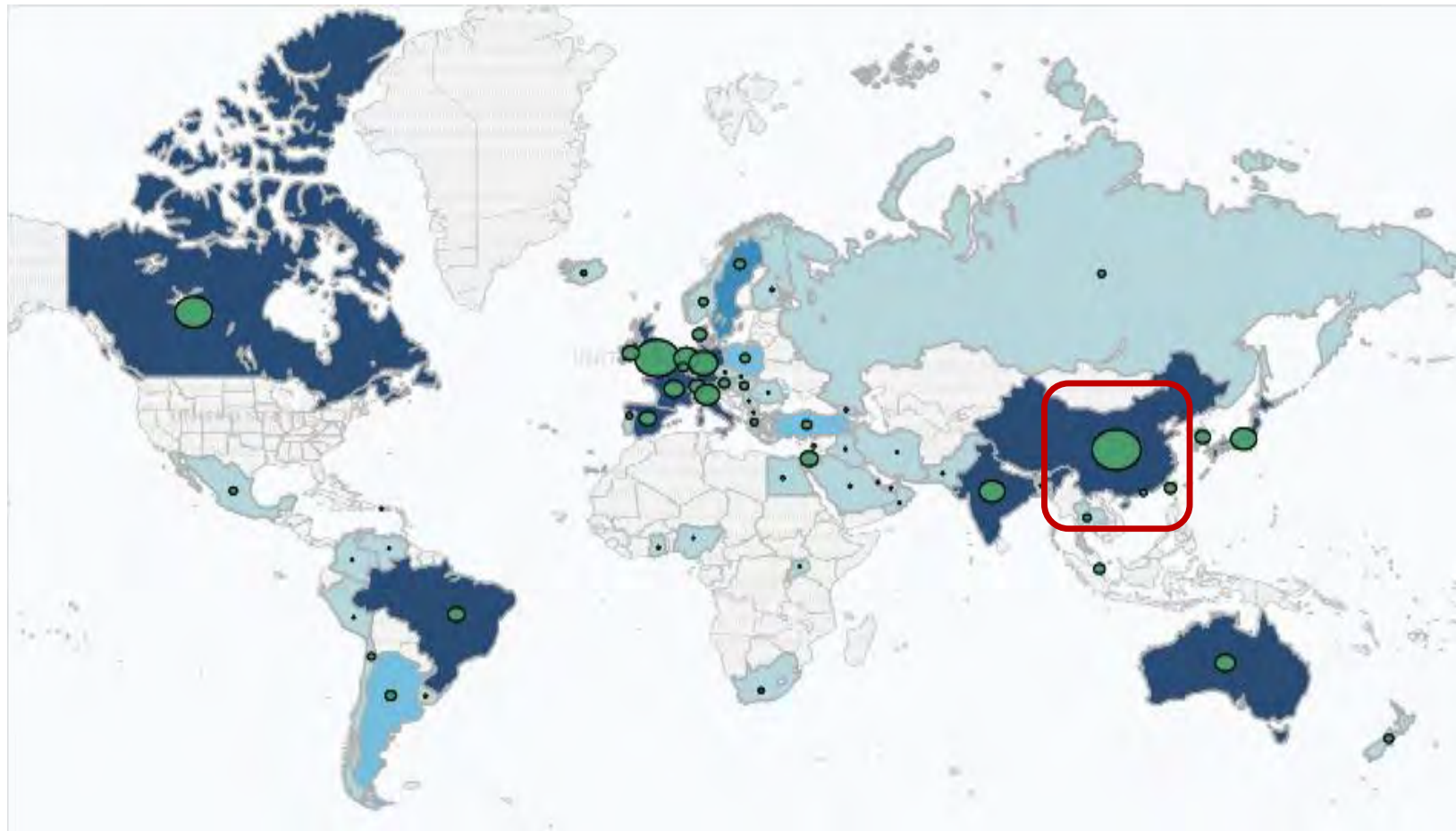


James B. Angell
U-M President (1871-1909)
US Minister to China (1880-81)



Shi Meiyu (Mary Stone)
UMMS Graduate (1896)
Among the first western-
educated physicians in China

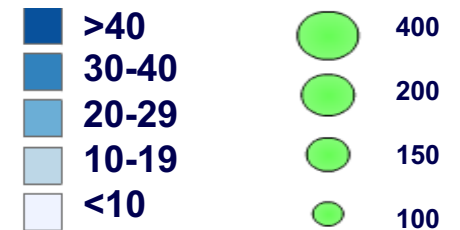
U-M Medical School Collaborations with China



Most Collaborations

- China (442)
- United Kingdom (333)
- Canada (234)
- England (160)
- Germany (139)

Collaborations



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Issues and Challenges

- Cultural barriers
- Concerns over data sharing and intellectual property
- Authorship and publication
- Data integrity; research ethics
- Politics

Strategic Collaboration Platform





Research

- \$646 Million annual research funding.
- #1 in research volume among US public Universities.
- 1.6 million ft² of dedicated research space.



Education

- 720 medical students, 527 graduate students, ~1300 residents & fellows.
- 21,000 alumni.
- A top 10 ranked US medical school.



Patient Care

- 3 affiliated hospitals and #5 in the US.
- 1,043 licensed beds.
- 46K discharges; 51K surgeries; 2.4 million annual outpatient visit.



Research

- 27 research institutes; 64 research centers.
- 1 state key lab; 1 national engineering lab.
- 1202 professors; 16 academicians.



Education

- 76 academic doctoral programs.
- 5,300+ graduate students.
- 3,900+ undergraduate students.



Patient Care

- 10 affiliated hospitals.
- 10,000+ beds
- 502K annual inpatient visits; 15 million+ annual outpatient visits.

Why a Joint Institute? What are the Institutional Benefits?



- Enhance translational research capacity, productivity.
- Enhance qualified workforce for basic science and clinical research.
- Attract high-quality students through an MD/PhD joint program.
- Successfully compete for grants and/ or endowments requiring international partnership.



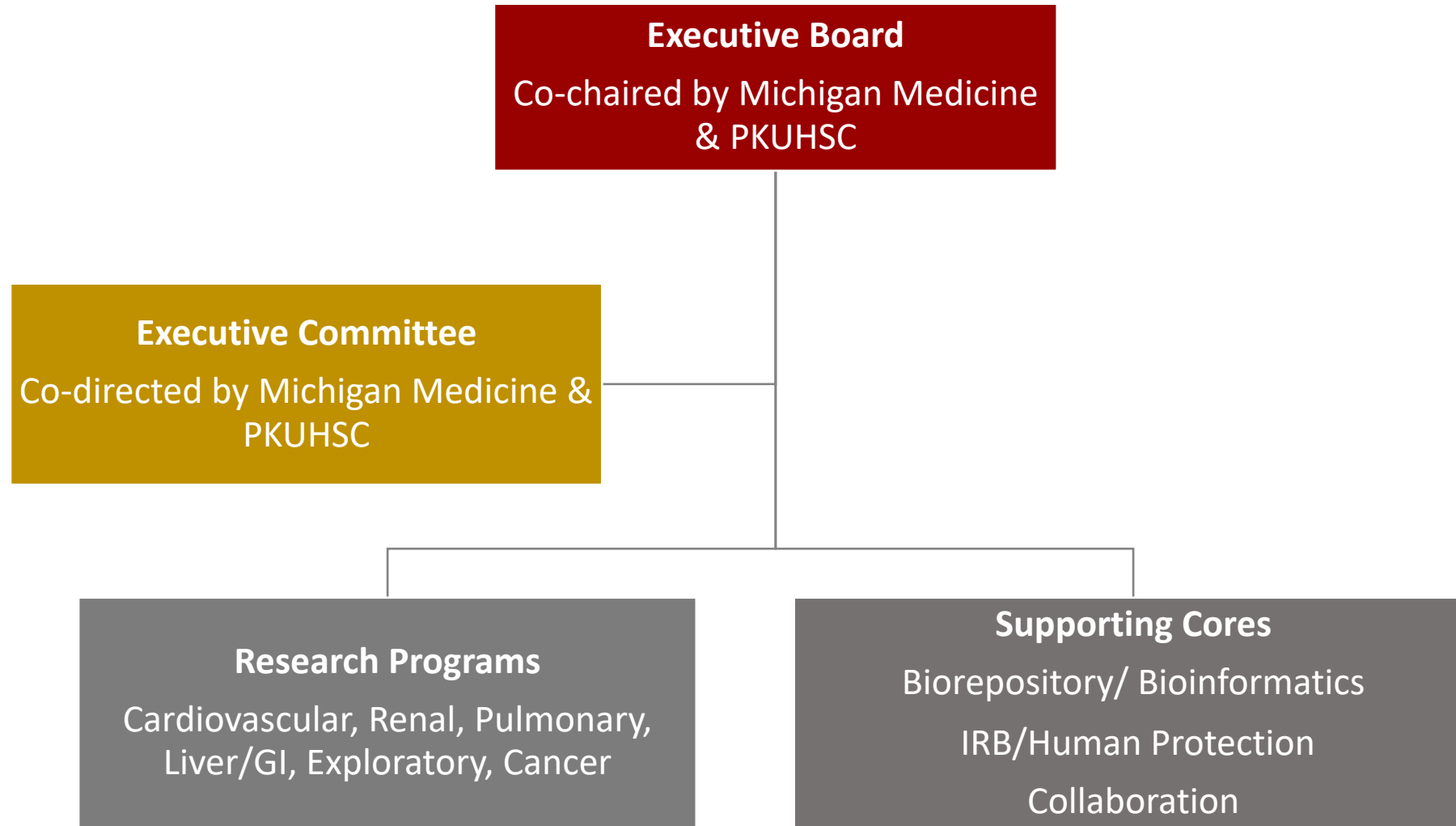
- Strengthen support for translational and clinical research to ensure quality and productivity.
- Enhance qualified workforce for basic science and clinical research.
- Provide an excellent exchange opportunity for students to gain international vision of medicine.
- Successfully compete for grants and/or endowments requiring international partnership.

Joint Institute (JI): Framework for Continued Collaboration

Launched in 2010, the Michigan Medicine-PKUHSC Joint Institute aims to promote:

- Joint translational and clinical research.
- Exchange of faculty members, learners, and other researchers.
- Lectures and symposia.
- Research on the “science of collaboration”

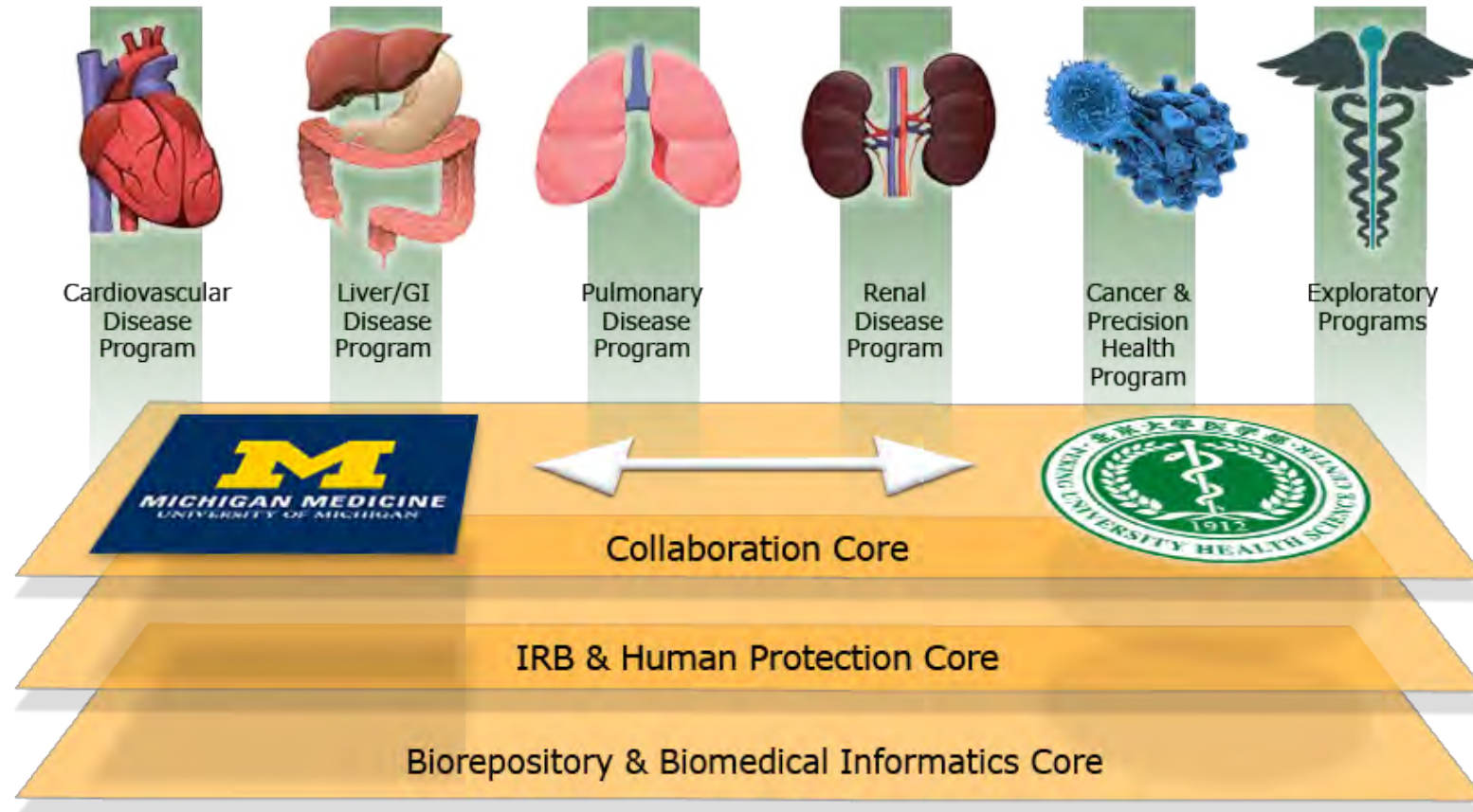
Joint Institute Governance Structure



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A Unique Structure for Success: Programs & Cores



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Joint Institute Collaboration Core

- Science of collaboration
- Build and facilitate collaboration & matchmaking
- Formulate strategies and policies related to RFP, communication, project management, and coordination
- Provide support to research teams:
 - Grant editing
 - Guidelines on Other Support & COI disclosure

Annual Symposium

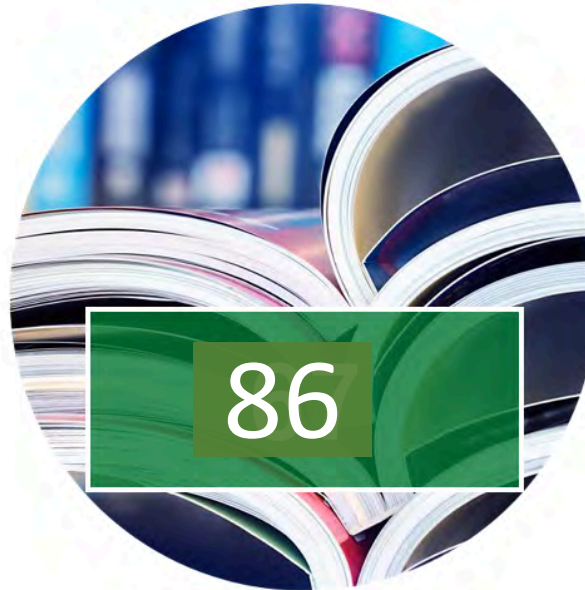
- To share research results
- To facilitate collaboration



JI by the Numbers



JI project awards to date



High-impact publications to date



Extramural funding to date

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Summary of JI Funded Projects & Select Outcomes

Thematic Programs	# of Pilot/Discovery Awards	JI Funding	# of Research Samples/Patients	# of Publications to Date	Extramural Funding Secured -UM	Extramural Funding Secured -PKUHSC
Cardiovascular	9/5	\$ 6,043,351	19,271	36	\$14,628,096	\$1,045,000
GI/Liver	5/4	\$ 4,000,174	2,749	19	\$4,869,526	\$ 1,500,000
Renal	2/9	\$ 2,135,927	110,469	13	\$4,916,944	\$ 1,242,000
Pulmonary	2/5	\$ 2,351,963	562	8	\$1,580,747	\$ 247,000
Cancer	1/1	\$ 800,000	0	0	0	0
Exploratory	2/14	\$ 4,389,927	5,907	10	\$1,280,000	\$ 429,000
Total	21/38	\$19,721,342	138,958	86	\$27,275,313	\$4,463,000

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Publications



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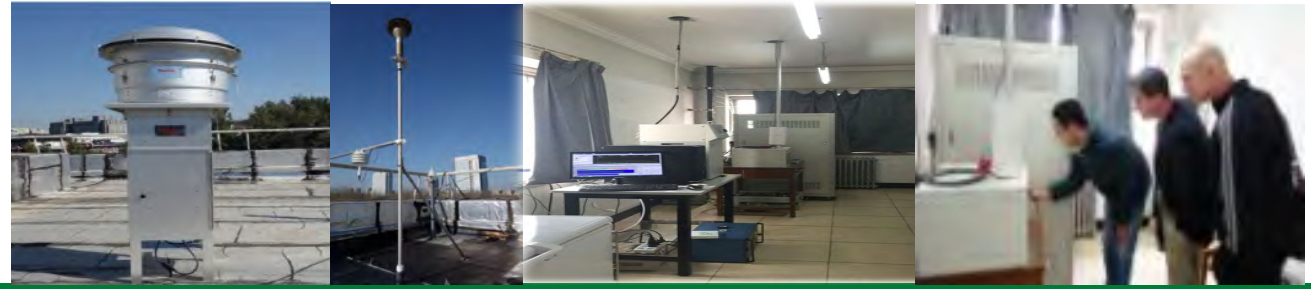
JI by the Numbers – Patent Submissions

Patent Name	JI Faculty Members	Filing Country	application number	Status
Targeted Imaging of Hepatocellular Carcinoma	Tom Wang Bishnu P Joshi, Zhao Li Juan Zhou	United States & China	UM 6702 US Utility 16/491,117	Pending
Valproic Acid for Treatment of Myocardial Ischemia	Zhong Wang Hasan Alam Yongqi Li Eugene Chen	United States	US-20180325850-A1	Pending
Treatment of Sepsis and Septic Shock (CitH3 as a diagnostic tool)	Hasan Alam Yongqing LI	China	China 201710096048	Pending

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Cardiovascular & Air Pollution



Key Achievements:

- 7 joint publications
- 4 manuscripts under submission/preparation
- 1 ongoing NIH R01
- Active involvement in WHO task missions on global air pollution intervention

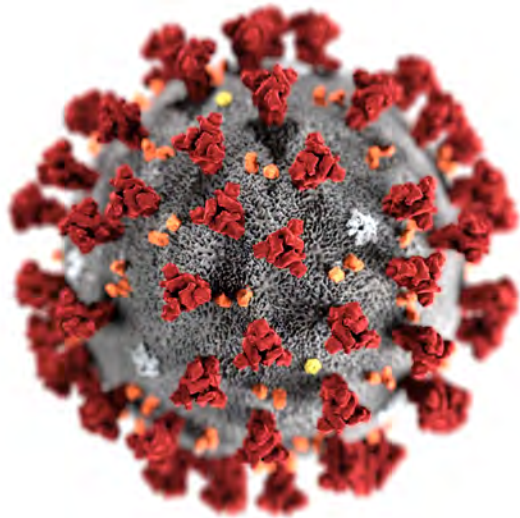


MD/PhD Dual Degree Program



- The joint program prepares physician scientists for careers in academic medicine with a focus on biomedical research
- MD training at PKUHSC & PhD phase at the U-M
- Collaborative financial model to provide scholarship: Rogel scholarship, Dean's commitment, mentors, and MD/PhD scholarship.

We are at a Unique Time



CRISIS

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Danger

机

Opportunity

COVID-19: Lessons from China

A Roundtable Discussion with our PKUHSC partners who've been on the front lines against coronavirus

Throughout February and March, China dispatched physicians and nurses from around the country to Wuhan to help treat the surge of coronavirus patients.

Join us for a virtual discussion to hear from several of our Joint Institute collaboration partners who took part of that effort.

A live-streamed event from Beijing, Wuhan and Ann Arbor:

Date: Thursday, March 26

Time: 7 - 8:30 a.m. (EST)



Beijing



Wuhan



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Jl Coordinates Donations to MM

- JI faculty lead the efforts in raising funds, securing and donating PPE to MM – Eugene Chen & Shaomeng Wang
- Over \$120K raised within five days and two huge patches of PPE donated to MM, including 4000 DuPont Tyvek Coveralls, 2,000 N95, and 22,000 surgical masks, 500+ ounces of hand sanitizer, 1,000 pairs of goggles, 1,000 face shields, etc.
- With the help of PKU hospitals and JI leadership & Development Council members, additional PPE has been secured in China and is on the way to Ann Arbor, including 10,000 3M N95, 10,000 equivalent N95, 60,000 surgical masks, and more...

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CELEBRATING 10 YEARS!

- Virtual celebration
 - September 24, 7-8:30 am, EST
 - ~200 people attended
 - External & internal panelists
- Trusted conversation series
 - Kickoff session
 - COVID-19 vaccine roundtable, January 22
 - Vaccine experts from U.S. and China
 - More to come



JI 2.0 Strategic Planning

- Vision

As an international partnership to advance health, the Michigan Medicine-PKUHS Joint Institute for Translational and Clinical Research is to enable top researchers from both institutions for high-impact collaborative research to advance medicine in the U.S., China, and beyond.

- Guiding Principles

- Transform JI 1.0 organ-based programs to JI 2.0 support for scientific themes
- Engage stakeholders to define focused research priorities and shape future RFP
- Cultivate high-quality data sets on cohorts of interest
- Strengthen JI enable functions to optimize inter- and intra-institutional collaborations
- Advance and promote JI competitive platform with access to trusted and high-quality cohorts to attract industry partners and develop sustainable financial models

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What is the biggest challenge of fostering international research in your institution?

 Poll Everywhere

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