

# Brief Introduction to IDMR

Sichuan University –The Hong Kong Polytechnic University  
Institute for Disaster Management and Reconstruction



IDMR

## Overview:

- What is IDMR?
- Scope of activities
- Strategic priorities and recent accomplishments
- Development of degree programs
- Focus on new models for international collaboration on research and education
  - The “Alliance of Alliances”, working with the “High-Level Experts and Leaders Panel on Water and Disasters (HELP)
  - The Himalayan University Consortium (HUC), Thematic Working Group on Disasters

- 以“地球人都要有灾害意识，地球人都要有灾害教育”此为理念 Milestone initiative

2008年汶川地震以后，我校与香港理工大学共同组建了“**四川大学—香港理工大学灾后重建与管理学院**”，并得到香港马会2亿人民币捐助。

After the 2008 Wenchuan Earthquake, IDMR was co-built with Hong Kong Polytechnic University with a donation of RMB 200 million from the Hong Kong Jockey Club

- **建设目标: Development objective**

建设成为高水平、全球化、多学科、宽领域，应对全球灾害与重大危机处理，集科学研究、专业人才培养及社会服务的重要基地。**Globalized, high-level, multi-disciplinary and wide-ranging Institute; tackling global disasters and major crises, integrating the functions of scientific research, professional talents training and social services.**



- 学院已完成总投资近**4亿元人民币**，其中实验室建设投入近1.1亿元，已经建成了具有世界先进水平的重大灾害与危机处理系列实验室

The Institute has completed an investment of RMB 400 million, of which 110 million has been put into laboratory construction

- 物理治疗实验室  
Physical Therapy Lab
- 作业治疗实验  
Occupational Therapy Lab
- 义肢矫形实验室  
Prosthetics & Orthotics Lab
- 灾害护理实验室  
Disaster Nursing Lab
- 灾害力学实验室  
Disaster Mechanics Lab



- 所有实验室面向全校和社会开放，服务于教学、科研、培训等多种需求
- All of these laboratories are accessible to the entire university and society**

2015年4·25尼泊尔8.1级特大地震：提供地震紧急医学救援与灾后重建支援。

4·25 2015 Nepal mega-earthquake

- ① 第一时间派出医疗人员100余人次，进行**紧急医学救援**  
**Immediately Sent Medical Staff Over 100 Persons;**
- ② 第一时间赴灾区调研评估10余人次，进行**灾后重建的咨询和政策建议**  
**Consultation And Policy Advice for Post-disaster Reconstruction;**
- ③ 第一时间成立“**四川人援助尼泊尔地震联席会**”组织社会力量参与尼泊尔灾后支援工作**Established "Sichuan People's Joint Committee on Aid to Quake-stricken Nepal" ;**
- ④ 同时协调**中国社会组织**参与尼泊尔灾区的抗震救灾，有力促进了灾区的恢复与重建**Coordinated China's social work;**
- ⑤ 同时为尼泊尔**紧急培训**灾后重建专业人才200余人**Training for over 200 senior talents of Nepal;**
- ⑥ 同时邀请**尼泊尔大学生**300余人来川大，学习灾害科学知识以及中国灾后重建的丰富经验**Invited 300 plus Nepalese students to SCU;**



我们已从“**因灾害被世界关注**”的大学走向了“**关注世界灾害**”的大学。

From a university “concerned by the world due to disasters” to a university “concerning world disasters”.

## What kind of research and higher education programs do we need?

- Providing broad interdisciplinary perspective, but maintaining depth in at least one of the foundational professional disciplines
- Team-based, multinational research from the earliest stages, e.g. freshman year
- Experience in working with multiple sectors of society, e.g. government, private sector, civil society, embedded into the curriculum
- A deep comparative understanding of how social, cultural, historical, economic and political considerations affect the possible range of solutions to technical problems
- Promotion of student leadership skills, strong oral and written communication skills

**In sum, a multinational, multidisciplinary PROJECT-BASED approach to integrating our disaster-related research and educational agendas**

## And what about undergraduate disaster programs? Elements we can build on:

- Experience worldwide in undergraduate research programs, and in “coop” and “internship” programs with industry and governmental partners
- Experience with “service learning” models (Hong Kong PolyU has a notable record here)
- Experience with innovations in engineering education, and in particular with team-based design projects in collaboration with industry and civil society partners.

**At IDMR we are developing an undergraduate program on “Integrated Disaster Sciences and Management”, which will include: 1) a stand-alone degree, with common core and multiple possible specialization; 2) options for students to do dual majors, e.g. joint program with IDMR and computer science on IT for disaster risk reduction and response, architecture and disasters, etc.; 3) and a new minor program**

1. 高度跨领域研究：在灾害健康科学、灾害相关基础科学与工程、灾害相关的社会科学和灾害教育方面进行高度跨学科、跨领域研究

Highly interdisciplinary, with clusters of activity in disaster health sciences, basic sciences and engineering, and disaster-related social sciences, and disaster edu

2. 开创新型综合灾害研究和教育，建立新的跨学科本科  
Pioneering new approaches to integrating disaster research and education, including developing new interdisciplinary undergrad program,

3. 深化与全球顶尖名校深入国际合作

Build on deep international collabs, in both education and research, with some of the best universities worldwide

4. 加强与中国国家与地方相关机构合作

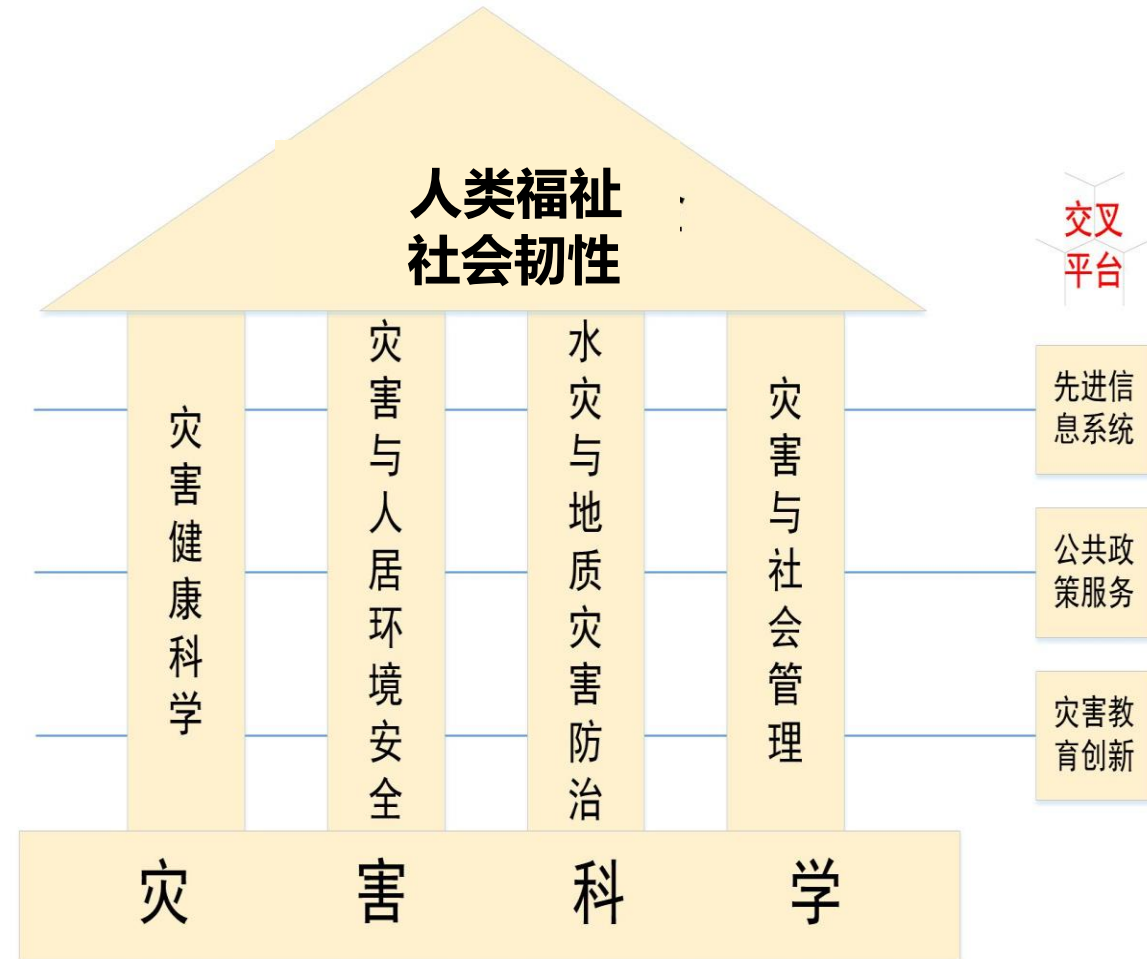
Collaborate closely with key Chinese national and provincial bodies

5. 人才引进招聘与IDMR的未来

Hiring progress and future

创建学科名称：综合灾害科学与管理

Integrated Disaster Sciences and Management





1. 高度跨领域研究：在灾害健康科学、灾害相关基础科学与工程、灾害相关的社会科学和灾害教育方面进行高度跨学科、跨领域研究

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## 灾害治理与公共政策

- 灾害社会工作
- 灾害教育与风险沟通
- 灾害福祉研究

灾害与公共管理

SCU交叉领先

水灾与地质灾害防治

- 地质灾害过程与防控
- 山洪灾害过程与防控
- 灾变流域生态修复与管理
- 跨境水灾害合作研究

- 灾害公共卫生
- 紧急医学救援
- 灾害康复医学
- 灾害流行病学
- 灾害心理学

灾害健康科学

灾害与人居环境安全

- 致灾机理与灾变规律
- 城乡防灾减灾规划
- 基础设施安全工程
- 韧性人居环境建设



2. 开创新型综合灾害研究和教育，建立新的跨学科本科 创建一个新的教育模型，交叉灾害科学与管理前沿，跨出边界工作，做他人未尝试之事，真正吸引世界关注，成为一流。

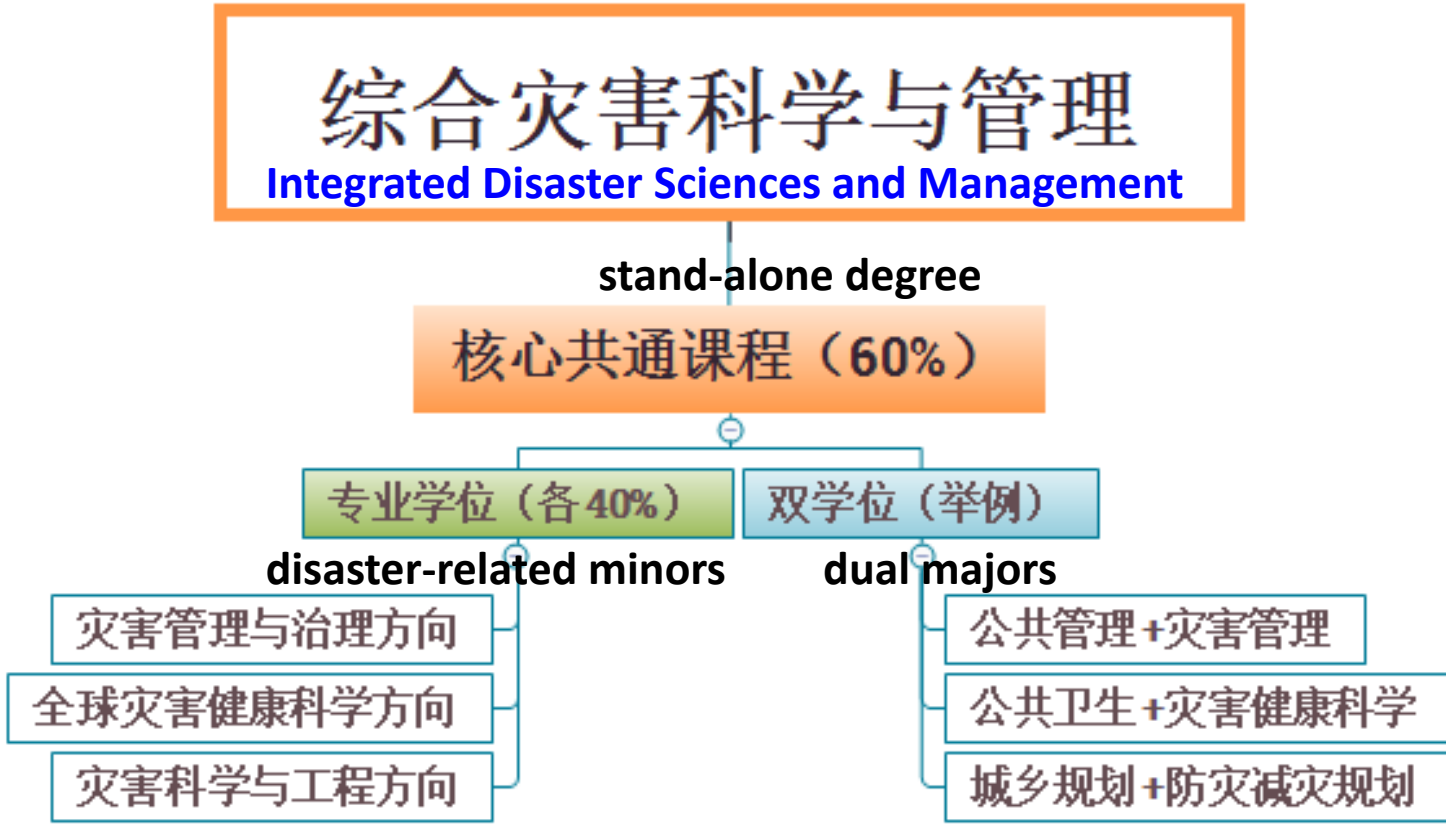
Pioneering new approaches to integrating disaster research and education, including developing new interdisciplinary undergrad program.

### ➤ 高度国际化合作办学

与世界一流大学共同设计，新设立高度国际化的“综合灾害科学与管理”交叉学科本科、硕士、博士学位项目。跨国团队活动和学生互换将是课程的重要部分。

### ➤ 灵活的学位选择设置

多学科方向、双学位、全方位创新交叉。培养综合灾害科学与管理国际化创新人才；创新高等教育人才培养模式，示范跨学科国际化科研和全球交叉学科建设

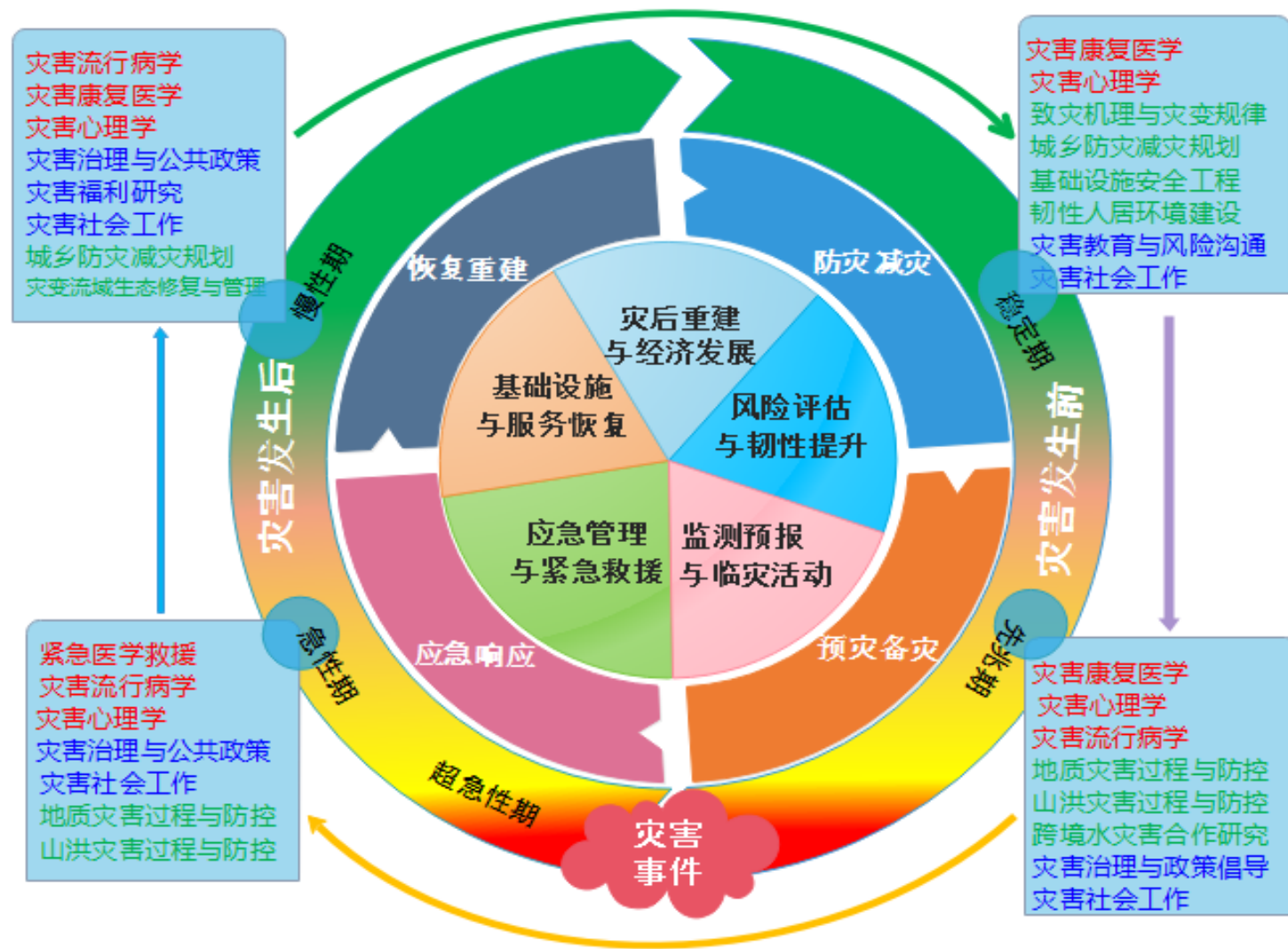


## 4. 加强与中国国家 and 地方相关机构合作

Collaborate closely with key Chinese national and provincial bodies

## 5. 人才引进招聘与IDMR的未来

Hiring progress and future



## Some priorities of the Institute of Disaster Management and Reconstruction

- Focus on collaborations on **integration** of research and innovative curriculum development
- Collaborations on disaster resilience on the **One Belt One Road**.
- Build on the work of our State Key Lab on **Mountain** Rivers and Hydraulic Engineering, other labs, agencies, etc. with mountain focus, e.g. Institute for Mountain Hazards and Environment (IMHE)
- Prioritize collaborations in the area of **disaster health sciences**, given our strengths and experience
- Collaborate strongly with Chinese agencies on **national level disaster education activities**
- Leverage collaborations between academies of science, professional societies, **IRDR**, etc.
- Build on **intergovernmental science programs**, e.g. the International Hydrological Program, IRDR
- **Networks of internationally designated sites** as living labs for DRR and sustainable development, leverage UNESCO-affiliated research centers
- Build on collaboration with the High Level Experts and Leaders Panel (HELP), particularly through hosting the Secretariat for the newly launched alliance (of alliances) of research institutes and universities on **water and disasters**.
- Collaborations on development of our **Disaster Information Research Center** (funding from Hong Kong Jockey Club, focus on knowledge services for and about **Western China**)

## A central question for multinational research and higher education collaborations:

- *Almost all DRR-related challenges are shared across national boundaries*
- *All of us are struggling with change with our organizations, including our research universities*

*Can we **couple** collaborative work on common, practical, multidisciplinary problems to mutually supportive work on strengthening our organizations themselves, in service to society?*

### **Core strategy:**

Create new multinational and multisectoral approaches which integrate collaborative research on disaster-related “**grand challenges**” into the curriculum, across the disciplines, and from freshman through masters and doctoral levels. **Tie to global SD agenda.**

## High-level Experts and Leaders Panel on Water and Disasters (HELP) 水与灾害高层专家与领导组 (<http://www.wateranddisaster.org>)

- **Established under recommendation of UN Secretary-General's Advisory Board (UNSGAB) in 2007 and upgraded to Ministers Level in 2013**  
2007年联合国秘书长水与卫生顾问委员会建议下成立，并于2013年升级为部长级别
- **Chaired by Dr.Han Seung-soo, former Prime Minister of Korea and UN Special Envoy on Disaster Risk Reduction and Water**  
韩国前总理、联合国秘书长减灾和水事务特使韩升洙博士任主席
- **Comprising 23 High Members (including 9 Ministers and 5 Heads of International organizations), 11 Advisors, and 2 Coordinators**  
成员含23位高级专家（包括9位部长和5位国际组织的领导）、11位顾问和2位协调人员
- **Working on implementation of Alliance of Alliances, on water and disasters. Co-Chaired by Kalonji and Prof. Toshio Koike (ICHARM). Secretariate at IDMR**  
柯瑞卿教授于2016年被任命为HELP顾问

# Mission and Achievements of HELP

## 使命和成果

- **Raise global awareness on importance of water and disasters at top level**  
在最高层面提升全球关于水与灾害重要性的认识
- **Galvanize actions for disaster risk reduction on water-related disasters at country and field levels**  
在国家层面推进涉水灾害的减灾行动

### Achievements of HELP (Examples) 成果示例

- **Co-organizing, with UN-Secretary-General, the UN Special Session on Water and Disaster, historically highest-level events on the subject, in 2013, 2015, 2017**  
2013年和2015年，与联合国秘书长共同主办联合国水与灾害主题会议，在该领域规格最高
- **Publishing high-quality Flagship Documents on Water and Disasters**  
发布高质量的水与灾害的重要文件
- **Producing global recommendation on climate change, disaster and cities, etc.**  
气候变化、灾害以及城市等提供建议
- **Tasked to play core role in the UN global water architecture and new UN Water Decade (2018-2028)**  
联合国十年水计划（2018-2028）核心作用





## “Alliance of Alliances” for Research and Education on Water and Disasters

1. **A communications role**, in providing a portal worldwide to research, best practices, etc, in this domain, and in enabling young scholars to connect with peers worldwide;
2. **An analytical role**: With a global scope, and intellectual and political independence, such an alliance could provide non-biased analysis of what works and would does not in terms of "water and disasters". This could be very valuable for policy formation;
3. **A catalytic role**: Such a network/alliance could prioritize the catalysis of innovative models of multinational, multidisciplinary collaborations on water and disasters. A focus might be on the higher education sector, given its strategic importance in our societies worldwide;
4. **A supportive role** to existing alliances, specifically in enhancing opportunities for collaboration on their ongoing work on water and disasters and disasters by sharing outcomes from the communications, analysis and catalysis mentioned above.

## The Himalayan University Consortium (HUC)

- **Headquartered at ICIMOD, in Kathmandu.** Brings together universities from the 8 countries that share the Hindu Kush Himalayas, on joint research projects, curriculum development and service. in providing a portal worldwide to research, best practices, etc, in this domain, and in enabling young scholars to connect with peers worldwide;
- **Thematic Working Groups formed:** After meeting of HUC leaders in Chengdu in 2017, working groups formed, including a “Disasters” group, led by Sichuan U and IDMR.
- **First meeting of “Disasters” group to take place on May 13, 2018 at IDMR:** Goal will be to formulate specific practical and focused multinational projects/.
- **Approximately 20 universities and institutes have joined this WG:** We have strong participation from each HKH country, but also welcome participation from other regions.

## Recent Developments at IDMR

- Awarded 51 million from National Ministry of Health to form the first of what will be 7 “National Disaster and Emergency Medicine” “bases” in China;
- In process of validation by WHO as an international emergency medicine team;
- Awards from the Ministry of Education “Double First Class Discipline” program for
  - Developing our undergraduate degree programs in “Integrated Disaster Sciences and Managements;
  - Developing our degree programs in “Disaster Medical Sciences”;
- Award from the Ministry of Education for a National Youth Education on Disasters Base;
- Award from the Hong Kong Jockey Club of an additional 81 million investment in the development of IDMR.

国家紧急医学救援综合基地

The First National Disaster and Emergency Medicine Base

- 全球第一支世界卫生组织认可民间3级紧急医学救援队伍训练基地  
Goal To be the first civilian WHO Type III Emergency Medical Team's Training base



“四川大学灾难医学中心”  
“Disaster Medicine Center, Sichuan University”

## Conclusions:

- IDMR still a very young institution, in a period of rapid growth.
- We look forward to further expanding our partnerships, especially with those interested in new models for multinational collaboration in research and higher education

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*IDMR*