### HEALTH INFORMATION SYSTEMS TO IMPROVE QUALITY OF CARE IN RESOURCE POOR SETTINGS

(Innovations in Global Health Informatics)

- Use MIT OpenCourseWare
- Start in Spring, 2012
- Graduate Institute of Medical Informatics
- · Full English course
- Online course for Fall semester & projectbased course for Spring semester













### Course Syllabus

#### **Objectives**

- Understand health care gaps and inefficiencies in resource-poor settings.
- Learn value-chain analysis, process re-engineering, design learning systems and quality improvement in the context of eHealth projects.

#### Requirements

- View MIT's weekly video
- Meet with project team online
- · Attend on site class
- Do final team project

COURSEWORK	GRADE
Class participation	10%
Homework	30%
Group project	60%

### Spring Course Election (2<sup>nd</sup> SANA course)

- Master/PhD Programs Graduate Institute of Medical Informatics
- Course#: 3105E053, 3100E146
- Course name: HEALTH INFORMATION SYSTEMS TO IMPROVE QUALITY OF CARE IN RESOURCE POOR SETTINGS

Students can get certificates signed by MIT & TMU instructors after finish the course.



### Course schedule & e-learning

#### **MIT TMU** Date Content Date Content 2/7 2/7 Course Begin Course Begin 3/28 Spring Break (no class) 3/28 Spring Break (no class) 5/9 **Final Class** 5/9 **Final Class**

E-Learning platform	The sectioning Station's Existing Station Station (C)
TMU Asynchronized (My2TMU) TMU Synchronized (for TMU team work or class meeting)	0
MIT Synchronized (WebEx) every Friday: •10pm-1am •9pm-12am (after 3/9)	Personalized Medication Management Platform (PMP)

#### **RESULTS FROM PREVIOUS COURSES**

# Students Enrollment (Spring, 2012)

Collage\Program	Ph.D	MS
Medicine		
Oral Medicine		1
Pharmacy	1	
Nursing		
Public Health & Nutrition	1	4
Medical Technology	1	6
Humanity		
Other		1
Total	3	12

Nationality	
Taiwan	7
Gambia	3
Pakistan	1
Jordan	1
Guatemala	1
Swaziland	1
Kenya	1

### Project List of Spring, 2012

- Household eHealth Screening (Kenya)
- Filariasis Follow-Up (India, Swaziland & Sao tome Principe)
- SwaziEMR (Swaziland)
- Psychiatric service (Swaziland)

### Students Enrollment (Fall, 2012)

Collage\Program	Ph.D	MS
Medicine		
Oral Medicine		
Pharmacy		
Nursing		
Public Health & Nutrition		4
Medical Technology	1	
Humanity		
Other		
Total	1	4

Nationality	
Taiwan	0
Indonesia	1
Swaziland	3
Belize	1

### Project List of Fall, 2012

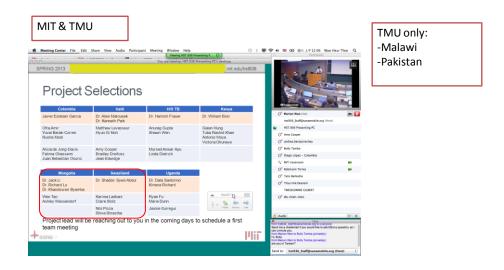
- E-Posyandu (Indonisia)
- Electronic health to improve tuberculosis and HIV medication adherence (Swaziland)

## Students Enrollment (spring, 2013)

Collage\Program	Ph.D	MS
Medicine		
Oral Medicine		1
Pharmacy	1	
Nursing		
Public Health & Nutrition		5
Medical Technology	2	1
Humanity		1
Other Taiwan Univ.		3
Total	3	11
From MIT		6

Nationality	
Taiwan	2
Gambia	2
Pakistan	2
Jordan	2
India	2
Swaziland	1
Nigeria	1
Malawei	1
Ecuador	1

### Project List of Spring, 2013



## Students Enrollment (Fall, 2013)

Collage\Program	Ph.D	MS
Medicine		
Oral Medicine		
Pharmacy		
Nursing		
Public Health & Nutrition	1	1
MedicalTechnology	3	1
Humanity		1
Total	4	3

Nationality	
Taiwan	3
Indian	1
Mexico	1
Pakistan	1
Jordan	1

### Project List of Fall, 2013

- Dengue Fever Reporting System via Mobile Phones (Pakistan)
- Using mobile SMS to increase adherence of diabetes patients in India
- Reducing mortality in children of Sub Sahara Africa
- To use the mobile phone as a conveying system in Taiwan's offshore island to investigate diabetic retinopathy