



# ToT Program for Telemedicine Engineers in Asia

**Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB)**

**&**

**Jigme Dorji Wangchuck National Referral Hospital (JDWRH)**

**Ms. Peldon**  
Deputy Chief ICT Officer  
Jigme Dorji Wangchuck National Referral  
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Khesar Gyalpo University of Medical Sciences of  
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## **Khesar Gyalpo University of Medical Sciences of Bhutan**

- Established on 2<sup>nd</sup> May 2013 by the University of Medical Sciences ACT of Bhutan 2012 and officially launched as the Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB) 28<sup>th</sup> Feb, 2015.
- Three constituent faculty
  - Faculty of Traditional Medicine
  - Faculty of Nursing and Public Health
  - Faculty of Postgraduate Medicine
  - Three affiliated Institute: Arura Academy of Health Sciences (AAHS), Faculty of Nursing at RTC and Apollo Bhutan Institute of Nursing
- MBBS will be launched on 28<sup>th</sup> February 2023 coinciding with Foundation Day of

## **Jigme Dorji Wangchuck National Referral Hospital**

- It was established in 1972, its apex hospital of the country, and is working towards providing efficient and excellent healthcare services to its citizen.
- Bed Strength: 381
- Departments : 20
- In-Patient Admission : 16,338
- Bed Occupancy : 7.9%
- Mortality Rate : 2.8%
- Average length of stay : 6.28days
- OPD Attendance : 605,398
- Total no. of deliveries : 4,300
- Total no. of caesarean section : 1,419
- Total no. of surgeries : 8644
- Doctors and nurses: 542

**Day one**



## **Orientation**

 med-hok

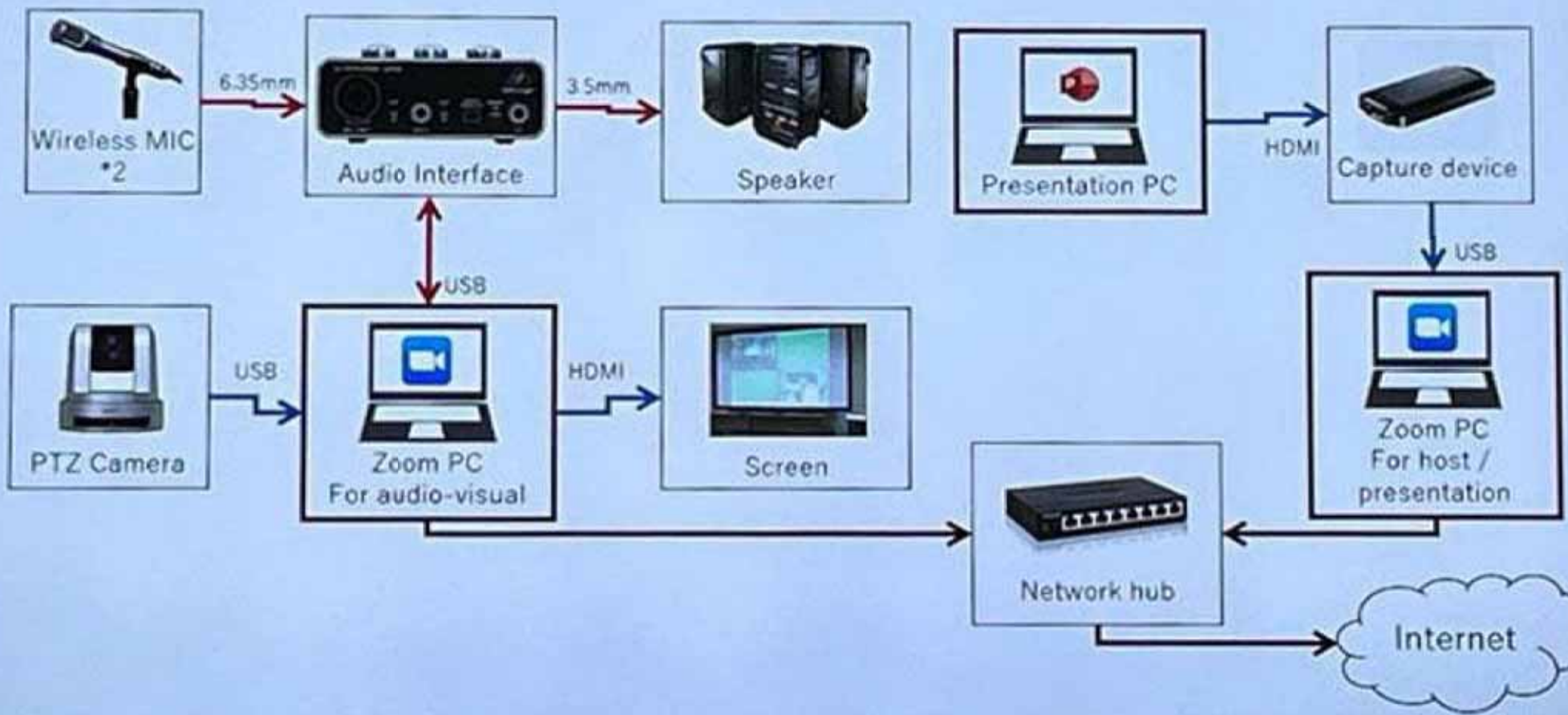
- Presentation by Mr. Shunta on the program list
- Administrative information by Ms. Miho and orientation to prayer room, Staff canteen and convenient stores in the university
- Overview of cultural visit to Hiroshima
- Familiarizing with the Zoom, Sharing Google calendar and taking us through the google calendar by Ms. Yukiko
- Demo on Med-Hok Teleconference Management System (Med-Hok) designed for the APAN Medical Working Group by Ms. Kuriko

## **Day 2**

Ms. Yoshiko presented on setting up venue for the hybrid conference and introduction of different types of equipment used for same.

Practical session to set up hybrid conference hall using zoom and high end telemedicine equipment such as gaming Laptop, wireless amplifier, switch, mike, USB audio interface, camera







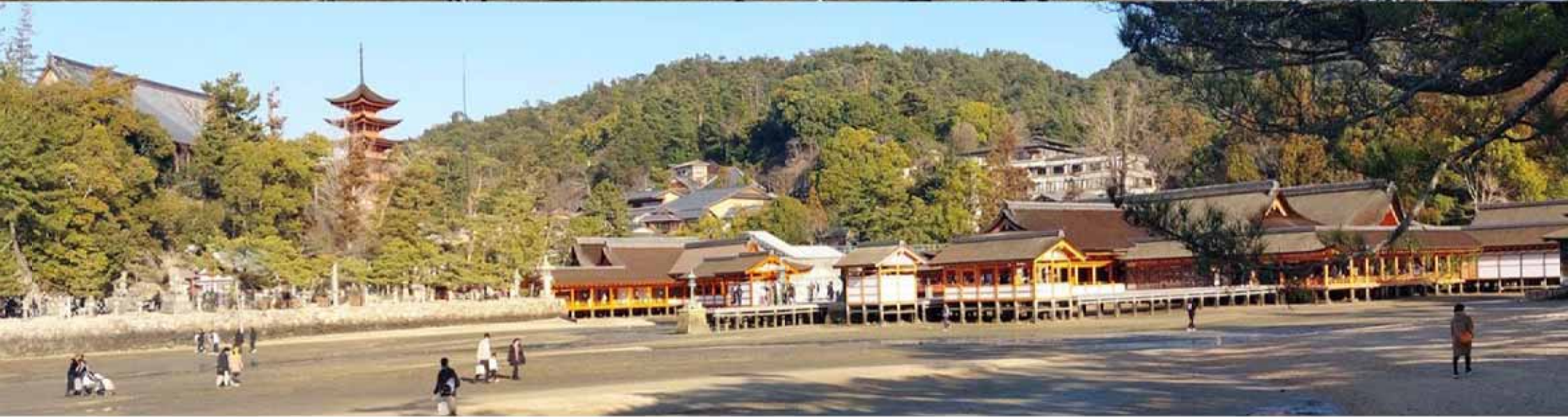


## Day 3 and 4

Presentation by Ms. Yoko on fetal ultrasound education for midwives using information communication Technology in Tanzania where maternal mortality ratio 556/100,000. Followed by Site visit in Hiroshima















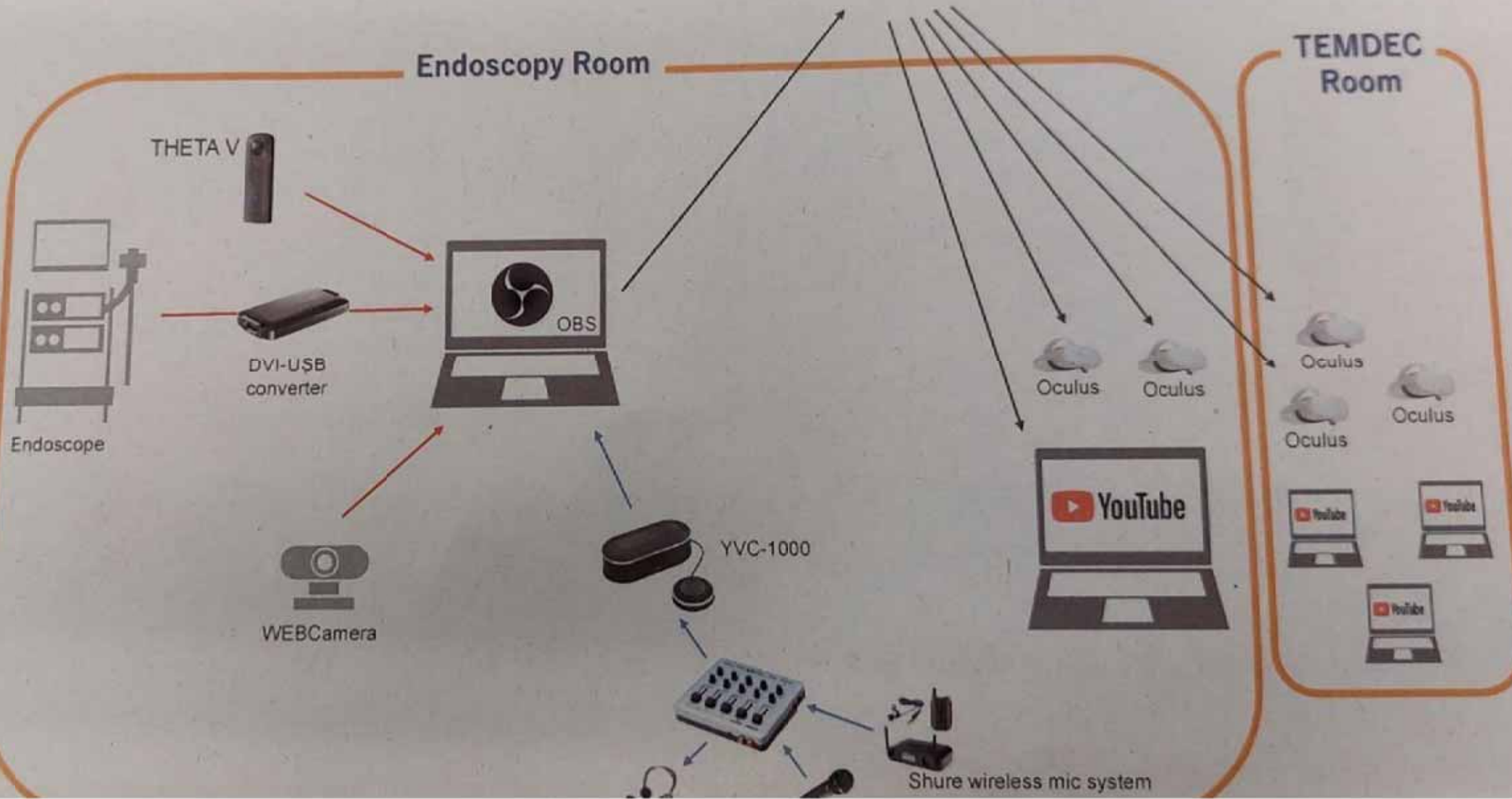


## **Day 5**

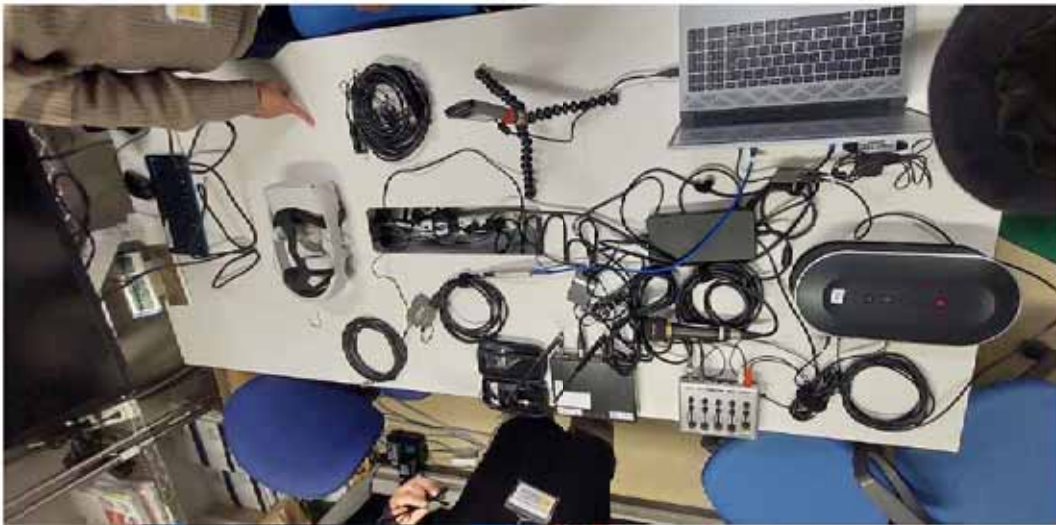
Explanation of temdec conference room set up such as hardware used and connection: Video/camera controlling, Sound Controller for mike and monitor by Shintaro. Software used for the VC is Zoom.

Demonstration followed by setting up of VR endoscopy between the endoscopy department and temdec conference room (remote site). The video was broadcasted using YouTube.

Case2 : YouTube Streaming









**Endoscopy Demonstration**





360°写真を撮る



shin



TEMDEC



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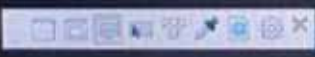
Oculus hisada



Oculus Shunta



Yukiko Hisada



Yukiko Hisada



Ctrlキーでキャプチャ実行/ESCキーで中止

## **Day 6**

Demo on Joinview software

Mr. Nopa Training participant(Engineer) successfully conducted the video conferencing session for case discussion/presentation on Neurology between and university of Indonesia and Kyushu University



## **Experience & future plan**

### **Experience**

- Share the TEMDEC experiences to colleagues for continuity

### **Future plan**

- Connect to all the teaching hospitals (Jigme Dorji Wangchuck National Referral Hospital (JDWNRH), Mongar Regional Referral Hospital (MRRH) and Gelephu Central Regional Referral Hospital (CRRH))
- Connect with other institutes from various countries
- Improve the quality of telemedicine in Bhutan in collaboration with TEMDEC

**THANK YOU!**