Space for Global Health: Intergovernmental process

Space4Health
Webinar

UNISPACE I 1968

- V Thematic Session. Biology and Medicine (B/M): (a) B/M played a leading role in cosmic research (part. manned cosmic flight); (b) the results of cosmic research and of the general development of cosmic science produced a considerable influence on the progress of B/M as disciplinary sciences, as well as on their general practical aspects.

UNISPACE II 1982

- Space environment (micro-gravity, cosmic spectrum of radiations, near-vacuum, etc) represented a new and powerful research environment for biology and medicine.
- GA Res 40/162 of 1985: STSC to start its consideration of the agenda item on life sciences, including space medicine.

UNISPACE III 1999

- "The Space Millennium: Vienna Declaration on Space and Human Development"
- Action should be taken to improve public health services by expanding and coordinating space-based services for telemedicine and for controlling infectious diseases.

UNISPACE III follow up

COPUOS Action Team on Public Health (action team 6) officially created in 2001

2001
- Action Team on Public Health (action team 6)
- Final report A/AC.105/C.1/L.305 (2011)

2012
- Action team 6 follow-up initiative
- Series of workshops with the support of UNOOSA

2014
- STSC focused expert group on space and global health

2016
- 7 thematic priorities (TP) of UNISPACE+50
- TP5: Strengthened space cooperation for global health

2017
- UN/WHO/Switzerland Conference on Strengthening Space Cooperation for Global Health

2018
- STSC agenda item on Space and global health
- STSC Working Group on Space and Global Health

Domains	Technologies
▪Telemedicine and tele-health ▪Tele-epidemiology and environmental health ▪Space life sciences ▪Disaster and health emergency management	▪ Remote sensing ▪ Telecommunications ▪ GNSS/GIS ▪ Space technology development

For more details, see A/AC.105/C.1/2015/CRP.29, Appendix

Appendix 1

The Relationship between Space Activities and Global Health Applications — *at a glance*[1]

SPACE AND GLOBAL HEALTH						
		Individual health	***Individual and Communities***		***Population Health***	
Key HEALTH activities		Medical practice	Health services	Medical Research	Prevention and control of infectious and chronic diseases	Global Health Security
Key Space Activities		**Tele-Medicine**	**Tele-Health**	**Health Sciences**	**Tele-epidemiology**	**Disaster Management**
Satellite Activities	*Tele-communications*	▪ Specialist ▪ Second opinion ▪ Remote monitoring ▪ Tele-diagnostic ▪ Tele-consultation ▪ Peer to peer ▪ Tele-Robotic	▪ Professional training ▪ Community health worker training ▪ Community health education ▪ Tele-education ▪ Peer-to-peer training	▪ Knowledge transfer	▪ Data dissemination through centres of expertise ▪ Water levels & water borne diseases ▪ Emergency communication for outbreak/pandemic management	▪ Flexible and deployable capacities ▪ Strategic planning, coordination and communication among relief workers; coordination sites; experts; individuals
	Global Navigation Space Systems & GIS	▪ Routing Medical Emergencies	▪ Contextual information on site ▪ Health services optimization		▪ Geographic occurrences of diseases ▪ Location of sources of infection/pollution ▪ Tracking animals as disease sentinels	▪ Detailed site information ▪ Response worker location coordination
	Remote sensing of the Earth and Atmosphere				▪ Tracking disease and risk factors ▪ Vector-borne diseases (malaria) ▪ Air-born disease, including dust, air pollution (ex: Asthma) ▪ Waterborne diseases (ex: Cholera) ▪ Food security	▪ Disaster mapping (before and after) ▪ Planning and response ▪ Emergency tele-epidemiology
Human Space Flight	*Space Life Science*			▪ Knowledge of the human body (ex: aging) ▪ Infection prevention		
	Technology Development	▪ Digital Applications		▪ Point of care medicine		

STSC Working Group on Space and Global Health

- Chair: Antoine Geissbühler (Switzerland). Multi-year workplan: 2019-2022.
- 2019 - Agreement on methods of work and workplan. Development of a questionnaire.
- 2020 - Nominations of national points of contact received
  - Review of contributions received in response to the questionnaire
    - The process enabled constructive discussions at the national level btw. space / health sectors.
    - Collected information to be organized with a view to establishing a globally accessible platform to enhance the sharing of information, best practices, tools and capacity-building resources in the area of space and global health.
  - Wikiversity: Development of free and open educational resources on space and global health [with support from the University of Koblenz-Landau, Germany].
  - UNOOSA to send a letter to WHO to inform it of the work of the Working Group; to continue to invite responses to questionnaire/nomination of points of contact.
  - Public health and medical experts be included in delegations to STSC.
  - WG to prepare recommendations as to the role and structure of the globally accessible platform.
- June 2020: Virtual meeting of the WG on Space and Global Health to discuss lessons learned form the COVID-19 pandemic that could be useful for the work of the WG

THANK YOU