UCL DEPARTMENT OF SPACE & CLIMATE PHYSICS

MULLARD SPACE SCIENCE LABORATORY CENTRE FOR SPACE MEDICINE



GAGARIN COSMONAUT TRAINING CENTRE DELEGATION VISITING CENTRE FOR SPACE MEDICINE 29 October – 2 November 2012

AIMs

- SkTech proposal clarification and detalisation through interaction with UCL experts
- Meeting and discussing potential topics of collaboration with UCL experts
- Plan for steps forward in the collaboration UCL GCTC

DELEGATION FROM GAGARIN COSMONAUT TRAINING CENTER (GCTC):

- Dr Oleg Ryumin Head of the Laboratory for Medical and Psychological Support of the Cosmonauts
- Svetlana Andreeva Psychologist
- Zhanna Shevchenko Lead Psychologist

PRELIMINARY AGENDA

Dr Oleg Ryumin will give a presentation about the current work in the Lab, "The cosmonaut selection and training medical and psychological support".

	DAY 1: 29 Oct 2012	
09:30	Meet at the Reception in Grafton	Dr Iya Whiteley
10:00- 12:00	Near Infrared for VIIP Optical equipment for crew monitoring Can anything be used in crew selection?	Prof Clare Elwell, Professor of Medical Physics, Group Lead, Near Infrared Spectroscopy Group http://www.medphys.ucl.ac.uk/~celwell/ Terence Leung, Biomedical Optics https://sites.google.com/site/terenceleungucl/
	LUNCH BREAK	
14:00- 16:30	Voice Analysis as a tool to assess crew mental state	Dr Andy Faulkner, Head of Research Department Speech Hearing and Phonetics Sciences https://www.ucl.ac.uk/psychlangsci/research/speech/Research-People/Andy_home
	DAY 2: 30 Oct 2012	
09:30	Meet at the Reception in Grafton	Dr Iya Whiteley
10:00- 12:00	Cardiovascular MR: fast MRI is real-time imaging for crew selection, monitoring, exercise regime adjustments and long-term health benefit	Dr. Vivek Muthurangu, Group Lead, Imaging: Vascular Imaging & Physics <u>UCL Institute of Cardiovascular Science</u> http://www.ucl.ac.uk/cardiovascular/themes/ imaging/vascular imaging physics
	LUNCH BREAK	
14:00- 16:00	fMRI scan results to determine some aspects of crew future	Prof Geraint Rees, Director of <u>UCL Institute of Cognitive Neuroscience</u>

	behaviour and performance: use in selection and professional development	http://www.fil.ion.ucl.ac.uk/~grees/styled/ page20/index.html
	DAY 3: 31 Oct 2012	
10:00	Meet at Bath Spa station	Dr Iya Whiteley
10:30- 13:00	SkTech proposal	Dr Iya Whiteley, Deputy Director, <u>Centre for Space Medicine, MSSL</u>
	WORKING LUNCH	
17:00	Train to Paddington	
	DAY 4: 1 Nov 2012	
08:30	Meet at the Reception in Grafton	Dr Iya Whiteley
09:00- 12:30	Parallels between medical surgeon and cosmonauts abilities, attitudes and selection methods Latest selection methods	Prof Chris McManus Professor of Psychology and Medical Education http://www.ucl.ac.uk/medical-education/
12:30- 14:30	Travel to MSSL	
	WORKING LUNCH	
15:00- 17:00	SkTech proposal Plan for steps forward in the collaboration CSM – GCTC teams	Prof Alan Smith, Director of MSSL https://iris.ucl.ac.uk/research/personal?upi=ASMIT51 Prof Louise Harra, Professor of Solar Physics, Medical Data Mining and predictions of cardiac arrest project http://www.mssl.ucl.ac.uk/~lkh/
		Dr Kevin Fong, Director of CSM, Consultant in Anaesthesia UCL Hospital http://www.ucl.ac.uk/anaesthesia/people/fong
17:00	Travel back to hotel	
	DAY 5: 2 Nov 2012	
09:30- 11:30	Capturing CSM-GCTC Collaboration Momentum and Next Steps	Dr Iya Whiteley, Deputy Director, <u>Centre for Space Medicine, MSSL</u>
11:30- 14:30	British Interplanetary Society visit	Nick Spall
	WORKING LUNCH	
15:00- 17:00	Latest innovations in Psychometrics Organisational psychology; psychometrics, especially personality assessment; cross-cultural psychology	Prof Adrian Furnham http://www.ucl.ac.uk/psychlangsci/staff/cehp-staff/a_furnham http://adrianfurnham.com/