

***There is no land uninhabitable,
nor sea innavigable***

Robert Thorne, 1527

Biology in Space: Challenges and Opportunities

NOVEMBER 7TH 2014 - 09.00/17.30

Aula Magna - Scuola Superiore Sant'Anna
Piazza Martiri della Libertà, 33 - Pisa

09.00 Mario Enrico Pè, Director, Institute of Life Sciences,
Welcome Speech

09.15 Mario Cosmo (ASI), Microgravity at Italian Space Agency

09.45 Paolo Nespoli (ESA-ASI), Challenges and opportunities: the astronaut's
perspective on space research

10.15 Paola Verde (AM), Biomedical training of astronauts

10.45 Debora Angeloni (Scuola Sant'Anna), Space flight as disease model:
the case of endothelium

11.00 Interval

11.15 Jack Van Loon (VU University, Amsterdam), Sensing changes of the
gravitational load by non-specialized cells

11.45 Gianni Ciofani (Istituto Italiano di Tecnologia, Pontedera),
Hypergravity to investigate cell differentiation

12.00 John Kiss (University of Mississippi), Plant tropisms: from Darwin to
the International Space Station

12.30 Paolo Aresi (journalist and writer), Signs of Life in science fiction
imagery

13.00 Interval

14.30 Andrea Ferrara (Scuola Normale Superiore, Pisa), Exohomes: searching
for habitable planets

15.00 Francisco Xavier Medina (Centro de Investigaciones Biológicas,
Madrid), Exploring plant growth and development on the
International Space Station

15.30 Enrico Caiani (Politecnico di Milano), Parabolic flight and bed rest
experiments: Earth platforms to study human physiology in
weightlessness

15.45 Valentina Colla (Scuola Sant'Anna), Building components for a human
outpost on the Moon with a novel 3D printing technology

16.00 Interval

16.15 Antonio Frisoli (Scuola Sant'Anna), Motor learning and adaptation in
altered gravity: support from Virtual Reality technologies

16.30 Valfredo Zolesi (Kayser Italia, Livorno), How to get bio-medical
experiments in space

17.00 Alberto Pirni (Scuola Sant'Anna), Space and anthropology of limit: the
philosopher's perspective

17.30 Concluding remarks

Contact: Dr. Debora Angeloni, tel. 050-3153092, angeloni@sssup.it



Scuola Superiore
Sant'Anna



esa



agenzia spaziale
italiana



LA TOSCANA
V E R S O
EXPO2015