

**GENOMIC STUDIES ON THE INTERNATIONAL
SPACE STATION WORKSHOP**

**NASA Gravitational Biology and Ecology Program
and Astrobiology Program**

**Ames Research Center (ARC)
Moffett Training and Conference Center (MTCC)
Moffett Field, CA**

AGENDA

Wednesday, January 27

- 8:00 am **WELCOME to ARC**
(Dr. Harry McDonald, Center Director)
- 8:15 **Opening Remarks and GB&E Overview**
(Dr. Mel Averner, GB&E)
- 8:30 **Astrobiology Overview**
(Dr. David Morrison, Director of Space)
- Tutorials:**
- 8:45 Gravity -- A Physical Force with Intensity and Direction
(Dr. Kathryn Clark, Office of Space Flight, NASA HQ)
- 9:15 Potential for Evolution Beyond the Home Planet
(Dr. Chris McKay, ARC)
- 9:45 Break
- 10:00 Prokaryote Experiments in Space
(Dr. Rocco Mancinelli, SETI Institute)
- 10:30 Genomic Studies of Renal Cells in Space
(Dr. Timothy Hammond, Tulane University)
- 11:00 *C. elegans* Experiments in Space
(Dr. Roger Kern, JPL)
- 11:30 Microbial Ecology of Closed Ecosystems: Implications for
Evolutionary Biology Research on the International Space Station
(Dr. Andrew Schuerger, Dynamac Corporation, KSC)
- 12:00 Microbes, Hitchhikers, and Humans: A Crew Health Perspective
(Dr. Duane Pierson, JSC)
- 12:30 pm **Lunch** (catered sandwich bar)
- 1:00 **Tour of Space Station Biological Research Mockup**
(Dr. Karen Plaut, SSBRP)

- 1:45 pm **Goals of Workshop - Charge to Participants**
critical questions, research themes and directions, representative organisms, applicable technologies, baseline data collection, section for NRA, written final recommendations.
(Dr. Mel Averner, Lynn Harper -- ARC)
- 2:45 **Group Discussions:**
- Participants organized into 2 working groups to discuss (1) simple organisms and (2) ecological systems including humans for short-term and/or multigenerational studies
 - Group “Leads” set ground rules and begin discussions based on NASA charge
 - Recommendations written up
- 5:45 **Adjourn**
- 7:30 **Social Banquet** (Mings, Palo Alto)

Thursday, January 28

- 8:00 am **Plenary Session**
• Workshop Strategy -- review overall process and address problems,
- 8:30 am **Group Discussions continue**
- 12 noon **Lunch**
- 1:00 pm **Plenary Session/Critique**
Each group lead presents recommendations for critique
(1 hr / group)
- 3:00 **Group Write-ups**
Each group begins to write up final recommendations
- 6:00 **Wine and Cheese Reception**

Friday, January 29

- 8:00 am **Group Write-ups**
Finalize recommendations and write-ups
- 10:00 **Plenary Session**
Present final summaries
- 11:30 **Summary and Future Actions of Workshop**
(Dr. Mel Averner)
- 12:00 **Workshop Wrap Up**
(Dr. David Morrison)
- 12:15 pm **Adjourn**
Working Lunch for Organizing Committee

