SIXTEENTH ANNUAL MEETING

AMERICAN SOCIETY FOR GRAVITATIONAL AND SPACE BIOLOGY

ASGSB-CSA-ELGRA Combined Meeting
October 25-28, 2000
Montréal, QC, Canada

SHORT PROGRAM

Wednesday, October 25

15:00	Registration Opens
19:00	Student Mixer
19:30	ASGSB Governing Board Meeting

Thursday, October 26

07:30	Registration Opens
08:30–08:45	Opening Remarks and Welcome
08:45–10:15	Symposium I – Consequences of Contamination of the Spacecraft Environment
10:15–10:45	Break
10:45–12:15	Symposium I, *cont.*
12:15–14:00	Lunch and Committee Meetings
14:00–15:30	Concurrent Posters – Session I A. Space Life Sciences Training Program Undergraduate Student Poster Competition B. Graduate Student Poster Competition
15:30–17:00	Concurrent Posters – Session II A. Space Life Sciences Training Program Undergraduate Student Poster Competition B. Graduate Student Poster Competition
19:00–21:00	Reception

Friday, October 27

09:00–10:30 Symposium II – Psychosocial Issues in Long-Term Space Flight

10:30–11:00 Break

11:00–12:30 Symposium II, *cont.*

12:30–14:00 Lunch and Committee Meetings

14:00–16:00 Concurrent Oral Sessions

I. Animal Development, Physiology and Gravity Sensing
II. Advanced Life Support and Biotechnology

16:00–17:30 Concurrent Posters – Session III

C. Animal Development, Physiology and Gravity Sensing
D. Cell Biology
E. Plant Development, Physiology and Gravity Sensing
F. Advanced Life Support and Biotechnology
G. Spaceflight Experiment Results
H. Spaceflight Physiology and Medicine

18:30–21:00 Banquet and Keynote Speaker; Business Meetings

21:00 ASGSB Governing Board Meeting

Saturday, October 28

08:30–10:30 Concurrent Oral Sessions

III. Space Flight and Space Medicine
IV. Plant Development and Physiology

10:30–11:00 Break

11:00–13:00 Concurrent Oral Sessions

V. Spaceflight Results
VI. Cell Biology

13:00–14:00 Lunch

14:00–15:30 Concurrent Posters – Session IV

C. Animal Development, Physiology and Gravity Sensing
D. Cell Biology
E. Plant Development, Physiology and Gravity Sensing
F. Advanced Life Support and Biotechnology
G. Spaceflight Experiment Results
H. Spaceflight Physiology and Medicine

15:30–17:00 Minisymposium – Current Ground-Based Models

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08:30 Opening Remarks and Welcome

Symposium I
Consequences of Contamination of the Spacecraft Environment

08:45 –12:15 Moderator: Richard Wassersug

Time		Page
08:45	Microbiological Contamination of Spacecraft. Duane L. Pierson, R.J. Bruce, T.O. Groves, N.D. Novikova and A.N. Viktorov. **[1]**	4
09:30	Contamination of Spacecraft Environment: Immunological Consequences. William T. Shearer. **[2]**	4
10:15	Break	

Concurrent Posters I

14:00 – 15:30

NOTE: Presenters are to be next to their posters the entire time.

A. Space Life Sciences Training Program Undergraduate Student Poster Competition

B. Graduate Student Poster Competition

Concurrent Posters II

15:30 – 17:00

NOTE: Presenters are to be next to their posters the entire time.

A. Space Life Sciences Training Program Undergraduate Student Poster Competition

B. Graduate Student Poster Competition

19:00 Reception

Friday, October 27

Symposium II
Psychological Issues in Long-Term Space Flight

09:00 –12:30 Moderator: Gerry Sonnenfeld

Time		Page
09:00	Psychosocial Issues in Long-Term Space Flight: Overview. Larry Palinkas. **[39]**	20
09:45	Psychosocial Adaptation, Social Interaction Processes and Performance of Crews During SFINCSS Isolation Study: Cultural, Gender and Personal Factors. Judith Lapierre. **[40]**	20
10:30	Break	
11:00	Psychosocial Issues in Space: Results from Shuttle/Mir. Nick Kanas, V. Salnitskiy, E. Grund, D.S. Weiss, V. Gushin, O. Kozerenko, A. Sled and C.R. Marmar. **[41]**	20
11:45	Issues for the Future. Gro Sandal. **[42]**	20
12:30	Lunch and Committee Meetings	

Concurrent Oral Sessions I and II

Oral Session I
Animal Development, Physiology
and Gravity Sensing

14:00 – 16:00 Moderator: Michael Wiederhold

Oral Session II
Advanced Life Support
and Biotechnology

14:00 – 16:00 Moderator: Charles Barnes

Concurrent Posters III

16:00 – 17:30

NOTE: Presenters are to be next to their posters the entire time.

C. Animal Development, Physiology and Gravity Sensing

D. Cell Biology

E. Plant Development, Physiology and Gravity Sensing

F. Advanced Life Support and Biotechnology

G. Spaceflight Experiment Results

H. Spaceflight Physiology and Medicine

18:30 Banquet and Keynote Speaker; Business Meetings

21:00 ASGSB Governing Board Meeting

Saturday, October 28

Concurrent Oral Sessions III and IV

Oral Session III
Space Flight and Space Medicine

08:30 – 10:30 Moderator: Stephen Keith Chapes

Time		Page
08:30	Effects of Spaceflight and Hindlimb Suspension Unloading on Rat Neuromuscular Development. D.A. Riley, B.L. Huckstorf, G.R. Slocum, J.L.W. Bain, P.M. Reiser, F.R. Sedlak, W. Liebl and M.T.T. Wong-Riley. **[91]**	43
08:45	Scientific Outcome of the Russian/French Cooperation on the Bion Flights. M. Viso. **[92]**	43
09:00	Muscle Collagen Gene Expression and Protein Adaptation Following 14 Days of Spaceflight in BION 11 Rhesus Monkeys (*Macaca mulatta*). D.A. Martinez, V.R. Edgerton, R.E. Grindeland, D.E. Gallagher, J.D. Tanksley, K.M. Shea and A.C. Vailas. **[93]**	43
09:15	Developing Protocols for Recombinant Adeno-Associated Virus-Mediated Gene Therapy in Space. S. Ohi, A. Aguilar and B.C. Kim. **[94]**	43
09:30	Evidence for a Th2 Shift Associated with Spaceflight: Immune Modulation by Stress Hormones. R.P. Stowe, D.L. Pierson, C.F. Sams and A.D.T. Barrett. **[95]**	44
09:45	Effects of Low Dose Proton Irradiation on Three Models of Behavior. M.J. Pecaut, A.L. Smith, E.D. Zendejas, C.N. Zuccarelli, P. Haerich and G.A. Nelson. **[96]**	44
10:00	Neurobehavioral Effects of Hypergravity Conditions in CD1 Mouse Strain. D. Santucci, G. Corazzi, N. Francia, A. Antonelli, L. Aloe and E. Alleva. **[97]**	44
10:15	Effects of Simulated Microgravity on Nitric Oxide Synthase Expression and Nitrate/Nitrite Content in Different Arteries of the Rat. J. Ma, C.I. Kahwaji, N.D. Vaziri, Z. Ni and R.E. Purdy. **[98]**	44
10:30	Break	

Oral Session IV
Plant Development and Physiology

08:30 – 10:30 Moderator: Mary Musgrave

Concurrent Oral Sessions V and VI

Oral Session V
Spaceflight Results

11:00 – 13:00 Moderator: Alan Mortimer

Oral Session VI
Cell Biology

11:00 – 13:00 Moderator: Augusto Cogoli

Concurrent Posters IV

14:00 to 15:30

NOTE: Presenters are to be next to their posters the entire time.

C. Animal Development, Physiology and Gravity Sensing

D. Cell Biology

E. Plant Development and Gravity Sensing

F. Advanced Life Support and Biotechnology

G. Spaceflight Experiment Results

H. Spaceflight Physiology and Medicine

Minisymposium
Current Ground-Based Models

15:30 –17:00 Moderator: Marianne Cogoli-Greuter