

AMA NATIONAL CONVENTION

27-30

Nov 1961

DENVER, COLO.

POTENTIAL SUBJECTS & SPEAKERS FOR:
SPACE MEDICINE SESSION

{ 1. Vectocardiography As a Tool in Cardiophysiological Research in Zero-gravity - L. E. Lamb

choose
one { 2. Comparisons of Usefulness of Vectocardiography & Phonocardiography in Space Cardiophysiology Research.
- L. E. Lamb

3. Effects
Influence of Space Flight ^{Stresses} on the Normal Cardiovascular System - L. E. Lamb.

Topics for

1. Space Medicine Session

R. Fixott
Earl Carter

H. Strughold

A. Clamann

B. Balke

Chuck Berry

Dave Simons

Ralph Kraus

G.L. Hethuis

John Stapp

Larry Lamb

Harold von Becht

Otis Benson

Robt Zellmer

Geo. Ruff

Bill Douglas

Chuck
Roadman

Albert Schwinterberg
Sam White

R. Lovelace

Stan White

J. Baum

Hyper- and Hypo-G

1. Effect of ~~Space Flight~~ Stresses on Bone and Muscle

Physiology — J. S. Baum

2. Oxygen & CO₂ Transport & Exchange In the Zero-Gravity State

3. Effects of Hyper- and Hypo-G on Respiration.

4. Radiation Dosimeter Implants

5. ^{changes in} Acid-Base Balance Resulting from Altitude Acclimatization

6. Control of Body Movements in Hypo- and O-gravity States.

7. Self-Sustaining Life Support Systems for Long Space Operations

8. ^{Mercury} The Astronaut Training Program

9. A Research Laboratory for the Development of the Self-Sustaining Life Support System for Long Space Operations,

10. Stresses encountered in S.F.

11. What can we do to adapt.

12. Astronaut selection.

2. Medical Electronics & Computer Session

- 1 or 2
1. ^{Ca} Medical Diagnosis by Computers Schenck
 2. Electronic Computers as an Aid to Medical Diagnosis
 3. The Future Role of Computers in Medical Diagnosis
 4. Computer Techniques in Medical Diagnosis
 5. New Developments in O₂ & CO₂ Sensors.
 6. ^{Medical} Molecular Electronics Coming — Molecular ^(Otto Schmidt) Medical Electronics
 7. Cataloguing Data — Mercury
 8. Sensors — Otto Schmidt
 9. Sensors Baldwin — U. of Ariz.

Session on Medical Electronics and Computers

- ✓ 1. Coming Micro and Molecular ^{Medical} Electronics - Otto Schmidt
(Coming Developments in Medical Electronics) ask about Vario Instrument manufacturer input
- ✓ 2. ~~Microelectronics for Neurophysiological Research~~ - Baldwin
- ✓ 3. ~~The Use of Computers in the Mercury Astronaut Program~~ - A. Schwichtenberg
- ✓ 4. Use of Computers in Cancer Diagnosis - J. Schenthal / Tulane
- ✓ 5. Biological Computers - W. McCulloch
- ✓ 6. ~~Dynamic Testing vs Static Testing in Medical Diagnosis~~ - A. Schwichtenberg
7. Materials Research for Medical Use - Some one from Dow Chemical Institute for Medical Research or Hughes Medical Research
- ? 8. ^{Implanted} Cardiac Pacemakers in Heart Block - J. Doneho
- ✓ Adv. Concepts used in Astronaut Examination Programs
+ the Need for New Dynamic Instrumentation - Schwichtenberg
30 - 40 ⁴⁵ min

For Stan White call Gilruth & ask for support & speaker. If agrees follow &
letter of request. For Randt call him direct

Space Medicine Session

(Col Chas. Rodman) ~~OK~~

1. The NASA Program in Life Sciences - Dr. Clark Randt (or successor)

2. The Impact of Space Medicine Research on ~~Medicine~~ General Dr. H. Strughold ~~OK~~

3. The Astronaut Selection & Training Program - Dr. R. Lovelace ~~OK~~

4. Medical & Environmental Instrumentation in the Mercury Program Dr. S. White
~~on~~ Results to Date in Mercury Program

5. Research on Weightlessness: Its Effects & Implications - Dr. J. Gaume ~~OK~~

6. Space Radiations: ^{Their} Characteristics & Implications - Dr. G. Hekhuis ~~OK~~

Session on ~~Medical~~ Computers & Electronics in Medicine

1. Coming Developments in Medical Electronics - Dr. Schmidt, Ph.D. ~~OK~~

2. Advanced Concepts Used in the Astronaut Examination Program & the Need
for New Dynamic Instrumentation - Dr. A. Schattenberg ~~OK~~

3. Biological Computers - Dr. W. McCulloch

4. The Use of Computers in Cancer Diagnosis Dr. T. Schenthal ~~OK~~

5. Materials Research for Medical Use Dr. Margaret B. Chowne M.R.D., Dow Chem.
Co., Midland, Mich.

-Dr. R.R. McGregor - polymer chemist
Dow Corning Inst. for Med. Res., Midland

6. Surgical Implants of Artificial Cardiac Pacemakers - Dr. J. Donoho