PROGRAM PLANNING COMMITTEE

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Carlos A. Perez
Willis J. Taylor

COMMITTEE MEMBERS

Joan M. C. Bull George M. Hahn
William C. Dewey Joseph P. Lowenthal
Saul B. Gusberg James R. Oleson
Stefano Vivona

PROGRAM

List of Participants
Opening Remarks.
  Willis J. Taylor

Biology, Physiology

Chairperson: William C. Dewey

Biological Effects of Heat.
  Eric J. Hall and Laurie Roizin-Towle

  W. C. Dewey

Effect of Local Hyperthermia on Blood Flow and Microenvironment: A Review.
  Chang W. Song

Sequencing of the Total Course of Hyperthermia and Irradiation.
  B. Emami, B. M. Mittal, and S. Sapareto

Summary of Discussion.
  William C. Dewey

Heat Delivery

Chairperson: James R. Oleson

Deep Local Hyperthermia for Cancer Therapy: External Electromagnetic and Ultrasound Techniques.
  Augustine Y. Cheung and Ali Neyzari

The Clinical Efficacy of Localized Hyperthermia.
  John L. Meyer

Local Hyperthermia with Interstitial Techniques.
  Ivan A. Brezovich, William J. Atkinson, and Michael B. Lilly

Combined Interstitial Irradiation and Localized Current Field Hyperthermia: Results and Conclusions from Clinical Studies.
  Silvio A. Aristizabal and James R. Oleson

Regional Power Deposition for Hyperthermia: Theoretical Approaches and Considerations.
  James R. Oleson

  Frederic A. Gibbs, Jr.

Summary of Discussion.
  James R. Oleson

Thermal Dosimetry

Chairperson: Thomas C. Cetas

The Utility of Thermal Dose as a Predictor of Tumor and Normal Tissue Responses to Combined Radiation and Hyperthermia.
  Mark W. Dewhirst and Dalice A. Sim
  John W. Strohbehn ........................................ 4781s

Applications of Bioheat Transfer Simulations in Hyperthermia.
  R. B. Roemer and T. C. Cetas ................................ 4788s

Direct Temperature Measurement.
  Peter Fessenden, Eric R. Lee, and Thaddeus V. Samulski .............. 4799s

Will Thermometric Tomography Become Practical for Hyperthermia Treatment Monitoring?
  Thomas C. Cetas ........................................ 4805s

Summary of Discussion.
  Thomas C. Cetas ........................................ 4809s

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Clinical Dose Effects

*Chairperson: Carlos A. Perez*

Quality Assessment and Assurance in Clinical Hyperthermia: Requirements and Procedures.
  Gilbert H. Nussbaum ..................................... 4811s

Thermal Dose Expression in Clinical Hyperthermia and Correlation with Tumor Response/Control.
  Carlos A. Perez and Stephen A. Saperato ....................... 4818s

Pathological Effects of Hyperthermia in Normal Tissues.
  Luis Felipe Fajardo-L-G .................................. 4826s

Clinical Use of Thermal Enhancement and Therapeutic Gain for Hyperthermia Combined with Radiation or Drugs.
  Edward L. Gillette ...................................... 4836s

Anatomical Site-specific Modalities for Hyperthermia.
  Malcolm A. Bagshaw, Mark A. Taylor, Daniel S. Kapp, John L. Meyer, Thaddeus V. Samulski, Eric R. Lee, and Peter Fessenden .... 4842s

An Update on the Anticancer Effects of a Combination of Chemotherapy and Hyperthermia.
  Joan M. C. Bull .......................................... 4853s

Problem of Sequence and Fractionation in the Clinical Application of Combined Heat and Radiation.
  Giorgio Arcangeli, Carlo Nervi, Anna Cividalli, and Giorgio A. Lovisolo ....................... 4857s

Induction of Hyperthermia Using Implanted Electrodes.
  O. H. Frazier and Peter M. Corry ....................... 4864s

Summary of Discussion.
  Carlos A. Perez ........................................ 4867s

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Whole-Body Hyperthermia

*Chairperson: Joan M. C. Bull*

Whole-Body Hyperthermia Induction Techniques.
  Andrew J. Milligan .................................... 4869s

General Anesthesia for Whole-Body Hyperthermia.
  Leslie H. Cronau, Jr., Denis L. Bourke, and Joan M. Bull .......... 4873s

  H. Ian Robins .......................................... 4878s

Summary of Discussion.
  Joan M. C. Bull ........................................ 4884s

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Commentaries and Summary

*Chairperson: George M. Hahn*

Thermal Biology and Physiology in Clinical Hyperthermia: Current Status and Future Needs.
  Gloria C. Li ........................................ 4886s

Status and Future Developments in the Physical Aspects of Hyperthermia.
  T. C. Cetas and R. B. Roemer ..................................... 4894s

Past Clinical Studies and Future Directions.
  J. Robert Stewart ...................................... 4902s

Summary of Discussion.
  George M. Hahn ........................................ 4905s

Conference Summary.
  George M. Hahn ........................................ 4906s