

# PROGRAM PLANNING COMMITTEE

## CO-CHAIRPERSONS

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 .....	4706s
Opening Remarks. <i>Willis J. Taylor</i> .....	4707s

### Biology, Physiology

*Chairperson:* William C. Dewey

Biological Effects of Heat. <i>Eric J. Hall and Laurie Roizin-Towle</i> .....	4708s
Interaction of Heat with Radiation and Chemotherapy. <i>W. C. Dewey</i> .....	4714s
Effect of Local Hyperthermia on Blood Flow and Microenvironment: A Review. <i>Chang W. Song</i> .....	4721s
Sequencing of the Total Course of Hyperthermia and Irradiation. <i>B. Emami, B. M. Mittal, and S. Sapareto</i> .....	4731s
Summary of Discussion. <i>William C. Dewey</i> .....	4733s

### Heat Delivery

*Chairperson:* James R. Oleson

Deep Local Hyperthermia for Cancer Therapy: External Electromagnetic and Ultrasound Techniques. <i>Augustine Y. Cheung and Ali Neyzari</i> .....	4736s
The Clinical Efficacy of Localized Hyperthermia. <i>John L. Meyer</i> .....	4745s
Local Hyperthermia with Interstitial Techniques. <i>Ivan A. Brezovich, William J. Atkinson, and Michael B. Lilly</i> .....	4752s
Combined Interstitial Irradiation and Localized Current Field Hyperthermia: Results and Conclusions from Clinical Studies. <i>Silvio A. Aristizabal and James R. Oleson</i> .....	4757s
Regional Power Deposition for Hyperthermia: Theoretical Approaches and Considerations. <i>James R. Oleson</i> .....	4761s
Regional Hyperthermia: A Clinical Appraisal of Noninvasive Deep-Heating Methods. <i>Frederic A. Gibbs, Jr.</i> .....	4765s
Summary of Discussion. <i>James R. Oleson</i> .....	4771s

### 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. <i>Mark W. Dewhirst and Dalice A. Sim</i> .....	4772s
--	-------

Calculation of Absorbed Power in Tissue for Various Hyperthermia Devices. <i>John W. Strohbehn</i> .....	4781s
Applications of Bioheat Transfer Simulations in Hyperthermia. <i>R. B. Roemer and T. C. Cetas</i> .....	4788s
Direct Temperature Measurement. <i>Peter Fessenden, Eric R. Lee, and Thaddeus V. Samulski</i> .....	4799s
Will Thermometric Tomography Become Practical for Hyperthermia Treatment Monitoring? <i>Thomas C. Cetas</i> .....	4805s
Summary of Discussion. <i>Thomas C. Cetas</i> .....	4809s

### Clinical Dose Effects

*Chairperson: Carlos A. Perez*

Quality Assessment and Assurance in Clinical Hyperthermia: Requirements and Procedures. <i>Gilbert H. Nussbaum</i> .....	4811s
Thermal Dose Expression in Clinical Hyperthermia and Correlation with Tumor Response/Control. <i>Carlos A. Perez and Stephen A. Sapareto</i> .....	4818s
Pathological Effects of Hyperthermia in Normal Tissues. <i>Luis Felipe Fajardo L-G</i> .....	4826s
Clinical Use of Thermal Enhancement and Therapeutic Gain for Hyperthermia Combined with Radiation or Drugs. <i>Edward L. Gillette</i> .....	4836s
Anatomical Site-specific Modalities for Hyperthermia. <i>Malcolm A. Bagshaw, Mark A. Taylor, Daniel S. Kapp, John L. Meyer, Thaddeus V. Samulski, Eric R. Lee, and Peter Fessenden</i> .....	4842s
An Update on the Anticancer Effects of a Combination of Chemotherapy and Hyperthermia. <i>Joan M. C. Bull</i> .....	4853s
Problem of Sequence and Fractionation in the Clinical Application of Combined Heat and Radiation. <i>Giorgio Arcangeli, Carlo Nervi, Anna Cividalli, and Giorgio A. Lovisolo</i> .....	4857s
Induction of Hyperthermia Using Implanted Electrodes. <i>O. H. Frazier and Peter M. Corry</i> .....	4864s
Summary of Discussion. <i>Carlos A. Perez</i> .....	4867s

### Whole-Body Hyperthermia

*Chairperson: Joan M. C. Bull*

Whole-Body Hyperthermia Induction Techniques. <i>Andrew J. Milligan</i> .....	4869s
General Anesthesia for Whole-Body Hyperthermia. <i>Leslie H. Cronau, Jr., Denis L. Bourke, and Joan M. Bull</i> .....	4873s
Role of Whole-Body Hyperthermia in the Treatment of Neoplastic Disease: Its Current Status and Future Prospects. <i>H. Ian Robins</i> .....	4878s
Summary of Discussion. <i>Joan M. C. Bull</i> .....	4884s

### Commentaries and Summary

*Chairperson: George M. Hahn*

Thermal Biology and Physiology in Clinical Hyperthermia: Current Status and Future Needs. <i>Gloria C. Li</i> .....	4886s
Status and Future Developments in the Physical Aspects of Hyperthermia. <i>T. C. Cetas and R. B. Roemer</i> .....	4894s
Past Clinical Studies and Future Directions. <i>J. Robert Stewart</i> .....	4902s
Summary of Discussion. <i>George M. Hahn</i> .....	4905s
Conference Summary. <i>George M. Hahn</i> .....	4906s

OCTOBER 1984

4705s

# Cancer Research

The Journal of Cancer Research (1916–1930) | The American Journal of Cancer (1931–1940)

**AACR** American Association  
for Cancer Research

## 44 (10 Supplement)

*Cancer Res* 1984;44:4873s-4770s.

**Updated version** Access the most recent version of this article at:  
[http://cancerres.aacrjournals.org/content/44/10\\_Supplement.citation](http://cancerres.aacrjournals.org/content/44/10_Supplement.citation)

**E-mail alerts** [Sign up to receive free email-alerts](#) related to this article or journal.

**Reprints and Subscriptions** To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at [pubs@aacr.org](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link [http://cancerres.aacrjournals.org/content/44/10\\_Supplement.citation](http://cancerres.aacrjournals.org/content/44/10_Supplement.citation). Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.