JANUARY 14-19, 1995
Mechanism of Action of Retinoids, Vitamin D, and Steroid Hormones
Chairpersons: Michael B. Sporn, Bethesda, MD; Ronald M. Evans, San Diego, CA; David Mangelsdorf, Dallas, TX
Whistler Resort and Conference Centre, Whistler, B.C., Canada

FEBRUARY 13-18, 1995
Molecular Biology of Cancer: Implications for Prevention and Therapy
Joint Meeting with Japanese Cancer Association
Chairpersons: Lee W. Wattenberg, Minneapolis, MN; Masaaki Terada, Tokyo, Japan
Maui Marriott Hotel, Maui, HI

MARCH 19-22, 1995
86th Annual Meeting
Chairperson: Donald S. Coffey, Baltimore, MD
Metro Toronto Convention Centre, Toronto, Ontario, Canada

APRIL 1-6, 1995
Signal Transduction of Normal and Tumor Cells
Chairperson: Anthony J. Pawson, Toronto, Ontario, Canada; André Veillette, Montreal, Quebec, Canada; Grant McFadden, Edmonton, Alberta, Canada
Banff Centre, Banff, Alberta, Canada

OCTOBER 14-18, 1995
Cytokines and Cytokine Receptors
Chairperson: Steven Gillis, Seattle, WA
The Sagamore, Bolton Landing (Lake George), NY

NOVEMBER 5-9, 1995
Cancer: The Interface Between Basic and Applied Research
Chairpersons: Bert Vogelstein, Baltimore, MD; Stephen H. Friend, Seattle, WA; John D. Minna, Dallas, TX
Stouffer Harborside Hotel, Baltimore, MD

NOVEMBER 17-21, 1995
Novel Strategies Against Resistant Cancers
Chairpersons: Victor Ling, Toronto, Ontario, Canada; Daniel D. Von Hoff, San Antonio, TX
Sanibel Harbour Resort & Spa, Ft. Myers, FL

DECEMBER 2-6, 1995
The Molecular Basis of Gene Transcription
Chairperson: Tom Curran, Nutley, NJ
Hotel Del Coronado, Coronado (San Diego), CA

FEBRUARY 19-25, 1996
Cancer Susceptibility Genes and Molecular Carcinogenesis
Chairpersons: Curtis C. Harris, Bethesda, MD; Allan Balmain, Glasgow, Scotland; Kenneth Olden, Research Triangle Park, NC
Keystone Resort, Keystone, CO

MARCH 1996
Proteases and Their Inhibitors in Cancer
Chairpersons: Lynn M. Matrisian, Nashville, TN; Bonnie F. Sloane, Detroit, MI
Location to be Announced

APRIL 20-24, 1996
87th Annual Meeting
Chairperson to be Announced
Washington D.C. Convention Center, Washington, D.C.

JUNE 1996
Inducible Genomic Responses
Chairpersons: William T. Beck, Memphis, TN; John A. Hickman, Birmingham, England; Richard I. Morimoto, Evanston, IL
Location to be Announced

AACR members will receive brochures on the above special conferences as soon as they are available. Nonmembers should call or write:

American Association for Cancer Research
Public Ledger Building, Suite 816
150 South Independence Mall West
Philadelphia, PA 19106-3483
215-440-9300 • 215-440-9313 (FAX)
TopoGEN, Inc.
New Products, Kits and Lower Prices in 1994

Foreign distributors now available (see below)

<table>
<thead>
<tr>
<th>Cat.#</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001-1</td>
<td>Topo II Assay Kit</td>
<td>100 assays</td>
</tr>
<tr>
<td>1001-2</td>
<td>Topo II Assay Kit</td>
<td>250 assays</td>
</tr>
<tr>
<td>*1003</td>
<td>DNA Gyrase Assay Kit</td>
<td>100 assays</td>
</tr>
<tr>
<td>1015-1</td>
<td>Topo I Assay Kit</td>
<td>100 assays</td>
</tr>
<tr>
<td>1015-2</td>
<td>Topo I Assay Kit</td>
<td>250 assays</td>
</tr>
</tbody>
</table>

Drug Screening/Analysis Kits: For characterizing Topo I or II inhibitors using purified Enzymes provided by TopoGEN. These kits contain DNA substrates and detailed instruction manual.

Kits for Assaying Topoisomerase I or II inhibition in vivo...in any cell line or tumor cell. These kits contain antibodies and instructions for detecting cleavable complexes inside cells. The resulting complexes can then be quantified for easy comparison of inhibitor activity in different cells. Special introductory price for these two new products (please inquire)

| *1021 | Topo I In Vivo Link-Kit | >200 assays |
| *1022 | Topo II In Vivo Link-Kit | >200 assays |

Kits for analysis of Type II Topoisomerase in cells. These kits include anti-Topo II antibody for investigating citolocalization of topo II and for immunoprecipitation of the native protein from extracts.

| *1030 | Topo II Immunofluorescence Kit | >50 Analyses |
| *1035 | Topo II Immunoprecipitation Kit | >50 Analyses |

Enzymes:

- 2000H-1: p170 Human Topoisomerase II
- 2000H-2: p170 Human Topoisomerase II
- 2005H-1: Human Topoisomerase I
- 2005H-2: Human Topoisomerase II

Antibodies and Related Reagents:

- 2010-1: Monoclonal AB Human p170
- 2011-1: Rabbit AB Human p170
- 2011-2: Purified C-terminal
- 2011-3: Human Topo II (p170) Marker
- 2012: Human AB to Human Topo I
- 2012-1: Rabbit AB to Human Topo I
- 2014: Rabbit AB Yeast Topo II

DNA Substrates for Assaying Topoisomerases and Gyrases:

- 2013-1: Kinetoplast DNA
- 2013-2: Kinetoplast DNA
- 2013-3: Kinetoplast DNA
- 2017-1: Linear KDNA
- 2020-1: Decatenated KDNA
- 2023-2: pRYG DNA (Topo II Site)
- 2025-1: Relaxed pRYG DNA
- *2030-2: pHOT1 DNA (Topo I Site)
- 2035-1: Relaxed pHOT1 DNA

Reagents and Inhibitors: All of our reagents and inhibitors are pretested with purified topoisomerases.

<table>
<thead>
<tr>
<th>Cat.#</th>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>*4010</td>
<td>Topo I Assay Buffer (10X)</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4020</td>
<td>Topo I Cleavage Buffer (10X)</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4030</td>
<td>Gyrase Assay Buffer (10X)</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4040</td>
<td>Topo II Assay Buffer (10X)</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4050</td>
<td>Topo II Cleavage Buffer (10X)</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4060</td>
<td>10% Sodium Dodecyl Sulfate</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4070</td>
<td>2.5 M KCl</td>
<td>1.5 ml</td>
</tr>
<tr>
<td>*4080</td>
<td>Agarose Gel Load Dye (10X)</td>
<td>0.75 ml</td>
</tr>
<tr>
<td>*4110</td>
<td>Camptothecin (10 mM)</td>
<td>0.25 ml</td>
</tr>
<tr>
<td>*4120</td>
<td>Doxorubicin (10 mM)</td>
<td>0.25 ml</td>
</tr>
<tr>
<td>*4130</td>
<td>Daunomycin (10 mM)</td>
<td>0.25 ml</td>
</tr>
<tr>
<td>*4140</td>
<td>Etoposide (10 mM)</td>
<td>0.25 ml</td>
</tr>
<tr>
<td>*4150</td>
<td>m-AMSA (10 mM)</td>
<td>0.25 ml</td>
</tr>
<tr>
<td>*4160</td>
<td>Genistein (10 mM)</td>
<td>0.25 ml</td>
</tr>
<tr>
<td>*4170</td>
<td>Ellipticine (10 mM)</td>
<td>0.25 ml</td>
</tr>
</tbody>
</table>

Distributors of TopoGEN Products:

- Cosmo Bio Co., Ltd., Tokyo, Japan
  (03)3663-0722; Fax (03)3663-0725
- Funakoshi Co., Ltd., Tokyo, Japan
  Tel (03)5684-1620; Fax (03)5684-1775
- Wake Pure Chemical Industries, Ltd.
  Osaka Office Tel (06)201-3741; Fax (06)201-5964
- Tokyo Branch Tel (03)3270-4571; Fax (03)3241-7552
- Hanson-Hong Biomedical Co., Ltd., Taiwan
  Tel (02)792-2808; Fax (02)791-4624
- Almog Diagnostic, Israel
  Tel 3 967 3095; Fax 3 967 3091
- Space Import Export, Milan, Italy
  Tel (02)257 75377; Fax (02)25 72331

To place an order in the USA:

International orders:
Tel 800-837-7911 (24 hr order line) Fax 800-233-8676 (800-ADD-TOPO)
Fax 614-451-5810

TopoGEN, Inc.
P.O. Box 20607
Columbus, Ohio 43220 USA
CANCER CENTER DIRECTOR
UNIVERSITY OF ILLINOIS AT CHICAGO

The University of Illinois at Chicago (UIC) College of Medicine invites applications for the position of Cancer Center Director. The position includes appointment as a tenured Professor. We are looking for an outstanding cancer researcher (MD, PhD or the equivalent) with international recognition, a strong record of publications and grant support, broad knowledge of the current state of cancer research and the ability to communicate effectively with both researchers and clinicians. This individual should have the organizational skills and ambition to initiate and coordinate multidisciplinary basic and clinical studies on cancer. The Cancer Center Director will foster interactions and collaborations among cancer researchers and clinicians at UIC, promote and coordinate recruitment of cancer researchers, establish and supervise shared facilities for the Cancer Center, and spearhead the development of new research and training programs in oncology. The Cancer Center will take advantage of the outstanding research environment at UIC, strong clinical base, diverse patient population, and the commitment of the University to developing UIC as a leading national center of preclinical and clinical oncology. For fullest consideration, interested applicants should send a copy of their curriculum vitae by January 17, 1995 to:

Dr. Igor B. Roninson
Chair, Cancer Center Search Committee
Department of Genetics M/C 669
University of Illinois at Chicago
808 South Wood Street
Chicago, IL 60612-7309

UIC is an Equal Opportunity/Affirmative Action Employer.

Vice President for Academic Affairs
The University of Texas M. D. Anderson Cancer Center
Houston, Texas

The University of Texas M. D. Cancer Center invites nominations and applications for the position of Vice President for Academic Affairs. The Vice President for Academic Affairs serves as the Chief Academic Officer of the institution and reports to the Office of the President of the institution.

Primary Responsibilities:
- Oversees faculty career development — responsible for development and implementation of policies relating to faculty recruitment, retention, promotion, and tenure; liaison to Faculty Senate.
- Leads educational programs — leads, coordinates, and implements all educational activities including pre- and post-doctoral studies, clinical fellowships and residencies, allied health training, inter institutional affiliations, and cancer information dissemination.
- Directs academic support services — including Medical Research Library and Offices of Conference Services, Scientific Publications, and Biomedical Communications.

Qualifications:
- Ability to develop and implement an academic vision for the institution in this time of health care uncertainty.
- A strong academic background with a degree in medicine or academic doctorate in one of the biomedical sciences.
- A record of leadership in academic administration.
- Demonstrated excellence in teaching, scholarship, and public service.
- Ability to build a consensus and work with all groups within the institution to enhance academic excellence.
- Exceptional oral, written, analytical, and interpersonal skills.
- A commitment to the vision and mission of M. D. Anderson Cancer Center.

Applications: Applicants should forward a letter of application, a current curriculum vitae and the names of three references by January 15, 1995 to:

Margaret L. Kopke, Ph.D., Chair
Search Committee for Vice President for Academic Affairs
U. T. M. D. Anderson Cancer Center
Department of Immunology — Box 178
1515 Holcombe Blvd.
Houston, TX 77030

Salary: Commensurate with qualifications and experience.

As an affirmative action employer, U. T. M. D. Anderson Cancer Center offers equal opportunities employment without regard to race, color, creed or religion, age, sex, national origin, or disability. M. D. Anderson Cancer Center is a smoke free environment.
DIRECTOR
Human Cancer Genetics Program

COMPREHENSIVE CANCER CENTER
ARTHUR G. JAMES CANCER HOSPITAL AND RESEARCH INSTITUTE
THE OHIO STATE UNIVERSITY

The Comprehensive Cancer Center-Arthur G. James Cancer Hospital and Research Institute at The Ohio State University seeks a cancer genetics researcher of international stature to direct a new program in human cancer genetics. The successful candidate will have responsibility for developing a comprehensive research program involving both basic and clinical scientists. Resources will be made available to recruit five additional senior level investigators as well as for continuing director's discretionary funds, space, equipment acquisition, and support for pre- and post-doctoral students and research assistants. Please forward letter of nomination or application, including a curriculum vitae, to:

David E. Schuller, M.D., Chair
Human Cancer Genetics Search Committee
Comprehensive Cancer Center
Arthur G. James Cancer Hospital and Research Institute
300 West Tenth Avenue, Suite 519
Columbus, Ohio 43210
CULTURAL DIVERSITY,
PUBLIC POLICY
AND SURVIVORSHIP

5th Biennial Symposium on Minorities,
the Medically Underserved & Cancer

April 22-25, 1995 Washington, D.C.

Topics: Major Cancer Sites Research Updates (Breast, Prostate, Lung, Colorectal, Gynecological, Liver, Thyroid & Skin Cancers), Health and Lifestyle Issues (Diet & Nutrition, Tobacco & Alcohol, Environment & Family History/Genetics), Public Policy, Survivorship, Model Intervention Programs, and Resources

CALL FOR ABSTRACTS, Deadline: February 15, 1995

Focus: Basic, applied to demonstration projects including behavioral, clinical trials, and community interventions

CONTINUING EDUCATION OPPORTUNITIES

For abstract and registration information contact:
Donette L. Walker, 5th Biennial Symposium
1720 Dryden, Suite C, Houston, Texas 77030
Tel (713) 798-4617 Fax (713) 798-3990
e-mail: symposium@bcm.tmc.edu

Presented by:
Baylor College of Medicine, UT MD Anderson Cancer Center, Susan G. Komen Breast Cancer Foundation, American Cancer Society, and Kellogg Company

AMERICAN ASSOCIATION FOR CANCER RESEARCH (AACR)

SPECIAL OPPORTUNITIES FOR YOUNG INVESTIGATORS

The AACR is a professional society of over 10,000 scientists and physicians involved in cancer research. Special opportunities for young investigators include:

- Associate Membership conferring almost all of the benefits of regular membership at reduced rates
- Employment Register listing available positions and candidates in all subdisciplines of cancer research. Listings appear in several issues of Cancer Research, and interviews are arranged at the AACR Annual Meeting (Toronto, Ontario, Canada, March 19-22, 1995)
- Travel Grants to the Annual Meeting and AACR Special Conferences
- Mentorship Program and Special Travel Awards for NCI-designated minority scientists

American Association for Cancer Research
Public Ledger Building, Suite 816
150 S. Independence Mall West
Philadelphia, PA 19106-3483
Telephone: (215) 440-9300 • FAX: (215) 440-9313

1995 Pezcoller Award
for oncology and related basic research
100,000 E.C.U.

Nominations should be received by 15th April, 1995.
For related forms write to:

4th Pezcoller Award - The Pezcoller Foundation
c/o European School of Oncology
Via Ripamonti 66 - 20141 Milan (Italy)
Tel.: (+39-2) 57305416
Fax: (+39-2) 57307143
This publication is available in microform.

University Microfilms International reproduces this publication in microform: microfiche and 16mm or 35mm film. For information about this publication or any of the more than 13,000 titles we offer, complete and mail the coupon to: University Microfilms International, 300 N. Zeeb Road, Ann Arbor, MI 48106. Call us toll-free for an immediate response: 800-521-3044. Or call collect in Michigan, Alaska and Hawaii: 313-761-4700.

Please send information about these titles.

[Form fields for name, company/institution, address, city, state, zip, phone number]
EMPLOYMENT REGISTER OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH (AACR)

An Important Listing of Available Positions and Candidates in All Disciplines of Cancer Research

- Publication of Position and Candidate Advertisements in Cancer Research and the Proceedings of the American Association for Cancer Research
- Arrangement of Interviews at the AACR Annual Meeting in Toronto, Ontario, Canada (March 19-22, 1995)
- For forms and information:
  Employment Register
  American Association for Cancer Research
  Public Ledger Building, Suite 816
  150 S. Independence Mall West
  Philadelphia, PA 19106-3483
  Telephone: (215) 440-9300
  FAX: (215) 440-9313

Cancer Research accepts submissions on disk to facilitate production.

Acceptable word processing packages are listed in Guidelines for Submitting Disks to AACR Publications, found in the back of every issue of Cancer Research. Tables and illustrations will be set from hard copy.

To submit your paper on disk, simply send a completed Disk Submission Form (found on the reverse of the Guidelines for Submitting Disks to AACR Publications) with your disk, labeled as shown above, to the AACR Publications Department. Be sure that the disk file is the most recent version of your paper and matches the hard copy printout.

For review purposes, 4 hard copy printouts of the manuscript and 4 copies of the original illustrations must accompany all submissions.
THE SURGERY BRANCH, NATIONAL CANCER INSTITUTE, NIH, IS SEEKING PATIENTS FOR ONGOING CLINICAL TREATMENT PROGRAMS.

PATIENTS WITH THE FOLLOWING MALIGNANCIES ARE BEING TREATED UNDER COMBINED MODALITY OR INNOVATIVE IMMUNOTHERAPY PROGRAMS:

- Metastatic melanoma and kidney cancer •
- Stage II or locally advanced breast cancer •
- Metastatic colorectal cancer to the liver •
- Locoregional gastric or pancreatic cancer •
- Mesothelioma, pulmonary metastases, stage III A, B lung cancer or esophageal cancer •
- Localized soft tissue sarcomas •
- Peritoneal carcinomatosis •

CARE FOR ALL PATIENTS IS PROVIDED AT THE CLINICAL CENTER, NIH, BETHESDA, MARYLAND.

FOR MORE INFORMATION ON CANCER PROGRAMS, PLEASE CALL

(301) 496-1533
The activation of chemical carcinogens can be explained in terms of a few of these enzymes, and in some cases, a single one may predominate. This information from in vitro studies can be coupled with markers of drug metabolism to estimate the levels of specific cytochrome P450 enzymes in different individuals (Proc. Natl. Acad. Sci. USA, 86: 7696, 1989; Pharmacogenetics, 2: 116, 1992). Studies in progress address the association of cancers with levels of cytochromes P450 1A1, 2A6, 2C, 2D6, and 3A4. The focus has been on the hepatic cytochrome P450 enzymes, but the extrahepatic enzymes may assume special importance in some tumor types. This research has been covered at many symposia.

Dr. Guengerich earned a doctorate degree in biochemistry at Vanderbilt University and held a USPHS postdoctoral fellowship at the University of Michigan with Dr. Coon. He returned to Vanderbilt where he is now Professor of Biochemistry and Director of the Center in Molecular Toxicology. He has been recognized with a number of awards, including the Achievement Award from the Society of Toxicology, the J. J. Abel Award, and the B. B. Brodie Award from the American Society of Pharmacology and Experimental Therapeutics. He was a Burroughs Wellcome Scholar in Toxicology and currently is on the second term of an NCI Outstanding Investigator Award. He has been a member of the American Association for Cancer Research since 1983 and serves as an Associate Editor of Cancer Research and a member of the Editorial Advisory board of Cancer Epidemiology, Biomarkers & Prevention. He is an Associate Editor for and presides on the boards of several other journals as well. Among his publications are a book on mammalian cytochrome P450 and over 420 papers, reviews, and chapters in books. A recent popular review is in American Scientist (81: 440, 1993).

Dr. Beaune earned a doctorate in biochemistry at the University of Paris, after previous degrees in pharmacy. His doctoral research dealt with methods for the isolation of human cytochrome P450. During the last 10 years, he spent three periods ranging from 3 to 16 months in Dr. Guengerich’s laboratory and one 6-month interval with J. E. Gielen in Liège, Belgium, to perfect isolation procedures and clone cDNAs expressing specific human cytochromes, including insertion of appropriate cDNAs in yeast. Also developed were monoclonal antibodies specific for cytochromes. Dr. Beaune is Professor of Biochemistry at the Necker School of Medicine in Paris, where he has spent his entire career, and where he is also Director of the French National Program for Toxicology Education.

Dr. Kamatay trained in pharmacology at Chiba University as a Research Associate, working on drug metabolizing enzymes. These efforts yielded a doctoral thesis defended at the University of Tokyo. During that period, he spent 6 months in the laboratory of Dr. Sato, at the Protein Institute, University of Osaka; Dr. Sato was the first to isolate cytochrome P450. Dr. Kamatay then spent 15 months at Vanderbilt in the laboratory of Robert Neub. He then was on the faculty of the Department of Pharmacology, Keio University in Tokyo, chaired by Ryuichi Kato (Cancer Research cover, Vol. 50, March 15, 1990). There he was the first to demonstrate appreciable levels of cytochrome P450 in human fetal liver, in contrast to low levels in rat fetal liver. He also performed key research on the metabolic activation of carcinogenic heterocyclic amines. Dr. Kamatay is now Professor in the Division of Drug Metabolism, Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo.

We are indebted to all those featured, especially Dr. Guengerich, for information and photographs for this cover and accompanying legend.

John H. Weisburger