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>Assay Kits:</td>
<td>For assaying Topo I, II or Gyrase using your extracts. These kits contain DNA substrates and detailed instruction manual.</td>
<td></td>
</tr>
<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.

<table>
<thead>
<tr>
<th>Cat.#:</th>
<th>Description:</th>
<th>Size:</th>
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<tbody>
<tr>
<td>1009-1</td>
<td>Topo II Drug Kit</td>
<td>100 assays</td>
</tr>
<tr>
<td>1009-2</td>
<td>Topo II Drug Kit</td>
<td>250 assays</td>
</tr>
<tr>
<td>*1010-1</td>
<td>SDS-K+ Precipitation Kit</td>
<td>100 assays</td>
</tr>
<tr>
<td>*1010-2</td>
<td>SDS-K+ Precipitation Kit</td>
<td>250 assays</td>
</tr>
<tr>
<td>1018-1</td>
<td>Topo I Drug Kit</td>
<td>100 assays</td>
</tr>
<tr>
<td>1018-2</td>
<td>Topo I Drug Kit</td>
<td>250 assays</td>
</tr>
<tr>
<td>1025</td>
<td>DNA Intercalator/Unwinding Kit</td>
<td>50 assays</td>
</tr>
</tbody>
</table>

**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 enquire):**

| *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 cytolocalization 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       | 200 units |
| 2000H-2     | p170 Human Topoisomerase II       | 500 units |
| 2005H-1     | Human Topoisomerase              | 500 units |
| 2005H-2     | Human Topoisomerase              | 750 units |

**Antibodies and Related Reagents:**

| 2010-1       | Monoclonal AB Human p170          | 50 units |
| 2011-1       | Rabbit AB Human p170              | 250 units |
|              | (Ideal for Western blotting, I.F. and Imm.precip.) |
| 2011-2       | Purified C-terminal               | 50 ug |
| 2011-3       | Human Topo II (p170) Marker       | 20 units |
| 2012         | Human AB to Human Topo I (Scieroderma antibody) | 500 units |
| 2012-1       | Rabbit AB to Human Topo I (affinity purified reagent) | 250 units |
| 2014         | Rabbit AB Yeast Topo II           | 250 units |

**DNA Substrates for Assaying Topoisomerases and Gyrase:**

| 2013-1       | Kinetoplast DNA                   | 25 ug |
| 2013-2       | Kinetoplast DNA                   | 50 ug |
| 2013-3       | Kinetoplast DNA                   | 250 ug |
| 2017-1       | Linear KDNA                      | 10 ug |
| 2020-1       | Decatenated KDNA                 | 10 ug |
| 2023-2       | pRYG DNA (Topo II Site)           | 20 ug |
| 2025-1       | Relaxed pRYG DNA                 | 10 ug |
| *2030-2      | pHOTI DNA (Topo I Site)           | 20 ug |
| 2035-1       | Relaxed pHOTI DNA                | 10 ug |

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

| *2010 | Topo I Assay Buffer (10X)         | 0.75 ml |
| *2040 | Topo I Cleavage Buffer (10X)      | 0.75 ml |
| *2030 | Gyrase Assay Buffer (10X)         | 0.75 ml |
| *2040 | Topo II Assay Buffer (10X)        | 0.75 ml |
| *2040 | Topo II Cleavage Buffer (10X)     | 0.75 ml |
| *2060 | 10% Sodium Dodecyl Sulfate        | 0.75 ml |
| *2070 | 2.5 M KCl                         | 1.5 ml |
| *2080 | Agarose Gel Load Dye (10X)        | 0.75 ml |
| *2110 | Camptothecin (10 mM)              | 0.25 ml |
| *2120 | Doxorubicin (10 mM)               | 0.25 ml |
| *2130 | Daunomycin (10 mM)                | 0.25 ml |
| *2140 | Etoposide (10 mM)                 | 0.25 ml |
| *2150 | m-AMSA (10 mM)                    | 0.25 ml |
| *2160 | Genistein (10 mM)                 | 0.25 ml |
| *2170 | Ellipticline (10 mM)              | 0.25 ml |

**3000** Mupid-2 / TopoGEN Electrophoresis System (includes power supply, 6 gel trays, two combs, agarose and polyacrylamide casting stand, gel migration trough, instruction manual). This is the best little gel unit on the planet... perfect for topo I and II assays... and fast; typical runs are <15 min!

*Denotes new TopoGEN products for 1994*
AMERICAN ASSOCIATION FOR CANCER RESEARCH
86th Annual Meeting

Donald S. Coffey, Program Chairperson
Metro Toronto Convention Centre, Toronto, Ontario, Canada
March 18-22, 1995

Titles of Major Sessions
(Confirmed Chairpersons in Parentheses)

PLENARY SESSION
An Integrated View of the Cancer Cell (Donald S. Coffey)

SYMPOSIA
The Cell Cycle and Tumor Suppressor Genes (Thea D. Tlsty)
DNA Damage and Repair (Philip C. Hanawalt)
Natural Products in Chemoprevention (Michael B. Sporn)
Ribozymes and Antisense Oligonucleotides and the
Alteration of Gene Expression (Kevin J. Scanlon)
Genetic Susceptibility to Cancer (Kenneth W. Kinzler)
Environmental Carcinogens and Their Impact (Kenneth Olden)
Cell Surface Glycosylation Defining Malignancy (Sen-itiroh Hakomori)
Peripheral Stem Cells and High-Dose Chemotherapy
Apoptosis (Alan R. Eastman)
Biology of Radiation Oncology (H. Rodney Withers and
additional chairperson to be announced)
Biomarkers of Carcinogenesis (David Sidransky)
Transcription Factors and Carcinogenesis (Frank J.
Rauscher)
Gene Therapy in Cancer Clinical Trials
Telomeres and Telomerases (Carol W. Greider and Jerry W. Shay)
Extracellular Matrix, Gene Expression, and Cell Signalling
(Hynda K. Kleinman)
Mechanistic Basis for Ethnic Differences in Cancer Risk
Signal Transduction and Gene Control and Development
(James E. Darnell)
Angiogenesis (Judah Folkman and Adrian L. Harris)
Genes, Development, and Cancer (Eric N. Olson)
Growth Factors, Their Receptors, and Differentiation
(Angie Rizzino)
New Strategies and Targets for Chemotherapy (Joseph R.
Bertino and Eddie Reed)
Genetic Approaches to Invasion and Metastasis (Robert S.
Kerbel and Patricia S. Steeg)
Immunotherapy: Tumor Vaccines (David A. Berd)
Graft versus Tumor Effects
Dietary Intervention in Hormonal Carcinogenesis (Diane F.
Birt and Lovell A. Jones)
The Role of Stromal-Epithelial Interactions in Growth and
Neoplasia (Leland W. K. Chung)
Cancer Prevention and Intermediate Biomarkers (Peter
Greenwald)
Translational Research in Breast Cancer
DNA Methylation (Peter A. Jones and Stephen B. Baylin)

METHODS WORKSHOPS
General, In Situ, and Quantitative PCR (including
Differential Display)
Gene Targeting: Transgenics and Knockouts

CONTROVERSY SESSIONS
Are Estrogens Implicated in Breast Cancer?
Is Mammography Before Age 50 Beneficial?
What Are the Limits and Benefits of the PSA Assay?
Breast Cancer Prevention: What Will We Advise Women
with BRCA1?
What Are the Risks of Electromagnetic Fields in Causing
Cancer?
Is Bone Marrow Transplantation Indicated for Breast
Cancer?

MEET-THE-EXPERT SUNRISE SESSIONS
New Developments in Clinical Pharmacology (Merrill J.
Egorin)
Site-specific Gene Expression in Transgenic Animals
(Norman Greenberg)
Organ-specific Carcinogenesis (Cheryl Lyn Walker)
Modeling and Analyzing Clinical Trials (Steven Piantadosi)
Multivariate Determinants of Radiocurability
Multidrug Resistance (Victor Ling)
Cytokines, Vaccines, and Gene Therapy (Jonathan W.
Simons)
Tyrosine Kinases and Phosphatases
Prostate Cancer (John T. Isaacs)
Lung Cancer
Colon Cancer
Pediatric Malignancies (Joseph V. Simone)
Hematological Malignancies
Stem Cell Transplantation (Elizabeth J. Shpall)
Epidemiology and Cancer Prevention (Elizabeth W.
Newcomb)
Is a Mutagenic Event Involved in Initiation? (Ann R.
Kennedy)
Glutathione S-Transferase
Farnesyl Transferase as a Target for Therapy (Alexander
W. Wood)
Liver Cancer Etiology and Prevention (John D. Groopman)
Biochemical Determinants of Carcinogenesis (Allan B.
Okey)

EDUCATIONAL WORKSHOPS
To Be Announced

Abstract Deadline: October 14, 1994. Further Information: AACR Office • Public Ledger Building • Suite 816
150 S. Independence Mall West • Philadelphia, PA 19106-3483 • TELePHONE (215) 440-9300 • FAX (215) 440-9313
MOLECULAR BIOLOGY OF CANCER: IMPLICATIONS FOR PREVENTION AND THERAPY

Third Joint Conference of the American Association for Cancer Research and the Japanese Cancer Association

Maui Marriott Hotel, Maui, HI
February 13-18, 1995

SCIENTIFIC PROGRAM COMMITTEE

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TADAQ KAKIEZ / Tokyo
TOMOYUKI KITAGAWA / Tokyo

Keynote Addresses
TAKASHI SUGIMURA / Tokyo
LEE W. WATTENBERG / Minneapolis

Differentiation
* TOMOYUKI KITAGAWA / Tokyo
* MICHAEL B. SPORN / Bethesda
HOYUKU NISHINO / Tokyo
LORRAINE J. GUIDAS / New York
TOSHIKU KUROKI / Tokyo
MARTIN LIPKIN / New York

Signal Transduction
* FRANK MCCORMICK / Richmond
* TAKASHI TSURUO / Tokyo
YOSHIIK TAKAI / Osaka
MASABUMI SHIBUYA / Tokyo
I. BERNARD WEINSTEIN / New York
TADATSUFI TANIGUCHI / Osaka

Hormones and Receptors
* KUMAO TOYOSHIMA / Osaka
* BRIAN E. HENDERSON / La Jolla
MICHAEL N. GOULD / Madison
JOHN T. ISAACS / Baltimore
KEN YAMAGUCHI / Tokyo
TADATSUHI KUMIMOTO / Osaka

Multi-Step Carcinogenesis and Genomic Instability II

Multi-Step Carcinogenesis and Genomic Instability II

Chemoprevention in Vivo
* WAUN KI HONG / Houston
* SUKETAMI TOMINAGA / Nagoya
ALLAN H. CONNE / Piscataway
YASUTOSHI MUTO / Gifu
PETER GREENWALD / Bethesda
SHIGEO HINO / Yonago

Special Lecture
CARLTON GAUDIEN / Bethesda

Genetic Intervention
* YOSHIIK HASHIMOTO / Sendai
* JAC S. COHEN / Rockville
MITSURO HAYAGIDA / Kyoto
ERIC J. STANBRIDGE / Irvine
RICHARD C. MULLIGAN / Cambridge
KOYO TANAKA / Osaka

Scientists are encouraged to submit abstracts of papers for consideration for poster sessions. Persons in the Americas and countries other than Japan may obtain additional information from the AACR Office.

* designates Session Chairperson

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

Office of the Japanese Cancer Association for the 3rd Joint Conference
5-1-1 Tsukiji, Chuo-ku
Tokyo, 104 JAPAN
Telephone: (03)-3542-2511 ext. 4101
FAX: (03)-3248-0326
AACR SPECIAL CONFERENCE IN CANCER RESEARCH

Translational Research in Cancer: New Opportunities for Progress

Supported by a Generous Grant from the National Institute of Environmental Health Sciences

November 29 - December 4, 1994
The Grove Park Inn, Asheville, North Carolina

CONFERENCE CHAIRPERSON
Carlo M. Croce / Philadelphia, PA

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Bruce D. Cheson / Bethesda, MD
Robert L. Comis / Philadelphia, PA
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Marc E. Lippman / Washington, DC

SCIENTIFIC PROGRAM

Keynote Address
Webster K. Cavenee / La Jolla, CA

Hematopoietic Malignancies - Biology
Max D. Cooper / Birmingham, AL
Edward A. Clark / Seattle, WA
Bice Perussia / Philadelphia, PA
Drew M. Pardoll / Baltimore, MD

Hematopoietic Malignancies - Molecular Biology
Carlo M. Croce / Philadelphia, PA
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Hematopoietic Malignancies - Treatment
Albert B. Deisseroth / Houston, TX
Neal A. Flomenberg / Milwaukee, WI
Lee M. Nadler / Boston, MA
Bruce D. Cheson / Bethesda, MD
John C. Reed / La Jolla, CA
Clara D. Bloomfield / Buffalo, NY

Cytogenetics of Solid Malignancies/Sarcomas/Brain Tumors
Felix Mittelman / Lund, Sweden
Frederic G. Barr / Philadelphia, PA
Mark A. Israel / San Francisco, CA
Mark Noble / London, England

Prostate Cancer and Ovarian Cancer
John T. Isaacs / Baltimore, MD
Donald S. Coffey / Baltimore, MD
Thomas C. Hamilton / Philadelphia, PA
Robert F. Ozols / Philadelphia, PA

Lung Cancer
John D. Minna / Dallas, TX
Susan L. Naylor / San Antonio, TX
Paul A. Bunn, Jr. / Denver, CO

Breast Cancer
Marc E. Lippman / Washington, DC
Ira Pastan / Bethesda, MD
Karl Erik Hellström / Seattle, WA
Charles R. King / Gaithersburg, MD
Lance A. Liotta / Bethesda, MD
Jackson B. Gibbs / West Point, PA
Martin D. Abeloff / Baltimore, MD

Colorectal Cancer
Raymond L. White / Salt Lake City, UT
Richard Fishel / Burlington, VT
Glenn Steele, Jr. / Boston, MA

Applicants are encouraged to submit abstracts for poster presentation.

Information and Application Forms
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)
NOVEMBER 7-11, 1994
Modern Developments in Cancer Therapeutics
Joint Meeting with Academia Sinica
Chairpersons: Yung-chi Cheng, New Haven, CT; Cheng-Wen Wu, Taipei, Taiwan
Academia Sinica, Taipei, Taiwan, R.O.C.

NOVEMBER 29-DECEMBER 4, 1994
Translational Research in Cancer: New Opportunities for Progress
Chairperson: Carlo M. Croce, Philadelphia, PA
Grove Park Inn, Asheville, NC

DECEMBER 8-13, 1994
Basic and Clinical Aspects of Prostate Cancer
Chairperson: Donald S. Coffey, Baltimore, MD
Marriott's Rancho Las Palmas Resort, Rancho Mirage (Palm Springs), CA

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
(Abstract Deadline: October 14, 1994)

APRIL 1-6, 1995
Signal Transduction of Normal and Tumor Cells
Chairperson: Anthony J. Pawson, Toronto, Ontario, 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, Charlestown, MA; John D. Minna, Dallas, TX
Stouffer Harbortplace 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

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
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215-440-9300 • 215-440-9313 (FAX)
On May 21, 1894, The Wistar Institute opened its Victorian doors at 3601 Spruce Street, Philadelphia, PA, to great fanfare and local pride. One hundred years later, almost to the day (May 20, 1994), the Institute commemorated 100 years of existence in that same building, which has been much renovated and enlarged over the years.

The Wistar Institute is the oldest independent institution in the United States devoted to biomedical research. It was founded in 1892, the brainchild of Civil War General and civic leader Isaac J. Wistar, in memory of his great-uncle Caspar Wistar, M.D., a renowned physician and professor of anatomy at the University of Pennsylvania. The Institute was at first intended mainly to house Caspar Wistar’s famous collection of models of human anatomical features, which had been used as an adjunct to his teaching; this collection was greatly enlarged by William Edmonds Horner, M.D., dean of the University’s medical school.

From the beginning, there was a strong research component to the Wistar Institute, and it is as a research institution that Wistar is known around the world today. Its first major achievement was the development of the Wistar rat, recognized as the first standardized laboratory animal and an ideal vehicle for the study of the human nervous system. This occurred during the 32-year directorship (between 1905 and 1937) of Milton J. Greenman, M.D., who appears on the left in the historical photograph on the cover (bottom row). Standing with him is zoologist Horace Jayne, M.D., who preceded Greenman as Wistar’s director (1894 to 1905) and under whom the museum holdings were increased by more than 10,000 specimens. Dr. Greenman took other important steps that dictated the Institute’s direction for years to come. One was to grant University of Pennsylvania graduate students, as well as young scientists from all over the world, access to training in Wistar laboratories, a practice that continues to this day.

The modern era of The Wistar Institute began when Hilary Koprowski, M.D., a Polish-born scientist, became director in 1957. During his 34 years of leadership, Dr. Koprowski emphasized basic research, particularly virology and immunology, areas in which Wistar has achieved world renown. During the Koprowski years, the cell line known as WI-38 was developed at the Institute. The first strain of normal human cells to be grown in a test tube led to two later Wistar achievements, vaccines against rubella and rabies.

In 1972, Wistar was one of the first institutions to be designated by the National Cancer Institute as a federally approved cancer center, specializing in basic research. The emphasis of Wistar’s cancer research in the 1980s was on tumor immunology and molecular genetics. During this period, Wistar became a leader in the production of monoclonal antibodies; in particular, the Wistar-developed monoclonal antibody known as 17-1A has been found to be effective when used after surgery for colon cancer to prevent the spread of micrometastasis. Also in the 1980s, Wistar scientists focused on oncogenes. In 1982, Carlo M. Croce, M.D., and his colleagues demonstrated the involvement of the immunoglobulin loci and of the c-myc oncogene in Burkitt’s lymphoma. In addition, Dr. Croce and Yoshihide Tsujimoto, Ph.D., discovered the gene they named bcl-2 that later proved to be a key player in programmed cell death. This gene is activated by chromosomal translocations in follicular lymphomas.

The other photograph (top row) is of Giovanni Rovera, M.D., who has been director of the Institute since 1991. Trained in internal medicine and oncology in his native Italy and in pathology in the United States, Dr. Rovera has been associated with Wistar since 1975. He has contributed to present-day knowledge of the biology and residual disease of human leukemias.

Cancer research continues to be the major thrust of The Wistar Institute under Dr. Rovera. The Albert R. Taxin Brain Tumor Research Center and the Robert A. Fox Center for Structural Biology reflect two major areas of research that came into existence during this centennial year. Another effort of great promise is the program on gene therapy headed by James M. Wilson, M.D., Ph.D., which is being carried out in conjunction with the University of Pennsylvania.

Among the recent discoveries at Wistar is that by Giorgio Trinchieri, M.D., and Bice Perussia, M.D., of the molecule interleukin 12, which appears to have a profound impact on the body’s T-cell response to cancer and to such infectious agents as HIV.

Information and photographs were kindly supplied by Diana Burgwyn, Public Affairs Manager at Wistar; Dr. Rovera’s photo is credited to Seymour Mednick.

Sidney Weinhouse