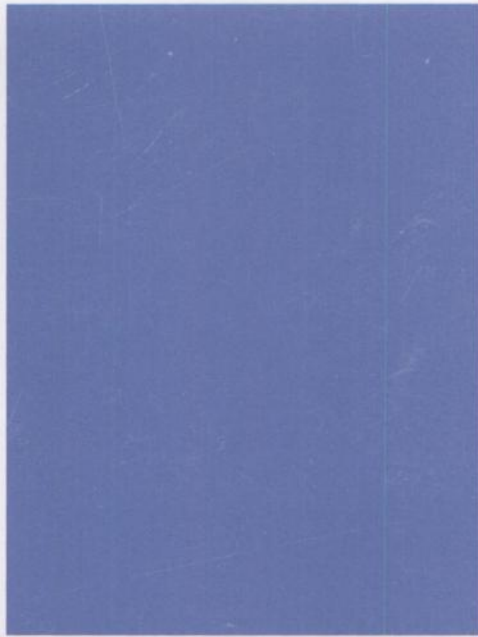
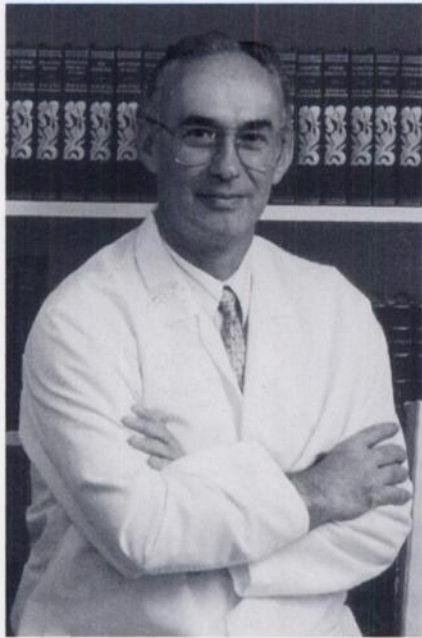




Cancer Research

AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH



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TopoGEN, Inc.

New Products, Kits and Lower Prices in 1994

Foreign distributors now available (see below)

Cat.#:	Description:	Size:
<i>Assay Kits: For assaying Topo I, II or Gyrase using your extracts. These kits contain DNA substrates and detailed instruction manual.</i>		
1001-1	Topo II Assay Kit	100 assays
1001-2	Topo II Assay Kit	250 assays
*1003	DNA Gyrase Assay Kit	100 assays
1015-1	Topo I Assay Kit	100 assays
1015-2	Topo I Assay Kit	250 assays

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.

1009-1	Topo II Drug Kit	100 assays
1009-2	Topo II Drug Kit	250 assays
*1010-1	SDS-K+ Precipitation Kit	100 assays
*1010-2	SDS-K+ Precipitation Kit	250 assays
1018-1	Topo I Drug Kit	100 assays
1018-2	Topo I Drug Kit	250 assays
1025	DNA Intercalator/Unwinding Kit	50 assays

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 I	500 units
2005H-2	Human Topoisomerase I	750 units

Antibodies and Related Reagents:

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

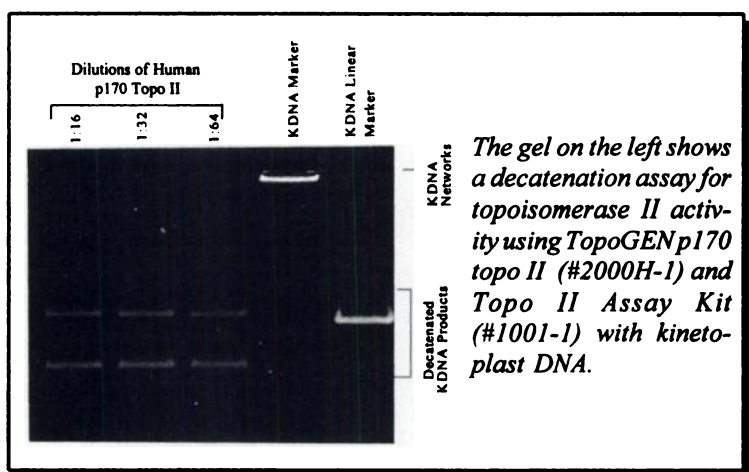
DNA Substrates for Assaying Topoisomerases and Gyrase:

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	pHOT1 DNA (Topo I Site)	20 ug
2035-1	Relaxed pHOT1 DNA	10 ug

Cat.#:	Description:	Size:
<i>Reagents and Inhibitors: All of our reagents and inhibitors are pretested with purified topoisomerases.</i>		
*4010	Topo I Assay Buffer (10X)	0.75 ml
*4020	Topo I Cleavage Buffer (10X)	0.75 ml
*4030	Gyrase Assay Buffer (10X)	0.75 ml
*4040	Topo II Assay Buffer (10X)	0.75 ml
*4050	Topo II Cleavage Buffer (10X)	0.75 ml
*4060	10% Sodium Dodecyl Sulfate	0.75 ml
*4070	2.5 M KCl	1.5 ml
*4080	Agarose Gel Load Dye (10X)	0.75 ml
*4110	Camptothecin (10 mM)	0.25 ml
*4120	Doxorubicin (10 mM)	0.25 ml
*4130	Daunomycin (10 mM)	0.25 ml
*4140	Etoposide (10 mM)	0.25 ml
*4150	m-AMSA (10 mM)	0.25 ml
*4160	Genistein (10 mM)	0.25 ml
*4170	Ellipticine (10 mM)	0.25 ml

3000 •Mupid-2 / TopoGEL 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**



The gel on the left shows a decatenation assay for topoisomerase II activity using TopoGEN p170 topo II (#2000H-1) and Topo II Assay Kit (#1001-1) with kinetoplast DNA.

Distributors of TopoGEN Products:

- Cosmo Bio Co., Ltd., Tokyo, Japan
Tel (03)3663-0722; Fax (03)3663-0725
- Funakoshi Co., Ltd., Tokyo, Japan:
Tel (03)5684-1620; Fax (03)5684-1775
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Osaka Office Tel (06)203-3741; Fax (06)201-5964
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Tel (02)792-2808; Fax (02)791-4624
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- Space Import Export, Milan, Italy. Tel (02)25 75377; Fax (02)25 72231

To place an order in the USA: Tel 800-837-7911 (24 hr order line) Fax 800-233-8676 (800-ADD-TOPO)
International orders: Tel 614-451-5810 Fax 614-451-5811

TopoGEN, Inc.
P.O. Box 20607
Columbus, Ohio 43220 USA

**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

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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TAKASHI SUGIMURA / Tokyo
SUKETAMI TOMINAGA / Nagoya
KUMAO TOYOSHIMA / Osaka
TAKASHI TSURUO / Tokyo

SCIENTIFIC PROGRAM

Keynote Addresses

TAKASHI SUGIMURA / Tokyo
LEE W. WATTENBERG / Minneapolis

Differentiation

*TOMOYUKI KITAGAWA / Tokyo
*MICHAEL B. SPORN / Bethesda
HOYOKU NISHINO / Tokyo
LORRAINE J. GUDAS / New York
TOSHIO KUROKI / Tokyo
MARTIN LIPKIN / New York

Signal Transduction

*FRANK McCORMICK / Richmond
*TAKASHI TSURUO / Tokyo
YOSHIMI TAKAI / Osaka
MASABUMI SHIBUYA / Tokyo
I. BERNARD WEINSTEIN / New York
TADATSUGU TANIGUCHI / Osaka

Hormones and Receptors

*KUMAO TOYOSHIMA / Osaka
*BRIAN E. HENDERSON / La Jolla
MICHAEL N. GOULD / Madison
JOHN T. ISAACS / Baltimore
KEN YAMAGUCHI / Tokyo
TADAMITSU KISHIMOTO / Osaka

Multi-Step Carcinogenesis and Genomic Instability I

*HIROO IMURA / Kyoto
*WEBSTER K. CAVENEE / La Jolla
MASAAKI TERADA / Tokyo
RAYMOND L. WHITE / Salt Lake City
MINAKO NAGAO / Tokyo
YUSUKE NAKAMURA / Tokyo

Multi-Step Carcinogenesis and Genomic Instability II

*ALLAN H. CONNEY / Piscataway
*HIROSHI KOBAYASHI / Sapporo
NOBUYUKI ITO / Nagoya
MUTSUO SEKIGUCHI / Fukuoka
THEA D. TLSTY / Chapel Hill
TOSHIKAZU NAKAMURA / Osaka
SHIGEKAZU NAGATA / Osaka
JOSEPH R. BERTINO / New York

Chemoprevention *in Vivo*

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

Special Lecture

CARLTON GAJDUSEK / Bethesda

Genetic Intervention

*YOSHIYUKI HASHIMOTO / Sendai
*JACK S. COHEN / Rockville
MITSUHIRO YANAGIDA / Kyoto
ERIC J. STANBRIDGE / Irvine
RICHARD C. MULLIGAN / Cambridge
KIYOJI 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

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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

c/o National Cancer Center
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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Robert L. Comis / Philadelphia, PA

Mark A. Israel / San Francisco, CA

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

Eli Canaani / Rehovot, Israel

Stephan W. Morris / Memphis, TN

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 Mitelman / 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

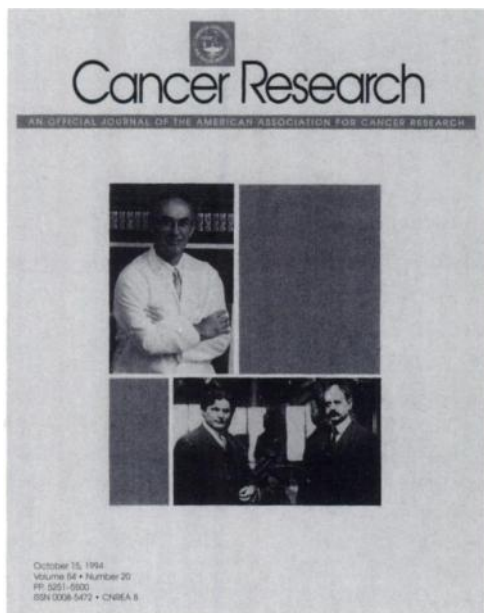
Glenn Steele, Jr. / Boston, MA

*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)

COVER LEGEND



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