

P-glycoprotein detection is becoming an important tool in the investigation of cancer multidrug resistance (MDR), a phenomenon in which resistance to one drug is associated with resistance to Signet's 4E3 monoclonal antibody, directed against a variety of unrelated drugs.

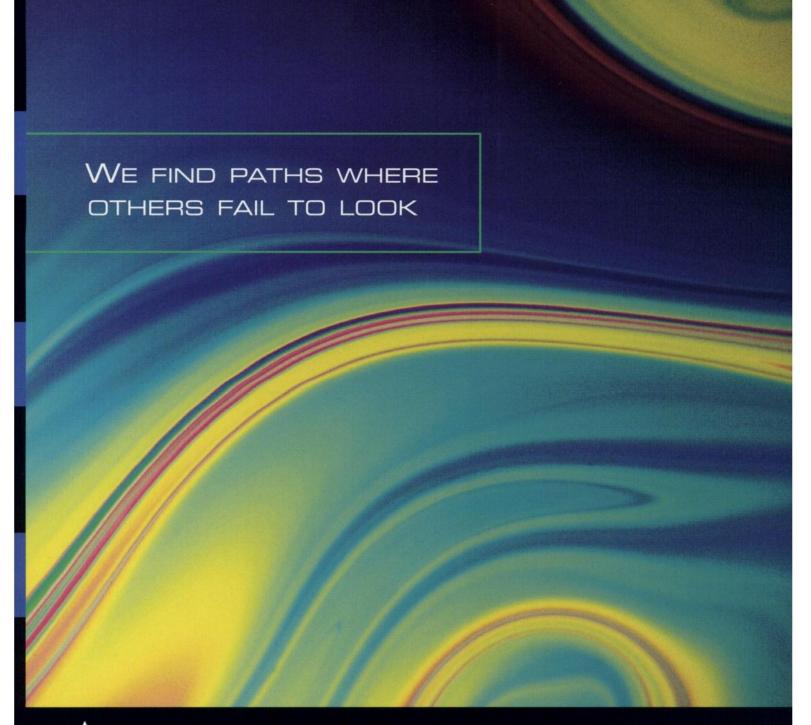
an external epitope of P-glycoprotein, can be used to determine the level of expression of P-glycoprotein in tissue specimens and on intact, viable cells, providing the advantage of being able to isolate P-glycoprotein positive cells for

Please call 800-223-0796 for additional Information on 4E3 and our other antibodles for investigation of multidrug resistance, C219, C494 and JSB-1.

SIGNET

Signet Laboratories, Inc. 180 Rustcraft Rd., Dedham, MA 02026 Fax: 617-461-2456 Tel: 617-329-7919 800-223-0796

For research use only. Not for use in diagnostic procedures. Arceci, R.J., et al. A monoclonal antibody to an external epitope of the P-glycoprotein. Proceedings of the American Association for Cancer Research 33:471, 1992.



At the Sandoz Cytokine Development Unit (CDU), we are exploring new paths of research and development and studying more options in disease treatment than were ever thought possible. Using the latest technology, the CDU is working to develop these treatments rapidly, with the same high-quality standards we have always upheld.

At the CDU, our commitment to research and development is unsurpassed. Sandoz created the

CDU as an independent unit, fueled by the dedication of specialized personnel. These highly skilled individuals have been brought together for a common goal—to explore new paths of therapy.



## The all-new edition of the unsurpassed resource for the day-to-day management of your patients with cancer.

## MEDICAL ONCOLOGY, 2/e

#### **Basic Management and Clinical Management of Cancer**

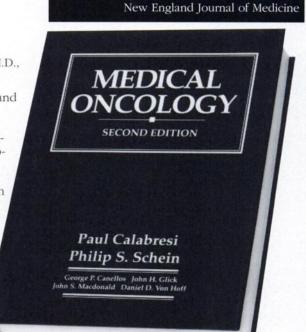
Paul Calabresi, M.D. & Philip S. Schein, M.D. George P. Canellos, M.D., John H. Glick, M.D., John S. Macdonald, M.D., Daniel D. Von Hoff, M.D.

Uniquely designed to meet the needs of the medical oncologists and primary care physician, the all-new Second Edition of MEDICAL **ONCOLOGY** provides you with authoritative review of the basic mechanisms underlying cancer therapy • current single and multimodal treatment approaches • and the theory and practice of supportive and palliative care.

At the core of **MEDICAL ONCOLOGY** is its in-depth survey of specific neoplasms, bringing together information essential at each point in the clinical decision-making process.

Second Edition Highlights Include: Molecular Biology for the Oncologist • Human Retroviruses and Cancer • Oncogenes • Tumor Growth Cell Kinetics and Cancer • Chemotherapy • Tumor Markers • Acute & Chronic Leukemias • Neoplasms of the Lung • Colorectal Cancer • Hematologic Considerations in Cancer • Control of Pain • Neoplasms Associated with AIDS • Cancer and Pregnancy • Office Practice of Oncology • Ethical and Psychosocial Issues in Oncology • Rehabilitation of the Patient with Cancer.

Available May 1993/1344 Pages/650 Illus/ ISBN: 105408-1/\$135.00 (tent.)



"Invaluable"

\*review of previous edition

#### Also New From McGraw-Hill



#### \*review of previous

#### THE BASIC SCIENCE OF ONCOLOGY, 2/e

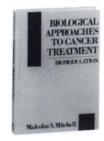
Editors: Ian F. Tannock, M.D., Richard P. Hill, Ph.D.

"It Delivers, Bravo."

-Journal of National Cancer Institute

Thoroughly revised and updated, provides you with timely, cohesive, straightforward account of the basic science aspects of clinical oncology.

May 1992/420 Pages/304 Illus/ISBN: 105407-3/\$49.95



#### **BIOLOGICAL APPROACHES TO CANCER TREATMENT Biomodulation**

Editor: Malcolm S. Mitchell, M.D.

Unparalled in depth and breadth of coverage, this groundbreaking work equips you with the tools and materials needed to ultimately devise your own rational approach to biomodulation in cancer therapy.

August 1992/624 Pages/Illus/ISBN: 105397-2/\$95.00

#### ORDER TODAY FOR YOUR FREE 30 DAY TRIAL!

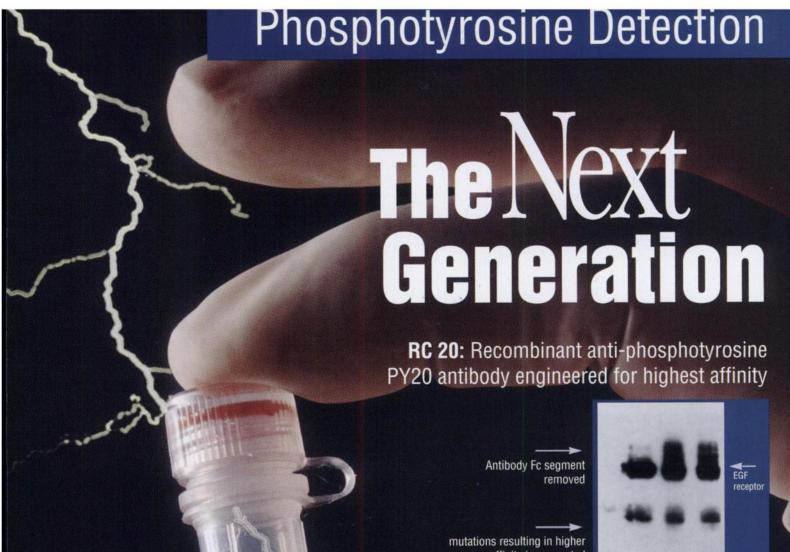
SPEED YOUR ORDER. CALL TOLL FREE 1-800-262-4729 (Between 8:00a.m. - 4:30p.m. EST) Please Mention Your Reference # 74SP004

CR



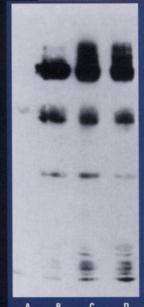
Clip and Mail to:  McGRAW-HILL, INC. Blue Ridge Summit, PA 17214-9989  YES! Please send me the book(s) I've checked on 30 day free trial. After 30 days, I will remit the full price plus local taxes and postage/handling or return the book(s) without obligation.  SAVE MONEY! Pay by check or credit card and McGraw-Hill pays postage. On all orders please add handling charges: \$3.50 on orders over \$40.00, \$2.00 on orders of \$40.00 or less. Other orders will be billed for postage and handling.			□ Calabresi: MEDICAL ONCOLOGY, 2/e □ Mitchell: BIO APPROACHES TO CANO (105397-2) \$95.00 □ Tannock: BASIC SCIENCE OF ONCLOOP Please Print: Name: Organization: Address:	
Charge my order to: VISA Master Card• AMEX  Account No.:  Typ. Date:  *MC Bank No.:		Daytime Telephone:  Offer only good in U.S. Prices outside the U.S. subject to acceptance by McGraw-Hill. All pric notice. 30-Day Trial does not apply to PreTest must be prepaid.		
Signature:  Date:  Bill Me Bill My Organization			Speed Your Order. Call Toll-Free 1-800 Be sure to mention your reference no.	

chec # / 101 001	
☐ Calabresi: MEDICAL ONCOLOGY, 2/e (105408-1) \$135.00 (ter	nt.)
☐ Mitchell: BIO APPROACHES TO CANCER TREATMENT (105397-2) \$95.00	
☐ Tannock: BASIC SCIENCE OF ONCLOGY, 2/e (105407-3) \$49.9	95
Please Print: Name:	
Organization:	
Address:	
City: State: Zip:	
Daytime Telephone:	
Offer only good in U.S. Prices outside the U.S. are slightly higher. All ord subject to acceptance by McGraw-Hill. All prices subject to change withou notice. 30-Day Trial does not apply to PreTest Titles. Shipment to P.O. Bomust be prepaid.	ıt
Speed Your Order. Call Toll-Free 1-800-262-4729.	
Be sure to mention your reference no. 74SP004	



affinity incorporated

direct conjugation to peroxidase or alkaline phosphatase for ease of detection



MAP

Normal human fibroblasts treated with EGF for O(A) 1(B) 3(C) or5(D) minutes and subjected to western blot in a 1 step method with RC20H recombinant

Now, single step non-radioactive detection on western blots in under 1 hour

Higher sensitivity and lower background than conventional P-tyr antibodies easy to use protocol included

Affordably priced

#### In Europe, contact **AFFINITI**

**Research Products Limited** Telephone: (44) 602 436100 Facsimile: (44) 602 436300

In Japan, contact

#### FUNAKOSHI CO., LTD.

9-7 Hongo 2-Chome, Bunkyo-Ku, Tokyo 113, Japan Telephone: 81-3-5684-1622 Facsimile: 81-3-5684-1633

## **Fransduction** aboratories.

Lexington, Kentucky 1-800-227-4063 Phone 606-277-1399 Fax 606-276-2251

#### Also available

antibodies to map kinases antibodies to SH2 proteins antibodies to other signal transduction proteins

#### AMERICAN CANCER SOCIETY CLINICAL AWARDS

The American Cancer Society is proud to announce its Clinical Awards for 1994 funding: the Clinical Oncology Fellowship (COF), the Clinical Oncology Career Development Award (CDA), and the Cancer Control Career Development Award for Primary Care Physicians (CCCDA).

The COF is a one-year institutional award intended to support a multidisciplinary training experience for physicians and dentists preparing for a leadership career in academic oncology. The Fellowship is expected to provide unique training in addition to that which is normally provided in postgraduate training programs designed to fulfill requirements of specialty boards. The COF stipend is \$10,000 per year.

The CDA is a three-year award given to promising junior faculty who will pursue academic careers in clinical oncology. A successful application must describe in detail a supervised program that will develop the candidate's clinical expertise and his/her capacity to perform independent clinical/laboratory research. The annual stipend for the CDA is \$25,000 for the first year, and \$30,000 and \$35,000 for the second and third years, respectively.

In order to encourage and support activities in cancer control, the Society offers a limited number of CCCDA's to physicians specializing in primary care. It is anticipated that physicians trained under these two-year grants will improve cancer control through involvement in primary care practice, education, and research activities related to cancer control. These awards are intended to develop academic leaders in primary care specialties emphasizing cancer control.

Please note that candidates for these awards must be citizens or permanent residents of the United States. The application deadlines for each of these awards are as follows:

Clinical Oncology Fellowship: July 1, 1993
Clinical Oncology Career Development Award: August 1, 1993
Cancer Control Career Development Award: August 15, 1993
To request additional information or application materials for these programs, contact the office of:

Virginia Krawiec, M.P.A. Professional Education Department American Cancer Society, Inc. 1599 Clifton Road, N.E. Atlanta, GA 30329-4251 404-329-5734

#### AMERICAN CANCER SOCIETY

#### **CLINICAL ONCOLOGY FELLOWSHIPS**

The American Cancer Society is pleased to announce the 1994 Clinical Oncology Fellowships (COF). The COF is intended to support a multidisciplinary training experience for physicians and dentists preparing for a leadership career in academic oncology. The program may include training in cancer control, prevention, detection, diagnosis, therapy, rehabilitation, and research. The Fellowship is expected to provide unique training in addition to that which is normally provided in postgraduate training programs designed to fulfill requirements of specialty boards, and it is available to citizens or permanent residents of the United States only.

Applications are to be submitted by institutions (not prospective fellows) by July 1, 1993 for fellowships to begin July 1, 1994. The stipend for this one-year award is \$10,000.

To request further information or application materials, please contact the office of:

Virginia Krawiec, M.P.A.
Professional Education Department
American Cancer Society, Inc.
1599 Clifton Road, N.E.
Atlanta, GA 30329-4251
404-329-5734

#### **AMERICAN CANCER SOCIETY**

#### CLINICAL ONCOLOGY CAREER DEVELOPMENT AWARDS

The American Cancer Society is pleased to announce the 1994 Clinical Oncology Career Development Award (CDA). This award is intended to encourage and develop promising candidates who will pursue academic careers in clinical oncology. Through the CDA, the Society seeks to support individuals in supervised programs that will develop the candidate's clinical expertise and his/her capacity to perform independent clinical and/or laboratory research

These awards are intended to support the early development of careers in academic clinical oncology; thus physicians who already have well established careers with substantial research funding should not apply. In addition, candidates for these awards must be citizens or permanent residents of the United States.

This is a three-year award. The stipend for the award is \$25,000 for the first year, \$30,000 for the second, and \$35,000 for the third. The application deadline is August 1, 1993 for awards to begin July 1, 1994.

To request further information or application materials, please contact the office of:

Virginia Krawiec, M.P.A.
Professional Education Department
American Cancer Society, Inc.
1599 Clifton Road, N.E.
Atlanta, GA 30329-4251
404-329-5734

#### AMERICAN CANCER SOCIETY

### CANCER CONTROL CAREER DEVELOPMENT AWARD FOR PRIMARY CARE PHYSICIANS

The American Cancer Society is pleased to announce the 1994 Cancer Control Career Development Award for Primary Care Physicians (CCCDA). This award is intended to develop academic leaders in primary care specialties emphasizing cancer control: family practice, general internal medicine, obstetrics and gynecology, and pediatrics. Through the CCCDA, the Society seeks to support individuals in supervised programs that will develop the candidate's clinical and teaching expertise and his/her capacity to perform independent clinical research in cancer control. It is anticipated that physicians trained under these awards will improve cancer control through involvement in primary care practice, education, and research activities related to cancer control.

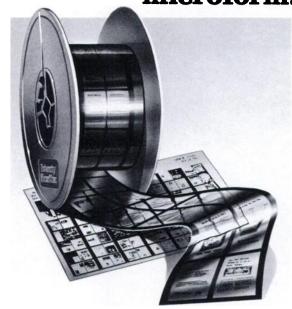
Candidates for first year Cancer Control Career Development Awards for Primary Care Physicians may not have an academic rank above that of Assistant Professor and must not be tenured or be the section head (or equivalent) in his/her discipline. These awards are intended to support the early development of academic careers which place emphasis on cancer control; physicians with well established careers and substantial research funding should not apply. In addition, candidates for these awards must be citizens or permanent residents of the United States.

This is a two-year award. The stipend for the award is \$25,000 for the first year and \$30,000 for the second. The application deadline is August 15, 1993 for awards to begin July 1, 1994.

To request further information or application materials, please contact the office of:

Virginia Krawiec, M.P.A.
Professional Education Department
American Cancer Society, Inc.
1599 Clifton Road, N.E.
Atlanta, GA 30329-4251
404-329-5734

# 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:				
Name				
Company/Institution				
Address				
City				
State	Zip			
Phone ( )				

University
Microfilms
International

## NINTH INTERNATIONAL SYMPOSIUM ON CELLULAR ENDOCRINOLOGY

## "Cell Signalling and the Molecular Stress Response"

September 23-26, 1993 at Whiteface Inn Resort & Club Lake Placid, NY

Sponsored By: W. Alton Jones Cell Science Center, Inc.



#### **ORGANIZING COMMITTEE:**

James L. Stevens, W. Alton Jones Cell Sci. Ctr. Cecil B. Pickett, Merck Research Laboratories William F. Greenlee, Purdue University

Topics include: mechanisms of transcription; protein kinases; cell cycle and p53; heat shock and glucose regulated proteins; regulation of cyt P450 and GSH-transferases; multidrug resistance genes; peroxisome proliferator, steroid and dioxin receptor mediated effects; molecular responses to asbestos, UV-light, ionizing radiation, metals, DNA damage, nitric oxide.

#### **INVITED SPEAKERS**

Patrick A. Baeuerle Jeff Laskin Yinon Ben-Neriah Amy S. Lee Chris Bradfield John T. Lis Margaret A. Brostrom Ian Macara Max Costa John McLachlan Tom Curran Richard I. Morimoto Albert J. Fornace, Jr. **Brooke Mossman** Mary-Jane Gething William B. Pratt Stephen Green **Carol Prives** Oliver Hankinson **Danny Reinberg** Nicholas Heintz Dennis J. Thiele Peter Herrlich Ralph Weichselbaum Susan Jaken James P. Whitlock, Jr. Michael Karin Xiao-kun Zhang

#### **REGISTRATION FORMS MAY BE OBTAINED FROM:**

The Organizing Committee
W. Alton Jones Cell Science Center, Inc.
10 Old Barn Road
Lake Placid, NY 12946

Tel: (518) 523-1252 Fax: (518) 523-1849