

**Progress
in
Cancer
Research**

P-glycoMAb C219™* **and** ***Multi-Drug Resistance to Chemotherapy***

Multiple drug resistance and P170

Data suggest that multiple drug resistance in cancer chemotherapy is associated with elevated levels of P-glycoprotein (P170)¹. P170 is a cell membrane protein that may serve as a pump to actively remove drugs from the cell². Thus, it may be important to further investigate if P170 levels can serve as a possible prognostic indicator of response to chemotherapy.

Research studies have shown elevated P170 levels to be associated with solid tumors and hematologic malignancies such as:

Ovarian
cancer
ascites
cells³

Acute
nonlymphoblastic
leukemia⁴

Breast cancer⁵

Colon cancer⁶

Initial research has begun on the role P170 may play in determining drug resistance to¹:

Colchicine

Doxorubicin

Vinblastine

Dactinomycin

P-glycoMAb C219™: monoclonal antibody to P170

Centocor's P-glycoMAb C219™ reacts with a P170 epitope expressed inside the cell membrane. Research is being conducted to determine the performance of C219 in detecting P-glycoprotein in:

Immunoblotting⁷

Immunocytology^{4,8}

Flow cytometry⁸

Now available for research use

To receive a complete scientific fact sheet and bibliography, or to order P-glycoMAb C219™ for research purposes, call 1-800-345-2401 (in Pennsylvania: 215-889-4446).

P-glycoMAb C219 is a trademark of Centocor, Inc.

1. Pastan I, Gottesman M: N Engl J Med 316:1388-1393 (1987).
2. Tsuruo T: Jpn J Cancer Res (Gann) 79:285-296 (1988).
3. Bell DR, et al: J Clin Oncol 3:311-315 (1985).
4. Ma DDF, et al: Lancet 1:135-137 (1987).
5. Fuqua SAW, et al: Cancer Res 47:2103-2106 (1987).
6. Dalton WS, et al: Cancer Res 48:1882-1888 (1988).
7. Procedure on file, Centocor, Inc.
8. Kartner N, et al: Nature 316:820-823 (1985).

* FOR RESEARCH USE ONLY. Not for use in clinical diagnostic procedure.



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Subscription Fulfillment Department
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428 East Preston Street
Baltimore, Maryland 21202



PROFESSOR OF MEDICINE

The University of California, Irvine, Cancer Center is seeking an Assistant Adjunct Professor of Medicine. Cancer research with expertise in molecular and cell biology. Study of transformation of human melanocytes and chemoprevention. Funding for at least two years available.

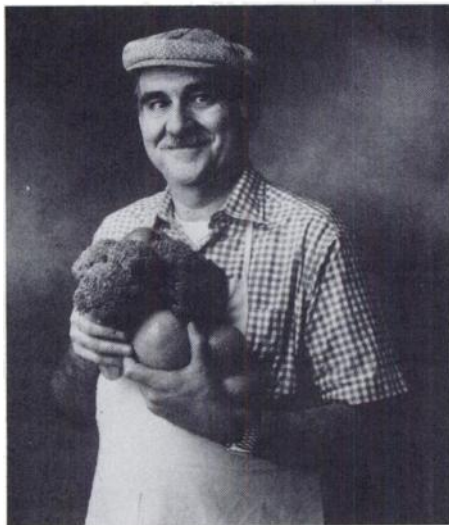
Opportunity to develop independent career. Position available July 1, 1989.

Send letter, list of at least 3 references, and curriculum vitae to:

Faculty Recruitment (Laboratory)
Frank L. Meyskens, Jr., M.D.
Director, UCI Cancer Center
101 The City Drive
Building 44
Route 81
Orange, CA 92668

Applications accepted until April 1, 1989, or until position is filled. UCI is an EO/AA employer.

FOR THE BEST DEFENSE AGAINST CANCER, SEE YOUR DOCTOR ONCE A YEAR AND HIM ONCE A WEEK.



He may not look like everybody's idea of a cancer specialist.

But there's strong evidence that your greengrocer has access to cancer protection you won't find in any doctor's office.

Like broccoli. Peaches. Canteloupes. Spinach. And other sources of Vitamin A related to lowering the risk of cancer of the larynx and esophagus. Not to mention sweet potatoes, carrots, pumpkin, winter squash, tomatoes, citrus fruits and brussels sprouts.

Vegetables such as cabbage, broccoli, brussels sprouts, kohlrabi and cauliflower may help

reduce the risk of gastrointestinal and respiratory tract cancer.

Fruits and vegetables (and whole grain cereals such as oatmeal, bran and wheat) may help lower the risk of colorectal cancer.

In short, make sure you do what your mother always told you to do.

Eat your vegetables.

**AMERICAN
CANCER
SOCIETY**

AMERICAN ASSOCIATION FOR CANCER RESEARCH, INC.

530 Walnut Street - 10th Floor

Philadelphia, PA 19106

APPLICATION FOR ASSOCIATE MEMBERSHIP

NAME OF CANDIDATE: _____ DATE OF BIRTH: _____

INSTITUTIONAL AFFILIATION: _____

INSTITUTIONAL ADDRESS: _____

(City) (State/Province) (Postal Code) (Country)

TELEPHONE NUMBER: _____ SOCIAL SECURITY NUMBER: _____

PRESENT ACADEMIC STATUS/TITLE: (Please check only one):

____ Graduate Student ____ Medical Student
____ Physician in Training ____ Postdoctoral Fellow

PRIMARY FIELD OF RESEARCH (Please check only one):

____ Biochemistry and Biophysics ____ Biostatistics ____ Carcinogenesis
____ Cellular Biology and Genetics ____ Clinical Investigations ____ Endocrinology
____ Epidemiology ____ Immunology ____ Molecular Biology and Genetics
____ Preclinical Pharmacology and Experimental Therapeutics
____ Virology ____ Other: _____

(Please specify)

ACADEMIC DEGREES (Please indicate degree(s) acquired to date along with the name of the academic institution and date of receipt. Provide information on degree currently being sought and the anticipated date of completion of this degree program.)

RELEVANT RESEARCH EXPERIENCE NOT RELATED TO COURSE WORK (Please list most recent first.)

PUBLICATIONS (List the authors, title, journal, volume, inclusive pages, and year of any article in a peer-reviewed journal on which the candidate appears as an author. Do not list abstracts. Continue on a separate sheet, if necessary.)

CANDIDATE NOMINATED BY: _____

(Please type or print name of AACR active member in good standing.)

SIGNATURES

I hereby apply for associate membership in the American Association for Cancer Research. I have read the instructions on the reverse side of this form, and I understand the privileges and responsibilities of this class of membership. I certify that the statements on this application are true.

Signature of Candidate: _____ Date: _____

I recommend this candidate for associate membership in the American Association for Cancer Research. To the best of my knowledge, the candidate is qualified for this class of membership, and the statements on this application are true.

Signature of Nominator: _____ Date: _____

Submit three copies of this form. At least one copy must contain the original signatures of the candidate and the nominator. Enclose a check for \$20 in U.S. funds made payable to AACR, Inc. and drawn on a U.S. bank. Check *one* of the following boxes *only* if this form is being submitted between September 1 and December 31:

The enclosed dues payment should be applied to the

current forthcoming calendar year.

(NOTE: If dues are applied to the forthcoming year, membership will take effect on January 1.) See Guidelines for Application on the reverse side of this form for further instructions.

(This form may be reproduced.)



AMERICAN ASSOCIATION FOR CANCER RESEARCH

EIGHTIETH ANNUAL MEETING

May 24-27, 1989
Moscone Convention Center
San Francisco, California

ADVANCE REGISTRATION FORM (please print or type)

NAME: _____
Last First/Middle Initial

ADDRESS: _____
Institution

_____ Street, Building, or Post Office Box

_____ City State or Province Postal Code

_____ Country (if not U.S.) Telephone

WHAT IS YOUR PRIMARY FIELD OF RESEARCH (Please check only one):
 ¹Biochemistry and Biophysics ²Biostatistics ³Carcinogenesis ⁴Cellular Biology & Genetics ⁵Clinical Investigations
 ⁶Endocrinology ⁷Epidemiology ⁸Immunology ⁹Molecular Biology ¹⁰Preclinical Pharmacology & Experimental Therapeutics
 ¹¹Virology ¹²Other (please specify): _____

ARE YOU THE PRESENTER OF AN ABSTRACT SUBMITTED FOR THE 1989 AACR MEETING? Yes No

ON WHICH DAYS WILL YOU ATTEND THE 1989 AACR ANNUAL MEETING?

Wednesday, May 24 Thursday, May 25 Friday, May 26 Saturday, May 27

WILL YOU ATTEND THE ASCO MEETING IN SAN FRANCISCO? Yes No

ON WHICH DAYS WILL YOU ATTEND THE 1989 ASCO ANNUAL MEETING?

Sunday, May 21 Monday, May 22 Tuesday, May 23

PAYMENT OF REGISTRATION

Fees may be paid by check or with a MasterCard, VISA, or Eurocard account. All payments must be made in U.S. currency, and all checks must be drawn on a U.S. bank. Payment must accompany this form; purchase orders will not be accepted as payment. Honorary and emeritus members may register gratis.

FEES

- | | |
|--|-------|
| <input type="checkbox"/> Active/Corresponding Member Rate | \$ 55 |
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| <input type="checkbox"/> Nonmember Rate (includes a copy of AACR <i>Proceedings</i>) | \$100 |
| <input type="checkbox"/> Student/Associate Member Rate* | \$ 25 |
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| <input type="checkbox"/> AACR <i>Proceedings</i> † | \$ 20 |
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THE DEADLINE FOR ADVANCE REGISTRATION IS MARCH 31, 1989

*Students must enclose a statement, signed by the registrar, dean, or department head of their university or college on official letterhead, confirming their status. Special student rates are available only to predoctoral students. Postdoctoral fellows or physicians in training do not qualify for the student registration rate unless they are associate members of the AACR. An application for associate membership may accompany this form, but these should be submitted well before the advance registration deadline as review of the associate membership application may delay registration.

†AACR members with paid-up subscriptions to *Cancer Research* receive the *Proceedings* automatically. Members who check this box and pay the \$20 fee will receive an additional copy of the *Proceedings*.

Mail all advance registration forms with applicable fees to Annual Meeting Registration, American Association for Cancer Research, Inc., 530 Walnut Street - 10th Floor, Philadelphia, PA 19106. Receipts will be sent to you in April. AACR members in good standing will receive copies of the Program and *Proceedings* prior to the meeting. Nonmember and student advance registrants residing in the U.S. and Canada will also receive the Program before the meeting and (if they have purchased it) the *Proceedings*. Please note that nonmember registrants receive a copy of the *Proceedings* automatically, but if students are to receive a copy of this document before the meeting, it must be purchased at the time of advance registration.

REFUND POLICY

Refunds on registration fees will be granted on written request received in the AACR Office by May 22, 1989. Requests received after this date will not be honored. Receipts and badges (if they have been mailed) must be returned to the AACR Office with the refund request. A cancellation fee of \$15.00 will be deducted from all refunds to cover administrative costs. *Proceedings* are not returnable, and an additional \$20 will be deducted from refunds to nonmembers and students if this document has already been mailed.

PRELIMINARY ANNOUNCEMENT

THE CELL MEMBRANE AND CELL SIGNALS AS TARGETS FOR CANCER CHEMOTHERAPY

Queens' College, Cambridge, U.K.

September 14-16, 1989



sponsored by
American Association for Cancer Research
European Organisation for Research and Treatment of Cancer (Pharmacology and Metabolism Group)
British Association for Cancer Research

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Wolfgang Berdel, Technical University, Munich, FRG

BACR

Anne P. Simmonds, Kirby-Warwick Pharmaceuticals, Bury St. Edmunds, UK

AIMS

This conference will explore one of the most promising areas of anticancer drug research today: the concept that cytotoxic drugs might act at the cell surface or on the intracellular signalling cascades. In the past two to three years there has been an explosion of knowledge about the role of cell surface receptors and intracellular signalling mechanisms. Furthermore, the recent advances in cell and molecular biology make it possible, for the first time, to think of targeting anticancer drugs at specific sites of difference between normal and tumor cells.

SPEAKERS

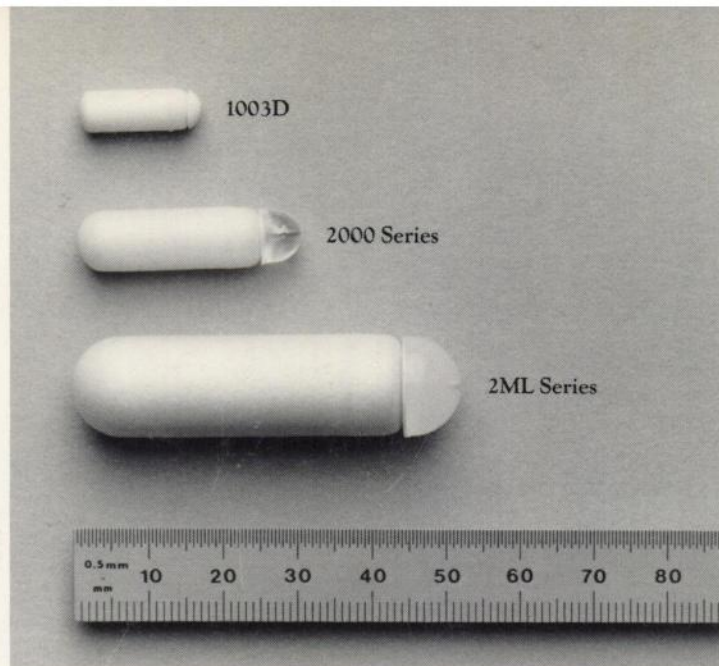
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Andreas Gescher, Aston University, Birmingham, UK
Yosef Graziani, Ben Gurion University of the Negev, Beer Sheeva, Israel
Hans H. Grunicke, Institute for Medicinal Chemistry and Biochemistry, Innsbruck, Austria
Ian R. Hart, Imperial Cancer Research Fund, London, UK

John A. Hickman
Marc Mareel, University Hospital, Ghent, Belgium
Christopher Marshall, Institute of Cancer Research, London, UK
Edward J. Modest
Wouter Moolenaar, Netherlands Cancer Institute, Amsterdam, Netherlands
Harold L. Moses, Vanderbilt University School of Medicine, Nashville, USA
Garth L. Nicolson
Ewa Ninio, INSERM, Clermont, France
Alexander Noseda, Mario Negri Institute for Pharmacological Research, Milan, Italy
Sten Orrenius, Karolinska Institute, Stockholm, Sweden
Peter J. Parker, Ludwig Institute for Cancer Research, London, UK
Garth Powis
Timothy J. Rink
Enrique Rozengurt, Imperial Cancer Research Fund, London, UK
Thomas R. Tritton
Michael D. Waterfield, Ludwig Institute for Cancer Research, London, UK

CONFERENCE SECRETARIATS

American Association for Cancer Research
530 Walnut Street, 10th Floor
Philadelphia, PA 19106
USA
215-440-9300
FAX: 215-440-9313

British Association for Cancer Research
c/o Institute of Biology
20 Queensberry Place
London SW7 2DZ, UK
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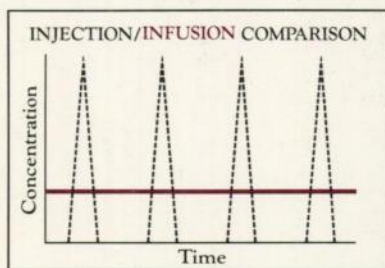


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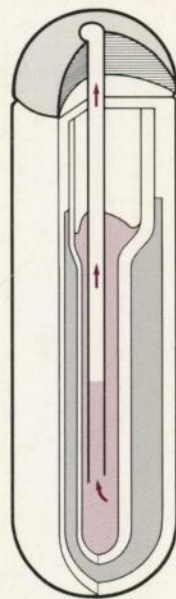
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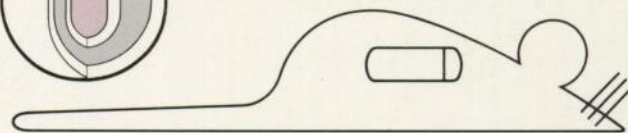


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