AUTHOR INDEX

Sumegi, J., 4481
Sumitani, S., 4323
Symbula, M., 4423
Takahashi, N., 4250
Takahashi, T., 4310
Takashima, T., 4250
Takashima, K-I., 4310
Takeyama, H., 4476
Tannenbaum, S. R., 4371
Taylor, P. T., 4423
Teitel, C. H., 4371
Teng, B-B., 4305
Theodorescu, D., 4486
Thomason, A., 4149
Thompson, S. M., 4492
Tomiya, J., 4149
Torigoe, T., 4250
Totpal, K., 4266
Toyokuni, T., 4310
Tribby, I., 4149
Trown, P. W., 4219
Tsukuda, K., 4450
Tsurumi, H., 4310
Tubbs, R., 4199
Tucker, R. W., 4206
Tweardy, D. J., 4355
Uemura, Y., 4271
Uzvolgyi, E., 4481
Vecchio, G., 4234
Veilleux, R., 4336
Viinikka, L. U., 4116
Vives, J., 4436
Vogelstein, B., 4135
Wakamiya, N., 4476
Waldren, C. A., 4463
Walker, C., 4415
Walker, G. J., 4367
Wei, H., 4443
Wharton, J. T., 4257
White, A., 4131
Wientjes, M. G., 4347
Wietharn, B. E., 4360
Witt, P., 4155
Wolkow, C. A., 4279
Woo, T., 4279
Xu, H-J., 4481
Xuan, H., 4192
Yagihashi, A., 4250
Yague, J., 4436
Yamaguchi, T., 4310
Yarosh, D., 4313
Yazaki, Y., 4450
Ylikorkala, R. O., 4146
Yoneda, T., 4430
Young, J. F., 4371
Yuspa, S. H., 4206
Zalutsky, M. R., 4164
Zava, D., 4470
Zilberstein, A., 4430
4503
BENEFITS OF MEMBERSHIP

The American Association for Cancer Research (AACR) is a scientific society consisting of laboratory and clinical cancer researchers. It was founded in 1907 "to bring together active investigators of the cancer problem for presentation and discussion of new or significant observations; and to foster research in cancer and other phenomena of growth." Members of the AACR enjoy the following benefits:

1. subscriptions to the journals Cancer Research and Cell Growth & Differentiation at the reduced member rate;
2. the privilege of sponsoring an abstract for presentation at the AACR annual meeting;
3. an advance copy of the Program and Proceedings pertaining to each annual meeting;
4. a reduced registration rate at all scientific meetings;
5. early notification of events in the AACR's series of special conferences;
6. subscriptions to any future AACR journals at reduced member rates;
7. reduced rates for the AACR Employment Register;
8. the benefit of AACR's public education activities;
9. the receipt of AACR newsletters, meeting announcements, and an up-to-date membership directory.

QUALIFICATIONS FOR MEMBERSHIP

Active membership in the AACR is open to investigators who live in the Americas, and who have conducted two years of meritorious research that has resulted in publications relevant to cancer. If a candidate is working in a research area not directly related to the cancer field but has conducted research of exceptional scientific merit, he or she may also qualify for membership.

Corresponding membership is open to qualified persons who are not residents of the Americas. The requirements for corresponding membership are the same as those for active membership. Visiting scientists from outside the Americas who intend to return to their countries of origin soon after submitting their applications should apply for corresponding membership. All other individuals should apply for active membership and transfer to corresponding status at a later date if they should leave the Americas.

PROCEDURES FOR APPLICATION

There are three deadlines for receipt of a membership application: March 1, July 1, and October 1 of each year. The Membership Committee will review all complete applications for active membership that have been received by these deadlines and will submit recommendations on each candidate to the Board of Directors which formally elects all members. The same procedure is followed by the Special Memberships Committee which receives applications for corresponding membership. Candidates will be notified according to the following schedule:

<table>
<thead>
<tr>
<th>Receipt of Application in AACR Office</th>
<th>Notification of Candidate</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 1</td>
<td>May</td>
</tr>
<tr>
<td>July 1</td>
<td>September</td>
</tr>
<tr>
<td>October 1</td>
<td>December</td>
</tr>
</tbody>
</table>

A complete application consists of the following material:

1. 6 copies of the form on the opposite side of this page, with all requested information provided.

2. 5 copies of the candidate's most current curriculum vitae and bibliography.
3. 5 copies of a letter of recommendation from a nominator who is an active, emeritus, or honorary member of the AACR (at least one copy must be a signed, original letter). This letter should describe the candidate’s achievements in laboratory research, clinical investigations, or epidemiological research, and it should affirm that this research adheres to accepted ethical standards.—OR—The nominator may supply the responses requested at the bottom of the application form in the section entitled “STATEMENT OF SUPPORT” (at least one copy of the form must be the signed original).
4. 5 copies of a letter of recommendation as described in Item 3 above from a seconder who is an active, emeritus, or honorary member of the AACR (at least one copy must be a signed, original letter).—OR—The seconder may supply the responses requested at the bottom of the application form in the section entitled “STATEMENT OF SUPPORT” (at least one copy of the form must be the signed original).
5. 5 reprints of each of two publications on which the candidate appears as author.

All material should be collated into five complete sets with the original application form as a covering document and sent to the address given below. Questions regarding procedures for membership application may also be directed to the following address:

American Association for Cancer Research
Public Ledger Building
620 Chestnut St.
Suite 816
Philadelphia, PA 19106
215/440-9300

RESPONSIBILITIES OF MEMBERSHIP

Candidates should be aware of the following responsibilities of membership in the AACR. Active members must pay annual dues, a major portion of which is designated for a subscription to at least one of the AACR’s publications. Newly elected members of the AACR who have already purchased subscriptions to Cancer Research or Cell Growth & Differentiation at the higher, nonmember rate will receive reimbursement of the unused portion of those subscriptions once their first year’s membership dues are paid in full.

All corresponding members elected after May 23, 1985, are required to pay an annual assessment in lieu of dues. This assessment, which is equivalent to that portion of the regular dues that pertains to support of activities other than publications, is imposed to defray the cost of sending AACR publications to members outside the Americas. Corresponding members may, if they wish, subscribe to Cancer Research or Cell Growth & Differentiation at the reduced member rate.

Applicants elected in May will be responsible for payment of that year's dues; applicants elected in September and December will pay dues in the following year. Applicants elected in May and September will be eligible to sponsor an abstract for the next annual meeting. Every effort will be made to afford the same opportunity to applicants elected in December.

Margaret Foti
Executive Director
# APPLICATION FOR MEMBERSHIP

**CATEGORY OF MEMBERSHIP:** □ Active □ Corresponding

**NAME OF CANDIDATE:** ___________________________ **DATE OF BIRTH:** ___________________________

**PRESENT POSITION/TITLE:** ___________________________

**INSTITUTIONAL AFFILIATION:** ___________________________

**TELEPHONE NUMBER:** ___________________________

**FAX NUMBER:** ___________________________

**INSTITUTIONAL ADDRESS:** (City) (State/Province) (Country) (Postal Code)

**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: ___________________________

**ACADEMIC DEGREES** (Including where and when granted)

**EXPERIENCE SINCE HIGHEST DEGREE WAS GRANTED** (Please list most recent first)

**PUBLICATIONS** (Reprints of two articles on which the candidate appears as an author must accompany this application. For these two articles list the authors, title, journal, volume, inclusive pages, and year. Do not submit abstracts.)

**CANDIDATE NOMINATED BY:** ___________________________ **CANDIDATE SECONDED BY:** ___________________________

**STATEMENT OF SUPPORT** (in place of letters of recommendation)

Instead of submitting letters of recommendation, either the nominator or the seconder or both may complete the following section:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long has the candidate worked in the field of cancer research?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Will the candidate make a long-term contribution to cancer research?</td>
<td>___ Yes ___ No</td>
<td></td>
</tr>
<tr>
<td>Does the candidate's research adhere to accepted ethical standards?</td>
<td>___ Yes ___ No</td>
<td></td>
</tr>
<tr>
<td>I therefore recommend this candidate for membership in the American Association for Cancer Research.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Signature of nominator** * ___________________________ **Date** ___________________________

**Signature of seconder** ___________________________ **Date** ___________________________

See Guidelines for Application on the reverse side of this form for further instructions.

* Nominators must be active, emeritus, or honorary members of the AACR.

(This form may be reproduced.)
GUIDELINES FOR APPLICATION FOR ASSOCIATE MEMBERSHIP

QUALIFICATIONS FOR MEMBERSHIP

Associate membership is open to graduate students, medical students, postdoctoral fellows, and physicians in training who live in the Americas and who are following a course of study or who are working in a research program relevant to cancer.

BENEFITS OF MEMBERSHIP

The American Association for Cancer Research (AACR), a scientific society consisting of laboratory and clinical cancer researchers, was founded in 1907 "to bring together active investigators of the cancer problem for presentation and discussion of new or significant observations; and to foster research in cancer and other phenomena of growth." Associate members of the AACR enjoy the following benefits:

1. the privilege of sponsoring an abstract for presentation at the AACR annual meeting provided that (a) the associate member is the presenter of the abstract and (b) an active member in good standing of the AACR also signs the abstract in support of the work (In this instance, the active member who cosigns the abstract does not lose his or her own sponsorship privilege);
2. an advance copy of the Program and (if one has been purchased by the associate member) the Proceedings of the American Association for Cancer Research which contains abstracts of all papers being presented at each annual meeting;
3. the privilege of registering for the annual meeting at the low student rate (This rate is otherwise available only to predoctoral students.);
4. preferred access to the AACR Employment Register;
5. an optional subscription to the journal Cancer Research at the reduced member rate;
6. subscriptions to any future AACR journals at reduced member rates;
7. early notification of events in the AACR’s new series of small scientific meetings on timely scientific topics;
8. the receipt of AACR newsletters, meeting announcements, and an up-to-date membership directory; and
9. the facilitation of informal scientific exchange with leading researchers in the cancer field.

PROCEDURES FOR APPLICATION

Persons wishing to apply for associate membership must use the official application form on the reverse side of these instructions. Each candidate for associate membership must be nominated by an active member in good standing of the AACR. Three completed copies of the form should be submitted; at least one of these copies must carry the original signatures of both the candidate and the active member nominator. The application form may be submitted to the Association Office at any time.

After review of applications for associate membership, the Executive Director will notify candidates of their election or deferral within one month of the receipt of the application form. A check in the amount of $20, which represents one year's dues payment, must accompany the application. This fee will be refunded to any candidate deemed to be ineligible for associate membership. Checks should be in U.S. currency, made payable to AACR, Inc., and drawn on a U.S. bank. Send the three copies of the application form and the $20 dues payment to:

American Association for Cancer Research
Public Ledger Building
620 Chestnut St.
Suite 816
Philadelphia, PA 19106
215/440-9300

RESPONSIBILITIES OF MEMBERSHIP

Associate members must pay annual dues in an amount to be determined by the AACR Board of Directors. Dues for 1991 have been set at $20 per year. If an application is submitted by August 31, the accompanying dues payment will be credited to the current year. Candidates submitting applications between September 1 and December 31 may indicate whether they wish their dues payments credited to the current or forthcoming year. Candidates should be aware, however, that associate members may sponsor an abstract for the annual meeting only if their dues for the current year are paid. For example, an associate member submitting an abstract in December 1990 for the forthcoming annual meeting must have paid dues for 1990. Any newly elected associate members of the AACR who have already purchased subscriptions to Cancer Research at the higher, nonmember rate will receive a refund for the unused portion of that subscription upon receipt of their payment for a member's subscription.

Each Fall the AACR will send to current associate members an invoice for dues for the forthcoming year. Payment of this invoice must be accompanied by a statement signed by the associate member's current registrar, dean, or department head, verifying the member's current academic status. The Association's By-Laws state that dues are payable for each year in advance on or before January 1 of that year. An individual may be an associate member for a maximum of five years. Each year in which an individual pays dues will count as one full year of associate membership. Thus, an associate member who pays dues for 1990 may retain associate membership until December 31, 1994. The Board of Directors may terminate the membership of an associate member whose dues are in arrears for two years.

Margaret Foti,
Executive Director
APPLICATION FOR ASSOCIATE MEMBERSHIP

NAME OF CANDIDATE: ____________________________ DATE OF BIRTH: ____________________________

INSTITUTIONAL AFFILIATION: ____________________________

INSTITUTIONAL ADDRESS: ____________________________

Telephone number: ____________________________

Fax number: ____________________________

Present academic status/title (please check only one):

Graduate student  Medical student  Preclinical pharmacology and experimental therapeutics

Primary field of research (please check only one):

Biochemistry and biophysics  Biostatistics  Virology

Cellular biology and genetics  Clinical investigations  Other:

Epidemiology  Immunology  Molecular biology and genetics

Preclinical pharmacology and experimental therapeutics  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, but the candidate will not be eligible to sponsor an abstract for presentation at the annual meeting in May of that year.) See guidelines for application on the reverse side of this form for further instructions.

(This form may be reproduced.)
Guidelines for Submitting Disks
to
American Association for Cancer Research Publications

The word processing packages that we prefer are as follows:

XyWrite III Plus (for the IBM)       Microsoft Word (for the IBM)
WordPerfect 4.2, 5.0, 5.1 (for the IBM) Wang OIS (WPS)
Wordstar (for the IBM)

Also acceptable:

Apple II DOS 3.3       Display Write 4
Apple with Appleworks Software       IBM Displaywriter Word Processor 6580
Apple III Plus DOS 3.3       Lanier Business One Step
Apple Macintosh 400K Disc/       Lanier No Problem
    MacWrite 2.2 (text)       Lanier Super No Problem
Apple Macintosh Plus 800K Disc/       MASS-11 PC
    MacWrite 4.5 (text)       Microsoft Word Macintosh
CPT 8000       (Versions 1–4) 400/800K
DEC WPS-8       Multimate
DEC Decmate II       PC Write
DEC Decmate III       PFS Professional Write
Display Write 3       Volkswriter 4.0
Wordstar 2000

New releases of word processing software are not always immediately available for conversion. In addition, because of the file structures and internal coding, we cannot accept disks created on desktop publishing systems or those created on proprietary typesetting systems. We also cannot guarantee that all special characters can be translated. Tabular and mathematical material, such as equations, will not be captured from the disk but will be rekeyed.

To expedite work and for your own security, we do require that you submit a hard copy printout of the disk file. The tables and equations will be keyed from this hard copy. We also need to know the name of the file to be converted, the type of hardware (e.g., IBM PC) on which the files were created, the operating system (e.g., DOS 3.3), and the version of the software (e.g., WordPerfect 5.1) used to create the file.

PLEASE FILL OUT ALL INFORMATION ON REVERSE SIDE AND SUBMIT THIS FORM WITH YOUR DISK. DISKS WILL NOT BE PROCESSED WITHOUT THIS INFORMATION.
DISK SUBMISSION FORM

AACR journals are now using personal computers to copyedit manuscripts accepted for publication. Authors are encouraged to submit electronic disks of their manuscripts along with the typed manuscript. Disks will ultimately be returned to the authors.

See reverse for the word processing packages that can be accepted.

File preparation

Please be sure that the file you send is the most recent version of the manuscript and that it matches the most recently submitted printed copy. The file should contain all the parts of the manuscript in one file. Mathematical and tabular material, however, will be processed in the traditional manner and may be excluded from the disk file.

Note: AACR does not assume responsibility for errors in conversion of customized software, newly released software, or special characters.

Please label the outside of the disk with the journal name, the first author's name, a partial title of the manuscript, and the name of the computer file used to access the manuscript on disk. To process your disk efficiently, we need the following information. Please be sure to provide ALL the information.

Name used to access paper on disk: ________________________________
Name of computer used (e.g., IBM/PS2): ________________________________
Operating system and version (e.g., DOS 3.3): ________________________________
Word processing program and version (e.g., WordPerfect 5.0): ________________________________
[See reverse for acceptable programs.]

Manuscript number (if known): ________________________________
First author: ________________________________
Corresponding author (if different from first author): ________________________________
Telephone/FAX numbers: ________________________________

This form (both sides) may be reproduced.
Concepts and Molecular Mechanisms of Multistage Carcinogenesis

First Joint Conference of the American Association for Cancer Research
and the European Association for Cancer Research
immediately following EACR-XI in Genoa

Additional Support from the Istituto Nazionale per la Ricerca sul Cancro

Grand Hotel Miramare, Santa Margherita, Italy
November 6-9, 1991

SCIENTIFIC PROGRAM COMMITTEE

AACR
I. BERNARD WEINSTEIN / New York, USA (Co-Chairperson)
ARTHUR P. GROLLMAN / Stony Brook, USA
HAROLD L. MOSES / Nashville, USA

EACR
PETER BANNASCH / Heidelberg, Germany (Co-Chairperson)
ALLAN BALMAIN / Glasgow, Scotland
JAN SVOBODA / Prague, Czechoslovakia

LOCAL ORGANIZING COMMITTEE

LEONARDO SANTI / Genoa, Italy (Chairperson)
MARIA COLNAGHI / Milan, Italy
MARGARET FOTI / Philadelphia, USA

SCIENTIFIC PROGRAM

Welcoming Remarks
LEONARDO SANTI / Genoa, Italy

Opening Address
PETER BANNASCH / Heidelberg, Germany

Epidemiological and Experimental Evidence for the Multistage Process
HENRY C. PITOT / Madison, USA
ERICH HECKER / Heidelberg, Germany
FRANCO MERLETTI / Turin, Italy
FRIEDRICH MARKS / Heidelberg, Germany
FRANCIS V. CHISARI / La Jolla, USA

DNA Replication, Damage, and Repair
MARCEL ROBERFROID / Brussels, Belgium
DEZIDER GRUNBERGER / New York, USA
HARTMUT M. RABES / Munich, Germany
ARTHUR P. GROLLMAN / Stony Brook, USA
PHILIP C. HANAWALT / Stanford, USA
TOMAS LINDAHL / Herts, England
SARASWATI SUKUMAR / San Diego, USA

Multiple Genetic Changes during Tumor Development
LANCE A. LIOTTA / Bethesda, USA
JAN SVOBODA / Prague, Czechoslovakia
ALLAN BALMAIN / Glasgow, Scotland
ANTON BERNS / Amsterdam, The Netherlands
TERRY H. RABBITTS / Cambridge, England
WEBSTER K. CAVENEE / Montreal, Canada

Genetic Aspects of Tumor Suppression
GEORGE KLEIN / Stockholm, Sweden
ERIC J. STANBRIDGE / Irvine, USA
MARY WEISS / Paris, France
DAVID P. LANE / Herts, England
NICHOLAS HASTIE / Edinburgh, Scotland
EDWARD HARLOW / Charlestown, USA

Growth Factors and Signal Transduction
HAROLD L. MOSES / Nashville, USA
GIUSEPPE DELLA PORTA / Milan, Italy
CHRISTOPHER J. MARSHALL / London, England
CARL-HENRIK HELDIN / Uppsala, Sweden
RIK DERYNCK / South San Francisco, USA

Overview and Future Directions
I. BERNARD WEINSTEIN / New York, USA

The AACR and EACR invite the international community of cancer researchers to submit applications for this exciting conference by August 15, 1991.

Abstracts for consideration for poster presentation also due by August 15, 1991.

A limited number of travel grants for graduate and medical students, postdoctoral fellows, and physicians in training will be available.