Genetics Society of America

1992 Records, Proceedings and Reports

Published as supplementary material in GENETICS, Volume 131

Prepared by The Secretary

Shirleen Roeder

*Department of Biology
Yale University
New Haven, Connecticut*

BOARDS, COMMITTEES AND REPRESENTATIVES FOR 1992

BOARD OF DIRECTORS

John C. Lucchesi, *President*
 A. Dale Kaiser, *Vice-President*
 Shirleen Roeder, *Secretary*
 Carol S. Newlon, *Treasurer*
 Leland H. Hartwell, *Past President*
 John W. Drake, *Editor*

Karen Artzt
 Welcome Bender
 Nina V. Fedoroff
 Barry S. Ganetzky
 Christine Guthrie
 H. Robert Horvitz

GENETICS EDITORIAL BOARD

John W. Drake, *Editor*
 Sally Lyman Allen
 Karen Artzt
 Douglas E. Berg
 David Botstein
 John E. Boynton
 Anthony H. D. Brown
 Benjamin Burr
 Marian Carlson
 Deborah Charlesworth
 Peter Cherbas
 Arthur Chovnick
 Andrew G. Clark
 Thomas W. Cline
 Rowland H. Davis
 Robin E. Denell
 Norman R. Drinkwater
 Walter F. Eanes
 Victoria G. Finnerty
 Margaret T. Fuller
 Roger E. Ganschow

Maureen R. Hanson
 Robert K. Herman
 Alan G. Hinnebusch
 Richard R. Hudson
 Nancy A. Jenkins
 Mark Johnston
 Elizabeth Jones
 Cathy C. Laurie
 Wen-Hsiung Li
 Trudy F. C. Mackay
 Patricia J. Pukkila
 Trudi Schüpbach
 William F. Sheridan
 Michael J. Simmons
 Montgomery Slatkin
 Gerald R. Smith
 Steven D. Tanksley
 Elizabeth Thompson
 Bruce S. Weir
 Fred Winston

ADMINISTRATIVE OFFICE

Elaine Strass, *Executive Director*
 Barbara Abbott, *Publications Assistant/ASHG Membership Coordinator*
 Sharon Adler, *Accounting Assistant*
 Judy Ashton, *Office Coordinator*
 Candis Galkin, *Accounting Assistant*
 Gloria Garber, *Membership and Meetings Assistant*
 Karen Gould, *Comptroller/Manager of Administration*
 Margot Kiley, *GSA Membership Coordinator*
 Krista Koziol, *Publications Manager*
 Anne Marie Langevin, *GSA Meetings Manager*
 Marsha Ryan, *ASHG Meetings Manager*
 Jane Salomon, *ASHG Special Projects Manager*

COMMITTEES

Executive

Leland H. Hartwell
 A. Dale Kaiser
 John C. Lucchesi
 Carol S. Newlon
 Shirleen Roeder

Affiliations Contacts

George B. Witman, *Chlamydomonas Representative*
 Peter A. Lefebvre, *Chlamydomonas Representative*
 John C. Lucchesi, *Drosophila Representative*
 Victoria G. Finnerty, *Drosophila Representative*
 Sarah Hake, *Maize Representative*
 Edward H. Coe, Jr., *Maize Representative*
 John L. Woolford, Jr., *Yeast Representative*
 George F. Sprague, Jr., *Yeast Representative*

Education

Leland H. Hartwell, <i>Chair</i>	Thomas R. Mertens
Leslie K. Derr	Lynn S. Ripley
Diane M. B. Dodd	Gerold Schubiger
John L. Haynie	Gail M. Simmons
David L. Jameson	Barton E. Slatko
Charles Laird	William Sofer
Thomas R. Manney	Vinton Thompson

Genetic Stock

Kathleen A. Matthews, <i>Chair</i>	Robert K. Mortimer
Barbara J. Bachmann	Calvin O. Qualset
Nicholas W. Gillham	Charles M. Rick
Elizabeth H. Harris	Thomas B. Shows
Robert K. Herman	Ronny C. Woodruff
Susan E. Lewis	

Nominating

Thomas C., Kaufman, *Chair*
 Charles H. Langley
 Judith E. Kimble
 Shirleen Roeder, *ex officio*
 Elaine Strass, *ex officio*

Office Management

Carol S. Newlon, *GSA Treasurer, Chair*
 A. Dale Kaiser, *GSA Vice President*
 Shirleen Roeder, *GSA Secretary*
 W. Allen Hogge, *ASHG Treasurer*
 Walter E. Nance, *ASHG President*
 Ann C. M. Smith, *ASHG Secretary Chair*

REPRESENTATIVES**Council of the International
Genetics Federation**

John W. Drake
 A. Dale Kaiser, *ex officio*
 John C. Lucchesi, *ex officio*

**Assembly of Life Sciences,
National Research Council**

Shirleen Roeder, *ex officio*

**American Type
Culture Collection**

Calvin O. Qualset

PAST AND PRESENT OFFICERS OF THE SOCIETY

	<i>President</i>	<i>Vice-President</i>	<i>Secretary-Treasurer</i>		<i>Secretary</i>	<i>Treasurer</i>
1932	L. C. Dunn	F. D. Richey	P. W. Whiting		W. R. Singleton	E. W. Caspari
1933	R. A. Emerson	Sewall Wright	P. W. Whiting		W. R. Singleton	E. W. Caspari
1934	Sewall Wright	D. F. Jones	P. W. Whiting		C. P. Oliver	E. W. Caspari
1935	D. F. Jones	P. W. Whiting	M. Demerec		C. P. Oliver	N. H. Giles, Jr.
1936	P. W. Whiting	L. J. Stadler	M. Demerec		C. P. Oliver	N. H. Giles, Jr.
1937	E. M. East	L. J. Cole	M. Demerec		H. B. Newcombe	R. D. Owen
1938	L. J. Stadler	M. Demerec	E. W. Lindstrom		H. B. Newcombe	R. D. Owen
1939	M. Demerec	B. McClintock	E. W. Lindstrom		W. L. Russell	R. D. Owen
1940	L. J. Cole	Th. Dobzhansky	B. P. Kaufmann		W. L. Russell	D. Schwartz
1941	Th. Dobzhansky	E. W. Lindstrom	B. P. Kaufmann		E. B. Lewis	D. Schwartz
1942	E. W. Lindstrom	M. M. Rhoades	B. P. Kaufmann		E. B. Lewis	E. Novitski
1943	M. M. Rhoades	G. W. Beadle	L. H. Snyder		E. B. Lewis	E. Novitski
1944	A. H. Sturtevant	B. P. Kaufmann	L. H. Snyder		R. P. Wagner	E. Novitski
1945	B. McClintock	P. C. Mangelsdorf	L. H. Snyder		R. P. Wagner	A. H. Sparrow
1946	G. W. Beadle	Karl Sax	M. R. Irwin		B. Wallace	A. H. Sparrow
1947	H. J. Muller	L. H. Snyder	M. R. Irwin		B. Wallace	D. R. Stadler
1948	L. H. Snyder	T. M. Sonneborn	M. R. Irwin		M. W. Shaw	D. R. Stadler
1949	T. M. Sonneborn	Curt Steven	W. R. Singleton		M. W. Shaw	G. Lefevre
1950	Curt Stern	M. R. Irwin			B. H. Judd	G. Lefevre
					B. H. Judd	D. Lindsley
					B. H. Judd	D. Lindsley
					G. R. Fink	D. Lindsley
					G. R. Fink	W. Welshons
					G. R. Fink	W. Welshons
					D. T. Suzuki	A. Chovnick
					D. T. Suzuki	A. Chovnick
					D. T. Suzuki	A. Chovnick
					H. W. Lewis	R. E. Esposito
					H. W. Lewis	R. E. Esposito
					A. P. Mahowald	R. E. Esposito
					A. P. Mahowald	A. C. Spradling
					A. P. Mahowald	A. C. Spradling
					T. C. Kaufman	A. C. Spradling
					T. C. Kaufman	C. S. Newlon
					T. C. Kaufman	C. S. Newlon
					S. Roeder	C. S. Newlon
1951	M. R. Irwin	J. W. Gowen				
1952	J. W. Gowen	R. E. Clausen				
1953	R. E. Clausen	W. R. Singleton				
1954	J. T. Patterson	R. A. Brink				
1955	P. C. Mangelsdorf	R. E. Cleland				
1956	R. E. Cleland	J. L. Bush				
1957	R. A. Brink	C. P. Oliver				
1958	C. P. Oliver	J. F. Crow				
1959	Karl Sax	J. W. Boyes				
1960	J. F. Crow	H. B. Glass				
1961	B. P. Kaufmann	R. D. Owen				
1962	R. D. Owen	W. L. Russell				
1963	Jack Schulz	S. Emerson				
1964	S. Emerson	H. L. Roman				
1965	W. L. Russell	E. W. Caspari				
1966	E. W. Caspari	E. B. Lewis				
1967	E. B. Lewis	H. L. Roman				
1968	H. L. Roman	C. Yanofsky				
1969	C. Yanofsky	N. H. Giles, Jr.				
1970	N. H. Giles, Jr.	R. P. Wagner				
1971	R. P. Wagner	R. D. Hotchkiss				
1972	R. D. Hotchkiss	M. M. Green				
1973	M. M. Green	B. Wallace				
1974	B. Wallace	O. Smithies				
1975	O. Smithies	E. S. Russell				
1976	E. S. Russell	D. D. Perkins				
1977	D. D. Perkins	M. Shaw				
1978	M. Shaw	E. Sears				
1979	E. Sears	W. K. Baker				
1980	W. K. Baker	B. H. Judd				
1981	B. H. Judd	H. L. Carson				
1982	H. L. Carson	M. L. Pardue				
1983	M. L. Pardue	R. W. Allard				
1984	R. W. Allard	I. Herskowitz				
1985	I. Herskowitz	D. L. Lindsley				
1986	D. L. Lindsley	E. W. Jones				
1987	E. W. Jones	G. R. Fink				
1988	G. R. Fink	D. L. Hartl				
1989	D. L. Hartl	R. L. Metzzenberg				
1990	R. L. Metzzenberg	L. H. Hartwell				
1991	L. H. Hartwell	J. C. Lucchesi				
1992	J. C. Lucchesi	A. D. Kaiser				
<i>Editors</i>						
	G. H. Schull (1916-1925)	C. Stern (1947-1951)			F. W. Caspari (1968-1972)	
	D. E. Jones (1926-1935)	R. A. Brink & J. F. Crow (1952-1956)			D. R. Stadler (1973-1976)	
	L. C. Dunn (1936-1939)	C. P. Oliver & W. S. Stone (1957-1962)			G. Lefevre (1977-1981)	
	M. M. Rhoades (1940-1946)	D. D. Perkins (1963-1967)			J. W. Drake (1982-1996)	

BYLAWS OF THE GENETICS SOCIETY OF AMERICA

(Revised August 25, 1988)

The Genetics Society of America is organized to provide facilities for association and conference among students of genetics, to promote the communication and publication of scientific knowledge, to promote education and research in genetics and to encourage interaction between workers in genetics and those in related sciences.

ARTICLE 1. *Membership.*—All persons interested in genetics shall be eligible for active membership. Any person who has been an active member of the Society for 20 years and who has retired is eligible for emeritus membership. Categories of membership shall be established by the Board of Directors.

ARTICLE 2. *Officers and Board of Directors.*—The officers of the Society shall be a President, a Vice-President who is also President-Elect, a Secretary and a Treasurer. They, together with the immediate Past-President, the Editor of *GENETICS* and six other members elected by the Society shall constitute the Board of Directors. Each Board member shall have one vote. The Board shall meet at least once each year. Additional meetings may be called by the President.

Executive Committee: The Executive Committee of the Board of Directors shall consist of the President, Vice-President, Secretary, Treasurer and one of the elected directors selected by the Board at its annual meeting. The Executive Committee shall act by majority vote in matters that require attention between regular Board meetings.

Election and Terms of Office of Officers and Board Members: The officers of the Society shall be elected by a simple majority of ballots cast by members of the Society. Each year the Nominating Committee shall submit the names of at least two nominees for each position to be filled, taking into consideration candidates suggested to the Secretary or the Nominating Committee. The ballot, mailed to all members in good standing, shall list the nominees and also provide spaces for write-in votes. At the end of the first year of service, the Vice-President shall automatically become President and shall serve for one year in that capacity and for one year thereafter as a director. Every third year the ballot shall include nominees for Secretary. The Treasurer shall be elected every third year, but not in the same year as the Secretary.

Members of the Board of Directors who hold no other office shall be elected by the membership. Each year, the Nominating Committee shall submit the

names of at least four nominees, and the two receiving the largest number of votes shall be elected to serve for three years.

Terms of all officers and members of the Board shall begin on January 1 of the year following their election and shall end on December 31 of the year ending their term.

ARTICLE 3. *Meetings.*—An annual meeting open to the entire membership of the Society shall be held at a time and place designated by the Board of Directors. During the annual business meeting of the membership, which shall be held during the annual meeting, the Board of Directors shall make its annual report to the membership, including the results of the election of officers and directors. Special meetings may be called by the Board of Directors. Twenty members shall constitute a quorum for any annual or special business meeting.

The program shall be arranged by the Secretary in accordance with the program rules adopted by the Board of Directors. The Board of Directors may arrange for joint programs with related scientific societies, and for presentation of invited papers.

ARTICLE 4. *Dues.*—Annual dues for the various classes of members shall be fixed by the Board of Directors. Dues shall include a subscription to *GENETICS*. Graduate students who provide evidence of their status are entitled to active membership at approximately half the regular dues for a period not exceeding five years. Husbands and wives both qualifying for membership individually may elect a combined membership entitling them to a single subscription to *GENETICS* while entitling each to be listed as a member and to vote. Emeritus members may elect to continue to receive *GENETICS* by paying approximately half the regular dues, or they may elect not to receive the Journal and be exempt from paying dues. Payment for all classes of membership shall be due January 1. New members shall be billed for dues from the previous January 1 and shall receive *GENETICS* for the entire year. Members whose dues are in arrears shall not receive publications or communications of the Society and shall be ineligible to vote. Members in arrears for one year shall be dropped from the rolls. A member who has been dropped for nonpayment of dues may be reinstated upon payment of dues for the year in which reinstatement is desired.

ARTICLE 5. *Publications.*—The Society shall pub-

lish *GENETICS* as its official journal. Subscription to *GENETICS* shall be considered an integral part of active membership. The subscription rate to nonmembers shall be set by the Board of Directors, and shall not be less than the dues for active members of the Society.

GENETICS shall be a periodical record of investigation into heredity and variation. Publication in the Journal shall be open to members and nonmembers alike. Acceptance shall be decided after editorial review solely on merit and suitability.

Editorial Board. An Editorial Board of *GENETICS* shall be appointed by the Board of Directors. Editorial Board members shall serve three-year terms which may be renewed by the Board of Directors. The Editor shall be appointed by the Board of Directors for a term of five years, but such appointment may be extended or terminated at any time by a two-thirds vote of the Board of Directors. The Editor shall be consulted about the Editor's term of appointment, but shall not vote thereon. The Board of Directors and the Editorial Board shall advise the Editor in matters relating to Journal policy and shall, with the Editor, determine editorial policy for the Journal in all respects not specified by these Bylaws.

The Editor of *GENETICS* shall carry out policy decisions of the Board of Directors and shall be authorized to act for the Editorial Board in arriving at editorial decisions and in conducting routine business. The Editor shall arrange meetings of the Editorial Board as necessary or upon written request of three members of the Editorial Board. The Editor shall preside over meetings of the Editorial Board and shall cast the deciding vote in case of a tie. The Editor shall, on request, communicate recommendations of the Board of Directors or of Society members to the Editorial Board and shall represent the Editorial Board in dealing with the Board of Directors. The Editor shall submit an annual report to the Society regarding the operation of *GENETICS*. The Editor shall, in cooperation with the Editorial Board and the Board of Directors, take measures necessary to assure an appropriate income from membership dues and subscriptions.

ARTICLE 6. Administrative Office.—An administrative office shall be maintained for conducting the business of the Society. It shall attend to such other matters as dictated by the Board of Directors. Supervision of the administrative office shall be the responsibility of the administrative director, who shall implement the policies decided by the Board of Directors. The administrative director shall provide staff support to assist the officers of the Society in carrying out their responsibilities. The President shall have responsibility and ultimate authority for the administrative office and resolution of any conflicts related to it.

ARTICLE 7.—Duties of Officers and Board of Directors.—The President shall preside at the meetings of the Society and the Board of Directors. With the advice of the Board of Directors, the President shall appoint such committees and representatives as may be needed. The Vice-President shall preside in the absence of the President. In the event of a vacancy in the office of President, the Vice-President shall become President for the remainder of the unexpired term as well as for the subsequent term. In the event of any other vacancy among the officers or directors, the Board shall appoint an active member to serve for the remainder of the year, and the office shall be filled at the next annual election.

The Secretary, in cooperation with the administrative office, shall: (1) keep the records of the Society; (2) direct the arrangement of meeting plans in accordance with the rules formulated by the Board of Directors and function *ex officio* on the Program Committee; (3) send to all members the date and place of the annual meeting, a call for papers to be presented at that meeting, and a call for suggestions for nomination for all offices to be filled by election. Not later than one month before the annual meeting, the Secretary shall send all members in good standing a ballot bearing the names of nominees for office; (4) The Secretary shall prepare minutes of the annual meeting and shall present an annual report to the members concerning actions of the Board of Directors, activities of the Society and its committees and representatives, and the membership of the Society; and (5) shall deposit those records of the Society no longer needed for current business in the historical collection of the Library of the American Philosophical Society.

The Treasurer shall: (1) have charge of all funds of the Society and be responsible for their investment; (2) be bonded in an appropriate amount fixed by the President; (3) send to all members bills for annual dues; and (4) prepare an annual statement to the members of the financial status of the Society, to be audited by a certified public accountant. (5) The Treasurer shall provide the administrative director and the editor of *GENETICS* with funds sufficient to operate the administrative office and to publish *GENETICS*.

ARTICLE 8. Committees: Nominating Committee.—A Nominating Committee shall be named each year by the Board of Directors and shall consist of three active Society members who are not members of the Board and who include representatives of different areas of genetics. In addition, the Secretary shall be *ex officio* a non-voting member of the committee. No person shall serve as a voting member on the Nominating Committee more than once during any four-year period.

Other Committees: The President shall create and

appoint members to such other committees as are deemed necessary or advisable by the Board of Directors.

ARTICLE 9. *Amendments.*—Amendments to these Bylaws may be adopted at the annual business meeting by a two-thirds vote of the members present and

voting, provided that any proposed amendment, signed by five members, has been submitted in writing to the Secretary at least three months before the annual meeting and has been communicated to the members of the Society at least two weeks before the annual meeting.

REPORT OF THE TREASURER

The following is the unaudited financial statement for the fiscal year 1991. The audited statement will be available from the Administrative Office.

STATEMENT OF ASSETS AND FUND BALANCES
ARISING FROM CASH TRANSACTIONS
December 31, 1991

Assets		
Editor's Office—Checking/Petty Cash	\$ 4,169.81	
Administrative Office-Checking	88,354.75	
Cash on Hand	50.00	
On Deposit with Asilomar	1,650.00	
Yeast Travel Awards-Savings	102.63	
Final Red Book Imprest Account	334.06	
Deposit for Fixed Assets	4,913.00	
Bulk Mail Deposit	<u>596.63</u>	
Total Current Assets		\$100,170.88
Merrill Lynch Cash Management Account	\$ 23,415.65	
Certificates of Deposit:		
Matures 12/7/92; @ 9.1%	90,000.00	
Matures 2/22/93; @ 8.2%	50,000.00	
Matures 6/18/93; @ 8.5%	50,000.00	
Matures 8/23/93; @ 8.05%	50,000.00	
Matures 2/7/94; @ 7.55%	70,000.00	
Matures 2/28/94; @ 8.45%	30,000.00	
Matures 4/18/94; @ 7.15%	15,000.00	
Matures 10/3/94; @ 6.15%	40,000.00	
Matures 10/31/94; @ 8.45%	15,000.00	
Matures 11/28/94; @ 8.2%	50,000.00	
Matures 12/12/94; @ 8.15%	25,000.00	
Matures 2/14/95; @ 8.45%	50,000.00	
Matures 4/10/95; @ 7.55%	80,000.00	
Matures 9/26/95; @ 8.4%	50,000.00	
Matures 12/12/95; @ 8.2%	25,000.00	
Matures 1/16/96; @ 7.9%	50,000.00	
Matures 10/2/96; @ 6.9%	50,000.00	
Corporate Bonds:		
Pepsico, Inc. @ 7.2%; 11/1/98	10,268.06	
Sears Roebuck @ 8.2%; 11/15/01	9,210.96	
Equities	<u>83,151.81</u>	
Total Investments		916,046.48
Furniture and Equipment	\$ 77,682.15	
Less: Accumulated Depreciation	<u>(49,935.21)</u>	
Total Furniture and Equipment		<u>27,746.94</u>
Total Assets		<u>\$1,043,964.30</u>
Fund Balances		
General Fund		
Fund Balance at January 1st	\$750,306.33	
Excess of Cash Receipts over Disbursements	<u>43,657.97</u>	
General Fund Balance at December 31st		793,964.30
Reserve Fund		
Fund Balance at December 31st		<u>250,000.00</u>
Total Liabilities and Fund Balances		<u>\$1,043,964.30</u>

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
For the Year Ending December 31, 1991

Cash Receipts

Membership Income	\$207,686.85	
Journal Sales	609,134.62	
Publications	123,031.60	
1991 Drosophila Conference	111,085.50	
YGM Meeting	130,295.08	
Contributions to <i>C. elegans</i>	4,850.00	
Interest Income-Administrative Office	5,244.73	
Interest Income-Investments	74,734.23	
Dividend Income-Investments	108.00	
Gain on Sale of Securities	7.90	
Miscellaneous Income	<u>4,302.80</u>	
Total Receipts		\$1,270,481.31

Cash Disbursements

Membership Expense	\$ 58,864.03	
Journal Publishing	545,017.48	
Publications Expense	102,968.29	
1991 Drosophila Conference	74,780.31	
YGM Meeting	115,149.55	
ICHG '91 Contribution	15,000.00	
<i>C. elegans</i> Misc./Reim.	4,850.00	
Awards	74.30	
Other Expense	98,793.01	
Administrative Office	<u>211,326.37</u>	
Total Disbursements		<u>1,226,823.34</u>
Excess of Cash Receipts over Disbursements		<u>\$ 43,657.97</u>

CAROL S. NEWLON, *Treasurer*

PROCEEDINGS OF THE 60TH ANNUAL BUSINESS MEETING

October 6, 1991

The Washington Convention Center, Washington, D.C.

The meeting was called to order at 5:15 PM by President L. H. Hartwell.

Editor's Report (J. W. Drake): GENETICS has remained approximately the same length for the last 2½ years. The November, 1991 issue will be a record-breaking 370 pages in length. Waverly Press will charge about \$4.50 per page less for papers submitted on disk. Page charges are restructured from \$20 to \$25 without disk, \$20 with disk. The policy on DNA sequences is that the author must provide the accession number. Sequences longer than about two pages will not be published unless they are critical to an understanding of the article; otherwise, the author will be asked to pay most of the cost if they are to be published. The 1992 incremental cost is estimated at \$125.

Secretary's Report (T. C. Kaufman): The minutes of the July 20, 1990, Business Meeting were approved as published in the July, 1991 issue of GENETICS (Vol. 128). Approximately one-third of the membership voted in the 1991 election. Effective January 1, 1992, J. C. Lucchesi will become president, A. D. Kaiser will become Vice-President, and S. Roeder will become Secretary. W. Bender and B. S. Ganetzky will serve three-year terms as directors, and K. Artzt will serve through 1993, the remainder of the late D. Bennett's term. Total paid and unpaid membership in the Society stands at approximately 3,750, a 3% increase over 1990. Drosophila researchers comprise the largest component of the membership.

Treasurer's Report (C. S. Newlon): The audit of the Society's books for 1990 shows that income of \$1,125,616 exceeded expenditures of \$1,114,180 by \$11,436, resulting in a general fund balance of \$750,360 in addition to the reserve fund of \$250,000. Thus GSA's assets totaled slightly over \$1,000,000 by December 31, 1990. It is likely that total fund balances will continue to exceed \$1,000,000 at the end of 1991. The Board of Directors has passed the first draft of the 1992 budget, which shows a net deficit of approximately \$1,000.

Meetings (G. Gurvitch, Executive Director): The 1991 GSA Annual Meeting was subsumed in the 8th International Congress of Human Genetics. The 1992 meeting will be held June 19–21 in St. Paul, Minnesota. R. K. Herman chairs the Program Committee and I. Rubenstein is the local organizer.

The 1991 GSA-sponsored Drosophila meeting was a success, with over 1,000 registrants. The 1992 meeting will be held March 11–15 at the Wyndham Hotel in Philadelphia, Pennsylvania, with W. M. Gelbart chairing the Program Committee. The 1993 meeting will be held April 1–4 at the Town and Country Hotel in San Diego, California. The 1994 meeting will probably be held in Chicago, Illinois.

The 1991 GSA-sponsored Yeast meeting was, like the Drosophila meeting, a scientific and fiscal success, with nearly 700 registrants. East Coast campus sites are being investigated for the 1993 biennial meeting. J. Woolford and G. Sprague currently head the Yeast meetings.

In 1992 the GSA will assume sponsorship of the biennial *Chlamydomonas* meeting. It will be held May 26–31 at Asilomar and G. B. Witman is the organizer.

The next International Congress of Genetics will be held August 15–21, 1993, in Birmingham, England. GSA representatives are J. C. Lucchesi, J. W. Drake and A. D. Kaiser.

GSA Awards: The recipient of the 1991 Thomas Hunt Morgan Medal, given in recognition of a lifetime contribution to the field of genetics, is A. D. Kaiser. B. S. Baker is the recipient of the 1991 GSA Medal, awarded for outstanding contributions to the field in the last 15 years. The medals will be presented at the 1992 GSA meeting.

The meeting was adjourned at 5:40 PM.

Respectfully submitted,
GERRY GURVITCH, *Executive Director*

REPORT OF THE COMMITTEE ON HONORS AND AWARDS

The Society makes two awards annually to honor members who have made outstanding contributions to the science of genetics. The Thomas Hunt Morgan Medal recognizes a lifetime contribution to genetics. The Genetics Society of America Medal recognizes

particularly outstanding contributions to genetics within the past fifteen years. We are pleased to report that the 1992 Thomas Hunt Morgan Medal will be awarded to Edward H. Coe, Jr., and the 1992 GSA Medal will be awarded to Maynard V. Olson.

1992 Thomas Hunt Morgan Medal: Edward H. Coe, Jr.

The Thomas Hunt Morgan Medal is awarded annually for lifelong contributions to genetics. The 1992 recipient, Edward H. Coe, Jr., clearly qualifies both in terms of his basic research in maize genetics and his service on behalf of the maize genetics community.

Soon after receiving his doctorate, Dr. Coe independently identified paramutation at the *b* locus. Using only genetic and physiological data, he proposed a sequence in which the genes affecting anthocyanin synthesis operate that has been supported by subsequent biochemical and molecular research. He showed that the dominant inhibitor of anthocyanin synthesis was an allele at the *c* locus. He has made elegant analyses of morphological development in maize, including an estimate of the number of cells in the apical meristem of the embryo that are to become involved in the production of the male inflorescence, and he has devised screens for efficient detection of spontaneous haploids. With Neuffer he devised a method for the treatment of pollen with mutagenic agents that is a very effective means of producing mutations in maize. With Walbot he showed that plants homozygous for the nuclear mutation, *iojap*, produce ribosome-less chloroplasts in a programmed fashion. The *white pollen* locus was identified as a duplicate gene encoding the same function as the *c2* locus but expressed only in the pollen. The product of these loci is now known to be the enzyme, chalcone synthase, catalyzing the first dedicated step in flavonoid biosynthesis. Plants that are double mutants, *c2/c2; wp/wp*, do not produce functional pollen.

His service to the maize genetics community has been extensive and very important. Since 1975, he has served as editor of the Maize Genetics Corporation Newsletter, which is an effective means of communi-

cating on an informal basis. As a senior U.S.D.A. employee, he has been the liaison between the Maize Genetics Corporation Stock Center at the University of Illinois and the U.S.D.A., which has supported the Center. It has taken a large amount of time and a good deal of quiet diplomacy to keep the Center functioning effectively. He has been the point man in a cooperative effort to increase the number of morphological markers on the genetic map and most recently in making maps that combine the RFLP data with the isozyme and morphological marker map. With Neuffer he has written an informative and succinct 110-page summary of maize genetics, which has appeared as a chapter in *Corn and Corn Improvement*, edited by George F. Sprague, Jr. This summation is a boon to anyone interested in learning what maize has to offer as a vehicle for genetic investigations as well as the knowledge available at the time of writing.

Ed Coe has been an influential mentor both on a formal basis with graduate students and postdoctoral fellows and on an informal basis with biologists trained in other areas who were interested in doing research in maize genetics.

He was born December 7, 1926, in San Antonio, Texas and educated at the University of Minnesota (B.S., 1949 and M.S., 1951) and the University of Illinois (Ph.D., 1954). Following a year as a Research Fellow at the California Institute of Technology, he became a research geneticist with the USDA-ARS at the University of Missouri, Columbia, where he has remained. In 1977, he assumed the post of research leader of the USDA-ARS Plant Genetics Research Unit at Columbia, a position that he still holds.

OLIVER E. NELSON

1992 Genetics Society of America Medal: Maynard V. Olson

For Maynard V. Olson, the 1992 recipient of the Genetics Society of America medal, genetics is a second career. Maynard began his education as an inorganic chemist. He attended Caltech, where he was privileged to be one of the very few who actually took

introductory physics when Richard Feynman gave his famous lectures. Maynard found this to be a truly memorable experience. He received his Ph.D. in inorganic chemistry from Stanford University in 1970; his mentor there was Henry Taube. Maynard contin-

ued his career as instructor and then assistant professor in the Department of Chemistry at Dartmouth College.

Maynard's life as a geneticist began in 1974, when he spent a sabbatical year at the Department of Genetics at the University of Washington in Seattle, working with Ben Hall. Maynard's collaboration with Hall was singularly creative and productive, so much so that he ended up remaining in Seattle for three additional years. Those were the early years of recombinant DNA, and Maynard was a major contributor to the cloning and sequencing of all the tyrosine tRNA genes of yeast, an achievement that included the co-discovery of intervening sequences in eukaryotic tRNAs.

The aspect of Olson's tRNA work in Seattle that seems most striking in retrospect, and in light of what was to come, was the feat of mapping each of the eight cloned tRNA genes to the corresponding genetic loci, each of which had been defined as the site of a tyrosine-inserting suppressor of ochre mutations. The method Maynard devised took advantage of the differences in restriction sites near the tRNA genes among laboratory yeast strains. By making crosses in which he could follow both a single locus genetically (by virtue of the ochre suppressor) and the polymorphic restriction sites physically (by Southern blots using the tRNA as probe) Maynard and his co-workers were able to assign each of the eight tyrosine tRNAs to its genetic map position. This was, of course, one of the very first uses of restriction fragment length polymorphisms to map a cloned gene.

By 1979, Maynard was a confirmed yeast molecular geneticist, and in that year he joined the Genetics Department at the Washington University School of Medicine in St. Louis, where he rose through the ranks from assistant professor to professor. Shortly thereafter he began his ambitious, but eventually com-

pletely successful, program to produce a continuous physical map, consisting of overlapping cloned segments and a restriction map derived from these clones, of the entire genome of *Saccharomyces cerevisiae*. Maynard Olson was the first to see the possibility and the value of such physical maps. Much of the approach, as well as the technology, of modern physical mapping of complex genomes (including those of the nematode *Caenorhabditis elegans* and the human) can be traced to the yeast effort of Olson and his group. A noteworthy advance was Maynard's extension and reduction to practice of the pulse-field gel electrophoresis, which allowed the separation of the intact DNA of the yeast chromosomes and brought this technology into common use.

More recently, Maynard took up the study of the problem of physical mapping of the human genome. His entry into this field has had revolutionary consequences. His development of the yeast artificial chromosome (YAC) cloning system made practical, for the first time, the production of reliable physical maps of human chromosomes over distances of several megabases of DNA. His inspired proposal of a common language based on short stretches of unique sequence (sequence-tagged sites; STSs) as mapping landmarks a basis for detecting overlaps has become the enabling technology for the mapping portion of the Human Genome Project.

Maynard Olson has made extraordinary scientific contributions to our discipline. He, more than anyone, has brought to fruition the convergence of genetic and physical mapping. He has shown others the way both by innovative strategies and the introduction of appropriate practical techniques usable by all. For these accomplishments, Maynard Olson richly deserves the 1992 Genetics Society of America medal.

DAVID BOTSTEIN

Recipients of GSA Honors

Thomas Hunt Morgan Medal

1981 Barbara McClintock, Marcus M. Rhoades
1982 Sewall Wright
1983 Edward B. Lewis
1984 George W. Beadle, R. Alexander Brink
1985 Herschel L. Roman
1986 Seymour Benzer
1987 James F. Crow
1988 Norman H. Giles
1989 Dan L. Lindsley
1990 Charles Yanofsky
1991 Armin Dale Kaiser
1992 Edward H. Coe, Jr.

Genetics Society of America Medal

1981 Beatrice Mintz
1982 Gerald R. Fink
1983 Charles Yanofsky
1984 David S. Hogness
1985 Philip Leder
1986 Gerald M. Rubin
1987 Sydney Brenner
1988 David Botstein, Ira Herskowitz
1989 Allan C. Spradling
1990 Nancy Kleckner
1991 Bruce S. Baker
1992 Maynard V. Olson

REPORT ON THE GENETICS SOCIETY OF CANADA AWARDS

1991 Genetics Society of Canada Award of Excellence: W. Ford Doolittle

The winner of the Genetics Society of Canada's highest honor, the Award of Excellence, is W. Ford Doolittle of Dalhousie University, where he is a fellow of The Canadian Institute for Advanced Research.

Dr. Doolittle's work has centered on the structure and evolution of ribosomal RNA genes. After his earlier studies on bacteria and blue-green algae, he became known to a wider audience following the publication of his paper on selfish DNA, coauthored with Carmen Sapienza, which appeared in *Nature* in 1980, back to back with another paper on the same topic by Francis Crick. Since then, he has continued

work on blue-greens and also on organelles, fungi and archebacteria. His papers are known for their synthesis and insight into such cryptic topics as plasmids, transposons, and hereditary symbiosis. Now he is playing a valuable service role as Director of the Canadian Institute for Advanced Research Programme in Evolution, a program that has provided a major stimulus for Canadian evolutionary biology.

The Award is made in recognition of an internationally recognized creative career that is still in full swing, and shows the likelihood of exceptional creativity in the years to come.

1991 Genetics Society of Canada Young Scientist Award: George Haughn

George Haughn is becoming recognized as an international leader in the competitive field of Arabidopsis genetics. Starting his research career in the lab of Bob Lee at Dalhousie, working on *Chlamydomonas* genetics, he moved on to obtain his Ph.D. in 1985 with J. M. Calvo at Cornell University in bacterial genetics. He began his Arabidopsis work as a postdoc with Chris Somerville on the molecular genetics of sulfonylurea and imidazolinone herbicide resistance. He has entered the exciting area of the molecular genetics of flower development, and has performed a sophisticated analysis of homeotic mutations affecting

the fate of floral parts in Arabidopsis.

His appointments include: 1987-90: assistant professor; 1990-present: associate professor, Biology, University of Saskatchewan; 1987-present: visiting scientist at the NRC Plant Biotechnology Institute in Saskatoon.

This Award is made in recognition of an exceptionally promising beginning to his career, and the excellent prospects for its continuation.

ANTHONY GRIFFITHS, *Chair, Awards Committee*

REPORT OF THE EDITOR

During 1991, the number of pages for articles in *GENETICS* was 2,844 and for the *Records, Proceedings and Reports* was 17 for a total of 2,861. Pages for articles decreased by 5.9% over 1990. The number of submitted manuscripts increased by 12.7% to 454 while the number of printed articles decreased by

5.5% to 260; note, however, that printed articles reflect submissions over a different and more diffuse interval. Paid circulation increased by 0.6% to 5,074.

JOHN W. DRAKE, *Editor*

REPORT OF THE SECRETARY

The Board of Directors met twice during 1991: in La Jolla, California, on January 26 and at the 8th International Congress of Human Genetics in Washington, DC, on October 6.

On December 31, 1991, GSA had 3,515 paid members (2,625 Regular, 477 Student, 170 Husband/Wife, 243 Emeritus), 57 paid affiliates, and 252 members who had not paid, for a total of 3,824. While the net gain in members over the last 6 years looks good at 1,094, it should be noted that the gain over 2-year increments has dropped and the number of unpaids that are dropped in March of each year is increasing.

In the 1991 election, A. Dale Kaiser was elected Vice President and S. Roeder, Secretary. W. Bender and B. S. Ganetzky will serve three-year terms as directors and K. Artzt will serve as director through 1993, the remainder of the late D. Bennett's term.

The 1992 GSA meeting to be held June 19–22 at the University of Minnesota, Minneapolis, will be the first campus-style meeting managed by the Program Committee and the local organizing group, pursuant to the newly instituted plan to lower the costs of the annual meeting. The Board is still debating the merits of the decision to proceed with this meeting in view of the projected low attendance, and therefore will await the outcome of this "experiment" before making a final decision on planning the 1993 meeting at Asilomar.

The 1992 *Drosophila* meeting was held March 11–15 at the Wyndham Franklin Plaza in Philadelphia. As usual the fly meeting was a critical and financial success with over 1,100 registrants. W. M. Gelbart chaired the Program Committee. The next meeting will be held April 1–5, 1993, at the Town and Country in San Diego, California. G. M. Rubin will chair the Program Committee.

The next Yeast Genetics and Molecular Biology meeting will be held in the spring of 1993 on the east coast and in the midwest in 1994, changing the meeting pattern from odd- to even-numbered years. J. L. Woolford and G. Sprague will co-chair the 1993 meeting.

The biennial *Chlamydomonas* meeting, organized by G. B. Witman of the Worcester Foundation for Experimental Biology, will be held May 26–31, 1992, at Asilomar. This will be the first GSA-sponsored *Chlamydomonas* meeting.

GSA representatives to the next International Congress of Genetics to be held August 15–21, 1993, in Birmingham, England, are J. C. Lucchesi, J. W. Drake and A. D. Kaiser.

The GSA Board is planning to sponsor more organismic meetings in future years, including the 1993 *Arabidopsis* and 1994 maize meetings.

THOMAS C. KAUFMAN, *Secretary, 1989–91*

THE AMERICAN TYPE CULTURE COLLECTION

I have served as the Genetics Society of America representative on the Board of Directors of the American Type Cultures Collection (ATCC) for the past six years. As I have relinquished this position as of March, 1992, it seems appropriate to apprise the membership of the GSA about the functions of ATCC with particular emphasis on those areas of most interest to geneticists. The ATCC is a unique, private, nonprofit organization dedicated to the acquisition (A), preservation (P), authentication (A) and distribution (D) of living microorganisms, viruses, DNA probes, plant, human and animal cells. These APAD functions are the prime mission of ATCC. The organization also performs and sponsors research to ensure the authenticity of the materials in the collection, and to improve and standardize methods of characterization, maintenance and distribution of such materials. The clients of the organization include makers of pharmaceuticals, food industry companies, researchers at academic and government institutions, and secondary and postsecondary schools which use microorganisms for instructional purposes.

The seven collections housed by ATCC represent the most diverse group of microbiological specimens in the world. The Bacteriology Department contains more than 15,000 strains including 2600 types representing nearly all currently recognized species, as well as bacteriophages. The Cell Culture Department includes more than 3,000 cell cultures and hybridomas and is the most comprehensive public collection in existence. The Molecular and Plasmid Biology Department contains genomic and DNA libraries, plasmids and cloned genes from both prokaryotic and eukaryotic organisms. The Mycology and Botany Department possesses 24,000 strains and is the only general-service collection of living fungi in the United States. The Protistology Department contains 1,200 free-living and parasitic strains of protozoa and algae. This collection includes most of the *Paramecium* strains isolated by the late Dr. Tracy Sonneborn. The Virology Department has both plant and animal viruses comprising a very diverse array of over 2,500 strains including many prototype animal viruses. The Patent Depository serves a key role in providing the back-up for patenting biological entities or the processes that use them and currently holds over 9,000 patent deposits. Each department is headed by a Ph.D.-level scientist who has expertise on and does research with the organisms under his or her care. The staffs of the departments also frequently include collection managers as well as other personnel. Each department has an advisory committee comprised of

respected scientists from outside ATCC who evaluate and provide advice to ATCC management, the senior scientists in charge of each collection and the Science Committee of the Board of Directors. These committees meet with ATCC staff every 18 to 24 months.

The ATCC provides numerous other services to the scientific community. The Applied Science Department analyzes and carries out extensive tests on cultures while Cryobiology is responsible for establishing the methods for long term frozen storage of cultures of different organisms. Freezing is the main method of culture maintenance used by ATCC for which Preceptrol and Uniplus are registered trademarks of the ATCC. The Bioinformatics Department of ATCC distributes computerized strain data and develops protocols for enhancing the free flow of database information among culture collections, research centers and across international boundaries. The Manufacturing Department produces, inventories, packages, and distributes more than 100,000 freeze dried and frozen microbial and cell cultures annually. The ATCC also regularly publishes catalogs for each of its collections as well as an informational newsletter dealing with new discoveries of interest to researchers. Workshops sponsored by the ATCC provide the opportunity for scientists and technical personnel to learn how to use modern molecular and cell-biological methods as well as providing valuable training for scientists and postdoctoral fellows from abroad. The Technical Services of ATCC allow access to scientists and staff by phone to answer questions and assist customers in choosing proper strains and managing cultures. Primary support for ATCC is provided by culture fees and by a variety of grants and contracts from Federal agencies.

The ATCC is governed by a Board of Directors which includes a representative from each of the 22 affiliated societies as well as members at large from companies with an interest in biological materials or from the financial community. The administration of ATCC is the responsibility of the Director, Dr. Robert E. Stevenson, and five Associate Directors for Science (Dr. Richard Roblin), Management and Information Systems (Mr. Kenneth Mertz), Administration (Ms. Bobbie A. Brandon), Operations (Mr. Frank Simone) and Finance (Mr. Robert Walden). The heads of the six scientific departments and Bioinformatics report to the Associate Director for Science. The Patent Depository is managed by the Associate Director for Administration and the Associate Director for Operations is responsible for Applied Sciences and Workshops.

The collections of the ATCC do not overlap or duplicate collections of mutant organisms held by genetic stock centers in the U.S., but the organization does maintain a collection of libraries, vectors and clones that will be of interest to members of the GSA. They are listed in the ATCC *Catalogue of Recombinant DNA Materials*, 2nd ed., 1991 and the ATCC/NIH *Repository Catalogue of Human and Mouse DNA Probes and Libraries*, 5th ed., 1991, that are available directly from the American Type Culture Collection, 12301 Parklawn Drive, Rockville, MD 20852 (301-881-2600). The former catalog lists clones from animals, bacteria, fungi and yeasts, plants, viruses and viroids. The latter catalog includes human and mouse probes sorted by chromosome and by locus, oligonucleotides sorted by locus, human chromosome-specific genomic libraries, primate cDNA and genomic libraries and oncogene probes and clones.

The collection includes the human brain cDNA clones from Dr. J. Craig Venter at the National Institute of Neurological Disorders and Stroke. To facilitate rapid availability of the sequence information and the clones from which sequences were derived, spe-

cialized collaborations have been established between the Venter laboratory, GenBank, and the clone resource bank at ATCC. The interest in having these clones available quickly, and their projected rate of isolation—up to 10,000 sequences and clones per year—have made the standard ATCC practice of structural verification of each plasmid impractical. Thus, in most cases, when a request for one of these human brain cDNA clones is received, a stab of the clone is prepared and sent to the requester without further characterization. The most current information on this collection can be obtained directly from the collection database by modem access through a 1-800 phone number.

Because the ATCC provides such a wide range of services to the scientific community, GSA support of the ATCC through its representative on the Board of Directors is important. This representative should also be a member of the GSA Genetic Stock Centers Committee so that he or she can report on the activities of ATCC at Genetic Stock Centers Committee meetings.

NICHOLAS W. GILLHAM