

**PERSONNEL RECORD
October 2002 (Excerpts)**

1. **Name** Ronald L. Phillips **Rank** Regents' Professor

Date of initial appointment September 1967 Email: phill005@umn.edu

Personnel Action Form (PAF) Appointment: T 17% R 78% E 0% Adm 5%

Date tenure was received: 1972

Graduate School Appointment(s) and date(s): Molecular, Cellular, Developmental Biology and Genetics (1968), Plant Breeding (1972), Agronomy (1981), Plant Biological Sciences (1990), Applied Plant Sciences (1999).

2. **Date and place of birth** January 1, 1940, Huntington County, Indiana

3. **Educational History**

<u>Name of Institution</u>	<u>Year</u>	<u>Major</u>	<u>Degree</u>
Purdue University	1961	Crop Science	B.S.
Purdue University	1963	Plant Breeding and Genetics	M.S.
University of Minnesota	1966	Genetics - Cytogenetics and Plant Breeding Specialties	Ph.D.
Cornell University	1967	Genetics	Postdoctorate

4. **Professional Positions:**

<u>Employer</u>	<u>Dates</u>	<u>Position</u>
Cornell University	1966-67	NIH Trainee
University of Minnesota	1967-68	Research Associate
University of Minnesota	1968-72	Assistant Professor
University of Minnesota	1972-76	Associate Professor
University of Minnesota	1976-93	Professor
USDA Competitive Research Grants Office, Washington, DC	1979 (5 months)	Program Director
Italian National Research Council and Experimental Institute for Cereal Crops	1981 (1 month)	Visiting Professor
University of Guelph, Ontario, Canada	1984 (3 weeks)	Visiting Professor
People's Republic of China	1986 (1 month)	Visiting Professor
Japan	1990 (3 weeks)	Foreign Specialist
Plant Molecular Genetics Institute	1991-1994	Director
USDA-National Research Initiative Competitive Grants Program	1996-1998	Chief Scientist
University of Minnesota	1993-present	Regents' Professor
University of Minnesota	1999-present	McKnight Presidential Chair in Genomics
University of Minnesota	2000-present	Director, Center for Microbial and Plant Genomics

5. Professional Organizations and Honor Societies:

American Society of Agronomy
Crop Science Society of America
Genetics Society of America
International Association for Plant Tissue and Cell Culture
Plant Molecular Biology Association
Gamma Sigma Delta
Sigma Xi
University of Minnesota Biological Forum
Biological Stain Commission
National Academy of Sciences
American Association for the Advancement of Science
American Chestnut Foundation

6. Honors and Awards and Dates Received:

Senior Achievement Award - Purdue University, 1961
Agronomy Student Award - Purdue University, 1961
NSF Summer Fellowship, 1962
Caleb-Dorr Award - University of Minnesota, 1965
Fellow, American Society of Agronomy, 1980
Fellow, Crop Science Society of America, 1985
Fellow, American Association for the Advancement of Science, 1985
Outstanding Faculty Performance Northrup King Award, 1985
Crop Science Research Award, Crop Science Society of America, 1988
National Academy of Sciences, Member, 1991
Purdue University Distinguished Agriculture Alumni Award, 1993
Regents' Professor, 1993
Gamma Sigma Delta Award of Merit, 1994
DeKalb Genetics Crop Science Society of America Distinguished Career Award, 1997
President-Elect, Crop Science Society of America, 1998-1999
Honorary Doctorate, Purdue University, 2000
President, Crop Science Society of America, 1999-2000; Past-President, 2000-2001
McKnight Presidential Chair in Genomics, University of Minnesota, 2000-2005

7. Name and Dates of Committee Membership and Other Professional Activities:

Department

• Teaching

Plant Breeding Seminar Committee 1968-71, 1972-74, 1981-83, 1989-present (Chair, 1970-71, 1973-74, 1982-83, 1991-92)
Undergraduate Teaching Committee 1971-72
Plant Breeding Orientation Class (now "Research Methods in Crop Improvement and Production") 1968-present
Plant Biological Sciences Colloquium Committee, Chair 1992-1993; 1998-1999
Educational Advisory Committee, 1992-1994
Expanded Undergraduate Committee, 1993-1994
Graduate Program Merger Committee, 1994-1996
Iowa State Graduate Students, Discussion, 1995
Appropriate Technology Transfer Panel, 1995
Cytogenetics Agro 8-230, 1970-1995 (Supervising in 1996 and 1997), 1998, 2000
Plant Biotechniques, Agro 5500, 1993-1998 (Co-supervised with Maria Gallo-Meagher) (1996); and Burle Gengenbach (1997)
NIH Trainee Orientation Class, 1997
Plant Breeding Topics Class, 1997, 1999
PMGI Genomics Course (Co-organizer), 1999
MaCalester College High School Class (lab tour and discussion), 1999

University of Minnesota (CBS) High School student discussion (genetic engineering issues), 1999
Eisenhower High School Biology Teachers Class, 2000, 2001, 2002

- Research
 - Research Labs and Equipment Committee, 1976-78, 1981-85, 1989-1992
 - Minnesota Agricultural Experiment Station Project Revision Committee - Chair 1977, 1982, 1987, 1992
 - Search Committee for Wild Rice Position - 1977-78
 - Search Committee for Tissue Culture Position - 1983
 - Endowed Chair Committee, Chair 1985-1989
 - Search Committee for Endowed Chair, Chair 1989-1992
 - Search Committee for Corn Breeding and Genetics, Chair, 1998-2000
- Other Service
 - Personnel Committee, 1978-1992
 - H.K. Hayes Award and Lectureship Committee, Chair 1973-present**
 - Hayes Hall Dedication Committee, 1994
 - Departmental Name Ad Hoc Committee, 1973
 - Building Addition Committee, 1977-78
 - Building Brochure Committee, 1978 and 1979
 - Philip C. Hamm Scholarship Committee, Chair 1980-81, 1984
 - Departmental Brochure Committee, 1985
 - Borlaug Hall Building Dedication Committee, 1985
 - Northrup King Outstanding Faculty Performance Award Committee, 1986-87
 - UM Outstanding Achievement Award, Coord., (T.T. Chiang), 1986-87
 - Patent Committee, 1989-1993
 - Department Head Review Committee, 1989-90
 - Awards Committee, 1989-present**
 - Hayes Hall Remodeling Committee, 1994-1997
 - UM Outstanding Achievement Award, Coord. (O.L. Miller, Jr), 1994; (K.J. Kasha) 1999; (T. Izuno) 2000
 - Sponsorship of Adjunct Assistant Professor, 1995
 - Tyler Prize Nomination, 1995-1997
 - National Academy of Sciences Foreign Associate Nomination, 1995
 - Northrup King Development Committee, 1998-2000, Chair 1999-2000
 - Burnham/Chang Scholarship, Chair 1993-present**
 - Unique Educational Opportunities Grant, Chair, 1986-present**
 - Undergraduate Program Enhancement Subcommittee, Member, 2000-present**

College and Institute

- Teaching
 - Teaching Evaluation Task Force 1974-76
- Research
 - Electron Microscope Steering Committee 1968-1989
 - Intercollegiate Search Committee for Molecular Biology of Plants Position 1979
 - Intercollegiate Research Program in the Molecular Biology of Economic Plants Directed Toward Applications in Agriculture - Chairman 1980-83, Member 1984-85
 - McKnight Foundation Interdisciplinary Program on Plant Biology - Project Coordinator 1983-87
 - Plant Molecular Genetics Institute, Member 1985-present, Executive Committee 1985-88, Director 1991-1994
 - Genetic Engineering of Oats Research Group, Member 1985-1995
 - Search Committee for Plant Molecular Genetics Institute faculty position, 1986
 - Search Committee for Plant Molecular Genetics Institute faculty position, Chair 1992-1993
 - Search Committee for Plant Molecular Genetics Institute Postdoctorals, Chair, 1994-1995
 - Search Committee for Animal Genomics Faculty Position, 2000-2001
 - Whole Grains Collaborative Research Group, 2002-**
- Other Service
 - Spring Campus Tour Committee for Children 1971
 - Internal Review Committee for Plant Pathology Department 1976-77
 - Single Quarter Leave Committee 1975-78
 - Centennial Banquet for Minnesota Agricultural Experiment Station (Host) 1975

Advisory Committee for Faculty Performance Evaluation 1977-79
 Impact of emerging biosciences on Minnesota Agriculture Symposium Committee 1986
 Search Committee for Associate Dean for Research, 1991-1992
 COA Faculty Consultative Committee, 1991-1993
 Faculty Committee on Biotechnology Issues, Member, 1992-1998
 Biotechnology Risk Assessment Working Group, 1993-1994
 Visions For Change Workshop, 1995, 1998
 COAFES Biotechnology Extension Position ad hoc Committee, Member, 1996-2000
 Y.S. Tsiang Honorary Doctorate ad hoc Committee, 1996
 Biological Sciences Enhancement Committee, Chair, 1996-1999
 Special advisor to Deans on genomics, 1998-2000
 McKnight Foundation Proposal for Plant and Microbial Genomics Institute, Chair, 1999
 Cargill gift to University of Minnesota for genomics building (proposal, discussion, tour), 1999
 Congressional Aides Tour, Project Heartland Education, "Biotechnology, Food, and Human Health", 2001
 Red River Valley Emerging Leadership Program, "Issues in Agricultural Biotechnology", 2001
Institute for Social, Economic, and Ecological Sustainability, Advisory Committee, 2002-

University and State

- Teaching
 - Graduate School Unit Committee - Plant Breeding representative 1971-74, Chair 1973-74
 - Graduate School Task Force on Doctoral Programs 1981-82
 - President's Task Force on Quality of Graduate Education 1983-84
 - Genetics and Cell Biology Orientation Class 1980-1991
(See "Other University Service" below)
 - Biotechnology Education and Extension, Co-Chair, 1997-1998
 - University of Minnesota Extension Service, "Biotechnology in Agriculture", 2001
- Graduate Program/Faculty
 - Genetics Program Subcommittee 1971-74
 - Genetics Written Preliminary Exam Committee 1970-73, Chair, 1972-73, Member 1980
 - Genetics Seminar, Chair 1968, Member 1975-77
 - Genetics Program Reorganization Ad Hoc Committee 1968
 - Member of Plant Breeding, Genetics, Agronomy, and Plant Biological Sciences graduate faculties
 - Plant and Animal Sciences Policy and Review Comm. (Grad. School) - 1978-80
 - Graduate School Examining Committees:
 - Completed - M.S. (25), Preliminary Ph.D. (76), Final Ph.D. (70)
 - Plant Breeding Program Steering Committee 1976-79, 1994-1995
 - Genetics Program Steering Committee 1976-80, 1990-1993
 - Plant Biological Sciences Graduate Program Colloquium Series, Chair, 1998-1999
- Research
 - University Senate Committee on Research (liaison with Biohazard-Recombinant DNA Committee) 1976-79
 - Biotechnology Committee 1981-82
 - Council of Dean's Task Force on UM Biological Sciences 1984-85
(See "Other University Service" below)
- Other University Service
 - Academic Salary Task Force 1974-76
 - President's Commission to study Daily 1970
 - University Senate alternate 1973-81
 - Biennial Request and Budget Review Committee 1977-78
 - Task Force on Biochemistry Programs 1983
 - Faculty and Senate Consultative Committees, elected two terms, 1986-1990 (Assoc. Chair, FCC, 1987).
 - Senate, member, 1986-1990
 - Genetics and Cell Biology Search Committee (genetics faculty position), 1984-85
 - Academic Professional and Administrative Class Representation in Senate and Assembly

Committee, Chair, 1987
 Student Representation on Search Committees, Report to SCC and Board of Regents, Chair, 1988
 V.P. Academic Affairs and Provost Search Committee, 1989
 Protecting Intellectual Property Symp., Session Chair, 1989
 U of M Biology Club, Program Committee, 1985, member 1975-1990, V.P. 1989-1990
 Biological Forum, President 1990-1991, Member 1990-present, Nominating Committee Chair, 1992
President's Distinguished Faculty Mentor Program 1988-present
 NSF Undergraduate Program In Molecular Biology, 1989-1993
 Sigma Xi, President 1991-1992
 Special Faculty Panel to Review Board of Regents, 1991
 Special Faculty Panel to Review President, 1991
 Special Investigative Committee on Fraud, Chair, 1991; Presented Deposition, 1994
 Licensing of Biological Materials Symposium, Committee Member and Session Chair, 1991
 Salary Task Force, 1991-1992
 Faculty Consultative Committee on Intercollegiate Athletics, 1991-1992
 Faculty Consultative Committee Nominating Committee, Chair 1992
 Vice Presidential Review Committee for V. P. of IAFHE, 1993-1994
 Blue Ribbon Committee on Teaching and Research Excellence, 1993-1995
 Public-Private Partnership Committee, 1993-1998
 Senior Vice President for Academic Affairs and Provost, Review Committee, Chair, 1994-1995
 Provost for Professional Studies, Search Committee, Chair, 1994-1995
 Biological Sciences Reorganization (Phillips) Committee, Chair, 1995-1996
 East Asian Committee, ad hoc member, 1996
 Rural Development Council Interdisciplinary Task Force, Hubert Humphrey Institute, 1998
 New Student Convocation Participant, 1998
 Genomics Intercollegiate Grant Proposal to McKnight Foundation, Chair, 1999
 University of Minnesota Foundation, Visit with prospective donor, Des Moines, IA, 1999
 University of Minnesota Foundation Minnesota Campaign Kickoff (video presentation), 1999
Genomics Planning and Coordination Committee, 1999-2002
 U of M Sesquicentennial Planning Committee, 1998-2001; Grants Subcommittee, 2000-2001
 Presidential Sesquicentennial Symposium Committee (COAFES, Law School), 2000-2001
Building Policy Committee for Center for Microbial and Plant Genomics, 1999-present
 Consortium for Ethics, Values, and Health, 2000-present, Grants Subcommittee, 2001
Center for Agriculture and Human Health, 2000-present
 CASE Fellowship on Genomics for Journalists Committee, 2000
University of Minnesota Foundation Scholars' Walk Committee, 2002-
President's Distinguished Professor Mentor Program, 2002-
 New Student Convocation, 1999, 2000, 2001
 Minnesota Public Radio Task Force, 2000
Campaign Minnesota Faculty and Staff Committee, 2000-present
 Microbial and Plant Genomics Groundbreaking Committee, 2000-2001
Microbial and Plant Genomics Building Landscape Committee, 2001-present
Microbial and Plant Genomics Public Art Committee, 2001-present
 Science Reporters Lab Tour, 2001
Mini Ag. School State Legislative Staff Tour, 2002
Board of Regents and Legislators Tour, 2002
 Minnesota Public Radio University of Minnesota Highlights, 2001
NSF-IGERT Proposal Committees, 2001-present
 Packard Interdisciplinary Grants Committee, 2001
Plant Genomics Positions Search Committee, 2001-2002
Regents' Professor Selection Committee, 2002-
Robert Last Search Committee, 2002
McKnight Distinguished Professor Selection Committee, 2002-
Executive Vice President and Provost Search Committee, Co-chair, 2002
Center for Microbial and Plant Genomics, 2002
 - Steering Committee, Chair
 - Policy and Planning Committee

- **Furniture Subcommittee**
- **Equipment Subcommittee**
- **Computational Genetics Laboratory, Executive Committee and Search Committee**
- **Consortium on Law and Values, Coordination Committee**
- **Bioinformatics Coordination Subcommittee**
- **National Academy of Sciences Lectureship Series, Chair**
- Other
 - Sigma Xi Minnesota Chapter Nominating Committee - 1975-76; Program Committee, 1980-84, President-elect 1990-1991, President 1991-1992
 - North Central ASA Meetings - Walking Tour Committee and Tissue Culture Workshop Chairman 1977, organized 1-day symposium on "Getting Biotech Into the Field" (1990)
 - Committee on Hunger and Poverty, MN United Methodist Church, 1984-present**
 - Centennial United Methodist Church Missions, 2000-present**
 - Refugee Assistance Faith Team, Centennial United Methodist Church, 2001-2002**
 - Project Ag Grad, MN United Methodist Church, Director 1986-1996, Co-Director 1996-present**
 - Centennial United Methodist Church Foundation, Director 1990-1994
 - Minnesota Agriculture Project, Co-chair Value-Added Task Force, 1993-1994
 - Minnesota Agriculture Project, Co-chair Value-Added Implementation Task Force, 1994-1999
 - Developing high school course on value-added agriculture, with Dr. Roland Peterson, 1995-1999, Advisory Board, 1997-1999
 - Burnham Memorial Service, 1995
 - Meeting of Minnesota National Academy of Science Members with Pres. Bruce Alberts, Chair, 1995
 - Meeting of Taiwan U of M Alumni Executive Committee, (Taipei, Taiwan), 1996
 - Honorary Doctorate presentation to President Kim (Seoul, South Korea), 1996
 - State Fair Booth, 1999

Regional, National, and International

- Board of Directors/Advisory Council
 - Biological Stain Commission (Rochester, NY) - 1975-80, Trustee 1980-84
 - National Treasurer, Gamma Alpha Graduate Scientific Society - 1970-75
 - American Chestnut Foundation - Board of Directors, 1983-85, Scientific Review Team, 1999, Scientific Steering Committee, 1983-present**
 - Scientific Advisory Board, Molecular Genetics, Inc., 1984
 - Scientific Advisory Council - Plant Gene Expression Center (USDA, U. California-Berkeley), Under auspices of National Academy of Sciences, 1985-1994, Chair 1991-1994
 - Crop Science Society of America Board of Directors, 1983
 - National Plant Genetics Resources Board, 1988-1992
 - Scientific Advisory Board, Bioseeds International Inc, 1988-1990
 - American Society of Agronomy Board of Directors, 1988-1991
 - Institutional Biosafety Board, Grand Metropolitan Inc., 1992-1998
 - International Food Policy Research Institute, Program Advisory Committee, 1993-2002**
 - Palm Oil Research Institute of Malaysia Program Advisory Committee, 1993-2001, Chair 1998, 1999, 2000, 2001
 - Palm Oil Research Institute of Malaysia Grants Program Review, Chair, 1999
 - Scientific Advisory Board, Mycogen, Inc., 1996-1999
 - International Rice Research Institute Review of Genomics Strategy, Los Banos, Phillipines, 1999
 - US AID Scientific Liason Officer to IRRI, 1999-present**
 - Tyler Prize for Environmental Achievement, T.T. Chang (recipient), Los Angeles, CA (received \$100,000 for University), 1999
 - International Crop Science Congress Advisory Committee, 2000
 - Non-Resident Fellow Review Team, Noble Foundation, 2001-present**
 - Danforth Plant Science Center Scientific Advisory Board, 2000-present**
 - National Science Foundation Mentors Lunch, 2002**
 - Council of Scientific Society Presidents, Board of Directors, 2002-**
- National Societies

- Audio-visual chairman for 1972 Genetics Society of America Meetings
 Genetics Society of America section chairman on "Molecular Genetics and Cytogenetics" - 1972
 Crop Science Society of America General Awards Committee - 1977-78
 Genetics Society of America Travel Grant to attend XIV International Congress of Genetics,
 Moscow, U.S.S.R., August 21-30, 1978
 DeKalb-Pfizer Crop Science Distinguished Career Award Committee - Chair, 1977-78, member
 1989-90, Chairman 1991
 Gordon Research Conference on Plant Cell and Tissue Culture - Chaired two sessions of 1981
 and one in 1983, Chairman of entire conference, 1985
 American Society of Agronomy Committee A639 (liaison representative to Genetics Society of
 America) 1982-84
 Crop Science Society of America Nominations Committee C101 1985-86
 Crop Science Society of America, Elected Chair Elect (1983) and Chair (1984) C-1 Division (Crop
 Breeding, Genetics, and Cytology)
 Crop Science Society of America, North Central Board Representative, 1988-1991
 AAAS Nominating Committee, Agriculture Section O, Chair, 1989-1990
 CSSA Publication Review Committee, 1990
 National Academy of Sciences, Panel on Genetics (Section 62), Chair, 1993-1997
 American Society of Agronomy, National Issues Response Team, 1992-2000
 National Research Council, Report Review Committee, 1993-1997
 American Association for the Advancement of Science (AAAS), elected Member-at-Large,
 Agriculture Section O, 1993-1998
 National Academy of Sciences, elected Class Membership Committee, 1994-1995
National Agricultural Biotechnology Council, Minnesota Representative, 1995-present
 American Association for the Advancement of Science (AAAS), moderated session in
 accountability, 1998.
 Crop Science Society of America (CSSA) President Elect, 1998-1999, President, 1999-2000, Past
 President, 2000-2001
 CSSA Executive Committee and Board of Directors, 1998-2001
CSSA Committee on Policy and Oversight, 1998-2002
 CSSA Program Planning Committee, Chair, 1998-1999
 CSSA Long-Range Strategies Committee, 1998-2001
 CSSA Honorary Membership Committee, 1998-2001
 ASA Executive Committee and Board of Directors, 1998-2001
CSSA Committee on Special Awards, 2001-2002
National Academy of Sciences, elected Section Chair, 1999-2002
AAAS Chair-Elect Section O, 2001, Chair, 2002
National Academy of Sciences Nominating Committee, 2002
- National Committees/Task Forces
 - Committee to Develop Cytogenetic Map for Maize - 1976-1980
 - USDA/SEA Basic Research Thrusts Task Force (Washington, DC) 1979
 - Joint Council Recombinant DNA Committee (Washington, DC) 1979
 - Executive Committee of maize geneticists, 1981-85
 - National Corn Research Thrusts Task Force, 1981
 - National Assoc. Land Grant Colleges and State Univ. - Biotechnology Committee 1982
 - Council for Agricultural Science and Technology Task Force on Genetic Engineering, 1982-85
 - National Agricultural Research Council Task Force on Basic Research - 1983
 - National Academy of Sciences Briefing Panel to Presidential Science Advisor Keyworth, 1985
 - Maize Genetics Cooperative Subcommittee on Gene Mapping, 1985
 - National Plant Genome Mapping and Sequencing Program, Coord. Committee, 1988-1991
 - National Plant Genome Coordinating Committee, 1992-1998
 - Workshop on Living Stock Culture Collections (NSF and Genetics Soc.), 1993-1994
 - National Maize Genome Project, 1994-1996
 - International Grass Genome Initiative, Steering Committee, 1994-2002**
 - Minnesota Corn Growers Representative to the National Maize Genome Project, 1995-2000
 - National Plant Breeding Study, 1996-2000

USDA-ARS Outstanding Scientists Awards Committee, 1996
U.S. President's Office of Science and Technology Policy, Interagency Working Group on Plant Genomes, Chair, 1997-1998
CROPS99 Participant, St. Louis, MO, 1998
NRC Study Commission on Environmental Impact and Monitoring of Transgenics During Commercialization, 2000-2002
National Academy of Sciences Class Membership Committee, 2001-2002
Maize Genetics Executive Committee, re-elected, 2001-present

Conference Organization

Minnesota Annual Symposia on Plant Biology, Co-Organizer 1973-1994
VI International Congress of Plant Tissue and Cell Culture (1986), Finance (Chair) and Program Committees, 1984-1986
U.S. Department of Energy Chromosome Isolation Workshop (Los Alamos, NM) Co-chairman 1986
Gordon Research Conference on Plant Cell and Tissue Culture, Vice Chair (1983) and Chair (1985)
Symposia Planning Committees - Brookhaven Symposium on "Genetic Engineering of Osmoregulation: Impact on plant productivity for food, chemicals and energy," and National Academy of Science Symposium on "Genetics of physiological traits in crop plants."
XVI International Congress of Genetics, Toronto, Canada (1988). Organized and co-chaired symposium on Plant Biotechnology, Organized and chaired workshop on Somaclonal and Gametoclonal Variation.
CIMMYT-North/Latin American RFLP Network Meetings (two in 1988 - Madison, WI and Raleigh, NC; St. Paul, 1989) - organized and chaired.
USAID Conference on Strengthening Collaboration in Biotechnology: International Agricultural Research and the Private Sector, Rosslyn, VA (1988). Steering Committee member, chaired workshop on Cell Culture.
Corn Utilization Conference III Sponsored by National Corn Growers Association, organized sections on Biotechnical Applications Including Molecular and Cellular Biology for New Specialized Corn (1989-1990).
American Society of Agronomy, NC Branch, organized sections on biotechnology (1990).
USDA Genetic Release Workshops, Co-chair (1989-1990).
American Seed Trade Association Corn and Sorghum Research Conference, Program Chair for 1991.
Genetics Society of America, 1992 Program Planning Committee, Abstract Committee (Co-Chair), Session Chair
Workshop on Heterosis, Program Planning Committee, University of Minnesota 1991.
Oat Genome Consortium, Chair work session 1991, 1992, 1993, 1994, 1995, 1996
PMGI Symposium on "Cloning Plant Genes Known Only by Phenotype", Committee member, 1994
U.S.-Japan Workshop on "Gene Expression and Non-Mendelian Inheritance in Plants", Co-organizer, Tsukuba, Japan, 1994-1995
PMGI Retreat, Chair, 1992, 1993, 1994
International Grass Genome Initiative, Session Chair, Cold Spring Harbor, 1994
Plant Genome III, San Diego, CA, Session Chair, 1995
Global Event on Biotechnology, University of Minnesota, Chair, 1995-1996
National Academy of Sciences Colloquium on "Protecting our food supply: The value of plant genome initiatives", Irvin, CA, co-organizer, 1997
National Academy of Sciences Workshop on "Designing an agricultural genome program", Washington, D.C., coordinator, 1997
Exploring our Global Community, Program Committee, Speaker, and Honorary Global Summit Committee, 1998-1999
Third International Crop Science Congress, Germany, Advisory Committee, 2000
Sesquicentennial President's Symposium on "Governing GMOs" Committee, 2000-2001
NABC (National Agricultural Biotechnology Council) National Symposium on "Food for Health", planning committee, 2001-2002
ASTA Corn and Sorghum Research Conference, Program Chair, 2001
Agronomic Science Foundation Educational Luncheon, 2001

University of Bologna, Italy, International Conference on "From the green revolution to the gene revolution", Co-organizer, 2002-2003.
National Academy of Sciences Workshop on Animal Genome Research Program, Organizing Committee 2002
National Science Foundation Plant Genome Research Program, Workshop Coordinator, San Diego, CA, 2002
International Rice Research Institute Genomics Conference for CGIAR, resource person, 2002

8. Publications:

See attachment at end of this document.

9. Professional Development Activities and Dates: (past five years)

Discussion Groups

National Science and Technology Policy Series led by Ken Keller and Ed Schuh at Humphrey Institute (1991-1992)

Pew Roundtable Discussion with President Hasselmo, 1994, 1995

Visiting Professor Leaves

Japanese Government and National Institute for Agrobiological Research (3 weeks - 1990) - visited 18 laboratories and 2 companies.

10. Grants (past five years):

- Assistantships in Cellular and Molecular Genetics of Oats Research, H.W. Rines (Coordinator), D.D. Stuthman, R.L. Phillips, D.A. Somers, B.G. Gengenbach, C.D. Silflow, W.R. Bushnell, and K.J. Leonard. Quaker Oats Co. 1985-1988, \$180,000; Renewal 1988-1991, \$180,000; Renewal, 1991-1994, \$315,000; Renewal 1995-1997, \$261,000; Renewal 1998 \$72,000.
- Multi-Institutional Research Coordination Group on Integration of Grass Genome Studies, J.L. Bennetzen, S.W. Cartinhour, S.R. McCouch, R.L. Phillips, 1994-1999, NSF, \$300,000.
- Received travel support of \$9,000.
- Developing value-added specialty oat cultivars by marker-assisted breeding. D.D. Stuthman and R.L. Phillips, Quaker Oats Co, 1994-1999, \$1,195,520.
- Genetic analysis of whole-kernel methionine content in maize. 1995-1998. Minnesota Corn Research and Promotion Council, \$47,000.
- Genetics and utilization of seed nondormancy in wild rice. R.A. Porter and R.L. Phillips. 1995-1997, Minnesota Crop Improvement Association, \$10,000, and Minnesota Cultivated Wild Rice Council, \$10,000.
- Identification and cloning of the gene for ferulate ester synthesis involved in lignin/polysaccharide cross-linking in maize cell walls. H-J. Jung, Principal Investigator, (Contributed as collaborator, Co-advise postdoctoral student). 1995-1997, Pioneer Hi-Bred International, Inc. \$60,000.
- Development of a high throughput genetic analysis laboratory. L.B. Schook, Principal Investigator, Contributed as "cooperator". 1995-1998, NSF.
- Training for future biotechnology development. 1995-2000, NIH, \$1,426,127. Contributed as "trainer" and received stipend for John McLaughlin (\$12,000) in 1995, 1996, 1997, 1998

- Wild rice breeding and molecular genetics. P.I., R.A. Porter and R.L. Phillips. 1993-1996. USDA-ARS to University of Minnesota, North Central Experiment Station, \$99,404 for molecular genetics.
- A unique system for subchromosome-specific plant genome analysis. R.L. Phillips and H.W. Rines. 1996-1998, USDA-National Research Initiative Competitive Research Grant, \$155,888.
- Marker-assisted domestication of wild rice. R.L. Phillips, 1996-1998. USDA-North Central Biotechnical Program, \$122,000.
- Synthesis of a waxy oat. D.A. Somers, H.W. Rines, and R.L. Phillips. 1996-1997, Quaker Oats Co., \$81,000.
- Ferulate cross-linking in maize: a proposal. H.G. Jung, W. Ni, and R.L. Phillips. 1997-1998, Pioneer Hi-Bred Intl., \$60,000.
- Gift support for research on the molecular dissection of maturity in corn. Novartis, 1997, \$10,000.
- Postdoctoral stipend to Isabel Vales, Spain, Department of Education, 1996-1998
- USDA National Needs Fellowship for Nathan Springer, 1997-2000. (R.A. directly to student).
- U of M Dissertation Fellowship for Mike Olsen 1998-1999 (directly to student)
- A radiation hybrid and cloning system for genetic and physical mapping of the corn genome, R.L. Phillips and H.W. Rines, NSF Plant Genome Project, 1998-2001, \$1,830,000.
- **Training for future biotechnology development, D.H. Sherman, P.I. (R.L. Phillips on Steering Committee), 2000-2005, NIH, \$2,319,146 (direct cost).**
- USAID Scientific Liaison Officer Grant (support S. Jackson to Int'l Rice Genetics Conference 2000), \$1,821
- USDA NRI Postdoctoral grant (S. Jackson) 2000-2001, \$89,702
- USDA Bioinformatics Contract (Phillips on Advisory Committee, P.I. Dr. Ernie Retzel), 2000-2001, \$1.3 million
- **Minnesota Cultivated Wild Rice Council, 1999-2002, \$20,400**
- **NSF Plant Genome Research Program, A radiation hybrid system for the genetic and physical mapping of the corn genome. R.L. Phillips and H.W. Rines, 2001-2005, \$3,081,245.**
- **IBM Shared University Research (SUR) grant to Supercomputing Institute, Co-PI with several others in the Computational Life Sciences Initiative, 2002, \$980,000**
- **NIH-NSF-BBSI, University of Minnesota Summer Bioinformatics Institute, V. Kumar, PI (Phillips is Senior Personnel), 2003-2006, \$657,983.**
- **NSF-REU (Research Experiences for Undergraduates), Supplemental support for two summer internships for St. Mary's University, R.L. Phillips, P.I.; R.V. Kowles, Supplemental project P.I., 2002, \$11,100.**
- **NSF-ROA (Research Opportunity Award), Supplemental support for R.V. Kowles from St. Mary's University, R.L. Phillips, P.I., 2002, \$34,937.**
- **University of Minnesota Foundation Fund 6116, Project Ag. Grad., R.L. Phillips, Co-Director, 2002, \$28,334 endowment.**

11. Miscellaneous Activities:

- Grants Panels
 - National Science Foundation Grants Advisory Panel on Genetic Biology 1976
 - USDA Grants Advisory Panel on "Genetic Mechanisms for Crop Improvement" - 1978-80, Director 1979
 - Iowa State University Biotechnology Grants Advisory Panel 1986
 - AID/USDA Special Constraints Research Grants Program Advisory Panel, 1985-1990
 - USDA National Research Initiative Chief Scientist, 1996-1998

National Science Foundation Plant Genome Research Young Investigator Grants Advisory Panel, 2002

- Editorial Boards
Proc. Natl. Acad. Sci., USA, Contributing editor, 1991-present; Editorial Board, 1996-1998; Co-Editor, "From the Academy" section of Proc. Natl. Acad. Sci. USA, 1996-1998
Editorial Advisory Board, *Encyclopedia of Plant & Crop Science*, 2000-present
Co-Editor-in-Chief, *Encyclopedia of Agricultural Science*, 2nd Ed., 2001-present
- Teaching (also see Invited Seminars and Symposia Papers)
Mentor in Preparing Future Faculty Course for Dan Griffin, 1998
Carlson School of Management Course in "Corporate Risk Management", 2000, 2001, 2002
MacArthur Interdisciplinary Program on Global Change, Sustainability and Justice, on "Ways of Knowing", 2001
Southwest State University-Marshall Class on Genomics and Biotechnology in Agriculture, 2001
MURP (Multicultural Undergraduate Research Program) Mentoring of Branley Eugene (Florida A&M University) and Casey Dorr (University of Minnesota-Duluth) 2001
- **Review Teams**
Site visits for USDA/Competitive Res. Grants Off. (Univ. of Wisc., Univ. of MO) - 1979
U.S. Dept. of Energy Review Team of Biological Energy Research Program 1979, 1982
U.S. Dept. of Energy Review Team for Biology Dept., Brookhaven Nat'l. Lab 1980
CSRS Review Team for Plant Pathology Dept., Univ. of Minnesota, St. Paul, MN. 1988
CSRS Review Team for Genetics Dept., Univ. of Wisconsin, Madison, WI. 1988
USDA Plant Gene Expression Center, Albany, CA. 1990, 1991, 1993 (Chair)
University of Missouri, Review Team for Division of Biological Sciences, 1996
Rutgers University, Review Team for Biological Sciences, 1996
Cornell University, Review Team for Plant Breeding, 1997
University of Wisconsin, Review Team for Genetics, 1998
American Chestnut Foundation, Review Team for Breeding, 1999
University of Florida, Review Team for Agronomy, 2000
Texas A&M Review Team for Department of Crops and Soil Sciences, 2001
University of Nevada-Reno, NSF Genome Program, 2001, 2002
Purdue University, Agronomy Department, CSREES Review, 2002
- **Other**
North Carolina Workshop on Molecular Biology Applied to Agriculture and Forestry 1980
Pioneer conference on Issues in Plant Breeding - Invited Participant, 1982, 1983, 1984
U of M Agricultural Policy Study Group - 1984-present
Developed questionnaire on genetic engineering for FAO, 1985
Pioneer Latin-American Plant Breeding Research Forum (Venezuela), 1985
Consultant to CIMMYT (International Maize and Wheat Improvement Center) on Plant Molecular Genetics (Mexico); established international network, 1987-1992
Review of European/CIMMYT RFLP Network, 1991 (El Batan, Mexico)
Consultant to Pillsbury Biotechnology Program, 1994
Visioning Task Force, Department of Agronomy, Iowa State University, 1997
University of Minnesota Alumni Meeting, San Diego 1998
- Invited Seminars and Symposia Papers (since 1990):
Minnesota
Faculty Colloquium (University of Minnesota) 1990
Plant Breeding Seminar (University of Minnesota) 1990
Corn Refiners Association Research Review (University of Minnesota) 1990
Special Evening Lecture on Biotechnology - sponsored by U of M Southern Experiment Station, Waseca 1991
University of Minnesota Animal Science Department 1991
Plant Pathology Seminar (University of Minnesota), 1992

McKnight Foundation Plant Biology/Third World Retreat, 1992
 National Undergraduate Research Conference (University of Minnesota) 1992
 Phi Zeta Veterinary Medicine Honor Society (University of Minnesota) 1992
 University of Minnesota Foundation, 1992
 Rotary International (St. Paul) 1992
 Centennial United Methodist Church Men's Club, 1992
 Crops and Soils Planning Conference Banquet (University of Minnesota) 1992
 Agronomy and Soils Department Wives (St. Paul) 1992
 Experiment Station Project Revision Seminar (University of Minnesota) 1992
 St. Paul Campus Retirees, 1992
 Food Science and Nutrition Department, 1993
 Agronomy and Plant Genetics Department - Genetics in Corn Breeding, 1993
 Plant Molecular Genetics Institute Project Revision, 1993
 Hamline University Biology Seminar, 1993
 Biotechnology Panel, University of Minnesota, 1993
 Graduate School Commencement Speech, University of Minnesota, 1993
 Plant Biological Sciences Colloquium, University of Minnesota, 1994
 PMGI Symposium Summary, University of Minnesota, 1994
 Wild Rice Conference, Grand Rapids, 1994, 1995
 American Oat Workers Conference, Minneapolis, 1994
 Graduate School Commencement, Introduction of Outstanding Achievement Award, 1994
 University of Minnesota-Duluth, 1995
 Grand Rapids High School, 1995
 University of Minnesota Board of Regents, 1995
 Control Consultants Annual meeting, Bloomington, 1995
 Agronomy and Plant Genetics Graduate Student Brown Bag Discussion, 1996, 1997
 University of Minnesota Foundation - A Tribute to Exceptional Education, 1996
 Plant Molecular Genetics Institute Retreat, 1997
 National Academy of Sciences Board on Sustainable Development, Minneapolis, 1997
 Comparative Genomics Retreat, University of Minnesota, 1997
 Sigma Xi-Minnesota Chapter, 1997
 Advanta Managers Meeting on Genomics, 1998
 American Association of University Women, Minneapolis 1998
 University of Minnesota Experiment Station Review, 1998
 U of M Institute of Technology Dean and Department Heads, 1998
 U of M Food Animal Biotechnology Center Advisory Committee, 1998
 Transgenic Animal Symposium, St. Paul, 1998
 Peace Makers Forum, Minneapolis, 1998
 PMGI Retreat, U of M, 1998
 Department of Biosystems and Agricultural Engineering, 1998
 PMGI Seminar, 1999
 University of Minnesota National Academy of Sciences Member and Regents' Professors, 1999
 Roseville Citizens Group, 1998
 University of Minnesota Genomics Retreat, 1999
 University of Minnesota Exploring our Global Community, People, Food and Agriculture, 1999
 11th North American Colloquium on Domestic Animal Cytogenetics and Gene Mapping, St. Paul, MN 1999
 University of Minnesota Retirees Association, University of Minnesota, 1999
 Global Event on Biotechnology, Teachers' Seminar, University of Minnesota, 1999
 Wild Rice Winter Meeting, Minneapolis, 1999
 College of Biological Sciences Advisory Committee, 1999
 Department of Agronomy and Plant Genetics, Role of Crop Science Society of America (Brown Bag), 1999
 Wild Rice Field Day, Grand Rapids, MN 1995-1999.
 3M, St. Paul, MN, 2000
 United Methodist Church, White Bear Lake, MN, 2000
 Centennial United Methodist Church, Roseville, MN, 2000 (2 lectures)

Agri-growth Council, Bloomington, MN, 2000
 FAC Journalists, Minneapolis, MN, 2000
 Global Event Teachers Workshop, St. Paul, MN, 2000
 Eisenhower High School Teachers Program (2 lectures)
 Minnesota Tech, Minneapolis, MN, 2000
 University of Minnesota Regents Education Committee, St. Paul, MN, 2000
 White Earth Indian Reservation, Mahnomon, MN, 2000
 St. Paul-Minneapolis Committee on Foreign Affairs, 2000
 Health Informatics Seminar, University of Minnesota-Minneapolis, 2000
 University of Minnesota Extension-Minnesota Nutrition Conference, Bloomington, 2000
 University of Minnesota Agricultural Retirees, St. Paul, 2001
 Elder Learning Institute, "At the U" series, Minneapolis, 2001
Wild Rice Council Winter Meeting, Grand Rapids, 2001, 2002
 Hennepin Avenue United Methodist Church, Minneapolis, 2001
 Food Science and Nutrition Department, NAS procedures, 2001
Wild Rice Field Day, 2001, 2002
 Monsanto, Large-acreage Farmer Program, Mankato, MN 2001
 United Methodist Women State Meeting, Redwood Falls, MN 2001
 Consortium on Law and Values, "Governing GMOs: Developing Policy in the Face of
 Scientific and Public Debate", Minneapolis, MN 2001
**Consortium on Law and Values, "Center for Microbial and Plant Genomics", Minneapolis, MN
 2002**
FarmAmerica, Waseca, 2002
**Plant Molecular Genetics Institute Retreat, University of Minnesota, Minneapolis Campus, 2001,
 2002**
SPA Technology Workshop for the Investment Community, Minneapolis, 2002
NABC Foods for Health, Luncheon Speaker Moderator, Minneapolis, 2002

Other States

American Society for Clinical Nutrition (Washington, D.C.) 1990
 American Oat Workers Conference (Jackson Hole, WY) 1990
 Symposium on Plant Breeding in the 1990s, North Carolina State University 1991
 U.S.-Japan Agricultural Biotechnology Conference (Banbury Center, Cold Spring Harbor, NY) 1991
 American Society of Agronomy Cytogenetics Forum (Denver, CO) 1991
 World Congress on Cell and Tissue Culture (Washington, DC) 1992
 University of Wisconsin (Madison, WI) 1992
 University of Georgia (Athens, GA) 1992
 American Society of Agronomy National meeting (Minneapolis, MN) - 2 invited papers 1992
 Plant Genome I Conference (San Diego, CA) 1992
 American Seed Trade Association, Corn and Sorghum Industry Research Conference (Chicago,
 IL) 1992
 Texas A&M University (College Station, TX) 1993
 Purdue University (West Lafayette, IN) 1993
 Quaker Oat Symposium on Biotechnology (Chicago) 1994
 Kansas State University, U.S.-Japan Joint Seminar (Manhattan, KS) 1994
 Maize Genetics Meeting Keynote Speech (St. Charles, IL) 1994
 Federation of Associated Societies for Experimental Biology (Vermont) 1994
 American Society of Agronomy (Seattle), invited symposium paper, 1994
 American Society of Agronomy (St. Louis), invited plenary speaker, 1995
 University of Florida (Gainesville), 1995
 University of Nebraska (Lincoln), 1995
 Plant Genome IV Conference (San Diego, CA), 1996
 Corn Breeders' School (Champaign, IL), 1996
 Agricultural Research Institute (Washington, DC), 1996
 National Academy of Sciences (Washington, DC), 1997
 Horticulture Society of America (Lexington, KY), 1997

Plant Gene Expression Center (Albany, CA), 1997
 Gordon Research Conference on Plant Cell Genetics and Development (New Hampshire), 1997
 U.S. House of Representatives Subcommittee on Agricultural Research (Washington, DC), 1997
 Colorado State University Cell and Molecular Biology Seminar Series, 1998
 Colorado State University Sigma Xi, 1998
 American Seed Trade Association—GEM Project, Chicago, 1997
 Plant and Animal Genome Conference, ITMI (Intl. Triticeae Mapping Initiative) Workshop, San Diego 1998.
 The National Forum for Agriculture (Biotechnology and the Future of the Agricultural and Food System), Des Moines, 1998
 University of Nebraska (Lincoln), 1998
 University of Wisconsin, (Madison), 1999
 Plant and Animal Genome VII Conference, Maize and Cytogenetics Workshops, San Diego, CA, 1999
 Cornell University, Boyce Thompson Institute for Plant Research, Ithaca, NY, 1999
 Purdue University, (Indiana) 2000
 ASA Symposium Invitational Paper (Salt Lake City, UT), 1999
 Maize Genetics Meetings (Idaho), 2000
 NSF Plant Genome Awardees Meeting (Washington, DC), 2000
 Plant and Animal Genome Cytogenetics Workshop (San Diego, CA), 2001
 American Association for the Advancement of Science Symposium, Invited Paper (San Francisco), 2001
Brigham Young University, Utah, 2002
University of Missouri, J.M. Poehlam Lecture in Plant Breeding and Radio Agri-Talk Show, 2002
USAID Scientific Liason Officer Meeting, 2002
Council of Scientific Society Presidents, Panel on Scientists and Homeland Security, Washington, DC, 2002
National Academy of Sciences Animal Genome Research Program Workshop, Washington, DC, 2002
National Academy of Sciences Plant Genome Research Program Workshop, Washington, DC, also chaired session, 2002

International

VII International Symposium on Plant Tissue and Cell Culture, Keynote lecture (Amsterdam, The Netherlands) 1990
 National Institute for Agrobiological Resources (Tsukuba, Japan) 1990
 National Tobacco Company (Iwata, Japan) 1990
 International Biotechnology Conference on the Oil Palm (Kuala Lumpur, Malaysia) 1991
 Palm Oil Research Institute of Malaysia (Kuala Lumpur) 1993
 Agricultural Biotechnology Institute (Suweon, Korea) 1993
 Palm Oil Research Institute of Malaysia (Kuala Lumpur) 1994, 1995, 1996
 International Rice Research Institute (Philippines) 1994
 International Symposium on Molecular Techniques for Crop Improvement, U.N., Vienna, Austria, 1995
 International Symposium on Modification of Gene Expression and Non-Mendelian Inheritance, Tsukuba, Japan, 1995
 IAV, Rabat, Morocco (5 seminars), 1996
 University of Minnesota President's Delegation to Taiwan, China and South Korea, 1996
 Rice Genome Program, Tsukuba, Japan, 1997
 International Symposium on Heterosis, Mexico City, 1997

International Rice Research Institute, Review of IRRI Genomics Strategy, Philippines (2 seminars), 1999
 Embrapa Maize and Sorghum Institute, Brazil, 1999
 Federal University of Rio Grande do Sol, Brazil (2 seminars), 1999
 Federal University of Vicosa, Brazil, 1999
 Quaker Oats Symposium/Workshop, Winnipeg, Canada, 1999
 International Rice Research Institute/International Food Policy Research Institute Symposium on Improving Human Nutrition Through Agriculture, Philippines, 1999.
 Kobe University, Japan 1999
 Frontiers of Science Symposium, Tsukuba, Japan, 1999
 John Innes Center, Norwich, UK, 2000
 International Grassland & Environmental Resources (IGER) Institute, Aberystwyth, Wales, 2000
 P.T. Thomas Memorial Lecture, IGER, Aberystwyth, Wales, 2000
 International Crop Science Congress, Hamburg, Germany 2000
International Rice Research Institute, Philippines, Genomics Conference, 2002
International Rice Research Conference, Beijing, China, Khush Symposium and Functional Genomics Workshop, 2002

Companies

Pillsbury Co. (LeSueur, MN) 1990
 Northrup King and Co., 1992
 Pioneer Hi-Bred Intl., 1993
 Northrup King and Co., 1995
 General Mills, 1999
 Monsanto (St. Louis, MO), 2000
General Mills (Minneapolis), 2002

8. Publications

Professional Journal Articles and Other Refereed Publications

1. Phillips, R.L. 1965. Determination of chromosome numbers in six *Lotus* species. *Crop Sci.* 5:370.
2. Phillips, R.L. 1967. The association of linkage group V with chromosome 2 in *Neurospora crassa*. *J. Hered.* 58:263-265.
3. Phillips, R.L. and A.M. Srb. 1967. A new white ascospore mutant of *Neurospora crassa*. *Can. J. Genet. Cytol.* 9:766-775.
4. Phillips, R.L. and W.F. Keim. 1968. Seed pod dehiscence in *Lotus* and interspecific hybridization involving *L. corniculatus* L. *Crop Sci.* 8:18-21.
5. Phillips, R.L. 1968. Cyanogenesis in *Lotus* species. *Crop Sci.* 8:123-124.
6. Phillips, R.L. 1968. Cytogenetic location of the gene for the purple plant color in maize. *J. Hered.* 59:56.
7. Phillips, R.L. 1969. Recombination in *Zea mays* L. I. Location of genes and interchanges in chromosomes 5, 6 and 7. *Genetics* 61:107-116.
8. Phillips, R.L. 1969. Recombination in *Zea mays* L. II. Cytogenetic studies of recombination in reciprocal crosses. *Genetics* 61:117-127.
9. Phillips, R.L., C.R. Burnham, and E.B. Patterson. 1971. Advantages of chromosomal interchanges that generate haplo-viable deficiency-duplications. *Crop Sci.* 11:525-528.

10. Phillips, R.L., R.A. Kleese, and S.S. Wang. 1971. The nucleolus organizer region of maize (*Zea mays* L.): Chromosomal site of DNA complementary to ribosomal RNA. *Chromsoma (Berl.)* 36:79-88.
11. Kleese, R.A. and R.L. Phillips. 1972. Electrophoretic mutants as useful markers for chromosome aberrations. *Genetics* 72:537-540.
12. Burnham, C.R., J.T. Stout, W.H. Weinheimer, R.V. Kowles, and R.L. Phillips. 1972. Chromosome pairing in maize. *Genetics* 71:111-126.
13. Burnham, C.R., and R.L. Phillips. 1972. Linkage Groups: Plants. Part IV, Corn. Contribution to Biology Data Book Second Edition, Vol. 1, pp.85-88. Fed. Amer. Socs. Exptl. Biol.
14. Stout, J.T., and R.L. Phillips. 1973. Two independently inherited electrophoretic variants of the lysine-rich histones of maize. *Proc. Nat. Acad. Sci. U.S.A.* 70:3043-3047.
15. Phillips, R.L., D.F. Weber, R.A. Kleese, and S.S. Wang. 1974. The nucleolus organizer region of maize (*Zea mays* L.): Tests for ribosomal gene compensation or magnification. *Genetics* 77:285-297.
16. Green, C.E., R.L. Phillips, and R.A. Kleese. 1974. Tissue cultures of maize (*Zea mays* L.): Initiation, maintenance, and organic growth factors. *Crop Sci.* 14:54-58.
17. Green, C.E., and R.L. Phillips. 1974. Potential selection system for mutants with increased lysine, threonine, and methionine in cereal crops. *Crop Sci.* 14:827-831.
18. Green, C.E., and R.L. Phillips. 1975. Plant regeneration from tissue culture of maize. *Crop Sci.* 15:417-421
19. Givens, J.F., and R.L. Phillips. 1976. The nucleolus organizer region of maize (*Zea mays* L.): Ribosomal RNA gene distribution and nucleolar interactions. *Chromsoma (Berl.)* 57:103-117.
20. Liang, G.H., A.S. Wang, and R.L. Phillips. 1977. Control of ribosomal RNA gene multiplicity in wheat. *Can J. Genet. Cytol.* 19:425-435.
21. Phillips, R.L. 1977. Genetic engineering for crop improvement. 32nd Ann. Corn and Sorghum Res. Conf. pp. 6-20.
22. Phillips, R.L., A.S. Wang, I. Rubenstein, and W.D. Park. 1979. Hybridization of ribosomal RNA to maize chromosomes. *Maydica* 24:7-21.
23. Phillips, R.L., E.D. Garber, O.L. Miller, Jr., and H.H. Kramer. 1979. C. R. Burnham. *Maydica* 24:3-6.
24. Albertsen, M.C., and R.L. Phillips. 1981. Developmental cytology of 13 genetic male sterile loci in maize. *Can. J. Genet. Cytol.* 23:195-208.
25. Phillips, R.L., P.R. Morris, F. Wold, and B.G. Gengenbach. 1981. Seedling screening for lysine-plus-threonine resistant maize. *Crop Sci.* 21:601-607.
26. Mascia, P.H., I. Rubenstein, R.L. Phillips, A.S. Wang, and Lu Zhen Xiang. 1981. Localization of the 5S rRNA genes and evidence for diversity in the 5S rDNA region of maize. *Gene* 15:7-20.
27. Burnham, C.R., R.L. Phillips, and M.C. Albertsen. 1981. Inheritance of male sterility in flax involving nuclear-cytoplasmic interaction, including methods of testing for cytoplasmic restoration. *Crop Sci.* 21:659-663.

28. McCoy, T.J., R.L. Phillips, and H.W. Rines. 1982. Cytogenetic analysis of plants regenerated from oat (*Avena sativa*) tissue cultures; high frequency of partial chromosome loss. *Can J. Genet. Cytol.* 24:37-50.
29. McMullen, M.S., R.L. Phillips, and D.D. Stuthman. 1982. Meiotic irregularities in *Avena sativa* L./*A. sterilis* L. hybrids and breeding implications. *Crop Sci.* 22:890-897.
30. McCoy, T.J., and R.L. Phillips. 1982. Chromosome stability in maize (*Zea mays*) tissue cultures and sectoring in some regenerated plants. *Can. J. Genet. Cytol.* 24:559-565.
31. Phillips, R.L., A.S. Wang, and R.V. Kowles. 1983. Molecular and developmental cytogenetics of gene multiplicity in maize. *Stadler Symp.* 15:105-118.
32. Buescher, P.J., R.L. Phillips, and R. Brambl. 1984. Ribosomal RNA contents of maize genotypes with different ribosomal gene numbers. *Biochem. Genet.* 22:923-930.
33. Luby, J.J., D.D. Stuthman, and R.L. Phillips. 1985. Micronuclei frequency and character coherence in *Avena sativa* L./*A. fatua* crosses. *Theor. Appl. Genet.* 69:367-373.
34. Phillips, R.L., and B.A. McClure. 1985. Elevated protein-bound methionine in seeds of a lysine-plus-threonine resistant maize line. *Cereal Chem.* 62:213-218.
35. Kowles, R.V., and R.L. Phillips. 1985. DNA amplification patterns in maize endosperm nuclei during kernel development. *Proc. Natl. Acad. Sci. (USA)* 82:7010-7014.
36. Phillips, R.L., R.V. Kowles, M.D. McMullen, S. Enomoto, and I. Rubenstein. 1985. Developmentally-timed changes in maize endosperm DNA. *UCLA Symp. Plant Genetics Alan R. Liss, Inc.*, pp. 739-754.
37. McMullen, M.D., B. Hunter, R.L. Phillips, and I. Rubenstein. 1986. The structure of the maize ribosomal DNA spacer region. *Nucl. Acids Res.* 14:4953- 4968.
38. Rhodes, C.A., R.L. Phillips, and C.E. Green. 1986. Cytogenetic stability of aneuploid maize tissue cultures. *Can. J. Genet. Cytol.* 28:374-384.
39. Rhodes, C.A., C.E. Green, and R.L. Phillips. 1986. Factors affecting tissue culture initiation from maize tassels. *Plant Sci.* 46:225-232.
40. Tuberosa, R., and R.L. Phillips. 1986. Isolation of methotrexate-tolerant cell lines of corn. *Maydica* 31:215-225.
41. Wang, A.S., R.L. Phillips, and C.C. Mi. 1986. Cell cycle parameters and accumulation of metaphase cells in maize suspension cultures. *Plant Sci.* 46:53-61.
42. Kowles, R.V., M.D. McMullen, and R.L. Phillips. 1986. Gene expression in developing kernels. *First Ann. Penn. State Symp. in Plant Physiol.*, University Park, Penn.
43. Tuberosa, R., and R.L. Phillips. 1986. Selection and partial characterization of corn (*Zea mays* L.) callus lines tolerant to methotrexate. *Genetica Agraria* 40:479.
44. Lee, M., and R.L. Phillips. 1987. Genomic rearrangements in maize induced by tissue culture. *Genome* 29:122-128.
45. Johnson, S.S., R.L. Phillips, and H.W. Rines. 1987. Meiotic behavior in progeny of tissue culture regenerated oat plants (*Avena sativa* L.) carrying near-telocentric chromosomes. *Genome* 29:431-438.

46. Johnson, S.S., R.L. Phillips, and H.W. Rines. 1987. Possible role of heterochromatin in chromosome breakage induced by tissue culture in oats (*Avena sativa* L.). *Genome* 29:439-446.
47. Peschke, V.M., R.L. Phillips, and B.G. Gengenbach. 1987. Discovery of transposable element activity among progeny of tissue culture-derived maize plants. *Science* 238:804-807.
48. Lee, M. and R.L. Phillips. 1987. Genetic variants in progeny of regenerated maize plants. *Genome* 29:834-838.
49. Armstrong, C.L. and R.L. Phillips. 1988. Genetic and cytogenetic variation in plants regenerated from organogenic and friable, embryogenic tissue cultures of maize. *Crop Sci.* 28:363-369.
50. Lee, M., J.L. Geadelmann, and R.L. Phillips. 1988. Agronomic evaluation of inbred lines derived from tissue cultures of maize. *Theor. Appl. Genet.* 75:841-849.
51. Benzion, G., and R.L. Phillips. 1988. Cytogenetic stability of maize tissue cultures: A cell line pedigree analysis. *Genome* 30:318-325.
52. Stadler, J., R. Phillips, and M. Leonard. 1989. Mitotic blocking agents for suspension cultures of maize 'Black Mexican Sweet' cell lines. *Genome* 32:475-478.
53. Benner, M.S., R.L. Phillips, J.A. Kiriara, and J.W. Messing. 1989. Genetic analysis of methionine-rich storage protein accumulation in maize. *Theor. Appl. Genet.* 78:761-767.
54. Phillips, R.L. 1989. Somaclonal and gametoclonal variation. *Genome* 31:1119-1120.
55. Kowles, R.V., F. Srienc, and R.L. Phillips. 1990. Endoreduplication of nuclear DNA in the developing maize endosperm. *Devel. Genet.* 11:125-132.
56. Peschke, V.M. and R.L. Phillips. 1991. Activation of the maize transposable element *Suppressor-mutator (Spm)* in tissue culture. *Theor. Appl. Genet.* 81:90-97.
57. Peschke, V.M., R.L. Phillips, and B.G. Gengenbach. 1991. Genetic and molecular analysis of tissue culture-derived *Ac* elements. *Theor. Appl. Genet.* 82:121-129.
58. Sullivan, T.D., L.I. Strelow, C.A. Illingworth, R.L. Phillips, and O.E. Nelson, Jr. 1991. Analysis of maize *Brittle-1* alleles and a defective *Suppressor-Mutator*-induced mutable allele. *Plant Cell* 3:1337-1348.
59. Kowles, R.V., M.D. McMullen, G. Yerk, R.L. Phillips, S. Kraemer, and F. Srienc. 1992. Endosperm mitotic activity and endoreduplication in maize affected by defective kernel mutations. *Genome* 35:68-77.
60. Phillips, R.L. 1993. Plant genetics: out with the old, in with the new? *Am. J. Clinical Nutrition* 58 (Suppl.):2595-2635.
61. Phillips, R.L. 1993. Cytogenetic manipulation of polyploid (*po*). *Maydica* 38:85-92.
62. Kaeppler, S.M., and R.L. Phillips. 1993. DNA methylation and tissue culture-induced variation in plants. *In Vitro Cell. Dev. Biol.* 29P:125-130.
63. Stapleton, A.E. and R.L. Phillips. 1993. A fertile field: maize genetics '93. *Plant Cell* 5:723-727.
64. Phillips, R.L., T.S. Kim, S.M. Kaeppler, S.N. Parentoni, D.L. Shaver, R.E. Stucker, and S.J. Openshaw. 1993. Genetic dissection of maturity using RFLPs. *Proc. 47th Annu. Corn & Sorghum Industry Res. Conf.* pp 135-150.

65. Muenchrath, D.A. and R.L. Phillips. 1993. Relationship of maize seedling response to lysine-plus-threonine medium and whole kernel amino acid profile. *Crop Sci.* 33:1095-1099.
66. Kaeppler, S.M., R.L. Phillips, and T.S. Kim. 1993. Use of near-isogenic lines derived by backcrossing or selfing to map qualitative traits. *Theor. Appl. Genet.* 87:233-237.
67. Jellen, E.N., R.L. Phillips, and H.W. Rines. 1993. C-banded karyotypes and polymorphisms in hexaploid oat accessions (*Avena* spp.) using Wrights' stain. *Genome* 36:1129-1137.
68. Jellen, E.N., W.L. Rooney, R.L. Phillips, and H.W. Rines. 1993. Characterization of the hexaploid oat *Avena byzantina* cv. Kanota monosomic series using C-banding and RFLPs. *Genome* 36:962-970.
69. Kaeppler, S.M. and R.L. Phillips. 1993. Tissue culture-induced DNA methylation variation in maize. *Proc. Natl. Acad. Sci. USA* 90:8773-8776.
70. Kim, T.S., R.L. Phillips, and M.Y. Eun. 1993. Identification of genomic regions controlling maturity in maize (*Zea mays* L.). *Crop Production and Improvement Technology in Asia*. pp. 379-397. Korean Soc. Crop Sci.
71. Jellen, E.N., R.L. Phillips, and H.W. Rines. 1994. Chromosomal localization and polymorphisms of ribosomal DNA in oat (*Avena* spp.). *Genome* 37:23-32.
72. Phillips, R.L. and E.N. Jellen. 1994. Videotaped lectures in a graduate cytogenetics course. *J. Nat. Res. Life Sci. Educ.* 23:16-18.
73. Phillips, R.L., S.M. Kaeppler, and P. Olhoft. 1994. Genetic instability of plant tissue cultures: Breakdown of normal controls. *Proc. Natl. Acad. Sci. USA* 91:5222-5226.
74. Young, N.D. and R.L. Phillips. 1994. Cloning plant genes known only by phenotype. *Plant Cell* 6:1193-1195.
75. Phillips, R.L., H.W. Rines, E.N. Jellen, W.L. Rooney, B.C. Wu, S. Kianian, and O. Riera-Lizarazu. 1994. Oat genome analysis via molecular markers and oat x corn crosses. U.S.-Japan Joint Seminar, Kansas State University, (in press).
76. Rooney, W.L., H.W. Rines, and R.L. Phillips. 1994. Identification of RFLP markers linked to crown rust resistance genes Pc91 and Pc92 in oat. *Crop Sci.* 34:940-944.
77. Rooney, W.L., E.N. Jellen, R.L. Phillips, H.W. Rines, and S.F. Kianian. 1994. Identification of homoeologous chromosomes in hexaploid oat (*A. byzantina* cv Kanota) using monosomics and RFLP analysis. *Theor. Appl. Genet.* 89:329-335.
78. Jellen, E.N., R.L. Phillips, H.W. Rines, and W.L. Rooney. 1995. Molecular genetic identification of *Avena* chromosomes related to the group 1 chromosomes of the Triticeae. *Genome* 38:185-189.
79. O'Donoghue, L.S., S.F. Kianian, P.J. Rayapati, G.A. Penner, M.E. Sorrells, S.D. Tanksley, R.L. Phillips, H.W. Rines, M. Lee, G. Fedak, S.J. Molnar, D. Hoffman, C.A. Salas, B. Wu, E. Autrique, and A. Van Deynze. 1995. A molecular linkage map of cultivated oat. *Genome* 38:368-380.
80. Phillips, R.L., M.A. Matzke, and K. Oono. 1995. Treasure your exceptions. *Plant Cell* 7:1522-1527.
81. Schweizer, L., G.L. Yerk-Davis, R.L. Phillips, F. Srienc, and R.J. Jones. 1995. Dynamics of maize endosperm development and DNA endoreduplication. *Proc. Natl. Acad. Sci. USA* 92:7070-7074.

82. Kianian, S.F., D.C. Bittel, R.L. Phillips, and M. Gallo-Meagher. 1996. Postdoctoral reserach associates as an educational resource: opportunities and constraints. *J. Nat. Resour. Life Sci. Educ.* 25:144-147.
83. Riera-Lizarazu, O., H.W. Rines, and R.L. Phillips. 1996. Cytological and molecular characterization of oat x maize partial hybrids. *Theor. Appl. Genet.* 93:123-135.
84. Ananiev, E.V., O. Riera-Lizarazu, H.W. Rines, and R.L. Phillips. 1997. Oat-maize chromosome addition lines: A new system for mapping the maize genome. *Proc. Natl. Acad. Sci. USA* 94:3524-3529.
85. Rasmusson, D.C. and R.L. Phillips. 1997. Plant breeding progress and genetic diversity from *de novo* variation and elevated epistasis. *Crop Sci* 37:303-310.
86. Martin, M., R. Phillips, and G. Gardner. 1997. Conducting and administering biotechnology research at a land-grant university. *J. Agric. and Human Values.*
87. Phillips, R.L. and J. Suresh. 1997. Cytogenetic basis for fertile plants in a maize nuclear male sterility system. *Maydica* 42:127-131.
88. Kianian, S.F., B-C. Wu, S.L. Fox, H.W. Rines, and R.L. Phillips. 1997. Aneuploid marker assignment in hexaploid oat with the C genome as a reference for determining remnant homoeology. *Genome* 40:386-396.
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Provisional Patents

DNA encoding oat acetyl CoA carboxylase.

University of Minnesota Docket No. 98137.

5-methylcytosine methyltransferase gene in maize.

University of Minnesota Docket No. 99195.

Control of DNA methylation

(University of Wisconsin Disclosures P99319, P01003, P01004, P01005)

Polycomb genes from maize-Mez1 and Mez2. University of Wisconsin, Reference No.

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