

October, 1996

THE DEPARTMENT OF PLANT PATHOLOGY

UNIVERSITY OF MINNESOTA

<u>Home Page</u> www.plpa.agri.umn.edu

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Aurora Sporealis is an annual publication mailed to former and current faculty, staff and graduate students, and to Old Timers who worked in the Department of Plant Pathology, at some time or other. Any contributions can be sent to the Department Head at the address below.

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COVER STORY

Something Familiar, Something New

The Aurora Sporealis is the primary news source for alumni and friends of the Department of Plant Pathology at Minnesota. It will remain so. However, in this edition we begin to join the electronic revolution with the "snail mail", tried and true Aurora Sporealis. Electronic communication enables us to offer instantaneous, more in-depth information about the Department by way of our Home Page. We also announce a new Aurora Sporealis feature, the "Alumni Speak" E-mail connection (see page 31).

Thus, this year's cover blends the old with the new. It offers the familiar in the form of the old cover illustration, and announces the new era of communication for alumni and friends. Senior Aurora Sporealis readers will readily recognize the old cover illustration. It features the "Tottering Tower" (built in 1907, demolished in the 1970's), "Stakman Hall" (finished in 1941), a fungal fount and the ubiquitous "Gopher" mascot. Younger alumni and friends recall other landmarks and memories not in the original illustration. For instance they recall doing science in Christensen Laboratories (formerly the Plant Science Building). They recall the new Plant Pathology library and seminar rooms in Borlaug Hall. They know Home Pages and E-mail as their sources of information and communication.

We invite all alumni and friends, regardless of their era, to visit us through our Home Page <www.plpa.agri.umn.edu>. There you will find current and historical information concerning the Department. Many questions can be answered by the materials contained in this Home Page. For example, who is still there that I knew? What has been going on since I left? What is the current curriculum like? Who are these new faculty and what do they do? Who graduated in what year and who was their advisor? What really is going on at Minnesota?

We also invite alumni and friends to communicate their thoughts and Aurora news items directly to us through our special E-mail address: <alumnis-plpa@puccini.crl.umn.edu> The Aurora Sporealis news magazine mantra is: "Wherein are recorded the recollections, the ruminations and the raspirations of those who have drunk from the foaming fount of the Department of Plant Pathology of the University of Minnesota and who now spout forth in divers ways." So, please feel free to send recollections, ruminations and raspirations in pixel form or via normal "snail mail". In either case, your messages will go directly to the staff of Aurora for inclusion in the next edition. Best Wishes.

- Richard J. Zeyen,

Public, Alumni & Institutional Relations Committee

MESSAGE FROM THE HEAD

We begin this year's Aurora having just celebrated Dr. Carl Eide's 92nd birthday anniversary. On August 20, 1996 we had a very special morning coffee honoring Carl and Johanna and sons David and spouse Anne and Charlie. Sue Shepard from the Minnesota Foundation Office joined us and presented Carl and Johanna a plaque in recognition of their gift establishing a Graduate Student Fellowship in our Department. We all enjoyed a very special time visiting with Carl, Johanna and friends.

The Department lost a wonderful professor but the College gained a wonderful administrator this past July when Phil Larsen became the College's Associate Dean for Research. We miss Phil and wish him the very best in this challenging assignment. The department really thrived under Phil's leadership and established a record for productivity that may never be excelled. Carol Windels was elected to become President of APS in 1998. We are really proud of Carol's accomplishments as a plant pathologist stationed at the Northwest Experiment Station, Crookston, MN and especially now for this well deserved honor. Bob Nyvall is the new Editor of Phytopathology News and will do his editing beneath the towering Norway pines, at the North Central Experiment Station, Grand Rapids, MN. With our own Dr. Kurt Leonard, (director of the USDA-ARS Cereal Rust Laboratory) as Editor-in-Chief of all APS publications the Department is well represented in society affairs.

In April of 1995 a Department CSREES review was conducted and we have been busy this past academic year responding to their suggestions. Our accounting department completed an audit of the past 2 years and our accounts are now up to date and monthly computer reports are available for each project. We obtained funds for a new autoclave for Christensen Laboratories through much appreciated help from the Provost and Dean's Offices. We revised and updated our department constitution to allow for increased communication between the faculty and academic professional staff. A computer specialist, Mr. Dean Flanders was hired 1/2 time in our department and 1/2 time with Agronomy & Plant Genetics Department. We "enhanced the scientific dialogue within the department" with a seminar series given by 10 of our professors presenting their research. Dr. Dariush Danesh has been asked to develop and teach Bill Kennedy's Phytobacteriology course beginning spring 1997. The graduate students sponsored an all day symposium entitled "Collaborating Research Between Industry and Academia." We received financial support from the Dean's office and from the Minnesota Extension Service for our Plant Disease Clinic. This financial help to the clinic allows the services to Minnesota Agriculture performed by Sandy Gould to continue and to keep the clinic viable and in the black financially. Faculty productivity in terms of manuscripts written remains high. In 1994-95 we were number one in the college in papers per professor and in 1995-96 we were number two.

Dr. Linda Kinkel was promoted to Associate Professor with Tenure this past year and has agreed to chair the Education Committee for the coming year. The department constitution calls for the chairperson of the five standing committees: Education: Linda Kinkel, Research: Bill Bushnell, Extension: Dick Meronuck, Physical Resources: Jim Groth, and Public Alumni & Institutional Relations, Dick Zeyen to comprise the Faculty Council and with the department head set policy for the Department. The constitution now 12 years old has served the Department well and is a good framework to help us get things done. Dick Zeyen like a masterful potter has molded, shaped and now reshaped the constitution till now it has utility and even a touch of elegance.

The Rosemount Agricultural Experiment Station is being reorganized. The "Plant Pathology Farm" and the "Agronomy Farm" are now the Plant Science Research Unit. James Rowe the Plant Pathology Research Coordinator will administer the new Plant Science Research Unit. Orville Bielenberg did a wonderful job for us at Rosemount for a number of years and now Jim Rowe carries on that tradition of good research.

Educating and helping students with their research is great fun. Saying Aufweidersehen to them as they finish is not. This year's group of new Old Timers included Brent McCallum, Robert Noyd, James Kurle, Julie Beale, Koren Gust, Bruna Buccarelli, Bruce Paulsrud, Wendy Jo White, Dennis McDougall, Akhilesh Mishra and Kasia Duellman. From our support staff Ellen Mester, Douglas Lange and Odette Holter also left us. We wish you all the best for productive and happy careers.

This coming year we will be converting all of our courses to the semester mode and it will be a major effort. We will finish a strategic plan to be sure we are meeting the agricultural needs of the state. We are also responding to losing Phil Larsen to the Dean's office by having Dr. Sagar Krupa develop and initiate a strong Urban Pathology program. Sagar continues his air pollution research as well. Plant diseases are unrelenting and so with late blight of potatoes, head scab of wheat and barley, white mold and soybean cyst nematode of soybean, and a new disease of sugar beet this year-Rhizomania destroying our crops, were pressing on. In our busyness it's important that the good doesn't get in the way of the best. Even virtue has its echelons and Natalina Ginzburg has said that "as we educate our children, they should be taught not the little virtues but the great. Not thrift but generosity, not caution but courage, not shrewdness but a love of truth, not tact but self denial and love and concern for our neighbors, not a desire for success but a desire to be and to know." Sage advice from our Old Timers will help keep us on the right track choosing the best over the good and the great over the less important. Best wishes for a productive and wonderful year.

Sincerely,

Heif a. anderson

Neil A. Anderson

AURORA SPOREALIS

October 1996

FEATURE ARTICLE

Nobel Laureate — Norman Borlaug A Personal Story of Persistence and Excellence

One of the Department of Plant Pathology's most famous alumni is Norman E. Borlaug, winner of the 1970 Nobel Peace Prize for the "Green Revolution". The Green Revolution was based on Borlaug's ability to breed and produce semidwarf, day length insensitive, rust resistant, high yielding wheat varieties. However, there was little in his academic career in the Department which would foretell this success. Neither his 1941 MS thesis on "Red stain of box elder trees" nor his 1942 Ph.D. thesis on "Variation and variability of Fusarium lini" suggested a future in wheat breeding and international development.

While some alumni know the story of Norman Borlaug through personal contact, many current students and more recent graduates have not had that opportunity. Norman Borlaug's personal story is both instructive and inspirational. Therefore we have asked for and received permission to reprint a short personal life history of Norman Borlaug as told to Vicki Stavig a writer for "Minnesota" — the magazine of the University of Minnesota Alumni Association. We hope you enjoy it.

- Richard J. Zeyen

Reprinted with permission from the University of Minnesota Alumni Association "Minnesota" July-August 1996 issue.

Raising the World's Grain

An Iowa farm boy grows up

to have a major impact on international agriculture

As told to Vicki Stavig

I grew up on a small farm in Iowa and am the product of a one-room country school. My grandfather, my father, my two sisters, and I all studied there. I did what most small boys on a rural farm in the Midwest do. Besides daily work, I liked to hunt and fish and play sports, especially baseball. In high school, I played all kinds of sports: football, baseball, and wrestling.

My ambition after high school was to become a high school science teacher and athletic coach. I graduated from high school in 1932 and had no money, so I stayed home for a year, but I had made arrangements to go to Iowa State Teachers College. In late August or early September 1933, George Champlin, a little halfback at the University of Minnesota, stopped by. We didn't know each other, but our fathers were friends. He said, "Go get your bag and ride up to Minneapolis with me; I'm going up to early football practice. My father has been telling me about you and I want you to look at the University of

Minnesota."

I said I would go if my friend Irv Upton could go too. We both went with Champlin, and the next day Irv and I had jobs at the University coffee shop. We didn't have junior high schools in Iowa, so the University wouldn't count my ninth grade and said I was four units short. They said, "The only way you can get in is to take a special exam," which I did. I flunked it beautifully; Upton passed it. I think I would have gone back home except I was too embarrassed.

The last regular issue of Aurora Sporealis was Volume 65, Number 1 dated December, 1995.

Champlin was a pretty aggressive guy and took me over to the General College, which was just opening. He knew the assistant dean there and explained what had happened to me. He said, "This guy isn't that bad; what can you do for him?" The dean signed me up for General College and, by my third quarter, he said, "You can transfer to any college you want to," so I transferred to forestry.

I also wrestled at the University. during my first year of inter-collegiate competition, I think I won eight out of nine bouts, so I looked like a hot shot. When I arrived in the 1930s, there was no high school wrestling in Minnesota, except in Austin and Rochester. My University coach retired, and my former high school coach from Iowa was brought in. He wanted to start a high school wrestling program and would send me and another wrestler around the state to meet with parents

and teachers and tell them what wrestling was and to demonstrate it. By the time I was in graduate school, we had high school wrestling started in Minnesota. I was assistant coach at the University when I was in graduate school and was inducted into the National Collegiate Wrestling Hall of Fame in 1993, along with several other people, including Norman Schwarzkopf.



During the fall quarter of '37, I attended a lecture by Dr. E. C. Stakman, head of plant pathology at the University, and was fascinated by the world he painted. I thought, if I ever have a chance to go to graduate school, I would like to study under him. I got my degree in forestry on December 18 that year. I passed the civil service exam and was scheduled to go to work on January 15 for the Forest Service in Idaho, where I had worked on and off over the years.

But, just after the first of the year, I got a note from the forest supervisor saying they had budget problems and asking if I could come June 1 instead. So I started graduate school and that changed the whole thing. I got my master's degree in plant pathology in 1940 and my PhD in 1942, then went to work for DuPont until 1944.

I went to Mexico in 1944 and worked with the

Cooperative Mexican Government-Rockefeller Foundation Agricultural Program until it was terminated in 1960 and the responsibility was transferred to Mexicans trained in that technology, quite a few of them with degrees from the University of Minnesota.

In 1964 I became director of the wheat program of the International Maize and Wheat Improvement Center, called CIMMYT, a Spanish acronym. I retired in 1979, but I'm still a consultant to that program. For the past 10 years, I also have been a professor of international agriculture at Texas A&M.

From January until September each year, I operate out of my office at CIMMYT, outside Mexico City. I work for Sasakawa-Global 2000, which is financed by a Japanese foundation, trying to get agricultural production going in African countries south of the sub-Sahara. We've been working for ten years in nine countries to see what can be done in the near term to change production.

The population of those African countries has been growing at about 3 percent per year for the last three decades, while agriculture is growing at only about 2 percent, so they're losing ground each year. To make matters worse, somewhere between 75 and 80 percent of the people are living in rural areas on small plots of land. The only way that can be changed is by having these people produce more than they consume so they can begin to buy some of the essentials for life, to make life a little less glum.

Over these past ten years, we must have supported more than 300,000 one-acre demonstration plots comparing the best package of technology; improved seeds; the proper use of fertilizers; control of weeds, disease, and insects; and the demonstration of this process by well-trained government extension workers. Farmers who have grown these plots now know it is possible to double and triple yields. To continue they need the right kind of fertilizer available at the village level on time, access to production credit, and a fair price at harvest that is close to the international price. Generally, it's half the world price.

The work we began in Mexico in the 1940s started this change. Changes in economic policy allowed the people there to use modern technology, and that Mexican food crops research program became the model for a series of international agricultural research institutes that have been established around the world. Today there are 17 of those centers.

To give you some measure of what has happened as a result of these international research efforts, wheat

production in India is 63 million tons today versus 11 million in 1965. The new rices also came in, and India became self-sufficient in cereal grains. That's the impact.

I won the Nobel Peace Prize in 1970. I was out in the field, about 35 miles from Mexico City, harvesting wheat in the mud. It had rained the night before and we were behind schedule. I saw the office car drive up, and my wife, Margaret, and her friend got out. I thought one of my parents had died.

Margaret said someone had called from Oslo and said I won the Nobel Peace Prize. I thought it was a joke. Margaret left, and about an hour and a half later, here comes another car. Out climbed a man who had filmed a couple movies about our work and a *Christian Science Monitor* writer. They said, "You won the Nobel

Peace Prize." I said, "What makes you think so?" The writer then reached into his pocket and pulled out all this ticker tape announcing it.

Margaret and I have been married for 59 years. I found her at the University; we both worked at the University coffee shop. She lived outside the country with me until 10 years ago. When I started teaching at Texas A&M 10 years ago, we bought a house in Dallas



near my daughter, Jeanie, and my son, Billy, and rented an apartment near A&M. We live in the apartment when I'm teaching, but when I go to Mexico, Margaret goes to Dallas. My children grew up in Mexico, and we stared Mexico's first Little League. I was proud of it. I had one team that won 30 games in a row; they were mean. The program is still going on.

I have returned to the University of Minnesota from time to time. I taught here in 1980. Borlaug Hall [on the St. Paul campus] was dedicated in 1988 and I came back for it a day early and missed the big earthquake in Mexico. Two years ago, I came back to be inducted into the University of Minnesota Hall of Fame, and last year I came back when Patty Berg and I were selected to get Big Ten Conference Centennial Scholar-Athlete Medals. I was grand marshal at the Homecoming parade last year.

What makes me happy? To see progress, to see

excellence, in any activity. It doesn't make any difference whether it's excellence in science, business, athletics, music, or literature, but I hope it's also got a good, healthy mixture of ethics.

When I was back in that one-room country school, one of my teachers insisted we learn parts of several poems. I always liked Rudyard Kipling's "If." It's still a part of me:

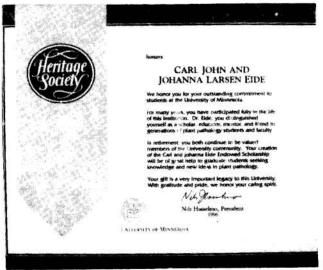
If you can walk with crowds and keep your virtue, Or walk with Kings and not lose the common touch, If neither foes nor loving friends can hurt you, If all men count with you, but none too much...

ENDOWMENTS

THE NEWEST ENDOWMENT FUND GIFT







The Carl and Johanna Eide Endowment for Graduate Student Scholarship

All members of the Department of Plant Pathology express their thanks and gratitude to two very special people, Carl and Johanna Eide. Carl and Johanna as part of their retirement and estate planning goals have established an endowment fund for graduate student scholarships in the Department of Plant Pathology. The official announcement was made by Professor Anderson during the 1996 Awards Ceremony on 23 May, 1996. Many generations of graduate students profited immensely from professor Eide's teaching, intellectual mentoring and positive approach to life throughout his long and distinguished career. This philanthropic gift of graduate student scholarships ensures that "Doc" Eide's legacy as an educator and scientist continues. Thus, many more generations will benefit from Carl and Johanna's thoughtful planning, generosity and concern for graduate students.

A trust account has been established so that friends of Carl and Johanna who wish to contribute to this graduate student scholarship may do so.

DEPARTMENTAL ENDOWMENT TRUST FUNDS GIFTS THAT KEEP ON GIVING

The Department of Plant Pathology at Minnesota is deeply indebted to its alumni, friends and faculty for their continuing support of the departmental endowment fund effort. In an era of down sizing and funding fluctuation in all aspects of higher education, departmental endowment funds have made it possible to maintain and even increase excellence in our efforts to support and educate tomorrow's leaders.

Our endowment trust funds now form the backbone of support for the Plant Pathology Library and scholarship funds for students. The recent CREES review of the department identified it as one of the top five departments of plant pathology in the United States. This high level of achievement and excellence would have been impossible without the continued support provided by alumni, friends and faculty.

Gifts to departmental endowments are invested as trust funds. Each year a portion of the interest they generate is used for the specific objectives intended by donors. The ramainder of each year's interest is reinvested in the principal of each fund, insuring growth and continuity. Thus, the objectives of donors are carried out in perpetuity. They are truly gifts that keep on giving.

Many donors have found creative ways to contribute

to this vital effort and to benefit their personal financial goals and plans at the same time. A brief summary of some of these has been provided by Ms. Sue Shepard, the Development Officer of the College of Agriculture, Food, and Environmental Sciences.

- Richard J. Zeyen, Public, Alumni and Instutitional Relations Committee

THE MANY BENEFITS OF A GIFT TO PLANT PATHOLOGY

There are many ways that you can make a gift to the Department of Plant Pathology and, at the same time, further your own financial or estate-planning goals. Our government, recognizing the importance of education to the nation's future, has enacted laws that encourage charitable giving to universities. The following present just a few ways of giving.

Gifts of appreciated stocks and other securities can result in tax savings for you. You can deduct their current market value, up to 30 percent of your adjusted gross income, over five years if necessary. You will avoid the capital gains tax which you would pay if you sold them.

Cash Gifts Compared to Gifts of Appreciated Stock

Cash	Stock
\$10,000	\$10,000
2,800	2,800
0	1,400
7,200	5,800
	\$10,000 2,800 0

Appreciated stocks and other securities may be given to the Department of Plant Pathology through the University of Minnesota Foundation. Then your gift is invested to pay an income to you, your beneficiaries, or to whomever you designate. The payments can continue for a lifetime. Upon death of the last surviving beneficiary, the Department of Plant Pathology may use the assets as you have directed.

Gifts of real estate can include homes, cabins, land, farms or portions of, or commercial property. You may decide to give land outright or give it to establish a Charitable Remainder Trust or other income-producing plan. With the charitable remainder trust, you receive an income tax deduction, income or life, plus a reduction in the amount of your estate. (Continue on Page 7)

HONOR LIST OF PAST AND PRESENT CONTRIBUTORS TO PLANT PATHOLOGY ENDOWMENTS

Individuals (419 names total)

A

Gilbert G. Ahlstrand Quazi A. Ahmed Geoffrey Ainsworth Axel L. Andersen Barbara A. Anderson Gerald W. Anderson Helen H. Anderson John T. Anderson Neil A. Anderson Markus W. Andres Mark Andrews Yehoshua Anikster Annonymous Deane C. Arny Edith B. Arny Frederick P. Arny H. Asuyama

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Barbara A. Johnson
Dorothy C. Johnson
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Businesses (97 names total)

A

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B

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Big Stone Inc. Biotal Inc.

Border Corp. Consulting

C

Campbell Soup Company Cargill Inc. Cenex/Land O'Lakes Cenex/Land O'Lakes Ag. Services Chapman Forestry Fdn. Christian Services Inc. Ciba-Geigy Corp. Clariant Biotech Research Corp. The Coca-Cola Co. Cooperating Fund Drive Cornell University

D

Del Monte Corp. The Dow Chemical Co.

E

E I Du Pont De Nemours & Co. Elf Atochem North America Inc. Executives Assn. of St. Paul

Faribault Foods Felhaber Larson Fenlon & Vogt Fermenta ASC Corp. First Bank System Fdn. Forest - Ag. Corporation

G

General Foods Mfg. Corp. General Mills Fdn. Goodhue Canning Co. Grace-Sierra Crop Protect Co. Griffen Corp. Grossman Founder Gustafson Inc.

H

I

ISK Biosciences ISK Biosciences Corp. Intl. Video Entertainment Inc.

J

J R Johnson Supply Inc. Janssen Pharmaceutica

Lakeside Packing Co. Land O'Lakes Inc. Lieberman Enterprises Inc. Lieberman-Okinow Fdn. Lieberman-Okinow Family Fund Lipha Chemicals Inc. Lipha Tech. Inc.

M

Mallinckrodt Inc. Midwest Food Processors Assn. Miles Inc. Agriculture Division Minnesota Barley Research Minnesota Crop Improvement Assn. Minnesota Flower Growers Minnesota Golf Course Suprntndnt Assn. Minnesota Wild Rice Council Mobay Corp. Animal Health Division

Nor-Am Chemical Co. Northharvest Bean Growers Assn. Northern Illinois Hosta Soc. Northrup King Co.

0

Olivia Canning Co. Owatonna Canning Co.

P

PBI/Gordon Corp. Pennwalt Corp. Pennwalt Agchem. The Pillsbury Co. Piper Jaffray & Hopwood Adv. Fd. Piper Jaffray Companies Inc. Pitman-Moore Inc. Plant Health Associates Inc. Horticulture Rsch. Inst. Endowmt. Potato Chip Snack Food Assn.

0

The Ouaker Oats Co. The Quaker Oats Fdn.

The Rainforest Project Fdn. Rhone-Poulenc Ag. Co. Ringer Corp. Rohm & Haas Co.

S

Sandoz Agro. Inc. Seneca Seneca Foods Corp. Seymour & Barbara J Leslie Fdn. Shiftan Family Charitable Fdn. Standard Fruit Co.-Costa Rica

Union Carbide Agric. Products Co. Uniroyal Chemical Co. Inc. United Foods Inc.

W K Kellogg Fdn Westbridge Agri. Products Wilbur-Ellis Co.

Z

Zeneca Agricultural Products

THE MANY BENEFITS OF A GIFT TO PLANT PATHOLOGY (Continued from Page 4)

Some Qualified Retirement Plans may be appropriate gifts that work effectively in your estate planning.

Income-producing gifts provide income for you, a substantial tax deduction, an estate-planning tool, and a significant contribution to the Department of Plant Pathology. For further information, contact Sue Shepard, at 1-800-775-2187 or 612-624-3625.

> - Susan A. Shepard, Director of Development COAFES

"Here's a formula: Professional knowledge plus personality plus character plus contacts equal employability." - Dale Dauten, Mpls. Star Tribune, 9/29/96

OLD TIMER NEWS

CONGRATULATIONS OLD TIMERS!

Cynthia L. Ash (former extension specialist in the department) has taken a new job as Director of Scientific Services at the St. Paul office of APS. In this position she will serve as a technical resource for APS and assist in the design of technology-based information products.

Dr. John Dueck (MS 1966; PhD 1971) has been named Director of the Eastern Cereal and Oilseed Research Centre at Ottawa, Canada. This newly formed center, with approximately 300 employees, is one of 18 national centers of specialization in Canada. John's administrative career with Agriculture and Agri-Food Canada has included the Directorship of the Regina Research Centre; Co-Director of the CIDA funded Barani Development Project in Islamabad, Pakistan; and most recently Director of the Summerland Research Centre in British Columbia, Canada.

Leif Sundheim (PhD 1964) was appointed Director of the Plant Protection Unit in the Norwegian Crop Research Institute, As, Norway.

Ayodhya Prasad Misra (PhD 1947, Advisor: Stakman, J.J. Christensen) was felicitated on his 78th birthday at a grand function held in the Conference Hall of Indian Institute of Sugarcane Research, Lucknow on 9 September 96. A large number of guests were present including ex-Plant Protection Advisor, Dr. K.D. Paharia (PhD 1956, Advisor: J.J. Christensen, Kommedahl).



Dr. A. P. Misra

Michael Hotchkiss (Technician 1981-1983), according to Phytopathology News, received the PhD from the University of Georgia. His thesis was titled "Etiology, epidemiology, and control of shuck and kernel rot of pecan caused by *Phytophthora cactorum*". It sounds like a mighty impressive study.

Lois E. B. Johnson (MS 1977; PhD 1980) celebrated her sixth decade of life by placing third (among many participants between 60 and 64 years of age) in the Grandma's Marathon. Her time was 4 hrs and 55 min according to Minneapolis Star Tribune. This race, a 26 mile run between Two Harbors and Duluth, is run annually. Lois entered graduate school as a graduate of the University's "University Without Walls" program, and is presently Senior Scientist for DuPont in Wilmington, DE.

Claude C. Bernier (PhD 1965) retired in July 1996 from the Department of Plant Science at the University of Manitoba after 31 years of service. A reception in his honor was held 4 July 1996 at the University's Faculty Club. Congratulations Claude!

John H. Hill (MS 1966) is now APS's Representative on the Executive Committee of the American Type Culture Collection representative.

THE CANYON

Old Timers will recognize this picture as that of the door of The Canyon, a long, deep room on the 3rd floor of the Tottering Tower, next to the departmental (Stakman's) office. The Canyon was devoted principally to study desks for graduate students who didn't have office space elsewhere.



The table shows that these people were students in the Department about half a century ago. Many have made their mark as plant pathologists and have been called to their reward, some apparently when the picture was taken.

If any Old Timers are still alive and has news of any of these people it would be interesting for him/her to send it to the Editor of Aurora Sporealis.

Nichala	Date of Degree		
Name	MS	PhD	
T. Laskaris	1938	1941	
J. R. Vaughn	1940	1947	
D. J. de Zeeuw	1940	1949	
A. R. Downie	1941	1942	
T. H. King	1938	1946	
R. C. Cassell		1938	
J. G. Churchward	1933	1936	
G. E. Hafstad	1933	1934	
E. G. Sharvelle		1934	
C. A. Wismer		1950	
W. Syed	_	-	
F. R. Davies		1938	
M. W. Cormack	1936		
K. Hubert	1933		
L. Person	1929	1937	
J. G. Harrar		1935	
D. Gottlieb		1942	
M. A. Petty		1940	
J. T. Presley		1947	
W. E. Sackston	1938	1941	
C. T. Tsiang		1947	
L. W. Lenz	(T-)	 (
L. E. Tyner		1939	
T. C. Loh		1933	
M. N. Kamat	1932		
J. M. Walter	1931	1933	
Lee Long	1936	1937	
C. G. Wang	1936	1937	
R. E. Atkinson		1952	
M. F. Kernkamp	1938	1941	
B. B. Vance	=	-	
L. W. Tervet		1940	
E. W. Hanson	1939	1942	
H. C. Young, Jr.	1943	1949	

- Carl J. Eide

Jean L. Williams-Woodward (PhD 1995) is now employed as Assistant Professor and Extension Plant Pathologist at the University of Georgia.

SPECIAL HONORS & RECOGNITIONS

H. David Thurston (MS 1953; PhD 1958) was honored at the Northeast Division meeting of APS in February 1996 with the Award of Merit. This award was given in recognition of Dave's distinguished career in plant pathology and international agriculture.

Aurora notes that Dave officially retired 31 December 1995 but has agreed to continue scholarly activities for another three years. These activities include: 1) teaching three courses, 2) revising his book on Tropical Plant Diseases for APS, 3) writing a new book on Slash/Mulch Systems for Tropical Agriculture, 4) continue his recent appointment as leader of the Mulch-Based Agriculture Group sponsored by Cornell International Institute for Food, Agriculture, and Development, 5) gardening, 6) reading, 7) traveling. Some retirement! He did say, however, that he will refuse to join in or do committee work. Congratulations, Dave!

Mary E. Palm (MS 1979; PhD 1983) was elected vice-president of the Mycological Society of America for 1995–1996. She will automatically succeed to president-elect and then to president. Prior to this election, Mary was secretary of MSA from 1991 to 1994. Mary, currently mycologist at USDA's Systematic Botany and Mycology Laboratory, was also appointed Adjunct Associate Professor of Plant Pathology at the Pennsylvania State University.

Edward E. Butler (PhD 1954) was named to the Wall of Fame at the University of Delaware in a ceremony on 17 May 1996. Ed, a graduate of UD, was honored for his ongoing interest in UD as well as for his long and distinguished service in teaching and research at the University of California, Davis.

Dr. George W. Hudler (MS 1973) currently professor at Cornell University, was awarded the State University of New York Chancellor's Award for excellence in teaching. George, widely known for his humor and commitment to teaching, teaches Pathology of Trees and Shrubs, Plant Disease Diagnosis, and a large and well attended undergraduate course entitled Magical Mushrooms, Mischievous Molds. The later course has an unprecedented level of interest with 300 students each year attending. Magical Mushrooms, Mischievous Molds has also achieved cult status and was featured in a recent article in Rolling Stone Magazine.

Dr. William H. Livingston (PhD 1985) currently associate professor of Forest Resources at the University of Maine, was selected as the first recipient of the G. Pierce and Florence Pitts Webber Outstanding Forestry Teacher for 1996. Bill teaches Introduction to Forest Biology, Tree Pests and Disease, Diseases and Stresses in Forest Ecosystems.

(See Page 32 Johnson)

HAVE YOU NOTICED?

Old Timers and Minnesota Faculty members are active editors and authors of books published by APS press. See New Titles in Plant Science (APS Press) for summer 1996 and New for Mycologists for 1996 (APS Press) for the following:

Clyde Christensen, on E. C. Stakman;

Ken Bromfield, on soybean rust;

Dick Frederiksen, on sorghum diseases; Thor Kommedahl, on challenging problems; Paul Manion, on forest decline; Dennis McGee, on maize and soybean diseases; Mary Palm, on literature guide for plant pathogenic fungi; Frank Pfleger, on mycorrhizae and plant health; Howard Schwartz, on diseases of onion and garlic; Larry Singleton, on methods for soilborne fungi; Frank Tainter, on plant disease video resource; Paul Teng, on crop loss assessment; Dave Thurston, on tropical plant diseases; Carol Windels, on biological control; Michael Wingfield, on Ceratocystis and Ophiostoma, and on pine wood nematode; and Tom Wyllie, on soybean diseases.

OLD TIMERS SIGHTED

A very reliable observer reported that in June of 1995 Drs. John Dueck (MS 1966; PhD 1971) from the Cereal and Oilseed Research Centre in Ottawa, Canada and Bent Skovmand (MS 1973; PhD 1976) from CIMMYT in Mexico attended a Plant Genetic Resources Conference in Leipzig, Germany. The observer also spotted them having a pint with Agronomy Department old timer and lyrical master, Ignatius Byrne.

SPECIAL NOTE

Aurora notes that Elwin L. Stewart (former Professor at U of M), Barbara J. Christ (MS 1980) and Mary E. Palm (MS 1979; PhD 1983) participated in the Alternaria Workshop held at the Pennsylvania State University 10-15 November 1995. Though their pictures were indistinct in the Phytopathology News Report of the workshop, we are certain their contributions to the workshop were outstanding.

GREETINGS FROM FAR AND NEAR

William H. Anderson (PhD 1974) from Virginia, Eldon Behr (minor in PlPa 1948) from Northfield, Minnesota.

Girma Bekele (Post Doc 1991-1992) from Texas, P. H. Berger (MS 1980) from the University of Idaho, Helmut Bochow (visitor) from Germany, Timothy Carver (visitor) from Wales, N. K. Chakrabarti (Post Doc 1968) from India,

H. S. Chung (MS 1957; PhD 1967) from Korea,

R. V. Crow (PhD 1975) sends greetings to all. Bob is recently retired from Ciba Geigy and he and Florence live in Ames, Iowa. Bob is now working with old timer Denis McGee at Iowa State University of Science and Technology on an electronic seed-borne disease data base project sponsored by the Commonwealth Agricultural Bureau.

Director and Faculty, Complexe Horticole d'Agadir, Morocco.

H. R. Etebarian (Post Doc 1991) from Iran,
Santiago Fuentes F. (MS 1958) sent greetings to Dr.
Eide from Mexico. He claims to be 70 years old, but we do not believe it because some of his old professors are not that old. He is now retired after a long distinguished career with CIMMYT. He reports, "I am content. Life has been full and rewarding." Can one ask

Wei-Ley Sunny Hsi (MS 1977) from Texas,
L. M. Joshi (Post Doc 1963) from India,
Abrar Khan (PhD 1950) from India,
Chet and Donna Mirocha from St. Paul, Minnesota.
A. P. Misra (PhD 1947) from India,
S. Nagarajan (visitor) from India,
Nilceu Nazareno (MS 1980) from Brazil,
Mahesh Pandey (MS 1966; PhD 1969) from India,
S. P. Raychaudhru (visitor) from India,
Dave and Cecila Rizzo (PhD 1993) from California,
Leif Sundheim (PhD 1964) from Norway,
Tarkus Suganda (MS 1991; PhD 1995) from Indonesia,
and

Carol Windels (MS 1972; PhD 1980) from Crookston, Minnesota.

TRAVEL AND LECTURES ABROAD

for more?

Mary E. Palm, (MS 1979; PhD 1983) presented an invited lecture in Ilheus, Bahia, Brazil at the 28th Brazilian Congress of Plant Pathology in August 1995. The lecture titled "Systematics of Fungi: Modern trends, Concepts, and Methods" was well received as she encouraged cooperation between mycologists and plant pathologists in order to advance understanding of fungi.

John M. Kraft (MS 1962), supervisory research plant pathologist at USDA's Vegetable and Forage Crops Research Unit in Prosser, Washington, and Al Slinkard (PhD, U of M Agronomy and Plant Genetics), University of Saskatchewan, Saskatoon, traveled to Australia in September 1995. They visited with scientists conducting research on grain legumes in Australia. They also presented several seminars, spoke to farmer-groups, and were featured on Australia's national television and radio.

THANK YOU

Frank H. Tainter (MS 1968; PhD 1970) donated to the Departmental Library a copy of "Principles of Forest Pathology", a book that he and F. A. Baker (PhD 1981) wrote. This gift is greatly appreciated, as are all donations to the library.

NEWS FROM THE DEPARTMENT

VISITORS AT THE DEPARTMENT IN 1995

We regret to say that visitors frequently do not sign our official guest book. Sometimes we forget to have them do it but usually they visit in the laboratory and office of faculty and never get to the guest book. Those who signed in were most welcome, as were those who did not sign the book:

Antonin Dreiseiti, Czech. Republic, Scott Enebak, North Central Experiment Station, Grand Rapids,

Shiu Ying Hu, Arnold Arboretum, Howard University, Eric L. Stromberg, Virginia Polytechnic University, Malcom C. Shurtleff, University of Illinois, John M. Kraft, USDA, Prosser, Washington, Brent McCallum, University of Manitoba, Fred A. Baker, Utah State University, Javier Plasencia, Mexico.

KUDOS TO THE DEPARTMENT

The Inventory Services Department of the University commended the department in July 1996 as follows: the capitol equipment inventory of items assigned to the department is complete. "We were able to locate all of the 603 listed capital items, computing to both a missing dollar and a missing item percentage of 0.00%. This compares favorably to the final missing dollar percentages of I.T. and the Academic Health Center at 0.61% and 0.81%, respectively."

CONGRATULATIONS

Professor Philip O. Larsen Becomes Associate Dean for Research



In May of 1996 Dr. Philip O. Larsen was named Associate Dean for Research for the College of Agriculture, Food, and Environmental Sciences (COAFES) at the University of Minnesota. Dr. Larsen joins Dean Michael Martin, Dean Gerald Miller, Associate Dean for Extension, and Dean Laurie Hayes, Associate Dean for Curricular and Student Affairs, as the administrative team for COAFES. As Associate Dean for Research Dr. Larsen is responsible for building and maintaining COAFES research programs. He is also the college level administrator responsible for branch experiment stations in Minnesota, and is COAFES's principle representative to the North Central Research Association.

Philip Larsen came to Minnesota from the Ohio State University and joined the department as its head in 1985. He was the first 'outside' department head in our history. He had no previous ties or associations with Minnesota. His tenure as head was characterized by humor and common sense. He served well during a decade of constant and very severe financial hardships in COAFES. He led during the most trying financial times since the great depression of the 1930's. His tenure saw a 25% downsizing of department personnel and a concomitant surge in productivity of those remaining. In 1994 he resigned the headship to serve as coordinator of the regional Visions for Change Grant funded by the Kellogg Foundation. During this time he also taught turf grass diseases and began the department's fledgling urban plant pathology effort. True to his profession he maintains a small office in Stakman Hall. We wish him all the best in his administrative duties and challenges.

- Richard J. Zeyen

STRATEGIC PLANNING RETREAT

On September 13 and 14 of 1995, the faculty, staff and students met to begin the process of strategic planning for the remainder of the 20th century. The theme of these discussions and planning exercises revolved around meeting the plant health needs of Minnesota and by doing so to become the best Department of Plant Pathology in the Land Grant University System. The main point of the retreat was to envision what are the characteristics of the "best" department of Plant Pathology and what it would take to achieve these characteristics.

Following an excellent introduction by professor Neil Anderson the two sessions were led by professors Richard Meronuck and Richard Zeyen. Faculty, staff and students were organized in groups according to the five standing committees in the department (Education; Extension Commodities; Physical Resources; Public, Alumni & Institutional Relations; and Research).

In the first session, each group was asked to imagine that it was now the year 2000 and they were members of a CSRS (CSREES) review team. As members of this hypothetical review team they had thoroughly reviewed the Department's educational programs, outreach activities, research and culture. Each group was then asked to list the characteristics that they discovered that would lead them to conclude that the department was indeed the best in the nation.

In the second session each group was charged with describing how resources were utilized and attracted to make the visions from the first session come to actualization within the following three scenarios. a) Increased resources from University sources, b) No increase in resources from University sources, and c) Decreased resources from University sources. These scenarios were imposed in order to add realism to group efforts.

Written responses were prepared and reviewed by all attendees. Needless to say, the two day effort resulted in frank, realistic discussions and in many creative ideas. Many participants remarked on the success of the methodology used to stimulate thought and to crystallize ideas. Selected items were taken for action during the 1995-96 academic year by the Department Head, Faculty Council and the five standing committees. - R. J. Zeyen, PAIR Committee Chair

EMERITI FACULTY

Carl J. Eide (MS 1929; PhD 1934) was honored at a celebration in his home on August 18, 1995, for his 91st birthday. He and Mrs. Eide enjoyed cake and coffee with about 15 persons from the department. The Eide's invite friends and visitors to their home for coffee and conversation on Wednesday mornings. Please sign up for the event in the Administrative Office.

David W. French (MS 1949; PhD 1952) celebrated his 74th birthday on November 10, 1995 with about 20 persons from the department and with former students and friends. The party was held at the Presbyterian Home in Roseville where Dave now resides.

VISITING SCIENTISITS

Dr. Jong Kyu Lee, an assistant professor from Kangwon National University, Chuncheon, Korea, arrived July 10, 1996 for a two-month visit. He teaches courses in mycology, mushroom science and forest pathology in Korea. Dr. Lee worked in Dr. Robert Blanchette's laboratory studying aspects of wood microbiology and investigating the use of fungi for biopulping precesses.

Mrs. Bich Mai visited the Department with several scientist from the University of Hou Chi Minh City and the Science and Technology Division from July 23 to 27, 1996. The Vietnamese scientists are cooperating with Dr. Robert Blanchette on studies involving fungi in rain forest trees and resin formation. Mrs. Mai remained in the Department for the month of August on a training program.

Dr. Pilar Ramirez of the Centro de Biologia Celular y Molecular, University of Costa Rica, visited the Department September 26 - 30, 1995. Dr. Ramirez consulted with Dr. Benham Lockhart on diagnostic methods for viruses in banana and plantain in Central America.

Ramon Suarez, a graduate student from the Universidad Nacional Autonoma de Mexico in Cuernavaca, Morelos, Mexico visited Drs. Deborah Samac and Carroll Vance (Agronomy and Plant Genetics) for two weeks in October 1995 for training in alfalfa transformation and tissue culture. Ramon's PhD research is investigating the effect of over expression and repressed expression of genes involved in nitrogen assimilation in alfalfa root nodules.

Dr. Sammy Sackey, virologist at the Cocoa Research Institute of Ghana, arrived on Monday, May 13, 1996 to spend a year's sabbatic leave working with Drs. Benham Lockhart and Neil Olszewski (Plant Biology) on molecular genetics of badnaviruses. Dr. Sackey's visit is sponsored by the American Cocoa Research Institute.



Dr. Sammy Sacky

- Delores Huebner

SPECIAL HONORS & RECOGNITIONS

Chad J. Behrendt was awarded second place for presentation of his paper entitled "Effects of resin content, bark removal, and biopulping potential after treatment of pine logs with Phanerochaete gigantea" at the APS meeting in August 1996. He was presented a book prize (a copy of the new book, Principles of Forest Pathology and a box of the new APS note cards.)

Debra Baden Drange and Delores Huebner were recognized for milestones of service, 22 years and 31 years respectively, at the University of Minnesota Employee Recognition Reception, July 24, 1996 in the North Star Ballroom of the St. Paul Student Center. Milestones of service recognized were 20, 25, 30, 35, 40 and 45 years of service.

Dr. Thor Kommedahl was one of six authors of the volume Scientific Style and Format: The CBE Manual for Authors, Writers, and Publishers, who received the American Medical Writers Association's award for excellence in medical publications at it's meeting October 2, 1995. Thor Kommedahl covered plant microbial sciences.

Dr. Carol E. Windels, (MS 1972; PhD 1980) was elected Vice President and President Elect of the American Phytopathological Society (APS). The official announcement was made at the national APS/MSA Annual Meeting in Indianapolis, Indiana, Carol joined the faculty at Minnesota in 1984 and is an associate professor stationed at the Northwest Experiment Station in Crookston, Minnesota. Dr. Windels is well known for her field and laboratory work. She has actively researched various soilborne diseases of field crops in Northwestern Minnesota. In addition she has been very active in APS having served in various capacities including associate editor of Phytopathology, Secretary-Treasurer of the North Central Division. Councilor-at-Large, and on the APS Foundation Board of Directors.

Dr. Windels will become the 89th president of APS, and joins an illustrious list of former Department of Plant Pathology faculty and/or alumni who have served as presidents of the American Phytopathological Society. In fact, approximately 14% of all former APS presidents were faculty and/or alumni of Minnesota. Her predecessors include Wiley Garrett (1981), John Schafer (1979), James Tamen (1975), Thor Kommedahl (1971), Harold Flor (1968), Charles Holton (1963), Helen Hart (1956), John Craigie (1946), Jonas Christensen (1944), Julian Leach (1941), Elvin Stakman (1922), and Edward Freeman (1918).

Michael E. Ostry (MS 1978; PhD 1992), Plant Pathologist with the Forest Disease Research Unit at St. Paul, MN, received the North Central Forest Experiment Station Distinguished Service Award in April 1996. This award recognized the significant impact of Ostry's research on disease management in forests of the US and other parts of the world. Dr. Ostry developed the first workable somaclonal system for producing disease resistant trees. This was recognized in 1989 by the Washington Office Forest Insects and Disease Research Award of Excellence. He is a recognized authority on diseases of aspen and poplar. He is the most widely recognized poplar pathologist in the United States. With Dr. Neil Anderson, Dr. Ostry patented a hypoxylon-resistant clone of aspen that is being mass-produced by a private - Delores Huebner company.

1996 DEPARTMENTAL AWARDS & RECOGNITION CEREMONY

The tenth annual Department of Plant Pathology Awards Ceremony was held May 23, 1996 in Borlaug hall. Dr. Neil Anderson presided over the ceremonies. Dr. Kent Crookston, Department head, Agronomy and Plant Genetics, provided a "Pep Talk". There were 43 persons recognized for their achievements over the past year. Dr. Anderson presented the following awards:

M.F. Kernkamp Scholarship

J. Patrick Martinez

Fred I. Frosheiser Scholarship

Akhilesh N. Mishra

Civil Service Award of Excellence

John E. Haight

Leslie M. Johnson

Distinguished Mentor Award

Linda L. Kinkel

Nevin D. Young

Distinguished Alumnus

Dr. Alan P. Roelfs

Distinguished Friend of the Department

Dr. William F. Hueg, Jr.

During the ceremony Dr. Anderson also recognized individuals who have received various honors and recognitions during the past year. Those recognized included:

William R. Bushnell, Award for outstanding contributions toward understanding host/pathogen interactions, 7th Japan/U.S. Cooperative Science Seminar, Tsu City, Japan, September 24-29,1995.

William R. Bushnell, Promotion, RPES Peer Panel Review, February 14, 1995.

Mark E. Hughes, USDA-ARS Certificate of Merit, October 1995.

Linda L. Kinkel, Tenure and promotion to Associate Professor.

Thor Kommedahl, Associate Editor, Boghopper, Science Museum of Minnesota

Thor Kommedahl, Honorable mention award for excellence in medical publications, American Medical Writers Association, 'Plant Microbial Sciences' style manual

Sagar V. Krupa, Fellow, Air & Waste Management Association, June 1995

Kurt J. Leonard, USDA-ARS Performance Award, January 1996.

David L. Long, USDA-ARS Spot Cash Award, December 1995. Chester J. Mirocha, Award for Seminar Series and Physiological Plant Pathology program longevity, 7th Japan/U.S. Cooperative Science Program, Tsu City, Japan, September 24-29, 1995.

Jacolyn A. Morrison, USDA-ARS Spot Cash Award, December 1995.

Robert F. Nyvall, Editor, International Guide to APS Resources in Plant Pathology, APS Press, St. Paul, MN Robert F. Nyvall, Editor-in-Chief, Phytopathology News, 1996-1998

Gerald Ochocki, USDA-ARS Spot Cash Award, December 1995

Rosalind Richards, USDA-ARS Performance Award, January 1996.

Rosalind Richards, USDA-ARS Spot Cash Award, August 1995.

Deborah A. Samac, Awarded ARS prizes for Science Fair projects.

1996 Nominees to Sigma Xi, The Scientific Research Society

Full Members: C. Kent Evans and Tarkus Suganda.

Associate Members: Julie W. Beale, Kasia M. Duellman, Brent D. McCallum, and Kyoko Shimizu.

PEPP Committee, Certification of Appreciation - 1996

Dann K. Adair Gilbert G. Ahlstrand Judy A. Cox

Gilbert G. Ahlstrand Ernest E. Banttari Ellen Mester Silvia Peñuela

Civil Service Length of Service Recognition

Gilbert G. Ahlstrand, 15 years

Todd A. Burnes, 10 years

Marguerite M. Clemens, 15 years

Odette M. Holter, 5 years

Mark E. Hughes, 20 years of federal service

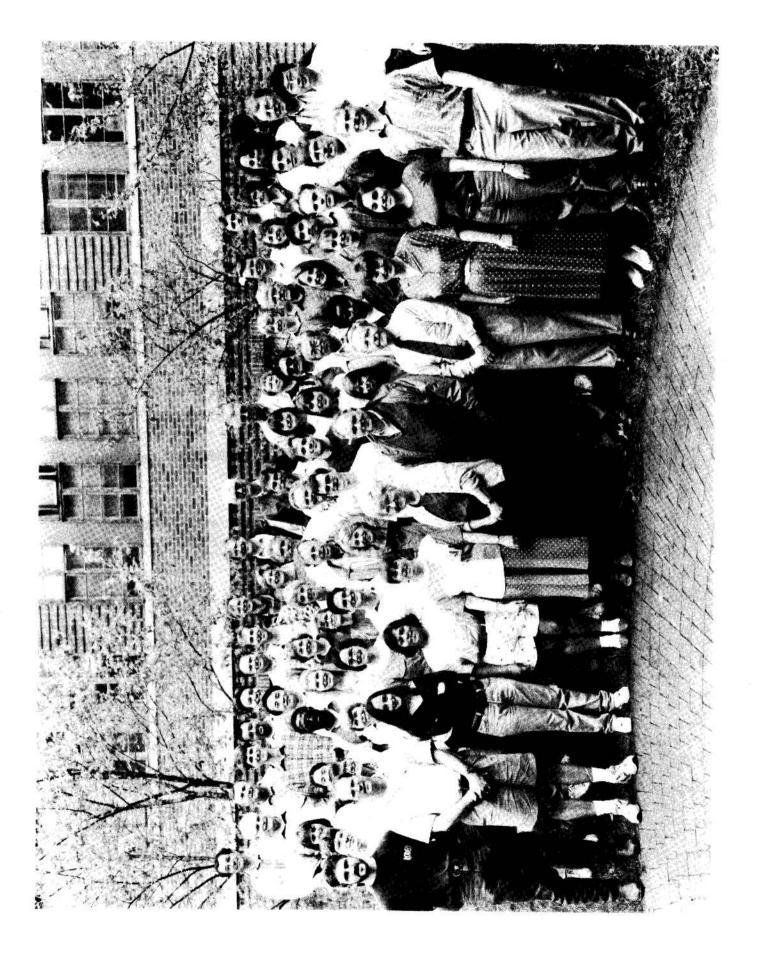
David L. Long, 25 years of federal service

Recipients of awards were honored and congratulated at a reception with a wonderful array of food and refreshments.

- Delores Huebner

PLANT PATH WOMEN HOLD GARDEN TOUR JULY 17

Women in Plant Pathology were invited Wednesday, July 17, 1996 at 6:30 PM to Audrey French's home, then to Bonnie Blanchette's home to view gardens of trees, shrubs, perennials, herbs, and vegetables. After the tour, international desserts were served at Barbara Anderson's home. Twenty five women, including faculty, spouses, students, staff—all women in the Department responded.



DEPARTMENT GROUP PICTURE

Front Row — left to right: Chad Behrendt, Todd Burnes, Sandra Mansur Scagliusi, Consuelo Estevez de Jensen, Meg Clemens, Rosalind Richards, William Bushnell, Neil Anderson, Delores Huebner, Silvia Peñuela, and Gilbert Ahlstrand.

Second Row — left to right: Dennis McDougall, Elaine Kolaczkowski, Grace Bucher, Elizabeth Bastian, J. Patrick Martinez, Kathryn Kromroy, John Haight, Lucy Wanschura, Tsitsi Ndowora, Jill Calabro, and László Gyenis.

Third Row — left to right: Roxanne Denny, Kyoko Shimizu, Donna Becker, Jacolyn Morrison, David Casper, David Long, Matthew McBride, Kasia Duellman, Charles Hu, Christine Schraut, Vergel Concibido, Richard Meronuck, and Senyu Chen.

Fourth Row — left to right: Sammy Sackey, Ruth Dill-Macky, Judy Cox, Benham Lockhart, Akhilesh Mishra, Ernest Banttari, Deborah Samac, Dean Malvick, and Melvin Wiens.

Fifth Row — left to right: Richard Zeyen, Kurt Stromberg, Hui Yu, Andrew Ryan, Debra Baden Drange, Frank Pfleger, Ellen Mester, Elizabeth Ozmon, Julie Jenkins, C. Kent Evans, Sandra Gould, and Lisa Stokvis.

Sixth Row — left to right: Gerald Baldridge, Philip Larsen, Amar Elakkad, Warren Kruger, Gerald Ochocki, Les Szabo, Kurt Leonard, Donald McVey, David MacDonald, Dann Adair, and Ann Arendt.

Missing: Faculty — Robert Blanchette, James Groth, Roger Jones, Linda Kinkel, Thor Kommedahl, Sagar Krupa, Chester Mirocha, Robert Nyvall, James Percich, Alan Roelfs, Jack Schafer, Darroll Skilling, Ward Stienstra, Roy Wilcoxson, Carol Windels, and Nevin Young.

Academic Professional — Cynthia Ash, John Bowers, Jason Brantner, Dariush Danesh, Randy Grioux, Dean Herzfeld, Mark Hughes, Darryl Krueger, James Kurle, John McCain, Robert Novd, and Weiping Xie.

Visiting Scientist — Edson Rodrigues Filho, Saruul Purevin, and Hirofumi Yoshioka.

Graduate Student —Julie Beale, Junping Chen, Pedro Figueroa, Koren Gust, Kuo Chih Lin, Mary Moberg, Joann Mudge, Miriam Newton, Jong-won Park, Bruce Paulsrud, Francisco Salazar-Huerta. Andrea Westergard, and Wendy Jo White.

AFSCME/Civil Service — Thomas Gearhart, Odette Holter, Leslie Johnson, Kimon Karelis, Mary Kay Kersting, Aaron Krohn, Daryle La Fleur, Douglas Lange, Miguel Linares, Molly McGilp, Melissa Pauna, and James Rowe.

Federal Civil Service - James Mork, and Christine Newby.

Editors note: The 1996 departmental photo is the sixth annual group picture. It was taken with a 4 x 5" format view camera. Special thanks to our photographer, Gilbert G. Ahlstrand.

SEMESTER CONVERSION Big Changes for Plant Pathology Course Offerings?

After decades of discussion, the Minnesota State Legislature decided that all state supported institutions of higher education in Minnesota will be converted from the quarter to the semester system. Thus, the University of Minnesota (U of MN) and its four campuses with approximately 65,000 students, and the Minnesota State Colleges and University system (MnSCU) and its 69 campuses with approximately 150,000 students will all convert from the quarter system to the semester system beginning in the fall of 1999. Locally, in the College of Agriculture, Food, and Environmental Sciences (COAFES) the switch from quarters to semesters offers both challenges and opportunities. One major challenge is the required one-third reduction in the number of course offerings for every degree program. In the quarter system a typical undergraduate degree program consisted of approximately 180 credit hours (i.e. 45, 4 credit courses), while same degree in the semester system consists of approximately 120 credit hours (i.e. 30, 4 credit courses). Thus, every degree program, be it undergraduate or graduate, must undergo reconsideration of its course requirements and perhaps its objectives as well. The Plant Pathology faculty have had low visibility in college-wide undergraduate curricula in recent years. Thus, our faculty view reorganization of undergraduate degree programs as a unique opportunity for defining new areas for our considerable teaching expertise. Our curriculum revision efforts will focus on the manner in which our expertise can contribute to undergraduate education within our 11 college-level majors and throughout the University. The autumn faculty retreat (mid September) is the first step toward defining current and potential courses which can contribute to some or all 11 COAFES undergraduate majors. Subsequent faculty meetings will be used to redesign our MS and Ph.D. curricula. All undergraduate curriculum revisions are due in the COAFES main office or the Graduate School by March, 1997. The March 1997 deadline is necessary in order to coordinate programs and to give lead time for working out 'grandfather' clauses for students caught in the transition from quarters to semesters and to prepare and publish new course catalogs. Taken altogether the next six months will be an exciting and very interesting time in the history of this Department.- Linda L. Kinkel

"To get the most out of yourself, reach your goals and have a wonderful time doing it all, you must know, honor and work with the gifts that make you uniquely who you are."

- Barbara Shor, author and therapist

(The Bottom Line, 6/1/96).

MEETINGS

8th International Congress — Molecular Plant-Microbe Interactions, Knoxville, Tennessee, July 14–19, 1996

More than 900 scientists representing 40 countries attended. The content of the congress was equally divided between plant-microbe interactions favorable to plant health and those whose interactions are detrimental. There were also sessions on marketed products and near-market biotechnology arising from the study of plant-microbe interactions. The number of commercial products being marketed worldwide has dramatically increased in the past year and will continue to do so.

Attendees and presenters from Minnesota included:

Department of Plant Pathology from Minnesota

Dr. Gerald Baldridge, Ms. Elizabeth Bastian, Dr. Randal Giroux, Mr. Warren Kruger, Mr. Matthew McBride, Professor Deborah Samac, and Professor Richard Zeyen.

Department Old Timers

Dr. Paul Goodwin, (MS 1983), University of Guelph, Ontario, Canada; Rita Kuznia, (MS 1991), Northrup King, Stanton, Minnesota; and Dr. Kuo-Chin Lin, (PhD 1996), North Carolina State University.

Other Departments from U of MN

Professor Michael Sadowsky (Soil, Water, and Climate) and Professor Carroll Vance (Agronomy & Plant Breeding).

APS & ISMPMI Staff from St. Paul

Corie Dacus and Corinne Dacus.

- Richard J. Zeyen

Safety Meetings In 1996

Safety training sessions on several topics were held for Department personnel in 1996. On February 14 and 22, sessions were offered to all campus personnel on the following topics: Back Injury Prevention, Animal Handling, Farm Equipment Safety, and Working in Confined Spaces, Dan Siegler of the Office of Risk Assessment presented. Department of Environmental Health and Safety staff presented Handling Hazardous Waste and Lab Safety: Who's Responsible? on March 20 to Plant Pathology personnel only. The sessions were well attended and discussions indicated that they were valuable. The sessions were coordinated by Dann Adair, Ellen Mester, and the MAES Resources Coordinating Team.

- Dann K. Adair

American Phytopathological Society Annual Meeting July 27-31, Indianapolis, Indiana

The 1996 meeting of the American Phytopathological Society was held jointly with the Mycological Society of America in the Indiana Convention Center and adjacent Westin Hotel in downtown Indianapolis, Indiana. Twenty two members of the department attended, 13 faculty and 9 staff, graduate students, and postdoctoral scientists. Members of the department were involved in presenting 6 oral papers and 5 poster papers. Dr. Benham Lockhart spoke on "Viral Diseases in Musa" in the colloquium on Tropical Diseases of International Importance and cochaired a colloquium on Novel DNA Viruses in which he gave a paper on badnaviruses. David Long spoke on "Eighty Years of National Surveys of the Small Grains Rust" in the Discussion of Innovative Techniques in Pathogen Detection and Their Role in Agriculture. Deborah Samac was co-chair of a colloquium on Functional Paradigms in Plant and Animal Diseases. Nevin Young spoke "Marker-assisted Selection for Partial Resistance" at the colloquium on Lowering the Barriers to Use of Quantitative Disease Resistance.

The Hospitality Party at this year's APS meeting brought together a large group of old timers of forest pathology fame. From the far corners of the United States came David M. Rizzo (University of California, Davis, CA), William H. Livingston (University of Maine, Orono, ME — Bill was also accompanied by his wife and two daughters), and Scott A. Enebak (Auburn University, Auburn, AL). Those from somewhere in between included George W. Hudler (Cornell University, Ithaca, NY), Robert L. Doudrick (US Forest Service, Saucier, MS), Joseph G. O'Brien (US Forest Service, St. Paul, Minnesota), William Merrill (Pennsylvania State University, University Park, PA), and Jennifer Juzwik (US Forest Service, St. Paul, Minnesota). This party is always a great time to visit with all who have graduated from Minnesota. The room was full. Come and visit the Department when you can.

Faculty, students, old timers and guests attended the Hospitality Party sponsored by the University of Minnesota and University of Wisconsin on Monday, July 29, 1996.

From the department were: Neil A. Anderson, Chad J. Behrendt, Robert A. Blanchette, C. Kent Evans, James V. Groth, Linda L. Kinkel, Philip O. Larsen, Dean K. Malvick, J. Patrick Martinez, and Deborah A. Samac, USDA-ARS. From the USDA-ARS Cereal Rust Laboratory, St. Paul, MN were: David L. Long, and John

F. & Joyce Schafer. From the USDA Forest Service, North Central Forest Experiment Station, St. Paul, MN were: Jennifer Juzwik, Joseph G. O'Brien, and Cynthia M. Ocamb. From the Northwest Experiment Station, Crookston, MN were: Jason R. Brantner, Alan T. Dyer, and Carol E. Windels.

Old Timers from elsewhere were: Hamed K. Abbas, USDA-ARS, Southern Weed Science Laboratory, Stoneville, MS; Kira L. Bowen, Auburn University, Auburn, AL; John H. Bowers, USDA-ARS, U. S. National Arboretum, Beltsville, MD; Eldon Brown, Florida Department of Citrus, Lake Alfred, FL; Edward E. Butler. University of California—Davis, Davis, CA: Barbara J. Christ, Penn State University, University Park, PA: Robert V. Crow, Iowa State University, Ames. IA: Robert L. Doudrick, USDA Forest Service, Southern Institute of Forest Genetics, Saucier, MS; Scott A. Enebak, Auburn University, Auburn, AL; Richard A. & Phyllis Frederiksen, Texas A&M, College Station, TX; James D. Froyd + Betsy & Allison, American Cyanamid Company, Princeton, NJ; John M. Halloin, Michigan State University, East Lansing, MI; German P. Hoyos, Rogers Seed Co., Gilroy, CA; George W. Hudler, Cornell University, Ithaca, NY; Barry J. Jacobsen, Montana State University, Bozeman, MT; Dennis A. Johnson, Washington State University, Pullman, WA; Coy W. Jones, Rhone-Pulenc Agriculture Company, Research Triangle Park, NC; Roland F. & Fran Line, USDA-ARS, Washington State University, Pullman, WA; Larry J. & Julie Littlefield, Okalhoma State University, Stillwater, OK; William H. Livingston & Family, University of Maine, Orono, ME; Twng Wah Mew, International Rice Research Institute, Manila, Philippines; Monte R. Miles, Mycogen Plant Sciences, Lincoln, IL; Louis T. Palmer, Sun Seeds, Ruskin, FL; David M. Rizzo, University of California-Davis, Davis, CA; Howard F. Schwartz, Colorado State University, Fort Collins, CO; Janell M. Stevens Johnk & Kavla, Texas A&M Research & Extension Center, Dallas, TX; Elwin L. Stewart, Penn State University, University Park, PA; Erik L. Stromberg, Virginia Polytechnic Institute and State University, Blacksburg, VA; Paul S. Teng, International Rice Research Institute, Manila, Philippines; Judy A. Thies, USDA-ARS, U. S. Vegetable Laboratory, Charleston, SC; James R. Venette, North Dakota State University, Fargo, ND; and Richard P. Woodward, Micro Macro International, Athens, GA.

[&]quot;Writing helps clarify thinking. You don't really know what you think until you write it."

⁻ Stephen Wilbers PhD, Mpls. Star-Tribune 2/23/96.

Others present were: Tara Duhy, University of Wisconsin—Madison, Madison, WI; Josias C. Faria, University of Wisconsin—Madison, Madison, WI; Roger Hull, John Innes Centre, Norwich, UK; Ralph Kurtzman, USDA, Albany, CA; H. Arthur Lamey, North Dakota State University, Fargo, ND; Hisashi Saito, ETH-Zürich, Zürich, Schweiz.; Daniel L. Schadler, Oglethorpe University, Atlanta, GA; Deon D. Stuthman Department of Agronomy & Plant Genetics, University of Minnesota, St. Paul, MN; Eugene P. VanArsdel, Professional Tree Service Inc., Bryan, TX; and Ruth A. Welliver, Pennsylvania Department of Agriculture, Harrisburg, PA.

- Robert A. Blanchette, Deborah A. Samac and Meg Clemens

Microscopy & Microanalysis 96 Meeting

The Microscopy Society of America, the Microbeam Analysis Society and the Microscopical Society of Canada met in a joint annual meeting held the Minneapolis Convention Center August 11–15, 1996. The Microscopy & Microanalysis 96 meeting featured the world's largest and most comprehensive exhibit of microscopy and imaging equipment, supplies, services and publications. The Minnesota Microscopy Society hosted the event, and 1,530 microscopists attended. Microscopy & Microanalysis 96 was the second largest gathering of microscopists ever seen in the United States.

The Cooperative Electron Optics Facility of the Minnesota Agricultural Experiment Station, directed by professor Richard J. Zeyen, and the College of Agriculture, Food, and Environmental Sciences were well represented. Gilbert (Gib) Ahlstrand, staff scientist in CEOF, served on the Local Arrangements Committee and chaired the poster session committee and co-chaired the audio/visual committee. Gib also co-chaired the poster session on Biological Techniques and presented a poster entitled 'Low Voltage, Low Temperature Scanning Electron Microscopy of Uncoated Frozen Biological Materials', Ms. Joan Hautman, currently doing electron microscopy for professor Ernest Banttari, helped staff the MSA Education Booth. Ms. Padma Commuri, Department of Agronomy & Plant Genetics, presented a poster entitled 'Characterization of the Effect of Heat Stress on Maternal and Embryonic Tissues of Maize (Zea mays L.) Kernels Using Scanning Electron Microscopy'. Her advisor, professor Robert Jones, co-chaired the poster session on Plant Biology & Pathology. Mr. Kenneth McNeil of Horticultural Science entered a micrograph titled Scanning Electron Micrograph of a Tomato Anther Locule in the micrograph contest. Ms

Tina Schwach from the Department of Food Science and Nutrition, presented a poster entitled 'Adherence of Temperature and Iron-stressed Enterohemorrhagic E. coli Growing at 9.5 Degree C to HEp-2 Cells'. Pat Martinez from the Department of Plant Pathology, helped run a Computer Workshop and Software Exchange service for microscopists at the meeting.

- Gilbert G. Ahlstrand

PUBLICATIONS OF THE DEPARTMENT — 1990-1995

Year	Number	Year	Number	
1990	135	1993	93	
1991	86	1994	92	
1992	116	1995	93	

BOOK OF OLD TIMERS AND THEIR THESIS

A book has been prepared by Roy Wilcoxson and Meg Clemens that lists persons who obtained MS and PhD degrees in the department between 1905 and 1995. It also catalogues the theses produced in the Department's programs: Plant Pathology, Plant Physiology, and Agricultural Botany. In addition the book includes a subject matter index of the theses.

Facts gleaned from the book are listed below.

Number of MS and PhD Theses

Decade	Decade	Plant Pathology		Plant Physiology		Agricultural Botany		Total	
	MS	PhD	MS	PhD	MS	PhD			
1905–1910	3	1		<u>.</u>	_		4		
1911-1920	10	2	-	-	_		12		
1921-1930	33	26	<u>(400</u> 0)	2	100	V—3	61		
1931-1940	26	39	-	3	-	-	68		
1941-1950	30	51	1	2	-		84		
1951-1960	69	75	1	3	3	1	152		
1961-1970	70	87	12	6	-	 2	175		
1971-1980	51	38	2	1	-	-	92		
1981-1990	56	38	3	_	-	-	97		
1991–1995	19	23	-	100	-	777	42		
Total	367	380	19	17	3	1	787		

Most Numerous Subjects in MS and PhD Theses

. 0			
Crop	No.	Pathogen	No.
Alfalfa	26	Bacteria	35
Barley	31	Fusarium +	
Corn	49	Gibberella	53
Grain		Helminthosporium +	
Storage	32	Bipolaris	35
Flax	15	Mistletoe	6
Forest		Nematodes	20
Pathology	48	Phytophthora	33
Genetics	65	Puccinia	116
Potato	51	Rhizoctonia	33
Soybean	39	Ustilago	34
Wheat	86	Viruses	34

Subject Matter	No
Biotechnology	10
Control + Biocontrol	59
Ecology + Epidemiology	146
Fungicides	31
Pathogenicity	46
Physiologic Specialization	26
Physiology	99
Resistance	91
Variation	24

NEW EMPLOYEES

Laurie Brand began working as our Account Specialist September 23, 1996. Laurie transferred to our department from Veterinary Pathobiology/Animal Science where she worked the past eight years as a Word Processing Supervisor. She also worked as a Senior Accounts Assistant in the University Chemical Storehouse for seven years.

Vergel C. Concibido, began working in the department as a Research Associate October 1, 1995. He is working with Drs. Neil Anderson and Roger Jones on screening for resistance of potato cultivars to phytophthora, race A-2. Vergel holds a Ph.D. in Plant Pathology, University of Minnesota.

Dean J. Flanders, User Services Specialist is a new member of the department providing computer support services, half-time in Plant Pathology and half-time in Agronomy and Plant Genetics departments. He transferred to our department May 6, 1996 from the Department of Medicine. Dean holds a B.S. in Biochemistry and a B.A. in Chemistry from the University of Minnesota.

Thomas E. Gearhart, Junior Scientist, was appointed October 1, 1996 to work with Drs. Neil Anderson and Jennifer Juzwik (NCFES) on tree disease problems. He received his B.S. degree in Urban Forestry with a minor in Horticulture from the University of Minnesota.

Aaron J. Krohn began working for Dr. Les Szabo, USDA-ARS, Cereal Rust Laboratory, September 25, 1995 as a Junior Scientist. He holds a B.S. in Biology from the University of Minnesota.



Laurie Brand



Vergel C. Concibido



Dean J. Flanders







Aaron J. Krohn



Hong Ma



Christine M. Schraut



Melvin J. Wiens

NEW EMPLOYEES (Continued)

Hong Ma, Research Associate, joined Dr. Ruth Dill-Macky's small grains pathology laboratory June 1, 1996. He is working on a collaborative Plant Pathology/Plant Breeding project aimed at the management and control of Fusarium Head Blight in wheat. He has a Ph.D. in Plant Genetics, Cytogenetics and Pathology, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Christine M. Schraut, Junior Laboratory Technician, began working in Dr. Ruth Dill-Macky's laboratory November 1, 1995. She is nearing completion of a B.S. in Science in Agriculture, University of Minnesota.

Melvin J. Wiens, Research Plot Coordinator, was appointed January 1, 1996 to work under the direction of Dr. Richard Meronuck, Coordinator of University of Minnesota research at the Central Lakes Agriculture Center. Mel supervises and coordinates the plot work and assists with education programming and other tasks necessary to implement the research. He holds a Master of Agriculture in Plant Pathology, University of Minnesota.

- Delores Huebner

RECENT PROMOTIONS

Dean Herzfeld from Assistant Professor, (Pesticide Applicator Training) to Associate Professor, (Coordinator of Pesticide Applicator Training) September 13, 1995.

Linda L. Kinkel from Assistant Professor to Associate Professor with tenure, July 1, 1996.

Philip O. Larsen appointed to the position of Associate Dean for Research, College of Agricultural, Food and Environmental Sciences and Assistant Director, Minnesota Agricultural Experiment Station, July 1, 1996.

- Delores Huebner

NEW GRADUATE STUDENTS

Burrows, Rhoda L. HS, Napoleon, Napoleon, ND; B.S., Montana State University, Bozeman, MT; M.S., University of Minnesota, St. Paul, MN F 1996 Pfleger Calabro, Jill M. HS, Missouri Valley High School, Missouri Valley, IA; B.S., Iowa State University, Ames, IA

S 1996 Blanchette

Dyer, Alan T. HS, Grove City Senior High School, Grove City, PA; B.S. Cornell University, Ithaca, NY S 1996 Windels

Estevez de Jensen, Consuelo HS, La Providencia, Quito, Ecuador; B.S., Universidad Central del Ecuador Quito, Quito, Ecuador; M.S., University of Minnesota, St. Paul, MN

W 1996 Percich

Muriuki, Gacheri Kimathi HS, Tumu Tumu Girls High School, Nyeri, Kenya; B.S. Nairobi University, Chiromo Campus, Nairobi, Kenya

F 1996

Meronuck/Mirocha - Delores Huebner



Rhoda L. Burrows



Jill M. Calabro



Alan T. Dyer



Consuelo Estevez de Jensen



Gacheri Kimathi Muruiki

ORAL EXAMINATIONS PASSED

1995

September 6	Vergel C. Concibido	PhD final
October 3	Jean L. Williams-Woodward	PhD final
November 3	Zhihong Yang	MS
December 1	Julie W. Beale	MS
1996		
January 30	Wendy Jo White	MS
February 20	Kasia M. Duellman	MS
February 28	Dennis McDougall	MS
April 10	Kuo-Chih Lin	PhD final
May 2	Bruce E. Paulsrud	MS
May 28	Bruna Bucciarelli	PhD final
May 29	Junping Chen	PhD final

DEPARTURES

Tea for Two—Jean Williams-Woodward and Richard Woodward—was held November 2, 1995. Both Jean and Dick completed their PhD degrees while in the Department. Jean is an Extension Plant Pathologist at the University of Georgia and Dick is Head of the Plant Pathology Division, Micro Macro International, Athens, Georgia.

Zhihong Yang completed her MS degree and a farewell tea was held November 10, 1996. She left to pursue a PhD degree at the University of California, Davis.

A joint farewell tea was held for Julie Beale and John Bowers December 15, 1995. John, who had been employed as a Research Associate working in Dr. Linda Kinkel's laboratory, accepted a position with the USDA, ARS Floral and Nursery Plants Research Unit in Beltsville, Maryland. Julie Beale completed her MS degree and left to serve as Director, Plant Disease Clinic in Lexington, Kentucky.

Double Tea-Timing event—Wendy Jo White and Dennis McDougall—was held Wednesday, February 28, 1996. Wendy defended her MS thesis January 30, 1996 and went to work at Source Technology Biological, Inc., Minneapolis, as a Technical Service Coordinator for Plant Pathology. Dennis defended his MS thesis February 28, 1996 and has been working as an Associate Editor for the U.S. Forest Service, State and Private Forestry, St. Paul.

Edson Rodrigues Filho, who spent a year in Dr. Chester Mirocha's laboratory to gain experience in natural product Chemistry and in the use of mass spectrometers, left the Department March 11, 1996 to return home in Brazil. A farewell tea was held March 8, 1996.

A triple tea—Mary Kay Kersting, Jim Kurle and Bob Noyd—was held March 26, 1996. Mary Kay, who worked as an Account Specialist in the Department, transferred to the Department of Agriculture & Applied Economics. Jim Kurle and Bob Noyd completed their PhD degrees under Dr. Frank Pfleger and continued to work in his laboratory as Research Associates. Jim left the department to accept a research position in the Department of Plant Pathology at the University of Wisconsin, Madison, Wisconsin. Bob accepted a teaching position in the Department of Biology, United States Air Force Academy, Colorado Springs, Colorado.

Kuo-Chih Lin passed his PhD final defense on April 10, 1996 and a farewell tea was held April 18, 1996. K.-C. moved to Raleigh, North Carolina where he holds a postdoctoral position at North Carolina State University in the Department of Plant Pathology.

Bruce Paulsrud presented his MS thesis on May 2, 1996 and successfully passed his examination. Bruce accepted a job at the University of Illinois and will be in charge of their Pesticide Applicator Training Program. A farewell tea was held May 10, 1996.

We bid Ellen Mester farewell at a tea on May 29, 1996. She had been working as a Junior Scientist in Dr. Ruth Dill-Macky's laboratory. Ellen and her family moved to Madera, California.

Kasia Duellman defended her MS thesis on February 20, 1996 and remained in the department to assist Dr. Richard Meronuck with teaching during the spring quarter. She accepted a Research Fellow position in the Plant Pathology Department at Iowa State University, Ames, Iowa. A farewell tea was held June 6, 1996.

Daryle LaFleur, who had been working in Dr. Benham Lockhart's laboratory as a Junior Scientist, transferred to the Department of Medicine on July 22, 1996. We bid Daryle farewell at a tea on July 19, 1996.

- Delores Huebner

DEPARTMENTAL SEMINARS

- Plant Pathology Seminar, 8201, Monday, 3 PM, 365 Borlaug, Fall Quarter, 1995
- September 25. Dr. Richard J. Zeyen, Professor. Active Defenses of Gramineae to Powdery Mildew Disease.
- October 2. Dr. Frank L. Pfleger, Professor. Studies Involving AM Fungal-plant Interactions and in Disturbed Ecosystem, An Overview.
- October 9. Dr. Deborah A. Samac, USDA, Assistant Professor. Transgenic Alfalfa Plants as Tools for Studying Plant-microbe Interactions.
- October 16. Dr. Ward C. Stienstra, Professor. Soybean Cyst Nematode.
- October 23. Dr. Chester J. Mirocha. Professor. Fumonisins What Are They? Let's Look at Them Through the Eyes of Mass Spectrometry.
- October 30. Dr. Les J. Szabo, USDA/ARS Research Geneticist and Adjunct Assistant Professor. Molecular Biology of Rust Fungi: From Avirulence to Taxonomy.
- November 6. Dr. James V. Groth, Professor; Dr. Kurt J. Leonard, USDA/ARS Director of Cereal Rust Laboratory and Adjunct Professor; and Dr. Thor Kommedahl, Professor Emeritus. Panel Discussion What Constitutes a Good Manuscript Review?
- November 13. Ms. Miriam Newton, Graduate Student. Interaction of Fungi and Nematodes in Plant Disease.
- November 20. Dr. Linda L. Kinkel, Assistant Professor. Biological Control and Other Wonders of Microbial Ecology.
- November 27. Dr. Ruth Dill-Macky, Assistant Professor. Fusarium Head Blight of Wheat and Barley A Cooperative Research Effort.

Plant Pathology Seminar, 8201, Monday 3 PM, 365 Borlaug, Winter Quarter, 1995

- January 8. Dr. Keith K. Klein, Department of Biological Sciences, Mankato State University. Populations, Sex, and the Haploid Fungus: A Model-Building Approach.
- January 22. Ms. Kori Gust, Graduate Student. Removal of Methyl Bromide as a Soil Fumigant: Regulatory, Political and Practical Considerations.
- January 29. Dr. Jo Handelsman, Department of Plant Pathology, University of Wisconsin-Madison. The Reform of Science Education: A Case for Local Action and Global Thinking. Cosponsored with Department of Plant Biology.

- January 30. Dr. Jo Handelsman, Department of Plant Pathology, University of Wisconsin-Madison. Molecular and Ecological Underpinnings of Biological Control of Plant Diseases. Cosponsored with Department of Plant Biology.
- February 5. Mr. Matthew J. McBride, Graduate Student. Ecology of Risk Assessment in the Release of Recombinant Microbes.
- February 12. Dr. Donald N. Alstad, Department of Ecology, Evolution and Behavior, University of Minnesota. Managing the Evolution of Insect Resistance to Transgenic Plants.
- February 19. Ms. Silvia Peñuela, Graduate Student. Mycoplasma-like Diseases of Plants.
- February 26. Mr. Bruce Paulsrud, Graduate Student. Mycoherbicides: Biological Control of Weeds.
- March 4. Mr. Warren Kruger, Graduate Student. H. H. Flor and the Origin of the Gene-for-Gene Genetic Theory.
- March 11. Ms. Kathy Kromroy, Graduate Student. Use of FAME Analysis to Identify Species, Track Isolates, and Quantify Presence of Fungi in Plant Tissue.

SPECIAL SEMINARS

1995

November 14. Dr. S. Nagarajan, Director of Wheat Project Directorate, Karnal, India. Management Strategy of Wheat Rusts in India.

<u>1996</u>

- May 3. Dr. Chet Sutula, President, Agdia, Inc., Elkhart, Indiana. Rapid Assays for Diagnosis of Plant Pathogens.
- August 8. Dr. F.J. Zeller, Department of Plant Production and Plant Breeding, Technical University of Munich, Germany. Present Status of Resistance to Wheat Powdery Mildew.
- August 12. Dr. G. Fischbeck, The Technical University of Munich, Germany. Spatial Distribution of Reactions Against Powdery Mildew in Two Subpopulations of *Hordeum spontaneum* from Israel.
- August 29. Dr. Don Kenney, Gustafson, Inc. Development of a Biological Control Agent to Promote Plant Growth and Control Plant Pathogens.

GRADUATE STUDENT SYMPOSIUM

The Department of Plant Pathology provides its graduate students with opportunity and funding to organize a symposium that is of special interest to students. This year they hosted an all day symposium entitled, "Collaborating Research Between Industry and Academia", on 7 May 1996, the St. Paul Student Center Theater.

Decreases in state and federal research funds have placed a premium on university researchers to establish networks of collaboration to maximize productivity — a trend that will probably increase in the future. As future researchers, we felt it would be important to understand the workings of established and successful collaborations so that we would be aware of potential pitfalls. We invited speakers from the University and from industry to discuss the historical evolution, the establishment and the (publishing and patenting legalities rights) collaboration. The talks were followed by a panel discussion.

On behalf of the organizing committee, I thank all participants for their time and effort.

Dr. Neil Anderson — Head of Plant Pathology, U of MN

Dr. Mike Martin — Dean, College of Agriculture, Food & Environmental Sciences, U of MN

Dr. Fran Webster - Quaker Oats

Dr. Jeff Rosichan - Northrop King

Mr. Tony Strauss — Office of Research & Technology Transfer Administration, U of MN

Dr. Jim Orf — Department of Agronomy & Plant Genetics, U of MN

Dr. Gary Gardner — Head of Horticultural Science, U of MN

Thanks to the Department of Plant Pathology and the Dean's office for financial support and to Dr. Dave Somers, of the Agronomy & Plant Genetics Department, U of MN for his help.

- Warren M. Kruger

INTERNATIONAL AGRICULTURAL GROUP (IAG)

During this academic year, the International Agriculture Group was recognized as an official student organization. With graduate student members from the departments of Plant Pathology, Soil, Water & Climate, Agronomy & Plant Genetics, Entomology and Ecology, the group organizes seminar series, cultural activities, internal discussion groups and symposia. The goal of the group is to serve as a multidisciplinary forum that raises awareness on issues and concerns facing International

agriculture systems.

Some of the public seminars offered this year included "Careers in Agriculture Series" with the participation of new faculty members from the College of Agricultural, Food. & Environmental (COAFES), Associate Dean, Dr. Michael V. Martin, and representatives from chemical and seed companies. The office of International Agriculture Programs cosponsored two seminars on "Research Opportunities Overseas" and "International Funding for Local Research". The key note speakers were Steve Clark, John Vreyens, Dr. Kent Crookston and many other guest speakers. Dr. Konrad Kmentz from DuPont was invited by Dr. Philip O. Larsen (IAG's advisor) to give a talk on pesticide use and safety. A seminar on "Causes of World Hunger" was presented by the organization 'Bread for the World'. Several other internal group discussions and cultural activities such as the 'International Extravaganza' were organized by IAG to promote a multicultural environment in which our common interest: Agriculture - brings the world together. - Silvia Peñuela

PLANT DISEASE CLINIC-1995

In 1995 the Plant Disease Clinic processed 2944 samples and phone calls. Of these contacts 57% were from commercial growers or consultants and 28% were from University staff, mainly from research plots. The remaining contacts were from county agents, Dial U referrals, Minnesota Department of Agriculture or Agrisource.

In addition to general sample processing, the clinic staff assisted with three projects. One was a project with Jill Pokorny of North Central Forest Service analyzing pine seedlings for root rot diseases. The second project was for W. Stienstra, Plant Pathology, and G. Rehm, Soil, Water & Climate Departments, analyzing soybean seedlings for root rot diseases. These two projects are being done for the third year this season. The third project, in cooperation with a local nursery and Dr. Pfleger, consisted of analyzing the potential of a peat:rice hull growing medium for inhibition of *Pythium* sp. root rot on geraniums.

In 1996 sample submittals got off to a slow start due to cool spring weather. Since July however, samples have been arriving steadily. Some interesting combinations of root rot, herbicide and nutritional symptoms have occurred in field crops this season due to the unusual weather conditions.

- Sandra Gould

SOCIAL AFFAIRS

CORN ROAST - 1995 A BIG SUCCESS

September 9 was beautiful as predicted, sunny and 70. The troops started to arrive about 3:00 PM just in time for hors d'oeuvres and great conversation. The hayrides were the BIG hit with "kids" of all ages. Jim Rowe and company, as usual prepared a great roast pig and three turkeys. They also took great care in cleaning up the farm for the party. Mike Strasser, retired civil service, surprised us with cucumber salad and home made garlic pickles. This was a special treat. Thanks also to Matt and Laura McBride for sharing their corn bread dish, which I heard was delicious. I would also like to give a very special thank you to Odette Holter for all of her help before, during and after the corn roast. She is quite a big asset to the Social Committee. We hope everyone at the Corn Roast had a great time.

- Debra Baden Drange, Social Committee Chair

PLANT PATHOLOGY HOLIDAY CELEBRATION

Once again, the Plant Pathology department celebrated the holidays with good food, good friends, and good cheer on Thursday, December 14 in Room P403 Stakman Hall from 2:00-4:30 PM. Our tree was donated by David French and decorated by the graduate students. This year, the department shared the spirit of the season by collecting toys for the Toys-for-Tots program. Everyone had a wonderful time eating and spending time together during the holiday season.

- Andrea M. Westergard

TOYS-FOR-TOTS PROGRAM

This year the St. Paul Student Center sponsored the Toys-for-Tots program and enlisted support from the 14 departments on campus during the holiday season to help needy children in the Twin City area. All boxes were picked up on December 15th. Treena Schmidt, Toys-for-Tots coordinator, congratulated the departments, including Plant Pathology that contributed more than 400 toys for children in need.

WINNERS OF TURKEY BOWLING

Thanks to all who participated in the turkey bowling held on December 21. It looked like everyone was having a great time!! \$10 certificates for turkeys were given to each member of the winning team and also to the person bowling the highest score of the day. The winners were: Ann Arendt, Debbie Drange, Judy Cox, Jim Kurle, and high score of the day was Kimon Karelis with a 191. Other high scores were: Dave Long (162), Bob Noyd (181), Pat Martinez (183), Ann Arendt (188), Judy Cox (177), and Ward Stienstra (155). Very nice bowling!!

- Ann M. Arendt

MID-WINTER INTERNATIONAL EXTRAVAGANZA MARCH 27

The International Agriculture Group and the Department of Plant Pathology Social Committee invited personnel from three departments (Agronomy & Plant Genetics; Soil, Water, & Climate; and Plant Pathology) to celebrate the first interdepartmental International party on Wednesday, March 27, 1996 from noon to 2 PM in the North Star Ballroom, St. Paul Campus Student Center.

The International Extravaganza started with a potluck that included a wide variety of ethnic foods from different countries. A display of international arts and crafts was set up around the room giving everyone the opportunity to learn about foreign cultures. Following the meal, the show started with an Indian dance performed by Pallavia Mishra and an Indian song by her father Akhliesh Mishra. Kasia Duellman played American folk songs with the guitar, and Warren Krueger and Silvia Peñuela sang South African melodies. László Gyenis performed Hungarian folk dances and Consuelo Estevez de Jensen, Silvia Peñuela and a group of Latin graduate students danced salsa, meringue and other Latin-American rhythms. The dances were followed by an African Fashion show with 'models' from Soil, Water, & Climate and Plant Pathology directed by Tsitsi Ndowora. Poetry reading by Dr. Nevin D. Young and J. Patrick Martinez contributed greatly to the cultural atmosphere of this International afternoon. It was a wonderful display of natural talents and a great opportunity to celebrate diversity! - Silvia Peñuela

GRADUATE STUDENTS WIN THE 21ST ANNUAL STAKMAN SOFTBALL GAME

The 21st Annual Stakman Softball Game was held on Friday, May 17th—Dr. Stakman's Birthday. The weather was not favorable early in the day, but Debbie assured department members the sun would be out by 3:00 PM and the game would be held at 5:00 PM. The game was played and the students won it by a whopping 13 to 9. The "after the game" picnic was held at Nevin and Diane Young's new home. Thanks for a great place to gather.

Debra Baden Drange,
 Social Committee Chair

SOCIAL AFFAIRS

CORN ROAST — 1995 A BIG SUCCESS

September 9 was beautiful as predicted, sunny and 70. The troops started to arrive about 3:00 PM just in time for hors d'oeuvres and great conversation. The hayrides were the BIG hit with "kids" of all ages. Jim Rowe and company, as usual prepared a great roast pig and three turkeys. They also took great care in cleaning up the farm for the party. Mike Strasser, retired civil service, surprised us with cucumber salad and home made garlic pickles. This was a special treat. Thanks also to Matt and Laura McBride for sharing their corn bread dish, which I heard was delicious. I would also like to give a very special thank you to Odette Holter for all of her help before, during and after the corn roast. She is quite a big asset to the Social Committee. We hope everyone at the Corn Roast had a great time.

- Debra Baden Drange, Social Committee Chair

PLANT PATHOLOGY HOLIDAY CELEBRATION

Once again, the Plant Pathology department celebrated the holidays with good food, good friends, and good cheer on Thursday, December 14 in Room P403 Stakman Hall from 2:00-4:30 PM. Our tree was donated by David French and decorated by the graduate students. This year, the department shared the spirit of the season by collecting toys for the Toys-for-Tots program. Everyone had a wonderful time eating and spending time together during the holiday season.

- Andrea M. Westergard

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BIRTHDAY CLUB

The Birthday Club convenes the last Tuesday of every month at 10:00 AM coffee. Debra Baden-Drange brings in a birthday cake to honor all those who had a birthday during the month. Membership is open to all who enjoy cake, coffee, and occasionally a chorus of "Happy Birthday to You." Attendance waxes and wanes depending on the season and class schedules.

- Dann K. Adair

PLANT PATHOLOGY AMONG THE LAKES AND TREES AT THE NORTH CENTRAL EXPERIMENT STATION

The experiment station was 100 years old in 1996. Research continues to focus on the two main areas of diseases of wild rice and development of mycoherbicides. Personnel are Dr. Robert Nyvall and Junior Lab Technician Laura Wagner. Ann Hu, who worked in the lab for the last three years, followed her husband to North Carolina where he assumed a new position at North Carolina State University. Additionally Jennifer Fulton, a biology teacher at the Middle School in Grand Rapids, worked in our lab for three weeks to learn techniques and gather ideas that may be useful in her teaching biology.

Andrea Westergard has visited the experiment station periodically throughout the summer as part of her thesis research on the etiology of *Bipolaris oryzae*, the cause of fungal brown spot on cultivated wild rice. Cultivated wild rice research cooperators are Drs. Jim Percich and Raymond Porter from the University of Minnesota and several cultivated wild rice growers. We continue to add equipment or otherwise alter our lab and have run out of space.

Our main research goals in the future are to determine the overwintering or survival sites of *Bipolaris* spp. and to determine what diseases are important to reducing yield and when they occur. Preliminary work indicated that grass on the paddy dikes may be a contributing factor to overwintering of pathogens but this is appearing to be less likely in the case of *B. oryzae*.

Work on mycoherbicide development is focusing on a suitable carrier in which to apply the fungi to target weeds. Several fungi have been identified that are pathogenic to purple loosestrife in the laboratory but laboratory techniques have not been applicable to the field. Dr. Dave Johnson has been cooperating in the search for pathogenic fungi, particularly those fungi pathogenic to purple loosestrife. Cooperation has been going on with Dr. Rick Cother of the New South Wales Department of Agriculture in the area of mycoherbicides to control water plantain.

- Robert F. Nyvall

NORTHWEST CORNER

This past year has noted a number of changes in the Plant pathology program at the Northwest Experiment Station (NWES), Crookston. Julie Beale successfully defended her M.S. thesis "Variability and spatial pattern of Aphanomyces cochlioides in soils assayed in the greenhouse compared to root rot in the field" on 1 December 1995. A couple of weeks later, Julie and her three cats moved to Lexington where she joined the Department of Plant Pathology at the University of Kentucky as a Plant Disease Diagnostician/Research Specialist. Julie spent two summers at the NWES, where she conducted her thesis research. She is a native of North Carolina and earned a B.A. in English from the University of NC, Chapel Hill.

Alan Dyer moved from Pennsylvania to the NWES in April, 1996 to begin research for a M.S./Ph.D. He currently is examining the molecular variation in Aphanomyces cochlioides. Alan is a graduate of Cornell University with a degree in Plant Biology and extensive experience in plant pathology. As an undergraduate, he worked on ash yellows with Dr. Wayne A. Sinclair and after graduation, worked for four years on late blight of potato as a laboratory manager for Dr. William E. Fry. Before moving to Minnesota, Alan was a vegetable grower in Pennsylvania.

Funding was approved in 1996 for construction of a Controlled Environmental Science Facility to replace existing antiquated greenhouses. The new facility will be located on the present greenhouse site and will link the campus of the University of Minnesota Crookston (UMC) to the Ag Research Center of the NWES. It will include glasshouses, growth rooms, growth chambers, research lab, headhouse, and an interactive TX classroom. Construction will begin in the spring of 1997. Carol Windels, NWES, and Wendell Johnson, UMC, cochair the committee for this \$2.8 million project.

The NWES lost a friend and colleague with the unexpected death of Dr. Cheryl Ann Engelkes, 36, on 28 September 1996 of complications attributed to diabetes. Cheryl was the first in-resident graduate student in plant pathology at the NWES where she did field research for the Ph.D. in the summers of 1988-1990. She earned the Ph.D. in 1991 and had two postdoctoral fellowships—one at the USDA-ARS Biocontrol of Plant Disease Laboratory in Beltsville, MD and another at the NWES. At the time of her death, Cheryl was employed at Principal Financial Securities Incorporated in Minneapolis. Cheryl was a young woman of exceptional personal traits and scientific ability. We miss her personally and professionally.

- Carol E. Windels

USDA/ARS CEREAL RUST LABORATORY

Three students completed degrees with research on cereal rust diseases at the Cereal Rust Lab. K.C. Lin's Ph.D. research with Bill Bushnell was on "Isolation and characterization of host response genes associated with resistance reactions induced in oat by *Puccinia graminis* f. sp. tritici;" Akhilesh Mishra's Ph.D. research with Alan Roelfs was on "Genetics of leaf rust resistance in durum wheat;" and Miriam Newton's M.S. research with Kurt Leonard and Linda Kinkel was on "Quantifying components of relative fitness in coexisting pathogen strains."

Dr. John Roberts, USDA-ARS plant pathologist and long time collaborator with the Cereal Rust Lab at Griffin, Georgia (Rust Lab South), announced his retirement as of October 18, 1996. John extended the cereal rust surveys into the Southeast and the Ohio Valley region and collaborated with Cereal Rust Lab efforts to transfer improved rust resistance into soft red winter wheat germplasm adapted to the Southeast. We will sorely miss John's collaboration and his semiannual visits to the Cereal Rust Lab.

John McCain, another long time collaborator with the Cereal Rust Lab, announced plans to move from the Twin Cities to Ohio. John has been an inexhaustible source of expertise on taxonomy of rust fungi and their host plants as well as a valued colleague in a series of research projects on biology, genetics, and phylogeny of rusts of cereals and grasses. Although we hope to continue contacts with John, the absence of his day-to-day presence at the Cereal Rust Lab will leave an immense void.

Members of the Cereal Rust Lab staff participated in the USDA-ARS Grain Improvement Research Review in St. Louis and made presentations at several international meetings including the combined International Oat Conference and International Barley Genetics the European Conference in Saskatoon, Mediterranean Cereal Rust and Powdery Mildews Conference in the Netherlands, the International Congress of Molecular Host-Parasite Interactions in Knoxville, the COST-Action 817 Workshop on Epidemiological Parameters in Denmark, and the British Society for Plant Pathology Presidential Meeting on the Gene-for-Gene Relationship in Warwick, England, as well as in national meetings of the American Phytopathological Society and the American Society of Plant Physiologists.

Visiting scientists Dr. Amir Sharon and Dr. Jacob Manisterski of the Institute for Cereal Crops Improvement, Tel Aviv University, spent 2 weeks and 5 weeks, respectively, in cooperative research at the Cereal Rust Lab in 1996. Dr. Sharon worked with Les Szabo on molecular biology of cereal rust fungi, and Dr. Manisterski worked with Kurt Leonard on computer image analysis techniques for assessing levels of slow rusting resistance in oat lines to crown rust. In addition Dr. Yehoshua Anikster, also of the Institute for Cereal Crops Improvement, spent a week at the Cereal Rust Lab with Bill Bushnell and Alan Roelfs putting finishing touches on a landmark manuscript on morphological genetic, and host range distinctions among biological species of the Puccinia recondita (wheat and rye leaf rust) complex.

Noted visitors to the Cereal Rust Lab in 1996 included: James Chong, Agriculture Canada, Winnipeg; Zahir Eyal, Tel Aviv University, Israel; Richard Staples, Cornell University; Gamal Rizk, Omar Azim, and Mohamed Abdelsamei of Minioa University, Egypt; Ian Barclay and Robyn McClean, Agriculture Western Australia, Perth; David Poulsen, CSIRO, Australia; and Sue Pelham, South Australia Research and Development Institute.

- Kurt J. Leonard

NEWS FROM THE SOUTHERN EXPERIMENT STATION

Dr. Senyu Chen was appointed to the faculty of Plant Pathology in 1995 and is housed at the Southern Experiment Station, Waseca. His research centers on the biology and management of the soybean cyst nematode (SCN) in Minnesota. Field sites were established in southwest and southern Minnesota to study on the effects of corn and soybean rotation on SCN populations and race composition. In collaboration with the Minnesota Soybean Association, a survey of SCN infestation and race distribution in southern Minnesota is underway. Dr. Chen's immediate research involves study of the life number generations. embryological of development, and hatching of SCN and a survey of fungal parasites of nematode eggs and juveniles. - Senyu Chen

Northwestern University, Evanston, 1995.

[&]quot;Learn conventional wisdom but be prepared to challenge it at all times. What most people agree upon is often wrong, though they won't welcome your bringing this to their attention."

- Allan Schnaiberg,

SUMMER FIELD PLANT PATHOLOGY CLASS-5204

The Plant Pathology summer field pathology class was held July 17-21, 1996 with 5 students from the University of Minnesota. Usually a group from the University of Wisconsin joins the class but they did not have a summer class this year. However, John Andrews, Patti McManus, Brian Hudelson, Tom German, Walt Stevenson, and Emeritus Professor Dean Arny made the "Wisconsin summer experience" available to our five students. We began our tour on Thursday morning, 18 July, at Wisconsin Rapids with a "best ever" introduction to cranberry production, processing, marketing, and disease problems under the guidance of Dr. Jonathan Smith of Northland Cranberries and Patti McManus, Extension Fruit Pathologist for the University of Wisconsin. Brian Hudelson, University of Wisconsin's ginseng project, finished his excellent introduction to diseases and other aspects of that crop just before heavy rain began to fall. We travelled from the near Little Chicago location of the ginseng plots to Rhinelander in heavy rain and otherwise threatening weather (tornado warnings and watches). At Rhinelander we intended to buy food and camp at the Stark Potato Farm. But, because of weather, the University of Minnesota instructor "chickened out" and we ended up staying in a motel and eating restaurant food. On Friday morning, we had short but excellent sessions on seed potato production at the Potato Farm with Tom German and on potato diseases at the Antigo airport plots with Walt Stevenson. We finally caught up with beautiful summer weather as we travelled to the Peninsular Experiment Station in Door County where we were met by its *enthusiastic superintendent, Dick Weidman. He introduced us to station projects and apple and cherry diseases and research. "Tradition says" that we would cook-out at the station but we again broke tradition and most of the group enjoyed a restaurant fish boil at Bailey's Harbor. We did follow tradition camping under the maples at the station. Patti McManus led the Saturday morning sessions in the Wood Family's fruit storage, apple and cherry orchards. We returned to St. Paul by early Saturday evening after a 4 day and nearly 1000 mile successful "Wisconsin Experience".

- David H. MacDonald

OBITUARIES

Alan Paton (Post-Doc 1976) of Aberdeen, Scotland, died in August of 1994 at age 72, after a long life of research accomplishments.

Hugh Howison Hotson (PhD 1951) died 22 December 1995 at age 79. He will be remembered as the first to grow rust in tissue culture. During his career, Dr. Hotson was manager of Agricultural and Chemical Products with 3M (1953–1958). He was President of The Maritime Corporation, which he founded in 1961, until his retirement in 1982.

Lawrence I. Miller (PhD 1953) died 1 March 1996 at age 82. Dr. Miller's career was at Virginia Polytechnic Institute and State University, Blacksburg, Virginia, where he specialized in peanut diseases and nematology. Dr. Miller was Professor Emeritus of Plant Pathology.

Milton Andrew Petty (PhD 1940) died from a brain tumor 28 February 1996 at the age of 80 years. Dr. Petty had a distinguished career with Lederle Laboratories of Cyanamid Company (1944–1962), with the Law Division of Cyanamid Company (1962–1968), and as a teacher of natural sciences at Long Beach State University from 1969–1977. He retired in 1977. Milton and Dorothea Petty were married 24 August 1940 the day after his final oral examination.

Wilma Renfro, wife of old timer Bobby L. Renfro (PhD 1960), died at College Station, Texas, 25 January 1996. Richard A. Frederiksen (MS 1957; PhD 1961) sent us a tribute to Wilma: "She will be remembered as a kind and loving mother, wife and companion to Bob on their 30+ years of international service with the Rockefeller Foundation in India, Thailand, and Mexico."

Cheryl A. Engelkes (PhD 1991) died from a diabetic coma probably on September 28, according to the coroner, although her body was not found until September 30. Dr. Windels was Cheryl's adviser for the PhD degree she earned in 1991. The funeral was at the Baptist Church in Adrian, Minnesota on October 4, 1996. We are all saddened at this tragic loss of life to a very promising scientist and an outstanding person.

[&]quot;Of 11 criteria examined for possible use in selecting students with a predisposition for careers involving research, only one, the research orientation of the graduate training environment, showed any promise. For the sample group, undergraduate academic grades were not correlated with post-training research activity."

⁻ Michael O'Brecht and Henry Friesen, Medical Research Council of Canada, Ottawa. (Science 273:1157, 1996)

EDITORS WALK THE HALLS OF DEPARTMENT

- 1. Thor Kommedahl was appointed Associate Editor of Boghopper—a Science Museum of Minnesota publication. This 16-page publication is distributed to about 6000 primary and secondary science teachers in Minnesota and neighboring states, three times a year.
- 2. Robert F. Nyvall was appointed to a 3-year hitch as Editor-in-Chief of Phytopathology News. This appointment also puts him on the APS Council where he can influence APS policies.

VITAL STATISTICS

Births

October 17, 1995. Ward and Myrna Stienstra proudly announce the birth of their first grandson, Nicholas Curtis Stienstra to Curt and Joy Stienstra, 7 lbs., 4 oz., in Grand Rapids, Michigan.

October 31, 1995. Catherine Pokorny to Paul and Jill Pokorny, 9 lbs. and 21 inches long.

January 15, 1996. Kayla Marie Johnk to Mike and Janell Johnk, 7 lbs., 4.5 oz. and 19.5 inches long in Dallas, Texas.

January 26, 1996. Phil and Sandy Larsen are proud grandparents of their first granddaughter, Kylie Ruth Larsen to Todd and Maureen Larsen, 9 lbs., 2 oz., and 21 1/2 inches long in Crystal Lake, Illinois.

May 9, 1996. Bob and Sandra Nyvall are proud grandparents of their first grandson, Grant Christopher Erickson to Christopher and Martha Erickson, 8 lbs., 3 oz., in Eagan, Minnesota.

Marriage

June 7, 1996. László Gyenis and Silvia Peñuela in Minneapolis, Minnesota.

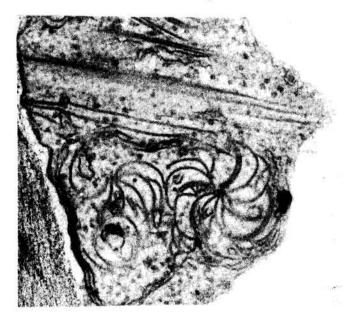
"Graduate study should be one of life's most pleasant and rewarding experiences.... One should seize this opportunity [in studying for the doctorate] to construct a mental framework of the generalizations and principles of biology as well as plant pathology, on which to hang new facts encountered in the years ahead."

- Kenneth F. Baker, University of California. Berkeley (April 20, 1982)

WOMEN IN AGRICULTURAL SCIENCE

The Women in Agricultural Science is a group of students, staff, and faculty from the departments of Plant Pathology, Agronomy and Plant Genetics and Soil, Water, & Climate that meet every two weeks. The lunch-time meetings feature discussions on current events, sharing of information, speakers, films and networking with other women scientists. The group kicked off the year with a well attended pizza lunch to meet and plan the year's activities. During the year, an electronic mailing list of the women in the group was established to notify members of meetings and special events. Several meetings focused on education of girls and women from other cultures. Members of the group related their experiences growing up in the Sri Lanka and Columbia. The group also watched the television series, "Discovering Women" which documented the lives of six contemporary women scientists. This year marked the sixth year the group has been meeting. It is the longest continually active group of women scientists on the St. - Deborah A. Samac Paul Campus.

DIAGNOSTIC QUIZ



What common disease agent causes this intracellular structure agent of potato? How is this agent transmitted? Alumni Speak slumnis-plpa@puccini.crl.umn.edu



A NEW TRADITION

We would like to establish a new tradition for the Aurora Sporealis, a column devoted to news and views from alumni as told directly to us. We are interested in what you are doing, advice you might have for today's students, and favored reminiscences. All alumni are invited to drop us a line (see envelope enclosed) or push some pixels our way <alumnis-plpa@puccini.crl.umn.edu>. We are especially interested in alumni from the following decades. Don't delay, have your say, write or push some pixels our way!

YEAR AND STUDENT	DEGREE	ADVISOR	YEAR AND STUDENT	DEGREE	ADVISOR
1995			1965		
Julie Wood Beale Jason R. Brantner Cynthia A. Buschena Vergel C. Concibido László Gyenis Cecilia R. Jones Brent D. McCallum Robert K. Noyd Tarkus Suganda Jean L. Williams-Woodwa Zhihong Yang	MS MS PhD MS MS PhD PhD PhD PhD MS	Windels Percich,Nyvall N.A. Anderson Young Banttari, N.A. Anderson Samac Groth Pfleger N.A. Anderson Pfleger,Windels Lockhart	A. Ahlquist Andrew Asare-Nyako Claude C. Bernier George E. Brown William M. Bugbee Lauren E. Carlson Sayed M. El-Kandelgy Cesaria P. Eugenio Hemant A. Fanse Raul G. Garza-Chapa	MS-B PhD PhD PhD PhD PhD MS MS PhD	Anderson Kommedahl King,Wilcoxson Kennedy Kernkamp King,Kernkamp Wilcoxson N.A. Anderson C.M. Christensen N.A. Anderson, Kernkamp, Stakman,
Robert A. Dietrich Clint L. Kohls William H. Livingston Joseph G. O'Brien Lewis Otjen Marguerita L.A. Palmer Moussa Seck William W. Shane Mary E. Sortland-Moberg	MS PhD PhD MS PhD MS PhD MS PhD MS PhD MS PhD MS PhD	Blanchette Percich Blanchette Blanchette Blanchette Stewart Teng,Roelfs Baumer,Teng MacDonald	Syed M. Husain Donald M. Knutson Thomas A. Kucharek May Yoshiko Manabe Paul D. Manion Arthur L. Schipper, Jr David B. Schroeder Ronald E. Welty Louis Wigginton Wayne T. Williams	MS	C.M. Christensen Linck Rowell Kommedahl Linck French French King Eide Linck Wilcoxson
Dereje Ashagari Robert V. Crow Dennis A. Johnson Virgil L. Jons Bulent Kiral David S. Lang Jeri J. Ooka Nursamsi Pusposendjojo Douglas J. Sarojak Elmer L. Schmidt Howard F. Schwartz Bryan L. Shearer James R. Venette James C. Wolf	PhD PhD MS MS MS MS PhD MS PhD MS PhD PhD PhD	Rowell Kommedahl King Kennedy Rowell Kommedahl Kommedahl C.M. Christensen N.A. Anderson French Moore, Wilcoxson Wilcoxson Kennedy Mirocha	J.J. Castano Albert H. Ellingboe Hosni A. Mohamed Charles R. Olien Donald S. Olmsted 1945 Ellis F. Darley Jose Rodriguez Listing compiled Wilcoxson and Margue		Kernkamp Kernkamp Hart Moore Eide Stakman C.M. Christensen Hart,Stakman Emeritus Roy D. ens.

(Continue Page 10 Johnson)

Kenneth B. Johnson (BS 1979; PhD 1986) was awarded the Ciba-Geigy Award at the APS Meetings in Indianapolis, Indiana in summer 1996. Ken is currently Associate Professor of Plant Pathology, Oregon State University. He is a distinguished scholar of quantitative epidemiology and its applications for integrated control measures. Crop species that have benefitted from his research include potato, hazelnut, and apple. He is an outstanding teacher of plant pathology as well as an efficient advisor to master of science and doctoral candidates. Other awards to Dr. Johnson include the Briskey Award for Faculty Excellence (1993), the Oilfield/Jackson Team Award (1994), and the Savary Outstanding Young Faculty Member Award (1995).

RECOVERY OF KERSTIN CONCIBIDO

It has been over a year since our car accident and my wife and I would like to update everyone in the department on the progress we have made in rebuilding our life. Kerstin is finally home after a nine-month rehabilitation program at Courage Center in Golden Valley, Minnesota. She has regained most of the movement in her arms and is as independent as she can be. Soon, she is going to start her volunteer work at the Raptor Center. Eventually, she is planning to go back to school and either finish her Ph.D. or get another M.S. During my wife's rehabilitation, I have been involved in several projects in the department. Currently, I am working with Dr. Roger Jones and Dr. Neil Anderson on late blight in potato. It's been quite an adventure for us this past year and we really didn't have the chance to personally thank everyone in the department for the tremendous outpouring of love and support during our ordeal. We are really overwhelmed by this continuous support and are totally indebted to the department. We are particularly grateful to the following people who went out of their way to make sure our needs were taken care of: Dr. Neil Anderson and his wife Barbara; Ms. Delores Huebner; Dr. Dariush Danesh and his family; and Ms. Sue Boutin (wife of Sam Boutin). Finally, we are lucky to have a very dear friend, Dr. Sagar Krupa, who has been on our side throughout this ordeal. He has been very instrumental in getting us back in Minnesota and personally took care of some of our pressing needs at that time such as our immigration status, housing, and hospitalization. It has been a tough ordeal but the love and support of the department helped us make it through. I am very glad and proud to be a member of this department. - Vergel C. Concibido