

DEPARTMENT OF PLANT SCIENCES

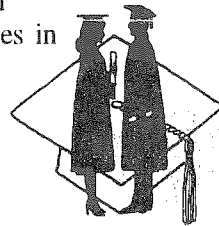
Dear friends of NDSU Plant Sciences:

Again, this has been another year of many changes at NDSU. President Ozburn left NDSU on June 30, 1995 and was replaced by Dr. Tom Plough, who came to NDSU from the Rochester Institute of Technology. Dr. Brendan Donnelly announced his resignation as Vice President for Agriculture and Outreach on January 4, 1996. He will return to the Cereal Science Department. Dr. Don Anderson, who retired several years ago, will serve as interim VP until a new person is hired. NDSU will also soon begin looking for a Dean of Agriculture to replace Dr. Satterlee, who has been Interim Dean. Elaine Dobrinz retired October 31. She had worked in Agronomy, Crop and Weed Sciences and Plant Sciences for 23 years. She was replaced by Linette Knoll, who transferred to Plant Sciences from the Math Department. Mark Halvorson completed his M.S. last fall and resigned his Ag. Res. Tech. III position with Dr. Helms to accept a job with Michigan State University. He was replaced by Larry Martin. Kris Prodoehl-Tedrow resigned in February to accept a position with CENEX. Dr. Richard Novy was hired as a potato breeder. He joined us on November 4. He has a B.S. from Washington State University and an M.S. and Ph.D. from the University of Wisconsin. He was at a postdoctoral position at Rutgers University before joining us. Dr. Galen Schroeder accepted a position as Assistant Director of the Seedstocks Project. Vern Quam, Extension Forester, also left NDSU in December. Dr. Bill



Ahrens will be resigning in the spring of 1996. Bill and his family are moving to China. Cathy Morton, who has been a Postdoctoral Research Associate with Dr. Nalewaja, will resign in March to marry Doug Nord, an NDSU weed science graduate. Welcome to all our new employees and our best wishes to those who have left or are leaving soon.

We graduated 12 M.S. degrees in the 1995 Commencement. Those receiving M.S. degrees were:



Lisa Axton (Dr. Nalewaja), Chad Effertz (Dr. Zollinger), Scott Fitterer (Dr. Schneider), Jeremy Frie (Dr. Zollinger), Mark Halvorson (Dr. Helms), Paul Isakson (Dr. Nalewaja), Curt Lee (Dr. Horsley), Brad Miller (Dr. Gardner), Troy Roebke (Dr. Dexter), Craig Rystedt (Dr. Elias), Bill Wilson (Dr. McMullen), and Bin Ye (Dr. Lorenzen). Several M.S. and Ph.D. students have completed their degrees since then and will be listed in next Spring's Commencement.

We had 48 full and part-time active graduate students in the fall of 1995 of which 18 are international students representing 12

February 1996

different countries. Because of the shortage of state appropriated funds, we are being forced to eliminate state funded assistantships. Almost all our graduate students are funded by grants or are self-supported. New students since last year and their advisors are listed below. Michael Bosela (Cheng), Darrin Haagenson (Deckard), Ann Heinze (Elias), Shane Johnson (McMullen), Thomas Kleven (Zollinger), Bradford Ramsdale (Messersmith), and Jing Kai Zhou (Deckard).

The department also had 10 visiting scientists and postdoctorates. Current visiting scientists are Aixiang Jiang (PRC), Wenkai Liu (China), Ed Szelezniak (Poland), and Zhen Zhang (PRC).

Two beautiful paintings of North Dakota grain harvest by John Bednarz of Upham, ND were donated to go with the new tables and chairs in the faculty/staff coffee room in Loftsgard Hall. A third painting dealing with sunflower will be received soon. Study tables and chairs for the long hallway on the main floor and a display case with many of Dr. Laurel Loftsgard's mementos were donated by the Loftsgard family.

The students are making good use of the facilities. The University, with monetary help from Sandoz, furnished the Plant Sciences Learning Center in the basement of Loftsgard Hall. This room is used for self study and for several Plant Sciences classes. It is one of the nicest classrooms and study areas on campus. We are converting the information on the auto-tutorial systems used for years in some of our labs to CDRom.

Room 102 in Loftsgard Hall, where a number of Plant Sciences classes are taught, was renamed the *Dr. Jack F. Carter Lecture Room* on September 29, 1995. A plaque will be placed in the room. The plaque has a picture of Dr. Carter and reads:

"Dr. Jack F. Carter Lecture Room
Dedicated September 29, 1995

"Society gives due recognition to earned degrees. Sometimes, however, even greater learning and wisdom come from one's immersion into the practicalities of life outside of academia. Jack Carter is not only a wonderfully skilled scientist, he is as well a brilliant teacher and servant of the people."

George A. Sinner, Vice President, American Crystal Sugar Company and former Governor of North Dakota

A teacher, scientist and administrator, Dr. Jack F. Carter was a faculty member at North Dakota State University from 1950 to 1987 and from 1960 to 1987 served as chair of the Department of Agronomy, now Plant Sciences. He earned a bachelor's degree in 1941 from the University of Nebraska, a M.S. degree in 1947 from Washington State University, and a Ph.D. in 1950 from the University of Wisconsin, all in agronomy. Following his retirement in 1987, he was named Professor Emeritus. At the 1995 Commencement, he was

awarded an Honorary Doctor of Science degree from NDSU.

Dr. Carter believed strongly in maintaining regular contact with undergraduate students, despite heavy administrative, graduate, research and service responsibilities. His skills as a teacher were recognized by students in 1979 when he was awarded the Alpha Zeta Agricultural Teacher of the Year Award, and in 1990 when he received the Blue Key Outstanding Educator Award.

Dr. Carter was instrumental in the process through which NDSU became a Ph.D.-granting institution, in 1959. He subsequently led the department in building a highly respected graduate program, one of the largest on campus, attracting talented graduate students nationally and internationally.

NDSU and the State of North Dakota have benefitted not only from Dr. Carter's commitment to teaching, but also from his commitment to research. He was instrumental in strengthening the department's respected plant breeding programs and in initiating a weed science research group. A recognized expert in the area of grain grading and on seedstocks and seed distribution systems, he was an important contributor when the U.S. sunflower and triticale standards were established, during discussions concerning revision of wheat and barley classification standards, and as a consultant to the government of Mexico when that nation revised its grain grading system. He became president of the Flax Institute of the United States in 1978 and continues as president to date. Also, he was appointed as a member of the North Dakota Oilseed Council."

Another honor was received by Dr. Carter this year on May 13, 1995, when he received an

Honorary Doctor of Science Degree at the NDSU Commencement.

In other news, a small satellite dish was placed on the roof of Loftsgard Hall. A signal is transferred to a computer on the main floor and provides regional and U.S. weather radar, weather forecasts, world news, sports, commodity prices, extension information etc. It will be especially valuable to our faculty and staff going to Carrington, Langdon, etc. early in the morning as it will provide current and expected weather at those sites.

A deer fence was placed around the Absaraka Horticultural Farm. A lot of genetic material, especially young trees, has been destroyed by deer the past few years. This should eliminate the problem. Some money was donated by the Fargo Garden Society, North Dakota Nursery and Greenhouse Association, North Dakota State Horticultural Society, and Bailey's Nursery, with the balance coming from the Experiment Station.

The 14th Annual Crops and Soils Blizzard Party was held October 31 during the ASA meetings in St. Louis. About 75 current and former faculty and graduate students enjoyed the opportunity to renew acquaintances and visit with friends. It is always a pleasure to see so many of you there.

Nine of our faculty, 1 postdoc and 6 graduate students/ag. res. tech. attended the ASA meetings and presented posters or papers. All of our students had several job interviews which is a good, positive sign. Eight undergraduates from the Crops and Soils Club also attended.

The 92nd annual meeting of the American Society of Horticultural Science (ASHS) was held in August at Montreal, Canada.

Dr. Chiwon Lee and several graduate and undergraduate students attended the meeting. Ross LaFramboise, an undergraduate in Biotechnology, was elected president of the Association of Collegiate Branches of the American Society of Horticultural Science. Dr. Lee is national advisor. A judging team from NDSU won first place in the vegetable division. A different team from the Horticulture Club attended the Mid-America Collegiate Horticulture Society annual conference held at Colorado State University in Fort Collins. They took 2nd place in the team contest involving general knowledge on horticultural topics and plant identification.

The WSSA annual meetings will be in Norfolk, Virginia in February, 1996. Four of our faculty will attend. The 1995 NCWSS meetings were in Omaha, Nebraska in December. Nine of our faculty, 2 research specialists and 11 graduate students attended, presenting posters and papers.

A search is in progress for a permanent chair for Plant Sciences. A number of faculty, staff and a student, plus several individuals from outside the department are on the search committee. A permanent chair should be selected this spring.

Dr. Burton Johnson is primary project leader of the new crops project while Dr. Schneiter serves as interim chair of Plant Sciences.

Each year the College of Agriculture and Experiment Station honors young and senior faculty in research and teaching. For the second consecutive year, our department won three of the four faculty awards with Dr. Richard Frohberg honored for Excellence in Research, Senior Faculty, Dr. Ed Deckard honored for Excellence in Teaching, Senior Faculty, and Dr. Chiwon Lee for Excellence in Teaching,

Early Career. Two awards are also given by the College of Agriculture for technical and support staff. Bob Baumann, Ag. Research Technician who works with Dr. McMullen in the oat breeding project, received the Support Staff Award for Excellence Award while Larry Chaput, who works with Dr. Herman in the woody plants/ornamentals project, received the Professional Staff Award for Excellence. It was almost a clean sweep for our department.

Dr. Cal Messersmith was selected as an outstanding teacher by the National Association of Colleges and Teachers of Agriculture. The award recognized faculty "where efforts represent the very best in agricultural higher education". Dr. Messersmith is also the President-elect of the Weed Science Society of America.

Dr. Jim Helm was named Extension Communicator of the Year by Extension Communications. He will also be honored at the Winter Show held in Valley City in March. Jim was bestowed the rank of "Honorary Kernel" by the North Dakota Grain Growers in December.

Drs. Roald Lund, Ted Helms, Ken Grafton, Phil McClean, Elias Elias, and Ron Smith are members of the Faculty Senate. Dr. Lund was elected to the executive committee.

Dr. Ron Smith is on the Faculty Development Committee.

Dr. Harold Cross was elected chair of the Promotion, Tenure and Evaluation Committee. Dr. Jim Helm is a member of this committee.

Dr. Richard Frohberg became the "father" of triplets as he and his staff released "Trenton", a conventional HRSW for western North Dakota, 'Glupro', a

highprotein spring wheat, and 'Ernest' a sawfly resistant hard red spring wheat. Ernest was named after Ernie French, former Williston Research Center Director. Dr. Richard Horsley released 'Foster', a new low protein six-rowed barley with malting potential. Dr. Jerry Franckowiak released 'Logan', a low protein two-rowed barley that may have potential as an export malting barley. Dr. Ken Grafton released 'Hatton' (1995) and 'Maverick' (January 1996) pinto beans, while Dr. Ted Helms released 'Council' soybean (1995), the first soybean variety released by NDSU. He also released 'Danatto' (1996), a small seeded specialty soybean. Dr. Jim Anderson released 'Elkhorn' hard red winter wheat. 'NorDonna', a red table stock potato bred by Dr. Bob Johansen was also released. 'Munich', a durum variety adapted to north central North Dakota, was released by Dr. Elias and 'Dakota Pinnacle' (1996), a fast-growing slender Asian white birch, was released by Dr. Zong-Ming Cheng. In late February, 1996, we will be considering several small grain and potato lines for release. A conservative estimate of the ANNUAL new income generated for North Dakota producers by the varieties released in 1995, based on increased yield only, is \$31 million. In addition, several of our faculty released germplasm, population and inbreds in several crops.

Dr. Alan Dexter is on the CAST Board of Directors as WSSA representative and is President of the North Central Weed Science Society.

Dr. Elias Elias is coordinator of the durum wheat regional nursery.

Dr. Ken Grafton received the Bean Improvement Conference (BIC) distinguished achievement award. BIC is an organization consisting of U.S. and Canadian

dry bean researchers. Dr. Grafton is also an associate editor of Crop Science.

Dr. Dale Herman was honored with the 1995 Centennial "Forest Resources Educator" Trees Award by the N.D. Centennial Trees Commission.

Dr. Zong-Ming Cheng is president of North Dakota Farm Forestry.

Dr. Rich Horlsey is a member of the National Barley Improvement Committee.

Dr. Jerry Miller was named a fellow of ASA while Drs. Gerald Seiler and Prem Jauhar were named CSSA Fellows.

Dr. Jerry Franckowiak is on the Crop Advisory Committee for barley, is a member of the organizing committee for the International Barley Genetics Symposium, and is Editor of the Barley Genetics Newsletter. He visited China this year where some of our barley lines are being evaluated for tolerance to fusarium.

Dr. Mike McMullen is a member of the Executive Committee of the National Oat Workers Conference, Technical Director of the American Oat Association and Editor of the Oat Newsletter.

Dr. Phil McClean has been selected to participate in the ESCOP/ACOP Leadership Development Program.

Dr. Schneider is an associate editor of Crop Science and a member of the Sunflower Variety Review Board of AOSCA. He is also editor for the revision of the ASA Sunflower Monograph. Drs. Dwain Meyer, Jerry Miller and Gerald Seiler are associate editors of the monograph. Drs. Jim

Hanzel, Richard Zollinger, Jerry Miller, Gerald Seiler, Al Schneider, and C. C. Jan are also contributing authors.

Four faculty members, Drs. Jim Hammond, Ed Deckard, Dwain Meyer and Al Schneider and staff member Roger Genoch became members of the NDSU Quarter Century Club for 25 years of service to NDSU.

The Graduate Student Symposium, which involves Plant Sciences graduate students from NDSU, the University of Manitoba, and the University of Saskatchewan was held March 3 and 4, 1995 in Lofstgard Hall. Scott Fitterer, Justin Faris and Mike Dietrich won awards for their presentations.

Tom Conlon, Superintendent Emeritus and former director of the Dickinson Research Center passed away May 28, 1995. He had recently completed a history of the Dickinson Research Center called "Next Year" Country.

Dr. Kenneth Frey of Iowa State University gave the Karl Lucken Memorial Lectureship in October. Dr. Frey was Dr. Lucken's advisor.

The Bison athletic teams won several honors. The women's basketball team, with only two seniors, went on to win their third consecutive Division II national championship defeating Portland State 98-85. This was their 4th national championship in the last five years. Until a loss in December 1995, they had won 49 consecutive games, a record for Division II. The football team soundly defeated UND to advance to the quarterfinals but lost to Pittsburgh State 9-6 in Pittsburgh, Kansas. NDSU initiated a varsity team in women's soccer.

The winter social was held on January 13, 1996 at the Seasons Restaurant at Rose Creek.

Please let us know of address changes for yourself or others, or if there is incorrect information. If you know the address of any of those for which we do not have an address, please provide it to us.

Drop us a short message and keep us posted on information that might be of interest. Our Email address is:

buringru@plains.nodak.edu

If you are traveling in the area, we encourage you to stop by and visit, however short it might be. All of us in the department extend our best wishes to you for 1996.

As we were finishing up the newsletter, North Dakota, South Dakota, and Minnesota were hit by a massive two-day blizzard. Snowfall in Fargo was 18 inches with high winds. Wind chills were in excess of -80 F. This was followed the next day by clearing with temperatures of about -30 F. I guess some things don't change. **KEEP WARM** wherever you are and best wishes from all of us at NDSU.

Al Schneider

I am pleased to send you a short message as it is not feasible for me or my wife to write

each of you individually. First, thank you for the holiday messages that come from you to the department or to us personally--we appreciate them very much and wish to "keep track"--please tell us more about yourself and your families. Send pictures, even if you may have aged since we last met--we all do!!

**Greetings
from
"Jack's
Corner"**

I've survived 8 1/2 years of retirement successfully, I believe. I've been more active and less chair-bound, and been involved enough in agronomic things not to go "brain-dead," I hope. My wife says that I'm not doing a lot differently than in the past but we start more slowly in the morning, don't work nights or weekends, and more or less doing the "agronomic things" as I please.

I received two nice recognitions in 1995 thanks to nominations by the department, I'm sure. They are (1) an Honorary Doctorate from NDSU in May 1995, and (2) a lecture room in Loftsgard named for me. NICE! Thanks folks!

I taught Grain Grading in 1995 for the 45th and last time at NDSU plus two years at Washington State. Dr. Jim Anderson wants to teach the course--it is time, I guess. I'll help him as much as he wishes. I've spoken to fewer commodity and extension audiences in 1995 than earlier about either wheat and barley grading, but more about flax-as-food.

I spoke about flax-as-food and had an information booth at the Conventions of the North Dakota Dietetics Association and the North Dakota Bakers Association. Also, I lectured to dieticians at Concordia and Moorhead State.

I'm President of the Flax Institute which had a 2-day program January 27-28, 1994, at Fargo. The 56th Flax Institute is March 20-22, 1996, at Fargo. I've been replaced as the Experiment Station Director's appointee to the North Dakota Oilseed Council but will serve as their "flax consultant"--maybe for pay now.

Also, I continue to be involved in research and promotion of flaxseed and flaxseed oil as possibly beneficial to human nutrition and health because of the high fiber and linolenic acid content (omega 3) that will have some interesting and valuable developments in the

future. People in the countries of some former foreign students maybe have consumed flax for hundreds of years, or should if they have not, for the omega 3 and fiber benefits.

I got funding for, and am supervising, two projects feeding flax to laying hens at Univ. of Nebraska and Texas A. & M., producing eggs 6-8 times higher in polyunsaturated fatty acids than generic eggs--the eggs are now being fed to people including 450 athletes at the training table of the No. 1 Huskers, University of Nebraska. The research on feeding hens was reported at the 55th Flax Institute and to the Poultry Science Society. The research on feeding "flax eggs" to people will be reported to the 56th Flax Institute in 1996 and published in a journal related to human nutrition.

Also, flax is high in lignans and soluble fiber and is one of five plant products being studied in very large experiments concerning Designer Foods by the National Cancer Institute and Food & Drug Admin. for the next several years.

Mostly at home I have been doing some maintenance, helping an older neighbor, gardening, fishing, hunting, grafted 9 apple trees for Bidder's Bowl and special individuals, and attended Bidders Bowl in October. Also, we attend home games of Bison football and basketball, especially the Lady Bison, Div. II National Championships in 1994 and 1995, and 3 of the last 4 years.

Imogene, Imy to some of you, continues to work with several clubs, church women's groups, has retired playing the organ full time from church, still does the usual household duties from which women never retire, I guess, and many other activities. Imogene would like to travel more to some other countries and maybe we will get going on that soon. Probably we will travel to Baton Rouge, LA, in February. I'm sorry to

have missed the ASA Blizzard Party in St. Louis in November, 1995. Both of us had health problems this summer. A necessary operation for diverticulitis slowed me up for much of the summer and fall, and my wife had shingles disease in her ear which has upset her equilibrium for several months. I'm ok, but she still is bothered with poor balance.

Our family is much as described in 1994, only one year older. We have had several visits from all of our children this year. Some of you know our daughter Nancy. Her husband is with the State Department and now back in Washington, D.C., as "second person" at the "African desk". Nancy teaches English as second language. Their oldest son attends Virginia Poly, Blacksburg (Bob Harrison's location) and visits us often during "breaks". Their daughter Christine is a freshman at Harvard. In retrospect, many of you have influenced our work and lives favorably, and we yours, we hope. We hope to see you at the next Blizzard Party, ASA in 1996--one more at least, although I know only the older members now. Stop to see us as you may pass this way and best wishes for a **HAPPY AND HEALTHFUL 1996.**

Dr. and Mrs. Carter



**FOSTER'S
SUN-TIMES**

Greetings to all!

1995 had many changes for us. We purchased a condo unit in Sun City, AZ in February and sold our Fargo home in July. We plan to spend winters in AZ and summers at our lake cottage near Detroit Lakes, MN. Dividing up all of our accumulated possessions among two daughters, the lake cottage, Sun City, neighbors,

and Good Will organizations took a lot of time and travel. We traveled for fun to Florida, Maine, and California.

We really enjoy our time here in the Vally of the Sun, and don't miss the cold and snow. We see many Fargoans, including NDSU retirees, in the Sun City area. Men from the F-M area meet on Tuesdays for breakfast and women meet on Wednesdays. There is no lack of things to do here. Sun City has more organized and unorganized activities than you can imagine, plus numerous volunteer organizations. We have a large, very well equipped recreational center near our home, and we can get to any of seven golf courses in 10 minutes.

Those of you who were at NDSU more than 10 years ago may recall that I used to ride a bike to work. I have reverted to that type of transportation when not walking to nearby shopping centers, church, or rec. center. Most residents here use golf carts for short trips, as well as golfing, and we are looking into that mode of transportation instead of a second car.

We keep up with news from NDSU via the dept., It's Happening, and letters and phone calls from friends. We look forward to returning to the Fargo area in May, after the snow is gone.

We hope you all have a great 1996.

The Fosters

Happy New Year to everyone!!! It is still nice to know that Horticulture is still alive and kicking. I want to send my hearty congratulations to Dr. Chiwon Lee and Larry Chaput on receiving the Excellence in Teaching, Early Career Award and Professional Staff Award for Excellence, respectively.

Dr. E. Lana

PLANT SCIENCES FACULTY

A. A. Schneiter, Professor and Interim Chair

W. H. Ahrens, Assoc. Professor, Weed Science

J. A. Anderson, Asst. Professor, Wheat Germplasm Enhancement/Winter Wheat Breeding

R.G. Askew, Professor Emeritus, Extension Horticulture

D. R. Berglund, Professor, Extension, Row Crops and Specialty Crops

A.A. Boe, Professor Emeritus Vegetable Breeding/Tissue Culture

L. G. Campbell, Adjunct Professor, Research Geneticist, Sugarbeets (USDA)

P.M. Carr, Adjunct Professor, Sustainable Agriculture

J. F. Carter, Professor Emeritus, Flax Promotion

Z.M. Cheng, Asst. Professor, Woody Plants, Biotechnology

H. Z. Cross, Professor, Corn Breeding

G.D. Dahl, Extension Specialist, Pesticide Program

L. S. Dahleen, Adjunct Professor, Barley Biotechnology (USDA)

E. L. Deckard, Professor, Crop Physiology

A. G. Dexter, Professor, Extension, Weed Science, Sugarbeets

D. L. Doney, Adjunct Professor, Research Geneticist, Sugarbeets (USDA)

M. E. Duysen, Professor, Crop Physiology

D. C. Ebeltoft, Professor Emeritus, Seedstocks

E. M. Elias, Asst. Professor, Durum Wheat Breeding

A. E. Foster, Professor Emeritus, Barley Breeding

J. D. Franckowiak, Professor, Barley Breeding

R. C. Froberg, Professor, Wheat Breeding

D. S. Galitz, Professor, Crop Physiology

J. C. Gardner, Adjunct Professor, Crop Physiology

K. F. Grafton, Professor, Dry Bean Breeding

J. J. Hammond, Professor, Flax Breeding

J. L. Helm, Professor, Extension, Cereal Crops and Forages

T. C. Helms, Asst. Professor, Soybean Breeding

D.E. Herman, Professor, Woody Plants, Ornamentals

N. Holland, Professor Emeritus, Fruits, Woody Plants

R. D. Horsley, Assoc. Prof., Barley Breeding, Genetics

C. C. Jan, Adjunct Professor, Sunflower Cytogenetics (USDA)

P. P. Jauhar, Adjunct Professor, Wheat Cytogenetics (USDA)

R.H. Johansen, Professor Emeritus, Potato Breeding/Genetics

L. R. Joppa, Adjunct Professor, Res. Geneticist, Durum Genetics (USDA)

E.P. Lana, Professor Emeritus, Vegetable Crops

C.W. Lee, Assoc. Professor, Ornamentals, Turf, Biotechnology

J.H. Lorenzen, Asst. Professor, Potato Physiology

E.C. Lulai, Adjunct Professor, Potato Physiology (USDA)

H. R. Lund, Professor, Potato Breeding/Genetics

R. G. Lym, Professor, Weed Science

S. S. Maan, Professor, Wheat Cytogenetics

P. E. McClean, Assoc.
Professor, Molecular Genetics,
Dry Bean

M. S. McMullen, Assoc.
Professor, Oat Breeding

C. G. Messersmith, Professor,
Weed Science

D. W. Meyer, Professor, Forage
Crops

J. F. Miller, Adjunct Professor,
Res. Geneticist, Flax & Sunflower
Breeding (USDA)

J. D. Nalewaja, Professor,
Weed Science

D. C. Nelson, Professor Emeritus,
Potato Physiology

R. G. Novy, Assistant Professor,
Potato Breeding/Genetics

P.H. Orr, Adjunct Professor,
Potato Breeding (USDA)

E. W. Scholz, Professor Emeritus,
Vegetable Crops/Sugarbeet

G. J. Seiler, Adjunct Professor,
Sunflower and Sugarbeet
Germplasm (USDA)

R. H. Shimabukuro, Adjunct
Professor, Plant Physiologist
(USDA)

G. A. Smith, Adjunct Professor,
Sugarbeet Genetics (USDA)

G. S. Smith, Professor Emeritus,
Wheat Breeding

R. C. Smith, Professor, Extension
Horticulture and Turfgrass

J.R. Sowokinos, Adjunct
Professor, Potato Physiology
(USDA)

L. A. Spilde, Assoc. Professor,
Seedstocks

J.C. Suttle, Adjunct Professor,
Potato Physiology (USDA)

D. A. Whited, Professor,
Genetics Teaching

N. D. Williams, Adjunct
Professor, Research Geneticist
(USDA)

R. K. Zollinger, Asst. Professor,
Extension, Weed Control

RESEARCH ASSOCIATES

N. Balbyshev, Potato Physiology

J. J. Hanzel, Sunflower and
Crambe Breeding

F. A. Manthey, Weed Science

B. Moreno-Sevilla, Wheat
Breeding

C. A. Morton, Weed Science

M. Rivkin, Molecular Genetics,
Dry Bean

GRADUATE RESEARCH FELLOWS

Christopher Goblirsch, Barley
Breeding

Jim Harbour, Weed Science

Christopher Mayo, Weed Science

SECRETARIES

Sharon Ahrens, Admin. Sec. III

Shirley Bertsch, Admin. Sec. II

Eileen Buringrud, Admin. Ass't. I

Iris Flatland, Inf. Proc. Specialist

Janet Fleeker, Admin. Sec. II

Louise Heinz, Admin. Sec. II

Mary Jurjans, Admin. Sec. III

Linette Knoll, Admin. Sec II

Joann Kolnes, Account Tech. II

Patsy Smith, Admin. Sec. II

TECHNICIANS/RES. SPECIALISTS

Robert Baumann, oat breeding

David Birdsall, durum wheat
genetics, USDA

Kay Carlson, wheat cytogenetics

Larry Chaput, woody plants

Kathy Christianson, perennial
weeds

Mark Ciernia, weed control

Dennis Craig, perennial weeds

Steven Ellefson, barley breeding

James Faller, HRS wheat breeding

Bryce Farnsworth, potato breeding

Roger Genoch, barley breeding

Erick Grafstrom, weed control

Pete Gregoire, crop physiology

Justin Hegstad, wheat germplasm
enhancement

Jeffrey Huckle, HRS wheat
breeding

Burton Johnson, crop production

Gerald Johnson, HRW wheat
breeding

Michele Kistner, potato germplasm
enhancement

Daryl Klindworth, wheat
genetics, USDA

Abbas Lafta, potato physiology

Barb Laschkewitsch, vegetables
and perennials

Lyle Lindberg, flax breeding

John Luecke, sugarbeet weed
control

Josef Maianu, seedstocks

Larry Martin, soybean breeding

Mitch Montgomery, sunflower
/crambe breeding

Wayne Norby, forage crop
production

Don Pingree, seedstocks

Jeff Prischmann, biotechnology

Dale Rehder, sunflower
breeding, USDA

Ronald Roach, weed control

Wayne Sargent, molecular biology

Jeff Schnurr, woody plants,
biotechnology

Galen Schroeder, foundation
seedstocks

Mike Schwalbe, potato breeding

Stan Stancyk, durum breeding

Janet Stromberg, weed science

Myron Thoreson, potato breeding

Jody VanderWal, dry bean
breeding

Duane Wanner, corn breeding

Theja Wijetunga, crop physiology

**GRADUATE STUDENTS
IN PLANT SCIENCES,
NDSU-FALL, 1995**

FULL-TIME STUDENTS

Antonio Andre	AFGRAD
Bosela, Michael	Mozambique GRA (DOE/EPSCOR)
Bruns, Dain	GRA
Capps, Tony	GRA
Chee, Peng	GRA
Chicaiza, O.	Malaysia CIMMYT/ GRA, Ecuador
Dietrich, Michael	GRA
Fan, Yongyi	GRA China
Faris, Justin	GRA
Garcia, Gioconda	GRA Ecuador
Goblirsch, Chris	GRF
Gonzalez, Victor	CIMMYT Colombia
Green, Marci	GRA
Guo, Yonghong	GRA PRC
Haagenson, D.	GRA (Am. Crystal)
Hamed, K.	Self Egypt
Harbour, James	GRF
Heinze, Ann	GRA
Johnson, Shane	GRA
Jorgenson, Doug	GRA
Kapaun, Jim	GRA
Kleven, Thomas	GRA
Liu, YiQiang	PRC
Maruska, Dean	Hoechst- Roussel
Mayo, Chris	GRF
Mesfin, Asfaw	GRA Ethiopia
Miller, Brett	GRA
Nelson, Jeff	GRA

Pauli, Matt	GRA
Radi, Scott	GRA
Rai, Satish	GRA India
Ramsdale, B.	GRA
Rojas, Gonzalo	GRA Chile
Roman, H.	GRA Chile
Sandman, J.	GRA
Ujianto, L.	OCEF Indonesia
Warner, Jon	GRA
Welsh, Molly	GRA
Qin, M.	GRA PRC
Zamora-Diaz, M.	INIFAP Mexico
Zhou, Jing Kai	GRA PRC
Zhou, Peng	GRA PRC

PARTTIME-ACTIVE

Arneson, Jerry	Self
Bresnahan, Gail	GRA
Christianson, K.	Self
Kistner, Michele	Self
Laschkewitsch, B.	Self
Montgomery, Mitch	Self
Peterson, Terry	Self
Schwalbe, Mike	Self

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