IOWA SECTION MAA NEWSLETTER



VOLUME VII, NO.1 Edited by Donald V. Meyer October 1991

THE GOVERNOR'S REPORT: ANNE STEINER

The following is a brief report of the meeting of the Board of Governors in Orono, Maine, on August 7, 1991.

This was the first meeting presided over by our current president, Deborah Tepper Haimo. Debbie's style is quite different from that of our past president, Lida Barrett, and for the first time since I have attended the Board of Governor's meetings, we completed our business agenda within the allotted time frame (and with time to spare!).

An item of special interest to the sections is the new award for Distinguished College or University Teaching of Mathematics. The details of the award are found in the September issue of FOCUS. In the first stage of the award process, each of the twenty-nine Sections will select a recipient of the Section Award. The awardee will receive special recognition at the spring 1992 meeting. These awardees are then eligible for the national award.

For the first time ever, the proposed budget for the new fiscal year was available for approval at the summer meeting preceding the budget year. A new computing system is to be installed at the Washington office. The current system, which has been in place since 1980, is becoming progressively less adequate. The major remodeling to the MAA Headquarters is completed, and all the tenants save one are mathematical organizations, making the offices a true mathematical center in Washington, D.C. The Mathematical Center Fund has raised \$459,000 toward a goal of \$600,000. far, there have been very few donors from our section. The minimum donation requested is \$100, so as not to conflict with the Greater MAA Fund. There are some changes in the staffing of the MAA offices: Andy

Sterrett is returning to Ohio, Don Albers is a new full-time Associate Director for Publications and Programs, and Lynn Steen is spending 50% of his time at MSEB and MAA.

The editorship of the MONTHLY is passing from Herb Wilf to John Ewing, and Keith Devlin is the new editor of FOCUS. There is a new committee on AMS-MAA Cooperation, whose job will be to look for new ways the two organizations might work together and to strengthen the present interactions. The dichotomy of a research organization and a teaching organization will someday be an anomaly of the past, as more emphasis is placed on research at the undergraduate level and more emphasis is placed on teaching at the graduate level.

I wish to remind you of the winter meeting which will be held in Baltimore, MD, January 8-11, 1992. At this meeting various prizes of the MAA will be awarded, including the Certificate of Meritorious Service (none from our section this time), the Yueh-Gin Gung and Dr. Charles Y. Hu Award for Distinguished Service to Mathematics, and the Chauvenet Prize. I also might note that there will NOT be a summer meeting in 1992 because of the International Congress on Mathematical Education in Canada.

The upcoming Board of Governors meeting in January will be my last as Governor of the Iowa Section, and I wish to express my gratitude to those of you who elected me to this position. I have found it a very enjoyable and educational office.

SPRING MEETING ANNOUNCEMENT: RONALD SMITH

The spring meeting of the Iowa MAA will be held April 24 and 25, 1992 at Graceland College in Lamoni, Iowa. The featured speaker for the meetings will be Gerald Alexanderson. As usual, we plan to have student papers on Friday and professional papers on Saturday. We have worked out a special arrangement with Graceland College for housing that will be hard to beat. You can stay in a (double) dorm room for \$10.00 per person. (This price includes a \$5.00 charge for bedding. If you bring your own sleeping bag and pillow, the price is only \$5.00 for the night.) At this price, even students can afford to stay overnight! For those of you who prefer a motel, Lamoni has a very nice one called the Chief Lamoni, and a brand new Super 8 Motel is scheduled to be finished in early April. We will have more specific information in the Spring newsletter, but mark your calendars now, and encourage students to do the same.

SECRETARY'S REPORT: DAVE OAKLAND

Attendance at the spring meeting included 77 paid and at least 28 free registrations (students and speakers). Student paper awards (one-year membership or an MAA book) were presented to Robin Taylor and Michael Yanacheak of Drake, Kevin Dennis of Luther, and Paul Shimura of Maharishi International. Elgin Johnston reported from the summer 75th anniversary meeting and Anne Steiner presented the Governor's report. Johnston appointed a committee of Alex Kleiner (Drake), Lynn Olson (Wartburg) and Johnston (ISU-committee chair) to implement the new Distinguished Teaching

Awards started by the MAA. Jerold Mathews reported on the formation of the Iowa Mathematics Coalition. Dave Oakland presented the treasurer's report.

Ron Smith (Graceland) and Marv Pappenfuss (Loras) had been nominated for Chair-elect. Smith was elected. Luz DeAlba announced that she would not be continuing as Newsletter Editor since she planned to be on leave. No volunteers or nominations were immediately offered. [Don Meyer volunteered later, and his offer was gratefully accepted.]

Section treasury: Balance on October 15, 1991 was \$1391.27.

Current Officers:

Governor
Chair
Chair-elect
Chair-elect
Past-chair
Sec-treas.
Newsletter Editor
Student Chapter Coord.
AHSME Regional Coord.
Public Information Off.

Alex Kleiner (ISU)
Alex Kleiner (Drake)
Donald Meyar (Graceland)
Elgin Johnston (ISU)
Dave Oakland (Drake)
Donald Meyer (Central)
Catherine Gorini (MIU)
Robert M. Buckingham
George Trytten (Luther)

AWARDS FOR DISTINGUISHED COLLEGE OR UNIVERSITY TEACHING OF MATHEMATICS ELGIN JOHNSTON

Nominations for the first Iowa Sections Awards for Distinguished College or University Teaching of Mathematics will soon be solicited. The recipient of our Section's award will be honored at the April 1992 meeting of the Iowa Section, and will be the official Section candidate for the national MAA Award for Distinguished Teaching. Details will soon be sent to all Mathematics Department Chairs in Iowa, as well as to Departmental MAA representatives. Do you know of a teacher or colleague deserving of this award? If so, plan on nominating him/her. The Section Selection Committee for the Distinguished Teaching Award consists of Elgin Johnston (ISU), Alex Kleiner (Drake), and Lynn Olson (Wartburg).

NOMINATIONS FOR GOVERNOR: ALEX KLEINER

A nomination committee of Anita Solow, Grinnell (Chair), Elgin Johnston, ISU, and Don Meyer (Central) has been appointed to select candidates for a three year term as sectional governor. The new governor will succeed Ann Steiner when her term ends on June 30, 1992.

A nominee must have demonstrated interest in the Association, be able to attend the meetings of the Board of Governors of the Association and be able to serve as an active representative of the Section. If you would like to nominate yourself or any other member of the Section please contact a member of the nomination committee by mid-November.

The election will be in the form of a mail ballot by the National Office in early 1992.

CAMPUS NEWS

CENTRAL COLLEGE: Agnes Andreassian attended an NSF Faculty Enhancement Workshop on "Critical Thinking and Problem Solving in the Foundations of Computer Science" at SUNY at Stony Brook, Long Island, New York, June 17 - 28, 1991.

Al Hibbard attended a workshop on "Computer Algebra Systems as Teaching and Learning Tools" on July 21-26, 1991, at St. Olaf College, Northfield, Minnesota. Hibbard also attended a follow up conference on the previous summer's NSF workshop on "Computational Number Theory" on June 1, 1991, at the University of Wisconsin - Whitewater, Whitewater, Wisconsin.

Robert Franks was granted tenure during the academic year.

David Ewing accepted a teaching position in the Department of Mathematics at Central Missouri State University, Warrensburg, Missouri.

CLARKE COLLEGE: In August, Sisters James Marie Gross, PBVM and Carol Spiegel, BVM, attended Robert Devaney's course, "Chaotic Dynamical Systems," at the University of Minnesota-Duluth.

COE COLLEGE: Terry Hostetler is a newly appointed Assistant Professor of Computer Science. Hostetler previously held a position in industry in San Diego. He did his undergraduate work at Augustana College, Rock Island, Illinois, and his graduate work at the University of Illinois (MS) and California.

Charles Lindsay presented a series of lectures (ORDER AND CHAOS) during Coe's Thursday Forum Series last spring. The eight hours of presentation included some history and people of mathematics, some patterns of problem solving, some probability and statistics, and a bit about fractals and chaos.

Hyman Bass, mathematician and Phi Betta Kappa Visiting Scholar, will be Coe's guest on November 11 and 12, 1991. His general lecture on Tuesday at 11 a.m. will be on "The Mathematics of Nature and the Nature of Mathematics." Several other specific presentations will be made by Professor Bass during his stay at Coe. For details contact Professor Calvin Van Niewall at Coe College.

Coe had nine graduating majors in mathematics and sixteen in computer science this past academic year.

Coe is actively participating in the ACM/GLCA Calculus Project. Several Classes, calculus and pre-calculus, are making use of the TI-81 calculator.

DORDT COLLEGE: Four members of the Mathematics Department, Jongsma, Wielard, DeJong, and Veldkamp, attended the eighth meeting of the Association of Christians in Mathematics at Wheaton College, Wheaton, Illinois. Dr. Jongsma presented a paper, "Give Saxon the Axe."

Arnold Veldkamp attended an NSF sponsored workshop on computer assisted instruction at Messiah College in Grantham, PA. Presently he is using "Derive" in the teaching of calculus for business, life science and social science. Next year's plans include the use of derive in all the introductory calculus courses.

DRAKE UNIVERSITY: Luz DeAlba is on sabbatical leave during the 1991-92 year. She is spending the fall term at the Institute for Mathematics and Applications at the University of Minnesota and will be at The College of

William and Mary in the spring.

Patsy Fagan has received her Ph.D. from Iowa State University. Last Summer she conducted a mathematics education workshop in Koro, Palau.

Bernadette Baker received grants from Drake's Excellence in Teaching Fund and Addison-Wesley Publishing Company to implement the use of graphing calculators in service courses. As of this fall, all students in College Algebra are required to use TI graphing calculators in class and on exams. The startup activities for this implementation included a two day workshop conducted by John Diehl. This workshop was attended by Drake faculty and local area teachers and administrators. Plans are under way for a larger conference on the use of technology in the classroom.

David Oakland and Wayne Woodworth have been appointed to the Iowa Mathematics Coalition.

Alex Kleiner was named Thomas F. Sheenan Professor of Mathematics and Computer Science.

GRACELAND COLLEGE: Steve Murdock is on a year's leave to complete course work for the Ph.D. at the University of Iowa.

GRINNELL COLLEGE: The Mathematics Department Seminar this year is based on Problem Solving. The entire department is working on solving problems from Crux Mathematicorum and the Monthly. Last year 16 mathematics majors and 2 computer science majors graduated. (This was the first offering of a separate computer science major in the department.)

Grinnell has a Student Chapter of the MAA, a Math Journal Club, and a Putnam Problem-Solving Group. Last year's student team was declared Meritorious in the Mathematical Competition in Modeling. The department uses the computer in the classroom extensively, including in Calculus, Linear Algebra, Series, and Computer Science courses.

Two additions in the department are Pamela Ferguson, Professor of Mathematics and President of the College, and George Welch, Instructor in Mathematics.

Arnold Adelberg has been named the Myra Steele Professor of Mathematics.

Eugene Herman is Chair, Advisory Board of the Interactive Mathematical Text Project, and MAA project funded by IBM (\$2.4 million) and NSF. He has been named the Samuel R. and Marie-Louise Rosenthal Chair of Natural Science and Mathematics.

Charles Jepsen is currently Chair of the Faculty. Emily Moore is currently chair of the department.

Tom Moore is teaching a freshman tutorial called "Chance" that uses articles from the journal <u>Chance</u> (and other places) to motivate the importance of probability and statistics in life. This is part of a larger project he is working on with faculty from several other college and universities.

Anita Solow is still involved in an NSF-funded project on calculus reform. She is in charge of writing a book of labs for calculus, <u>Learning by Discovery</u>. The second edition was completed and contains 26 labs. She also graded AP Calculus exams last summer.

Henry Walker taught a programming languages course this past summer in the Computer Science Department at UT-Austin. He continues to be involved in reading the AP CS exams, and will be organizing workshops for high school AP CS instructors in Dallas in January, in cooperation with UT-Austin and with funding form Texas Instruments. He was Chair for Tutorials

and Workshops for SIGCSE '91 in San Antonio. His sixth book, "The Limits of Computing," is expected to be out early in 1992.

Royce Wolf collaborated with two Grinnell students, Kris Hauser and Mike Landsberg, on a ten week research project during the summer of 1991.

IOWA STATE UNIVERSITY, DEPARTMENT OF STATISTICS:

1. <u>Lecture Series</u>. The Statistical Laboratory has a seminar series of lectures which meets regularly on Wednesday at 4:00 p.m. when the university is in session.

2. Professional activities

Wayne Fuller was elected vice president of the American Statistical Association (ASA) for 1991-1993.

W. Robert Stephenson is vice president/president-elect of the Iowa chapter of the American Statistical Association for 1991-92. He will moderate the College Bowl at the ASA Winter Conference in Louisville, Kentucky, January 3-5, 1992.

Stephen B. Vardeman has been appointed to be editor of <u>Technometrics</u> starting in January 1991.

John Wiley & Sons has announced September 1991 publication of <u>Statistics for Spatial Data</u>, by Noel Cressie. This is a landmark textbook that "brings together material largely excluded from other literature, enabling statisticians and mathematicians to catch up with recent developments."

William Q. Meeker, Jr., is co-author, with Gerald J. Hahn of General Electric, of the book <u>Intervals: A Guide for Practitioners</u>, published by Wiley in August 1991.

The statistics faculty continue to be active in securing research grant funds as principal investigators and as coinvestigators, e.g., Alicia Carriquiry (National Institutes of Health), Noel Cressie (NSF), William Kennedy (NSF), Kenneth J. Koehler (National Cancer Institute), Soumendra Lahiri (NSF), Frederick Lorenz (National Institute of Mental Health). Contractual agreements with the U.S. Bureau of the Census, the U.S. Soil Conservation Service, the U.S. Bureau of Labor Statistics, U.S. Army Research Office, National Security Agency, and between the Center for Agricultural and Rural Development at ISU and the USDA Human Nutrition Information Service also support statistical research and collaborative research by Wayne Fuller, Roy Hickman, H. A. David, David Harville, Alicia Carriquiry, graduate students and staff.

3. Awards, honors, promotions, leaves, resignations, additions

Wayne A. Fuller received the 1991 Award for Excellence in Research from the College of Liberal Arts and Sciences.

Kathleen Shelley, specialist in the Statistical Computing Section of the Statistical Laboratory, and Mack C. Shelley II, professor of statistics and political science, won second place

in the 1991 Zenith Masters of Innovation competition, Liberal Arts and Sciences category. The award was given for developing a software system, combining data entry graphics and statistical modeling, for projecting presidential delegate counts for primaries and caucuses. The award consists of \$4,000 to the winners and a matching amount for their departments, both to be applied to purchase of Zenith equipment at an educational rate.

Noel Cressie remains on faculty improvement leave through the fall semester, primarily working at Stanford University.

Carl Roberts is on faculty improvement leave through August 31, 1992 to write a book on a theory of cognition. He has been awarded a foreign travel grant and is doing independent research in the Netherlands in the Hague.

Debapriya Sengupta and Stephen J. Haslett, who had been on leave, resigned effective December 31, 1990. Sengupta has been a visiting lecturer at the Indian Statistical Institute, Calcutta. Haslett remained at Victoria University of Wellington, New Zealand as research statistician and lecturer.

Donald Hotchkiss, after 30 years on the statistics faculty, began early retirement in December 1990 but continued teaching during spring 1991 on a temporary basis. He has been named professor emeritus.

Roy Hickman chose early retirement as of May 20, 1991, but is continuing supervision of the Statistical Laboratory Survey Section on a temporary basis until a replacement is found. He has been named professor emeritus.

Three new faculty members were appointed as assistant professors effective August 21, 1990. Mark S. Kaiser, formerly a mathematical statistician at the National Fisheries Contaminant Research Center in Columbia, Missouri, has a Ph.D. degree in statistics from the University of Missouri-Columbia and holds a joint appointment in the Department of Statistics (College of Liberal Arts and Sciences) and the statistics department of the Iowa Agriculture and Home Economics Experiment Station. Breidt's appointment will involve some work with the Survey Section of the Statistical Laboratory. He recently completed a Ph.D. degree at Colorado State University. Peter Sherman received a Ph.D. degree in mechanical engineering at the University of Wisconsin-Madison in 1984 and had been at Purdue University since then. He has a joint appointment in the Department of Statistics and the Department of Aerospace Engineering and Engineering Mechanics.

J. Peter Jones is a visiting professor for the 1991-92 academic year while on sabbatical leave from the Department of Chemical Engineering, Universite de Sherbrooke, Quebec, Canada.

4. Student Information

The Department of Statistics/Eli Lilly Company Scholarship has been established for an outstanding entering freshman student majoring in statistics. The first award, of \$1,000 for the first year of study at ISU, was made to Gregory Kinser of Emerson, Iowa, for 1991-92.

A Vera David Fellowship in Statistics is being set up at ISU to help support an outstanding female graduate student.

An exchange program with Dortmund University, Dortmund, Germany, brought four statistics graduate students here for the 1990-91 academic year. This fall three more students have come here and one student has gone from ISU to Dortmund. Preliminary contacts leading to the exchange program were made by Noel Cressie and Paul Hinz in their visits to Germany and by Franz Hering in his visits to ISU.

In the 1990-91 fiscal year, 11 students received B.S. degrees in statistics and one received a B.S. degree in biometry. There were 175 graduate students in statistics at ISU in that period. Thirty-three received M.S. degrees (including one in operations research) and 12, Ph.D. degrees (including two with co-majors--in statistics and economics and in statistics and professional studies in education, respectively).

Philip Iversen, a Ph.D. candidate in statistics at ISU, was a semifinalist in the Zenith 1991 Masters of Innovation Contest's Business category.

ISU graduate student Morgan Wang won the first prize award for Best Student Statistics Paper Presentation sponsored by the Iowa chapter of the American Statistical Association at its spring 1991 meeting with the Iowa section of the Mathematics Association of America. For the third year, an ISU statistics team won the annual Data Analysis Competition sponsored by the ASA chapter and open to teams of graduate students in Iowa. The winning team members were Jingyu Liu, Rochelle Milbrath, James Robison-Cox, and Alan Zimmermann.

ISU Graduate College Teaching Excellence Awards were given to Barbara Dombroski and Shelly Gregory in December 1990, to Karen Drinkwater in May 1991, and to Brian Lindstrom in July 1991, recognizing outstanding contributions in the teaching of undergraduate students while working toward degrees. A Graduate College Research Excellence Award was given to Scott Vander Wiel in the spring, recognizing research accomplishments demonstrated by completion of an outstanding dissertation. The Department of Statistics presented its Dan Mowrey Consulting Excellence Awards to Barbara Worth and Ann Russey last spring.

Todd Sanger served as president of the ISU Graduate Student Senate for the 1990-91 year. Abdoulaye Adam served as president of the African Students Association. He received the 1991 George W. Snedecor Award as the most outstanding Ph.D. candidate in the Department of Statistics among students completing the doctoral preliminary examination during 1990.

Iowa STAT-ers, the graduate student organization, sponsored a biweekly seminar series this past year that included talks by local students and faculty and by visitors from Shell Oil Company, Scripps Institution of Oceanography, Dow Chemical USA, Virginia Polytechnic Institute and State University, the University of Southern Louisiana, Merck and Co., IBM, and Mayo Clinic. The Iowa STAT-ers also organized social functions and explored the intramural sports scene, winning championships in basketball, broomball, golf, badminton, racquetball, tennis, soccer, and wallyball. Their music group, the STAT-er Clatter, gave several performances. Similar activities continue this year.

The undergraduate Statistics Club sponsors social, academic, and career-related events throughout the year. These included a visit to IBM in Rochester, Minnesota, in April 1991.

LORAS COLLEGE:

- 1. Larry Hart retired from teaching after 38 years of service. Not only was he a dedicated professor of mathematics here at Loras during these many years, but he was also very active in the MAA as well. Included in his MAA activities were a term as chairman elect and chairman during the years 1974-76.
- 2. Dennis Risher was promoted to associate professor and Tan Tran was granted tenure.
- 3. Last year we had 5 mathematics majors and 3 computer science majors graduate from Loras.
- 4. This year we anticipate that 6 mathematics majors and 6 computer science majors will graduate.
- 5. Our visiting high school lecture program continues to operate. During the year 25 talks were given to 550 students and 30 faculty throughout the tri-state area.
- 6. Our student MAA chapter remains active and was represented at the MAA summer meeting in Columbus, Ohio as well as at the 1990 Nobel Conference at Gustavus Adolphus College.
- 7. Our student ACM chapter participated in a regional programming contest.
- 8. Don Marxen and Steve Mosiman attended an NSF Chautauqua short course and summer workshop.
- 9. John Friedell, Harriet Holles, Don Marxen, and Larry Zettel recently attended the conference on technology at St. Ambrose University.
- 10. Marvin Papenfuss coached a team of three students in the national mathematical competition in modeling.
- 11. Don Marxen and Marlene Pinzka taught a new course in the History of Mathematics.
- 12. Brenda Tuomi Litka is organizing a math camp for junior high school girls for the summer of 1992.
- 13. Our calculus I classes now include biweekly computer laboratories where students use various software packages to assist the learning of calculus concepts.

LUTHER COLLEGE:

- a. Donald Pilgrim took early retirement in May and moved to Bella Vista, Arkansas. During his last sabbatical, he spent 6 months in Bella Vista, which has more golf courses than Elizabeth Taylor has had husbands, and is a half-hour's drive from Fayetteville, home of the University of Arkansas. The university has a fine mathematics department with an active group in algebra, specifically inverse semigroup theory. Don has re-established contact with them and continues his research.
- b. Dr. Steve Schlicker returned to his native Michigan. He accepted a position with Grand Valley State College.
- c. We have hired Richard Bernatz, who this May received his Ph.D. from the University of lowa. He did his dissertation research under C. J. Chen of the Department of Applied Mathematical Sciences. In 1980, Bernatz earned an M.S. in meteorology from lowa State. He taught mathematics for Luther from 1982 to 1985, when he chose graduate studies in mathematics, this time at lowa.
- d. Gordon Bril is enjoying a semester's sabbatical leave here in Decorah, doing a statistical analysis of hurricane patterns. Filling in for him for the semester is Ms. Carolyn Chapel, who was awarded her master's degree in mathematics in May from Washington State University.
- e. Walter Will has returned to the department after a year's sabbatical leave at California Polytechnic Institute, San Luis Obispo.
- f. Joyce Becker has been appointed to represent private four-year colleges in lowa on the lowa Board of Regents Committee on Early Mathematics Prognostic Testing (EMPT).
- g. As a lot of departments are doing, we continue developing computer lab support for our calculus courses. We are using—and modifying—a selection of programs written in <u>True Basic</u> at Dartmouth College. For the most part, the aim of the labs is to deepen the understanding of the concepts, not just to illustrate the use of methods.

MOUNT ST. CLARE COLLEGE: Brenda Metzger has been taking courses at Marycrest College in order to complete an MS in education with an emphasis in computing. She completed a course this summer on computer applications in education and is infusing this material into her "Mathematics for Educators" course.

Mount St.Clare has approved several areas of emphasis for its baccalaureate degree in liberal arts. Students can now receive a bachelor of arts degree in liberal arts with an emphasis in mathematics. This program provides an interesting blending of technical concentration within the liberal arts framework.

NORTH IOWA AREA COMMUNITY COLLEGE: Dave Clayton attended the AMATYC sponsored summer institute on "Computers for the Mathematics Classroom and Computer Literacy." The institute was held at Charleston, South Carolina.

NIACC will host the fall meeting of the Iowa Association of Two-Year Colleges. The meeting is November 15th at the Muse-Norris Center on the NIACC campus in Mason City. Eric Hart from MIU, Bruce Wagner from ISU, and David Duncan from UNI will make presentations at the meeting.

UNIVERSITY OF IOWA, Department of Statistics and Actuarial Science:

George Box (Univ. of Wisconsin) will be an Ida Beam lecturer sometime this spring (probably in April).

Purushottam Laud (University of Northern Illinois) will give a colloquium Nov. 14 (MacLean Hall, University of Iowa)

Bob Hogg is in charge of the American Statistical Association Winter Meetings to be held in Louisville, Jan 3-5, 1992.

Richard Dykstra and Jim Calvin awarded two year NSF grant to study variance components.

Kung-Sik Chan awarded NSF grant to work on time series.

Tim Robertson is Eugene Lucacs Professor at Bowling Green this year and will host conference there March 26-28, 1992.

Faculty New arrivals: Elias Shiu from University of Manitoba (actuarial science) Kung-Sik Chan from University of Chicago (non-linear time series) and Martin Appel from Johns Hopkins (percolation theory).

Faculty Departures: Jim Calvin (Texas A&M), Mark Conaway (Duke), Joseph Pignatiello (Texas A&M) and Joseph Sedransk (SUNY, Albany).

Hannes Ledolter was made a Fellow of the American Statistical Association this August in Atlanta.

Numbers of Graduates:

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Summer 1991:
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PhD 1 (statistics)

MS 3 (1 stat 2 act sci)

BS 6 (1 stat 5 act sci)

Spring 1991

PhD 1 (stat)

MS 18 (6 stat 11 act sci 1 qual manag and prod)

BS 17 (3 stat 14 act sci)

Fall 1990

PhD 1 (stat)

MS 5 (1 stat 3 act sci 1 qual manag and prod)

BS 12 (3 stat 9 act sci)

Current number of graduate students 118 (61 stat 46 act sci 11 quality M&P)

UNIVERSITY OF NORTHERN IOWA:

Hyo Myung was a speaker at the Second International Conference on Algebra in Barnaul, Siberia, USSR; at the 1991 Summer Symposium on Sciences and Technology in Seoul, Korea; and at the Daewoo Mathematics Workshop and Mathematics Seminar at Seoul National University.

Russ Campbell attended the annual meeting of SSE (Society for the Study of Evolution), Evolution '91, in Hawaii.

Greg Dotseth and Augusta Schurrer attended a Chaotic Dynamical System workshop in Duluth.

Mathematics Education Standards

Bonnie Litwiller, Ed Rathmell, Diane Thiessen, Paul Trafton, and Jack Wilkinson have all been instrumental in setting the standards developed by the National Council of Teachers of Mathematics.

New Faculty

Joel Haack is the new Department Head for the Mathematics and Computer Science Department. He is from Oklahoma State. Paul Trafton is Professor of Mathematics Education and Fellow in the Regent's Center for Early Developmental Education. Mahmoud Pegah has returned from leave.

Min Lee has been given tenure and has been promoted to Associate Professor of Mathematics.

Syed Kirmani has been promoted to Professor of Mathematics.

Mark Fienup is on leave.

Russ Campbell is the Associate Editor for 1991-1993 of "Theatrical Population Biology".

Joel Haack is the Associate Editor of Humanistic Mathematics Newsletter.

The Mathematics and Computer Science Departments will move back into a renovated Wright Hall for Spring semester. Some changes include: a computer lab to be available for classroom instruction and classrooms networked with faculty offices.

WARTBURG COLLEGE:

- Our Department has weekly seminars on a topic which currently is parallel processing but we have no lecture series of general interest.
- a. Josef Breutzmann, Lynn Olson, Chris Schmidt and Bill Slough attended the Nobel Conference on the topic "Chaos" held at Gustavus Adolphus College, October 2-3, 1990.
 - b. Chris Schmidt participated in a workshop on "Computers on Campus" in South Carolina, November 11-14. He also attended the ASCUE annual meeting in South Carolina, June 9-13.

- c. Augie Waltmann attended the ICTM meeting held in Des Moines, February 7-8.
- d. Josef Breutzmann, Lynn Olson and Bill Slough attended the Small College Computing Symposium held at the University of Minnesota Morris in late April.
- e. Dr. Bill Slough participated in a Faculty Enrichment Workshop sponsored by NSF on the topic "Critical Thinking and Problem Solving in the Foundation of Computer Science" held at SUNY at Stony Brook, June 17-28. He also participated in a similarly sponsored workshop on the topic "Algorithm Visualization in Computer Science Laboratories" held at Lawrence University, August 6-10. Dr. Slough is co-author of a research paper entitled, "On Limitations of Transformations Between Combinatorial Problems" to be published in the journal on Mathematical Systems Theory.
- f. Josef Breutzmann attended the IEEE Conference on "Structure in Complexity Theory" held at Chicago, June 30 July 3.
- g. Lynn Olson and Bill Waltmann participated in the Eighth Biennial Summer Seminar sponsored by the North Central Section of MAA on the topic "Chaotic Dynamical Systems" held at the University of Minnesota - Duluth, August 12-16.
- h. Glenn Fenneman and Augie Waltmann attended the ICTM and UNI sponsored Math Conference on September 20 where Glenn presented a paper entitled, "In-Class Probability Simulations".
- 3. a. Josef Breutzmann completed a 1990-91 academic year sabbatical leave to work towards a Ph.D. in computer science at Iowa State University.
 - b. Augie Waltmann has a Fall Term 1991 sabbatical leave to improve his preparation to teach the preservice elementary teachers in the mathematics content area at Wartburg College.
 - c. Chris Schmidt has a Winter/May Term sabbatical leave in order to study recent improvements in computer hardware and software to advance his research in computer modeling.
 - d. Daryl Bruflodt has been hired as an instructor in mathematics.
- 4. a. The number of graduating seniors (1990-91) in math 17, in stat 0, in CS and CIS 14 (7 double majors within Dept. of MA/CS and 5 doubles with second major in another department. 28 total persons majored in MA/CS Dept.).
 - b. No graduate program.

- c. We have the Iowa Delta Chapter of Kappa Mu Epsilon national mathematics honor society (29 were intitiated last March) and an organization called "Missing Bytes" for computer science students. The latter organization is in the process of organizing a local student chapter of ACM.
- 5. Lynn Olson is using Mathematica in three or four of the math classes he teaches.

FROM THE EDITOR: DONALD MEYER

Thank you to those of you who took time to send in campus news. I think it is interesting for us to share what is going on at the various campuses and within our mathematical community. I received answers from about one-third of the letters that I sent, so we could do better. I hope that more of you will respond next year. I took the liberty to reprint some of the copy in the form it was sent to me. I hope that was O.K. It saved some typing.

We added a questionnaire at the end of the newsletter regarding the possibility of offering a mini-course at our annual spring meeting. I discussed this with Ronald Smith by phone, and several of us visited about it earlier. If this interests you, send your response to Ronald Smith at Graceland College.

HOW ABOUT A MINI-COURSE?

Question: Would you be interested in having a mini-course offered at our annual spring meeting? We are thinking of one similar to those offered at the national meetings. In the past some of our Iowa people have given these courses at the national meetings.

If your are interested, tear of and send it to Ronald Smith	Ef the response form below, fill it out,
RESPONSE	
Yes, I might be interested in attending a mini-course at our annual spring meeting, either in 1992 or a later year.	
Suggested topic(s):	
Suggested speaker(s) (including yourself?):	
Thu Fou	urs. aft., Thurs. eve. and Fri. morn. urs. eve and Fri. morn. ur hours on Fri. ner:

Signed:

Send to Professor Ronald Smith, Graceland College, Lamoni, IA. 50140.