

Volume 7

Fall 2002

Number 1

The Fall meeting of the Ohio Section of the MAA will be held at Kent State University - Trumbull Campus in Warren, Ohio. The meeting starts at 1:30 pm Friday and continues through 1 pm Saturday. It will be held in conjunction with the Fall meeting of

Underwood Dudley of Depauw University starts off with "Why Teach Mathematics." Woody is the editor of the MAA's College Mathematics Journal. He will also talk after dinner on

Danny Otero of Xavier will talk on "Henry Briggs' Arithmetica Logarithmica (1624)" on Friday and "Teaching Mathematics Through Its History and/or Original Sources" on Saturday. Also on Saturday Al Stickney of Wittenberg will give the teaching award talk on "Mathematics Viewed as an Experimental Science." A panel discussion sponsored by CONCUR on Intern-

Fall Meeting at Kent State - Trumbull Campus October 25 - 26

OhioMATYC.

"Calculus Books."



Technology Building - KSU Trumbull

Section Teaching Award

Professor C. David Minda of the Department of Mathematical Sciences at the Univer-



sity of Cincinnati is the eleventh recipient of the prestigious Mathematics Teaching Award given to a college or university faculty member from the Ohio Section.

The Teaching Award is bestowed on faculty who are widely recognized as successful teachers, have an influence in their teaching of mathematics beyond their own institutions and foster curiosity and excitement about mathematics in their students. Minda's nominators and colleagues at University of Cincinnati noted that these requirements were certainly well met.

Minda earned both his bachelor's and master's degrees in mathematics from the University of Cincinnati and his PhD from the University of California at San Diego. He began his teaching career at the University of Minnesota before return-

ing to spend the remainder of his career in Ohio. During this time he has devoted himself to teaching undergraduate as well as graduate students, and especially to the training of future and in-service teachers. In the ensuing years, a myriad of students have had him

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Inside Fall Meeting Details Governor's Report President's Column Ohio Section Activities Campus News Cliff Long 1931 - 2002 Calender of Events

(continued on page 3)

Time goes fast! The July 31 meeting of the Board of Governors in Burlington, VT was the penultimate meeting in my three-year term as the Ohio Section Governor. This fall, as specified by our Section by-laws,

the committee of officers of our Section, consisting of our President, Past-President, President-Elect, Secretary-Treasurer, and Governor, will choose two candidates for Section Governor. Then, the national MAA office will conduct elections next spring, and my successor will begin his or her duties next summer. Compared to being Section President or Program Chair, I assure you that being

Section Governor is a sinecure, so if asked to run, please do so.

The MAA presents Certificates of Meritorious Service for service to the MAA at its January meetings. The first such awards were made in 1984. Every Section can make one nomination for the award every five years. Ohio recipients for the award have been: Will Hahn in 1984, Andy Sterrett in 1989, Cliff Long in 1994, and Dave Kullman in 1999. The Ohio Section needs to submit its nomination by this coming May for the award to be presented at the January 2004 award in Phoenix. The Section President and I will convene a small committee to select our Section's nominee, so if you would like to suggest someone whom you feel deserves this award, please mail or email your suggestion to either Harold Putt or to Leo Schneider by Friday October 18, a week before our Fall meeting.

MathFest held in Burlington, VT on August 1-3 was a superb meeting in a beautiful setting. If you were there, you know that; if you missed it, it is your loss. Don't miss next summer in Boulder! The rest of this report will be on items from the 8-hour Section Governors' meeting that I think might be of interest.

Locations for two more winter meetings were approved. These are the future MAA winter and summer meeting sites and dates approved so far: Baltimore, MD, January 15-18, 2003; Boulder, CO, July 31-August 2, 2003; Phoenix, AZ, January 7-10, 2004; Providence, RI, August 12-14, 2004; Atlanta, GA, January 5-8, 2005; Albuquerque, NM, August 4-6, 2005; San Antonio, TX, January 12-15, 2006; New Orleans, LA, January 4-7, 2007; San Di-

Section Governor's Report

ego, CA, January 6-9, 2008; Washington, DC, January 7-10, 2009. Jim Tattersall is our MAA Associate Secretary who works on selecting these sites, and he does a tremendous job!

The new national MAA Treasurer is John Kenelly, and he did a great job in writing reports to explain the finances of the MAA, including `blips' or `bubbles' that in the long run smoothed themselves out, such as the delay in renewals and dues collections after 9/11/02, special grants received, and shifting alignments of costs. I am convinced that the MAA is healthy on the national level ex-

cept for one of John's concerns that I share: A long-standing organization should have an endowment or reserve fund equal to its annual income and outgo, and the MAA only has about 2/3 of a year set aside. John is a visiting mathematician to the MAA office this year, and I am sure we will be receiving letters from him in his beggar's mode related to this situation.

In light of criticisms of Boards of Directors of failed and failing commercial enterprises, the MAA auditors wanted to make sure the MAA Board of Governors was very aware of the financial responsibilities of the board of a not-for-profit organization. On the heels of this, we learned that for many years we have been in violation of Robert's Rules of Order in giving substitute governors a proxy vote during board meetings. From now on, if our Section Governor cannot make a meeting of the Board of Governors, (s)he will be encouraged to seek an informed replacement to attend the board meeting. The replacement will be able to enter all discussions during the meeting. The only thing the replacement will not be able to do is to vote.

The MAA Board of Governors consists of about 50 members, slightly over half of whom represent Sections of the MAA as I do. The remaining Governors are various national officers of the MAA and certain Governors-at-Large representing special subsets of our members who might not otherwise be represented. MAA Secretary Martha Siegel announced that two of these Governor-at-Large positions will be expiring, and she is looking for a slate of possible replacement candidates by November 1. One of these Governors-at-Large will represent `Mathematicians Outside Academia' and the other those interested in Teacher Education. If you might be interested or know someone else who would also be a good candidate, please let me [Leo@jcu.edu] know and I will pass the information along to Martha.

The MAA is sponsoring "Travel with the MAA to Greece on a Mathematical Study Tour", May 22 to June 5, 2003. Stops to be explored will include Delphi, famous for its Oracle; Samos (as in Pythagoras of Samos); Miletus, the birthplace of Thales; and the Mathematics Department of the University of Athens. Details will be available from Lisa Kolbe [LKolbe@maa.org] in September. The trip is limited to 30 travelers, and they expect it to fill quickly.

The MAA has published 12 exciting new books since my last report in January, and they have 9 more currently in production. In the writing stage is a book by our own Joe Kennedy from Miami University. It will include the problems and solutions from the MAA's contest directed toward 7th and 8th grade students. Joe chaired the committee that writes that examination for the better part of a decade. Rather than list all the MAA's new books here, I will let you check www.maa.org. Better yet, fondle the books gently and purchase them at a discount at our fall section meeting October 25-26 near Warren, OH.

PREP = Professional Enhancement Programs. These are NSF-funded workshops to give college teachers additional expertise in some area. Of the 7 mentioned at the Board of Governor's meeting, the one I was most sorry that I had to miss was "Presenting Mathematical Masterpieces" by Mike Starbird and Ed Burger. Be sure to keep checking www.maa.org for updates on this year's PREP programs; some preliminary information should also appear in our next national MAA Focus.

The International Mathematical Olympiad was over just a couple days before our Board of Governors' meeting, so the announcement at the meeting was fresh: This year the USA placed third in the world with China placing first and Russia placing second. Four of the six students on the USA team received Gold Medals, one received a Silver Medal, and one received an Honorable Mention. Check www.unl.edu/amc for details which I hope will be posted momentarily.

The MAA is looking into electronic voting for its national elections. Next spring's elections might be electronic, but

will probably be the last using a paper ballot.

Some recent CBMS surveys contain alarming statistics. In response, the Board of Governors passed two resolutions:

We recommend that mathematics programs not run counter to the MAA Departmental Guideline concerning over-reliance on part-time faculty. In case you don't have these Guidelines memorized, the easiest access to them is by a search for `Guidelines for Programs' at www.maa.org. Courses taught for `dual enrollment' both in high school and in college by high school faculty in the high schools are getting out of control, so the Board of Governors passed a resolution recommending that mathematics departments awarding credit for dual enrollment courses give close supervision to the choice of text, syllabus, final exam, and choice of instructor to assure that the quality of these courses meets or exceeds that of courses they proudly offer on their own campuses. Of course, the Advanced Placement examinations in calculus, statistics, and computer science should remain the standard way in which high school students request college credit for work done in high school.

Due to parallel commitments with the Pi Mu Epsilon Council, I was not able to attend the Section Officers' meeting at MathFest, but Bill Friel and Harold Putt attended to represent the Ohio Section. I am sure that in his President's column, Harold will mention anything he sees as significant on the national level that I have overlooked.

> Leo Schneider - JCU [LEO@JCU.EDU]

(*Fall Meeting - continued from page 1*) ships is scheduled for Saturday.

A contributed paper session is planned for Friday. Get your talk ready to share.

A major part of all such meetings is to meet and greet your colleagues. Ample time is scheduled for breaks to do that and to browse the exhibits, especially the MAA Book Sale Table --at which you can get a discount, and the Section earns a commission. There is a banquet Friday evening followed by Dudley's after dinner talk. See pages 8 - 11 for details. Greetings everyone! I hope that you have had an enjoyable summer and a smooth beginning to the fall term and that you are looking forward to an interesting and productive year for the Ohio Section of the MAA. I know that I am.

This year our fall meeting is at the Kent State University - Trumbull Campus in Warren, OH. It will be a joint meeting with OhioMATYC. The MAA meeting format will be followed with OhioMATYC programs running concurrently with some MAA sessions. The Program Committee (chaired by

Sherri Brugh) has arranged for a very interesting meeting. Invited speakers are Underwood Dudley of Depauw University and Danny Otero of Xavier University. Al Stickney of Wittenberg University will give the teaching award talk. A panel discussion sponsored by CONCUR on Co-Op Programs has also been scheduled. Sherri and her committee deserve many thanks for their fine work. I would also like to thank Mary Ann Hovis (OhioMATYC liaison to OhioMAA) for her part in structuring the OhioMATYC meeting events so as to coordinate with our meeting format.

On July 20, 2002, the Executive Committee held its summer planning meeting at the Ohio Northern University Conference Center. The meeting included reports from section committees, announcements concerning future section meetings, and discussion of the 2002-03 section budget and several other issues. It was noted that the Ohio Section Summer Short Course on game theory given at the University of Dayton by Phil Straffin of Beloit College was highly successful. The Treasurer's report showed that the Section is in good shape financially. Future meetings are planned for The Ohio State University (Spring 2003), Ohio Northern University (Fall 2003), and John Carroll University (Fall 2004). As I write, plans have not been finalized concerning the location of our Spring 2004 meeting. Other issues raised at the meeting were the possibility of splitting the office of Secretary-Treasurer into two offices and our need for nominees for Section Governor. Finally the Executive Committee in consultation with Mary Ann Hovis, the OhioMATYC liaison to the Section, decided to discontinue the practice of holding fall meetings jointly with OhioMATYC on an every other year

basis. This does not mean that we will discontinue cooperation with OhioMATYC nor does it mean that we will never again hold a joint meeting. It simply ends the practice of have a joint meeting every other fall.

Bill Friel and I represented the Ohio Section at the Section Officer's Meeting at the MathFest in Burlington, VT on August 1. At this session

we heard that grant money is still available for section NExT activities, that a new Project NExT type program for two-year college faculty is being developed jointly by MAA and AMATYC, and that a mathematics/history study tour of Greece is being planned for May-June 2003. Details concerning the tour of Greece are available via the web at MAA.org. Joint meetings with other organizations, section websites, electronic newsletters, and the use of substitutes at Section Governor's meetings were among the other items discussed.

Burlington was a lovely place to hold a summer meeting. All of the sessions that I saw were very good and very well attended. If you missed this one, start thinking now about attending next summer's MathFest in Boulder. I'm sure it will be just as enjoyable.

Take care and I hope to see you on October 25 - 26 at KSU-Trumbull.

Harold Putt - ONU

Harold Putt did his graduate work at Bowling Green State University where he wrote his dissertation on ordered permutation groups under the direction of W. Charles Holland. He has been a member of the MAA and the Ohio Section since 1973. Over the years he has served as President-Elect, on the Program Committee (the third year as chair), CONCUR (two terms, one year as chair), CONTEAC, and CONSACT.

(The Editors)



President's Column

2002 - 2003 Ohio Section Officers and Committees

ELECTED OFFICERS

President Harold Putt, Ohio Northern 419-772-2352; h-putt@onu.edu

President-Elect Dale Mugler, Akron 330-972-5365; dmugler@uakron.edu

Past-President Thomas Gantner, Dayton 937-837-1152; gantner@udayton.edu

Section Governor Leo Schneider, John Carroll 2003 216-397-4481; leo@jcu.edu

Secretary-Treasurer J. William Friel, Dayton 2003 937-229-3071; friel@udayton.edu

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Technology Conference Coordinator Al Stickney, Wittenberg 937-327-7856 astickney@wittenberg.edu

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COMMITTEES

* Denotes committee chair. Elected Officers and Committee Chairs are voting members of the Executive Committee. Terms expire at the end of the Spring meeting of the year listed. See the Bylaws.

Program Committee	
*Sherri Brugh, Mount Union	2003
Carl Spitznagel, John Carroll	2004
Vickie Van Dresar, Ashland	2005

Committee on Curriculum (CONCUR)* Mark deSaint-Rat, Miami Mdtwn2004David Hahn, Malone2003Charles Hampton, Wooster2003Rajappa K. Asthagiri, Miami2004Jon Stadler, Capital2004Christopher Swanson, Ashland2004

Committee on Section Activities(CONSACT)*Donald Hunt, Ohio Northern2004Irina Chernikova, Akron2004Ann Ritchey, Mt. Union2004Maria Raiti, Ohio Northern2005Lisa Rome,2005

Committee on Student Members(CONSTUM)*Judith Holdener, Kenyon2003Gordon Swain, Ashland2003Deborah Denvir, Marshall2004Darren Wick, Ashland2004

Committee on Teacher Education and
Certification (CONTEAC)*Cathy Stoffer, Ashland2004John Prather, OSU-Eastern2005Woody Silliman, Cleveland St.2003Linda Saliga, Akron2003Phil Blau, Shawnee State2004

OTHER COMMITTEES

* denotes committee chair.

Nominating Committee*Judith Palagallo, Akron2005Roger Marty, Cleveland St.2003Leo Schneider, John Carroll2003

Committee on Contests Bill Higgins, Wittenberg AMC8 David Stenson, John Carroll AMC12

ByLaws Committee Darrell Horwath,John Carroll J. William Friel, Dayton

Teaching Award Committee Tom Gantner, Dayton (PP) J. William Friel, Dayton (ST) Jerry Moreno, John Carroll Aparna Higgins, Dayton

Local arrangments for meetings:

Fall 2002 Kent State, Trumbull Vic Perera 330-675-8813; pererav@trumbull.kent.edu

Spring 2003 Ohio State Phil Huneke 614-292-7844; huneke@math.ohio-state.edu

Fall 2003 Ohio Northern Harold Putt 419-772-2352; h-putt@onu.edu

OHIO FOCUS

The newsletter of the Ohio Section of the American Mathematical Association is published twice yearly

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Deadline for the next newsletter is **February 7, 2003** This information will also be posted and updated on the web page www.maa.org/Ohio

(Minda - continued from page 1)

as their professor. Many have gone on to careers in education themselves. His students invariably describe him as energetic and creative, bringing in numerous interesting examples to assist them in catching his enthusiasm for mathematics. In 1992, he pioneered a cooperative learning course for minority engineering students at his university. The results were impressive with grades improving 27% and with 67% of the students earning and A or B. His success led to the adoption of this program by the College of Engineering for all of their at-risk freshmen. Now this course is offered to all calculus students. An engineering dean summarized, "His openness to this new idea and his courage to act on it have positively impacted the lives of hundreds of engineering students." One of the students wrote, "He explains things so well, the material is almost common sense. Lobby Congress to give an exemption from the ban on cloning, and produce more of him. We definitely need more teachers like him on this campus -- demanding of us and equally demanding of himself."

Minda's impact on the high school mathematics teachers of his region of Ohio and beyond can be demonstrated with two examples. He was instrumental in developing the curriculum and policies for a Master of Arts for Teachers of Mathematics program for certified secondary school teachers that has become a model for such programs. The high school teachers he has worked with cite him as a powerful role model for their own teaching. For instance, they stated:

"I learned to really explain mathematics. I feel much more equipped to help my students learn the art of proof-writing and learning mathematics, in general."

"I appreciate the rigor, detail and depth you have required in my mathematical thought. I have grown tremendously in this area. I know I can't help but pass this on to my students."

"Ideas and concepts were presented precisely and clearly in a variety of ways: lectures and written theorems for the auditory learner, diagrams and visual aids for the visual learner, and hands-on manipulatives for the tactile learner."

Since 1997, he (and a colleague) have conducted an NSF-funded Institute for Advanced Study/Park City Mathematics Institute program for high school geometry teachers. Through this institute, they have developed a group of internationally-recognized high school teachers of geometry who are reforming the teaching of geometry in their own classrooms. With high mathematical standards, they are nurturing teachers to excel. Minda has demonstrated a commitment to developing excellent mathematics teachers for the future. A young colleague, now a professor at Penn State University and a Project NExT Fellow, states, "He is undoubtedly the best professor I have ever had. Because of his influence, particularly his teaching, I became a teacher myself." In addition to his recognition as a teacher, he has 25 years of NSF funded research, and he has published approximately 80 papers in complex analysis and geometric function theory. His work stands as an example of how a serious research mathematician is able to contribute effectively in improving the teaching of mathematics

Ohio Project NExT

Ohio Project NExT is a program to help young faculty members meet and interact with colleagues from colleges and universities within the Ohio Section, to share ideas and experiences that promote professional growth, and to encourage newer faculty to become involved in the Section.

Preceding the semi-annual (Friday-Saturday) Ohio Section Meetings, members of Ohio Project NExT gather on Thursday evening for a banquet, which provides an opportunity for meeting new and old friends [Last April, we gathered at the historic Vernon Manor Hotel in Cincinnati]. After the banquet, the NExTers spend an hour or so discussing topics of interest to them as young faculty members [In Cincinnati, we discussed an article from The Chronicle of Higher Education]. Then, on Friday morning, our NExT workshop is held [In April, we met on the campus of Xavier University]. The workshop usually features two major speakers, along with three contributed

(project Next continued)

talks by NExT members. [At Xavier, Phil Schmidt (Northern Kentucky University) spoke on "What Is the Chair Looking For?" and Bill Davis (Ohio State University) spoke on "Reflections on the Way We've Taught". Short talks were given by Ohio NExT members: Lew Ludwig (Kenyon College), Darren Wick (Ashland University), and Wiebke Diestelkamp (University of Dayton). The Ohio NExTers extend our sincere THANKS to Danny Otero and Amy Vanderbilt (both at Xavier University) for handling all the local arrangements in Cincinnati that made our spring gathering a real success.]

Ohio NExT is open to anyone who is in his/her first five years of teaching in Ohio and is strongly committed to undergraduate education. Please consider joining us for this fall's NExT Banquet and Workshop, and the Ohio Section meeting. Contact John Holcomb <j.p.holcomb@csuohio.edu> for membership information. As this fall's Workshop details become available, they will be posted on the NExT web page, which is linked to the Section page (www.maa.org/Ohio).

Ohio Project NExT is co-directed by John Holcomb (Cleveland State University) and Mark Smith (Miami University), along with Program Coordinators Dave Sobecki (Miami University) and Angie Spalsbury (Youngstown State University).

Mark A. Smith - Miami U.

Ohio Masters of Mathematics Bicentennial Project

Do names like Eugene Lukacs, Hans Zassenhaus, E. H. Moore, and Benjamin Finkel sound familiar? As part of Ohio's Bicentennial celebration in 2003, the Ohio Section has established a web site featuring biographies of prominent mathematicians who were natives of Ohio, were educated in Ohio, or who practiced in Ohio at some time during the past 200 years. The project is designed to foster public understanding and appreciation of mathematics as a human endeavor and Ohio's contributions to that enterprise. It will also serve as a resource for students, teachers, and historians of mathematics who want to know more about American mathematicians. The site, already featuring approximately 30

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Cliff Long 1931 - 2002

Cliff Long passed away peacefully at home Tuesday Aug 6, 2002 after a 7 year bout with multiple myeloma.

He was very active in the

MAA and the Ohio Section. He served on the Board of Governors of the MAA 1988-91, received the MAA Meritorious Service Award in 1994, was Chairman (now President) of the Section 1980-81, Program Committee Chair 1978-79, and handled local arrangements for several Section meetings at BGSU. He had a near perfect Section attendance record, even after he became ill.

He was born Clifford Allan Long on the south side of Chicago on April 10th, 1931, son of Peter Allan and Marguerite Mildred Miller Long, both originally of Ontario, Canada. Cliff's father was a carpenter, from whom he learned a love of wood and many useful skills which would serve him well his entire life.

Following high school graduation Cliff was offered a half-time scholarship at the University of Chicago, but couldn't afford to attend. Instead, he took a position as an order checker at Armour Inc., at the stockyards. Cliff began attending Wilson Junior College and then left the stockyards for the University of Illinois (Navy Pier). He studied mathematics, and was a member of the gymnastics team, with a specialty in the flying rings. After a few years at Navy Pier, Cliff moved to the Champaign-Urbana campus.

Cliff obtained his bachelor's degree, a master's degree, and finally a doctorate in mathematics under Pierce Ketchum. Cliff began teaching mathematics at Bowling Green State University in 1959, and he taught there for the next 35 years.

He witnessed the infancy of the computer at the University of Illinois, and followed it through its adolescence while at BGSU guiding the integration of computers into everyday university life. He was one of many who helped computing reach a certain level of maturity in our time, when the computer seems but a simple and useful appliance in so many homes. He had a special interest in computer graphics, and the visualization of mathematical ideas. He started doing computer graphics when it was really difficult to do. It now seems so easy, but he started doing 3-D computer graphics on a line printer in the 60s. He even had a small computer-controlled milling machine in his office to generate models of 3-D surfaces. It was built by one of his students.

Cliff had an early interest in computer aided design. He was involved in early work at Ford Motor Company on Bezier curves and surfaces. That seemed to drive most of his work of the next 30 years. He even taught his milling machine to sign his name to his works with Bezier curves. These curves are used everyday in modern Postscript laser printers.

He was in the linear algebra reform movement before there was such a thing. He and colleagues (but mostly him) started teaching a linear algebra course in the 70s which had as its goal the singular value decomposition (SVD) and an emphasis on applications previously found only in numerical analysis courses. This followed the work of Gilbert Strang of MIT which has changed the course of linear algebra instruction. He was joined in this work by his son Andy. His Mathematics Magazine article on using a digitized model of a bust of Abe Lincoln (which he digitized by hand) to demonstrate the SVD is still cited by authors on the subject.

Cliff was also a very early pioneer in the calculus reform movement and the introduction of technology in teaching mathematics. In 1970 he and David Krabill taught a calculus course using Fortran based on the CRICISAM project. In later years he adapted as newer technologies emerged for this effort which is now so widespread. He had to push the technology, which meant building a portable cart himself with monitor and Apple II computer to wheel into a classroom, producing super-8 movies, slide sets, milled models, and even a View-master reel of quadric surfaces. All this to try to teach mathematics through visualization.

One aspect of the visualization of mathematical ideas that many people appreciated was his sculpting: Cliff expressed his mathematical interests in art works which he carved from wood and stone. Even those petrified of mathematics enjoyed seeing and touching his mathematical sculptures.

In addition to his many accomplishments in mathematics-- he was published in many journals, including several recently with his son Andy-- Cliff was most committed to serving students through his teaching. Over the years many students paid their respects to him in various ways: some became mathematicians, some sent Christmas cards and occasional letters, and some would return from time to time to check in on their professor. This mutual respect is also evident in his selection by students for the Kappa Mu Epsilon mathematics honorary "Excellence in Teaching Mathematics Award" in 1970 and 1980.

He is survived by his wife Lyn, and children: Steven, Andrew, Thaddeus, and Melinda (Gedeon) and their families.

A longer version of this article is at www.bgsu.edu/departments/math/Ohiosection/CliffLong/ Cliff's home page is at www.wcnet.org/~clong/

Tom Hern - BGSU

Summer Short Course

The 2002 Summer Short Course was held at the University of Dayton on June 27-29 with Phil Straffin of Beloit College presenting an "Introduction to Game Theory" with an emphasis on how to teach an introductory course on that subject. There were 16 participants in attendance: 12 teach in Ohio, and 1 each from Georgia, Maine, Pennsylvania, and West Virginia. Pictures of the participants and some of their activities are found on the Ohio Section web site.

Tom Gantner - Dayton

(Project - continued from page 5) mathematicians, may be viewed at http:// www.bgsu.edu/departments/math/Ohiosection/bicen/index.html

Tom Hern and David Kullman are coordinating this project, which has been endorsed by the Science & Technology Council of the Ohio Bicentennial Commission. We are seeking additional short biographies of mathematicians associated with Ohio in the past 200 years. If you have biographical information about an Ohio mathematician, please contact Tom (hern@wcnet.org) or Dave (kullmade@muohio.edu) to let us know of your interest in being a part of the project. Alternatively, if you know of a web page that should be linked to Ohio Masters of Mathematics, please let us know that too. Some mathematics departments are including historical materials on their department web pages, and we would also like to know about these.

Dave Kullman - Miami U.

(OhioMATYC continued from page 9)

The spring 2003 meeting of OhioMATYC will be held May 2 & 3, 2003 at Maumee Bay Resort & Conference Center. The theme of this conference is cognitive learning. Robert Mayes, Director of the Institute for Mathematics Learning, West Virginia U. will be the featured speaker. All mathematics faculty in the state are invited to attend. Our web site http:// www.tetta.edu/ohiomatyc/ will have information about the meeting by next January.

The annual conference of AMATYC (American Mathematical Association of Two-Year Colleges) will be held in Phoenix in November where several of our members will present. Two of the OhioMATYC members are national committee chairs and one has a NSF grant through AMATYC.

One quick note about emails for the two-year colleges: Many of our colleges email addresses are changing to the edu extension. Also the name of Lima Technical College has changed to Rhodes State College.

Mary Ann Hovis OhioMATYC Liaison to the OH Section, hovis.ma@RhodesState.edu

State Science Day Award

The 2002 State Science Day winner of the Mathematical Association of America -Ohio Section Award for Excellence was John Platig a tenth grader from New Knoxville High School. His project, entitled "Are there ratios common to all of music" examined the differences in tonal ratios between western musical scales and those scales employed in eastern music. His project sought to devise equations and ratios for each. This project blended John's love of mathematics and music as he searches for music with wide appeal. The Award consists of \$100 and a subscription to Mathematics Magazine.

State Science Day was hosted by Ohio State University on May 11, 2002 and was sponsored by the Ohio Academy of Science, American Electric Power, The Ohio Environmental Education Fund, and Roxane Laboratories.

> David E. Meel Bowling Green State U.

Distinguished Teaching Award Nominations

Nominations for the 2003 Ohio Section Award for Distinguished College or University Teaching of Mathematics are now being welcomed. Anyone may nominate an Ohio Section member for the award. Department chairs and MAA Liaisons should verify that all worthy colleagues will be considered.

The awardee will be announced and honored at the 2003 Spring Ohio Section meeting. News of the Award will be published in the Section newsletter, newspapers, and in other sources. Official letters will be sent to the appropriate persons at the awardee's institution.

The awardee will also be the Section candidate in the pool from which the recipients of the Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics will be selected. There will be up to three such awards, each of which will be honored at the National Mathematics Meetings in January, 2004, and receive a \$1000 check and a certificate.

The following are the rules and guidelines from the MAA: Those eligible are College or University teachers assigned at least halftime during the academic year to teaching a mathematical science in a public or private college or university (from two-year college teaching through teaching at the Ph.D. level), who have at least five years teaching experience in a mathematical science, and are members of the Ohio Section of the MAA. Those on approved leave (sabbatical or other) during the academic year in which they are nominated qualify if they fulfilled the requirement in the previous year.

Nominees should be widely recognized as extraordinarily successful in their teaching, have teaching effectiveness that can be documented, have had influence in their teaching beyond their own institution, and foster curiosity and generate excitement about mathematics in their students.

Please send inquiries, or the nomination form (see section web page) and supporting information, postmarked by December 1, 2002 to the the committee chair: Thomas Gantner, Department of Mathematics, University of Dayton, Dayton OH 45469-2316, 937-837-1152, Fax: 937-229-2566, gantner@udayton.edu



Section Meeting Sites

Campus News

Bowling Green State University: New tenure track faculty: Diem Nyugen, Ph.D.Texas A&M, math ed; Juan Bes, Ph.D. Kent State, Operator theory, comes to us from Trinity College, Connecticut. Promoted to Professor: Hang-Feng Chen, Kit Chan. Jim Albert is now editor of the ASA journal, The American Statistician.

Miami University:

New tenure track faculty: Peter Blanchard, Ph.D. Virginia, algebra; Suzanne Harper, Ph.D. Virginia, math ed, and John Westman, Ph.D. Illinois at Chicago, applied mathematics.

University of Akron:

Several members of the department received College of Arts and Science awards last spring. Judith Palagallo received the Teaching Award; Debbie Okonieski received the Part Time Teaching award; and Pam Hoover received the Service Award. In addition, two of our faculty received Department Chairs awards: Dr. Don Story received the Outstanding Teacher Award and Dr. Laura Gross received the Early Career Award. Drs. Antonio Quesada and Linda Saliga, et al received an OBR Technology Initiative grant of \$214,592. Two applied mathematicians, Drs. Patrick Wilber and Eric Wright, joined the department this fall. Three of our students, Isabel Averill, Ben Marko, and Coral Wheeler completed REU programs this past summer. The mathematics department moved to the newly constructed Arts and Sciences Building over the summer.

Fall Meeting Program

Friday October 26

Saturday, October 26

	Registration, Technology Building Rotunda	8 - 10:30 AM	Registration, Technology Bldg Rotunda
Noon-4:30	Book Exhibits, Technology Building Rotunda	8:00-9:00	Coffee, etc.
12:15-1:15	Committee Meetings. Technology Building	9:00-9:15	Announcements
	CONSTUM T176, CONSACT T179	9:15-10:15	Invited Address
	CONCUR T181, CONTEAC T253		"Mathematics Viewed as an
	Program Committee Room T113		Experimental Science"
1:30-1:45	Greetings, Announcements		Al Stickney - Wittenberg U.
1:45-2:45	Invited Address		MAA-Ohio Section Teaching Award
	"Why Teach Mathematics?"		Winner
	Underwood Dudley - DePauw University	10:15-10:45	Break
2:45-3:15	Break	10:45-11:45	Panel discussion sponsered by CONCUR
3:15-5:10	Contributed Papers		"Co-Op Programs and Internships in
3:15-5:10	Executive Committee Meeting		Mathematics"
5:15-6:15	Invited Address	10:45-11:45	OhioMATYC Business Meeting
	"Henry Briggs (1561-1630) and the Story of	12:00-1:00	Invited Address
	Logarithms" Danny Otero - Xavier U.		"On Teaching Mathematics with Original
6:30-7:45	Banquet		Sources"
7:45-8:30	After-Dinner Address		Danny Otero - Xavier U.
	"Calculus Books"	1:00-1:15	Closing remarks
	Underwood Dudley		
8:30-9:30	Social Hour		
		. ,	

Check the web page for updates, online registration, and paper submission (www.maa.org/Ohio)

Underwood Dudley "Why Teach Mathematics?"

Why do we teach algebra to almost all highschool students? What is the explanation for 700,000 students a year starting to try to learn calculus? I will give six reasons, five of which are wrong, and conclude with the right one. Not everyone, I have found, agrees with me.

"Calculus Books"

Calculus textbooks have been with us since 1696, when the first, by L'Hospital, was published. I will quickly say what has and hasn't been in them, and what should and shouldn't be in them. Several important conclusions will be drawn about this weighty subject.



Woody Dudley was born in New York City quite a number of years ago. After graduating from the Carnegie Institute of Technology he was going to be an actuary, but after

two years at the Metropolitan Life Insurance Company, he fled back to academia. He earned a Ph.D. degree (number theory) from the University of Michigan in 1965; after two years at Ohio State, he moved to DePauw University (Greencastle, Indiana) where he has been ever since. He is responsible for five books and one of his papers has been translated into Czech. He is currently editor of the *College Mathematics Journal* and is very proud of having a Erdos number of 1.

Danny Otero "Henry Briggs (1561-1630) and the Story of Logarithms"

In 1614, Henry Briggs, geometry professor at the new Gresham College in London, read a newly published work by the aristocrat, inventor and amateur mathematician, John Napier, which announced the "marvelous" invention of the logarithm table, a device for dramatically increasing the speed of arithmetical computation. Briggs was so impressed with the work that he traveled to Scotland to meet Napier, beginning a collaboration that would install Briggs in the annals of mathematics history. Briggs' formal training allowed him to simplify considerably Napier's ideas and led to the publication of the Arithmetica Logarithmica (1624), the first formal description of the common logarithm, which was to form the basis of fast computational techniques for centuries, up to the advent of electronic computing. We will fill in some of the details of this fascinating story and draw some morals in conclusion.

Danny Otero "On Teaching Mathematics With Original Sources"

There has been a steady increase over the last decade in the realization that the learning of mathematics can be enhanced when presented within an historical context. (Ohio "native son" Fred Rickey has championed this view at this Section's meetings in the recent past.) One way to accomplish this is to expose students to original sources, which allows them to experience, to a degree, the context in which these ideas were formulated, and helps them to "see the forest for the trees." Reading original sources can transmit to students a sense of the excitement in the questions that prompted the development of the mathematical ideas. On the other hand, this practice is fraught with many dangers. We will discuss these in the light of the speaker's experience with original sources in the classroom.

Danny Otero is one of approximately six living people who are natives of Miami, Florida, and have moved away from that subtropical paradise for the more temperate climes of southeastern Ohio. He was an undergraduate student of MAA Associate Secretary Jim Tattersall in the late 1970s at Providence College. His Ph.D. was awarded in 1987 from the Pennsylvania State University. After a two year postdoc at Syracuse University, he came to Xavier University in Cincinnati, where he has been ever since. His training in graduate school was in a mix of algebra and number theory, but his professional career was redirected toward the history of mathmatics when he attended, with Tattersall, a 1990 MAA minicourse on using the history of mathematics in teaching that was offered by erstwhile Ohioan Fred Rickey. This experience led to an ever-increasing involvement in the history of mathematics and its use in enhancing the teaching of undergraduate mathematics. He has designed a calculus course for humanities majors that takes an historical perspective on the subject, and has been preparing a textbook for the course. Otero is also an avid contract bridge player, a Miami Dolphins fan, and a lover of good short stories, music of the Renaissance, and NPR.

Al Stickney "Mathematics as an Experimental Science"

Mathematics is, of course, the ultimate deductive science. However, experimentation, trial-and-error, data gathering, pattern recognition, and inductive conjecture are all very important aspects of "doing mathematics". Why don't we do a better job of teaching that to our students? Should we focus more on "problem solving" and less on content in our classes? We will look at this aspect of mathematics in the context of several fairly simple problems with the hope of motivating all of us to look for ways to improve our teaching. We will also consider the role that technology might play in this process. Don't expect good answers, just good questions.

Al Stickney,

Professor of Mathematics at Wittenberg University, received his B.S.(1969) from Michigan State University and his M.S. (1970) and Ph.D. (1975) from the University of Michigan. He is also an alum of

the "Ross Summer Program" at The Ohio State University (1964-68). He has held faculty appointments at Michigan State University (1975-77) and the University of Delaware (1977-79), and has been a member of the Wittenberg faculty since 1979. He is a former Chair of the Department of Mathematics and Computer Science at Wittenberg. Al has been active in the Ohio Section since 1979. He has served on several committees and has had a special interest in promoting student involvement in section activities. Most recently, he has served as the Section Liaison to OhioMATYC and as the Section's Coordinator for the Columbus Winter Technology Conference. He was president of the Section in 1992-93 and was the 2001 recipient of the Section's Award for Distinguished College Teaching. Although trained as an algebraist, his current interests lie in the areas of college mathematics education and the use of handheld technology in mathematics education. He has presented numerous papers, workshops, and short courses on topics in those areas.

Registration

Online registration is prefferred; see the meeting web page at www.maa.org/Ohio. Deadline for online registration is October 18.

On-site registration is always available, but last minute banquet tickets cannot be guaranteed. Early registration helps those making arrangements and is always appreciated.

You may also register by sending the following information: name, affiliation, address, phone, email address (if any), type of position, and banquet information. Send with check, payable to Ohio Section MAA, for applicable fees [registration fee (\$20 full time, \$10 retired or part time, no fee for students), banquet (\$18 or \$20 if you want beer/wine)] to Vic Perera, Kent State University - Trumbull Campus, 4314 Mahoning Ave. N. W., Warren, Ohio 44483 (330) 847-6172 (fax), vperera@kent.edu. Fax or email registrations would be pending upon the receipt of registration fees.

Book Exhibits

At press time, McGraw-Hill Higher Education, Scientific Workplace, Addison Wesley, Prentice Hall, and Texas Instruments are scheduled to display their wares at the meeting. Please encourage book reps to contact Vic Perera and take advantage of a captive audience.

There will also be MAA books on display, with an opportunity to buy books at a discount. Not only would you save money, but the Section would earn some too.

Call for Contributed Papers

Fifteen-minute presentations on any topic of general interest in mathematics or related areas are encouraged. Reports on projects, research announcements or anything you believe would be of interest to those in attendance are welcome.

Contributors should send a title and a brief abstract by October 11, 2002. Online submission is preferred. Or, mail (email) to the chair of the Program Committee: Sherri Brugh, Department of Mathematics, 1972 Clark Avenue, Mount Union College, Alliance OH 44601, 330-823-3561, brughsl@muc.edu. The contributed paper program will be posted on the web page prior to the meeting.

Banquet

The Friday evening banquet will be in the Student Union Hall of the Admin/Classroom Building. It is a buffet with tossed salad, stuffed chicken breast, Italian sausage with peppers & onions, stuffed shells in marinara suace, green beans almondine, baked potatoes, fresh bread w/butter, coffee/iced tea, and strawberry filled angel food cake with ice cream.

Banquet cost is \$18 (\$20 if you want beer/wine). Reservation deadline is October 18, 2002. Space is limited. There may be additional banquet tickets available on site, but this cannot be guranteed.

Local Contact at Kent State U. Trumbull

For local arrangement questions, contact: maa2002@trumbull.kent.edu; Vic Perera at pererav@trumbull.kent.edu or (330) 675-8813; or contact Partha Rajagopal at partha@trumbull.kent.edu or (330) 675-8906.

News from OhioMATYC

OhioMATYC (Ohio Mathematical Association of Two-Year Colleges) is pleased to join the Ohio Section MAA for the fall meeting. The MAA format will be followed this fall. During the contributed paper session, OhioMATYC will have a panel discussion with some of the participants of a NSF (DUE 0003065) sponsored conference (May 02) dealing with the mathematics needs of students in advanced technological programs, a report from the Reformed College Algebra Conference held at West Point (February 02) and a session by one of the members of the writing team for Mathematical Journeys I another NSF (DUE 0100932) sponsored project.

(continued page 7)







From Youngstown: Take 680 west to Meridian road exit, north to I80, east on I80, north on Route 11, west on Route 82, turn right on State Route 45 (Mahoning Avenue). Campus is on your right immediately after the exit..

From Columbus (via Akron), From Central &Southwest Ohio (Cincinnati): Take I-71 North to I-76 east (Exit 209?). From I-76 east go pass Akron and exit to Route 44 east (exit 38A). From Route 44, take Route 5 bypass east towards Warren. Route 5 merges with Route 82. Stay on Route 5/82. Take exit to Route 45 (Mahoning Avenue) and turn left on State Route 45 Mahoning Avenue). Campus is on your right immediately after the exit.

From Cleveland & Northwest Ohio: Take Ohio Turnpike (I-80 Toll Road) East to Exit 209 (old exit 14), take Route 5 bypass east towards Warren. Route 5 merges with Route 82. Stay on Route 5/82. Take exit to Route 45 (Mahoning Avenue) and turn left on State Route 45 (Mahoning Avenue). Campus is on your right immediately after the exit.

From Canton & Southeast Ohio: Take I-77 North to I-76 east. From I-76 east go past Akron and exit to Route 44 east (exit 38A). From Route 44, take Route 5 bypass east towards Warren. Route 5 merges with Route 82. Stay on Route 5/82. Take exit to Route 45 (Mahoning Avenue) and turn left on State Route 45 (Mahoning Avenue). Campus is on your right immediately after the exit. (continued in column 2) From Kent: Take Route 59 east, to Route 5 bypass east towards Warren. Route 5 merges with Route 82. Stay on Route 5/ 82. Take exit to Route 45 (Mahoning Avenue) and turn left on State Route 45 (Mahoning Avenue). Campus is on your right immediately after the exit.

Where to stay

Warren:

Best Western Downtown Motor Inn (Approximately 2 miles from Campus) 777 Mahoning Ave NW (330) 392 2515 or (330) 392 7099 (Fax) \$42.40 plus tax, one queen bed, \$50.40 plus tax, two queen beds. (Mention Mathematical Association of America for special rate guaranteed until October 11. Rooms at this rate are limited.)

Holiday Inn Express Hotel & Suites (Approximately 6 miles from Campus) 135 Highland Terrace Blvd (330) 544-8807 or (330) 544-8956 (Fax) \$79 plus taxes for a standard room. (Mention Mathematical Association of America for special rate guaranteed until September 25. Rooms at this rate are limited.)

Fairfield Inn - Niles (Approximately 6 miles from Campus) 1860 Niles Cortland Road (330) 544 5774 - Call hotel directly to reserve (not the 800 number)

\$59.95 plus tax, two double beds.

(Mention Mathematical Association of America for special rate guaranteed until September 25. Rooms at this rate are limited.)

• Avalon Inn & Resort

(Approximately 7 miles from Campus)
9519 E Market St
(800) 828 2566, or (330) 743 4000, (330) 856 1900 or (330) 856 2248 (Fax)
\$60 plus tax.
(Mention Mathematical Association of America Block SH011 for special rate guaranteed until September 25. Rooms at this rate are limited.)

Directions to campus from each hotel may be found at http://maa2002.trumbull.kent.edu/

Many other hotels are located near to Interstate exits. There are 3 motels located on I-80 (Toll Road) exit 209 (about 8 miles from campus) and also several motels on I-80 & Belmont Avenue (closer to PA border) that are within a 30 minute drive to the Kent State Trumbull Campus.



Parking

Parking is FREE in any lot, but DO NOT use those lots designated as Faculty/Staff.

and Anixer are participating in the University's efforts to transform chalkboards and lesson plans into highly interactive multimedia computer-enhanced courses. Kent Trumbull is committed to meeting the demands of community businesses and industries and will continue to grow to meet those demands.

An example of the level of this commitment is the recent expansion of the Trumbull Campus to include the Technology Building where classes began in Fall Semester, 2000. This beautiful, state-of-the-art building is equipped to meet the technical education needs of business and industry in Northeast Ohio. Not only are there classrooms,

Kent State Trumbull is one of the major components of Kent State University's eight-campus multi-network system. This eight-campus system is comprised of campuses located in the regional areas of Ashtabula, East Liverpool, Geauga, Kent, Salem, Stark, Trumbull, and Tuscarawas Counties. Students at each of these Regional Campuses become part of the distinguished academic community of Kent State University. All students complete the University's core curriculum which can be accomplished at any of the Regional Campus locations. Once this foundation in the Liberal Arts and Sciences is complete, students may either continue their education at Kent State Trumbull or transition to the Kent Campus, depending upon their individual degree requirements. Kent State Trumbull offers coursework to complete the following degrees: Associate Degrees, coursework leading to completion of Bachelor Degrees, and a Master of Technology Degree.

The Kent State Regional Campus had its beginnings in 1912 making it one of the oldest systems in Ohio. The Regional Campuses enjoy partnerships with area industries including United Autoworkers, Daimler Chrysler, and General Motors.

On more than 200 acres of land, Kent State Trumbull Campus is located on Route 45, just off the Route 5 bypass adjacent to a residential neighborhood. The heart of business and industry is located only a short distance away in the nearby cities of Cortland, Niles, and Youngstown, Ohio and only minutes away from downtown Warren, Ohio in Trumbull County.

The Campus includes a spacious two-story Classroom/Administration building which incorporates administrative offices, faculty offices, classic and modern classrooms, and several computer labs as well as the cafeteria, the bookstore, and the Campus Library. Kent Trumbull is on the cutting edge of distributed learning with computer and communications grants. IBM, Ameritech computer labs, and various administrative offices, the Center for Emerging Technologies in Aerial Application Research CETAAR, and the Tech Prep Program are located in this building as well.

The learning environment of Kent State Trumbull Campus is one of a student/faculty ratio of 16:1. More than 90 percent of the faculty have earned a master's degree or a Ph.D. There are approximately 60 resident faculty and 90 adjunct faculty available to teach in over 100 degree programs.

Kent State Trumbull also offers Certificate Programs, which are another way students can enhance their career-related skills and employability without completing an entire degree program. Certificate programs at Kent State Trumbull consist of six to eleven college courses in a specific, work-related area.

A campus is known and judged by the quality of the faculty it hires. Likewise, the outcomes of academic courses are determined by the quality of the material presented to the student. Kent State University Trumbull Campus is committed to the highest quality of education possible by enhancing the critical and creative skills of both traditional and nontraditional students through study of the arts, sciences, professional, and technical areas. Intellectual breadth and depth are strongly emphasized in the curriculum. Teaching excellence, supported by highly qualified faculty and staff members who are professionally active and current in their professional fields, is primary at the institution. In working with students, both faculty members and administrators are committed to providing a humane, responsive, and intellectually stimulating environment in which everyone can learn and work productively. One motto of the Kent State University Trumbull Campus has been: "where students are names, not numbers." The institution is proud that many students and faculty have found Kent State University Trumbull Campus to provide a warm and friendly learning environment.

Calendar

Ohio Section

Other

October 25-26, 2002, Kent State University Trumbull Campus, Warren OH. With OhioMATYC	Annual Miami Conference "History of Mathematics in America," October 4 - 5, 2002. With Pi Mu Epsilon Student Conference.		
Winter Institute/ T3 Regional Conference, February 14-15,	Conference.		
2003. Columbus State CC	Indiana Section, October 5, 2002, Indiana University North- west, Gary, IN		
April 4-5, 2003, The Ohio State University, Columbus OH.			
Fall Section Meeting, 2003, Ohio Northern University, Ada,	OCTM Conference, October 10-12, 2002, Cincinnati AMATYC, November 14-17, 2002, Phoenix AZ		
ОН			
National MAA-AMS			
Annual Joint Meetings, January 15-18, 2003, Baltimore MD.	NCTM Regional Conference, January 23-25, 2003, Indianapo- lis, IN		
MathFest, July 31-August 2, 2003, Boulder, CO.	Indiana Section, March 28-29, 2003, Butler University, Indianapolis, IN		
Annual Joint Meetings, January 7-10, 2004, Phoenix AZ.			
MathFest, August 12-14, 2004, Providence, RI.	NCTM Annual Meeting, April 9-12, 2003, San Antonio, TX		
Annual Joint Meetings, January 5-8, 2005, Atlanta GA.	OhioMATYC, May 2-3, 2003, Maumee Bay Resort & Conference Center.		
MathFest, August 4-6, 2005, Albuquerque, NM.	Michigan Section, May 2-3, 2003, Saginaw Valley State		
Annual Joint Meetings, January 12-15, 2006, San Antonio TX.	University.		
Annual Joint Meetings, January 4-7, 2007, New Orleans LA.	Joint Statistical Meetings, August 3-7, 2003, San Francisco, CA		
Annual MAA-AMS Joint Meetings, January 6-9, 2008, San Diego, CA.			

Complimentary copies of this newsletter are being distributed to people who would be interested in Ohio Section activities. By joining the MAA, you will get your own copy of the newsletter. If you are not an MAA member, look at the web page: www.maa.org/mbsvcs/individual.html. MAA Departmental Liaisons also have membership information.



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