

## Math Awareness Week April 26th - 30th

by David Patterson

The Department of Mathematical Sciences will celebrate Mathematics Awareness Week April 26-30 as part of the nationwide celebration of Mathematics Awareness Month in April. Mathematics and Biology is the theme for this year's celebration which has been extended to a whole month instead of a week as in previous years. Our department will still have its own week-long celebration where we will recognize our outstanding undergraduate and graduate students with scholarships and prizes and hold our annual potluck picnic and softball game. We will also have two colloquium talks related to the theme.

This year, Texas Instruments joins three mathematical societies in sponsoring and organizing Mathematics Awareness Month. Mathematics is an essential element of scientific advancement in many biological areas, including brain research, the human genome, modeling blood flow, epidemiology and many other bio-technical fields. The 1999 Mathematics Awareness Month color poster, *Vital Rhythms: Mathematics in the Heart* highlights the contribution mathematical modeling makes in understanding heart function and malfunction. These images are visualizations of mathematical models that help us "see" how the heart is excited. They result when mathematics is used (as no other science can) to depict physical processes or physical activity. These particular models/images demonstrate normal electrical activity in the heart and help researchers under-

stand more about fatal heart attacks. Dr. James Keener of the University of Utah and Professor A.V. Panfilov of the University of Utrecht provided the poster images.

Extensive information about Mathematics Awareness Month - including the theme poster, an annotated essay with links to many other related sites, and news of MAM celebrations taking place around the country - can be found on the MAM website at <http://forum.swarthmore.edu/mam>.

Mathematics Awareness Month is coordinated by the Joint Policy Board for Mathematics on behalf of three national mathematics organizations - the American Mathematical Society, the Mathematical Association of America, and the Society for Industrial and Applied Mathematics. Previous themes have included Mathematics and the Internet, Mathematics and Decision-Making and Mathematics and Symmetry.

### Mathematics Awareness Week Activities at UM

For more information, call the Math Department office at 406/243-5311, email [michelj@selway.umt.edu](mailto:michelj@selway.umt.edu) or visit our website at <http://www.umt.edu/math>.

#### Tuesday, April 27, 4:10 p.m.

Colloquium (room to be announced): William Derrick, University of Montana, "*Introduction to Cellular Automata (CA)*". The first (CA) was the "*Game of Life*" invented by Conway. Since this invention, CA's have been used in a variety of ways to study complicated phenomena, such as spiraling waves and skin patterns on wild animals.

#### Thursday, April 29, 3:30-5:00 p.m.

Mathematics Awards Ceremony in the Dell Brown Room in Turner Hall. Join us for refreshments and the formal presentation of scholarships and awards for our undergraduate and graduate students.

Scholarships include the Joseph Hashisaki Memorial Scholarship and the Mac Johnson Family Scholarships. Awards include the N.J. Lennes Awards for the top performers on a competitive examination; the John A. Peterson Mathematics Education Award for a graduating senior in mathematics education; the Graduate Student Distinguished Teacher Awards for two outstanding Teaching Assistants; and the Undergraduate Teaching, Technical, and Tutorial Scholar Awards. In addition, we induct new members of Pi Mu Epsilon, a national mathematics honor society. We also recognize mathematics students who have won University-wide awards.

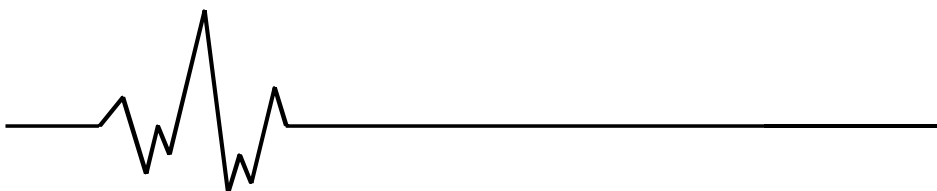
#### Friday, April 30, 4:10 p.m.

Colloquium (room to be announced): Mark Pernarowski, Montana State University, "*Controllability of excitable cells*". Mathematical models of cell electrical activity typically consist of a current balance equation, channel activation (or inactivation) variables and concentrations of regulatory agents. These models can be thought of as nonlinear filters whose input is some applied current  $I$  (possibly zero) and output is a membrane potential  $V$ .

A natural question to ask is if the applied current  $I$  can be deduced from the potential  $V$ . For a surprisingly large class of models the answer to this question is yes.

#### Friday, April 30, 5:30 p.m.,

Bonner Park: Annual Math Department Spring Potluck and Faculty vs. Student Softball Game.



## Notes from the Chair's Desk

Winter forgot Missoula again this year; it was very mild. Snow in the valley was minimal. I missed the long periods of white silence, but thoroughly enjoyed the lack of severe cold weather. The excitement of being able to recognize students who study mathematics for their achievements is here. We are now busy preparing activities for Math Awareness Week and determining awards to be made. Through the generosity of our donors the number and amounts of awards have increased. We are very grateful for the gifts and grants that have come to the Department. Do read the article in this Newsletter telling you about the awards that are planned for this year.

Our Fall departmental retreat centered on issues related to review of our programs and the assessment of outcomes. When this process is all done, we should have a clearer picture of our program objectives, what our students should learn, how well they are learning, as well as, what should be changed to make things better.

I told you in the Fall 1998 issue that most of the renovation projects on the Mathematics Building are



complete. It is certain now that the one classroom that remained to be renovated will be completed this summer as a middle level high technology classroom. All the rest (including our new mathematics education classroom in the Liberal Arts Building) are completed. Each is equipped with acoustical tile ceilings, lighting control, two pull-down screens, video and computer projection capability, and tables with deluxe stacking chairs. The room to be completed this Summer will have all this and more. Some of you may remember that room as the large room where a built-in lab desk sat on a raised platform. All colloquium lectures were given in this room. The lab desk will be removed, but the platform will remain. In addition to the same video and computer projection capability, there will be a podium with built in monitor and keyboard/mouse drawers for both PC and MAC computers, slide projection capability from the back of the room, and motorized screens. The Mathematics Building truly will have completed its new look. You must make a point of stopping in to see us.

We have been doing a lot of interviewing to hire three new faculty members for next year. One will be in algebra, one in statistics and the third will have primary responsibility centered around teaching duties with research interest in algebra or numerical analysis. The first two will replace two members who are retiring. Further, Thomas Tonev and Libby Krussel will be away next year and new visiting faculty members will replace them. With so many new faces, there will be lots of excitement.

This brings me to the difficult part. These tidbits will be my last to you. I am retiring at the end of June. I am beginning to indulge myself more and more often with moments of nostalgic memories. I have thirty-eight years worth of memories and I can honestly say that I would do it again. James Hirstein will take over as the new Chair of the Department. Watch for his article in the Fall issue. Don Loftsgaarden is also retiring this year. When we talk about it, I realize that he too looks back with many fond memories. We have watched this Department grow into the largest department on campus and increase in quality every year. Our statistics course, Math 241, alone has continuously grown in enrollment from 298 in Fall '97 to 406 this Spring. Approximately 3000 students enroll in our lower division courses each semester. We are proud of this department!

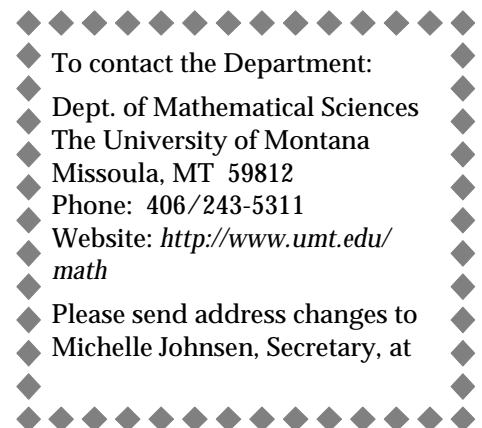
Do not forget that we want to hear from you and keep open lines of communication with you. Let us have your ideas about things you would like to know about the Department and about articles you would like to see included in this newsletter. We appreciate the visits some of you have made to the department. You are always welcome!

*Gloria C. Hewitt*

### Faculty:

Gloria C. Hewitt, *Chair*  
David Patterson, *Assoc. Chair*

Rick Billstein, *Mathematics Education*  
Mary Jean Brod, *Secondary Mathematics*  
William Derrick, *Applied Mathematics*  
Rudy Gideon, *Statistics*  
Jonathan Graham, *Statistics*  
Gloria C. Hewitt, *Algebra*  
James Hirstein, *Mathematics Education*  
Leonid Kalachev, *Applied Mathematics*  
Mark Kayll, *Operations Research*  
Libby Krussel, *Mathematics Education*  
Don Loftsgaarden, *Statistics*  
Johnny Lott, *Mathematics Education*  
Jennifer McNulty, *Operations Research*  
George McRae, *Operations Research*  
David Patterson, *Statistics*  
Greg St. George, *Functional Analysis*  
Karel Stroethoff, *Complex/Functional Analysis*  
Thomas Tonev, *Complex/Functional Analysis*  
Nikolaus Vonessen, *Algebra*  
George Votruba, *Functional Analysis*  
Keith Yale, *Complex/Functional Analysis*



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Please send address changes to  
Michelle Johnsen, Secretary, at

# Alumni News

by David Patterson

We heard from a number of alumni about their experiences since graduating from UM. We'd like to encourage all alumni, particularly older ones, to also write us about any memories you have about the Math Department and the University. We'll try to include them in a future newsletter.

**Edwin T. Mertz**, (B.A., Chemistry and Math 1931), received his Ph.D. in Biochemistry in 1935 from the University of Illinois, was a Professor of Biochemistry at Purdue University from 1946-1976, then served as a consultant in agronomy until his retirement in 1994. He now lives with his daughter and son-in-law in Richardson, Texas.

**Fat C. Lam** (Ph.D. 1987) is a Professor of Mathematics at Gallaudet University in Washington, D.C. An article about Lam appeared in the Jan-Feb 1998 issue of the Gallaudet magazine *World Around You* (the article can be viewed at <http://www.gallaudet.edu/~pcnmpway/jan-feb98/fat.html>). It discusses Lam's childhood in Hong Kong, how he ended up at Gallaudet, and his participation in protests during Hong Kong's transition from British to Chinese rule. According to the article, Lam "was glad that Hong Kong has returned to the rightful nation. 'The problem is [the Chinese] government,' he said."

**Steve Mihina** (B.A. 1989, M.A. 1995) teaches in the Math Department at Highland Community College in Freeport, Illinois. He writes "Things are going pretty well here. I'm already second in seniority even though I'm only in my third year here. They keep me really busy. I teach a full load, I'm on 5 committees, I work with the college trying to get local high school kids interested in math, and I run the scoreboard at the college men's and women's basketball games." You can check out his web site at <http://www.userworld.com/users/S1Mihina/main.html>.

**Chris Vahl** (B.A. 1991) is pursuing a Ph.D. in Statistics at Kansas State. He writes "I like it here a lot -- you could say that I've been born again purple.

(Go Wildcats!) I passed the Ph.D. qualifier. I now have a research/teaching assistantship and will most likely spend the rest of my natural life in graduate school." He also writes "Just this semester, I was given a research assistantship, but I'm still teaching one class. I'm working with Jeff Pontius and some wildlife biologists. They have a grant to study the impact of the US Army on the wildlife and vegetation at Ft. Riley, the local military base. Believe it or not, but we may be needing to use some sort of robust, nonparametric correlation coefficient. Do you know anyone who would know anything about such a thing?" [Editor's note: this is a thinly-veiled reference to Prof. Rudy Gideon who has been promoting the non-parametric correlation coefficient he developed to our graduate students for years.]

**Tim Thompson** (M.A. 1994) is a tenure-track assistant professor at Oregon Institute of Technology in Klamath Falls whose winter passion is back-country telemark skiing and ski-mountaineering. He writes "I teach a wide range of undergraduate level courses from college algebra to differential equations and math stats. In addition to teaching responsibilities, I do part-time consulting for the Forest Service, and continue to work with the Yellowstone Center for Resources. I have presented several papers at regional mathematics/science meetings. I am currently interested in the mixed-normal problem complicated by dependent random variables. You could quote me on the following: In my travels and interaction with colleagues in the mathematics/statistics fields, I find that my graduate education from U of M is equivalent to many of my colleagues, and in many regards, superior. I have never felt intimidated when asked to teach a subject area which I am unfamiliar with. In fact, it is often the case that I am asked to teach the more difficult subject areas in undergraduate mathematics. I owe my ability to learn, understand and apply mathematics to the broad base of knowledge obtained through the UM Department of Mathematics."

## 1998 Honor Roll of Donors

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Duane Adams  
Ernest Anderson  
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Gavin Bjork  
Elaine Bohanon  
Ruth Rollins Brocklebank  
Rod & Mary Jean Brod  
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Betty Remington  
Catherine Stewart  
Thomas & Elena Tonev  
R. Lynn Turnquist  
Ernest Underwood  
Marilyn Vogel

**David Goldsmith** (M.A. 1997) is an Instructor of Mathematics and manager of the Math Lab at the University of Hawaii, Hilo. He is also pursuing a Ph.D. in mathematics from the University of Hawaii, Manoa and recently finished a directed reading from Polya and Szego's "Problems and Theorems in

# The Way It Was

by Keith Yale

Harold Chatland arrived at the University of Montana in 1937. He had graduated from McMaster University in Hamilton, Ontario in 1934 with degrees in mathematics and physics. His Ph.D. followed three years later from the University of Chicago with a dissertation on the Waring problem directed by L.E. Dickson. In those days fresh Ph.D.'s were always hired at the rank of Instructor, and it was at that rank that Harold Chatland started his career. It was the beginning of a long and productive career which spanned five decades. It included teaching, research and administration in both academic and industrial settings.

During the war years, 1941-1945, the normal enrollment at the university had dropped by a dramatic seventy five percent but this decline was largely offset by the university's role in the training of Army Air Force personnel. For the mathematics department (Carey, Chatland, Dubish, Lennes, Lommasson, and Merrill) this meant teaching the rudiments of mathematics and navigation to large numbers of young men under very trying circumstances. Various artifacts (large protractors, spherical chalkboard, etc.) from this era can, on occasion, still be found in the mathematics building. Regular university courses were still being taught. Professor Carey was teaching Advanced Mathematical Analysis but he became ill and was replaced by Chatland. By popular demand, Chatland had to finish the course. Among the students was Joe Hashisaki who joined the faculty in the mid 1950's.

In 1946, Harold Chatland became an Associate Professor at Ohio State University. Nearby was Wright-Patterson Air Force base, and, at the

suggestion of Tibor Rado, Chatland became quite involved in teaching partial differential equations and in doing research for the Air Force. At that time it was most difficult to get the people working with computers to become interested in mathematics. Important work in number theory with Harold Davenport was also done at the time; incidentally, from this work Chatland gained an early Erdős number of two.



*Harold Chatland in 1992*

Harold returned to the University of Montana in 1950 and stayed until 1960. During this period he became involved with university administration and served as department Chair, Dean of the College of Arts and Sciences, Dean of the Faculty and, finally, as Academic Vice President.

He always remained an active teacher. During the summer of 1956, he taught number theory and astronomy to a group of enthusiastic but somewhat incorrigible high school students. Jack Silver and Keith Yale were among those of that group who later became mathematicians. Tomme

Lu Worden (née Middleton), the Program Director at the Lodge, was the steady and caring chaperon for the group.

In October 1957, Sputnik ominously appeared overhead. Stirring speeches were the initial American response, and Harold Chatland provided one in a packed Music Recital Hall at the University of Montana. Calculus enrollments doubled, but class size was maintained at a respectable dozen students.

The demand for scientific talent throughout the country was overwhelming. In 1960 Harold Chatland joined Sylvania where, except for a short interlude at Western Washington University, he was to remain until his retirement in November 1970. His work at Sylvania (still classified) mainly dealt with missile detection and missile security systems.

Following his retirement he served as a project director under grants from the National Science Foundation for the water quality in Monterey Bay and for various problems concerning the abalone fishery of California.

In his teaching and research Harold Chatland always believed in raising the central questions first. Only after these questions were connected and understood should the detailed work on the problems begin. Teaching and research were of primary importance to him and one senses these were of greater importance than administration.

Harold Chatland, 87, now lives in Missoula with his youngest daughter, Lee, and her husband, Eric Clemmensen. His daughter, Clare, practices medicine in California. Anne, his oldest daughter, died in 1982 and his wife, Alice, passed away in 1984 after a tragic encounter with Guillain-Barré disease.



# Faculty Profile - - Jim Hirstein

by Johnny Lott

What do you get when you have a philatelist, racquetball playing, mathematics educator who grew up in Illinois in and around the pottery-making business? In the case of the Department of Mathematical Sciences, you get Jim (Dusty) Hirstein, the next department chair.

Dusty came to The University of Montana by way of Slippery Rock University in Pennsylvania, Illinois State University and the University of Georgia. As an undergraduate, Jim was a professional coffee maker in the Women's Cafeteria where he met the woman who became his wife. He and Cheryl have one daughter, Karue, who with her husband and their three children live in Pennsylvania. As an avid camper and sometimes scuba diver, Dusty brings a wealth of varied extramural experiences to the campus. He has been an officer of the Garden City Stamp Club and does indeed have a collection of mathematics stamps. He takes this portion of his stamp collection a bit more seriously than those who claim a math stamp is any stamp with a number on it and concentrates on mathematicians and on stamps honoring mathematics.

In the arena of mathematics, Dusty did his dissertation on learning in mathematics with Dr. Les Steffe in Georgia and occasional lapses of southern dialect creep into his conversations. Dusty has a background in secondary school mathematics and has strong interests in not only how people learn mathematics, but in the content, teaching and assessment of mathematics. He was Co-Director of the Assessment and Evaluation Committee for the Systemic Initiative for Montana Mathematics and Science and was the co-author and author of many related publications in that endeavor.

Dusty hit the ground running when he arrived in Montana and early on received a Dwight D. Eisenhower grant for summer inservice programs. As a result, he is behind many of the graduate degrees in mathematics edu-

cation at The University of Montana. He currently serves as a member of the Board of Directors of the Montana Council of Teachers of Mathematics. With interests in both mathematics and mathematics education, he is a natural for the chairmanship.

In a recent conversation, Dusty talked about his interests and goals for the department in the coming years:

*What led you to a decision to become Chair of the department?*

The job is not one that most people actively seek to do. I became convinced to be considered for the position when many people in the department told me that they thought I could do it. I allowed my name to be put forth for consideration and am grateful to the department for selecting me.

*What are your immediate goals as department chair?*

Right off the top of my head, I would say that it is to keep my head above water. I have been told by Dr. Hewitt that it is a job that you learn as you go. My immediate goal is to learn as fast as I can.

*What are your long term goals for the department?*

My most sincere long term goal is to get more undergraduate mathematics majors in the department. I feel that we need to nurture students at least through calculus. We need to get student believing in a mathematics program early on. Calculus seems to be a struggle for many regardless of their majors. We also need to recognize as a department that we play a huge service role, and we must take it seriously. Virtually every student at the university passes through this department. We need long term faculty to work with them.

*How will your interests both inside and outside of mathematics be affected by being department chair?*

A major concern is the amount of time that must be devoted to the administrative details of the department. It will certainly affect the number of students whom I reach and teach. It will also affect the amount of mathematics that I can do. As Chair, I may



*Jim Hirstein*

not be able to play mathematics and ask the what if questions. Outside the department? Will there be any time left for outside hobbies? I will continue to visit my grandchildren who think I am Santa Claus' helper. That is good therapy.

*What advice do you have to give to pre-college students and undergraduate students about studying mathematics--both as a primary interest and from a mathematical literacy standpoint?*

Study all the mathematics that you can before you go to college. Press teachers for more; don't stop. As undergraduates, don't settle on a mathematics field in which to concentrate too early; don't specialize too soon. Get as broad a background in mathematics as you can. Graduate students should carefully choose with whom they want to work. An exemplar for me was a colleague at Illinois State University, Dr. Phares O'Daffer. He taught me to pay attention to when and how to teach mathematics and made me a better teacher as a result.

I didn't read mathematics for literacy or recreation or to play until I started teaching. Now it is fun to do but then mathematics was serious business to me. When I was an undergraduate and about to be accepted into Kappa Mu Epsilon (mathematics honorary), I had to do a paper and chose to write on L'Hospital's rule. It wasn't for fun; it was like a class. I thought that was what mathematics was. Now mathematical recreations are truly fun! Reading *Mathematical Experiences* and *The Mathematical Tourist* was super! I never did that before. Don't do as I did.

*(Continued on page 6)*

## Hirstein *(Continued from page 5)*

*What challenges you in mathematics?*

One challenge is to be visual in explanations. In geometry with such technology as the Geometers Sketchpad, working on three-dimensional geometry has become a pleasure. An example was to determine the stereographic projections of the great circles from a sphere onto a tangent plane. This was a challenge where technology really helped.

As an undergraduate, I was challenged by the Putnam Exam. I scored well but got no problems correct. I got farther on the number theory problem below than on anything else and had never had a number theory course. You should try to prove it.

In any set of 10 consecutive natural numbers, there exists at least one that is relatively prime to all the others.

*What is your most interesting mathematical story?*

There are stories and there are stories that cannot be told. Let's leave it at that.

Jim Hirstein will be the next Chair of the Department of Mathematical Sciences at The University of Montana. All associated with the department are wondering if we can get him to revert to an old job and to become the professional coffee maker in the department among his other administrative duties. We welcome him in his new administrative role.

## American Mathematics Competition

by Jim Hirstein

The American Mathematics Competitions are jointly sponsored by twelve organizations, including the Mathematical Association of America and the American Mathematical Association. For the past five years, I have been Director for the State of Montana.

The junior high school exam was taken by 1664 students from 23 schools in November. Two students tied for the highest score in the state: Brian Vankoten, an 8th grader at C. R. Anderson Middle School in Helena and Miles Anfinson, a 7th grader at Helena Middle School. Brian tied for first place for the second year in a row.

The AHSME, American High School Mathematics Examination, was taken in February by 2253 students in 49 Montana High Schools. Gregory Giem, a junior at Twin Bridges High School, received the highest score in the state. The thirteen top Montana students qualified to take the AIME, American Invitational Mathematics Examination, the next step leading to the selection of the U. S. Mathematics Olympiad Team.

The AHSME also reports a team score for each participating school. This year's winners in the team competition are:

- 1st: Billings Senior High School
- 2nd: Billings West High School
- 3rd: Helena High School

## Colloquium Highlights

by George Votruba

Not one -- but two -- past Presidents of the American Mathematical Society gave featured Colloquium talks in our series last (Fall) semester.

Ronald L. Graham of AT & T Labs and the University of California - San Diego served as President of the AMS 1993-95. He is also a former President of the International Jugglers

Association. His colloquium presentation, *Juggling Permutations of the Integers*, was given to a capacity crowd in September. (See the article by Mark Kayll in the Fall 1998 newsletter).

Then in October, William Browder, Princeton University, delivered the talk *The History of Manifold Topology in the last 50 years*. Professor Browder was the President

*(Continued on page 7)*

## 1998 Graduate Degree Recipients

Name	Degree	Date	Thesis/Professional Paper/Project Title	Advisor
Ronald Anderson	Ph.D.	Spring 1998	<i>Spatial Discriminant Analysis for Linear Relationships</i>	Graham
Paul Duffy	M.A.	Spring 1998	<i>The Use of Pyro dendrochronological Data in Estimating Mean Five Interval</i>	Graham
Radha Krishnamoorthy	M.A.	Spring 1998	<i>A Partial Characterization of Commutative Rings with Identity Having Only a Finite Number of Ideals</i>	Hewitt
Supawan Lertsakrai	M.A.	Fall 1998	<i>Asymptotic and Numerical Estimates for the Dissolution of a Spherical Bubble in the case of a Fast Reaction</i>	Long
Yueju Li	M.A.	Fall 1998	<i>Comparison of Tests of Fits between Pearson's Correlation Coefficient and Two Kolmogorov-Smirnov Type Tests (Lilliefors)</i>	Gideon
Andrew Schuh	M.A.	Spring 1998	<i>Algorithms in Invariant Theory</i>	Vonessen

**Colloquium** (Continued from page 6)

of the American Mathematical Society 1989-91. He has a long list of services provided on the national level; e.g., he was Chairman of the Briefing Panel on Mathematics for the Office of Science and Technology Policy of the White House in 1983. The Proceedings of a conference — convened at Princeton in 1994 in his honor — lists 28 direct mathematical descendants, 78 mathematical grandchildren, and 15 mathematical great-grandchildren.

You are always welcome to attend a colloquium talk. They are typically on Thursdays at 4:10 p.m. in Math 109. If you would like to be on our mailing list to receive announcements of future talks, please contact us. You can also see the schedule on our website at <http://www.math.umt.edu/Colloq/>.

**Distinguished Scholar for 1999**

by Rick Billstein

The Vice President for Research at The University of Montana recently announced that Professor William Derrick of the Department of Mathematical Sciences will receive The University of Montana Distinguished Scholar Award for 1999. The award will be made by President Dennison at the Faculty/Staff Awards Reception, Wednesday, April 28, 1999. It recognizes, among other accomplishments, the more than 30 research articles and six textbooks in pure and applied mathematics that Bill has authored or co-authored, and the six Ph.D. students whose dissertations he has directed. Bill will receive a certificate and a check for \$1,000 from The University

of Montana Foundation. There is always strong competition for this award and to have a member of the department win is truly an honor.

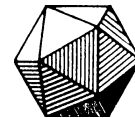
Congratulations, Bill, you make us all proud!



*Bill Derrick*



**πμϵ/MAA Math Club Corner**



We've made it to spring 11111001111 [binary] and the Math Club is going to party like it's 1999 [base ten], as the song goes. The fall semester for the Math Club went really well. We had guest speakers which were very interesting. Jenn Berg spoke about her REU [Research Experience for Undergraduates] in Louisiana last summer. Professor Bill Derrick shared his thoughts on Colombian mathematics. We also saw some interesting mathematical videos and had our traditional pizza party at the end of the semester [hmm.... funny it was our largest attendance]. Due to popular demand, we sold another batch of the "Does 1 = 2?" design t-shirts. Another particularly successful outcome from fall semester was the variety of student presentations. Even though each of us has a different level of understanding in our study of mathematics, all of the presentations were great and generated much enthusiasm!

spring semester. We've tackled some spring cleaning and organization of the undergraduate study lounge. We've seen some mind-boggling math videos; "The Shape of Space" especially stretched our thinking. The popular "Mr. G" [Glenn Goyertsen] spoke to us about fractals and the opportunities he has had to both learn and instruct on the subject all over the country. After



*Top: Cole, Joe, Keith  
Bottom: Amanda, Angie, Kristen*

Spring Break in March, we plan to do another round of student presentations. Math Awareness Week is an exciting time for us in April. During Math Awareness Week, scholarships and prizes are awarded, new members are inducted into the national Pi Mu Epsilon honorary society and seniors present their thesis research.

Anyone with an interest in mathematics is welcome to attend meetings on Tuesdays from 3:10 to 4:00 p.m. in Davidson Honors College room 118. Laughing at silly math jokes is not a requirement, but it helps.

πμϵ/MAA Math Club  
active members include:

- Joe Peterson ..... President
- Cami Welborn ..... Vice President
- Angie Concepcion-Willmott ..... Sec/Treas
- Jenn Berg ..... Amanda Deisher
- Cory Fuchs ..... Kristen Goyertsen
- Scott Jappinen ..... Cole Maxwell
- Kathleen Ores ..... Melissa Stiltner

Faculty Advisors:  
Mary Jean Brod ..... Keith Yale

So far, we're finding plenty to do

## UM Project Wins Governor's Award

Reprinted from *News Forum* 1/25/99  
(*News Forum* is The University of  
Montana campus Newsletter)

An innovative mathematics project created in part at UM recently was honored for its role in AIDS/HIV education.

The SIMMS Project, which integrates real-world math, science and technology in high school textbooks, earned the Governor's Award with a "module" -- chapter -- on AIDS and HIV.

On behalf of the Montana Council of Teachers of Mathematics, UM math Professor Johnny Lott accepted the prestigious Governor's Award from Superintendent of Public Instruction Nancy Keenan at a World AIDS Day luncheon in Helena Dec. 1.

Lott is co-director of The SIMMS Project, a mathematics curriculum funded through MCTM with a grant from the National Science Foundation.

The award-winning module, "AIDS: The Preventable Epidemic," uses information from the U.S. government's Centers for Disease Control and Prevention to demonstrate death rates and probabilities of contracting the disease.

"It's real-world data," Lott said. "We approached it from a purely mathematical standpoint. What



*Johnny Lott*

we tried to do is to let (students) reach their own conclusion that the best way of being safe is to avoid risky behavior."

The SIMMS Project curriculum is being used by students across the country, including about 8,000 students at 75 high schools in Montana.

"AIDS: The Preventable Epidemic" is part of The SIMMS Project's goal of helping students use mathematics to make better decisions.

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