

# MACS DEPARTMENT NEWSLETTER

## New Leadership in the MACS Department

By Don Clewett

With the retirement of Dr. Sandstrom last year, the Mathematics & Computer Science department needed a new department chair. Dr. Mohammad Riazi-Kermani was tapped to follow in Dr. Sandstrom's footsteps, but not without his being a little concerned as to the size of the shoes he would have to fill. Many of you know Dr. Riazi from taking Calculus III, Linear Algebra or Differential Equations, but how many of you actually *know* Dr. Riazi?

While many know that Mohammad was originally born in Iran, few know that his true passion is not mathematics. It is actually poetry. Mohammad has said that any day that contains poetry is a good day, no matter what else happens. You can often find him in the Union at lunch (along with Dr. Aflatooni) reading Rumi (a famous Iranian poet).

In fact, as a young man in Iran, Mohammad wanted to study poetry and literature at university. When he took the entrance examination for literature, however, he answered all the questions as poems, and was told that he should study something else, as the faculty had nothing to teach him. Mohammad was also skilled at mathematics, so he began his studies in that direction. In a sense, Mohammad's field of study was pre-ordained at birth. His name, Riazi-Kermani, actually means "mathematician from

Kerman." His family is named for a famous mathematician from Kerman who died about the time Mohammad came to the U.S.

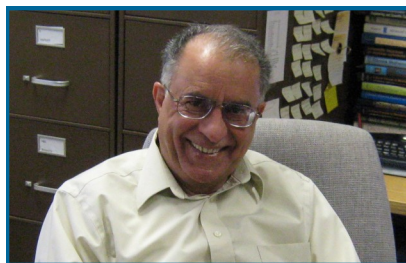
This famous mathematician, Abbas Riazi-Kermani left his family and home at a young age and travelled to the city of Yazd to learn more mathematics than he could learn in Kerman.

After a few years studying in Yazd, Abbas had exhausted their ability to challenge him, and he moved to Tehran to continue his studies. After completing his bachelor's degree in Tehran, Abbas had to go to England to continue his studies finishing with a Ph.D. from Cambridge University.

Mohammad had to travel overseas to further his studies, as well. He left Iran and travelled to the U.S. to study at Michigan State University. Mohammad admits that he wanted to study geometry at first, but was attracted to 'mathematical logic.' He was interested in topology, analysis and higher algebra. He ended up with a Ph.D. in Applied Mathematics, specializing in differential equations and dynamical systems. In 1984, after completing his graduate studies,

Mohammad came to FHSU, admittedly for 'just a couple of years.' But he fell in love with Hays and the teaching at FHSU, and he has been here ever since. Hays has been good to Mohammad and his family.

Mohammad has been married to his wife, Seddigheh, for 38 years, and they have 3 children: a son, Mehdi; and daughters, Mariam and Mina.



Dr. Mohammad Riazi-Kermani

So far, all three have escaped the burden of the family name. Mehdi is an actuary in Dallas. Mariam is in medical school and does medical research. Mina will begin studies in accounting at FHSU in the Fall.

The Mathematics and Computer Science department is lucky to have Dr. Riazi-Kermani at the helm as we head into the future. We may think of him as a very capable and accomplished mathematician and an expert Sudoku player, but who would have realized he was such a Renaissance man.

We would love to hear from you. If you have any comments, questions, or news to report, please contact Lane Young at [lyoung@fhsu.edu](mailto:lyoung@fhsu.edu) or Bev Unruh at [bunruh@fhsu.edu](mailto:bunruh@fhsu.edu).

### Inside this issue:

KAMS	2
KME/MACS	2
MATH RELAYS	2
STUDENT ARTICLE	3
2009 GRADUATES	3
WHERE ARE THEY NOW	4
FACULTY ACTIVITIES	5
RETIRED FACULTY	6-7
SCIENCE OLYMPIAD	8
SCHOLARSHIPS	8-9
CONTRIBUTIONS	10

## KAMS: The First Year

By Keith Dreiling

Twenty-six high school juniors from across Kansas have come to Fort Hays State University as the first class of the Kansas Academy of Mathematics and Science (KAMS). During what would normally be their last two years of high school, KAMS students complete two years of college-level courses while satisfying high school graduation requirements. In addition to rigorous coursework, KAMS students are involved in research projects with

FHSU faculty as well as faculty from other state universities. The goal of KAMS is to promote mathematics and science education in Kansas and to encourage some of Kansas' brightest math and science students to continue their college education in Kansas.

For more information  
about KAMS...check out  
[www.fhsu.edu/kams](http://www.fhsu.edu/kams)



KAMS student Seth Gooding works at the board while Shelby Smith looks on.

## Math Relays 2009

By Bill Weber

It was another successful year for students and faculty at the 2009 edition of the Math Relays. Nearly 575 students from 48 high schools attended the event, making it the largest Math Relays since we restarted the event after cancelling in 2006 due to construction at the Memorial Union.

Once again, the school with the most points overall was TMP-Marian, which allowed them to claim top honors in the 2A/3A division. It was a tight battle for 2<sup>nd</sup>-4<sup>th</sup>, but in the end, Minneapolis took home the 2<sup>nd</sup> place trophy and Salina-Sacred Heart was a close 3<sup>rd</sup>. McPher-

son ended with the 2<sup>nd</sup> highest point total overall, which allowed them to claim the 4A-6A 1<sup>st</sup> place trophy. Salina Central took 2<sup>nd</sup> in the large school division, while Hutchinson was 3<sup>rd</sup>. In the 1A division, Ness City squeaked out the title, with Quinter a close 2<sup>nd</sup>, and Skyline 3<sup>rd</sup>. For a complete listing of individual winners, please check the website <http://bigcat.fhsu.edu/macs/mathRelays/relayresults09/Schoolresults09.htm>

We seemed to get a lot of positive feedback from the coaches, after allowing each school to bring an extra team. This change allowed each school to bring 4 more stu-

dents to the event, and as long as we can stay under the fire code, we'll keep considering how we can add more. It is very impressive to see so many high school students coming to campus each fall to take math tests!

Note that the 32<sup>nd</sup> Annual Math Relays will be held on Tuesday, November 9, 2010. This change was made to accommodate those schools who are involved with Veteran's Day activities on Thursday the 11<sup>th</sup>.

## KME/MACS Club News

By Lanee Young

KME/MACS Club is still plugging along. The KME Spring 2009 Banquet was held in The Memorial Union on March 24. The new initiates were Antoinette Leiker, Troy Morash, Marcella Rhoads, Fred Schuckman, Kylie Simpson, and Michelle Webb. Dr. Paul Adams, Anschutz Professor of Education, spoke to the group about the life of a science nomad. Dr. Adams has been all over the world promoting science education.

This fall KME/MACS Club kicked off the new school year with an ice cream social in August to meet the new freshmen. It was well attended but we had a lot of ice cream left over since Dr. Sandstrom retired. Early in the fall semester we had pizza with the MACS faculty and students. Late in September we had our annual softball game followed by a barbecue in the park. I know you will find this

hard to believe, but the faculty were victorious again. It remains difficult for students to be involved in extra activities as they seem to be working more hours while trying to maintain a full course load. We will continue to work together to sponsor activities for the MACS students to be involved in and out of the classroom.

## A Little Adventure

By Rita Gnizak



**Rita Gnizak is a senior majoring in mathematics at FHSU.**

Being surrounded by hundreds of women for a weekend chimes a little different to everyone's ears. The 12<sup>th</sup> Annual Nebraska Conference for Undergraduate Women in Mathematics was, for me, one of the most positive

undergraduate experiences I've had. Women graduate students from a variety of schools across the country were open and honest about sharing their graduate fears, hopes, and experiences. Lead recruiters for SIAM, NSF, IPAM, and the NSA were available to discuss internships, careers, personal experiences as well as steps to better oneself as an applicant to each of their programs. The conference also included a series of break-out sessions where a young lady could ask personal, life-juggling questions ranging from how to manage mother-

hood while still aggressively perusing one's career to things a woman should be aware of in a discipline typically filled by men. Additionally, I was able to present the research on fractals that I had done through a summer REU program in New York. The questions and discussions that occurred as a result of the presentation helped me to start moving in new directions on the project. Since there were many sessions of student talks, I was able to attend several other undergraduate presentations as well as a poster session. As if all that

was not enough, the conference hosts also encouraged and specifically arranged dinner seating such that students from different schools could meet one another. The embracing and supporting atmosphere made networking simple and fun. After all, these are the mathematical women of my own generation; we will encounter one another again.

Nebraska Conference for  
**Undergraduate Women**  
in Mathematics

## 2009 Graduates

Aimee Doose – Industrial/Academic

Aimee is working at Professor's Steakhouse in Hays as the General Manager.

Jordan Funk – Teaching

Jordan is a graduate student at Kansas State University.

Kimberly Kohn – Teaching

Kimberly graduated in December and is substitute teaching until she is hired in a permanent teaching position.

Antoinette Leiker – Industrial/Academic

Antoinette is attending graduate school at Kansas State University.

Catelyn Manly – Teaching

Catelyn is teaching mathematics at Chaparral High School in Anthony, KS near Wichita. It was nice to visit with her in November when she brought students to the 2009 Math Relays at Fort Hays State University.

Brandon Nimz – Industrial/Academic

Brandon is in Hays and volunteering at North Oak Community Church as a college group leader.

Naoto Saga – Industrial/Academic

Naoto is believed to be attending graduate school.

Yong-Il Seo – Computer Science

Yong-Il is now married, living in Hays, and plans to attend graduate school at FHSU in Fall, 2010.

Chelsey Weber – Industrial/Academic

Chelsea is currently working at Walgreen Drug Store in Hays and is also a Resident Assistant at Marian Hall, the girls' dormitory for Thomas More Prep Marian High School.

## Where Are They Now???

Editor's Note: This is the eighth contribution to a continuing feature in our annual newsletter. The purpose is to describe in greater detail the interesting careers of individual alumni after graduating with a degree in mathematics or computer science. If anyone would be interested in contributing to future issues, please let me know.

My work at Cerner encompasses many different aspects of software development. Some aspects that are more heavily emphasized than in many other software development fields are testing, traceability, and reliability. Since Cerner's solutions are considered "healthcare devices", it is imperative they function as required. It is very important the final design of the software doesn't deviate from requirements (including unnecessary extra features, which is considered scope creep). The care of patients are reliant on supporting systems, and Cerner's solutions are no exception.

On a day-to-day basis, development involves creating the design from requirements (previously gathered), and managing code throughout the development (SVN checkins, SVN-viewer code reviews, in addition to standard code-diffing reviews). Code bases are separated according to release cycles, so defects can be tracked to when they first appeared, and patched-back to an older code base as far as needed. The different code bases (pipelines) makes it easier to isolate specific changes, and prevent patching back enhancements only intended for newer releases.

We work with many languages; C++, VB, Java, and a limited amount of .NET (C#), which will increase in use as old VC/VB code goes through uplift

to .NET. Most new development is currently done in the Eclipse RCP framework, which uses OSGI Java components that can be reused in new applications. Maven is used for our Java build system, which obtains dependencies from SVN repositories according to declared Project Object Model files, and builds endstates (JAR's) to designated repositories. The RCP framework is very powerful, and with the new Eclipse e4 XWT gui tools slated to be released soon, I can see its use being extended to other areas of development at Cerner.

For the last year, I worked on the Security Architecture team. One of my main projects for the year included a registration application to validate that new registrants of Ucern.com were valid Cerner Millennium users. The other main project was an Internet Explorer add-on module used to interface with smart cards, to authenticate users to the Choose and Book UK web app, and to poll and close their session once the card is removed. In addition, I also did numerous bug fixes on older code, in order to address client issues. This included back-end code as well

(AIX, HPUNIX, and now unsupported VMS code).

Cerner is dynamic, and adaptation is necessary to remain competitive. Currently, I am in the process of moving to the iAware team, where the projects will focus on clients that already have Electronic Medical Record software, but want to display it in a concise and meaningful way, in convenient locations. This will be RCP-based GUI development, and will also include varying technologies / interfaces to interact with the EMRs.

There are many opportunities at Cerner. In addition to software development, SolutionWorks communicates with clients directly in order to be a front-line of defense in solving client issues. CernerWorks is an optional hosting of Cerner's solutions to clients via Citrix. We all work together in order to make solutions into what the clients want. I am looking forward to Cerner's direction for future development, and will learn much throughout the process.



Charles Hansen graduated from FHSU in 2008. He is currently working at Cerner in Kansas City.

**Dr. Riazi will be teaching MATH 670: An Intro to Set Theory and Topology this summer. Check it out if you want an exciting and challenging class.**

**Check out MATH 673 VA: Calculus Concepts for Middle Level Teachers in the fall for some recertification credits.**

**Summer 2010  
Intermediate Algebra, College Algebra, Elements of Statistics, and Calculus Methods are offered online.**

## What does a faculty member do besides teach?

By: Mohammad Riazi-Kermani

The Mathematics and Computer Science faculty are actively involved in original research, publication, presentation, problem solving and proposing. The following is a partial list of scholarly activities by the department in 2009.

### INTERESTS

Intrusion Detection with Recurrent Neural Networks, Using Patterns to Promote Algebra, Object Information Repository in Christian Theory of Technology, Anonymity Leakage Reduction in Network Latency, Online Homework in the Classroom, Assuring Telecommunication Anonymity through Leakage Reduction, Groups from Days Gone By...Reflections by a Chair, Automated Interpretation of Discussion Threads' Messages in Asynchronous Distance Education, Generalization on Leibniz's Theorem, A Hybrid e-Learning Model of Quality Management System Auditor Training, Triangle Constructions in Taxicab Geometry, Analyzing Data with Excel, Bring Geometry to Life, Quadrature of a Parabola, Marden's Theorem in Action, Rates of approach of arbitrary differential equations to steady-state in one dimension.

### ACTIVITIES

One presented at National Council of Teachers of Mathematics National Conference. Several presentations were given at Kansas Association of Teachers of Mathematics Annual Conference. One faculty was the content specialist for the Western Kansas Primary Mathematics Academy. Two faculty presented a Curriculum Workshop in Salina. Several attended KMAA conference in Pittsburgh. The math education faculty assisted in the development, scheduling, organization, planning, and running of the KATM conference at Hays High School. Three are finishing their doctoral work. Two developed and revised original activities involving the use of mathematics in crime scene investigation for summer 2009 Middle School Girls Math and Science CSI camp. All read numerous journal articles and books of professional interest in order to keep abreast of current events/topics in mathematics, mathematics education, computer science, and general education. Several attended CTELT session on Podcasting, new university web site system and DyKnow. One

grand submission was made to KSDE for the MSP grants. Articles were submitted for publication to The Advocate, Mathematics Teaching in the Middle School, Mathematics Teacher, and The Journal of Computing Sciences in Colleges. One faculty member received Kansas Distinguished Dissertation Award. Professional Training on Mathematics of Modern Cryptography, Quantum Computation, and Quantum Information was completed by another faculty member. Correct Solutions to Problems were submitted to the College Mathematics Journal while problems were submitted to the Pentagon.

As you can see the faculty in the Mathematics & Computer Science do a lot more than just teach. Not a lot of dust settles under our feet as we meet ourselves coming and going.



Luis Macias, Colton Mills, Justin Maughn, Royce Wichers, Rita Gnizak, and Kylie Simpson studying in the MACS library.

**CHECK OUT OUR NEW  
WEBSITE**

[www.fhsu.edu/macs](http://www.fhsu.edu/macs)



## Retired Faculty News

by Keith Dreiling

Author's note: Some of the retired faculty members sent their information to me in written form, and others provided the information to me over the phone or in a personal interview. I have summarized the information from the interviews, but I have included the written information as it was sent to me since it seemed to be more interesting to read than if I had summarized.

### Ron Sandstrom

We were able to join a tour of Sweden during the last part of July. We spent 10 days in Sweden and got within 20 miles from where my grandfather emigrated. The 55-passenger bus could not get any closer because the roads were too narrow. Later in the summer we took a Smoky Hill Public television trip to KC and we did another in late October. In September, I led an NCA team to University of Wisconsin at Eau Claire. In late October we did a week trip to Maine called "Leaves, Lobsters, and Lighthouses." In early November, I went on a mission trip to Baldwin LA. Then right before Christmas we took our camper to Austin TX to visit some college day friends. These excursions were in addition to visiting the grandchildren in Hutchinson and Lakin. Also, I preached 14 different Sundays during the year. Hence, there's not much dust on my shoes, except when I'm out in the garden. Unfortunately, I have not had much time to work on my '53 Cadillac. But, there are no funds left in my fun-fund since I bought a '69 John Deere 1020 tractor.

### Rosalie Nichols

Retirement is good. We have had a busy year. The big news is we bought a condo in Las Cruces, New Mexico in November. We plan to spend winters in Las Cruces and eventually live there full time.

We traveled some: a Caribbean Bridge cruise in January, a trip to Texas in March, a road trip around Lake Superior in July, and a trip to Maryland for my 50<sup>th</sup> high school reunion in August. Though we had planned to fly our small plane for the trips to Florida for the cruise and to Texas and to Maryland, weather was not good so we put many miles on the car. In addition we made trips to St. Louis, Warrensburg, Omaha, and Alexandria for Weeden's Clan MacLeod responsibilities. Weeden had photo exhibits at a local bank in January, at a coffee shop in March and April, and at a Unitarian Church in Salina in July and August. He also had a photo accepted in the Five State Photo Exhibit at the Hays Arts Center.

We have continued to play duplicate bridge. We have enjoyed visits to and from children, their spouses, and grandchildren.

### Larry Dryden

Larry reported that he is still "hangin' in there." He has not done any traveling this year, and he has nothing else to report.

### Ruth Pruitt

I really haven't done anything different this year. One trip to Portland, OR, and two to Hot Springs, AR, to see the kids and grandkids. Other than that just what it takes to live and do the usual activities.

### Charles Votaw

Again, I don't have much to say about my activities. We still spend a good bit of time looking after great-children. I still digitize and edit family photos. I also take family videos, edit them and put them on DVDs for the family. We don't do much distance traveling, although we did go to Oklahoma for my brother's funeral. Our latest addition to the family is a great-granddaughter whom we haven't visited yet. It's likely we'll see her in late Spring.

### Elton Beougher

I decided I'd better provide something for the Math Alumni newsletter before Keith writes something for me. I think I could trust him but wonder if he has been corrupted by his colleagues in the Mathematics Department. Or, maybe he has corrupted them! :o) Instead of boring you with my activities I want to share something with you of a more solemn and personal nature that might interest those of you who were mathematics majors during the mid-1960s. Ima Lee Heier, my big sister, passed away this past January. She earned BS and MA degrees in mathematics at FHSU. She completed these in 1968 and started teaching mathematics and computer science at Tri-State University (Indiana). She retired in 1992 after a very successful teaching career at that school. I will finish this item with the tribute that I wrote, and read with some difficulty, for her memorial service. She was a remarkable woman.

#### A TRIBUTE TO MY SISTER, IMA LEE

I have always looked up to my big sister, and admired her courage and spunk. When she was widowed at the age of 30 years with 6 children, none older than 10 years, she took it upon herself to better her lot by going to college and earning two degrees, a Bachelors and a Masters, both in mathematics. This allowed her to obtain a position of teaching mathematics at Tri-State University that she held until her retirement. I am so proud of her accomplishment. I believe that her upbringing gave her the fortitude to carry out this plan.

She was the firstborn of Merlyn and Vivian Beougher in 1930 at the beginning of the Great Depression. Her siblings were three younger brothers, whom she helped raise. Of course, the boys

## Retired Faculty News

did not want to be raised by an older sister. That in itself provided her some experiences in conflict resolution to prepare her for raising her family. As in any family with a sister and three brothers she had to put up with a lot of ornery activity by her siblings. If she entertained other girls at our house, they would retire to her bedroom and close the door. Of course that led to the youngest sibling wanting to get through that door. You know how a closed door cannot be ignored by a 5 or 6 year old boy.

Ima Lee bumped heads with her Dad on several occasions. One family story relates an argument between her and him when the family was sitting down around the kitchen table for a meal. Ima Lee would not back down in the discussion and give up the argument. That led to tempers rising and all at once a missile (a biscuit from the table) went flying by her head and hit the wall behind her. Her dad had punctuated his point in the argument. I believe that ended the conflict. At least the family story does not relate that more biscuits were thrown.

Another family story relates an incident with her Grandma Jennie Beougher. The Beougher house had been built in 1897 from native Kansas limestone by our Granddad Joel Beougher. It had no indoor plumbing, hence no running water in the house. The drinking water was brought from the wellhouse in a pail. When one wanted a drink he or she took a dipperful of water from the pail, and drank his or her fill. If any water was left after the drink, it was dumped into another pail, called the "slop bucket." The contents of this bucket were table scraps and water, used to feed chickens and pigs. When Ima Lee was probably not more than 2 years old she was fascinated with this process. She decided to try her hand at it. She would take a dipperful of water from the pail, take a sip, and dump the rest of the water into the slop bucket. It was so much fun she did it several times in a row. Grandma Jennie was raised in a period of time when one was not wasteful of anything, especially water that had to be drawn from the well and brought into the house in a pail. She scolded Ima Lee for this wastefulness. Ima Lee, at the age of two, was already learning her conflict resolution skills. She patted her Grandma's hand and said, "Now, now Gramma, don't get cacited."

I imagine there were several conflicts in the Heier household as Ima Lee was getting her education and her 6 children were all at home. I don't know if any of these were resolved by the methods

described in these two stories. But, the 6 children all grew to adulthood and a bond of love and caring was formed that will carry them through the loss of their beloved mother.

Ima Lee suffered pain from back problems and the discomfort of allergies for most of her life. She soldiered on and lived to enjoy her grandchildren and great grandchildren. We are all the better from our association with her. She leaves a family of five generations to mourn her passing. We can take comfort in the knowledge that she is in the arms of our Lord and is enjoying the company of those who have gone before her. I don't know if there are arguments and biscuits in Heaven, but if there are such, then there may be biscuit missiles flying there.

### Erv Eltze

As in past years most of our attention has been focused on our grandchildren. For the last 2 ½ months I have been putting together a doll house (8 rooms 34 ½" W x 25" D x 33" H) . We got a kit that had all of the pieces cut out and so all I had to do was to paint the pieces and glue it together. That still took a lot of time and effort.

Last July we took the grandkids and their parents to Yellowstone Park for a week. I am happy to report that we all had a good time. We did see a lot of wildlife, but we did not see any bears.

Otherwise I am doing the usual things, including singing in the UMC choir and playing in the Hays Symphony.

### Ellen Veed

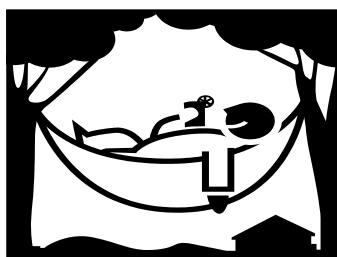
I have been doing well. No big news. Carolyn Ehr and I spent the week between Christmas and New Year in San Francisco and had a good time.

I spent three months at my cabin in Colorado last summer. Went back country exploring with friends. We got really lost once so now I have a GPS system in my car.

I'm helping with Tiger Call at the Foundation this spring. I've talked with several of my former students and it has been great catching up with their lives.

### Carolyn Ehr

Carolyn is doing well.



## Mathematics Faculty Assist with Science Olympiad

By Lane Young

**Science Olympiad** is a national, non-profit organization dedicated to improving the quality of K-12 science education through participation in Science Olympiad Tournaments and incorporation of the Science Olympiad into classroom curriculum.

Science Olympiad competitions are like track meets, consisting of 23 individual and team events. Each year, events are updated to reflect the ever-changing nature of biology, earth science, chemistry, physics, computers, astronomy, engineering, and technology. By combining events from all disciplines, Science Olympiad encourages a wide cross-section of students to participate.

Students who participate in Science Olympiad are taught advanced science through active, hands-on participation. All events involve team work, group planning, and cooperation.



There are now over 5,500 middle schools and high schools from all 50 states who participate in Science Olympiad.

The Department of Mathematics and Computer Science at Fort Hays State University has been actively involved in coordinating, organizing, and judging events for the past several years. Members of the MACS faculty were involved in both 2009 and 2010 but only the results of 2010 will be reported here. Keith Dreiling judged Trajectory for middle school and high school students (Division B and C) on February 9 and 11. Hongbiao and Michelle Zeng judged Write It Do It for both divisions. Mission Possible was judged by Jeff Sadler on Feb 11. Don Clewett was roped into helping with Technical Problem Solving for Division C while Longy Anyanwu graciously offered to judge Compute This for Division B. If you ever want to help with a Science Olympiad, you will enjoy the experience of watching these young minds at work.

## Over \$35,000 in Scholarships Offered for 2009-2010

By Jeff Sadler

The Fort Hays State University Mathematics and Computer Science Department (MACS) offered \$37,500 in student scholarships during the 2009-2010 academic year. The scholarship dollars come from three areas of funding: named scholarships, departmental scholarships, and Academic Opportunity Awards.

Scholarships funded through the on-going generosity of contributors to named/endowed scholarship funds, through the gains in the investment of these funds, and through other unrestricted donations provided \$15,400 in the department's highly prized named scholarships. These scholarship dollars went to the following upperclassmen/women pursuing a degree within the department:

Chase BeHee (Spearville)—Gene and Pauline Etter \$600 Scholarship  
 Fred Schuckman (Victoria)—Paul Miller Math/Physics \$1,000 Scholarship  
 Adam Falcon (Sylvan Grove)—Tebo Family \$1,000 Scholarship  
 Josh Peterson (Abilene)—Clarence W. Lowry \$750 Scholarship  
 Jeffrey Kaufman (Hoxie)—Ron and Cathy Sandstrom \$750 Scholarship  
 Judy Brummer (Hays)—Jimmy Rice Memorial \$850 Scholarship  
 Rita Gnizak (Hays)—Ora and Everett Marshall \$600 Scholarship  
 Tyler Kincaid (Dodge City)—Vivian Baxter Memorial \$800 Scholarship  
 Andrew Leiker (Hays)—Wilmont Toalson \$1,200 Scholarship  
 Kylie Simpson (Hays)—Elgin & Freda Denio \$750 Scholarship  
 Daniel Schneider (Olmitz)—Moore Family \$1,000 Scholarship  
 Nolan Trapp (Susank)—Moore Family \$1,000 Scholarship  
 Nichole Delzeit (Dodge City)—Moore Family \$1,000 Scholarship  
 Kory Koehn (Montezuma)—Moore Family \$1,000 Scholarship  
 Shawn Davis (Mankato)—Ruth and Roger Pruitt \$850 Scholarship  
 Cody Fief (Copeland)—Dr. Ellen Veed \$750 Scholarship  
 Troy Morash (North Platte, NE)—EE and Louie Colyer Memorial \$1,000 Scholarship



Emma Dreiling (Hays)—Esther Carter Ogle \$500 Scholarship

Another portion of the 2009-2010 MACS scholarship monies was funded by contributions to the department during the annual FHSU Endowment Telethon. (A special “thank you” goes to all those who contributed.) The dollars received during the telethon were used to fund five \$500 Departmental Scholarships. The following students pursuing a degree in math or computer science were awarded scholarships:

William Allen (Wakefield)  
Skyler Schultz (Lucas)  
Devon Mitchell (Hastings, NE)  
Cameron Stremel (Hays)  
Jami Norman (Holcomb)

The Academic Opportunity Awards (AOA) continued to be a great resource for incoming freshmen within the MACS department. In its third year since replacing the 20-year old Award of Excellence, the AOA provides a two-tier structure with award amounts of either \$900 or \$500 to awardees. The award and amount is based upon a student’s interest in pursuing a degree within mathematics or computer science as well as upon the student’s high school academic achievement and ACT/SAT scores. This past year, the MACS department offered over 40 AOA scholarships to students interested in attending FHSU. From this group of prospective students, twelve received a total of \$9600 as they began classes in Fall 2009. Those students included:

James Beard (Peyton, CO)  
Emma Dreiling (Hays)  
Paul Flesher (Hays)  
Jocelyn Lytton (Hays)  
Justin Miller (McDonald)  
Garrett Olsen (Abilene)  
Aimee Overmiller (Beloit)  
Alex Schaeffer (Hays)  
Steiner Scott (Hoxie)  
Benjamin Seuser (Sedgwick)  
Phillip Sheffield (Elbert, CO)  
Cy Sprouse (Enterprise)

**Your contributions  
to FHSU MACS  
Scholarships are  
greatly appreciated.  
Your donations,  
assist students in  
obtaining quality  
higher education.**

The department encourages all alums to direct local high school students with an interest or talent in mathematics, mathematics education or computer science toward FHSU. The department would enjoy awarding all possible dollars made available to us within this scholarship area.

Many of the above students share their appreciation for the financial assistance that comes through these scholarships. Anyone interested in contributing to the scholarships funds may do so by sending a check payable to the FHSU Endowment Association, specifying the MACS department or named scholarship fund as the recipient of the contribution. Also, additional scholarship information may be obtained by completing the form on the website at [www.fhsu.edu/macs](http://www.fhsu.edu/macs) or by contacting Jeff Sadler at [jsadler@fhsu.edu](mailto:jsadler@fhsu.edu) ; (785)-628-4416.

# Contributions to MACS Department Scholarships

Thanks to the generosity of the following contributors, the Mathematics and Computer Science Department provides scholarships to our outstanding students.

Joan Albers	Colby	KS	Don and Linda Lesovsky	Lakewood	CO
Lavern and Cari Andrews	Holton	KS	Aaron Lessor	Wichita	KS
Peter and Deborah Barclay	Woodbridge	VA	Max and Thelma Liggett	Greensburg	KS
Paul and Angela Basgall	St Louis	MO	Paul and Pat Luca	Ellis	KS
Gary and Bernice Bell	Mountain Home	AR	Larry and Connie Masters	St Charles	MO
Elton and Wendy Beougher	Hays	KS	Daniel and Pamela May	Mount Hope	KS
Ron and Suzanne Billinger	Highlands Ranch	CO	Regina Miller	Wichita	KS
Rex and Beverly Blanding	Brentwood	MO	Ronald and Debbie Miller	Wichita	KS
Sonny and Therese Blyn	Wichita	KS	Robert and Anel Minneman	Tescott	KS
Stacy Boyd	Abilene	KS	Donald Molleker	Marion	KS
Susan Bozeman	Topeka	KS	Ali and Maryam Farahani	San Diego	CA
Jerry Braun	Hays	KS	James and Wanda Morford	Kanopolis	KS
Stephen and Judy Brummer	Hays	KS	Phuoc Nguyen	Garden City	KS
Darren Brungardt	Shawnee Mission	KS	Merlin and Della Ohlemeier	Wa Keeney	KS
Larry Carter	Makawao	HI	Geoffrey Peter	Grand Prairie	TX
Kent and Lisa Colwell	Hays	KS	William Peterson	Vestavia Hls	AL
Vernon and Pricilla Cowan	Tigard	OR	James and Sharla Pfeifer	Bel Aire	KS
Willis and Alma Crabtree	Brewster	KS	Larry and Darlene Plymell	Hays	KS
Mary Cunningham	WaKeeney	KS	Lynne Rahm	Wichita	KS
Craig and Anita Curtis	Wichita	KS	Roy and Eugenia Richards	Sherman	TX
Kyndra Dobson	McPherson	KS	Shayne Riley	McCook	NE
Scott Claassen and			Richard and Sharon Ruder	Hays	KS
Francine Dreiling	Kansas City	MO	John and Becky Saddler	Agra	KS
Keith and Pam Dreiling	Hays	KS	Jeff and Lori Sadler	Hays	KS
Kay and Mildred Dundas	Hutchinson	KS	Ron and Cathy Sandstrom	La Crosse	KS
Kenneth Eichman	Lees Summit	MO	Ronald and Kim Schmidtberger	Victoria	KS
Greggory and Shelley Feist	Beverly Hills	MI	Bryan and Melissa Schoepf	Sylvan Grove	KS
Leslie and Karen Freeman	Concordia	KS	Janet Schuetz	Hays	KS
Kathryn Fritz	Washington	KS	Shawn and Sarah Schwarz	Hays	KS
Mickey and Lynnette Frownfelter	Phoenix	AZ	Lance and Jada Sharp	Hays	KS
Michael and Vicky Garza	Topeka	KS	James and Lida Sharp	Norton	KS
Betty Gingrich	Lancaster	PA	Pat and Kathy Spicer	Hays	KS
Leroy and Mary Gnad	Hays	KS	Gail Stanley	Dighton	KS
Jon and Robin Hanna	Hill City	KS	Jim and Debbie Stelter	Oklahoma City	OK
Sharon Hauge	Silver Spring	MD	Gene and Mary Swinton	Lincoln	NE
Chad and Lora Heckman	Arvada	CO	David and Betty Taylor	Atlanta	KS
Al and Marilyn Herren	Pratt	KS	Ken and Linda Trimmer	Plano	TX
Marvin and Marty Hines	Agra	KS	Blake and Crystal Vacura	Omaha	NE
Jerrold and Jess Hofaker	Logan	KS	Charlene Weber	Ellis	KS
Kent Huffman	Sharon Springs	KS	Bill and Tiffany Weber	Hays	KS
Roger and Teresa James	Hugoton	KS	Donald and Mary Werner	Wichita	KS
Justin and Amy Johnson	Ellsworth	KS	Joe and Sandra Whitley	Montrose	CO
James and Judy Johnson	Great Bend	KS	Fred and Roxi Wilson	Greeley	CO
John and Regina Johnson	Brewster	KS	Gary and Virginia Wilson	Cawker City	KS
Brad Kearn	Liberal	KS	Rex and Margaret Wilson	Marion	KS
Vernon and Virginia Kisner	Hays	KS	Marilynn Wilson	Emporia	KS
Norwin Kohls	Cottonwood	AZ	Leroy and Sharon Winklepleck	Pratt	KS
Richard and Sandra Kratzer	Gorham	ME	Wilbur and Shirley Wood	Haviland	KS
Mike and Carmen LaBarge	Valley Center	KS	Lanee Young	Hays	KS
Darrell and Sheila Latham	Stockton	KS	Eugene and Mary Zimmer	Hays	KS
Clint and Carol Ledbetter	Edmond	OK			
Rudy and Maralyn Legleiter	Colorado Springs	CO			

Thank you for your contributions to FHSU MACS Scholarships!!!