



# Newsletter

College of Physical and Mathematical Sciences

November 2005

## Stephen Humphries receives the first Annual Distinguished Teaching Award in Math

By David Wright

Professor Steve Humphries will be awarded the first annual Distinguished Teaching Award in the Brigham Young University Department of Mathematics on November 3, 2005 at 4 PM. The award will be presented in Room 3714 of the Harold B. Lee Library. Following the award, Professor Humphries will deliver a public lecture on "Piles of Pennies and Mountains of Money." A reception will be hosted in the Math Department following the lecture.

The Distinguished Teaching Award for the BYU Department of Mathematics was established by a gift from Carolyn Savage Wright and the Savage Foundation as a tribute to the many dedicated teachers in the BYU Department of Mathematics with special recognition of Wayne Barrett, Peter Bates, James Cannon, Peter Crawley, Lawrence Fearnley, Kenneth Hiram, Kenneth Larson, Hal Moore, and Don Robinson.

The stipend for the Award is \$1,000. The recipient also receives for the year the sculpture *Wildfire* by Helaman Ferguson, a former member of the BYU Department of Mathematics. The sculpture is a solid bronze wild sphere.

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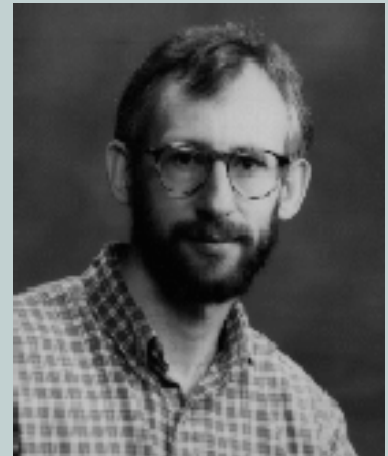
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Sculpture, *Wildfire* by Helaman Ferguson



Stephen Humphries

Recipients of the award should be widely recognized as extraordinarily successful in their teaching, have teaching effectiveness that can be documented, have had an influence in teaching beyond their own classroom, and foster curiosity and generate excitement about mathematics in their students. Professor Humphries is being recognized for the enormous impact he has had mentoring the research of his students. From a former Ph.D. student who is now an assistant professor at Washington University in Saint Louis to high school students at Timpview High School, Humphries has worked with dozens of students in a very personal way to produce quality research that stretched each of his students to the limit. The students speak highly of Humphries' classroom teaching as well. A student who went on to receive her Ph.D. at another institution writes, "He was not afraid to push his students to master difficult concepts. His lectures were well thought out and planned and presented in a compelling, challenging and fun environment. The material was at times cryptic, but Dr. Humphries presented the concepts in an easy to learn manner. The rigorous thinking I gained during his class was indispensable when I went on to get my Ph.D."

# The American Chemical Society Student Affiliates Chapter at BYU receives an Outstanding award

From the President of the American Chemical Society, William F. Carroll, Jr.

The American Chemical Society (ACS) Student Affiliates chapter at Brigham Young University has been selected to receive an Outstanding award for its chapter activities conducted during the 2004-05 academic year.

One of the Society's important responsibilities is the preprofessional development of undergraduate students in the chemical sciences. One way the Society accomplishes this is by offering undergraduate students majoring in chemistry or a related science the opportunity to

“It takes more than exceptional effort to be an award-winning chapter, it takes the nurturing attention of dedicated advisors. Professor Sevey's efforts certainly represent the best in undergraduate science education...”

(SA) program. The SA program has a current enrollment of more than 10,000 students and offers them the support, privileges, and benefits of the largest scientific professional society in the world. Many of our students are affiliated with over 970 chapters

at colleges and universities in the U.S. and Puerto Rico.

Every chapter is required to submit an annual report of its activities. Based on the review of these reports, chapters are selected by the Society Committee on Education for recognition as Outstanding, Commendable, or Honorable Mention chapters. For the 2004-2005 academic year, 32 outstanding; 62 commendable; and 81 honorable mention awards will be presented.

In addition to being recognized by their peers and ACS members, this award brings to your Student Affiliates and to your institution a note of accomplishment in *Chemical & Engineering News*, the Society's official national newsmagazine, and in

*Chemistry*, the Student Affiliates magazine. The award winning chapters will be honored at the 231st ACS National Meeting in Atlanta, GA on Sunday, March 26, 2006.

Professor Eric T. Sevey, faculty advisor of the chapter, deserves special commendation. Few faculty members are willing to make the great commitment of time and energy that a successful chapter requires of its advisors. It takes more than exceptional effort to be an award-winning chapter; it takes the nurturing attention of dedicated advisors. Professor Sevey's efforts certainly represent the best in undergraduate science education and mentoring around the country.

## BYU welcomes new faculty for 2005-2006 academic year

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**Daniel E. Austin**, assistant professor, chemistry and biochemistry; former research director at Sandia National Laboratories.

**Natalie Blades**, visiting assistant professor, statistics; postdoctoral at Johns Hopkins University.

**Eugene E. Clark**, visiting instructor, geology; faculty at Mountain View High School.

**Kent L. Gee**, visiting assistant professor, physics and astronomy; The Pennsylvania State University.

**Hope H. Gerson**, assistant professor, mathematics education; part-time faculty at BYU.

**Jaron C. Hansen**, assistant professor, chemistry and biochemistry; postdoctoral at California Institute of Technology.

**Scott J. Hendrickson**, assistant teaching professor, mathematics education; secondary math specialist for the Alpine School District.

**Thomas F. Kent**, visiting assistant professor, mathematics; University of Wisconsin-Madison.

**Randy S. Lewis**, professor, chemical engineering; former faculty at Oklahoma State University.

**Tracey L. Meade**, visiting instructor, statistics; faculty at Davis High School.

**Thomas W. Milligan**, visiting assistant professor, mathematics; former faculty at BYU-Idaho.

**Robert K. Wadley**, visiting instructor, mathematics education; director of secondary education, Nebo School District.

**Matthew M. Webb**, visiting instructor, mathematics education; BYU.

## Moore and Hamblin honored with Homecoming Awards

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By Charlene Winters

October 7, 2005

A retired BYU professor, **Hamblin** has been referred to as the Carl Sagan of geology. Over the past several decades, his textbooks have become among the most highly acclaimed and widely read. He is a master of geologic illustration and has shared his exceptional talents with generations of students.

A former public school math teacher, **Moore** joined the BYU mathematics faculty in 1961 and retired in 1994. According to university policy, he could continue to work as an adjunct professor for three years after retirement, and he did so. Following the period, he volunteered to continue teaching without remuneration, and he has been donating his time as a professor for the past six years.

Moore's teaching is exceptional and he has been a great influence on students at BYU.

# College Publications

## Chemistry

B.R. Brown, S.P. Zeiner, T.L. Niederhauser, and E.M. Woolley, "Apparent Molar Volumes and Apparent Molar Heat Capacities of Aqueous D(+)-Maltose, and Sucrose at Temperatures from (278.15 to 393.15) K and at the Pressure 0.35 Mpa", *J. Chem. Thermodynamics*, **37**, 843-853 (2005).

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Y. Qiao, R. Wang, Y. Bai, and L.D. Hansen, "Characterizing Critical Phases of Germination in Winterfat and Malting Barley with Isothermal Calorimetry," *Seed Science Research*, **15**, 229-238 (2005).

## Computer Science

A. Peterson, and T.R. Martinez, "Estimating the Potential for Combining Learning Models", *ICML Workshop on Meta-Learning* (2005).

C. G. Dickey, V. Lo, and D. Zappala, "Using N-Trees for Scalable Event Ordering in Peer-to-Peer Games", *ACM NOSSDAV* (2005).

C. Giraud-Carrier, "The Data Mining Advisor: Meta-learning at the Service of Practitioners", *Fourth International Conference on Machine Learning Applications* (2005).

C.K. Monson, K.D. Seppi, "Linear Equality Constraints and Homomorphous Mappings in PSO", *IEEE Congress on Evolutionary Computation* (2005).

C. W. Nielsen, M. A. Goodrich, and R. J. Rupper, "Towards facilitating the use of a pan-tilt camera on a mobile robot", *Proceedings of the 14<sup>th</sup> IEEE International Workshop on Robot and Human Interactive Communication* (2005).

D. Stutzbach, D. Zappala, and R. Rejaie, "The Scalability of Swarming Peer-to-Peer Content Delivery", *IFIP Networking* (2005).

H. Carroll, M. Clement, Q. Snell, and K. Crandall, "Phylogenetic Analysis of Large Sequence Data Sets", *Biotechnology and Bioinformatics Symposium* (2005).

J. Mecham, M. Clement, T. Freestone, Q. Snell, K. Seppi, and K. Crandall, "Jumpstarting Phylogenetic Analysis", *International Journal of Bioinformatics Research and Applications*, **2**(1) 2006.

J. Menke, and T. Martinez, "Domain Expert Approximation Through Oracle Learning", *13<sup>th</sup> European Symposium on Artificial Networks* (2005).

J. W. Crandall, and M.A. Goodrich, "Learning to Compete, Compromise, and Cooperate in Repeated General-Sum Games", *International Conference on Machine Learning* (2005).

J. W. Crandall, and M. A. Goodrich, "Learning to Teach and Follow in Repeated Games", *AAAI Workshop on Multiagent Learning*, (2005).

M. A. Goodrich, R. J. Rupper, and C. W. Nielsen, "Perceiving Head,

Shoulders, Eyes and Toes in Augmented Virtuality Interfaces for Mobile Robots", *14<sup>th</sup> IEEE International Workshop on Robot and Human Interactive Communication* (2005).

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M. Pandey, and D. Zappala, "A Scenario Based Evaluation of Mobile Ad Hoc Multicast Routing Protocols", *IEEE International Symposium on World of Wireless* (2005).

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M. Transtrum, and J. Van Huele, "Commutation Relations for functions of operators", *Journal of Mathematical Physics*, **46**, 1-14 (2005).

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