

January 20 – January 26, 2013

LSU Professor Susanne Brenner is World Renowned Computational Mathematician

Susanne Brenner has recently been elected as a Fellow of the American Association for the Advancement of Science (AAAS). This honor is bestowed on her for "advancement in finite element, multi-grid, and domain decomposition methods, and for service to the computational and applied mathematics community."

The American Mathematical Society (AMS) has also recently named Brenner as a member of the 2012 inaugural class of Fellows. Members were named thus for their outstanding contributions to the creation, exposition, advancement, communication, and utilization of mathematics.

Brenner is the Michael F. and Roberta Nesbit McDonald Professor at Louisiana State University, holding appointments with both the Department of Mathematics and the Center for Computation & Technology (CCT). At the CCT, she also serves as the associate director of academic affairs.

In 2010, she was named Fellow of the Society of Industrial and Applied Mathematics (SIAM). In 2011 she was awarded the AWM-SIAM Sonia Kovalevsky Lecture, a prize awarded by the Association for Women in Mathematics and the Society for Industrial and Applied Mathematics. She is also a recipient of a 2005 Humboldt Award for Senior U.S. Scientists from the Alexander von Humboldt Foundation in Bonn, Germany.

Currently, Brenner serves as managing editor of the journal *Mathematics of Computation*. She also serves on the editorial boards of the *Notices of the American Mathematical Society, SIAM Journal on Numerical Analysis, Numerische Mathematik, Numerical Algorithms, Electronic Transactions on Numerical Analysis,* and the *SIAM Classics in Applied Mathematics*. She serves on the SIAM Book Committee, the Scientific Council of the Center International de Mathematiques Pures et Appliquees (since 2009), the National Advisory Committee of the Statistical and Applied Mathematical Sciences Institute (SAMSI) (since 2010) and the AMS Council (since 2012). She is a past SIAM Vice President for Publications and served on the SIAM Council.

In addition, Brenner has received numerous accolades throughout the year, with a sampling listed below:

• she was invited to be one of the plenary speakers at the 36th Annual SIAM Southeastern Atlantic Section Conference, March 24 - 25, 2012 at the University of Alabama in Huntsville;

- she has accepted an invitation to be one of the plenary speakers at the Fourth Chilean Workshop on Numerical Analysis of Partial Differential Equations, 14-18 January 2013, in Concepcion, Chile
- she's accepted an invitation to present the Babuska Lecture at MAFELAP 2013, (The Mathematics of Finite Elements and Applications 2013), 11-14 June 2013, at Brunel University, London;
- she was one of the plenary speakers at the International Conference on Computational Sciences, which was held July 16-20, 2012, at the Shanghai Normal University in Shanghai, China;
- she's been selected to be a Distinguished Visiting Professor at the Indian Institute of Technology, Bombay, India.

Brenner's research interests include numerical analysis, finite element methods, multigrid methods and domain decomposition methods. For more information on Susanne Brenner or the world-renowned faculty at the LSU Center for Computation & Technology, visit: http://www.cct.lsu.edu/.

CCT in the News:

Third generation supercomputer at LSU

Source: The Advocate

Please Note:

- The Beowulf Bootcamp is open for registration. CCT will host the sixth Beowulf Boot Camp July 8-12 on the LSU campus. This exciting course offers students and teachers a unique opportunity to work with advanced research technology not usually available in a typical classroom setting. During Beowulf Boot Camp 2013, students will work hands-on with a number of LSU professors as they learn how to build and use supercomputers.
 - WHO: Louisiana High School Students, Baton Rouge Community College Students, and Louisiana Teachers
 - Students will engage in the following activities:
 - building a computer cluster from scratch
 - installing the Linux operating system on the computer they've built
 - connecting computers put together by their peers to make a minisupercomputer
 - learning how to program a mini-supercomputer in parallel with Python
 - interactive activities to help understand how Parallel computing works in Supercomputing
 - running performance benchmarks to determine how your cluster ranks in comparison with the fastest and largest supercomputers in the world
 - o This camp is introductory so students do not need a strong computational

- science background to participate. Some knowledge of programming a plus.
- For more information and to register, visit http://www.cct.lsu.edu/beowulfcamp2013
- LSU Science Café- Join us at Chelsea's (2857 Perkins Road chelseascafe.com) on **Jan. 29** for the first of LSU's Science Cafe series, where you can get up close and personal with some of the university's leading faculty. Networking and giveaways start at 5 p.m., but the event kicks off at 6 p.m. Appetizers will be provided.

Our first guest will be Prosanta Chakrabarty, curator of fishes at LSU's Museum of Natural Science, who will share stories of cave diving in Madagascar, combing fish markets in Taiwan and discovering new species all around the world and even right here in the Gulf of Mexico.

For details or to ask questions, contact Ashley Berthelot, <u>aberth4@lsu.edu</u> or visit http://www.lsu.edu/researchnews.

- Registration is open for Finite Element Circus & Rodeo, March 8-9, 2013, at Louisiana State University. For more information and to register, visit http://www.cct.lsu.edu/events/finite-element-circus-rodeo.
- Registration is now open for SCALA 2013: Scientific Computing Around Louisiana. SCALA will be held at Tulane University in New Orleans, February 15-16, 2013. Tulane University's Center for Computational Science and the LSU CCT will co-sponsor, for the fourth time, a meeting to: (1) highlight cutting-edge topics in scientific computing, (2) showcase the research at Louisiana institutions and, (3) promote collaborations across the state of Louisiana. This meeting is open to any faculty, post-doctoral researcher or student from any college in and around Louisiana. For more information and to register, visit http://tulane.edu/sse/ccs/news/scala-2013.cfm.
- Executive Vice Chancellor & Provost Stuart Bell has issued the call for nominations for the 2013 Distinguished Faculty Awards. LSU is proud of its world-class faculty, and we look forward to recognizing outstanding work among colleagues. Special thanks go to the LSU Alumni Association, the LSU Foundation, and the Tiger Athletic Foundation for their continued support. More information can be found here. Nomination packets are due through academic deans to Academic Affairs by Feb. 1, 2013.
- Prior approval is required for Special Meal Requests. Employees who make meal purchases without prior approvals may find that they must cover the cost of any monies spent for an unapproved event out of pocket. Dine-in restaurant meals are not allowed on LaCarte credit cards. Please contact Susie McGlone (susie@cct.lsu.edu) prior to any special meal with visitor(s) to file the appropriate request for approval. Prior approval could take up to two weeks, so please plan accordingly.
- Please remember to send your news concerning grants, awards, conferences, or other

pertinent information to CCT Event Coordinator Jennifer Fontenot at jennifer@cct.lsu.edu

 Follow CCT with social media to access photos and see news, events or updated information. These pages are public; you do not need an account to view the information.

o Facebook group: LSU Center for Computation & Technology

o Twitter: LSUCCT

o YouTube channel: LSUCCT

Interest groups:

- MAG (Mobile App-Art-Action Group): Everyone interested in the potential for Mobile Apps is invited to come and add their vision for these revolutionary devices.
 - Spring 2013 semester MAG meeting schedule; 4:30- 6:00 pm, 338 Johnston Hall:
 - January 24
 - February 28
 - March 21
 - April 18
 - Weekly MAG Lab Time- Fridays, 9:00 AM-Noon: MAG collaborative work time- 16 Johnston Hall
 - Come, design, plot, scheme, dream, work on your mobile projects with people around to provide help, feedback, and encouragement.
 - o For more information visit: http://www.cct.lsu.edu/MAG
 - o Contact: Jesse Allison (jtallison@lsu.edu)
- **GPU**: meets weekly (Thursdays @ 12:30 pm in 338 Johnston) and encourages participation from anyone who would like to join in the discussions. Join the mailing list: lasigma-gpu@loni.org
 - o Contact: Zhifeng Yun (zyun@cct.lsu.edu)

Upcoming events:

February 15- 16, 2013: Scientific Computing Around Louisiana Workshop

February 21: Apple At-Home Work Program for Students—Informational Meeting

March 1: <u>REU- Computational Sciences Applications Due</u>

March 1: <u>REU- Materials/LA-SiGMA Applications Due</u>

March 1: RET- Research Experiences for Teachers Applications Due

March 8-9: Finite Element Circus & Rodeo

Apply for positions w/Apple (for Students): At-Home Advisor program