New Mexico Network

Women **Scientists** and Engineers



2005 Reunion

Join Us at Lunch Barbecue June 24 in Tinka's Back Yard.

1047 49th, Los Alamos. 505-690-1318. Map exists at http://nmnwse.org/lawis/maps/map_to _1047_49th.jpg

All current and past NMNWSE members are invited. Friends and family are welcome.

Directions from Santa Fe are: Head north on 285 ~15 miles, then turn west on 502 at Pojoaque. Follow 502 into Los Alamos (another ~15 miles), coming up the main hill road. (There is a Y ~5 miles out of town, branching off - follow the

Los Alamos sign.) At the top of the hill is Los Alamos. Shortly after the local airport, the road veers left and becomes Trinity. Stay on Trinity past the intersection with Diamond until you get to 49th, being careful to note that at 48th, what looks like the continuation of Trinity is actually 48th, and Trinity makes a left hand turn, becomes slightly smaller, and continues 1 more block west towards the mountains. Make this left to stay on Trinity. 49th is the next right. Tinka's is the last (4th) house on left.

Adrienne Dare wins Governor's Award for Outstanding **New Mexico Women**

In nominating Adrienne Dare for the Governor's Award for Outstanding New Mexico Women, I would like to acknowledge her passion and commitment showing others the usefulness of a mathematics education in the real world. Immediately after earning her B.A. in 1964 from California's San Jose State University, Adrienne joined the Peace Corp teaching mathematics and science in

Nigeria for two years. From 1975 to 2001, Adrienne provided guidance and mentoring through her teaching positions at the University level. During this time, Adrienne recognized that one obstacle to learning mathematics was the fear of mathematics. To this end, Adrienne developed Math Anxiety workshops that were presented at regional mathematical meetings and used in

Special events this summer

- Adrienne Dare wins Governor's award
- Barbecue All come
- Who did what at Socorro?
- Barbara Torres **Receives ABWA Top** Ten Award
- Yolanda Jones King is Chair of SET
- Eleanor Walther receives Special Service Award



Adrienne Dare – 2006 Governor's Award Recipient

Nomination Letter continued

her classroom teaching. By 1974 Adrienne had earned her M.S. in Computer Science from the University of Oregon and in 1985 earned her PhD. in Mathematics from New Mexico State University,

During 1974 Adrienne attended a Math/Science Network meeting of women educators interested in increasing the number of young women entering professions requiring advanced studies in mathematics and science. Discussion at these early meetings focused on the graduate dissertation of sociologist Lucy Sells pointing to early mathematics education as a "critical filter" keeping young women out of mathematics and science careers. The outcome of these discussions was to hold the Expanding Your Horizons in Science and Mathematics Conferences TM (EYH) for girls showing young women how important mathematics courses were to their futures.

For several years, Adrienne volunteered at EYH Conferences held in the Las Cruces area sponsored by the American Association of University Women (AAUW). In 1993, as President of the Grant County Branch of AAUW, Adrienne recruited Della Nanez-Acosta to assist her in planning and executing the first

> Women in Science Award went to Tierra Todechine Team #101 Shiprock High School

2006 New Mexico SuperComputing Challenge, 25 April 2006, Los Alamos of 14 EYH Conferences for girls in southwest New Mexico, including Grant, Luna, Catron, and Hidalgo counties.

The primary obstacle to carrying out these conferences is resources, especially funding. Adrienne and Della found local business owners willing to donate goods and services, and they recruited more than 25 professional women willing to serve as workshop presenters and female role models. Pharmacists, doctors, dentists, airplane pilots, military officers, computer engineers were recruited from the local communities—all women who were excited to be sharing their careers with younger women. Early on, the EYH effort found a partner in Western New Mexico University, which has provided the facility for the conference since the beginning. The local school districts have joined with EYH providing transportation to the conference. In 2005, the Rio Grande Council of the Girl Scouts of America and Gila Regional Medical Center joined the effort as partners hosting EYH. The 2005 conference hosted 294 young women, more than 80% of them in the 5th, 6th, and 7th grades. The latest research shows that most girls lose interest in mathematics and science curriculums by the 7th grade. Adrienne identified this and wanted to do something about it. For 14 years, young girls in the southwestern corner of New Mexico have been able to meet professional women and spend time in a workshop session learning what mathematics and science skills are needed to succeed. New Mexico is large state with small, rural communities. Often, exposure to educational and career opportunities is limited. Perhaps the biggest impact this program has is that when the younger girls are in their teens, they want to come back to EYH as a volunteer, assisting workshop presenters in showing the next generation how important mathematics and science education is to their future.

Adrienne has never lost sight of the "critical factor" eliminating young women from mathematics and science based careers. Her years of service on the Board of Directors for New Mexico Network for Women in Science and Engineering, AAUW-NM, and her membership in the Association for Women in Mathematics and the Mathematical Association of America have helped her maintain this focus. She has been influential in leading her local AAUW Branch in this "win – win" for Grant, Luna, Hidalgo, Catron Counties, the girls of southwestern New Mexico and the State of New Mexico. I am honored to nominate Adrienne Dare, Professor Emeritus, Mathematics and Computer Science, Western New Mexico University for this prestigious award.

Author: Jo Ann Fischer.



Barbara Torres



Dr Yolanda Jones King

Barbara Torres Recognized Among Top Ten Business Women of the Year

Barbara Torres of Tijeras, N.M. has been selected as one of the 2006 Top Ten Business Women of the American Business Women's Association (ABWA).

The winners of this year's Top Ten Business Women of ABWA honors were selected for their many career and philanthropic achievements, as well as for demonstrating how their involvement in the Association has contributed directly to significant career achievements.

"When I joined ABWA, I spent the first 2 years sitting away from the podium and spending time just with people I knew, " says Barbara, who joined the La Luz Chapter in 1979. "As chapter members become people I knew, I started to change. I started to share my ideas. I started to share my time. Chapter activities gave me opportunities to share my ideas without the fear of failure. In ABWA, you don't fail, you learn."

Barbara has served her local chapter in every board position except secretary. She also served as chair of the Albuquerque Area Council, district vice president, chair of the 1995 Southwest Regional Conference, and national secretarytreasurer.

Barbara works as division director of Ethics and Business Conduct for Northrop Grumman. "As a result of what I learned through seminars and working with ABWA members, " she says, "I know that am a more valuable manager and competent mentor and coach."

Source: The I&TSD Reporter, December, 2005

Dr. Yolanda King is Chair of the NATO Sensors and Electronics Technology Panel (SET)

Yolanda Jones King is the Technical Advisor of the Spacecraft Technology Division of the Space Vehicles Directorate. She served as the Technical Advisor of the Spacecraft Technology Division of the Space Vehicles Directorate. she served as the Technical Advisor for the Space IR Technologies Center of Excellence from 2001-2002. She received her BS in Chemistry in 1076 and PHD in Phy7sical Chemistry in 1981 from the University of New Mexico. She is a Fellow of the AIAA and the US Lead for the NATO Sensors & Electronics Technology Panel

Yolanda's PHD research was in the chemical kinetics for high-energy laser systems and she spent her first 7 years at the (now) AFRL-Phillips Site in directed energy research obtaining a patent in beam sensing. Yolanda then managed the SDIO (then BMDO) technology program (\$300M/year) within the USAF laboratories and served as the Division Chief for that activity within the AFSTC and then Phillips Laboratory. She served as a Congressional Fellow in 1996 for Representative Ron Dellums advising on science and technology. Yolanda returned to AFRL and began leadership of the SBR integrated product team (AFRL and SMC) and the US/UK/CA coalition space based surveillance program. Yolanda was Director of the AFRL International Office in Arlington, VA (at AFOSR) from 1999 until her return to Kirtland in 2001.

Source: Dr. Yolanda Jones King Resume



Eleanor Walther Receives Special Service Award

The Supercomputing Challenge gave the Judges' Special Service Award to Eleanor Walther. Eleanor organizes the Expo portion of the Challenge finalist judging. In the first round of judging, six teams are selected based on their final reports. While these six teams make their finalist presentations to the judges, all the remaining 30 teams who have completed the Challenge, are organized into 20 - 30 minute time slots with a team of 2-4 judges. This is a logistical challenge and Eleanor manages to schedule the teams such that no two teams are presenting with their posters on the same table at the same time. At the end of the morning she needs to bring the 20 or so judges to consensus and select four teams. Her negotiating skills were put to the test this year because there were 5-6 projects that the Expo judges believed deserved to be in the finalist round. She was able to get the group to select four with as little randor as

possible. It was a real act of grace under fire.

Eleanor has been a part of the Challenge for several years as a mentor to teams as well as the management team, as a finalist iudae, and as a liaison to the resources at Sandia. She came to the Kickoff event at Glorieta this as she always does and worked with teams and after the school buses pulled out, she stayed and helped load the Ryder truck with the 60 desktop computers and monitors, cabling, and other boxes of conference materials. She followed the truck to the shed in Albuquerque and helped unload it there and followed it back to my garage where the unloading was completing. A finalist team from Onate High School in Las Cruces was mentored by Eleanor. She is a real Friend of the Challenge and New Mexico's students.

Author: Betsy Frederick

	Award	ExhNum	Title of Project
	\$50 cash award +	LAINUIII	How Opinion and Tolerance Forms
	Certificates and Tote Bag	7	Groups
Awarded by	\$50 cash award +		Dynamic Word Problem Generator
New Mexico Network of	Certificates and Tote Bag	82	System
Women Scientist and	\$50 cash award + Certificates and Tote Bag	89	Fossil Variation on the Sandia Peak Ski Area
Engineers at	\$50 cash award +	100	Macouring Disuith Dandom Numbers
New Mexico Science and Engineering Fair	Certificates and Tote Bag \$50 cash award +	166	Measuring Pi with Random Numbers Measuring Data Track Spacing Using a
New Mexico Tech	Certificates and Tote Bag	257	Laser Pen
	\$50 cash award + Certificates and Tote Bag	317	Biomusicology of Coalition Signaling in Human and Non-Human Animal Song
Socorro, NM	\$50 cash award +	011	
April 7-8, 2006	Certificates and Tote Bag	150	Plants Gone Wild
	\$50 cash award + Certificates and Tote Bag	347	Glowing Green Water: Synthesis and Analysis of Porphyrin Nanostructures
	\$50 cash award + Certificates and Tote Bag	355	Estimating West Nile Virus After Hurricane Katrina
	\$50 cash award + Certificates and Tote Bag	422	Geomicrobiology of Tunnel Springs and Las Huertas Creek, New Mexico
	Honorable Mention \$20 and Tote Bag	337	Does Elevation Effect Stomatal Densities? Phase III
	Honorable Mention \$20 and Tote Bag	385	Contamination Migration
	Honorable Mention \$20 and Tote Bag	465	Solar Engineering of Pogonomyrmex Harvester Ant Mounds
	Honorable Mention and Tote Bag	329	How to Steal Electrons from Algae
	Honorable Mention and Tote Bag	402	Controlling Chaotic Orbits
	Honorable Mention and		
	Tote Bag Honorable Mention and	83	Achoo! Modeling the Spread of Flu
	Tote Bag	54	Metal Oxidation
	Honorable Mention and		Long Term Monitoring of the Rio San
	Tote Bag	396	Jose Watershed
	Honorable Mention and Tote Bag	2	Boys: Girls Who Notices Detail?
	Honorable Mention and		
	Tote Bag	78	3 Scan, a 3D Scanning System
	Honorable Mention and	50	
	Tote Bag	59	Nails to Die For
	Judge: Mercedes Agogino		