

August 21, 2000

Dear Educator:

You are invited to participate in the 11th Annual New Mexico High School Supercomputing Challenge! We hope that, as you look ahead to the 2000-2001 academic year, you will include the Challenge in your plans. The Supercomputing Challenge is organized and administered by New Mexico Technet and Los Alamos National Lab/DOE.

Since the inception of the program in 1990, more than 4,900 New Mexico high school students have worked to solve interesting scientific problems. More than 890 teachers have supported their teams' work (many of them for more than five years!). As New Mexico addresses its workforce needs for the 21st Century, it is evident that students who participate in the Challenge are better prepared to plan for careers in the high-tech industry. Colleges and employers seek the skills and personal characteristics that Challenge participants develop.

The Challenge is a learning experience set in the context of a competition. Through workshops, educational materials and the help of technical support resources, students and teachers work to solve complex problems in a field of science that they have chosen. Teams that make and document significant progress on their projects can compete for awards of savings bonds and scholarships for individuals, computer equipment for the schools and trophies for teams.

This year, the program will again emphasize computational science, project design and the use of computers to find solutions to scientific problems. Instructional goals include collaboration, communication, research, development of programming skills, and project follow-through. Again this year, there will be a special track to guide teams through the Challenge with a non-competitive but complete project.

Teachers are expected to provide assistance to their teams in accessing and browsing the Internet. Use of electronic mail, Power Point, HTML and a programming language are important topics that students may need help with. Resources and mentors are available on the Internet to aid in this instruction. Additionally, the Challenge staff is always ready to help.

The Keynote speaker this year is recent PhD graduate in cancer studies, Karen Haines. The title of her talk is "Using Computational Science and Scientific Visualization to Model the Fly's Early Visual Processing System".

The dates for this year's Kickoff are October 29 – 31. There will be two overnight sessions. Each session of the conference will include one overnight stay, on October 29th for those schools more than 100 miles from Glorieta and on October 30th for those schools within 100 miles of Glorieta.

The Kickoff schedule includes workshops, seminars, and lab-based classes. Students can select either a beginning, intermediate or advanced curricular track; whichever one is appropriate to

their skill level and interest. Although full team attendance is not mandatory, all students and teachers are encouraged to attend.

Each student and teacher attending the Kickoff Conference will pay a \$20.00 registration fee, **due Thursday, October 26th**. A hardship fund has been established. Please contact Betsy or Celia at New Mexico Technet at (505) 345-6555 if you have a student who would not be able to attend without assistance.

The Challenge is offered at minimal cost to schools. Administrators are asked to support their teachers and teams by enabling them to attend training sessions during the year, have access to appropriate equipment, and work as a team to accomplish their goals. Each school must provide a connection to the Internet.

We urge you to read through the enclosed Challenge 2000 Kickoff, Significant Dates, Project Guidelines, Requirements and Restrictions, and Glorieta Conference Center Rules. A copy of the Acceptable Use Policies (AUP) is attached. Please look closely at the Acceptable Use Policies. We recommend that you provide a copy of the AUP and procedural guidelines to the participants' families.

You can access **registration** information from the Challenge Web Page located at <http://www.challenge.nm.org>. Click on Registration and supply the requested information. Electronic registration for the 2000-2001 Challenge closes at 5:00pm, Tuesday, September 26, 2000. The original paper copy of the **Team Entry Authorization Form (TEAF)** must be received at New Mexico Technet no later than 5:00pm, Tuesday, October 3, 2000. A copy is attached. Please make as many copies as you have teams. By signing the TEAF, each participant commits to following the Challenge and Glorieta rules and agrees to the AUP.

Finally, documents on preparing the Abstract and information about Awards and Scholarships are included.

We hope you will encourage your students to form teams, register online, return the TEAF, and come to one of the sessions of the Kickoff Conference in Glorieta, New Mexico October 29 – 31, 2000. Please share this information with your colleagues. If you would like a visit from a member of the Challenge staff to discuss the program or strategies for developing projects, please phone us at (505) 345-6555.

Sincerely yours,

Celia Einhorn and Betsy Frederick, New Mexico Technet
David Kratzer and Eric Ovaska, Los Alamos National Laboratory/DOE