

What is Computational Science?

In broad terms, computational science is using computers to analyze scientific problems. Computational science seeks to gain understanding principally through the analysis of mathematical models on high performance computers.

National Computational Science Leadership Program

The National Computational Science Leadership Program is intended to build a national reservoir of secondary education teachers who can effectively utilize computational science to enhance science and math education. The overall goal of this program is the development of a core group of teachers who, through a rich and stimulating environment including interactions with leading computational scientists and year-round support, will reach out from within their school districts to share their knowledge and expertise with other teachers.

Teachers Selected from National Pool

Two hundred teachers, participating in teams of four teachers each, will be selected from a national pool of teacher applicant teams. These teacher teams may come from one school district or from several cooperating school districts as needed to make up the four participants required for each teacher team. The teams should be formed around two science teachers, one mathematics teacher, and one school administrator.

Teacher Team Member Benefits

Teacher team member benefits include but are not limited to:

- Paid attendance at the SC2000 Conference (November 4-10, 2000);
- Paid attendance at a two-week summer workshop at the University of Alabama-Huntsville with research excursions to NASA's Marshall Space Flight Center (July 2001);
- Computational science leadership skill development;
- Participation in web cast seminars, computational science and leadership topics, and on-line intra-classroom experiences including "live national hands-on laboratory exercises"; and
- Development of learning modules that will become a permanent part of the national online computational science resource repository

Program Made Possible by Funding from National Science Foundation Grant

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Teachers participating in this program will be provided adequate travel allowances. These allowances will cover reasonable costs for coach airfare to project meetings (including the SC2000 Conference and Summer Institute), ground transportation, lodging, meals, course instructional materials, and substitute teacher support.

Additionally, program coordinators are applying for supplemental grants to provide laptops, Internet Service Provider (ISP) accounts, and release time to teacher participants. Special emphasis will be placed on providing additional support to low wealth schools and districts.

