

## Caretaker to Talent

At the helm of the Center for Excellence, president Joann DiGennaro endeavors to turn America's heads of the class in the direction of far-reaching top achievements.

**By Forrest Glenn Spencer / Photography by Seth Freeman**

Every generation produces a group of young men and women who are the best and the brightest. Some of them are recognized for their endeavors as students who shine in such studies as mathematics, engineering and the sciences. In the competitive global market of our world, it has become essential to not only recognize these talented students, but to encourage them, to give them the proper education required to foster their greatest potential.

Here in Northern Virginia is an organization that strives to give these students the opportunities to excel. For 25 years, the Center for Excellence in Education has sought to nurture students' budding careers of excellence and leadership. The organization was co-founded by the late Adm. Hyman George Rickover, father of the Nuclear Navy, and Joann DiGennaro, who serves as the Center's current president. DiGennaro's been the guiding force in ensuring that the United States makes the necessary investments in its educational programs, that no child, no student—even the brightest of the best—is left behind, and that our nation's technological advancements remain strong, innovative and competitive.



**Joann DiGennaro**

### **Who are the students you serve?**

We're the only U.S. organization left that works with the most academically achieving students in the U.S. and abroad in providing, which we jointly sponsor with MIT, for 80 students—50 from the U.S. and 30 international students; almost 2,000 alumni. We work with them from when they go through that summer program between their third and fourth years of high school, and we work with them eight to ten years at no cost to them throughout their undergraduate and graduate studies.

There were other organizations that did similar programs, but they're all gone because the government quit funding any programs for the achieving students unless they were targeted to underrepresented populations. We have been most fortunate because our

donors have been mostly from the private sector—many from corporations with sites right here in Northern Virginia, and many tied to the high-tech industry or to the [Department of Defense].

**You're an organization that has been recognized internationally.**

Our program is so renowned that international countries stand in line to have their students accepted to the program. We were the first organization approached by the Ministry of Foreign Affairs in China to have its high-school students to come to. We were also the first to receive high-school students from the Baltic and Balkan nations, India and Vietnam. We pride ourselves in having worked with 51 nations to date.

**Tell me about the USA Biology Olympiad and Research Science Institute.**

Five years ago, we began sponsoring USA Biology Olympiad. It was the only Olympiad that wasn't sponsored in the United States. International Academic Olympiads started in Central Europe, and the U.S. had teams in all of them, except biology. We knew that certainly it was important to have a program for students throughout the nation to raise the bar of excellence in biology and to help teachers, particularly rural and urban schools, and now that program has grown over 10 percent a year. We were up to nearly 10,000 U.S. students participating this year.

It [consists of] two rounds online, and then the teams narrow it down, and we select 20 high-achieving students to come to George Mason University, where we have the national finals. Then, Team USA is selected to represent our nation at the International Olympiad. Last year we were so proud when Team USA was awarded four gold medals; even more important, we were named No. 1 team in the world for theoretical and lab scores, edging out China by five-tenths of one percent. China, India and Singapore tend to take many of the medals.

Our Research Science Institute has more awardees and winners in two prestigious high school competitions: Siemens and Intel competitions. What's important is those awards are \$100,000 scholarships, because all our students are from middle-class families—over 92 percent are attending public schools, and we have a goodly number of females in that pool.

**Does our government nurture these gifted students, or seek them out?**

It's the dirty little secret that while so much is expended—federal, state and local monies for education—in the 2006 federal education budget, only less than \$10 million was allocated for gifted education, which is a fraction of a penny for every dollar spent. Programs cut across the nation are cut from gifted-and-talented budgets simply because of the politics involved.

We have to continue to bring up those less advantaged students and those with less opportunities and underrepresented populations. So where do the cuts occur? To the smallest group being served, and that's the most precocious, gifted and talented—what Johns Hopkins would say is one in 10,000 students.

That's rather sad.

We will never have as many engineers as China and India, but we know we have to work harder and longer in this nation. The concern is—as studies show—that half to two-thirds Ph.D.s awarded in this country will be to foreign-born. We know that if the number of engineers is going down in this country, we need to work on it. Engineers are the engines of innovation.

But in this past year, the president proposed more for K-12 science-engineering education, and it was passed by both chambers of Congress—the Senate, unanimously. But when it came time to fund it, there were 12,000 earmarks and no money going to the America COMPETES (Creating Opportunities To Meaningfully Promote Excellence In Technology, Education, And Science) Act.

With gifted and talented, we know they produce more than 50 percent of the Ph.D.s in the country each year. If you're going to work smart, it would seem you would give a little extra attention to the most achieving students, to nurture them, to push them a bit, to hold them in STEM (Science, Technology, Engineering and Mathematics) careers. Certainly our government is crying out for professionals in STEMs. Our companies are crying out and hiring more and more those who are not U.S. citizens.

We have a major problem now to help our nation to compete and to encourage international collaborations amongst the best scholars in the world, and we do that from a little office in Northern Virginia.

**Has your advice been sought by government or the media?**

It has been increasing over the last couple of years. I've testified before Congress. Just this past year, I wrote an op-ed in The Washington Post and have been quoted about international competitiveness in US News & World Report. I am delighted in providing information simply because I've given my life to talking about the importance and working with it, and I have a dedicated staff and volunteers and wonderful corporate support and some government support for our programs that I am constantly raising funds for.

**Your hopes for the next president?**

To the candidates this year, I would say, Let us fund the America COMPETES Act. One issue that is important and lacking in funds is substantive research that is creditable and reliable and not done by political pundits or think tanks with agendas.

**How do some of the states approach gifted students?**

Up and down. California was a forwarder years ago. They still have some good programs. In Virginia, we've got a number of the magnet schools in the nation, like Thomas Jefferson High School. People don't realize that the federal government is not the linchpin for education in our nation. We have been unique in the world for local control. One of the predominant issues that smacks of the autonomy of states' control is that we need standards for excellence across the board and states to come together and say, 'We cannot dumb down our standards.'

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