



INSTITUTE OF CREATIVE PROBLEM SOLVING FOR GIFTED AND TALENTED STUDENTS

Director:
Arthur L. Kalish,

**Institute of MERIT,
SUNY College of Old
Westbury**

Advisory Board

Scott Bronson
K-12 Program
Manager, Brookhaven
National Lab

Jun Choi
Executive Director
of NJ SMART

Ronni David
Chair, LIMACON
committee

Robert Gold
CEO, Ridgewood
Capital Company

**Raymond N. Greenwell,
Ph.D.**
Mathematics Professor,
Hofstra University

Ron Labrocca
Mathematics
Consultant, Grades K-12

Ron Lancaster
Senior Lecturer,
Mathematics Education,
University of Toronto

Cindy Lawrence,
Associate Director,
MoMath

**Karen Lee,
M.D.**
Assistant Professor
of Radiology,
Mount Sinai Medical
Center

Mary Ann Mansfield
Co-Chair, Working
Group, MoMath

Nicholas Restivo
Executive Director,
Mathematical Olympiads

**Frank Sanacory,
Ph.D.**
Assistant Professor of
Mathematics, SUNY
College at Old Westbury

**Geta Techanie,
Ph.D.**
Assistant Professor of
Mathematics, SUNY
College at Old
Westbury

**Glen Whitney,
Ph.D.**
Executive Director of
MoMath

To: Parents of Alumni and Current Participants in The Institute of Creative Problem Solving

From: Arthur L. Kalish
Director of the Institute of MERIT
Mathematics Education, Research, and Instructional Technology

Subject: Research and Technology Course

Date: February 25, 2013

The Institute of Creative Problem Solving for Gifted and Talented Students is expanding the program to include a second year of participation. This new program is designed for students who are interested in actively pursuing research in mathematics. It is only available to students who have successfully completed the ICPS program and who will be in grade 10 or 11 in September 2013. It will be expected that all participants select a topic of interest, produce a well-documented paper, and present their work at one of the local competitive competitions such as The Long Island Mathematics Fair.

The program will consist of 12 classes meeting on Saturday morning from 9 AM to 11:30 AM at SUNY College at Old Westbury. All participants must attend each session. This means that you and your child make a commitment to place this program as a priority. Students missing more than two sessions will be dropped from the program. Room is limited so please only apply if you can pledge to fully participate in the program.

The coordinator of the program is Dr. Robert Gerver, a mathematics and research teacher at North Shore High School. Dr. Gerver received the Presidential Award for Excellence in Mathematics Teaching in 1988. He has published over 20 books as well as many articles in mathematics magazines. One of his books, *Writing Math Research Papers - A Guide for Students and Instructors*, will be used as the basis for the course. In addition to Dr. Gerver, guest lecturers will be brought in to broaden the scope of the program and to focus on researched based technology.

Class seminars will include discussions concerning: 1) routine versus non-routine problems, 2) defying your intuition, 3) the art of technical writing, annotating, equation editing and naïve proofreading, 4) finding patterns and making conjectures, 5) determining a suitable and exciting research topic, 6) learning to read mathematics journals, 7) components of a research paper, 8) preparing and critiquing oral presentations, 9) learning to use Excel to perform mathematical calculations and analysis, 10) using Geometer's Sketchpad and Geogebra to develop assumptions, and 11) programming calculators and computers.

I am very excited to be able to offer your child this wonderful opportunity free of any tuition. We do ask that, if possible, you help maintain the program for future participants by making a donation. If you and your child are interested in applying for this program, please complete the enclosed application and return it to us as soon as possible. Students will be admitted on a first come first served basis.