Introduction to Innovation is the centerpiece of CWRU’s new, campus-wide broader impacts strategy to strengthen elementary school teachers' science and engineering content and practice. Funded by the National Science Foundation and the Gelfand STEM Center, the program is designed to use standards-based science content and processes in grades 2-5 as mechanisms to introduce fundamental concepts of engineering and design, explore the natural connections between science, engineering, and literacy, and enable teachers to appreciate the tremendous importance of science and engineering to society at large.

Leonard Gelfand STEM Center staff provide the overarching structure for the program and organize contributions by faculty from the College of Arts and Sciences and Case School of Engineering. University faculty help teachers explore ways engineering practices can be used to enrich the study of standards-based science content. A veteran elementary school teacher assists in the translation of college-level content to the classroom and leads the integration of literacy into the curriculum. The problem-based approach we use reflects the practices and strategies researchers use in their own investigations and provides a model teachers will be able to replicate in their classrooms.

PRESENTATIONS BY:
Bill Badders, Cleveland Metropolitan School District (retired), and former president, NSTA
Sarah Diamond, Ph.D., Assistant Professor, Department of Biology
Michael Hore, Ph.D., Assistant Professor, Department of Macromolecular Science & Engineering
Michael Fu, Ph.D., Assistant Professor, Department of Electrical Engineering and Computer Science
Jim Bader, Executive Director, Leonard Gelfand STEM Center

ELIGIBILITY
To be eligible for this program, applicants must have a regular appointment as a grade 2-5 teacher at a public, private, or charter elementary school in Cuyahoga, Lorain, Medina, Lake, Portage, Summit, or Geauga counties. Teachers with at least three years experience are preferred, but all teachers are welcome to apply. Preference will be given to teams of teachers from the same school. Teams may be composed of teachers from the same or consecutive grade levels. Enrollment is limited to 12 teachers.

DURATION
July 18 through July 22, 9:00 AM – 4:00 PM on the campus of Case Western Reserve University.

RESPONSIBILITIES
Participants are expected to attend all sessions, develop at least one lesson/laboratory for use in the classroom, conduct assessment of project impact in their classroom, and provide examples of student work for discussion at a year-end meeting.

STIPEND
Each participant will receive a $500 stipend plus $250 to purchase supplies necessary to implement the lessons in their classroom.

SELECTION PROCESS
Each applicant must submit a complete application package consisting of the application form, resume, essay, and a reference letter from your principal. Forms may be submitted by mail at the address shown below, by fax to (216) 368-5465, or by email to jxb14@case.edu.

APPLICATION DEADLINE
Enrollment is limited to 12. Applicants will be accepted on a first come, first served basis.
Name ____________________________________________

Last   First   Middle

Home Address __________________________________________

________________________________________________________________________

Telephone   (School) ______________________________ (Cell) ___________________________

Email ___________________________________________

School ___________________________________________ Grade(s) _________________________

School Address __________________________________________

________________________________________________________________________

I am applying as part of a school or grade level team that includes:

________________________________________________________________________

APPLICATION CHECKLIST

☐ Resume which includes information stating your education and professional experience with relevant teaching history.

☐ Essay (300-500 words). Based on your experience, what are the most difficult scientific concepts for your students to grasp? What prior knowledge or misconceptions hinder their understanding of this material?

☐ Reference letter from principal supporting your participation in this program.

CONTACT INFORMATION

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Cleveland, OH 44106

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