

University of Illinois at Chicago (UIC) in collaboration with the Chicago Public Schools (CPS)



WE ENCOURAGE  
MATH TEACHERS  
TO APPLY!

## Chicago Science Teachers Research (CSTR) Program - 2016 **Summer Research Fellowships for K-12 Math and Science Teachers**

The Chicago Science Teacher Research (CSTR) program is an initiative by the faculty of four UIC Colleges in cooperation with the Chicago Public School (CPS) authorities and industrial interest groups to address the need to engage in-service teachers in emerging technologies and cutting edge research in the area of material sciences, nanotechnology, bio-, biomedical and environmental engineering. **Some** fellowships are sponsored by the National Science Foundation (NSF) Research Experiences for Research Teachers (RET) Program and Chicago public school.

### **Research projects span a broad range of topics including:**

- Mathematical modeling for medical images and drug delivery
- Neural interface engineering and analysis, drug delivery in the brain, micro fabricated devices in bioengineering, adult stem cell differentiation, vibrational analysis of the human organs
- Synthesis of carbides and nitrides for clean fuel technology, comparative life cycle analysis

Emphasis will be placed on a summer teacher research apprenticeship using state-of-the-art experimental and computational facilities. Special events include seminars, tutorials, workshops, and industry visits. The RET experience aims at introducing teachers to methods and equipment used in cutting edge research, reinforcing the math and science background of teachers as well as the skills and means to effectively disseminate such knowledge to their students, and provide a research element for the continuing education of science and math teachers. **We especially encourage math teachers and computer instructors interested in Visualization of Scientific Data and Mathematical Modeling to apply!**

### **Program Description:**

- Participant teachers engage in research apprenticeship for 7 full-time weeks within the time frame from June 23 to August 12, 2016 at the University of Illinois at Chicago.
- Final project reports, classroom implementations and awards for exceptional participants will be featured in the Annual RET Conference under the auspices of the Chicago Public School authorities.
- Open to K-12 teachers and community college faculty.
- Selection is based on applicant's resume, essay, and two reference letters. The essay should be a brief narrative of approximately 500 words which proposes the research activities and the name of your preferred research mentor and your thoughts on the benefits for you and your students resulting from your participation in the program. The two reference letters may be from your principal, assistant principal, department head, science coordinator or prior RET fellow.
- RET fellows will receive a stipend of up to \$8,000 for the full program. Additional funding for research projects and development of classroom projects is available.
- Three continuing education credits will be offered simultaneously (graduate level credits).

**Application Deadline: postmarked by May 5<sup>th</sup>, 2016**

*Later applications will be considered until all positions are filled.*

**Before applying find useful information in our website <http://www.uic.edu/labs/lppd/RET.html>**

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