

The Santa Fe Institute is a private, not-for-profit, independent research and education center founded in 1984, for multidisciplinary collaborations in the physical, biological, computational, and social sciences. Understanding of complex adaptive systems is critical to addressing key environmental, technological, biological, economic, and political challenges.

Renowned scientists and researchers come to Santa Fe Institute from universities, government agencies, research institutes, and private industry to collaborate in attempts to uncover the mechanisms that underlie the deep simplicity present in our complex world.



# Emergence of Life

From Geochemistry  
to the Genetic Code



## SANTA FE INSTITUTE

1399 Hyde Park Road  
Santa Fe, New Mexico 87501  
[www.santafe.edu](http://www.santafe.edu)

## For more information, please contact:

Paige Prescott  
T 505.690.3614  
[paige@projectguts.org](mailto:paige@projectguts.org)



This program is supported through NSF FIBR  
Award # 0526747 and NSF AYS Award # 0639637

A two week workshop for  
MIDDLE AND HIGH SCHOOL SCIENCE TEACHERS  
July 5- 18, 2009, in Santa Fe, New Mexico



SANTA FE INSTITUTE

**In the last decade**, the search for the understanding of the origins of life has become more urgent. The discovery of extra-solar planets, information sent back from the remote landings on Mars and Titan detecting evidence for life, and the exploration of extreme terrestrial environments have all highlighted the need for a better understanding of the very definition of life as well as the factors that lead to the emergence of life.

Scientists from five research institutes are collaborating on a multidisciplinary approach to further the understanding of the pathways from geochemistry to the development of the genetic code. The next chapter of their work is to deliver this information to middle and high school science teachers in the hopes to inspire the next generation of scientists to learn more about these exciting frontiers in biological research. Participants in the workshop will hear

from the research scientists and will receive training on three curricular units developed by a team of educational experts.

### Criteria

In order to be considered for this teacher workshop, you must be one of the following: a current middle school or high school teacher, a trainer of teachers, afterschool science club provider or currently enrolled in a teacher education program. You must agree to implement the new material in the 2009-2010 school year and continue to be a part of the network of teachers pioneering the curriculum. We are targeting teachers from the areas surrounding the five research facilities: George Mason University, University of Illinois-Champaign Urbana, University of Colorado at Boulder, Arizona State University and the Santa Fe Institute. Teams of teachers from the same school are encouraged to apply.

## Teacher Workshop Schedule

### July 5 - 18, 2009

- Sun** arrive to Santa Fe.  
5-7pm Welcome Reception
- Mon - Fri** 9am to 4pm at Santa Fe  
Institute (lunch will be provided  
at Santa Fe Institute)
- Sat** free time, trips around Santa Fe,  
International Folk Art Market
- Sun** free time
- Mon - Fri** 9am to 4pm at  
Santa Fe Institute
- Sat** departure from Santa Fe

For those outside of Santa Fe: Included in your attendance of the workshop is all travel. You will stay at St. John's College in a single-occupancy room. All meals included.

All participants will receive an initial stipend of \$1000.00 as well as additional support for implementing the curriculum either as part of your courses or in a science club.

### How to apply

Apply online at [www.santafe.edu/FIBR](http://www.santafe.edu/FIBR), click on 'registration' then the online application.

Applications are due by **April 26<sup>th</sup>, 2009**.  
Notification of acceptance will be by May 8<sup>th</sup>.

