



# SEG Mentor

## Holly Stein



### Contact Information

#### Primary contact:

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### Current Position and Focus (areas of research and/or interest in economic geology)

Senior Scientist and Professor, CSU  
 Researcher, Geological Survey of Norway  
 Extensive work with mineral industry, academia, and international government.

Metallogeny in a magmatic-metamorphic-tectonic framework using absolute time for reconstructions; Re-Os as a tracer and time pin to elucidate depositional ages for sulfides, oxides, and black shales; Re-Os for understanding diagenesis, dating migration of hydrocarbons and tracing hydrocarbons to source rocks; Re-Os to understand early Earth and the evolution of Earth's atmosphere.

The Norwegian research council (NFR) and the petroleum industry jointly awarded the AIRIE-NGU partnership a multi-million dollar 4-year grant to develop Re-Os as an exploration tool for the hydrocarbons.

### Relevant Education/Work Experience

Founder and Director, AIRIE Program, [airie.cnr.colostate.edu](http://airie.cnr.colostate.edu)

Present project work at AIRIE is based in 60 countries with more than 300 collaborating persons and groups.

Building models that link field observations with data at the nanoscale. Transforming laboratory results into real working utensils for resource exploration.

Effective 2006, AIRIE is launching a new decade of research in close collaboration with the petroleum industry. Technique development and Re-Os applications for hydrocarbon exploration is a major focus of this program. The field areas are the Barents Sea (drill core) and Svalbard.

Ph.D. and MS degrees from University of North Carolina at Chapel Hill (1985, 1978); early years of employment with the mineral industry.

### Hobbies and Interests

Classical music, early music, opera, hiking, biking, friends

### Nationality

USA

### SEG Activities (e.g. positions held, former student membership details)

Vice President (1999-2000)  
 Councilor (1995-1998)  
 Editorial Board, Economic Geology (1991-1995)

### Personal Philosophy on Mentoring

Mentoring is the natural outcome of two persons who meet, find mutual interests, find energy in one another, AND the mentor is in a position to help, further, or enable the other. Mentoring is not a commodity to be monitored or forced.

**Languages Comfortable Communicating With**

English (native)

German (intermediate level)

Norwegian (working knowledge, reading)

**Other Relevant Information**

On occasion, AIRIE considers taking on positively exceptional students and post-docs. Important qualities include self-starter, visionary thinker, and ability to question dogma. A demonstrated capacity to think broadly and reason scientifically is essential. Strong work ethic and ability to communicate are very important.