

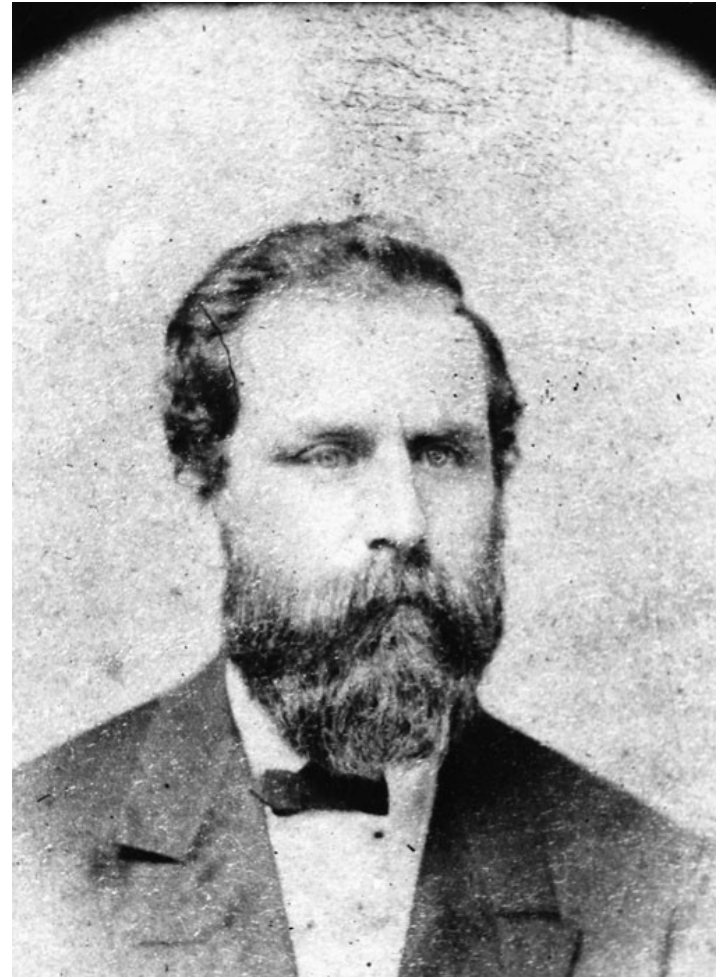


College of  
**MINES AND EARTH SCIENCES**  
THE UNIVERSITY OF UTAH



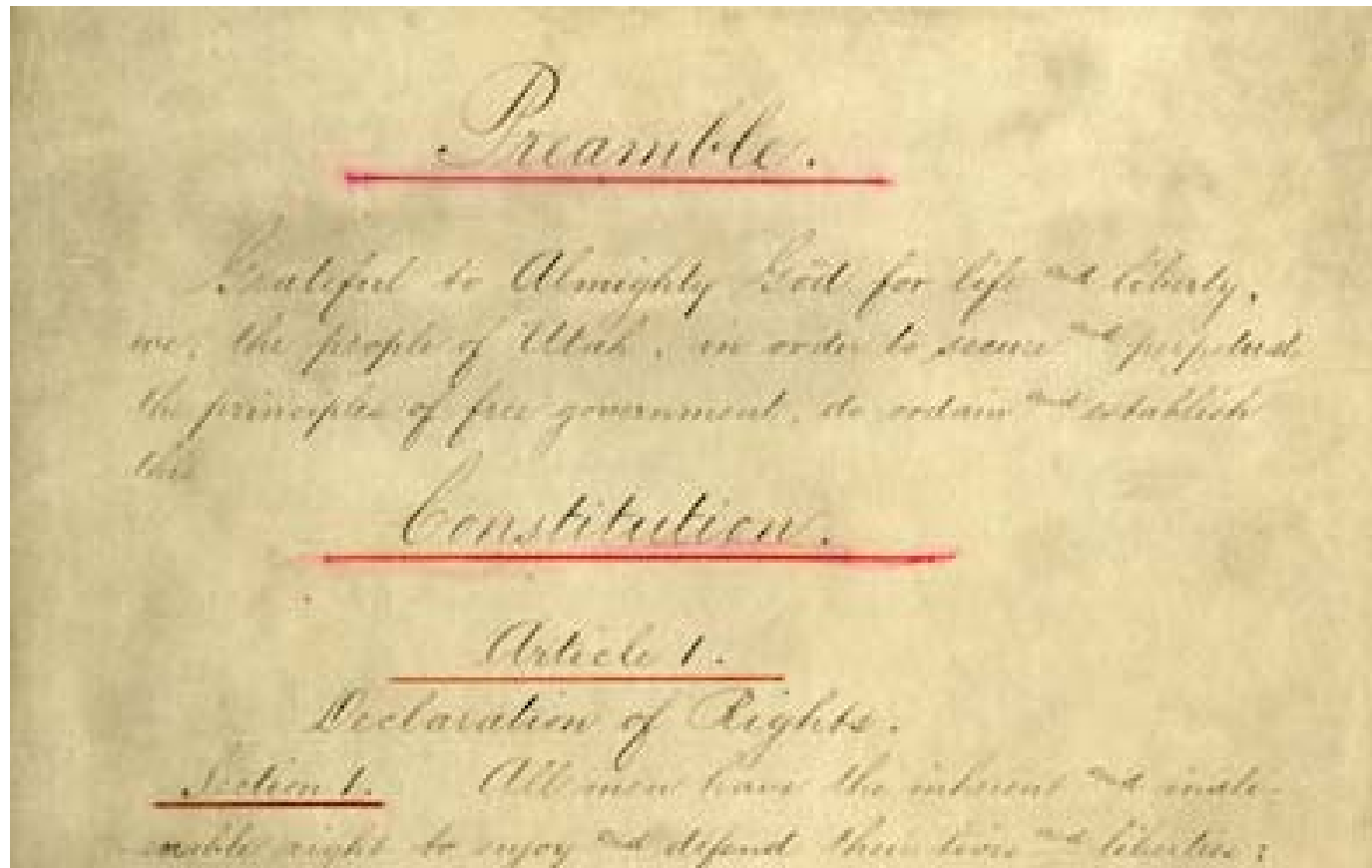
# The University of Utah

- Established 1850
- By 1852, 80 students enrolled, but funding was rescinded
- Classes re-established in 1869, under Dr. John R. Park, Chancellor
- Classrooms completed by 1884



# School of Mines of the State of Utah

- Established by the state constitution







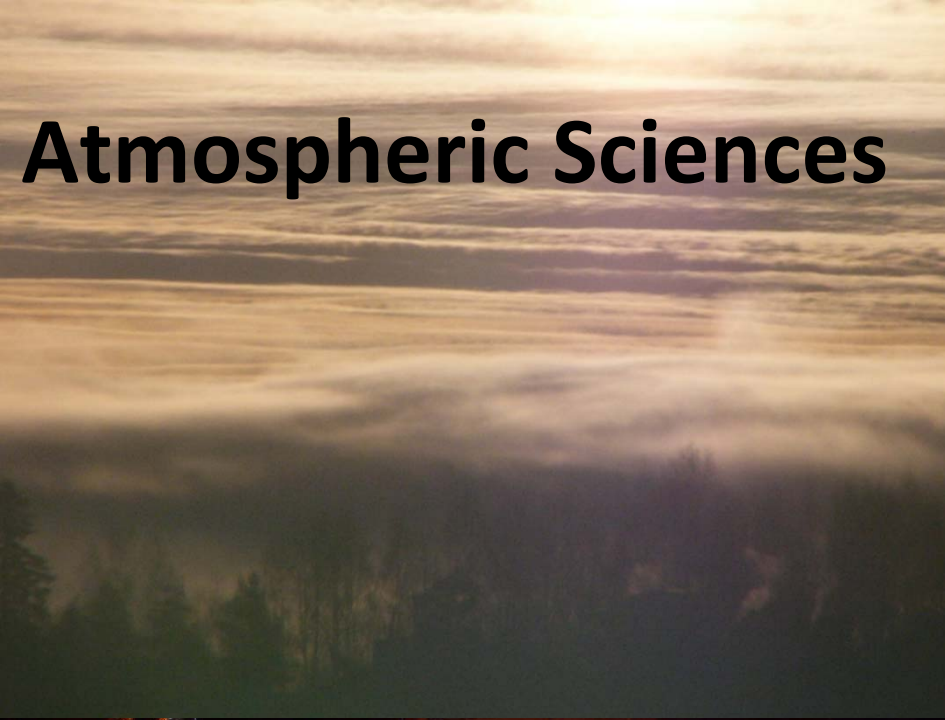
# School of Mines of the State of Utah

- Instruction began in 1891
- B.S. degree offered in 1895-6
- Utah State School of Mines organized, 1901





**Atmospheric Sciences**



**Geology & Geophysics**



**Metallurgical Engineering**



19/06/2009

**Mining Engineering**

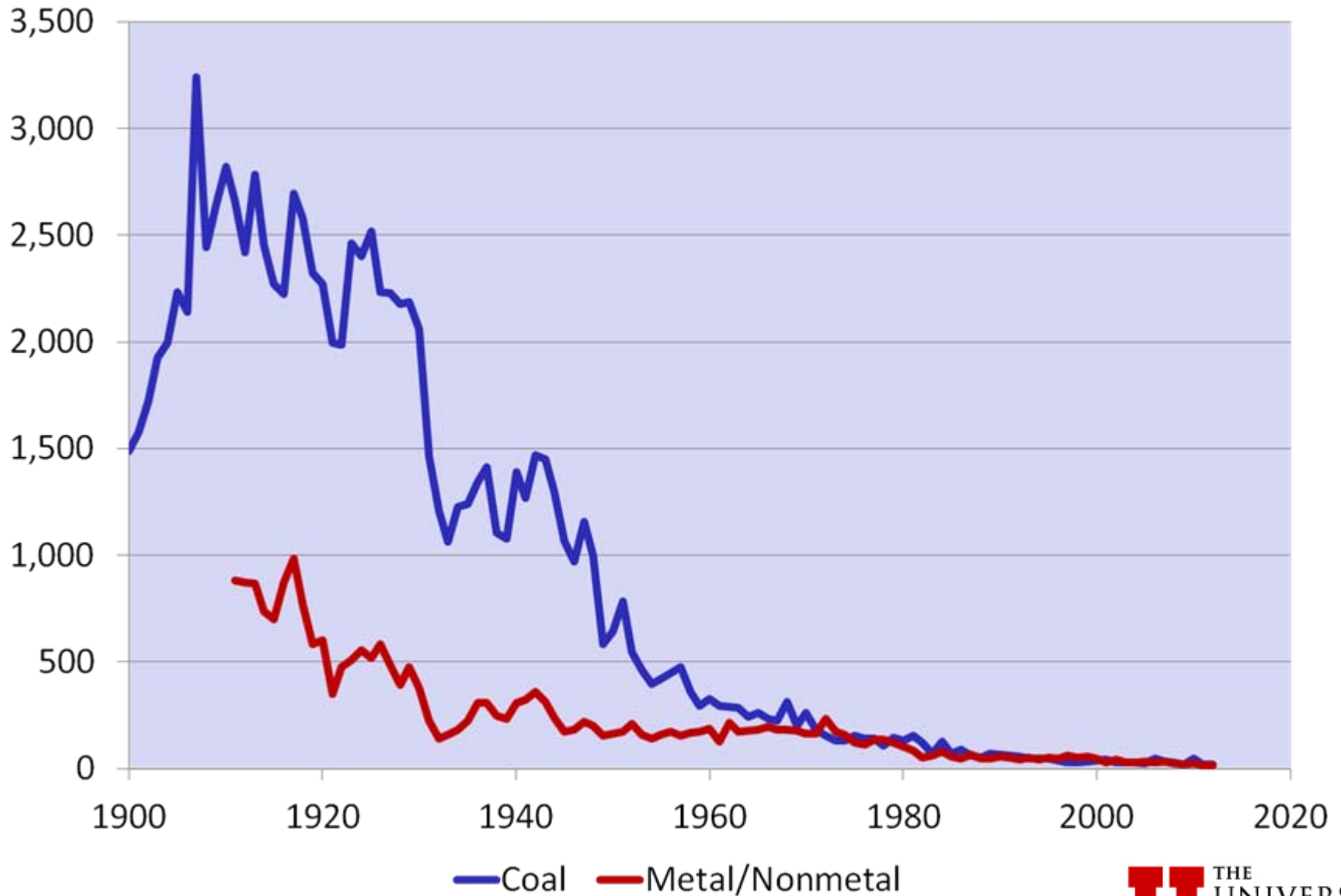




# Safety Education in the Mining Engineering Program

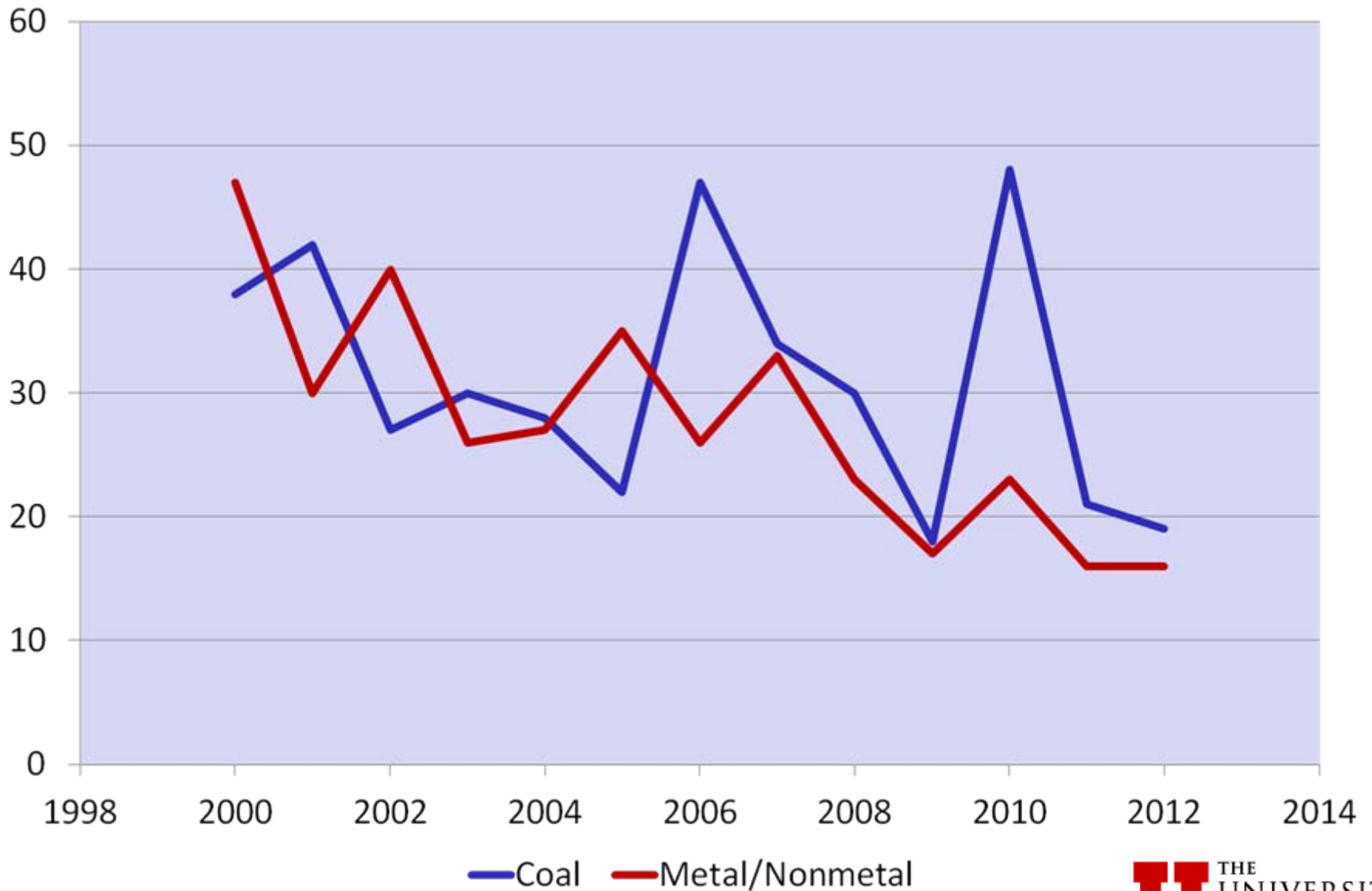


# U.S. Mining Fatalities

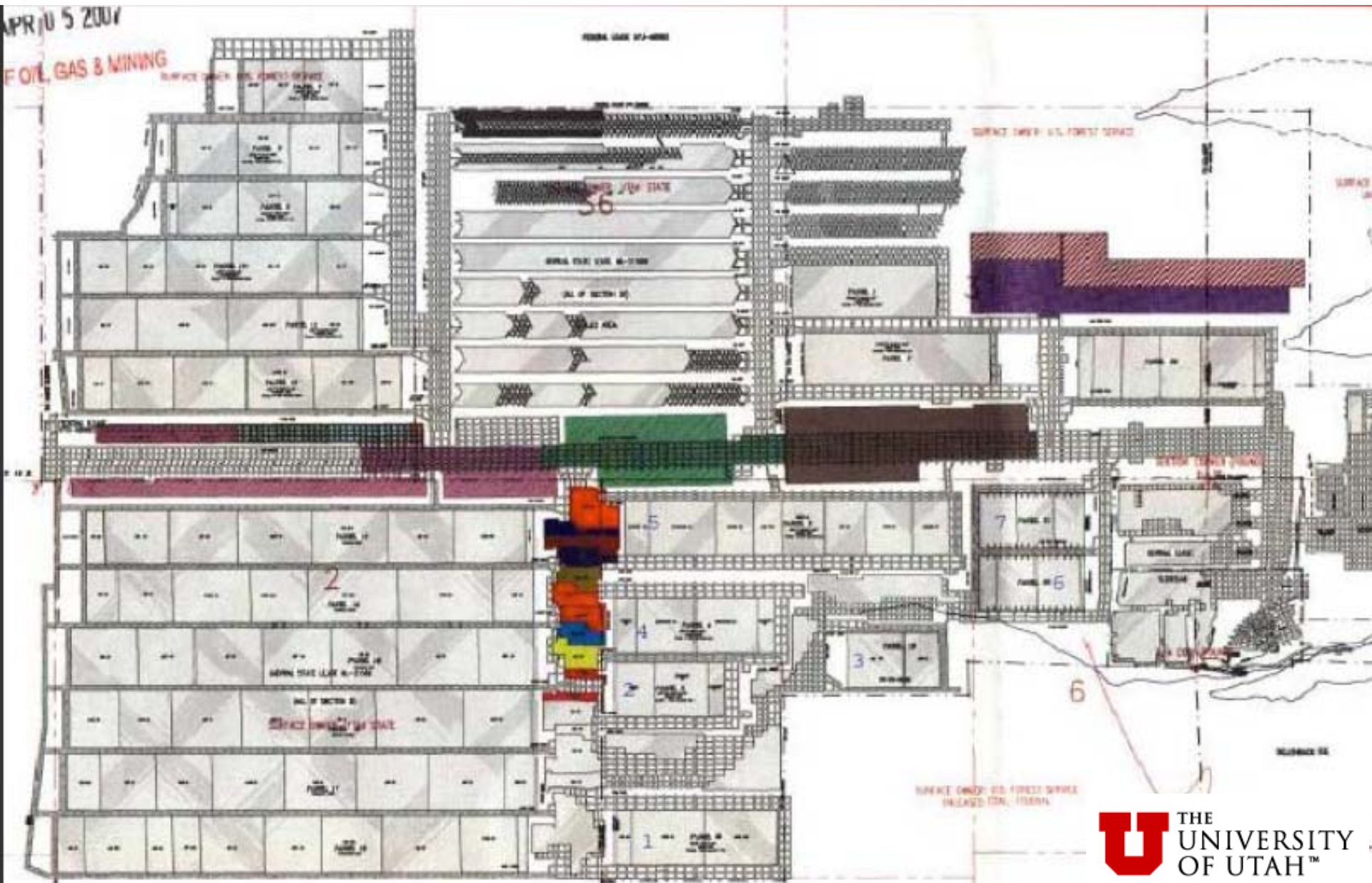




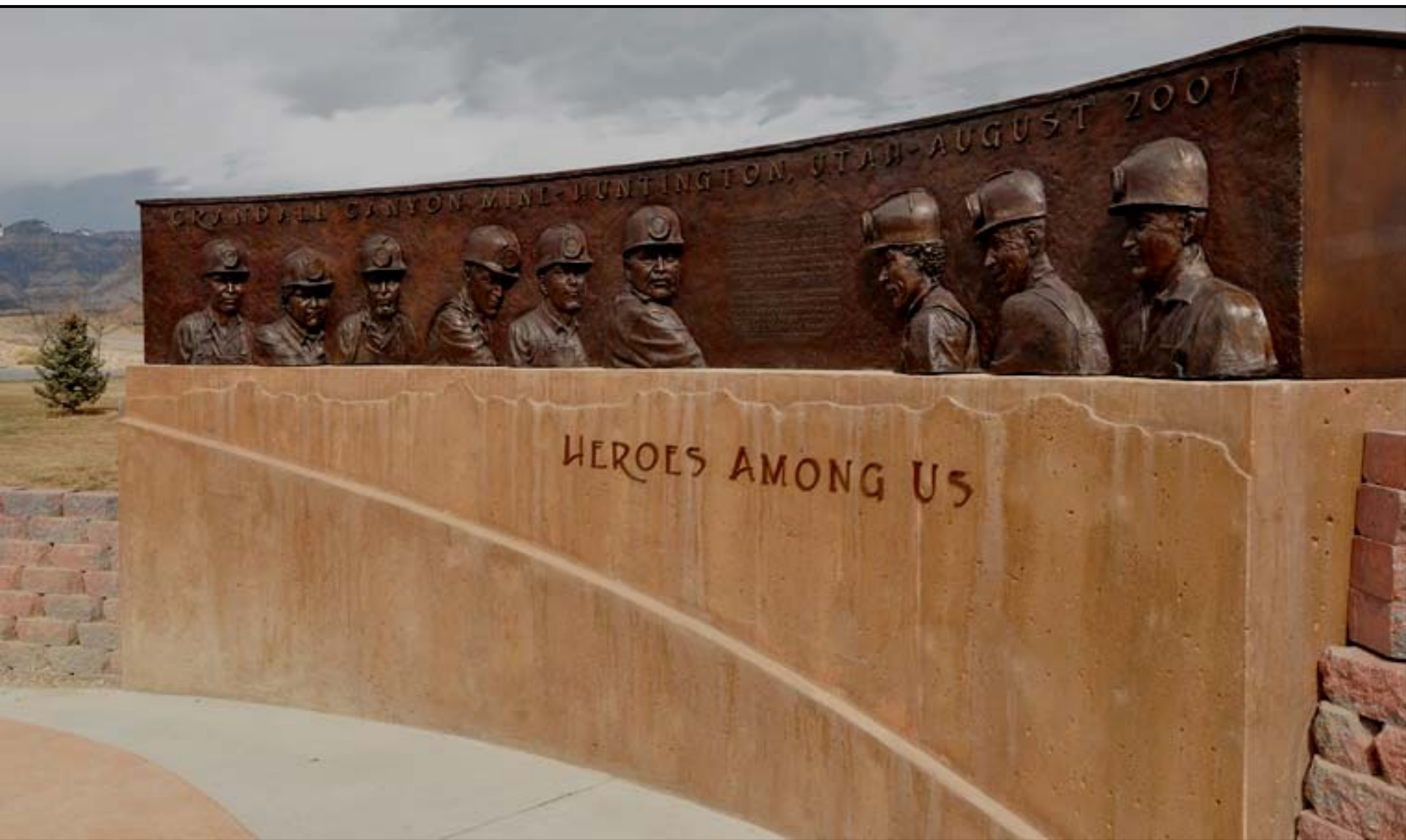
# U.S. Mining Fatalities



# Crandall Canyon, 2007: Pillar Burst



# Crandall Canyon, 2007: Nine Fatalities





# Western Mining Presidential Chair in Mine Safety



# Support for the Endowment

- 12 corporate donors
- 9 individual donors



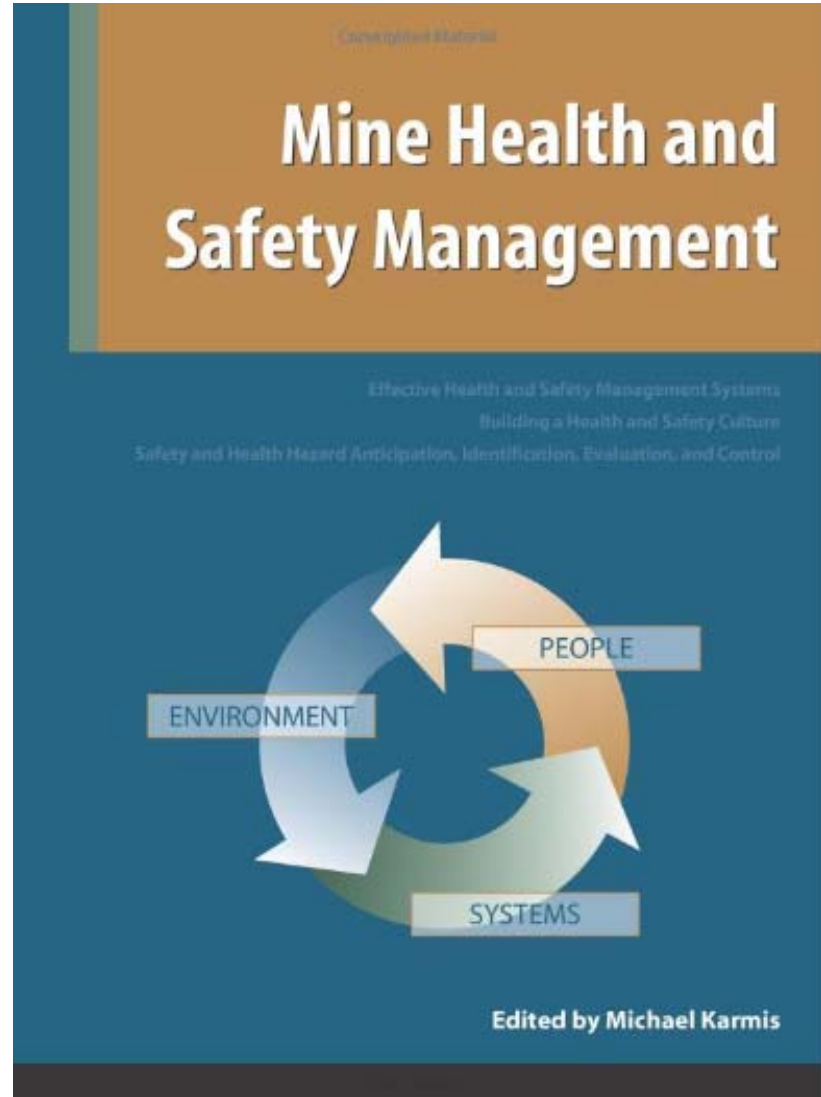
# Professor Tom Hethmon



- Industrial hygiene
- Safety management systems
- Organizational behavior
- Management improvement
- Safety training and education
- Executive positions with Phelps Dodge, Rinker NA, and DynoNobel NA



# Safety Education in the Curriculum



# Utah Curriculum Guidelines

- B.S. degree should be 122 credits
- One credit includes
- 16 weeks of instruction
- One hour of classroom hours or four lab hours per week
- Three hours of outside work per week

# Mining Engineering Curriculum (2009)

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Category	Credits
Science and Mathematics	35.0
Mining Engineering	44.0
General Education	27.0
Geology	14.0
Engineering Science	12.5
Total	132.5

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# Development of Formal Safety Courses

- Health & Safety Management in Mining  
(August 2011)
- Risk Management & Management Systems  
(January 2012)

# Health & Safety Management in Mining

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- Understand management systems for safety and health
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- Understand how behavior and human factors to affect safety performance
- Be familiar with Whole Systems Design
- Understand the mining engineer's role in safety and health management

# Risk Management & Management Systems

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- Several students have enrolled specifically because of these courses

# Mining Engineering Curriculum (2013)

Category	Credits
Science and Mathematics	30.0
Mining Engineering	50.0
General Education	24.0
Geology	9.0
Engineering Science	12.5
Total	125.5

# Student Reactions

Increased awareness of the importance of safety

- Students present a “safety share” at the weekly departmental seminar
- Employers interviewing students note student interest their companies’ safety systems and values





# Student Reactions

## Student comments

- “These courses provide a new way of thinking about management and people in the workplace.”
- “This isn’t the usual stuff where we calculate the right answer and go on to the next problem.”



# Center for Mining Safety & Health Excellence established by the Board of Regents, April 2012





# Center for Mining Safety & Health Excellence

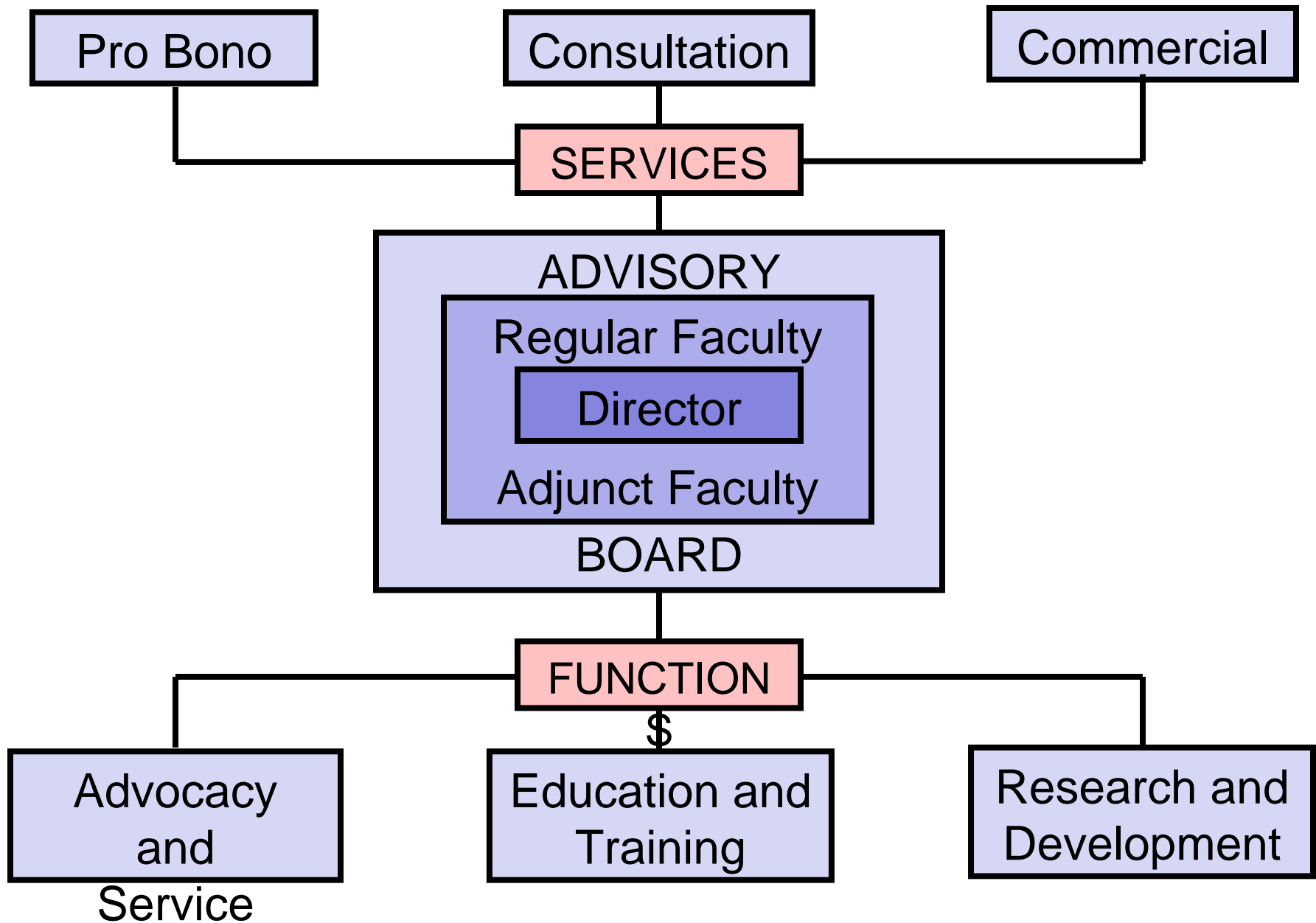
## Center for Mining Safety & Health Excellence

A resource for the global mining community.

*Minerals For Society With Zero Harm*

LEARN ABOUT THE CENTER ►








SKANSKA

**Western Mining**  
*Presidential Chair in Mine Safety*



The University of Utah is pleased to announce the appointment of Dr. [Name] as the Presidential Chair in Mine Safety. Dr. [Name] is a leading expert in the field of mine safety and has been instrumental in the development of new safety technologies and protocols. His appointment is a testament to the University's commitment to research and innovation in the mining industry.

# The UNIVERSITY OF UTAH



**Department of Mining Engineering**  
College of Mines and Earth Sciences

*Mining Engineering*

**The Utilization of Fans in Underground Mines**



Missouri R&T  
Dr. [Name]  
Knox, Idaho, U.S. Graduate







P&H MINING EQUIPMENT INC.



JOY MINING MACHINERY

## 2011 P&H & JOY Hospitality Event

Denver, CO ▪ February 28, 2011



# Independence Pass, Colorado (3,687 m)

