Microsoft Research Faculty Summit 2013
Welcome

Tony Hey
Vice President
Microsoft Research Connections
Welcome to Faculty Summit 2013

- 412 Faculty and Researchers
- 200 Institutions and Organizations
- 154 International Attendees
- 95 Presenters
- 27 Countries Represented
- 218 First Time Attendees
Big Data + Machine Learning + Cloud = Informed, Intelligent Decisions
Cliff Maas on the Yarnell Hill Fire

Hours before the incident it was clear there was a real threat...satellite and radar showed developing convection to the north that was moving south towards the fire.

High-resolution numerical models showed a threat. Were there any meteorologists working the fire? If not, why not? This terrible tragedy needs to be reviewed carefully.

A number of media outlets called the strong winds unpredictable and random. This is not correct, as shown by the information I provided above.

http://cliffmass.blogspot.com/2013/07/the-yarnell-hill-fire-meteorological.html
Greek forest fires kill 56 as blaze nears Athens

A hot, dry summer and a three-day heatwave with temperatures of 40C created the tinderbox conditions.

By Roya Nikkhah and Emma Henry
4:00PM BST 26 Aug 2007

Massive forest fires which have killed at least 56 people in Greece are racing towards the site of the ancient Olympics.

Video: Greece on fire
In pictures: After the flames
Virtual Fire

Virtual Fire (VF) is an early warning and decision support system for integrated forest fire management, based on geoinformatics and modeling fire risk.

University of the Aegean, University of Athens, MS Hellas/MIC in Greece, and Microsoft Research
Texas River Systems
Envisioning a New Era of Research Reporting

Reproducible Research

Interactive Data

Collaboration

Reputation & Influence

Dynamic Documents

Slide from Bill Gates SC05
All Scientific Data Online

- Many disciplines overlap and use data from other sciences.
- Internet can unify all literature and data
- Go from literature to computation to data back to literature.
- Information at your fingertips – For everyone, everywhere
- Increase Scientific Information Velocity
- Huge increase in Science Productivity

(From Jim Gray’s last talk)
The Future of Computing
The Future of Computing

- Over 2,500 academics and scientists from 500+ universities have attended Faculty Summit (Redmond) since 2000
- Over 200 Ph.D. student fellowships awarded since 2004 in Europe
- Over 100 top universities in North America
- 465 students from more than 35 countries have interned at our Cambridge (UK) lab since 2006
- 50 Graduate Women’s Scholarships awarded since 2008
- In Asia, over 450 top students awarded Stars of Tomorrow internships every year
- 35,000 scientists, academic researchers, faculty and students have attended our summits, conferences, workshops since 2008
- Over 1,100 students selected annually for lab internships in the U.S., China, India and UK
- 90 students and young faculty attend our India Summer School Program every year
- 60 Faculty Fellowships awarded since 2005 in North America
- 250 researchers from 50 universities in 16 countries have joined the Latin American and Caribbean Collaborative ICT Research Federation (LACCIR)
- 60 students worldwide awarded Ph.D. fellowships and scholarships in 2012
- 1,765 people attended our Techvista 2012 symposium in Kolkata