

Yale



**Yale Geology &
Geophysics
Alumni
Reunion
Nov 6-9, 2009**





Our Reunion Chair: Elisabeth Vrba

**Indispensible:
G&G Chair's
Assistant:
Becky Pocock**





Sort of New faculty (2000-2004)

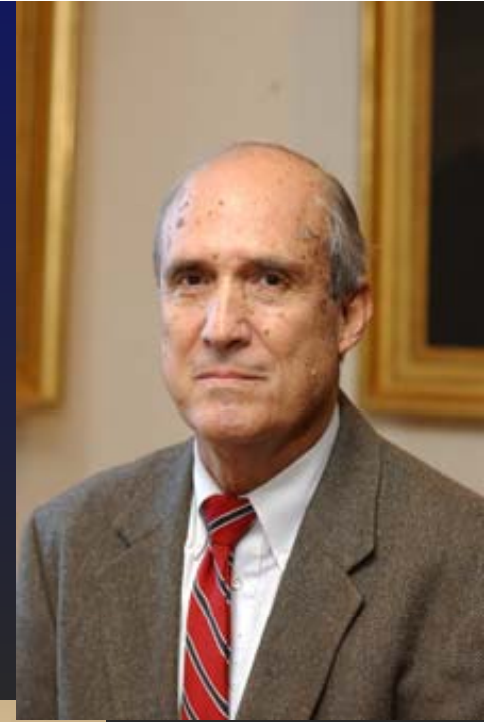


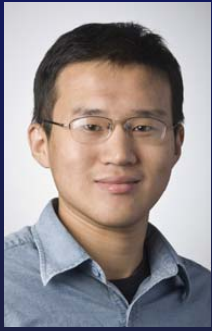
Very new faculty (2007-2010)



Newly minted Full Professors

Recent retirements





Successes in graduate recruiting
Example: 2008 entering class:
20 in one year



Recent expansions: Physics & Chemistry of the Earth's Deep Interior



Atmosphere, ocean, and climate physics

Recent expansions

Atmosphere, ocean geochemistry, and paleoclimate





R.K. Pachauri, YCEI Director



economics



Molecular
biochemistry



anthropology



chemistry

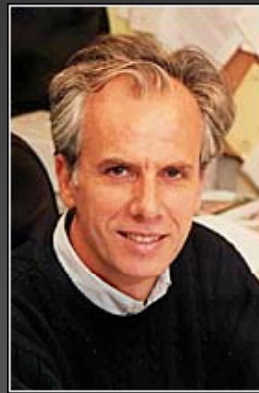
YCEI Yale Climate & Energy Institute



G&G



law



engineering



sustainability



Public health



G&G



hydrology

Yale Participating Units

- **Faculty of Arts & Sciences**
- Geology & Geophysics
- Chemistry
- Molecular Biophysics & Biochemistry
- Ecology & Evolutionary Biology
- Economics
- Political Science
- Anthropology
- Sociology
- Astronomy
- Physics
- **School of Forestry & Environmental Studies**
- **School of Engineering & Applied Science**
 - Mechanical Engineering
 - Chemical Engineering
- **School of Epidemiology & Public Health**
- **School of Law**
- **School of Management**
- **School of Medicine**
- **School of Architecture**

School of Engineering and Applied Science

Lisa Pfefferle
Marshall Long
Abbas Firoozabadi
Paul Fleury
Menachem Elimelech
Kyle Vanderlick
Daniel Rosner
Mitchell Smooke
Robert Grober
Alessandro Gomez
William Mitch
Julie Zimmerman
Joseph Pignatello
Jordan Peccia
Robert McGraw
Yehia KhalilJuan
De La Mora

Physics

Meg Urry
Tom Appelquist
Sean Barrett
Richard Easther
Jack Harris
Andreas Heinz
Simon Mochrie
Peter Parker
Volker Werner
Yoram Alhassid

G&G

Ronald Smith
John Wettlaufer
Hagit Affek
Karl Turekian
Mark Pagani
Steven Sherwood
Alexey Fedorov
Elisabeth Vrba
Zhengrong Wang
Edward Bolton

Derek Briggs
Jeffery Park
Mark Brandon
Jacques Gauthier
David Bercovici
Leo Hickey
Danny Rye
David Evans
Brian Skinner
Ruth Blake
George Veronis

Chemistry

Gary Brudvig
Paul Anastas
Robert Crabtree
Mark Johnson
Victor Batista
John Tully
Charles Schmuttenmaer

EEB

Michael Donaghue
Gunter Wagner
David Post
Melinda Smith
David Skelly
Paul Turner
Jeffrey R. Powell

Astronomy

Sabatino Sofia
Jeffrey Kenney
Sarbani Basu
Pierre Demarque

Law

Daniel Esty

FES

Peter Raymond
Robert Mendelsohn
Xuhui Lee
Rob Bailis
Tom Graedel

James Saiers
Shimon Anisfeld
Mark Ashton
Michelle L. Bell
Graeme P. Berlyn
Ellen Brennan-Galvin
Marian Chertow
Lisa Curran
Oswald J. Schmitz
Mary Evelyn Tucker
William Ellis
Bradford S. Gentry
John Grim
Alan Brewster
Robert Repetto
Florenca Montagnini
Anthony Leiserowitz
Stephen R. Kellert
Lloyd C. Irland
Arnulf Grubler
Tim Gregoire
Gus Speth
Fred Strebeigh
Michael Dove
John Wargo
Kalyanakrishnan Sivaramakrishnan

Epidemiology and Public Health

Durland Fish
James Childs
Ted Holford
Yongtao Guan
Maria Diuk-Wasser
Alison Galvani

Department of Near Eastern Languages and Civilizations

Harvey Weiss

Anthropology

Richard Bribiescas

Office of Sustainability

Julie Newman

MBB

Scott Strobel

Funded Workshops

- Incorporating Black Carbon Mitigation in Developing Countries into the International Climate Regime: Bringing Together Science, Policy and Implementation.
- The Impacts of Abrupt Climate Changes on Human Societies: Past and Future.
- Host, Vector, and Pathogen Responses to Climate Change.
- From process to proxy – the mechanisms behind paleo-temperature assessments.

Funded Interdisciplinary Grants

1. Experimental studies of thermodynamics, kinetics and mechanics of carbonation of ultramafic rocks for CO₂ storage and the economic evaluation of their applications.
1. Late Holocene Paleoclimate Reconstruction and Long-Term Human Response in the Region of Timbuktu, Mali (West Africa): Interdisciplinary collaboration in the study of Lake Faguibine and the drought-afflicted populations.
1. Developing and Marketing Improved Cook-Stoves for Rural Bangladesh.
1. Global warming impacts on CT salt marshes ecosystems and consequent effects on salt marsh vulnerability to sea level rise.
1. Land surface properties, regional climate feedbacks and urban adaptations.
1. Metabolic Flux Analysis for the Biosynthesis of Fuel Hydrocarbons.

Other Activities

- YCEI Seminar Series
- YCEI co-sponsoring COP15 side event
 - University-City collaboration on climate response
- YCEI Clean Energy Conference, April 23, 2010
- YCEI Postdoctoral Fellowships
- YCEI Student Congress

Future Directions - Geology & Geophysics

- **Evolution of Earth's crust and surface**
 - tectonics, structural geology,
 - stratigraphy, geochronology
 - Tectonics in deep time
 - Surface-climate interactions

- **Exchange between Earth's crust, surface and atmosphere:**
 - petrology, volcanology, sedimentology,
 - natural resources,
 - volatile exchange,
 - carbon cycle, carbon sequestration.

- **The Biosphere and History of Life:**
 - Palentology and geomicrobiology,
 - Deep time micropaleontology;
 - Co-evolution of Earth and life;
 - Interaction of life with solid Earth, ocean, atmospheres, and climate.