

VITAE

Professor William M. Gray

Professor Gray has worked in the observational and theoretical aspects of tropical meteorological research for more than 50 years, much of this effort going to investigations of meso-scale tropical weather phenomena. He has specialized in the global aspects of tropical cyclones for his entire professional career. He studied under Professor Herbert Riehl who arranged his early reconnaissance flights into hurricanes in 1958. He has been involved with studies of broad-scale cumulus interactions and has extensively studied the processes associated with tropical cyclone structure, development, and movement. Numerous satellite-based studies of tropical weather systems have also been accomplished. Current areas of research include: 1) tropical cyclone structure, movement and intensity change; 2) seasonal prediction; 3) meso-scale tropical weather systems, 4) diurnal variability of tropospheric vertical motions and 5) ENSO variability. Professor Gray has made Atlantic basin seasonal hurricane forecasts for the last 30 years. He was a pioneer in developing these types of forecasts.

EDUCATION:

B.A. George Washington University (1952)

M.S. University of Chicago (1959), in Meteorology

Ph.D. University of Chicago, Dept. of Geophysical Sciences (1964). Dissertation is entitled "On the Scales of Motion and Internal Stress Characteristics of the Hurricane".

METEOROLOGICAL EXPERIENCE:

Weather Forecasting duty as Air Force Officer, 1953-1957

Research Assistant, Dept. of Meteorology, Univ. of Chicago, 1957-1961.

Faculty of Dept. of Atmospheric Science, Colorado State University, 1961-present.

Professor, 1974 to present.

ABBREVIATED SUMMARY OF PI'S PROFESSIONAL ACTIVITY:

Advisor of 50 successful MS (theses) graduates and 20 successful Ph.D. graduates in Atmospheric Science, eight of whom have received AMS awards as students. Panel Member - U.S.-Japan Mutual Science Program (Panel 7-Tropical Storms) - 1964-1969; Panel Member - American Meteorological Society Committee on Hurricanes and Tropical Meteorology 1968-1973, 1978-1981. Chairman 1987-1990; Advisor - U.S. GATE Meso-scale and Cumulus Sub-Programs 1969-1972; Panel Member - USAF Scientific Advisory Board on Tropical Cyclone Aircraft Reconnaissance (1973-1974); USAF Reserve Officer - 1957-1973; U.S. Representative - WMO Working Group on Tropical Meteorology (1975-1988); Co-organizer of three-week NCAR GATE Workshop (summer, 1977); Chairman, Organizing Committee for first WMO International Workshop on Tropical Cyclones, Bangkok, Thailand, 1985; Fellow, American Meteorological Society.

AWARDS/HONORS:

Fellow, American Meteorological Society; CSU "Jack E. Cermak" Graduate School Award for Outstanding Adviser (1992); Co-recipient of AMS Banner I. Miller Award (1993); AMS Jule L. Charney Award (1993); Neil Frank Award of the National Hurricane Conference (April 14, 1995), "for pioneering research into long-range hurricane forecasting and for developing a better understanding of how global climatological conditions shape the creation and intensity of tropical cyclones"; Invited lecture for Eighth IMO Lecture to the 12th WMO Congress, Geneva, June, 1995. (This is an honorary award given to senior scientists in recognition of lifetime research achievements; ABC Television "Person of the Week", September, 1995; Man of Science Award by the Colorado Chapter of Achievement Reward College (ARC) Scientist (1995).

PUBLICATIONS & RESEARCH REPORTS:

Over 80 published papers and 60 more extensive research reports.

Hundreds of Conference talks and conference proceedings.

Papers available on CSU website (<http://tropical.atmos.colostate.edu/>)

W. M. Gray's Graduate Students: Name, Year of Graduation and Degree

Bruce Mendenhall (1967) – M.S.	Clifford Matsumoto (1984)--Ph.D.
M.S. Raul Lopez (1968)--M.S.	Candis Weatherford (1985)--M.S.
Ronald Wachtmann(1968)--M.S.	Robert T. Merrill (1985)--Ph.D.
James Sartor (1968)--M.S.	Cheng-Shang Lee (1986)--Ph.D.
Thomas Wills (1969)--M.S.	Patrick Lunney (1987)--M.S.
Knox Williams (1970)--M.S.	Candis Weatherford (1987)--Ph.D.(7)
Dennis Shea (1972) - M.S.(1)	Michael Middlebrooke (1987)--M.S.
Raul Lopez (1972)--Ph.D.	Joel D. Martin (1988)--M.S.
Ray Lee Hoxit (1973)--Ph.D.	Daniel N. Shoemaker (1989)--M.S.
William Frank (1973)--M.S.	Chris Collimore (1989)--M.S.
Dave Novlan (1973)--M.S.	Dan B. Mundell (1990)--M.S.
Robert Maddox (1973)--M.S.	Stephen Hodanish (1991)--M.S.
Greg Walters (1975)--M.S.	Stephen Hallin (1991)--M.S.
John George (1975)--M.S.	Christopher W. Landsea (1991)--M.S.
Rodolpho Ramos (1975)--M.S.	Raymond Zehr (1992)--Ph.D.
Robert Jacobson (1975)--M.S.	Michael E. Fitzpatrick (1992)--M.S.
Gary Foltz (1976)--M.S.	John A. Knaff (1992)--M.S.
Steve Erickson (1976)--M.S.	Edward B. Rodgers (1992)--Ph.D.
William Frank (1976)--Ph.D.(2)	Christopher W. Landsea (1994)--Ph.D(8)(9).
Raymond Zehr (1976)--M.S.	Gary B. Kubat (1995)--M.S.
Charles Arnold (1977)-- Ph.D.	Patrick J. Fitzpatrick (1995)--Ph.D.
Jean Dewart (1977)--M.S.	Carl A. McElroy (1996)--M.S.
Pamela Grube (1978)--M.S.	Stephen B. Cocks (1997)---M.S.
John McBride (1979)--Ph.D.	John A. Knaff (1997)---Ph.D.
William Fingerhut (1980)--Ph.D.	Matthew D. Eastin (1999)---M.S.
Edwin Nunez (1980)--Ph.D.(3)	Kelly M. Findeisen (1999)---M.S.
Ken Dropco (1981)--M.S.	Robert N. LeeJoice (2000)---M.S.
Greg Holland (1981)--M.S.	Steven E. Vilpors (2001)---M.S.
Cheng-Shang Lee (1981)--M.S.	Eric S. Blake (2002)---M.S.
Geoff Love (1982)--Ph.D.	Philip J. Klotzbach (2002)---M.S.
Robert Merrill (1982)--M.S.(5)	Matthew D. Eastin (2003)---Ph.D. (10)(11)
Johnny C.L. Chan (1982)--Ph.D.	Stacey Seseske (2004)---M.S.
Greg Holland (1983)--Ph.D.(4) (6)	Phil Klotzbach (2007) --- Ph.D.
Cecilia Askue (1984)--M.S.	

Awards Won by Gray Students for Project Research:

(1) D. Shea received first (1972) CSU Dept. of Atmos. Sci. Christian Gallet Award. (2) W. Frank received the AMS 1980 Banner I. Miller Award. (3) E. Nunez received the 1980 Max Eaton Prize. (4) G. Holland was a recipient of the 1982 Max Eaton Prize. (5) R. Merrill was a recipient of the 1984 Max Eaton Prize. (6) G. Holland received the AMS Banner I. Miller Award in May 1985. (7) C. Weatherford was the recipient of the 1987 Max Eaton Prize. (8) C. Landsea was the recipient of the 1991 Max Eaton Prize (9) and Co-recipient of the 1993 Banner I. Miller Award. (10) M. Eastin won the AMS Max Eaton Prize and our Department's Herbert Riehl award for research on the PI's project. (10) M. Eastin received the 2002 Max Eaton Prize (11).