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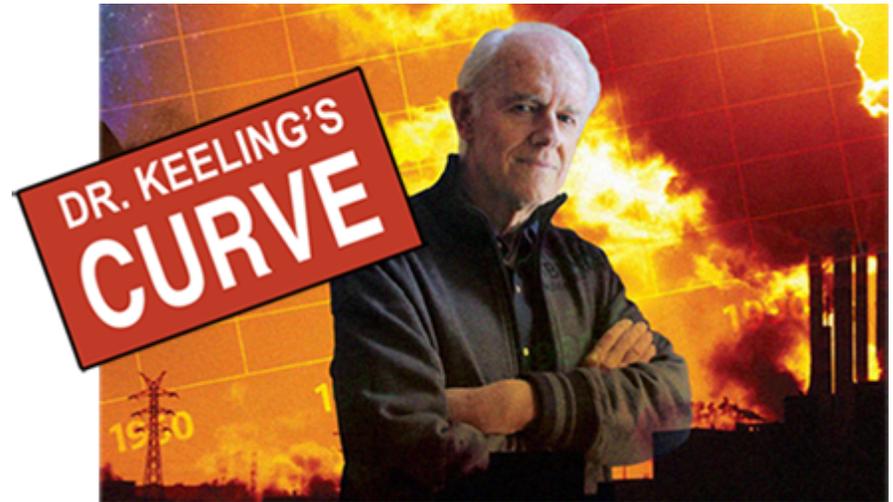
*Beneficial State Bank*

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*Margee Hills*

*Glenn Pascall*



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### Thank You Climate Action Panelists

Mike Farrell, George Shea, Terry Tamminen,  
Dr. Peter Kalmus, Dr. Khin Khin Gyi

### Thank You Sierra Club Members, Supporters and Staff who made this event possible

Steve Wicke, Event Chair  
Margee Hills, Tickets Manager  
Sandra Cattell, Reception Manager  
Liz Flowers, Graphic Design  
Debbie Drezner, Program Design  
Sarah McCarthy, Performance Booking  
George Watland, Event Business Manager, Chapter Director

### Thank You Staff of The Broad Stage and Santa Monica College for making this performance a success

Linda Sullivan, Associate Dean Facilities Programming  
Rob Rudolph, Production Manager

A One-Man Show With Mike Farrell  
Written By George Shea

The Broad Stage, Santa Monica  
September 30, 2018

Presented by



**SIERRA CLUB**  
ANGELES CHAPTER

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*Contributions to the Sierra Club Angeles Chapter are not tax-deductible; they support our effective, citizen-based advocacy and lobbying efforts.*



## The Story Behind Dr. Keeling's Curve

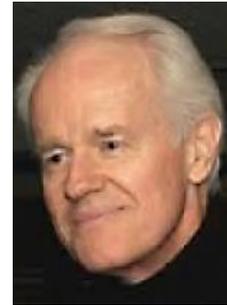
Charles David Keeling (1928 – 2005) was a pioneering atmospheric chemist at Scripps Institution of Oceanography who

was among the first scientists to document increasing greenhouse gases in the Earth's atmosphere. Long before "global warming" and "climate change" became household words, Dr. Keeling began to uncover an increase in CO<sub>2</sub> concentrations worldwide that unseated conventional wisdom about the pervasiveness of this trend and shed light on natural and seasonal fluctuations of atmospheric CO<sub>2</sub> resulting from plant photosynthesis and respiration.

That climate change is a global phenomenon is now widely accepted by the scientific community, but arriving at that recognition required navigating many scientific hurdles on the way to obtaining convincing data for the existence of such change. Contributions of carbon dioxide uptake and release from plants must be determined and geographic variability in concentrations must be quantified. By conducting measurements at the Mauna Loa Observatory atop an extinct volcano in Hilo, Hawaii, Dr. Keeling's research demonstrated that there is a distinct seasonal cycle of atmospheric carbon dioxide with peak levels in the spring when plants are beginning to grow. His research also revealed that CO<sub>2</sub> levels do not vary in different locations and are the same all over the planet as well as the fact that carbon dioxide acts as a control knob for climate on this planet. This result contradicted earlier less-accurate studies carried out in Scandinavia which showed much greater variability. The Keeling Curve is the graph of continuous carbon dioxide measurements at the Mauna Loa Observatory since the 1950s. These measurements are the first compelling evidence of increasing carbon dioxide levels in the atmosphere from anthropogenic sources.

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*Please turn off your cell phone. Photographs and video/audio recordings of the performance are not allowed.*



## Mike Farrell (Actor)

Mike Farrell is an actor, director, writer and producer best known for his role as B.J. Hunnicutt in the iconic TV series, M\*A\*S\*H. As partner in Farrell/Minoff Productions, he produced a number of films for television as well as the features "Dominick and Eugene" and "Patch Adams."

"Dr. Keeling's Curve" is his third one-man show, following "JFK, A One-Man Show" for PBS and a national tour of David W. Rintels' "Clarence Darrow."

Mike was Co-Chair of the Southern California Committee of Human Rights Watch for ten years and is currently President of Death Penalty Focus. He is the author of "Just Call Me Mike; A Journey to Actor and Activist," and "Of Mule and Man."



## George Shea (Playwright)

George is a playwright, children's author, and environmental activist who in 2011 was arrested outside the White House with 1250 other activists protesting the Keystone XL Pipeline. His plays have been produced in New York, Williamstown and around the U.S. He is the author of many children's books.

George would like to take this opportunity to acknowledge the immense contribution of Spencer Weart, author of the award winning "The Discovery of Global Warming" who has served for seven years as principal consultant on "Dr. Keeling's Curve."



## Kirsten Sanderson (Director)

Kirsten Sanderson has directed plays by, Michael John LaChiusa, Craig Lucas, Shel Silverstein, Steven Schwartz and Blake Edwards among others. Kirsten has been Resident Director at New Dramatists, Director of Ensemble Studio Theatre's National Theatre Colony, and Literary Director of The

Blank Theatre in Hollywood.

## Cameron Zetty (Lighting)

## Warren Davis (Sound)