

# BRIGHT HORIZONS 31

SCIENTIFIC AMERICAN™ **Travel**

## Hawaii | January 7th – 14th, 2017

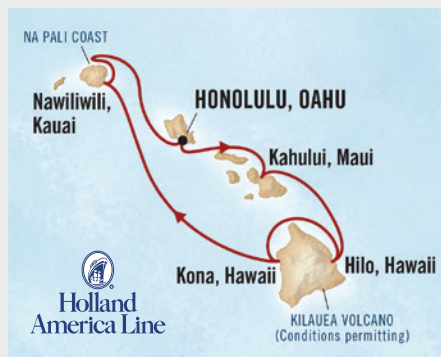
Hawaii is beckoning to Bright Horizons 31. Its volcanoes, marine conservation, astronomical research, and botany are appealing. And there is Hawaii's waves on the sand, moonlight on the sea, palm trees in the breeze aspect.

Join our scientist speakers and kindred spirits on Bright Horizons 31 as we sail roundtrip Honolulu on NCL's Pride of America January 7–14, 2017, visiting Oahu, Maui, the Big Island, and Kauai.

Get the latest in science with Scientific American's lecture program. Engage in outdoor activities, visit volcanoes up close, spot hump-back whales, relax Hawaiian style. Recreational opportunities with a science angle will be all around you. Join lively discussions in class and enjoy well informed dinner table conversation.

Few places offer the scenic beauty, cultural immersion, activities and relaxation that a Hawaiian island getaway does. Come along with Bright Horizons on an easy, seamless vacation. This is the time to experience the world of science, with the experts, in the Aloha State. Let us take care of the details so you can unwind and savor the moment. Please join us.

Cruise prices vary from \$1,619 for an Interior Stateroom to \$6,199 for the Deluxe Owner's Suite, per person (pp) based on double occupancy. For those attending our SEMINARS, there is a \$1,075 fee. Add'l pp fees: gov't taxes and fees (10% – 14%), Non-refundable Booking Service Fee (\$200), cruiseline gratuities (approx. \$13.50 – \$15.50 pp per day), and Tour Leader gratuities (\$99). The Program, cruise pricing, and options are subject to change. For more information email us at [info@InsightCruises.com](mailto:info@InsightCruises.com).



## SEMINARS



### DINOSAURS: François Therrien, Ph.D.

#### The Paleobiology of Meat-eating Dinosaurs

With famous names like T. rex, Allosaurus, and Velociraptor, meat-eating dinosaurs (also known as theropods) are among the most popular of dinosaurs, and the most common to appear in movies. But does the cinematic portrayal of theropods actually reflect current paleontological knowledge or is it just Hollywood fantasy? Find out the latest research on theropod feeding behaviors and sensory abilities that casts a light on the paleobiology and lifestyle of these ancient predators.

### Alberta, Land of Dinosaurs

The fortuitous combination of Alberta's geologic past and modern climate has allowed erosion to expose many fossils buried millions of years ago, making this province one of the best places in the world to find and study dinosaurs. Learn about some of the most significant paleontological discoveries made here, from the first member of the tyrannosaur family ever discovered to the first feathered dinosaurs found in North America.

#### What Killed the Dinosaurs?

About 66 million years ago the dinosaurs and nearly 75 percent of all species on Earth were wiped out in an event called the Cretaceous-Paleogene (K-Pg) mass extinction. Despite frequent claims of "ground-breaking discoveries," the exact details of the K-Pg mass extinction remain shrouded in mystery. We'll discuss the current state of knowledge among paleontologists and Earth scientists and attempt to answer the question "What killed the dinosaurs?"

### SPEAKER:



### François Therrien, Ph.D.

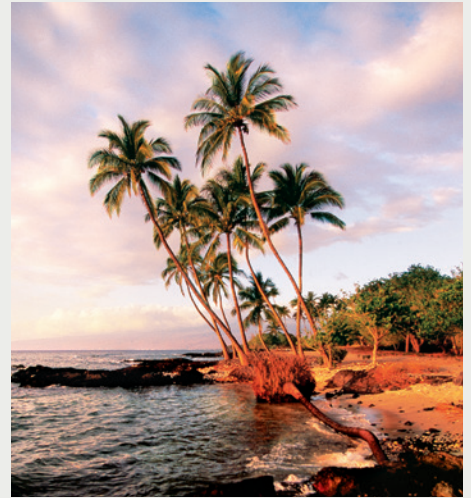
Dr. François Therrien is the Curator of Dinosaur Palaeoecology at the Royal Tyrrell Museum of Palaeontology in Drumheller, Alberta. He holds a B.Sc.

in Geology from the Université de Montréal, a Master's degree in Geosciences from the University of Rhode Island, and a Ph.D. in Functional Anatomy & Evolution from the Johns Hopkins University School of Medicine. Fresh out of his Ph.D., Dr. Therrien came to the Royal Tyrrell Museum as a NSERC postdoctoral fellow and was hired as a curator in 2006. Dr. Therrien's primary research interests focus on the study of faunal and environmental changes that occurred just before the extinction of the dinosaurs as well as the study of dinosaur behavior, particularly that of extinct predators. Over the years, he has conducted field research in Canada, the USA, Romania, and Mongolia and has participated in numerous documentaries. In 2012, Dr. Therrien was involved in the discovery and study of the first feathered dinosaurs from North America.

FOR MORE INFO

Please email: [info@InsightCruises.com](mailto:info@InsightCruises.com) or visit: [ScientificAmerican.com/travel](http://ScientificAmerican.com/travel)





## HUBBLE and KEPLER TELESCOPES:

**David M. Meyer, Ph.D.**

### Exploring the Milky Way with Hubble

Our Milky Way is home to over 200 billion stars of various sizes, colors and ages. By imaging the Milky Way with a resolving power more than 10 times better than the largest ground-based telescopes, the Hubble Space Telescope is revolutionizing our understanding of how these stars evolve, from cradle to grave. Through Hubble images, we'll explore the cores of star-forming nebulae, observe stars being born, and glimpse the Sun's distant future.

### How the Universe Began

Hubble has created the deepest, most detailed optical image of the universe to date, which supports the notion that the cosmos began with a Big Bang 13.8 billion years ago. Scientists think the universe began in a hot and dense state, and as the cosmos expanded and cooled, galaxies formed and evolved into the familiar spirals and ellipticals seen nearby today. Learn how Hubble can reveal the universe's origins, and explore the concepts of dark matter, dark energy, and galaxy collisions through Hubble images of galaxies near and far.

### The Search for Other Earths

NASA launched the Kepler Space Telescope in 2009 with the primary objective of determining whether or not Earth-size planets are common in our galaxy. Kepler detects planets around other stars (exoplanets) by observing and timing tiny eclipses in the brightness of a star as any satellite exoplanets orbit in front of it. Evidence from Kepler so far indicates that there are many billions of Earth-size planets in the Milky Way. Learn about the challenges of detecting exoplanets, the details of the Kepler mission, and the implications of its results for the possibility of life elsewhere in the galaxy.

### SPEAKER:



**David M. Meyer,  
Ph.D.**

Dr. David M. Meyer is Professor of Physics and Astronomy and Director of Dearborn Observatory at Northwestern University. He received a B.S.

degree in astrophysics (1980) at the University of Wisconsin and earned his M.A. (1981) and Ph.D. (1984) in astronomy at UCLA. Dr. Meyer's research focuses on the composition, structure, and physical conditions of interstellar gas clouds in the Milky Way and other galaxies, and often makes use of observations obtained with the Hubble Space Telescope. At Northwestern, Dr. Meyer has specialized in designing and teaching introductory undergraduate courses in astronomy, cosmology, and astrobiology for non-science majors. His success in such efforts has led to a number of teaching awards including Northwestern's highest teaching honor — the McCormick Professorship of Teaching Excellence (in 2009). He has also developed and recorded two video courses for the Great Courses.

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