

The NOVA logo is rendered in a stylized, blue, metallic font with a glowing effect, set against a dark blue background with a subtle pattern of stars and nebulae.

# NOVA EXPLORES THE PAST, PRESENT, AND FUTURE OF EVOLUTIONARY THEORY, THE MISSION TO SAVE HUBBLE, DREAMS, AND LIZARDS IN FALL 2009 LINEUP

Tuesday nights at 8pm ET/PT on PBS  
[www.pbs.org/nova](http://www.pbs.org/nova)

BOSTON, MA—This fall, NOVA celebrates the 200<sup>th</sup> anniversary year of Darwin's birth and the 150<sup>th</sup> anniversary of the publication of his famous book the *Origin of Species* with three evolution-themed programs.

Each film will approach the topic of evolution in a different way. To kick off NOVA's fall season on October 6, Henry Ian Cusick (*Lost*) and Frances O'Connor (*Mansfield Park*) star in *Darwin's Darkest Hour*, a two-hour scripted drama that presents the remarkable story behind the birth of Darwin's radically controversial theory of evolution and reveals his deeply personal crisis: whether to publish his earthshaking ideas, or to keep quiet to avoid potential backlash from the Church. In November, NOVA premieres *Becoming Human*, a three-part special on human evolution. The series combines interviews with world-renowned anthropologists and paleoanthropologists and the most recent, groundbreaking discoveries with vivid images of our earliest ancestors to present a comprehensive picture of our human past. Then, on December 29, *What Darwin Never Knew* reveals answers to evolutionary questions that even Darwin couldn't explain. Scientists are beginning to expose nature's biggest secrets on the genetic level, with the hope of one day answering the crucial question: How does evolution *really* work?

Following are descriptions for NOVA films in fall 2009:

## ***Darwin's Darkest Hour* (2 hrs) – Tuesday, October 6**

NOVA and National Geographic Television present the extraordinary human drama that led to the birth of the most influential scientific theory of all time. Acclaimed screenwriter John Goldsmith (*David Copperfield*, *Victoria and Albert*) brings to life Charles Darwin's greatest personal crisis: the anguishing decision over whether to "go public" with his theory of evolution. Darwin, portrayed by Henry Ian Cusick (*Lost*), spent years refining his ideas and penning his book the *Origin of Species*. Yet, daunted by looming conflict with the orthodox religious values of his day, he resisted publishing—until a letter from naturalist Alfred Wallace forced his hand. In 1858, Darwin learned that Wallace was ready to publish ideas very similar to his own. In a sickened panic, Darwin grasped his dilemma: To delay publishing any longer would be to condemn all of his work to obscurity—his voyage on the *Beagle*, his adventures in the Andes, the gauchos and bizarre fossils of Patagonia, the finches and giant tortoises of the Galapagos. But to come forward with his ideas risked the fury of the Church and perhaps a rift with his own devoted wife, Emma, portrayed by Frances O'Connor (*Mansfield Park*, *The Importance of Being Earnest*, Steven Spielberg's *Artificial Intelligence*), who was a strong believer in the view of creation and honestly feared for her husband's soul. *Darwin's Darkest Hour* is a moving drama about the birth of a great idea seen through the inspiration and personal sufferings of its brilliant originator.

*more*



Produced for PBS  
by the WGBH  
Science Unit

One Guest Street  
Boston, MA 02135

617.300.2000

[www.pbs.org/nova](http://www.pbs.org/nova)

Funding for NOVA is provided by ExxonMobil, Pacific Life, David H. Koch, the Howard Hughes Medical Institute, the Corporation for Public Broadcasting, and public television viewers.

**ExxonMobil**

**PACIFIC LIFE**



**DAVID H. KOCH**

**HHMI**

**cpb** Corporation  
for Public  
Broadcasting  
A private corporation funded  
by the American people

NOVA® is a registered  
trademark of WGBH  
Educational Foundation



***Hubble's Amazing Rescue* – Tuesday, October 13**

In the spring of 2009, NASA sent a shuttle crew on a risky mission to service the Hubble Space Telescope for the last time. Hubble has enthralled scientists and the public by capturing deep views of the cosmos and a wealth of data from distant galaxies. It has helped lead the search for alien planets and is a key tool in cosmology's quest to investigate and map the universe's mysterious dark matter. The astronaut servicing team carried out the first-ever in-space repairs of Hubble's defective instruments, a task that required ingenious engineering fixes and the most intensive NASA spacewalk ever. From training to launch, NOVA presents the inside story of the mission and the extraordinary challenges faced by the rescue crew.

***Lizard Kings* – Tuesday, October 20**

Though they may look like dragons and inspire stories of man-eating, fire-spitting monsters with long claws, razor-sharp teeth and muscular, whip-like tails, these creatures are actually monitor lizards, the largest lizards to walk the planet. With their acute intelligence—including the ability to plan ahead—these lizards are a very different kind of reptile, blurring the line between reptiles and mammals. And even though these bizarre reptiles haven't changed all that much since the dinosaurs, they are a very successful species, versatile at adapting to all kinds of settings. *Lizard Kings* will look at what makes these tongued reptiles so similar to mammals and what has allowed them to become such unique survivors. But while the creatures can find their way around many different habitats, finding them is no easy task. Natural loners, and always on guard, they sense anything or anyone from hundreds of feet away. NOVA will follow expert lizard hunter Dr. Eric Pianka as he tracks the elusive creatures through Australia's heartland with cutting-edge "lizard cam" technology for an unparalleled close encounter with these amazingly versatile "living dragons."

***Becoming Human: Unearthing Our Earliest Ancestors* – Tuesday, November 3, 10, 17**

NOVA presents a three-part, three-hour special—investigating explosive new discoveries that are transforming the picture of how we became human. The first program explores fresh clues about our earliest ancestors in Africa, including the stunningly complete fossil nicknamed "Lucy's Child." These three-million-year-old bones from Ethiopia reveal humanity's oldest and most telltale trait—upright walking rather than a big brain. The second program tackles the mysteries of how our ancestors managed to survive in a savannah teeming with vicious predators, and when and why we first left our African cradle to colonize every corner of the Earth. In the final program, NOVA probes a wave of dramatic new evidence, based partly on cutting-edge DNA analysis, that reveals new insights into how we became the creative and "behaviorally modern" humans of today, and what really happened to the enigmatic Neanderthals who faded into extinction. Shot "in the trenches" where discoveries were unearthed throughout Africa and Europe, each hour of *Becoming Human* unfolds with a forensic investigation into the life and death of a specific hominid ancestor, such as "Lucy's Child." Dry bones spring back to vivid life with stunning animation, the product of a unique NOVA collaboration between top anthropologists and a talented team of movie animators.

*more*

***What Are Dreams?* – Tuesday, November 24**

What are dreams and why do we have them? NOVA joins the leading dream researchers as they embark on a variety of neurological and psychological experiments to investigate the world of sleep and dreams. Delving deep into the thoughts and brains of a variety of dreamers, scientists are asking important questions about the purpose of this mysterious world we escape to at night. Do dreams allow us to get a good night's sleep? Do they improve our memory? Do they allow us to be more creative? Can they solve our problems or even help us survive the hazards of everyday life? NOVA follows researchers like the Massachusetts Institute of Technology's Matthew Wilson who is literally 'eavesdropping' on the dreams of rats and takes viewers into a sleep lab for a first-hand look at how scientists do their best to eavesdrop on human dreams. From those who violently act out their dreams to those who can't stop their nightmares, from sleepwalking cats to people who can't dream, each fascinating experiment contains a vital clue to the age-old question: What are dreams?

***What Darwin Never Knew (2 hours)* - Tuesday, December 29**

Earth teems with a staggering variety of animals, including 9,000 kinds of birds, 28,000 types of fish, and more than 350,000 species of beetles. What explains this explosion of living creatures—1.4 million different species discovered so far, with perhaps another 50 million to go? The source of life's endless forms was a profound mystery until Charles Darwin's revolutionary idea of natural selection, which he showed could help explain the gradual development of life on Earth. But Darwin's radical insights raised as many questions as they answered. What actually drives evolution and turns one species into another? And how did *we* evolve?

Now, on the 150<sup>th</sup> anniversary of Darwin's the *Origin of Species*, NOVA reveals answers to the riddles that Darwin couldn't explain. Stunning breakthroughs in a brand-new science—nicknamed "evo devo"—are linking the enigma of origins to another of nature's great mysteries, the development of an embryo. To explore this exciting new idea, NOVA takes viewers on a journey from the Galapagos Islands to the Arctic, and from the Cambrian explosion of animal forms half a billion years ago to the research labs of today. Here scientists are finally beginning to crack nature's biggest secrets at the genetic level. And, as NOVA shows in this absorbing detective story, the results are confirming the brilliance of Darwin's insights while exposing clues to life's breathtaking diversity in ways the great naturalist could scarcely have imagined.

###

**Share your evolution film**

WGBH Lab has partnered with PBS Engage to launch an "Open Call" on its website for user-generated content around the theme of evolution. The challenge is to create a three-minute video that offers a compelling perspective on the living world. Selected submissions may be presented, via broadcast and broadband, in conjunction with NOVA's spotlight programming on Darwin and evolution. For more information, visit <http://lab.wgbh.org/open-call/nova/evolution>

*more*

Now in its 36<sup>th</sup> season, NOVA is the most-watched, primetime science series, reaching an average of five million viewers weekly. The series remains committed to producing in-depth science programming in the form of hour-long (and occasionally longer) documentaries, from the latest breakthroughs in technology to the deepest mysteries of the natural world. NOVA airs Tuesdays at 8pm ET/PT on WGBH and most PBS stations. It is produced for PBS by the WGBH Science Unit at WGBH Boston. The Director of the WGBH Science Unit and Senior Executive Producer of NOVA is Paula S. Apsell.

Funding for NOVA is provided by ExxonMobil, Pacific Life, David H. Koch, the Howard Hughes Medical Institute, the Corporation for Public Broadcasting, and public television viewers.

Additional support for *Darwin's Darkest Hour* comes from the Alfred P. Sloan Foundation. The Arthur Vining Davis Foundation has also contributed.

NOVA is closed-captioned for deaf and hard-of-hearing viewers and described for people who are blind or visually impaired by the Media Access Group at WGBH. The descriptive narration is available on the SAP channel or stereo TV and VCRs. To order NOVA direct from WGBH Boston Video, visit [shop.wgbh.org](http://shop.wgbh.org) or call 800.949.8670. *Darwin's Darkest Hour* will be available on DVD and Blu-ray on Tuesday, November 17, 2009 on [shopNGvideos.com](http://shopNGvideos.com), in stores where videos are sold, or by calling 800.627.5162.

Pressrooms

[pressroom.pbs.org](http://pressroom.pbs.org)

[pressroom.wgbh.org/nova](http://pressroom.wgbh.org/nova)

**Press Contacts**

Eileen Campion

Dera, Roslan & Campion PR

212.966.4600

[eileen@drcpublicrelations.com](mailto:eileen@drcpublicrelations.com)

Carole McFall

NOVA National Promotion

617.300.3988

[carole\\_mcfall@wgbh.org](mailto:carole_mcfall@wgbh.org)

**Photography Contact**

Karina Sjo-Gaber

NOVA National Promotion

617.300.4258

[karinna\\_sjogaber@wgbh.org](mailto:karinna_sjogaber@wgbh.org)

**Online Contact**

Karen Laverty

617.300.4382

[karen\\_laverty@wgbh.org](mailto:karen_laverty@wgbh.org)

© 2009 WGBH EDUCATIONAL FOUNDATION

**ExxonMobil**

**PACIFIC LIFE** 

**DAVID H. KOCH**

**HHMI**

 **Corporation for  
Public Broadcasting**  
A private corporation funded by the American people