

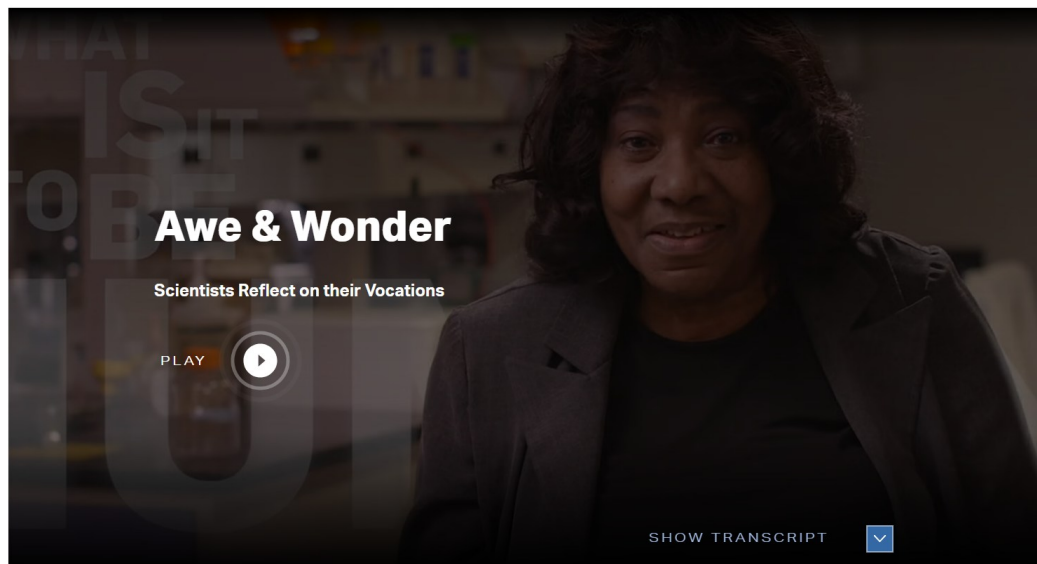
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Awe & Wonder: Scientists Reflect on Their Vocations

In this inspiring short film, scientists describe how their fascination with the beauty and complexity of nature informs their vocations, and how their observations of the natural world cause them to reflect on the bigger questions of life.

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Why do science? Why explore the world? In this inspiring short film, scientists describe how their fascination with the beauty and complexity of nature informs their vocations, and how their observations of the natural world cause them to reflect on the bigger questions of life. Exploration of the world evokes a sense of awe and wonder for these men and women, and this emotional response to nature often leads to an exciting journey of scientific discovery. The scientists discuss the way in which problems and failures spur better science, and how one of the great joys of science is to explore the questions and puzzles inherent in the world around us.

Featured Scholars:

Dr. Justin Barrett, Thrive Professor of Developmental Science, Fuller Theological Seminary

Dr. Sean B. Carroll, Vice President, Science Education, Howard Hughes Medical Institute and Allan Wilson Professor of Molecular Biology and Genetics, University of Wisconsin

Dr. David Charbonneau, Professor of Astronomy, Harvard University

Dr. Guy Consolmagno, Director of Vatican Observatory

Dr. Georgia Dunston, Professor of Microbiology and Founding Director, National Human Genome Center, Howard University College of Medicine

Dr. Sylvester James Gates, Jr., University System of Maryland Regents Professor and John S. Toll Professor of Physics, University of Maryland

Dr. Jeff Hardin, Professor of Zoology, University of Wisconsin

Dr. William Newsome, Professor of Neurobiology, Stanford University

Dr. Richard Potts, Director of Human Origins Program, Smithsonian Institution

Dr. Michael Ruse, Director of the Program in the History and Philosophy of Science, Florida State University

Dr. Neil Shubin, Professor of Organismal Biology and Anatomy, University of Chicago

Dr. Jennifer Wiseman, Astronomer, Director of AAAS Dialogue on Science, Ethics, and Religion

Dr. Huda Zoghbi, Professor, Baylor College of Medicine; Director, Jan and Dan Duncan Neurological Research Institute at Texas Children's Hospital

VIDEO TRANSCRIPT

ENGLISH

Dr. S. James Gates: The instant that one realizes that you're having a genuinely new thought is essentially indescribable. I'm sure that this is something similar to what people describe as a muse. It seems unworldly.

Br. Guy Consolmagno: I had a little telescope I'd take up country and everybody in the village would come up and they'd look through the telescope and see the craters in the moon or the rings of Saturn. They'd go "ooh" and "ahh," just like my family and friends back in Michigan do. And it finally hit me – this is what makes us human, this ability to look at the sky with wonder.

Dr. Jeff Hardin: When I look through a microscope, I can't help but be struck with a sense of awe and wonder about what I'm looking at, and I can't help but reflect on the larger questions of life.

Dr. Jennifer Wiseman: The human spirit does gain a lift from pure curiosity, trying to understand who we are and where we fit into the larger scheme of things.

Dr. William Newsome: Because if we didn't have that sense of awe, if we didn't have that sense of curiosity, we wouldn't start down this road in the first place. It's hard to do world-class science.

Dr. Sean B. Carroll: When you look into something, you almost always get a surprise, and then that surprise leads you into new pathways.

Dr. Huda Zoghbi: Are there failures? Absolutely. When you don't have very firm ground, you're really searching for a needle in a haystack. I've collected a lot of hay before I found that needle.

Dr. Justin Barrett: It sure is fun to play in this space and to make new discoveries and to hopefully make contributions that move us forward.

Dr. Michael Ruse: Science loves problems. Any fool can find the solution – it takes a genius to find the question.

Dr. Neil Shubin: We live in a world loaded with questions and puzzles. If you know how to look, you can begin to see connections in humans and other species, and between humans, other species, and the planet itself. And when you see those connections, it's hard not to be in awe.

Dr. Richard Potts: That kinship that human beings share with all other creatures on Earth is a very, very powerful thing, and helps us to understand the continuities and to place into context our uniqueness.

Dr. Georgia Dunston: So we get into those philosophical questions of "what is life?" and, within that context, "what is it to be human?"

Dr. David Charbonneau: There's this incredible universe that surrounds the Earth for us to go and explore and that we as humans have to pick up that charge.

Dr. Jennifer Wiseman: And then it becomes the task of human societies, cultures, and religious communities and philosophers to dig deep and find out what that message is that's beyond just what science is telling us.

SPANISH

Asombro y Maravilla

Dr. S. James Gates: El instante que uno se da cuenta de que está teniendo una idea genuinamente nueva es, básicamente, indescriptible. Estoy seguro de que esto es similar a lo que algunos describen como la musa... parece algo de otro mundo.

Br. Guy Consolmagno: Yo tenía un pequeño telescopio que llevaba conmigo al campo, y todos los del pueblo venían a mirar por el telescopio y ver los cráteres de la luna o los anillos de Saturno. Decían, "oh" y "ah," igual que mi familia y amigos en Michigan lo hacen. Finalmente lo entendí todo. Esto es lo que nos hace únicos como seres humanos: esta capacidad de mirar al cielo con un sentimiento de asombro.

Dr. Jeff Hardin: Cuando miro por un microscopio, es inevitable que sienta asombro y maravilla por lo que estoy mirando y no puedo evitar el tener que meditar en las preguntas más importantes de la vida.

Dr. Jennifer Wiseman: El espíritu humano se eleva por la pura curiosidad tratando de entender quiénes somos y dónde encajamos en el cuadro del universo.

Dr. William Newsome: Porque si no sintiéramos ese asombro, si no tuviéramos esa curiosidad, no empezaríamos por este derrotero, en primer lugar. Es difícil crear la ciencia de primera categoría.

Dr. Sean B. Carroll: Cuando examinas una cosa cuidadosamente, casi siempre te llevas una sorpresa, y luego esa sorpresa te lleva por nuevos caminos.

Dr. Huda Zoghbi: ¿Hay fracasos? Definitivamente. Cuando no tienes un fundamento muy sólido, en realidad estás buscando una aguja en un pajar. He recogido mucha paja antes de hallar esa aguja.

Dr. Justin Barrett: Ciertamente es muy divertido jugar en este espacio y hacer nuevos descubrimientos, y esperamos hacer contribuciones hacia el progreso.

Dr. Michael Ruse: A la ciencia le encantan los problemas. Cualquier tonto puede hallar la solución. Se requiere un genio para hallar la pregunta.

Dr. Neil Shubin: Vivimos en un mundo repleto de preguntas y rompecabezas. Si sabes dónde buscar, empiezas a ver conexiones entre los humanos y otras especies y entre los humanos, otras especies, y el planeta mismo. Y cuando ves esas conexiones, no puedes evitar asombrarte.

Dr. Richard Potts: Esa afinidad que comparten los seres humanos con todas las demás criaturas en la Tierra es algo muy, muy poderoso y nos ayuda a entender las instancias de continuidad y a contextualizar nuestra individualidad.

Dr. Georgia Dunston: Así que nos adentramos en esas preguntas filosóficas, como "¿Qué es la vida?" y dentro de ese contexto, "¿Cómo se define ser humano?"

Dr. David Charbonneau: Tenemos a este increíble universo que rodea a la Tierra, al cual podemos ir y explorarlo, y nosotros como seres humanos tenemos que aceptar esa responsabilidad.

Dr. Jennifer Wiseman: Y luego llega a ser el trabajo de las sociedades humanas, culturas, comunidades religiosas y filósofos ahondar profundamente y averiguar cuál es ese mensaje... que va más allá de lo que tan solo la ciencia nos dice.



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