

Books for Subaru Loves Learning School Donation Program

Books for Grades K-3

***An Egg Is Quiet*, by Dianna Hutts Aston, with illustrations by Sylvia Long. San Francisco: Chronicle Books, 2006.**

In this stunning book, poetic, hand-lettered text is richly garnished with more than 100 ink and watercolor illustrations of an eclectic array of species, all identified by common names. Birds make up the majority of the animals pictured, but insects, crustaceans, fish, reptiles, and amphibians are represented as well. No part of the book has gone unillustrated; even the front and rear endpapers are decorated with the shell pattern of one of the eggs. This book is visually pleasing, educational, and utilitarian. It sets the foundation in early learnings for the study of diversity in the animal kingdom.

Winner 2007 Children's Picture Book

***Parrots over Puerto Rico*, by Susan L. Roth, Cindy Trumbore, with illustrations by Susan L. Roth. NY: Lee & Low Books, 2013. (Hardcover)**

Puerto Rican parrots lived on the island for millions of years, and then they nearly vanished from the earth forever. In this compelling (and visually stunning) book, Roth and Trumbore recount the efforts of the scientists of the Puerto Rican Parrot Recovery Program to save the parrots and ensure their future. Woven into the parrot's story is a brief history of the island, from before the first human settlers to the present day. With striking collage illustrations, a unique format, and engaging storytelling, *Parrots Over Puerto Rico* invites readers to witness the amazing recovery efforts that have enabled Puerto Rican parrots to fly over their island once again.

Finalist 2015 Children's Picture Book

***Danger! Volcanoes*, by Seymour Simon. StarWalk Media, 2013.**

From powerful explosions to flowing rivers of hot, fiery lava—in this book from award-winning science author Seymour Simon, beginning readers will see it all. With fascinating facts and amazing images, Simon presents an irresistible invitation to growing readers to question, explore, and discover the exciting world around them and to learn the causes of volcanoes, how they build up the surface of the earth, and what to do if you are near an eruption.

Seymour Simon is an AAAS/Subaru SB&F Prize Lifetime Achievement Award winner.

***Sisters & Brothers: Sibling Relationships in the Animal World*, by Steven Jenkins & Robin Page. Houghton Mifflin, 2008.**

Animals and families always fascinate children, but the facts about siblings that fill this book will also engage adults. For example, young shrews line up holding each other's tails, with the mother leading the way. Female termites lay 30,000 eggs a day, whereas giant anteaters are always single offspring. Nile crocodiles cooperate even before they hatch, but hyena cubs can fight to the death. As this book shows, animal siblings have a variety of relationships, ranging from playing with each other to fighting to the death for food. *Sisters and Brothers* examines the range of sibling relationships with paragraph-length descriptions and engaging illustrations. The animals discussed include elephants, bats, lizards, termites, cheetahs, and crocodiles, among others, making up quite an eclectic group. The authors' collages are sure to appeal to young readers.

Winner 2009 Best Children's Science Picture Book

***Tiny Creatures: The World of Microbes*, by Nicola Davies, with illustrations by Emily Sutton. Somerville, MA: Candlewick, 2014. (Hardcover)**

In *Tiny Creatures*, zoologist and award-winning science writer Nicola Davies tackles what is undoubtedly an uncommon topic for a children's picture book. Microbes are central to almost every aspect of biology, but talking to very young children about microscopic life is difficult. In *Tiny Creatures*, Davies demonstrates how a conceptually difficult topic can be effectively introduced to the very young by tapping into prior knowledge of the world they can see and experience through their senses. Throughout the book, the author focuses on the fundamental elements of the concept "microbe," using clear, jargon-free text that is complemented by Sutton's charming illustrations.

Winner 2015 Children's Science Picture Book

Books for Grades 4-8

***The Kid's Guide to Exploring Nature*, by Brooklyn Botanic Educators. (Edited by Sarah Schmidt.) NY: Brooklyn Botanic Garden, 2014.**

This gorgeously illustrated guide calls on children to look closely at the world around them through 24 "adventures" that invite readers to explore the complex ecosystems of plants and animals in the woods, at the beach, and in a city park. Detailed, scientifically based drawings help young scientists identify hundreds of North American plants and animals, while dozens of fun projects include keeping a journal, conducting field experiments, and exploring nature with all five senses. The activities are organized by season and the book also includes summaries of common careers, such as nature educator and field biologist.

Winner 2015 Hands-On Science Book

***Mission: Mars*, by Pascal Lee. NY: Scholastic: 2013**

What if we started to train the astronauts of 2035 today? Pascal Lee does just that in his kid-friendly training guide for would-be Mars explorers. Lee, a planetary scientist with the Mars Institute and the SETI Institute, explains what it will take to send humans to Mars—from spacesuits and exploration rovers to surviving subzero temperatures and raging dust storms. By showing the latest designs and plans for the mission, Lee helps readers envision the possibilities, focusing on a future in which they can partake, rather than on accomplishments of the past. Readers are also introduced to research being done at NASA and around the world. *Mission: Mars* is also visually strong; the colorful illustrations are engaging, informative, and complement Lee's enthusiastic and infectious text. The book, written by a scientist who is a major player in the endeavor, is sure to inspire the next generation of space explorers.

Winner 2015 Middle Grades Science Book

***The Case of the Vanishing Golden Frogs: A Scientific Mystery*, by Sandra Markle. Millbrook Press, 2011.**

Panamanian golden frogs aren't just cute, little, and yellow. They're also the national symbol of Panama. But they started to disappear about fifteen years ago. What's killing them? Could it be a change in their habitat? What about pollution? Might it be a result of climate change? Follow a team of scientists working to save these frogs and protect frog populations worldwide in this real-life science mystery. Award winning children's author Sandra Markle has created a meticulously researched science adventure story that puts readers at the center of a real-life environmental mystery.

Winner 2012 Middle Grades Science Book

***Wild Horse Scientists*, by Kay Frydenborg. Boston: Houghton Mifflin Harcourt, 2012.**

Several hundred sturdy wild horses thrive on the dune grasses among the shifting sands of the barrier islands of Maryland and Virginia. Paradoxically, protecting the herds and giving the horses a natural habitat depended on discovering how to control their fertility. This book focuses on the strategies used by scientists to manage the populations of the wild horses in Assateague Island. Author Kay Frydenborg provides readers a rare glimpse into the wild herds of Assateague through the work of two scientists who have devoted their lives to studying the horses. Through beautiful photographs and elegant, readable prose the story of the herds and the researchers is revealed.

Finalist 2014 Middle Grades Science Book

***Handle with Care: An Unusual Butterfly Journey*, by Loree Griffin Burns, with photographs by Ellen Harasimowicz. Minneapolis, MN: Millbrook Press, 2014.**

You may have seen the butterfly life cycle before in books, but never quite like this. How do you raise a butterfly? Award-winning team Burns and Harasimowicz take readers to a butterfly farm in Costa Rica and show how it's done. Stunning photographs and informative, engaging text show how workers care for these delicate, winged creatures as they change from eggs to caterpillars to pupae. Like any other crop, the butterflies will eventually leave the farm. But where will they go? And just how do you ship a butterfly? Very carefully! To discover how it works, readers follow these butterflies on their remarkable journey from a Costa Rican farm to a science museum in Boston.

Finalist 2015 Middle Grades Science Book

Books for High School

***Extreme Medicine: How Exploration Transformed Medicine in the Twentieth Century*, by Kevin Fong. NY: The Penguin Press, 2014.**

Kevin Fong is an anesthesiologist who is also trained in intensive care medicine. His work involves researching how humans survive extremes such as heat, cold, and trauma in environments that include outer space and the deep sea. In *Extreme Medicine*, Fong's strong narrative voice and his likening of medical discovery to extreme geographical exploration fully engage the reader in a discussion of science, medical practice, and innovation. He offers compelling stories of doctors and patients that include just enough detail to contextualize and educate without overwhelming, making this book a perfect choice for teen and young adult readers. Fong's passion for his work as a doctor and his clear compassion for the ill (or harmed) shows in every case he describes. His curiosity taps the reader's curiosity. And, more than anything else, the unanswered questions invite young readers into the challenge of charting the future path of medicine.

Winner 2015 Young Adult Science Book

***Eyes Wide Open: Going Behind the Environmental Headlines*, by Paul Fleischman. Somerville, MA: Candlewick: 2014.**

Paul Fleischman offers teens an environmental wake-up call and a tool kit for decoding the barrage of conflicting information confronting them. Science, politics, history, and psychology are joined to provide the briefing needed to comprehend the 21st century: Take 250 years of human ingenuity. Add abundant fossil fuels. The result: a population and lifestyle never before seen and in which suddenly everything needs rethinking—suburbs, cars, fast food, cheap prices. This book explains the changing world, clearly articulating the principles, driving attitudes, and events that have brought us to this point, to the young audience whose future will be most affected by these changes. The book is appropriate for students from grade 8 through high school.

Finalist 2015 Middle Grades Science Book

***The Odyssey of KP2: An Orphan Seal, a Marine Biologist, and the Fight to Save a Species*, by Terrie M. Williams. Penguin Press.**

Williams' interesting, well-told story of a single Hawaiian monk seal pup illustrates how scientific research increases knowledge while helping draw attention to the fate of a declining species. Her story is a good mix of "hands on" science and how human and animal culture play roles in the natural cycle of life. She also poses for readers the question of the value and appropriateness of government intervention in helping preserve species for scientific research. Because the book focuses around a few key personalities, it provides students with an up-close look at scientists. Additionally, the presence of a female scientist opens up the possibility that girls reading *The Odyssey of KP2* will be more likely to pursue science when they see it in the context of this story, especially since the narrative conveys not only Williams' work, but also how she developed into a scientist, and her passion for her work—all good things for young people to see.

Winner 2013 Young Adult Science Book

***The Sixth Extinction: An Unnatural History*, by Elizabeth Kolbert. NY: Henry Holt, 2014.**

Award-winning journalist and author Kolbert blends field reporting with natural and intellectual history to reveal the mass extinction that is already taking place on our planet. She introduces us to a dozen species, some already gone, others facing extinction, including the Panamanian golden frog, staghorn coral, the great auk, and the Sumatran rhino. Through these stories, Kolbert provides a moving account of the disappearances occurring all around us and traces the evolution of extinction as concept. For teen audiences, the book should encourage the discussion and understanding of scientific ideas through a writing style that is down-to-earth and full of explanations of even the more potentially confusing aspects of the science, such as the possible chemical reactions that lead to extinction.

Finalist 2015 Young Adult Science Book

***The Immortal Life of Henrietta Lacks*, by Rebecca Skloot. NY: Random House, 2010.**

The ubiquitous cell line HeLa (whose immortality provides the book title) has helped power the explosive growth of cell biology over the past 50 years. But for all that is known about the cells themselves, most people know little about their original source. Skloot explores that origin and the subsequent confusion over these cervical cancer cells' history. She eloquently interweaves stories of the cells and researchers, the life of Henrietta Lacks (from whom the cells were cultured), and the response of Lacks' family to her investigation. Carefully crafted, her rich and balanced narrative reminds us to not lose sight of the source of biological research materials. Interestingly, the author does so without passing judgment on the families' reactions (some of Lacks' relatives believe they should be paid for the gains made from the contribution she unknowingly made) or the researchers (some of whom could be said to have been dismissive of Lacks in their treatments of her and her cells). Skloot recognizes that research standards have changed over time and we have progressed in our treatment of patients. But the tale that she so superbly tells provides anyone interested in biomedical science a timeless and necessary reminder of the humanity shared by the afflicted and the researchers who work to understand and overcome diseases.

Winner 2011 Young Adult Science Book