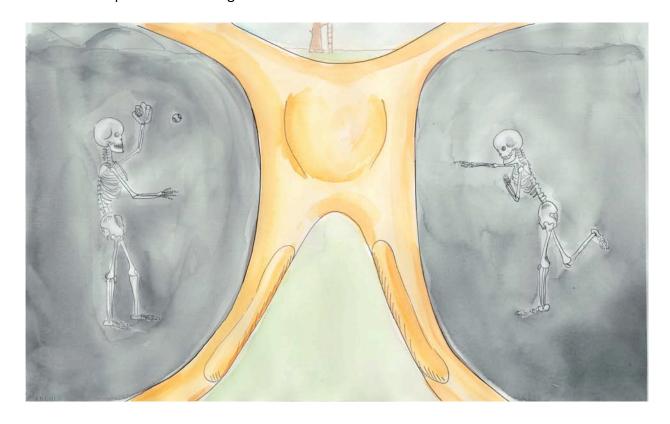
"X-Ray Kay" is a whimsical picture book telling the adventure of Kaytlin, a curious, rough and tumble 7-year old who experiences an unfortunate turn of events. Kay fractures her arm and quickly finds that her bulky yellow cast won't allow her to play with her friends. In a sudden change of luck, Kay discovers a pair of x-ray glasses on the playground. All are invited to join Kay as she watches her arm heal and discovers the skeleton is an interesting part of everyone.

My children's picture book, "X-Ray Kay", introduces skeletal anatomy in an imaginative, comfortable setting. Secondarily, my book focuses on broken bones and help children cope with and possibly relate to problems that come from a bone fracture. In summary, this is a story about a girl whose curiosity and daredevil attitude leave her with a broken right radius and ulna. The cast on her dominant arm keeps her from doing the hands-on activities she and her friends like to do together. While she feels the sting of loneliness on the swing set, Kay finds a pair of glasses that change her world. These x-ray glasses spark a new sense of curiosity for Kay and she spends the next six weeks watching her arm heal and exploring all the skeletons around her. The x-ray glasses provide a source of entertainment, wonder, and a new outlook, until her cast comes off and she can return to her energetic lifestyle. The glasses are passed on to another child in need so that the reader may continue to imagine a world seen through x-ray glasses.

"X-Ray Kay" introduces anatomy through a pair of x-ray glasses that allow the protagonist to see straight through to the skeleton of both people and animals, much like an

x-ray machine. Kay is able to compare skeletons as well as track the healing of her own fracture. The magic of the x-ray glasses as well as Kay's amazement and excitement about her new world, will communicate to children that skeletons do not have to be scary and will possibly inspire them to take the initiative to learn more about osteology. By fostering this interest in anatomy, the child will also become exposed to other branches of science. I am particularly interested in sharing this doorway to science because of my own personal fascination with the study of anatomy. As an artist, I appreciate the beauty and complexity of the human body. Because of this, I believe it is important that kids are taught at a young age that skeletons do not have to represent death or gore.



Mary Roach, author of *Stiff: The Curious Lives of Human Cadavers*, agrees that the study of anatomy has gone through some dark times. From current crime shows to early anatomist's grave robbing beginnings, bones have been an indicator of poison, suffering and death. These connotations are understandable, seeing that in the past the only way to see a skeleton was by

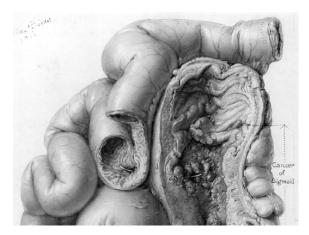
dissecting a corpse. However, in today's reality, we can see bones without even breaking the skin. Roach argues that despite the unsavory early stages, anatomy has more to offer than morbidity. Roach even goes so far as to explore the incredible contemporary contributions to science and engineering a skeleton can make after one has passed on.

Although on one level "X-Ray Kay" carries an educational message, it is important that "X-Ray Kay" is a story that is magical enough to invite little ones to sit and engage. My target audience is children age five to seven. Children of this age are beginning to read and understand more complex story lines, but they are still interested in picture books. Also, the main cause for children of this age group to be admitted to a hospital is bone fractures, especially those resulting from a fall. Because of this, five to seven year olds will not only find interest in "X-Ray Kay", but will also be able to relate to her situation. Regardless of having an experience with a broken bone, all children have had experience with loneliness at some time or another. Kay experiences this feeling of isolation when her bulky cast keeps her from joining her friends on the playground.

The story of Kay is manifested as an 8.5" x 11" storybook. The illustrations are done in watercolor paint and ink pen, in a loose, whimsical style. Illustrations are done at 150% scale to ensure a maximum amount of detail as well as to prevent any loss of quality when scanned and printed. Large illustrations also provide something physical that can later be framed for the project's installation. Although watercolor is a common medium for picture book illustrations, the main reason I chose it is because it is whimsical and spontaneous, much like the story itself. Watercolor also takes the scientific story into a flowing, more imaginative space that is more familiar to children. I am also using pen to accentuate details. Detail can be lost and muddied

with watercolor and because I have a more technical subject, I need the rigidity of pen in some cases, such as Kay's x-ray views.

Illustration has been a means of communicating and instructing scientific subjects from



as early as the fourth century BC in Hellenic

Alexandria (Demarest). From then on, famous

illustrators such as Leonardo da Vinci, Andreas

Vesalius, Jan Wandelaar, and Max Brodel began

creating works that were not only intricately

beautiful, but also informative. Although medical

illustrators are now venturing out into the digital realm as well as experimenting with abstract forms, medical illustrations are known for their technicality and precision; this is why I look to Jason Freeny's work. Jason Freeny mixes anatomy and pop culture to the point where it creates a new context, one even suitable for children. Freeny is best known for creating imaginative yet feasible organs and skeletons inside of cartoon characters and action figures. Although Freeny's work is not intended for children, it has a

way of speaking to them and bringing their favorite characters to life. In my book, I intend to mix the rigid and informative drawings that medical illustrators are known for with the charm and magic of Freeny's juxtapositions.





I have studied the work of David Wiesner in terms of illustration style and the art of a



wordless picture book. His stories are often full of magic and whimsy. For example, in his book *Tuesday*, in the middle of the night frogs rise up from a pond on their lily pads and fly through a city. He captures a sense of enchantment through his incredible and detailed watercolor illustrations in his book *Flotsam*.

The fact that his books are usually without text allows the viewer to imagine their own commentary. I chose this style for "X-Ray Kay" to allow the reader to put themselves in Kay's shoes and discover things on their own. Telling the reader what is happening takes away from the magic of finding and imagining things on their own. It also leaves little beyond the story's surface. In a wordless book, the meaning is allowed to change for each reader and can continue changing even as the reader gets older.

My book draws inspiration from the style of *The Magic School Bus* book series by Joanna Cole. *The Magic School Bus* series has three layers of communication with the reader. The most superficial layer is that of a zany schoolteacher taking her class on improbable adventures. The

next is the interactions between characters.

Beyond the story's text, illustrations provide

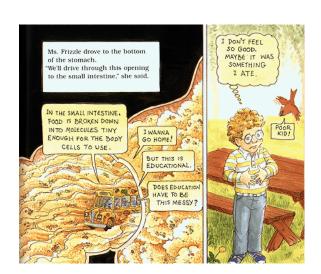
extra commentary from the character's point of

view. On the final level, there is educational

instruction. Not only does the story carry bits of

information regarding a scientific subject, but

there are also related short essays, facts and



tidbits along the side of the page. I appreciate the opportunity Joanna Cole gives to delve further and further into the story. This sort of interaction allows the story to be pertinent even as the child gets older. Another reason I take interest in *The Magic School Bus* series is that it presents the science as a story. Many other scientific or anatomical children's books, especially for those ages 5-7, are text-heavy and fact-heavy. These stories act more as a reference book than a story book. For example, *Skeletons! Skeletons!* by Katy Hall has a main character, however he is merely a vehicle for the facts to come through. There is no plot or sense of attachment or empathy between the reader and the protagonist, therefore it reads as a reference book.

Other books that begin to take science into a narrative setting are *Dem Bones*, by Bob Barner, and *Time Flies*, by Eric Rohmann. *Dem Bones* takes a well-known folk song and gives background information for each lyric. *Time Flies* is a picture book that shows the reader dinosaur bones in a museum setting and then helps the viewer imagine them when the dinosaurs were alive. *The Sprog Owner's Manual: (Or How Kids Work)* by Babette Cole is a unique book that takes anatomy out of context to explain it better. The author compares a child to a fictional creature called a sprog. *The Sprog Owner's Manual* teaches children how their body works and how to maintain a healthy body by contrasting it to the badly wired sprog. For example, bad sprogs turn their square lungs black from cigarettes and eat an unhealthy diet of junk food. Good children have healthy pink lungs because they do not smoke. Good children also eat lots of fruits and vegetables to keep themselves strong and healthy. I found the distinctive way of approaching anatomy not only refreshing but also a source of inspiration for my own story.

As a child, books meant a great deal to me. I looked forward to bedtime every night when my dad would let my brothers and I pick a book from the shelf and he would proceed to read it in the silliest way possible. There were books I turned to when I was faced with problems, like dealing with siblings, making mistakes, and the responsibilities of growing up. I had books that inspired me to be a kinder, more creative and more curious person. Then there were the books I could personally relate to, either through the characters or subject matter. My favorite books had all three elements. If I had a book like "X-Ray Kay" when I was younger, I know I would have become interested in anatomy at an earlier age. I also would have had something to turn to when I broke my arm or when I was faced with boredom or loneliness. It is my hope that "X-Ray Kay" will mean to someone what the books from my childhood have meant to me.

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