7TH NOV 2015

THE SECRET WORLD INSIDE YOU

American Museum of Natural History

Photo: Eozin Che

Behind the scenes with the making of The Body Table

What is the human microbiome? It consists of the trillions of microbes that live in and on your body (together they weigh about three pounds). Most of the ones living inside you are actually vital to keeping your body, and even your mind, functioning properly. The intricacies of this complex ecosystem are explored in depth in the American Museum of Natural History's new exhibit, The Secret World Inside You.

One of the exhibit's most intriguing aspects is The Body Table; an interactive table that displays a fourteen foot projection of a pregnant woman's body. By touching different areas of the display, visitors can learn the ways that microbes impact human health. The woman in the table actually speaks to and interacts with visitors as they explore the seventeen animated microbial scenes. She was created from a real life model, who was chosen through a casting call.

Bringing The Body Table to life took months of collaboration by a team that included Joe Levit, Bob Peterson and Eozin Che, who brought their expertise to the roles of researcher, animator

and programmer, respectively. They shed some light on the experience of making the table come alive…

Photo: Eozin Che

What was your role in putting The Body Table together and how much time did you spend working on the project?

Joe Levit: I'm the writer/researcher on the media team within the exhibition department. That means I normally complete the logic, conduct the research for and write the content that will appear within the team's media interactives (not including films, which our colleague Sarah manages or handles). For this show, I was almost exclusively working on the content for The Body Table, because there was a lot of research to do for such large project. In addition to selecting the stories we wanted to tell in the Table, I wrote the narration that the actor conveys and the text for each of the 17 animated stories. I also did a lot of research regarding the ecological relationships between us and bacteria, or bacteria versus other bacteria, and provided our animator Bob with some visual references for each story. I spent the better part of 7 months doing this.

Bob Peterson: I am the animator for The Body Table. How Long did it take? Over a period of months, as the curators and everyone in the exhibitions department contributed their incredible ideas and creativity.

Eozin Che: I'm the programmer for this Body Table project and I spent 1 month + one week.

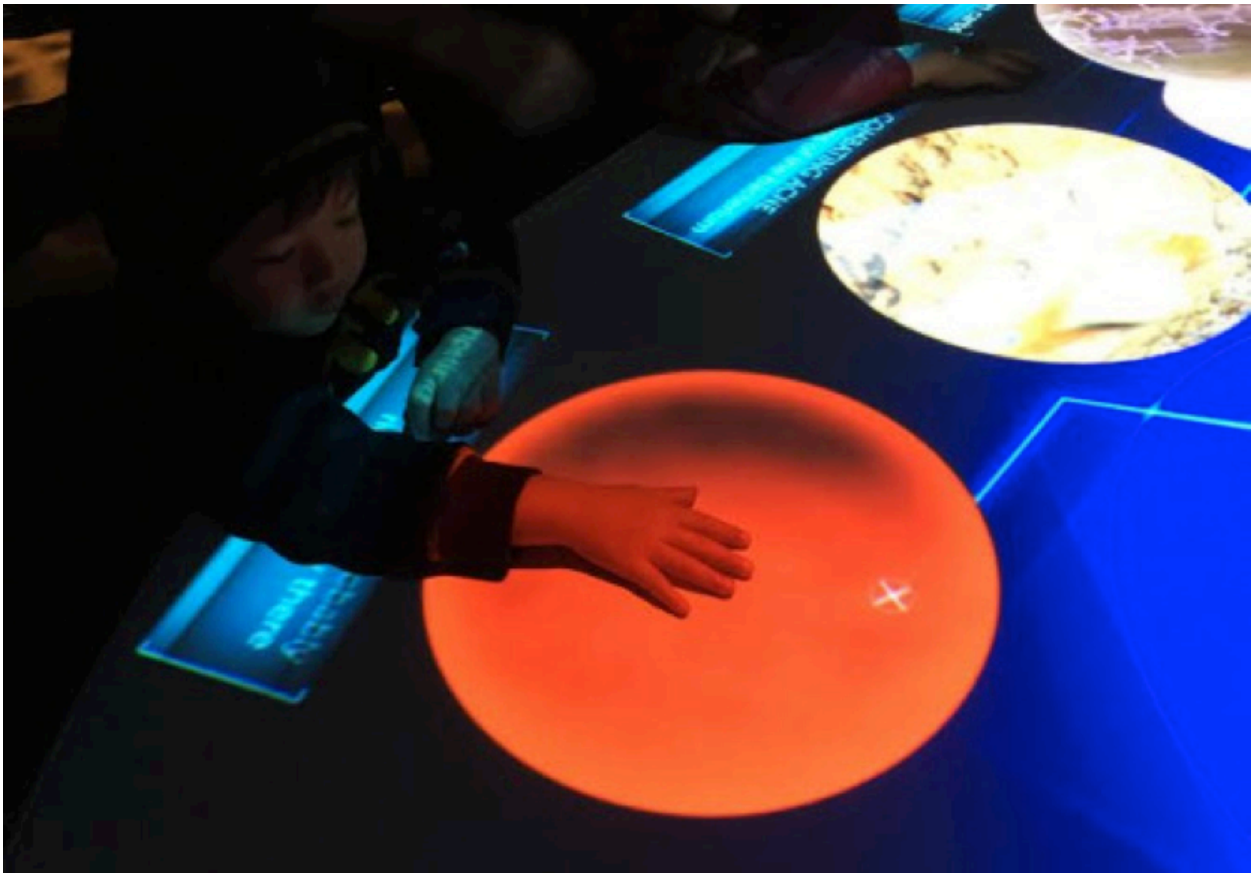

Photo: Eozin Che

What was the biggest challenge that you faced in putting it together?

JL: The biggest challenge I faced personally was finding the answers about how these interactions probably actually occur. Keep in mind that many of these interactions have never been shown before in public in an animated way. We are breaking new ground with many of the stories, bringing unseen battles and assistance to life for viewers. I think the biggest challenge for the team as a whole was figuring out how to meld the narration and stories as seamlessly as possible, from both a story and graphics standpoint. That took a lot of time to discuss and figure out.

BP: This field of study is so cutting edge and there is so much to explore and discover. In working closely with Robert DeSalle and Susan Perkins it was a fun challenge to recreate these amazing ecosystems and the creatures who inhabit them.The head of our department Helene Alonso gave us incredible direction and freedom to create and explore these unseen worlds for The Body Table. Our project director Ariel Navarez did an incredible job helping design the table and directing the talent. Brett Peterson and Eozin Che were the wizards behind the programming and Joe Levit did a great job with his research and writing. We had a blast and we all learned so much working on The Body Table. We just hope the visitors exploring these “unseen worlds” at the exhibit have just as much fun as we did creating this experience .

EC: The biggest challenge I had was the application’s performance issue. Since we have many different visual contents including background video and animation,17 feature players, animated

sensors, lines and sub-images, it was definitely challenging to get everything work well together in appropriate play speed without any delay. I tried a couple of different iterations in code structure and solved the issue by using image sequences to play videos instead of normal movie clips.(So now, each animated body story is a sequence of over 1500 images) Now you can check high-resolution animations in the most smooth speed in the Body Table.

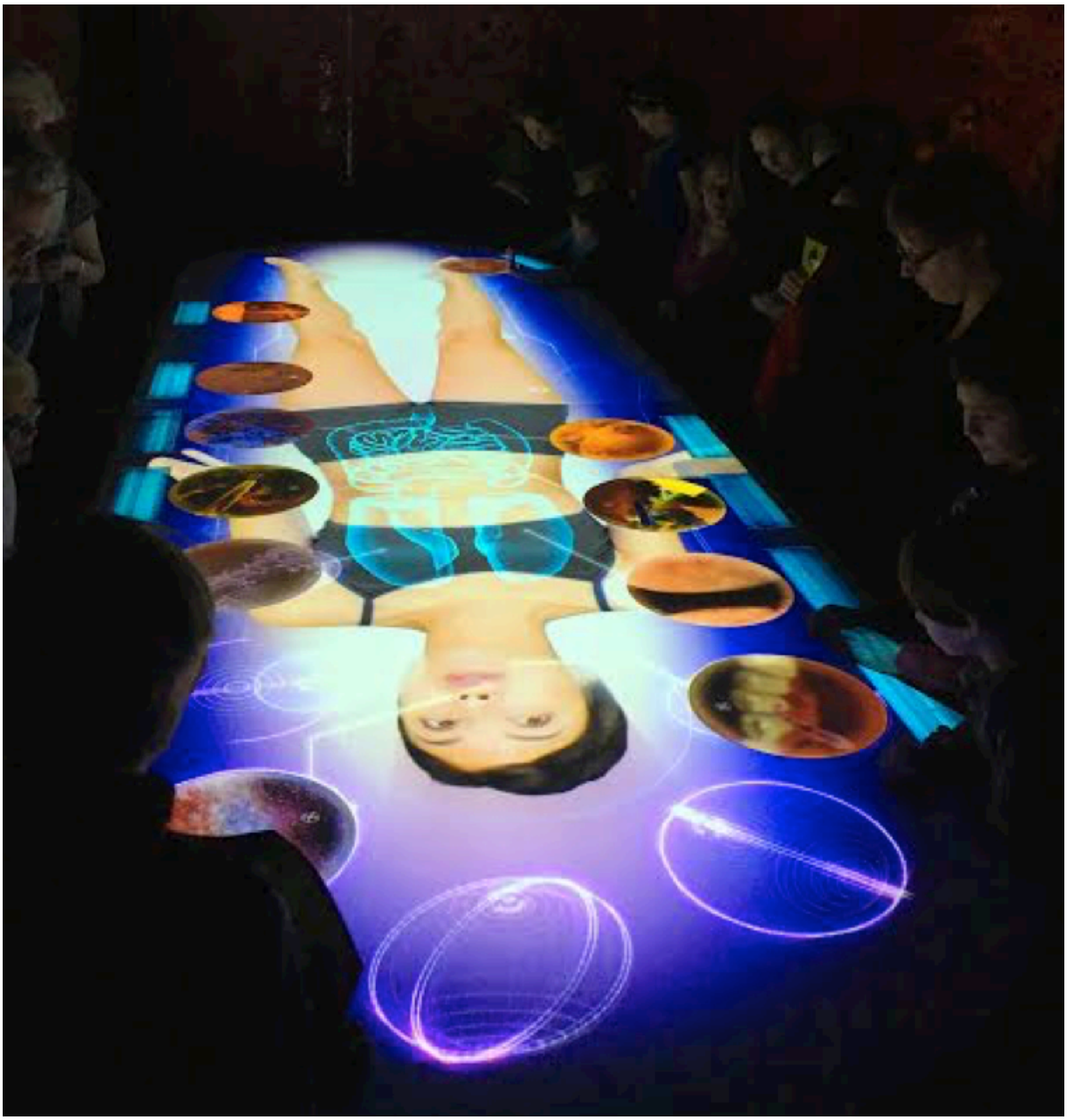

Photo: Eozin Che

What is your favorite part of The Body Table?

JL: My favorite part of the Body Table is the way that the public can passively and in a subtle way pick up on the ideals of four principles of ecology (Niche Adaptation, Commensalism , Mutualism and Competition) while simultaneously engaging with one of 17 stories that give them information they might use to improve or better understand their own biology and relationships with microbes.

BP: The process of creating the BodyTable with my colleagues has been my favorite part. They are an amazing group of talented people. The Museum of Natural History in and of itself, is such a unique place here in NYC. And I wish the general public would have the opportunity like I have had to see the incredible work that takes place behind scenes of every exhibit in every corner of the museum. Its the ultimate collective of many brilliant talented people who everyday successfully mesh Art and Science.

EC: My favorite part of the Body Table is the moment that highlights selected stories for each different chapter. (Niche Adaptation, Commensalism , Mutualism and Competition) What I really like about it is its vivid color change and integrated animation consists of vivid color change on the background, clear narration and beautifully refined small animations on sensors that attract the audience to try it.

Photo: Rhonda Erb

The Secret World Inside You runs from November 7, 2015 to August 14, 2016. Take a break from the usual holiday fare and pay a visit to this enlightening exhibition. It's an experience that will change the way you see yourself interacting with the world around you.

-Rhonda Erb