COLLEGE OF ARTS, HUMANITIES & SOCIAL SCIENCES
THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

Research and Creative Experience for Undergraduates Program (RCEU) Summer 2019

Visualizations for Cartilage Restoration Method

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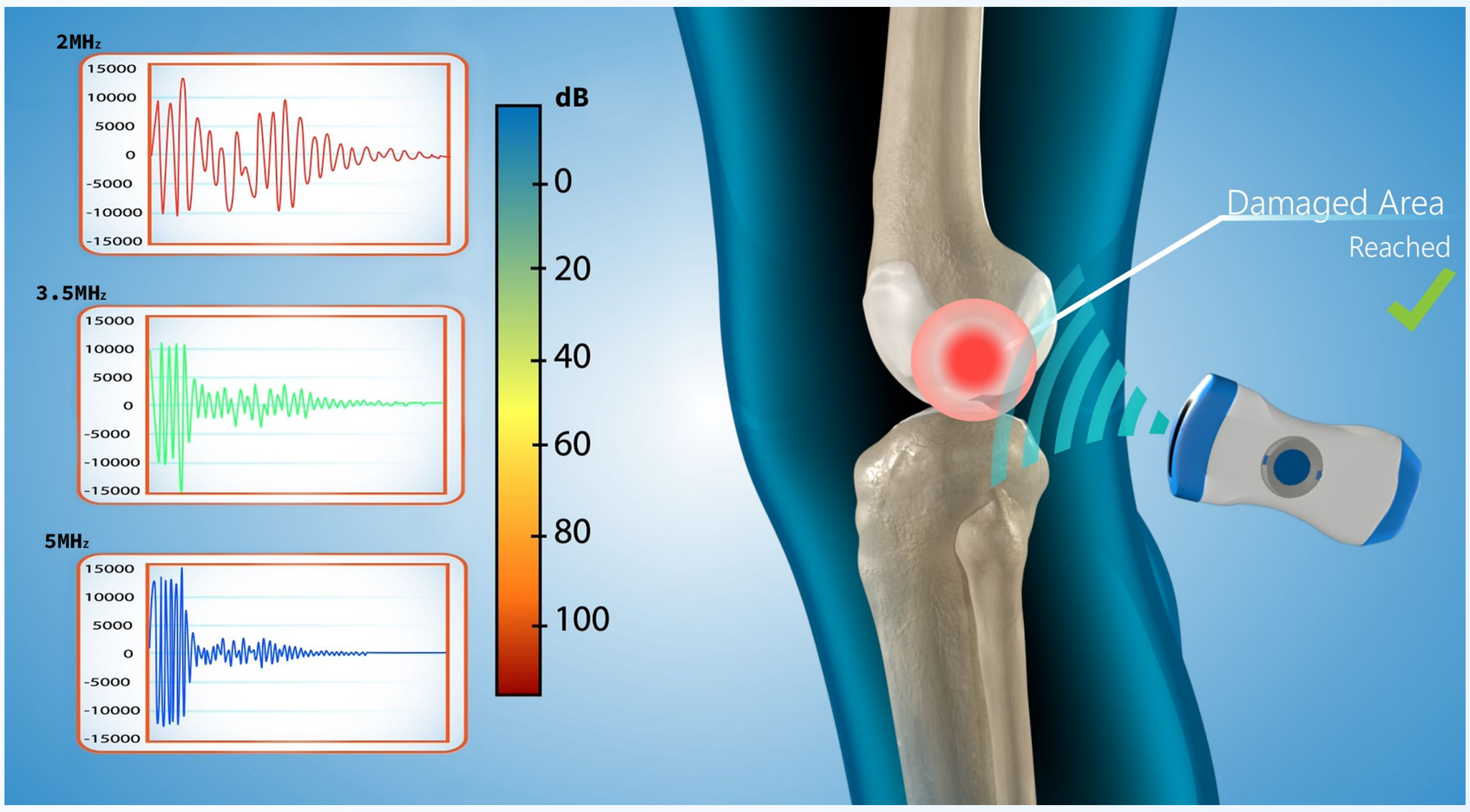
Overview

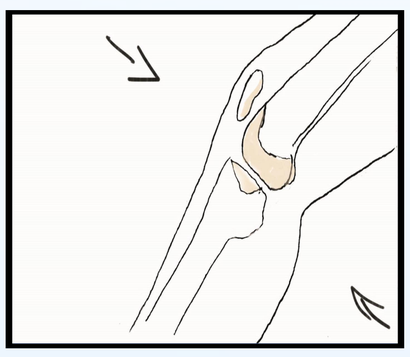
In this collaborative project, my sponsor and I worked with Dr. Subramanian to develop visualizations, including graphics and animations, to facilitate public outreach for Dr. Subramanian's ongoing medical research using low-intensity continuous-ultrasound (LIUS) for cartilage restoration.

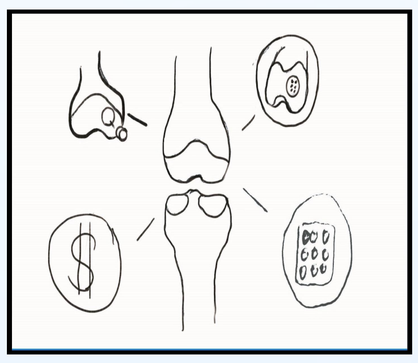
Creative Process

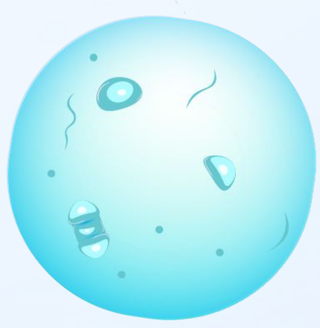
After gaining a broad understanding of Dr. Subramanian's LIUS research, we proposed solutions to help visually communicate the research and results through animations. This started with a script and storyboards that were reviewed and refined. Once approved, voice over narration was created to time out the storyboards into an animatic. The animatic was reviewed, further refined, and approved. The final look for the video was developed using 2D and 3D graphics, then combined into the final video.

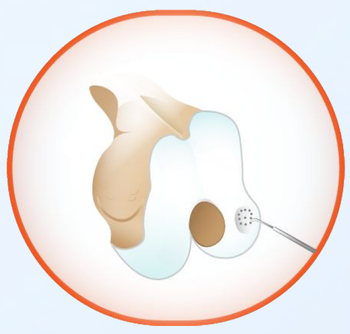


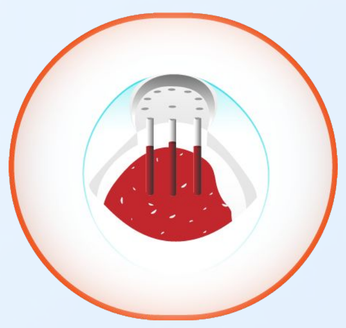
Frame from Final Animated Video



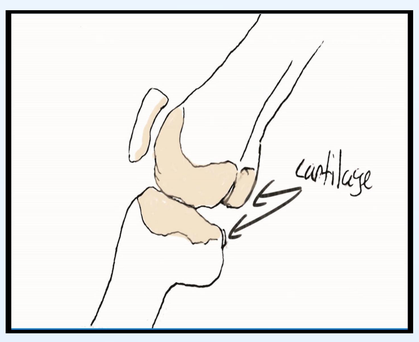




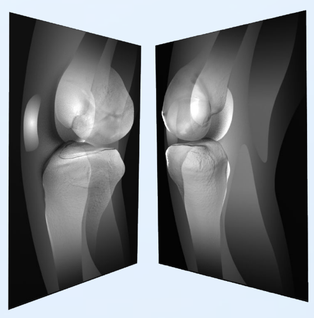




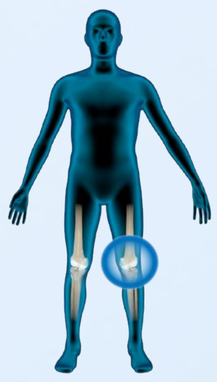
2D Cell Assets



Storyboard & Color Scheme Assets



3D Render Assets



Acknowledgments

Thank you to the RCEU program for providing the funding as well as the opportunity to learn new skills for my degree. Thanks to Dr. Subramanian for her assistance in helping us understand her research and for offering a unique and interesting challenge. Thanks to the UAH Department of Art, Art History, & Design for the resources and a place to work throughout the day.

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