



Stem Cell Research in Denver, CO Austin Schoppe, Biomedical Engineering, 2020

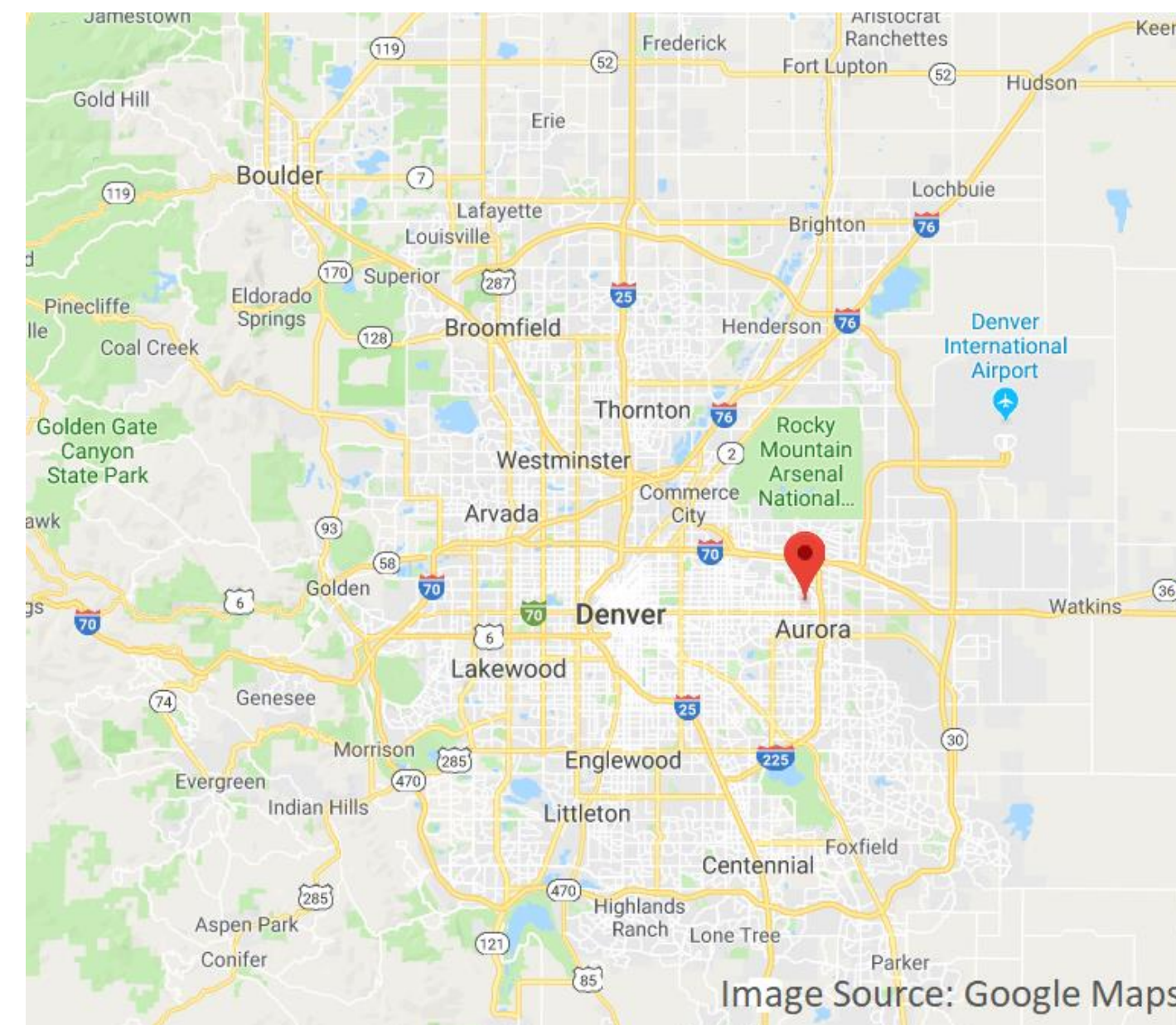
Intellectual
Achievement
& Research

SUMMARY

Over the summer, I participated in the Gates Summer Internship Program (GSIP) hosted by the Gates Center for Regenerative Medicine in Denver, Colorado. This internship required me to conduct extensive image analysis, animal surgery, and histological studies. The program coordinators also hosted a series of lectures, delving into topics such as professional development, graduate school, and novel research in regenerative medicine. As part of GSIP, I also participated in a number of social events along with my cohort of interns.



University of Colorado Denver Campus



Map of Denver with location of GSIP marked

SPICES

This experience best fits under the Intellectual Achievement and Research aspect of SPICES, as working in a research lab was a predominant factor in my experience

HERBS

This experience required Resilience, as I was required to overcome the challenges and obstacles that research often presents to those who engage in it

LEARNING OUTCOMES

This internship gave me the opportunity to develop a plethora of research skills that will greatly assist me in the future. With these newfound abilities, I will be better equipped for my current projects as well as my graduate and professional careers.

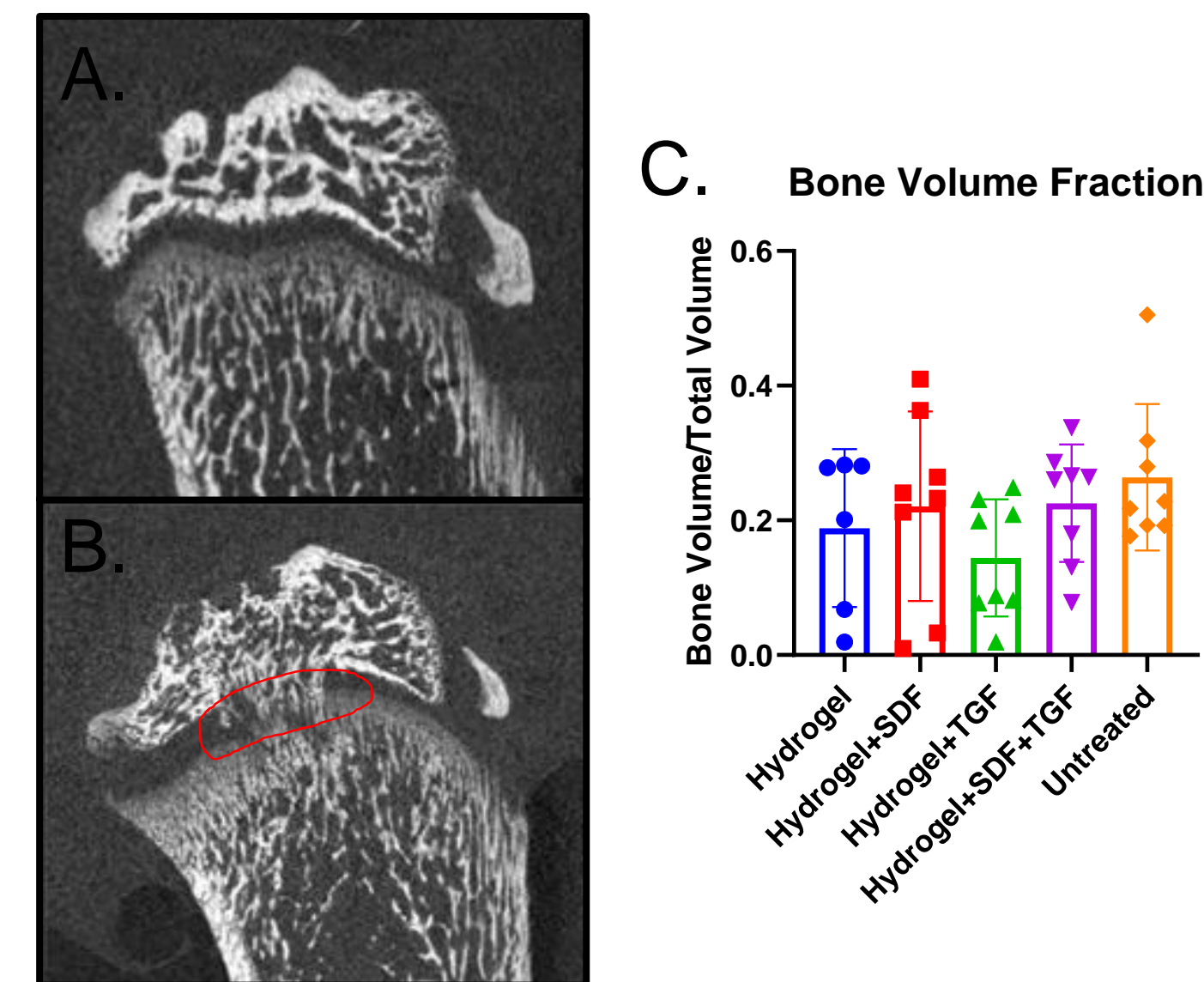


Figure 4. Delivery of SDF-1 and/or TGFβ-1 did not affect bone volume fraction at the injury site in a rat model of the growth plate injury. A) intact growth plate, B) injured growth plate with bony bar 28 days post-injury, C) Quantification of bone volume fraction

IMPACT

This project aims to provide an improved treatment for pediatric patients with injured growth plates. At its conclusion, this project will prevent stunted limb elongation in young individuals and avert the need for subsequent surgeries.

I have benefited from this project by procuring new skills and experiences, as well as expanding my professional network.

ADVICE

Keep an eye out for any opportunities that may present themselves. Consider them even if they don't seem to align closely with your interests. It never hurts to be experienced in many fields!