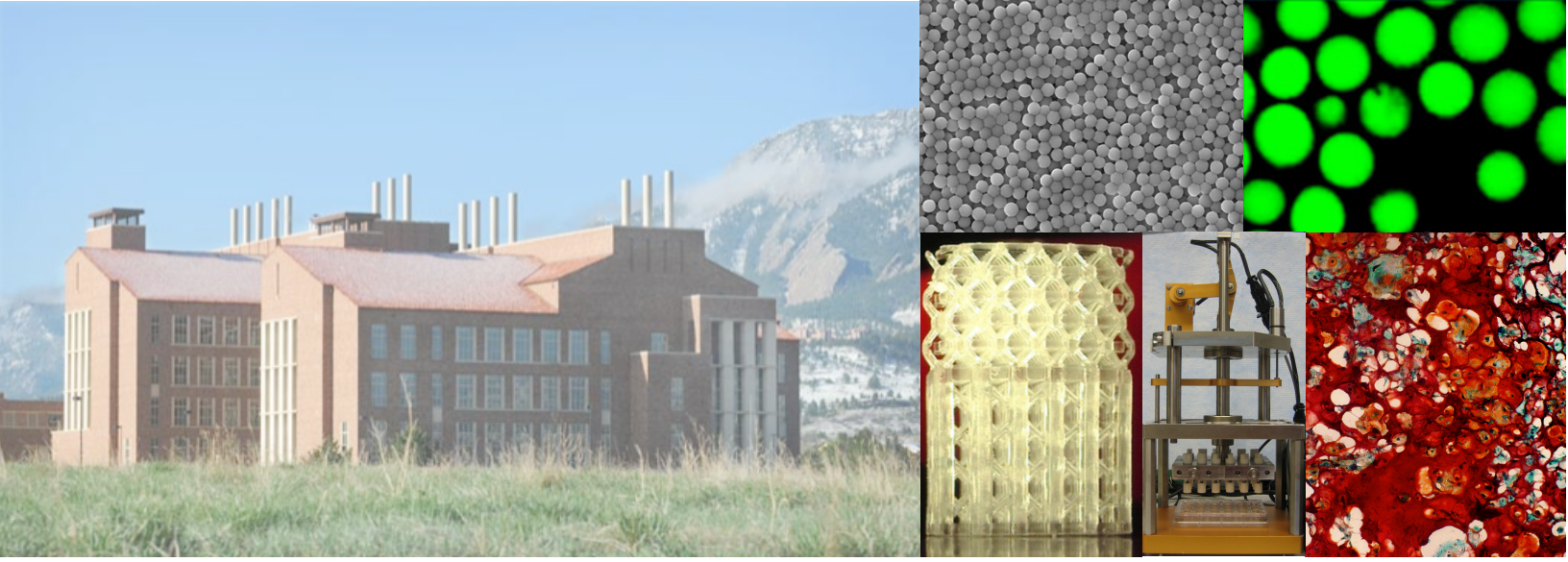

Multiple Post-doc Positions Available at the University of Colorado Boulder in Biomaterials

Project: Novel biomaterials to treat Osteoarthritis

Traditional treatment strategies for osteoarthritis (OA) are palliative, with the focus on pain management and joint replacement. The longstanding inability to develop disease-modifying therapies that can rejuvenate joint cartilage and bone is a great unmet need considering that diarthrodial and spinal OA is the most prevalent disease in the U.S., equal in numbers to the next top 4 disorders combined (heart, pulmonary, mental health and diabetic conditions). The development of an effective regenerative treatment for OA is a vital public health initiative with potential for tremendous impact. Our **multi-disciplinary translational project** aims to address this unmet need through the development of a **novel multimodal biomaterial** therapeutic approach.

Our program has an ambitious goal to develop a biomaterial-based therapy that will be translated into humans. To achieve our goal and make an impact in how OA is treated, we are looking for **creative and team-oriented individuals** with a PhD is materials science and engineering, chemistry, chemical engineering, bioengineering, biomedical engineering, biology, or related fields. Prior post-doc experience is welcome, but not required. Individuals will be part of a highly interdisciplinary team of engineers, biologists, clinicians, and veterinarians.

Specific areas of expertise desired include:

- Polymeric nanoparticle synthesis and characterization, nanoparticle drug delivery
- Polymer synthesis and characterization (e.g., click chemistry)
- Tissue engineering (e.g., stem cells, immune cells, cell signaling, bioreactors, joint biology, etc.)

Start Date: March 1, 2024

If you are interested in translational science and have a background in any one of these three areas, we encourage you to contact the project lead, Stephanie Bryant at sbryant@colorado.edu.

Boulder, CO is ranked #4 in the U.S. as one of the "Best Places to Live" and offers 300+ days of sunshine, dozens of award winning restaurants, eco-friendly transportion, 43,000 acres of open space, 84 miles of multi-use paths, many outdoor activities, and close proximity to Denver.