



**Postdoctoral Research Associate Position in
Matrix Biology and Engineering Lab &
Systems Genetics Lab
Department of Biomedical Engineering**

The University of Virginia's Matrix Biology Lab, directed by Dr. Thomas Barker and Systems Genetics Lab, directed by Dr. Mete Civelek, seeks a Postdoctoral Research Associate to develop engineered therapeutic synthetic gene networks based on fibroblast mechanotransduction for the treatment of fibrotic disorders. The Matrix Biology and Engineering and Systems Genetics Labs are integrating their unique mechanobiology, molecular and cell biology experimental expertise and established genomics and computational approaches to build novel therapeutic approaches to reversing tissue fibrosis, relevant to Cardio-Pulmonary fibrotic diseases. The Research Associate will perform research on the **recently funded NIH Director's Transformative Research Award** and work closely with both PIs and a team of quantitative molecular and cell biologists and computational biologists to create a new solution for a currently incurable disease.

The Research Associate will identify cell type-specific DNA regulatory elements and engineer sensor-actuator circuits for delivery into lungs and livers in various stages of fibrosis with the ultimate goal of dissolving fibrotic tissue. The discoveries will also lead to the understanding of temporal dynamics of how therapeutically targeting mechanical stimuli, such as tissue stiffness, alter the cell's signaling and phenotypic state.

Candidates must hold a PhD in Biomedical Engineering, Bioengineering, Quantitative Biology, Genetics/Genomics or a closely related field by the start date and lead-author publications in their fields. Candidates must also have strong communication skills and the ability to work both independently and as part of a large collaborative, transdisciplinary team. Prior experience in mechanotransduction, functional genomics, or transcriptional regulation is preferred.

To apply, visit <https://jobs.virginia.edu> and search on Posting Number 0621003. Complete a candidate profile online; attach a CV, cover letter, and contact information for three references. The position will remain open until filled. For a description of the labs' overall research interests, visit www.matrixbiology.net and <http://civeleklab.org/>. For questions about the position, please contact Dr. Tom Barker via email at thomas.barker@virginia.edu.

The University of Virginia is an equal opportunity and affirmative action employer and is committed to building a culturally diverse community and strongly encourages applications from underrepresented groups and dual career opportunities.