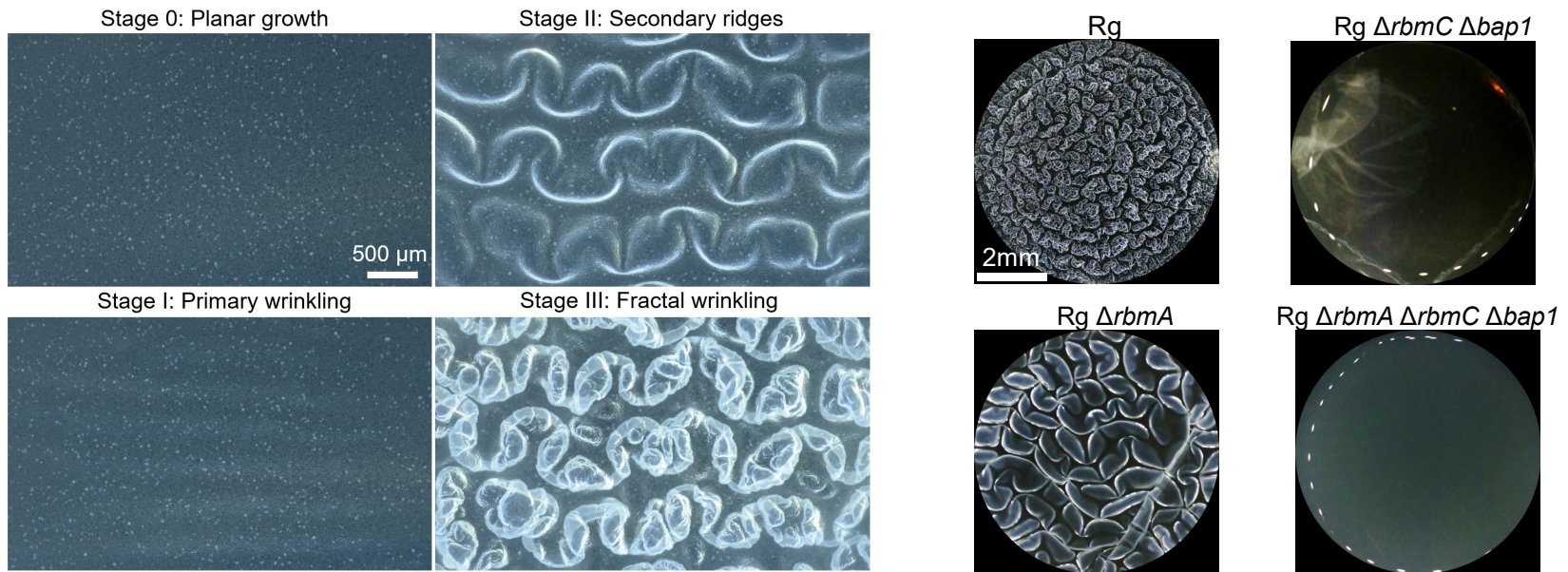


Materials Research Science and Engineering Centers

Matrix components and quorum sensing modulate interfacial peeling and drive fractal wrinkling in bacterial pellicles

Pellicle: Bacterial biofilm at air-water interface; discovered four stages of wrinkling morphogenesis program (left). Example of polymeric materials relevant to the “Rules of Life” (right).



Qin, B., Fei, C., Wang, B., Stone, H. A., Wingreen, N. S., & Bassler, B. L., “Hierarchical transitions and fractal wrinkling drive bacterial pellicle morphogenesis,” *Proc. Natl. Acad. Sci.* (2021).