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Fibrous Tissues Growth And Remodeling: Evolutionary Micro-Mechanical Theory

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Highlights

- A 3D multiscale mechanistic structural theory for tissue growth and remodeling (G&R) was developed.
- The model links structure and mechanics evolution with underlying local biological events.
- This approach circumvents a basic obstacle in modeling growth due to its non-bijective motion.
- Predictions yielded close similarity to structural and mechanical features of evolved tissues.
- The results suggest that these important functional features of living tissue evolve with growth.

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