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Quantitative Analysis of Extracellular Matrix Components and Crosslinks of Porcine Penile Tunica Albuginea

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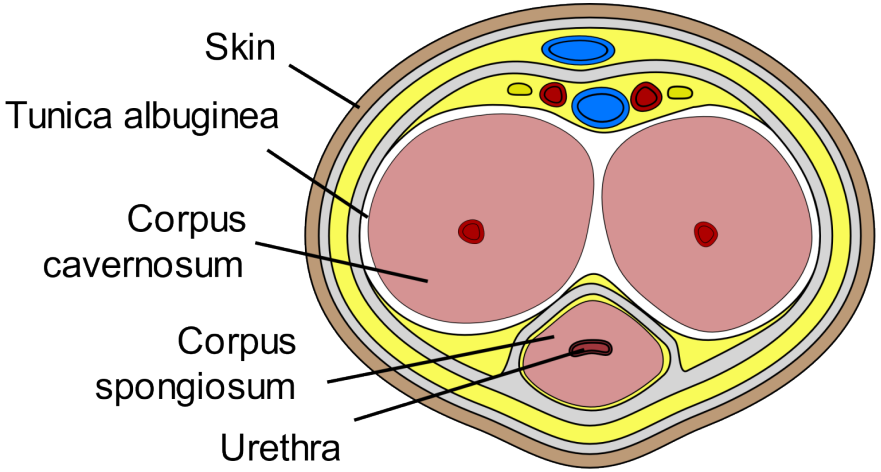
Introduction & Objective

- Peyronie's Disease (PD)
  - Caused by scar tissue in the tunica albuginea (TA)
  - Painful, curved erections
- Tissue engineering TA
  - Design criteria needed



Healthy erection

Peyronie's Disease

TA Biochemistry

- H&E stain shows collagen and cells
- COL/DW ≈ 70%
- ELN/DW ≈ 20%
- Next steps
  - Bottom-up proteomics
  - Mechanical characterization