Three Decades of Innovation: Advancing Regenerative Urology from Bench to Bedside

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Goal:

To restore function to damaged urological organs.

Focus:

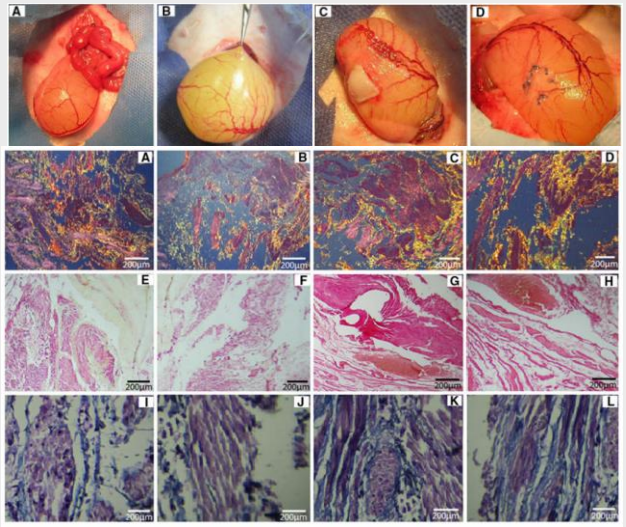
Decellularization, recellularization, and grafting of tissues.

Experience:

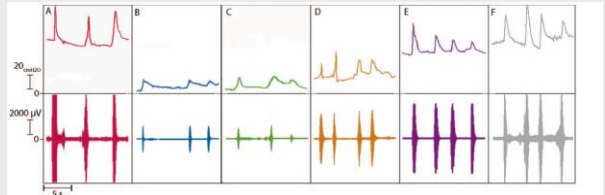
A single-center's three-decade journey in experimental regenerative urology.

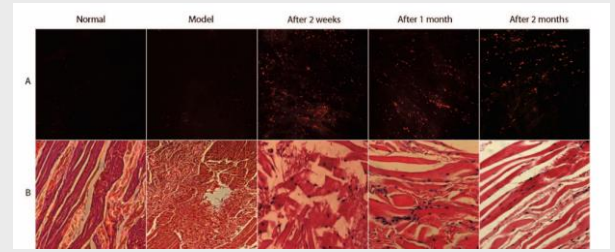
Methods & Key Projects

- Bladder Augmentation



- Anal Sphincter





- Female SUI
- **Penile Tissue** elongation in a sheep model.
- **Testicular Tissue:** expanding spermatogonial stem cells via microfluidic scaffolds.

Results

- structural integration, cellular repopulation,functional recovery
- These biocompatible scaffolds, when recellularized with stem cells, significantly enhance functional recovery.

Conclusion

- Regenerative urology potential for treating organ failure.
- Further experimental validation and long-term studies Our goal is to create
- personalized regenerative solutions