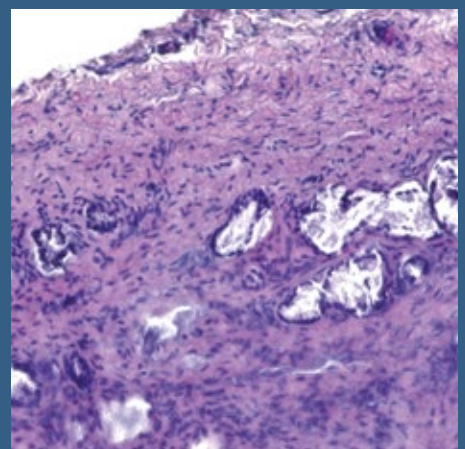
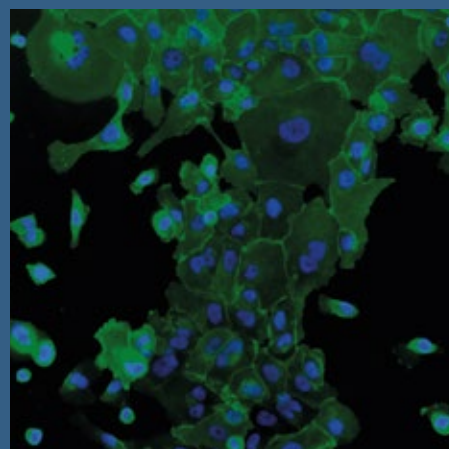
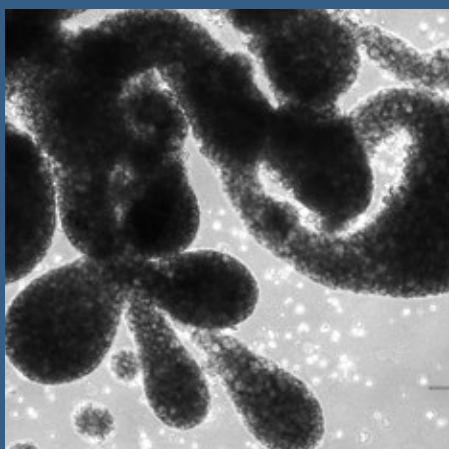
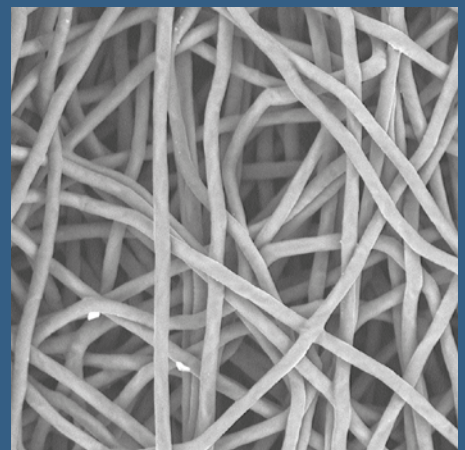
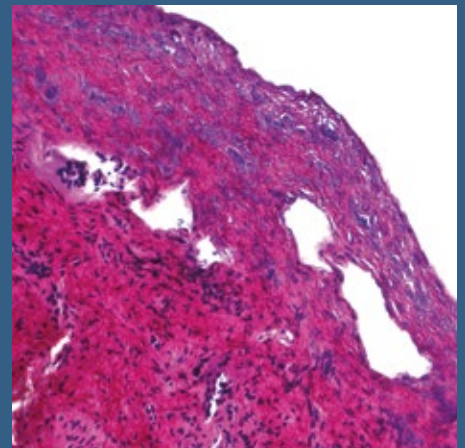
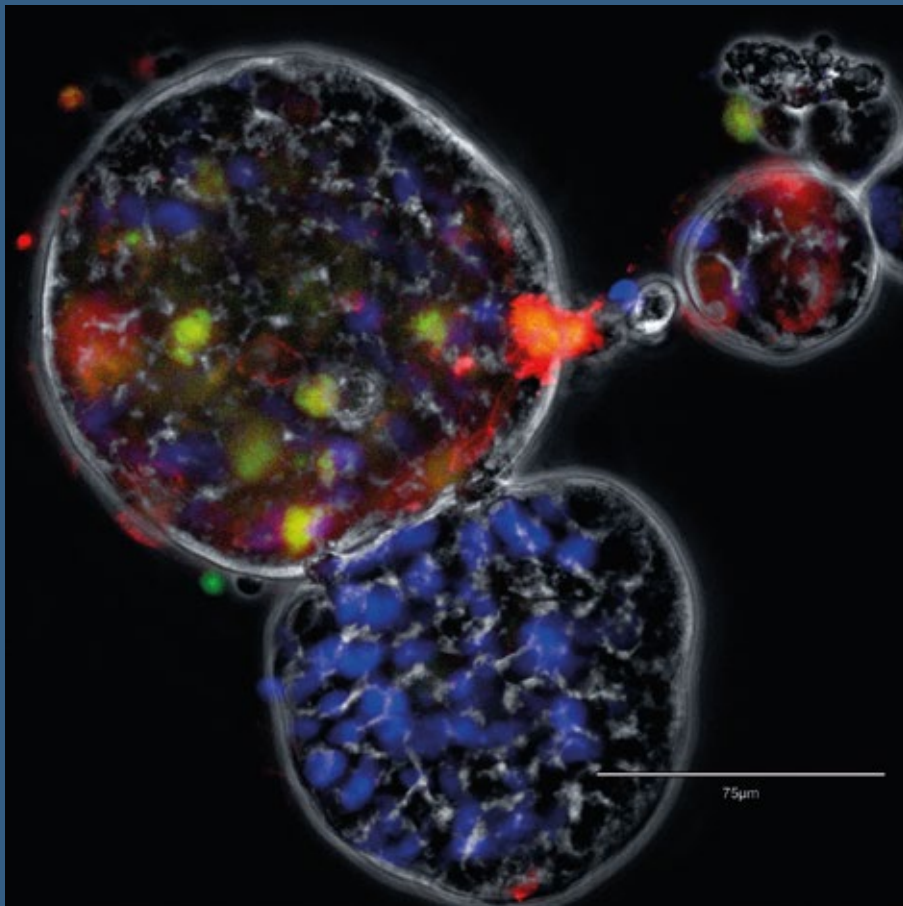


Hepatobiliary Regenerative Medicine Group @ RI.MED

Our Hepatobiliary Regenerative Medicine group seeks to couple methods drawn from biology and tissue engineering to develop and translate innovative therapeutic treatments for biliary diseases.





FOCUS

- Establishment of patient-derived biliary epithelial cell (BEC) cultures
- Development of implantable bioartificial bile ducts
- Development of translational pathways for combined ATMPs in this area



OUTCOME

- Optimized workflow for the rebuilding of functional biliary tissue
- Publications in peer-reviewed journals
- International collaborations with academic partners



COLLABORATIONS

- The Mediterranean Institute for Transplantation and Advanced Specialized Therapies (ISMETT), ITA
- University of Pittsburgh, PA, USA
- McGowan Institute for Regenerative Medicine (MIRM), PA, USA



AIMS

- Advance cell culture techniques for patient-derived BECs
- Tune biomaterial properties for improved growth and function of BECs
- Fabricate bile duct-like structures *in vitro*
- Investigate BEC–biomaterial interactions and BEC functions *in vitro*
- Investigate the safety and efficacy of lab-generated bile duct-like structures *in vivo*



EXPERTISE AND RESOURCES

- Primary adult and progenitor cell isolation/purification, culture, and functional characterization
- Biomaterial processing
- Histology and cell imaging techniques
- Functional and mechanistic studies
- Molecular biology



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Hepatobiliary Regenerative Medicine Group

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