3D Printing and Biofabrication Workshop

NIH Center for Engineering Complex Tissues (CECT)

June 7, 2019

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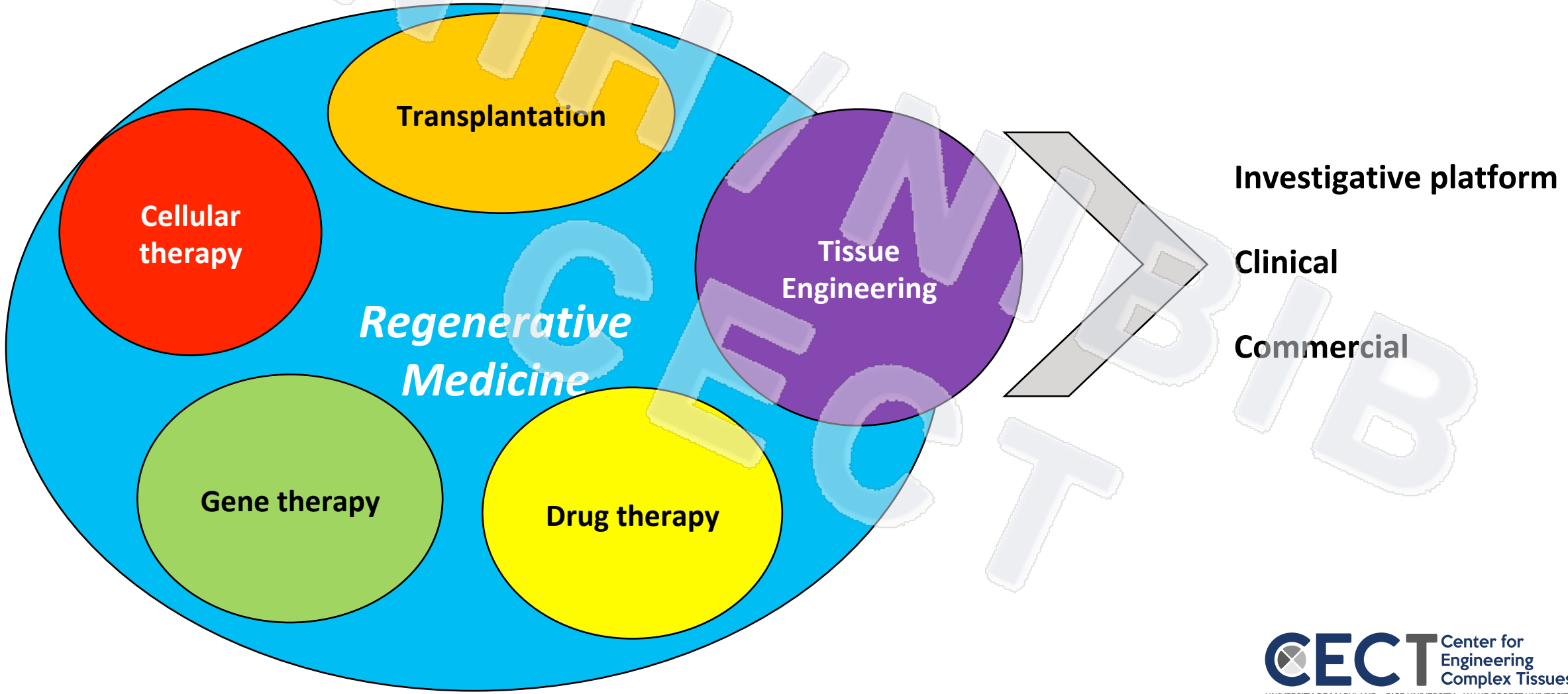
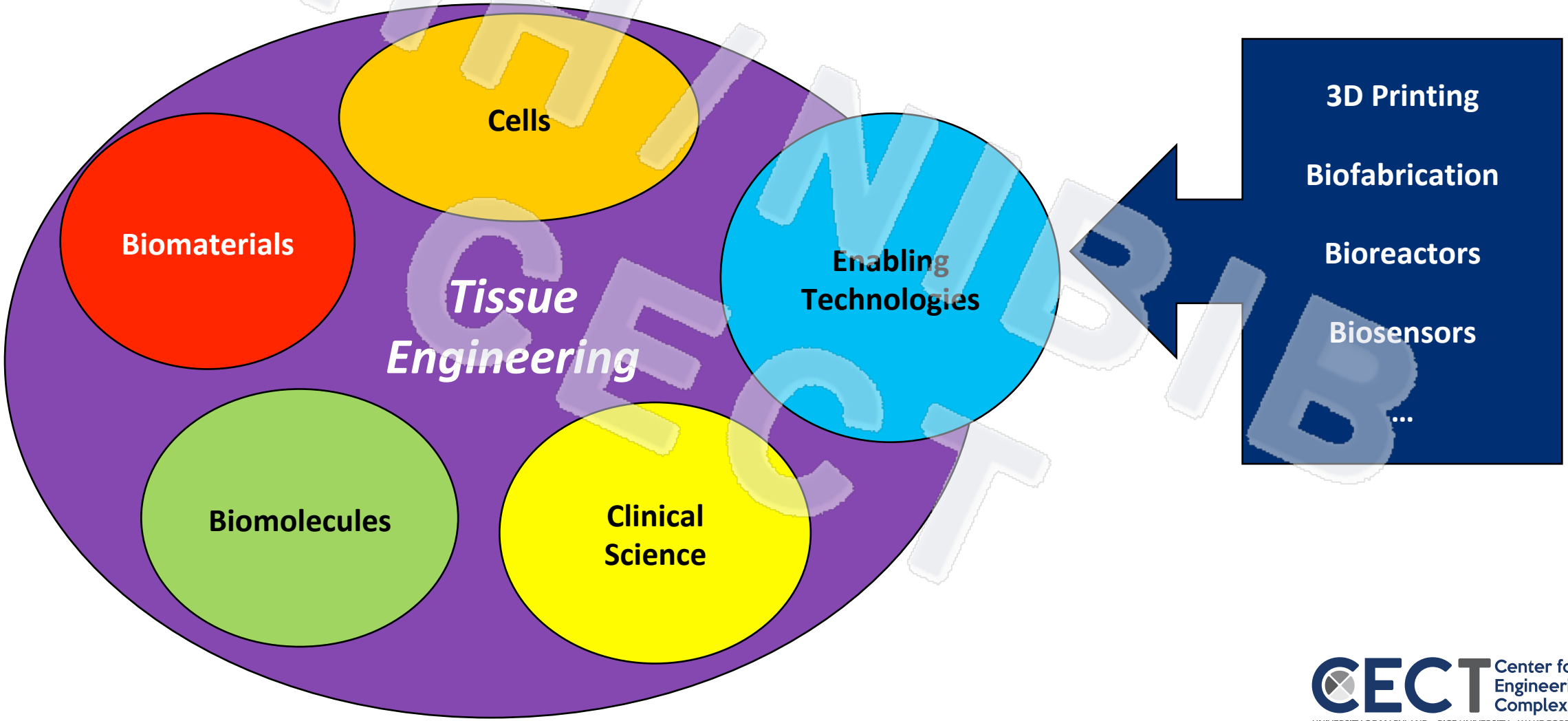
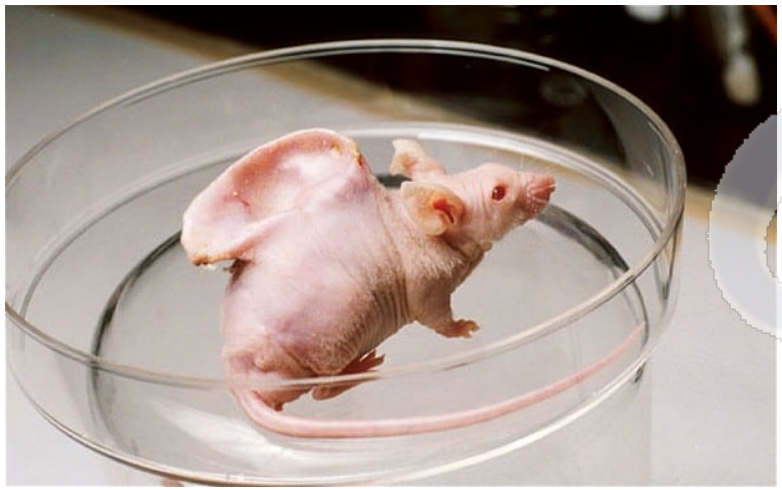
Tissue Engineering and Regenerative Medicine (TE/RM)



Tissue Engineering and Regenerative Medicine (TE/RM)



Capturing native complexity



C. A. Vacanti et al., 1997

Repair

Replace

Regenerate

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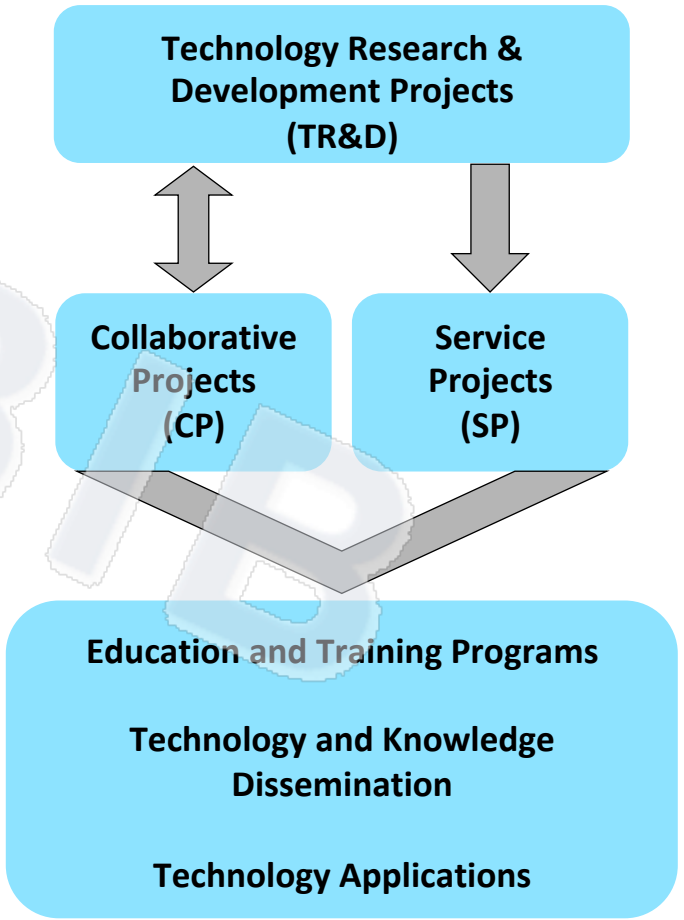
- The fabrication of complex engineered tissues remains a grand challenge in regenerative medicine
- CECT will pioneer the engineering of complex tissues by developing and disseminating techniques in bioreactor culture, cell printing, and complex scaffolds
- CECT will also establish a community of investigators in these endeavors through disseminating technologies and growing new technologies for fabricating complex tissues



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Goals

- Understanding the basic concepts of 3D Printing and Bioprinting
- The printing process: concept to product
- Opportunities and Limitations
- Applications in research

Questions?