

**Targeting Brain Inflammation After Injury: Exploring Gliosis with Mechanobiology and Molecular Approaches**  
Akash Garhwal

**Exploring the potential of different body fluids to implement rapid testing for multiple sclerosis (MS)**  
Bianca Castelli

**Investigating the role of brain-meninges interface in traumatic brain injury**  
Erin Reardon

**Enhancing epilepsy treatment with targeted nanoparticle delivery**  
Katy McGonigal

**Building a Brain (Model)**  
Martha Gallagher

**Development of an MS-on-a-chip device for the study of lymphoid-like follicles**  
Patrick C Hurley

**Molecules Making Magic: Don't Blink or You'll Miss the Cool Stuff!**  
Viswanath Vittaladevaram

**From sports performance to health diagnostics: monitoring of biomarkers with non invasive sensors**  
Clara Cosa-Garcia

**Testing people for Human papillomavirus without a lab**  
Ella Boswell

**Increasing Access to Life-Saving Cell Therapies through Automation**  
Imen Boumar

**A low-cost wearable microneedle sensor based on sweat analysis for daily monitoring of multiple analytes**  
Junxiang Wang

**DERMATech: A Portable Tool for Early Skin Cancer Detection Using Blood-based Biomarkers and SERS (Surface-Enhanced Raman Spectroscopy)**  
Mohamed Touhid Patel

**Developing affordable and accessible diagnostics for Schistosomiasis – a neglected tropical disease**  
Rory Barnes

**Diabetes in a Dish: a new lab-based model to understand complex disease**  
Elaine Duncan

**The role of metabolite sensing GPCR mechanotransduction in adipocyte function**  
Euan Purdie

**Nature-inspired animal-free gels for skin healing applications**  
Athena Mattheou

**Stretching Macrophages to Affect their Wound Healing Potency**  
Cian Whelan

**A Smart Device to Monitor Blood Flow in grafts after Reconstructive Surgeries**  
Narjes Meselmani

**The development of high strength vascular adhesives**  
Ryan Meechan

**Tuneable Sugar Coated Materials for Developing Implants**  
Amrutha Varshini Hariharan

**The impact of environmental mechanical cues on cells in soft tissues**  
Dora Rogkoti

**Developing a material out of DNA that can be printed in 3D and support cell growth.**  
Emily Maxwell

**Developing representative in vitro models of the human testis**  
Kamalnath Selvakumar

**Synthesis and design of new hydrogels for nerve repair**  
Lineta Stonkute

**Adapting Cell Culture Technology to Produce Cultivated Meat for Human Consumption**  
Adam Efrat

**3D printing of edible materials for cellular agriculture**  
Louis Hutchings

**Sustainability in cell research labs**  
Paola Sofia Serrano Bravo

# LifETIME CDT Student Projects

**Brain trauma, conditions & epilepsy**

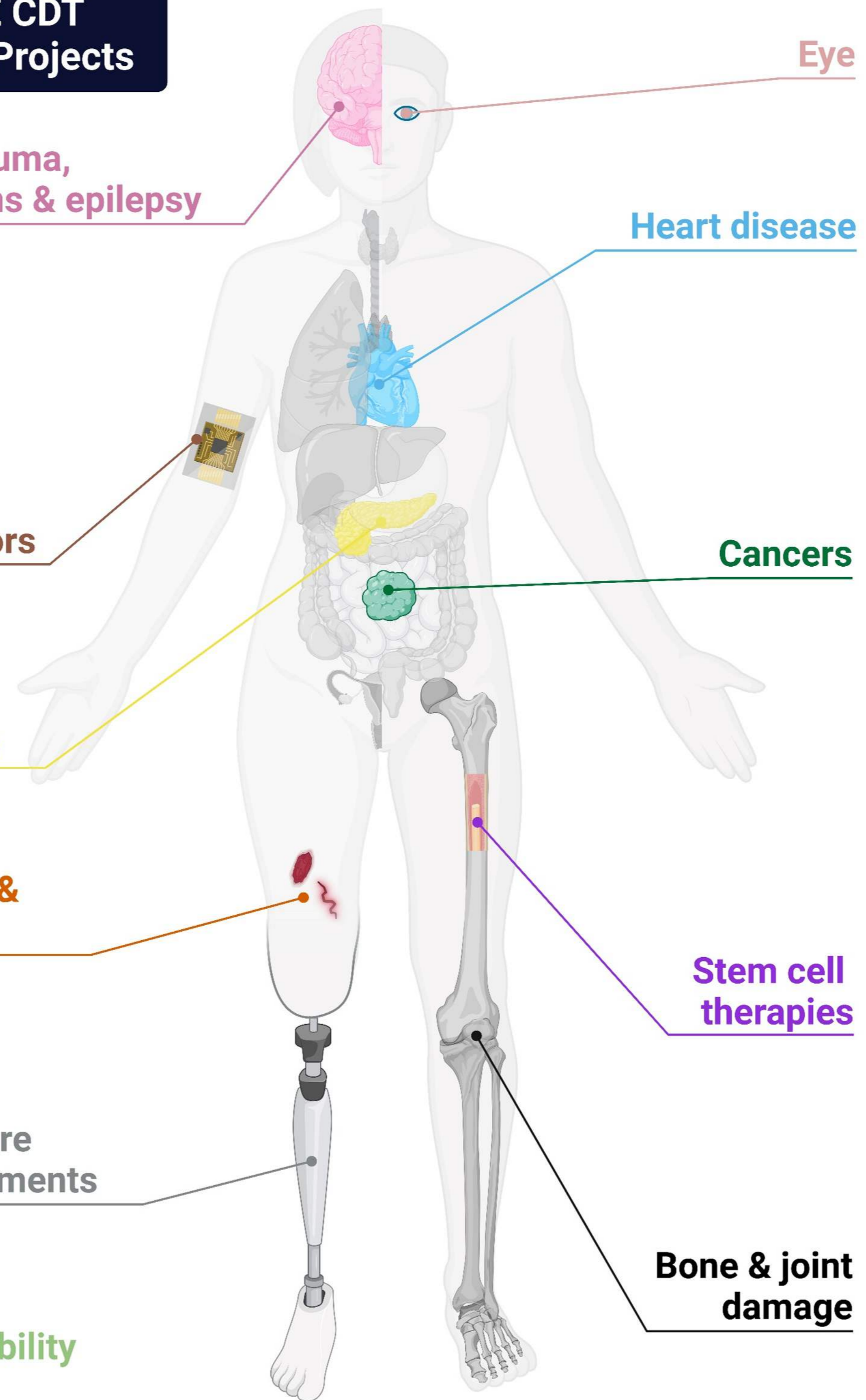
**Biosensors**

**Diabetes**

**Wounds & burns**

**Healthcare Advancements**

**Sustainability**



**Delivering Stem Cell Products to the Injured Corneal Surface Using an Innovative Hydrogel System**  
Seyedmohammad Moosavizadeh

**Developing and testing mobile apps to improve the testing of new ocular treatments and technologies**  
Thaiba Bano

**Creating an experimental model to visualise how blood flows through medical devices**  
Eleanor Barton

**Bioprinting cardiac organoid models containing structurally and functionally mature vascular networks**  
Hey Wei Wong

**Using 3D Gels to Study Heart Healing**  
Joanne Chang

**Smart coatings to limit blood clot formation on synthetic vascular grafts**  
Justine Clarke

**Enhancing cancer treatments by understanding immune cell communication and responses in influencing tumour growth**  
Brian Harkin

**Bioengineered human tissue models of leukaemia to improve drug development**  
Celia Ribes Balanza

**Ready-to-use bone marrow models for drug testing**  
Conor Robinson

**How the immune system regenerates unhealthy cells in the liver**  
James Kennedy

**Designing gel-like materials to mimic tumor environment and help stop cancer growth**  
Konstantina Evdokimou

**How Breast Cancer Cells Feel Their Surroundings - And Why It Matters**  
Lola Ajayi

**A new approach to liver cancer treatment**  
Megan Bannister

**Development of in vitro triple-negative breast cancer model for improved targeted therapies.**  
Nivethitha Ashok

**Developing an Automated platform to identify and sort Cancer therapy resistant cells based on their chemical information**  
Owen Drabwell

**Understanding Cancer, One Cell at a Time**  
William Mills

**Improving Liver Cell Therapies by Enhancing Cell Adhesion**  
Amaziah Alipio

**Not Enough Stem Cells! Improving the Number of Stem Cells Produced from Bioreactors for the Treatment of Autoimmune-related Conditions**  
Jennifer Willis

**New materials to help stem cells stay young and grow better**  
Paris Alexandros Kalli

**How Forces in Cells Affect Protein Folding and Disease**  
Shaima Maliha Riha

**The development of a novel "tuneable" microcarrier system using Polyhedrin Delivery Systems (PODS™) to bulk culture therapeutically active Mesenchymal Stromal Cells (MSCs)**  
Sophie Caprioli

**Magnetic Gels to Speed Up Bone Healing**  
Emma Jackson

**"Osteosarcoma, I have a bone to pick with you!" Treating osteosarcoma: a small molecule approach.**  
Francesca Kokkinos

**Identifying how phosphate balance influences the bone healing process**  
Joseph Weightman

**Smarter, better, faster, stronger: Advancing rheumatoid arthritis diagnosis**  
Julia Isakova

**Better Disease Understanding using Sugar-Decorated Biomaterial Models**  
Mohamed EL-Melegy

**Designing animal -free organoids based on engineered vegetables- VegFold**  
Xally Montserrat Valencia Guerrero