

**Team Projects and Internships Organized by MS Biotechnology and Bioinformatics and MS Biotechnology/MBA Dual Degree Programs at CSUCI
(2005-present)**

Project	Host Institute	Mentor or Supervisor	Research Projects	# Students
TP	Integrity Biosolutions	Byeong Chang, PhD., President, Founder	Towards heat stable vaccines for global health	4
TP	Baxter Biosciences and UCLA	Bill Tawil, PhD, Director of Global Strategy	Promising therapeutics for reconstructing the heart	5
TP	Ceres, Inc	Kenneth Feldman, PhD, VP	Production of cellulosic ethanol from switchgrass	4
TP	Invenios	John Craig, PhD., VP, Software Development	Nanotechnology and biorobotics-picopipetting stem cell cultivation factors	4
TP	Baxter Biosciences and UCLA	Bill Tawil, PhD, Director of Global Strategy	Spinal disc tissue regeneration	5
TP	Ceres, Inc	Steven R. Thomas, PhD., Director of Bioproducts	Bioethanol for California	4
TP	Alzheimer's Institute	Gil Rishton, PhD, Founder and Director	Beta secretase inhibitors as Alzheimer's therapeutic	4
TP	Amgen	Timothy Osslund, PhD, Principal Scientist	Building a protein production facility at CSUCI	4
TP	Alzheimer's Institute	Gil Rishton, PhD, Founder and Director	Bioavailable antioxidant nutraceuticals	3
TP	Integrity Biosolutions	Byeong Chang, PhD., President, Founder	Formulating vaccines for the global market	4
TP	Amgen	Timothy Osslund, PhD, Principal Scientist	Restructuring world trade in follow on biologics	3
TP	Stellar Biotechnologies, Inc.	David Spaulding, PhD, Chief Technology Officer	KLH immunocompetence diagnostics	4
TP	UCLA-Dept of Bioengineering	Jakob Schmidt, PhD, Assistant Professor	Librede-scientific analysis, strategic business plan	4
TP	Baxter Biosciences and UCLA	Bill Tawil, PhD, Director of Global Strategy	Liver organogenesis	3
TP	Childrens Hospital Los Angeles	Jessica Rousset, PhD., Director	Amincure- scientific analysis, business and strategic plan	4
TP	Symbion Research International	Peggy Pence, PhD., CEO,	Design and development of robotic formula for treatment of human diseases	3
TP	Amgen	Timothy Osslund, PhD, Principal Scientist	Biosimilar manufacturing in Africa	3
TP	Alzheimer's Institute	Gil Rishton, PhD, Founder and Director	Diagnostic kit and possible treatment for neurodegenerative disease	4
TP	CSUCI	Nitika Parmar, PhD, Assistant Professor	Immunoprevilidge-organ transplant tolerance through hair follicle's	3
TP	Kythera Biopharmaceuticals	Christopher Robertson, PhD	ATX-103, product development and commercial assessment	3
I	Celavie Biosciences	Oleg Kopyov, MD., PhD, CEO	Enhancement/reformulation of human culture media for equine stem cells	1
I	UCLA-Dept of Bioengineering	Bill Tawil, PhD, Research Professor	Biomaterial used in tissue engineering	1
I	Scripps	Joel Gottesfeld, PhD	Development of hNSC models for the neurodegenerative diseases Friedreich' ataxia and Huntington's disease	*
I	Scripps	Carlos Barbas, PhD	Development of hESC therapies for diseases/conditions such as: AIDS, Alzheimer's disease, liver disease, diabetes, Parkinson's disease, muscular dystrophies, spinal chord injuries, and inborn errors of metabolism	*
I	Scripps	Inbar Friedrich Ben-Nun/RA	Cellular reprogramming of human adult cells by microRNA's	*
I	Scripps	Eyitayo Fakunle, PhD	Ethnically diverse panel of pluripotent stem cells for pharmacogenomic applications	1
I	Scripps	Ibon Garitaonandia/post doc	Generation of induced pluripotent stem cells from amyotrophic lateral sclerosis (ALS) patients	1
I	Scripps	Suzanne Peterson, PhD	Mechanism of action of small RNAs in human embryonic stem cell development	1
I	Scripps	Kristin Baldwin, PhD	Profiling full pluripotency, generating neurons from iPS cells, and generating human iPS cells and neurons in vitro	2
I	Scripps	Ulrich Mueller, PhD	Determination of the molecular signature of neural stem cells and their differentiated offspring	1
I	City of Hope	Adam Bailis, PhD	Influence of aging and genotoxic exposure on genomic stability	*
I	City of Hope	Art Riggs, PhD	Epigenetics, chromatin structure, X inactivation, and imprinting	*
I	City of Hope	Carlotta Glackin, PhD	Molecular mechanisms of breast tumor migration and invasion	*
I	City of Hope	David Ann, PhD	DNA damage response	*
I	City of Hope	Jiing-Kuan Yee, PhD	Establishment of human disease models with induced pluripotent stem cells	*
I	City of Hope	John Rossi, PhD	Small RNA regulation of gene expression	*
I	City of Hope	John Zaia, MD	Gene therapy for HIV-related therapy	*
I	City of Hope	Judith Singer-Sam, PhD	Monoallelic expression in neural stem cells and the CNS	*
I	City of Hope	Linda Iverson, PhD	Global gene expression and alternative splicing profiles in hESCs, neural progenitors, brain tumor stem cells; identification of molecular targets for therapeutic intervention of brain tumor; assay development to screen for small molecule inhibitors using hESCs	*
I	City of Hope	Karen Aboody, MD	Neural stem cells targeting human primary and metastatic tumors in animal models: therapeutic strategies	*
I	City of Hope	M.L. Richard Yip, PhD	High throughput screening for small molecules that modulate stem cell growth and differentiation	1
I	City of Hope	Michael Jensen, PhD	Therapeutic eradication of brain tumor Stem/Initiating Cells with T cell therapies	1
I	City of Hope	Nagarajan Vaidehi, PhD	Computational methods to identify and design small molecule probes for Wnt and hedgehog signaling pathways	*
I	City of Hope	Qiang Lu, PhD	Mechanisms of neural stem cell self-renewal and differentiation in mouse brain development and in brain tumors	*
I	City of Hope	Rama Natarajan, PhD, FAHA, FASN	Epigenetics, Chromatin remodeling, micro RNA's, and gene expression	*
I	City of Hope	Ravi Bhatia, MD	Mechanisms underlying abnormal growth of malignant stem and progenitor cells	*
I	City of Hope	Ren-Jang Lin, PhD	Alternative splicing and long, non-coding RNA's	*
I	City of Hope	Saswati Chatterjee, PhD	Genetic modification of stem cells using novel recombinant adno-associated virus vectors	1
I	City of Hope	Teresa Ku, PhD	Human embryonic stem cell differentiation toward pancreatic islet cells	*
I	City of Hope	Timothy O'Connor, PhD	DNA repair	*
I	City of Hope	Toshifumi Tomoda, MD, PhD	Mechanisms underlying establishment of neuronal polarity	*
I	City of Hope	Wendong Huang, PhD	Metabolic regulation, liver stem cell, and liver cancer	*
I	City of Hope	Yanhong Shi, PhD	Regulatory network of neural stem cell self-renewal and differentiation and iPS cells	*
I	City of Hope	Yuan Chen, PhD	Post-translational modifications by ubiquitin-like proteins, NMR spectroscopy, and structural biology	*
I	UC Berkeley	Won Hyuk Suh, PhD	Development of synthetic and nanostructured extracellular matrices for controlling biological functions in neuronal, embryonic, and iPS cells	*

I	UCSB	Dennis Clegg, PhD	Molecular basis of neural development and disease; retinal development and degeneration; differentiation of ocular cells from embryonic and adult stem cells	1
I	UCSB	Patrick Daugherty, PhD	Engineering of protein-ligand interactions; microfluidic cell sorting; intercellular screens for protein-protein interactions.	*
I	UCSB	Tod Kippin, PhD	Functional consequences and mechanisms of neurogenesis in the adult mammalian brain and how adult neural stem cells are involved in neural disease	*
I	UCSB	Ken Kosik, PhD	Basic mechanisms and disorders of neural plasticity; the role of microRNA's in stem cell differentiation.	*
I	UCSB	Norbert Reich, PhD	DNA methyltransferases; epigenetics; enzyme mechanisms; novel therapeutics; nanoparticle-based proteomics, diagnostics.	*
I	UCSB	Joel Rothman, PhD	Molecular and genetic control of development in the nematode <i>C. elegans</i> ; the genetic basis of stem cell competence states; microRNA control of proliferation and differentiation in the stem cell niche.	*
I	UCSB	Thomas Weimbs, PhD	Role of adult stem cells in renal repair after ischemic injury	*
I	Amgen (Thousand Oaks)	Gordon Ng, PhD	Role of growth differentiation factor-5 (GDF-5) in mesenchymal stem cell biology in the joint of adult animals.	1
I	Amgen (Washington)	Christophe Queva, PhD	In vitro and in vivo characterization of cancer stem cells in primary colorectal cancer models	1

Note: TP: Team Projects; I: Internships; *: Available for our students. All students on team projects and internships are also co-supervised and co-mentored by our faculty at CSUCI.