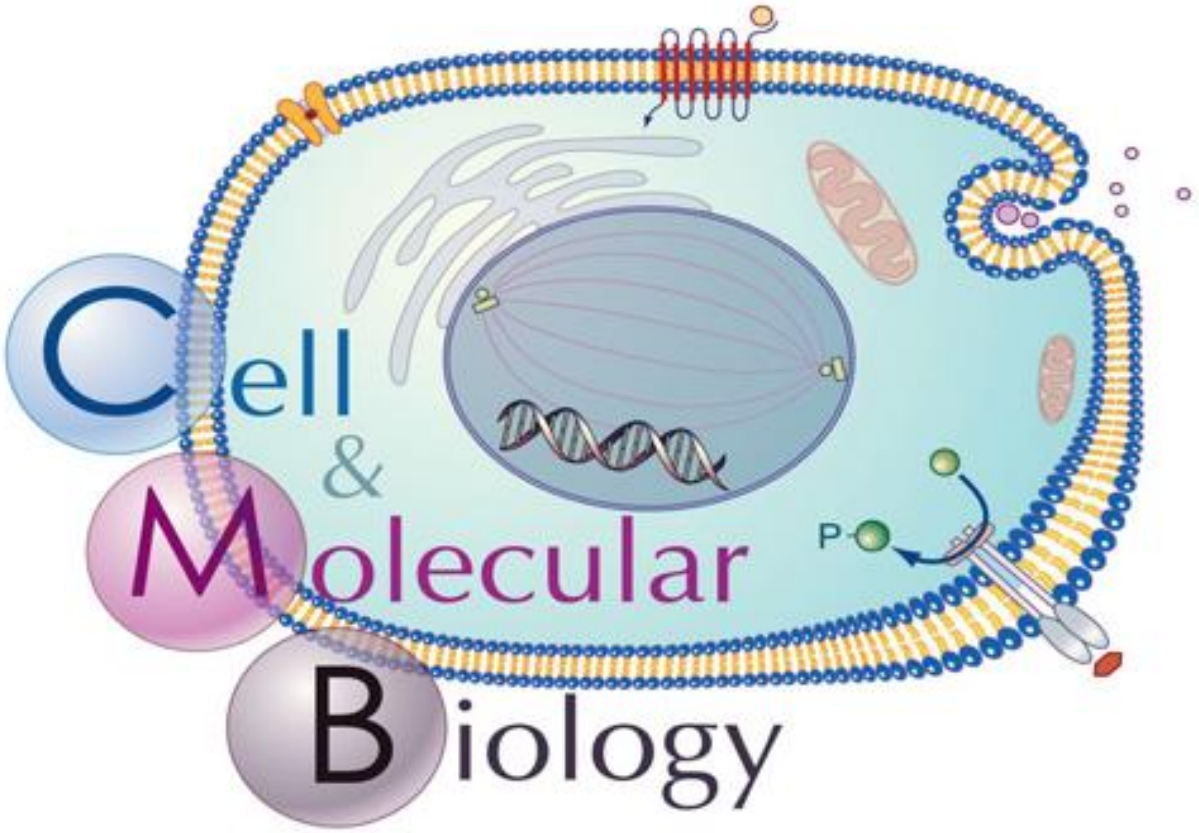
CELL & MOLECULAR BIOLOGY (CMB) TRACK

(Soon-to-be Cellular & Molecular Medicine Track)

STUDENT HANDBOOK (2013)



This handbook and other CMB track-related documents are available at:

http://www.uthscsa.edu/csb/grad-trackcellmolecular.asp

Contents

Program Overview

The Cell and Molecular Biology (CMB) Track is the gateway to all basic, medical and translational research. This program is designed with maximum flexibility and it can be individually tailored to a specific student's interests including aging, cancer, immunology, neuroscience, metabolism and genetic disorders. The CMM track emphasizes the importance of molecular and cellular approaches to studying health and disease. It provides students with a broad foundation that can be utilized for future career development in more specialized areas of biomedical research and education. We encourage students to combine our advanced curriculum in Molecular and Cellular Biology with any of the advanced courses in the other IMGP tracks.

Track Leader: James Lechleiter, Ph.D.
LECHLEITER@UTHSCSA.EDU
(210) 562-4043, STRF 207.2

Track co-Leader and Credentialling chair: P. Renee Yew, Ph.D.
YEW@UTHSCSA.EDU
(210) 562-4150, STRF 261.2

Student advisor: Lily Dong, Ph.D.
DONGQ@UTHSCSA.EDU
210-567-4849, HSC-MED 2.061V

Recruitment chair: Bandana Chatterjee, Ph.D
CHATTERJEE@UTHSCSA.EDU
(210) 567-7218, HHB 3.060

MGP Admissions: Consuelo Walss-Bass, Ph.D.
WALSS@UTHSCSA.EDU
(210) 562-4050, STRF 207.1

IMGP Admissions: Senlin Li, M.D.
LIS1@UTHSCSA.EDU
(210) 567-1905, DTL 5.060R

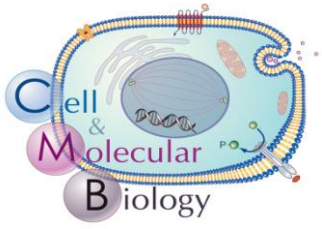
Candidacy chair: Rita Ghosh, Ph.D.
GHOSHR@UTHSCSA.EDU
(210) 567-5664, HSC- MED 2.264A

Curriculum chair: Barbara Christy, Ph.D.
CHRISTY@UTHSCSA.EDU
(210) 567-7227, HHB 3.064

Student representative: Rasika Shrirang Vartak
VARTAK@LIVEMAIL.UTHSCSA.EDU
210-567-0578, HSC-MED 221D

Ad hoc member: Ellen Kraig, Ph.D.
KRAIG@UTHSCSA.EDU
210-567-3818, HSC-MED 4.013V

Ad hoc member: LuZhe Sun, Ph.D.
SUNL@UTHSCSA.EDU
(210) 567-5746, HSC-MED 2.020V



Ph.D. Course Work

Fall: Year 1

Monday	Tuesday	Wednesday	Thursday	Friday
INTD 5000 Lectures 8:30-9:30, 9:45-10:45	INTD 5000 Lectures 8:30-9:30, 9:45-10:45	INTD 5000 Lectures 8:30-9:30, 9:45-10:45	INTD 5000 Small groups, 8:30-10:45	INTD 5000 Small groups, 8:30-10:45
Rotations	Cellular & Structural Biology Seminar, 11 – 12	Rotations	Cellular & Structural Biology Student Presentations, 11 – 12	Rotations
	Rotations		Rotations	

Rotations

4 rotations required (6 weeks each). Complete rotations by first week in April, second semester
Choose mentor, then track by end of second semester, first year.

Spring: Year 1

Monday	Tuesday	Wednesday	Thursday	Friday
	Advanced Molecular Biology (INTD 6007, 2 credits) and/or Advanced Cell Biology (INTD 6009, 2 credits) plus 2 credit hours of another advanced course if only one of the above.		Advanced Molecular Biology (INTD 6007, 2 credits) and/or Advanced Cell Biology (INTD 6009, 2 credits) plus 2 credit hours of another advanced course if only one of the above.	
	11 – 12 Cellular & Structural Biology Seminar		11 – 12 Student Presentations	
	Colloquium		Colloquium	

*Ethics course is included in this semester

Summer: Year 1

Research, Colloquium, Optional track course

Fall: Year 2

Monday	Tuesday	Wednesday	Thursday	Friday
Experimental design		Experimental design		Experimental design
Scientific writing	11 – 12 Seminar	Scientific writing	11 – 12 Student Presentations	

Optional track elective course

Spring: Year 2

Complete qualifying exam

Summer: Year 2

Present dissertation proposal and choose dissertation committee

CMB Track Curriculum Summary

1. CMB Track Curriculum: 72 credits are required to graduate.
2. Summary of Courses:

a.	**Required Courses:**	23.5 total Credits
i.	Fundamentals of Biomedical Sciences INTD5000:	8 Credits
ii.	Laboratory Rotations INTD 5008:	4 Credits
iii.	*****Advanced Cell & Molecular Biology INTD 5007:	*4 Credits
iv.	*****Advanced Cell Biology or Molecular Biology INTD 6007 or 6009	*2 Credits
	plus one Required Core Course from other IMGP track (see below)	*2 Credits
v.	Ethics in Research INTD 6002:	0.5 Credits
vi.	Scientific Writing INTD 5077:	2 Credits
vii.	Exp. Design/Data Analysis CSBL 5095:	2 Credits
viii.	Colloquium CSBL 6089:	2 Credits
ix.	Supervised Teaching CSBL 6071:	1 credit
b.	**Elective Courses:**	
	6 credits	
i.	Selected by students based on their research interests.	
c.	**Others:**	43.5 credits
i.	Seminar Course (two semesters/yr) CSBL 6090:	8 Credits
ii.	Research CSBL 6097:	35.5 Credits

3. Qualifying Exam: Spring 2nd year
4. Dissertation Proposal Presentation CSBL 7099: Summer 2nd year
5. Annual Progress Seminar (Seminar course): Every spring semester starting in 3rd year

---

*****CMB students can tailor the required coursework for our track to their specific interests including aging, cancer, immunology, neuroscience, metabolism and genetic disorders. They have two options to fulfill the 4-credit advanced course requirement:

Option 1: Take the full course (Advanced Cell & Molecular Biology, INTD 5007)
Option 2: Take only one of the advanced course modules, either Advanced Molecular Biology (INTD6007, 2 credits) or Advanced Cell Biology (INTD 6009, 2 credits), then add 2 credit hours of required core coursework from any of the other IMGP tracks (list provide below).

These changes provide CMB students with the greatest flexibility, while emphasizing the importance of molecular and cellular approaches to studying health and disease.

***Required Core Courses for Other IMGP Tracks:**

Biology of Aging: Molecular and Cellular Homeostasis (CSBL6049, 2 credits)
Biology of Aging: Systems Homeostasis and Aging (CSBL6050, 2 credits)
Cancer Biology Core I (CSBL6068, 2 credits)
Cancer Biology Core II (CSBL6069, 2 credits)
Genetics (CSBL5035, 1 credit)
Genomics (CSBL5024, 1 credit)
Development (CSBL5023, 1 credit)
Stem Cell Biology (CSBL5026, 1 credit)
Core Concepts in Microbiology & Immunology (MICR5003, 4 credits)
Macromolecular Structure & Mechanism (BIOC6036, 2 credits)
Integration of Metabolic Pathways (BIOC6037, 2 credits)
Mammalian Physiology: Excitable Membranes (PHYL5041, 1 credit)
Mammalian Physiology: Cardiovascular Physiology (PHYL5042, 1 credit)
Mammalian Physiology: Respiratory and Renal Physiology (PHYL5043, 1 credit)
Mammalian Physiology: Endocrine/Metabolism & Gastrointestinal Physiology (PHYL5044, 1 credit)
Fundamentals of Neuroscience (INTD5040, 2 credits)
Principles of Pharmacology (PHAR5013, 3 credits)

ADVANCED CELL AND MOLECULAR BIOLOGY

INDT 5007, 4 credit hours

Course Director: LuZhe Sun
Module Directors:
P. Renee Yew (INTD 6009: Advanced Molecular Biology)
LuZhe Sun (INTD 6007: Advanced Cell Biology)

Course Description:

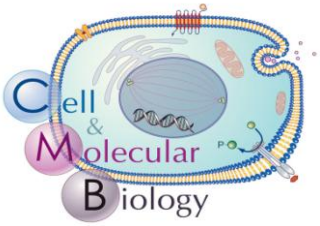
The Advanced Course for the Cell and Molecular Biology Track can be taken as a single 4 credit hours course. Alternatively, each of its two modules can be taken separately as two-credit courses either by CMB Track students or by students from any Track as an elective. The course provides a unique learning experience that prepares the student to evaluate and design new research in the cutting-edge areas of modern cell biology and molecular biology. Instead of a didactic program of lectures, the entire course comprises a small-group format in which students interact closely with a group of faculty who have active research programs. The Advanced Molecular Biology module focuses on: Chromatin structure, DNA Transcription, DNA Replication and Repair, Recombination, RNA processing and regulation, Protein processing, targeting and degradation. The Advanced Cell Biology module focuses on: Cell Signaling and Communication, Cell Growth, and Cell Death. Each week, faculty will provide students with didactic lectures on a current research area. Students and faculty will then jointly discuss key publications that serve to bridge the gap between the fundamental underpinnings of the field and the state of the art in that area.

Goals of the course:
To learn how to read and critically evaluate the literature on a given topic, how to design the next hypothesis-driven experiment and to learn current experimental techniques.

Schedule:
Tuesday and Thursday 8:00 - 9:50 a.m.

Course Structure:
Lecture
Reading
Discussion

Evaluation/Grading:
Letter grading for the course will be based on class participation (30%), a take-home exam (30%) and written/oral presentations (40%) of proposed experiments for topics taught in the course.



ADVANCED MOLECULAR BIOLOGY

INTD 6009, 2 semester credit hours

Course Director: Renee Yew and Alexander Bishop

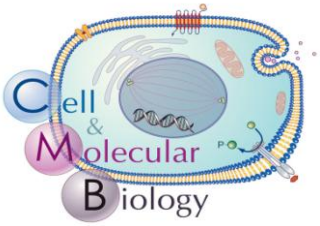
Course Description:
Advanced Molecular Biology is a 2 credit hour course that will provide an indepth learning experience on the fundamentals of molecular biology as well as prepare the student to evaluate and design new research in the cutting-edge areas of modern molecular biology. The course combines a didactic program of lectures along with a small-group discussion format in which students interact closely with a group of faculty who have active research programs. The course focuses on active areas of research in molecular biology: Chromatin structure, DNA Transcription, DNA Replication and Repair, Recombination, RNA processing and regulation, Protein processing, targeting and degradation. Each week, faculty will provide students with didactic lectures on a current research area. Students and faculty will then jointly discuss key publications that serve to bridge the gap between the fundamental underpinnings of the field and the state of the art in that area.

Goals of the course:
To gain an indepth knowledge of molecular biology, to learn how to read and critically evaluate the literature in a given area, how to design the next hypothesis-driven experiment and to learn current experimental techniques.

Schedule:
Tuesday and Thursday 8:00 - 9:50 a.m.

Course Structure:
Lecture
Reading
Discussion

Evaluation/Grading:
Letter grading for the course will be based on class participation (30%), a take-home exam (30%) and written/oral presentations (40%) of proposed experiments for topics taught in the course.



ADVANCED CELL BIOLOGY

INTD 6007, 2 semester credit hours

Course Director: LuZhe Sun

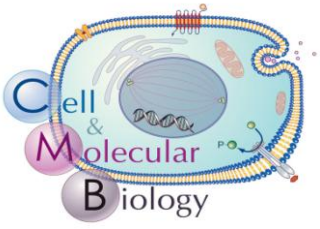
Course Description:
Advanced Cell Biology is a 2 credit hour course. The course provides an indepth learning experience that instructs students on the fundamentals of cell biology as well as prepare the student to evaluate and design new research in the cutting-edge areas of modern cell biology. The course combines a didactic program of lectures along with a small-group discussion format in which students interact closely with a group of faculty who have active research programs. The course focuses on active areas of research in cell biology: Cell Signaling and Communication, Cell Growth, and Cell Death. Each week, faculty will provide students with didactic lectures on a current research area. Students and faculty will then jointly discuss key publications that serve to bridge the gap between the fundamental underpinnings of the field and the state of the art in that area.

Goals of the course:
To gain an indepth knowledge of cell biology, to learn how to read and critically evaluate the literature in a given area, how to design the next hypothesis-driven experiment and to learn current experimental techniques.

Schedule:
Tuesday and Thursday 8:00 - 9:50 a.m.

Course Structure:
Lecture
Reading
Discussion

Evaluation/Grading:
Letter grading for the course will be based on class participation (30%), a take-home exam (30%) and written/oral presentations (40%) of proposed experiments for topics taught in the course.



Mitochondria and Apoptosis

INTD 6008, 1 semester credit hour

Course Director: Yidong Bai

Course Description:
This course will focus in depth on Mitochondria and Apoptosis. Topics will include: Mitochondria and Respiration; Mitochondria and Reactive Oxygen Species; Mitochondria and Apoptosis. It will provide an opportunity for a unique leaning experience where the student can prepare to evaluate and design new research in the cutting-edge areas of modern cell biology and molecular biology. Instead of a didactic program of lectures, the entire course comprises a small-group format in which students interact closely with a group of faculty who have active research programs. Each week, faculty will provide students with a brief overview of the research area. Students and faculty will then jointly discuss key publications that serve to bridge the gap between the student's prior understanding of the field and the state of the art in that area.

Goals of the course:
To learn how to read and critically evaluate the literature on a given topic, how to design the next hypothesis-driven experiment and to learn current experimental techniques.

New Schedule:
Fall, 2013, TBA

Course Structure:
Lecture
Reading
Discussion

Evaluation/Grading:
Letter grading for the course will NOT be based on a traditional examination but will be based on class participation and written/oral presentations of proposed experiments for topics taught in the course.

Faculty Name	Email Address	Department	Research Interests	Web Page Link
Asmis, Reto	ASMIS@UTHSCSA.EDU	Clin. Lab. Sciences and Biochemistry	Thiol Oxidative Stress and Macrophages Dysfunction in Chronic Inflammatory Diseases	http://www.biochem.uthscsa.edu/faculty.php?displayID=32
Bai, Yidong	BAIY@UTHSCSA.EDU	CSBL	Mitochondrial, respiratory chain, complex assembly, turnover, copy number control	http://www.uthscsa.edu/csb/faculty/bai.asp
Berton, Michael T.	BERTON@UTHSCSA.EDU	Micro/Immunol	Regulation of immunity in infection, allergy and cancer; cytokine and Toll-like receptor signal transduction, regulation of gene expression	http://www.uthscsa.edu/micro/faculty/mtb/mtb.asp
Bishop, Alex	BISHOPA@UTHSCSA.EDU	CSBL	Genomic instability, DNA repair, homologous recombination, cell signaling, cancer and aging	http://www.uthscsa.edu/csb/faculty/bishop.asp
Bose, Santanu	BOSE@UTHSCSA.EDU	Micro/Immunol	anti-viral signaling against respiratory RNA virus	http://www.uthscsa.edu/micro/faculty/sb/sb.asp
Chatterjee, Bandana	CHATTERJEE@UTHSCSA.EDU	Molecular Med	Gene regulation; nuclear receptors; cancer cell biology; environmental carcinogenesis; transgenic/knock out mice; live cell microscopy	http://molecularmedicine.uthscsa.edu/FAC_Profile.aspx?facID=39
Chen, Xiao-Dong	chenx4@UTHSCSA.EDU	Comprehensive Dentistry	Stem cells, extracellular matrix, aging, and biomedical tissue engineering	http://profiles.uthscsa.edu/?pid=profile&id=2080J7575
Christy, Barbara	CHRISTY@UTHSCSA.EDU	Molecular Med	Function and interactions of proteins regulating cell growth, differentiation and tumor formation.	http://molecularmedicine.uthscsa.edu/FAC_Research.aspx?facID=40
Clark, Robert	CLARKRA@UTHSCSA.EDU	Medicine	Neutrophil phagocytosis, microbial killing and tissue injury, gene regulation, cell signaling, reactive oxygen species	http://medicine.uthscsa.edu/Medicine/facultystaff.aspx?p=0V71ETRQC
Curran, Joanne E.	Jcurran@sfbrgenetics.org	TX Biomed Res Institute	Type 2 diabetes, obesity and cardiovascular disease	http://txbiomed.org/departments/genetics/genetics-staff-bio?u=96
Dong, Lily	DONGQ@UTHSCSA.EDU	CSBL	Adiponectin signaling in Obese and Diabetes	http://www.uthscsa.edu/csb/faculty/dong.asp
Dube, Peter	DUBE@UTHSCSA.EDU	Micro/Immunol	Endocytosis, bacteria/macrophage interacition	http://www.uthscsa.edu/micro/faculty/phd/phd.asp

Eaton, Benjamin A.	EATONB@UTHSCSA.EDU	Physiology	Synaptic growth, stability, and function in Drosophila	http://physiology.uthscsa.edu/new/research/faculty_view.asp?id=41
Galvan, Veronica	Galvanv@uthscsa.edu	Physiology	Alzheimer's disease, nervous system, aging, mTOR pathway, stem cell	http://physiology.uthscsa.edu/new/research/faculty_view.asp?id=79
Ghosh, Rita	GHOSHR@UTHSCSA.EDU	Urology	Melanoma, DNA damage, GU and skin cancer	http://profiles.uthscsa.edu/?pid=profile&id=1JD0VUR9I
Ghosh-Choudhury, Nandini	CHOUDHURY@UTHSCSA.EDU	Pathology	Gene expression, growth factor, signal transduction, kinase, breast cancer, metastasis, transgenic models, knockout mice, reactive oxygen species	http://profiles.uthscsa.edu/?pid=profile&id=0V71EBWSK
Habib, Samy	Habib@uthscsa.edu	CSBL	Renal cancer	http://www.uthscsa.edu/csb/faculty/habib.asp
Hinck, Andrews	HINCK@UTHSCSA.EDU	Biochemistry	Melanoma, DNA damage, GU and skin cancer	http://hincklab.uthscsa.edu/
Hornsby, Peter	HORNSBY@UTHSCSA.EDU	Physiology	Cell transplantation, cellular aging	http://physiology.uthscsa.edu/new/research/faculty_view.asp?id=9
Hu, Yanfen	HUY3@UTHSCSA.EDU	Molecular Med	BRCA1, breast cancer, gene expression and regulation	http://molecularmedicine.uthscsa.edu/FAC_Profile.aspx?facID=112
Tim Huang	huangt3@uthscsa.edu	Molecular Med	Cancer epigenetics.	http://molecularmedicine.uthscsa.edu/FAC_Research.aspx?facID=133
Jiang, Jean	JIANGJ@UTHSCSA.EDU	Biochemistry	Intercellular and intracellular signaling, amino acid transport	http://www.biochem.uthscsa.edu/faculty.php?displayID=39
Kadosh, David	KADOSH@UTHSCSA.EDU	Micro/Immunol	Cell morphology, filamentous growth, fungal pathogenesis, gene regulation, genomics	http://www.uthscsa.edu/micro/faculty/dk/dk.asp
Kim, Chongwoo	chong@biochem.uthscsa.edu	Biochemistry	Polycomb Group structural biology chromatin	http://kimlab.uthscsa.edu
Kim, Dae Joon	kimdj@uthscsa.edu	Pharmaclogy	Molecular mechanisms of carcinogenesis, protein tyrosine phosphatases	http://pharmacology.uthscsa.edu/faculty/kim.asp
Kokovay, Erzsebet	KOKOVAYE@UTHSCSA.EDU	CSBL	Niche Regulation of Neural Stem Cells, Aging of Neural Stem Cells	http://www.uthscsa.edu/csb/faculty/kokovay.asp
Kraig, Ellen	KRAIG@UTHSCSA.EDU	CSBL	Effects of aging and infection on immunity and autoimmunity	http://www.uthscsa.edu/csb/faculty/kraig.asp
Kumar, A. Pratap	KUMARA3@UTHSCSA.EDU	Urology	Molecular targets, cancer therapy	http://profiles.uthscsa.edu/?pid=profile&id=1JJ0KQXNJ

Lafer, Eileen	LAFER@UTHSCSA.EDU	Biochemistry	Clathrin mediated endocytosis, Synaptic vesicle recycling, Molecular mechanisms underlying clathrin coat assembly and uncoating	http://www.biochem.uthscsa.edu/~lafer/
Larsen, Pamela	LARSENP@UTHSCSA.EDU	CSBL	Metabolism, stress resistance, aging and C. elegans development	http://www.uthscsa.edu/csb/faculty/larsen.asp
Lechleiter, James D.	LECHLEITER@UTHSCSA.EDU	CSBL	Cellular and molecular mechanisms of protection during ischemic stress, acute brain injury and aging	http://www.uthscsa.edu/csb/faculty/lechleiter.asp
Lee, John	LEEJ@UTHSCSA.EDU	Biochemistry	Skeletal system	http://www.biochem.uthscsa.edu/~jclee/
Li, Rong	LIR3@UTHSCSA.EDU	Molecular Med	Breast cancer, BRCA1, hormone-dependent gene regulation, obesity, adipose tissue, tumor microenvironment	http://molecularmedicine.uthscsa.edu/FAC_Research.asp?facID=113
Li, Senlin	LIS1@UTHSCSA.EDU	Medicine	Stem cell/gene therapy, neurodegenerative diseases, Parkinson's disease, atherosclerosis, hematopoietic stem cell, aging, rejuvenation	http://pharmacology.uthscsa.edu/faculty/LiSenlin.asp
LoVerde, Philip	LOVERDE@UTHSCSA.EDU	Biochemistry	Molecular, Genetic and Immunological Investigation of the human blood fluke, Schistosoma mansoni	http://www.biochem.uthscsa.edu/faculty.php?displayID=34
Lu, Xin-Yun	LUX3@UTHSCSA.EDU	Pharmaclogy	Neurobiology of stress-related disorders, Depression and obesity, Leptin signaling in the central nervous system	http://pharmacology.uthscsa.edu/faculty/Lu.asp
Luduena, Richard	LUDUENA@UTHSCSA.EDU	Biochemistry	Structure of tubulin; biochemistry of microtubules; tubulin isotypes, mechanism of action of anti-tumor drugs	http://www.biochem.uthscsa.edu/faculty.php?displayID=45
McEwen, Donald	MCEWEN@UTHSCSA.EDU	Biochemistry	Apoptosis, development, cell signaling, planar cell polarity, oncogenesis	http://mcewenlab.uthscsa.edu
Nicholson, Bruce	NICHOLSONB@UTHSCSA.EDU	Biochemistry	Cell communication; gap junction channel structure, permeability and gating; mechanisms of tumor	http://biochem.uthscsa.edu/~bjn/

			suppression; intercellular communication and cell migration	
Oddo, Salvatore	ODDO@UTHSCSA.EDU	Physiology	Alzheimer's disease, neurodegeneration, aging, transgenic mice, dementia	http://physiology.uthscsa.edu/oddo
Oyajobi, Babatunde	OYAJOBI@UTHSCSA.EDU	CSBL	Skeletal biology, cancer-induced bone diseases, multiple myeloma, ubiquitin-proteasome pathway, non-invasive small animal imaging	http://www.uthscsa.edu/csb/faculty/OYAJOBI.asp
Penalva, Luis	PENALVA@UTHSCSA.EDU	CSBL	Post-transcriptional regulation and RNA binding proteins	http://gccri.uthscsa.edu/lpenalva.asp
Ran, Qitao	RAN@UTHSCSA.EDU	CSBL	Oxdative damage, antioxidant defense, aging, Alzheimer's, transgenic mice, apoptosis	http://www.uthscsa.edu/csb/faculty/ran.asp
Rao, Hai	RAOH@UTHSCSA.EDU	Molecular Med	Ubiquitin, regulated proteolysis, protein quality control, prion diseases	URL:http://molecularmedicine.uthscsa.edu/FAC_Profile.asp?facID=81
Rao, Manjeet	RAOM@UTHSCSA.EDU	CSBL	Pediatric cancers, microRNA, RNAi, transcription	http://www.uthscsa.edu/csb/faculty/rao.asp
Rebel, Vivienne	REBEL@UTHSCSA.EDU	CSBL	Stem cell regulation, transcriptional regulatory networks, CBP, p300	http://gccri.uthscsa.edu/VRebel.asp
Saikumar, Pothana	SAIKUMAR@UTHSCSA.EDU	Pathology	Cell injury, cell death, oncogenes	http://profiles.uthscsa.edu/?pid=profile&id=0V71EC09H
Shiio, Yuzuru	SHIIO@UTHSCSA.EDU	Biochemistry	Quantitative proteomics, ICAT (isotope-coded affinity tag), ubiquitin ligases, VHL, BRCA1, protein secretion, senescence, cancer biomarkers	http://www.biochem.uthscsa.edu/faculty.php?displayID=40
Sun, LuZhe	SUNL@UTHSCSA.EDU	CSBL	Cancer biology, Signal transduction, Cell cycle, Cell senescence, Experimental therapeutics	http://www.uthscsa.edu/csb/faculty/SUN.asp
Tekmal, Rajeshwar	TEKMAL@UTHSCSA.EDU	Obstetrics & Gynecoloyg	Growth factor/hormone crosstalk, signal transduction, steroid hormone coactivation	http://pharmacology.uthscsa.edu/faculty/Tekmal.asp
Toney, Glenn M.	TONEY@UTHSCSA.EDU	Physiology	Neurotransmitters, neuropeptides, membreane channels, neuronal osmosensation	http://physiology.uthscsa.edu/new/research/faculty_view.asp?id=17

Vadlamudi, Ratna K.	VADLAMUDI@UTHSCSA.EDU	Obstetrics & Gynecoloyg	Nuclear receptors, coregulators, hormone, growth factor, chromatin regulation, epigenetics, cytoskeleton signaling, kinases, breast cancer	http://profiles.uthscsa.edu/?pid=profile&id=1OF0ZWU18
Walss-Bass, Consuelo	WALSS@UTHSCSA.EDU	Psychiatry	Schizophrenia, neuregulin	http://psychiatry.uthscsa.edu/faculty.aspx?f=1KD0OPXMF
Walter, Chris	WALTER@UTHSCSA.EDU	CSBL	DNA repair, mutagenesis, mitochondria, transgenic mice, aging, spermatogenic cells	http://www.uthscsa.edu/csb/faculty/walter.asp
Wang, Degeng	WANGD4@UTHSCSA.EDU	Epidemiology & Biostatistics	Dynamics of biochemical networks	http://ceb.uthscsa.edu/faculty.html
Wang, Pei	WANGP3@UTHSCSA.EDU	CSBL	Next generation sequencing; structure and dynamics of biochemical networks; comparative genomics	http://www.uthscsa.edu/csb/faculty/wangp.asp
Wargovich, Michael	WARGOVICH@UTHSCSA.EDU	Molecular Med	Cancer chemoprevention drug discovery.	http://molecularmedicine.uthscsa.edu/FAC_Research.aspx?facID=141
Yew, Renee	YEW@UTHSCSA.EDU	Molecular Med	Vertebrate cell cycle regulation, DNA replication initiation, Ubiquitin-mediated proteolysis and signaling, Tumor suppressor function	http://www.moleculармedicine.uthscsa.edu/FAC_Profile.aspx?facID=45
Zhong, Guangming	ZHONGG@UTHSCSA.EDU	Micro/Immunol	Microbial manipulation of mammalian cell apoptosis and other signaling pathways, Infection and Immunity, Vaccine	http://www.uthscsa.edu/micro/faculty/gz/gz.asp