



Undergraduate Research Faculty Mentors Brochure

A resource for academic and professional development at NYC College of Technology

Undergraduate Research Committee Members:

Viviana Acquaviva, Ralph Alcendor, Reginald Blake (Chair), Mercer Brugler, Aida Egues, Pa Her, Elaine Leinung, Janet Liou-Mark, Zory Marantz, Alberto Martinez, Hamidreza Norouzi, Katherine Poirier, Jonas Reitz, Jody Rosen, Diana Samaroo, Liana Tsenova, Lin Zhou.

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BIOLOGICAL SCIENCES

Faculty Member	Research Interest	Email	Office
Ralph Alcendor	Cell survival and longevity factors, stress resistant mechanisms and cell signaling molecules.	ralcendor@citytech.cuny.edu	P-313
Christopher Blair	Molecular Systematics, Phylogenomics and Historical Biogeography, Landscape Genomics, eDNA Metabarcoding	cblair@citytech.cuny.edu	P-410
Mercer R. Brugler	Deep-sea evolutionary biology; diversity and evolution of marine invertebrates; molecular systematics and evolutionary history of sea anemones and black corals (phylum Cnidaria); effects of dispersal and gene flow on the genetic structure of shallow and deep-water populations; evolution of mitochondrial gene order, gene content and genome architecture in basal metazoans.	mbrugler@citytech.cuny.edu	P-313
Eugenia Giannopoulou	Next-generation Sequencing, Computational Genomics, Epigenomics Data Analysis, ChIP-seq, RNA-seq, DNA methylation. Cancer genomics, Data analysis of epigenomics mechanisms in rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), and other autoimmune and inflammatory diseases. Programming/Web interfaces for genomics/proteomics, Information Visualization in Bioinformatics.	egiannopoulou@citytech.cuny.edu	P-313
Laina Karthikeyan	Molecular basis of neurodegenerative diseases like Dystonia, and Parkinson's	lkarthikeyan@citytech.cuny.edu	P-306
Jeremy Seto	Neuropsychimmunology - The interface of immunology, infection and inflammation with psychiatric disorders and neurodevelopment Urban Ecology - The unique interaction of human populations in an urban space on the environment and ecosystems	jseto@citytech.cuny.edu	P-410
Armando D. Solis	Use of bioinformatics tools and computational approaches to discover how protein folding information is encoded in amino acid sequences, and how interaction information is encoded in protein-DNA interfaces.	asolis@citytech.cuny.edu	P-313
Liana Tsenova	Current research interests lie in collaborative interdisciplinary projects with undergraduates, combining microbiology and infectious diseases with mathematics, to address epidemiological, ecologic and health care problems	ltsenova@citytech.cuny.edu	P-313
Tatiana Voza	Research interest includes 1) testing drugs on malaria parasites in vivo, 2) the imaging of parasites in the skin and 3) evaluating the efficacy of different route of injection in the context of immunizations. I am also setting up an artificial pond for teaching purposes and many studies could be related to this project.	tvoza@citytech.cuny.edu	P-313
Mai Zahran	Research focuses on exploring the structure and dynamics of biological systems and linking them to function. Rationally design new biological molecules, such as drugs using computational methods such as molecular dynamics tools, docking, and homology modeling approaches.	mzahran@citytech.cuny.edu	P-313
Andleeb Zameer	My broad area of interest is nervous system and immune system interactions. More specifically I am interested in how immune system can alter the functioning of nervous system in autoimmune disorders like Multiple Sclerosis and similar neurodegenerative disorders.	azameer@citytech.cuny.edu	P-313

CHEMISTRY

Faculty Member	Research Interest	Email	Office
L. Jay Deiner	Electrochemistry, Spectroscopy, Reactions related to fuel cell catalysis and environmental remediation	ldeiner@citytech.cuny.edu	P-613
Alberto Martinez	Synthesis and evaluation of multi-target compounds as potential chemotherapeutic agents for Alzheimer's disease.	amartinez@citytech.cuny.edu	P-613
Diana Samaroo	1. Characterization and investigation of porphyrin-type molecule with proteins and DNA for therapeutic applications. 2. Spin-coating, photolithography, nanomaterials.	dsamaroo@citytech.cuny.edu	P-613
Peter Spellane	Preparation and analysis of light-sensitive transition metal compounds; investigations of the environmental consequences of chemicals manufacturing and petroleum refining in Brooklyn during the 19th and 20th centuries.	pspellane@citytech.cuny.edu	P-613
Suresh Tewani	Analytical chemistry	stewani@citytech.cuny.edu	P-613

PHYSICS

Faculty Member	Research Interest	Email	Office
Viviana Acquaviva	Analysis of the properties of distant galaxies; big data, machine learning and data mining for astronomical data sets.	vacquaviva@citytech.cuny.edu	N-828
Oleg Berman	Superconductivity, super-fluidity, spontaneous coherence.	oberman@citytech.cuny.edu	N-810
Reginald Blake	Satellite Remote Sensing of the Environment, Hydro-climatology, and Tropical Meteorology: Hurricanes	rblake@citytech.cuny.edu	N-801
Andrea Ferroglia	Theoretical particles physics, LHC phenomenology, calculation of Feynman diagrams, resummation techniques	aferroglia@citytech.cuny.edu	N-801
Boris Gelman	Nuclear and particle physics; physics of ultracold atomic clouds.	bgelman@citytech.cuny.edu	N-810
German Kolmakov	Condensed matter physics; computational physics, graphics processing units computations.	gkolmakov@citytech.cuny.edu	N 801
Manas Kulkarni	Condensed Matter Theory, Cold Atomic Gases, Non-equilibrium Physics with light and matter, Mesoscopic Quantum Optics, Hybrid circuit-QED systems, Integrable Models, Mathematical physics, Nonlinear hydrodynamics	mkulkarni@citytech.cuny.edu	N-604
Lufeng Leng	fiber optics, optical system and network, fiber-based nonlinear devices	lleng@citytech.cuny.edu	N-800
Ariyeh Maller	Understanding the formation and evolution of galaxies. Both from a theoretical perspective using computer simulations and by applying novel methods to analyze observational data.	amaller@citytech.cuny.edu	N 801
Giovanni Ossola	Theoretical Particle Physics	gossola@citytech.cuny.edu	N-810
Justin Vazquez-Poritz	Black holes, gravity, string theory, particle physics	jvazquez-poritz@citytech.cuny.edu	N-828

MATHEMATICS

Faculty Member	Research Interest	Email	Office
Urmi Ghosh-Dastidar	Nonlinear optimization for parameter estimation, mathematical biology.	ughosh-dastidar@citytech.cuny.edu	N-726
Ezra Halleck	Discrete mathematics (including algebraic combinatorics), probability and statistics, simulation and applications in biology and social sciences	ehalleck@citytech.cuny.edu	N-726
Nadia S. Kennedy	Mathematics education and Teacher Education	nkennedy@citytech.cuny.edu	N-602B
Gjerjg Klimi	Applied Math and Physics in the Military Sciences	gklimi@citytech.cuny.edu	N-825
Boyan Kostadinov	Applied Fourier calculus with applications to Medical Imaging, Signal and Image Processing, and Monte Carlo simulations with applications to finance, biology and physics.	bkostadinov@citytech.cuny.edu	N-602B
Janet Liou-Mark	Factors influencing and affecting student learning of mathematics	jliou-Mark@citytech.cuny.edu	N-725
Ariane Masuda	Number theory and discrete mathematics	amasuda@citytech.cuny.edu	N-602B
Hans Schoutens	Algebra - geometry.	hschoutens@citytech.cuny.edu	N-826
Satyanand Singh	Statistical Analysis and simulations. Explorations in additive Number Theory, Quantum Integers and such. Linear and Abstract Algebra and their applications.	ssingh@citytech.cuny.edu	N-724
Simon M. Smith	Discrete math problems like graphs and networks, and financial math. Additionally, symmetry (group theory) and computing.	sismith@citytech.cuny.edu	N-825
Jonas Reitz	Mathematical logic. Logical puzzles and games. Set theory and foundations of mathematics. Computation and complexity. Calculus projects: patterns in integration and differentiation.	jreitz@citytech.cuny.edu	N-707
Huseyin Yuce	Ordinary and Partial Differential Equations (applications involving structural mechanics, vibration and control theory), Mathematical Physics, and Perturbation Theory.	hyuce@citytech.cuny.edu	N-826
Lin Zhou	Non-Newtonian Fluids, asymptotic method	lzhou@citytech.cuny.edu	N-602B

DENTAL

Faculty Member	Research Interest	Email	Office
Renata Budny	any research associated with dental technology: dental restorations, dental materials, dental equipment	rbudny@citytech.cuny.edu	P-409
Lois Dreyer	Incoming student attitudes towards dental health, New patient attitudes toward the profession and oral health, the professional image and its impact on trust and reliability.	ldreyer@citytech.cuny.edu	P-201
Avis J. Smith	Various including Ethics, Inclusion, Education, Social, Health.	asmith@citytech.cuny.edu	P-409

HUMAN SERVICES

Faculty Member	Research Interest	Email	Office
Soyeon Cho	Mental and Physical health disparities among minority population especially in elders/Stress management and coping with chronic stressors	scho@citytech.cuny.edu	N401
Carmen V. Negron	Of particular interest are program evaluation, social welfare policy, social action, cause related marketing, the impact of social media on nonprofit organizations, grass-roots empowerment, and participatory research projects that connect women and girls to the land.	cnegron@citytech.cuny.edu	N-401
Christine Thorpe	My research interests are in health disparities in communities of color, women's health issues, holistic nutrition and wellness.	cthorne@citytech.cuny.edu	N-401

ENGLISH

Faculty Member	Research Interest	Email	Office
Lubie G. Alatraste	second language writing, classroom methodologies, academic discourse	lalatraste@citytech.cuny.edu	N-520
Jill Belli	My interdisciplinary research interests include utopian studies / science fiction; positive psychology / happiness studies; writing studies / composition and rhetoric / professional and technical writing; digital humanities; education / pedagogy; cultural studies. I also help direct three digital projects, which all involve work in coding, data entry, network analysis, data visualization, usability / user experience, and design: 1) City Tech's OpenLab (openlab.citytech.cuny.edu); 2) the Writing Studies Tree (writingstudies.org); 3) the digital presence of the Society for Utopian Studies (utopian-studies.org).	jbelli@citytech.cuny.edu	N-520
Anna Do	As a linguist I mostly work with language. My research interests include first and second language acquisition, linguistic analysis of any language, any language-related topics, ESL, discourse analysis, and teacher education.	ado@citytech.cuny.edu	N-528
Kate Falvey	Undergraduates to assist in producing the 2 Bridges Review, City Tech's first peer-reviewed literary arts magazine. Production will include: monitoring and helping to review submissions in all categories (art, poetry, fiction, nonfiction), helping to keep our website current, assisting with promotion and distribution of the magazine.	kfalvey@citytech.cuny.edu	N-527
George Guida	Creative Writing, Literature, Ethnic Studies, Film and Popular Culture	gguida@citytech.cuny.edu	N-525
Caroline Hellman	19 th -21 st century American Literature; Contemporary Ethnic American Writers; Urban Studies; Space and Place; Women Writers	chellman@citytech.cuny.edu	N-503
Reneta Lansiquot	I conduct interdisciplinary, mixed-methods research on learning in virtual worlds. This includes studies of ways to improve computer programming and writing skills.	rlansiquot@citytech.cuny.edu	N-520
Robert Leston	Writing in electronic environments, particularly in the medium of video. Research into the study of the Film Essay; television storytelling and their applications to professional scholarship as well as undergraduate essays and journalism. Human, animal, technological relationships.	rleston@citytech.cuny.edu	N-511
Jody Rosen	20 th and 21 st Century Literature, Narrative and Storytelling, Gender Studies, Writing in Digital Media, Brooklyn in the Archives (using the Brooklyn Historical Society)	jroosen@citytech.cuny.edu	N520
Joni Schwartz	Engagement of Young Men of Color in Learning/Process Writing	JMSchwartz@citytech.cuny.edu	M-210

SOCIAL SCIENCE

Faculty Member	Research Interest	Email	Office
Daniel Capruso	Clinical neuropsychology	dcapruso@citytech.cuny.edu	N-625
Peter Catapano	My research is on the social and cultural life of immigrants to the US during the 20 th century. I am especially interested in comparing representations of early 20 th century and post-1965 immigration.	pcatapano@citytech.cuny.edu	N-610
Lisa Pope Fischer	Anthropological research focuses on post socialist Hungarian society from a global perspective as a way to address concerns regarding identity (gender, ethnic, national), issues of power and agency, the social construction of time and space, and the politics of difference and social inequities. My multi-site research includes the impact of migration and societal change on personal practice.	LPopeFischer@citytech.cuny.edu	N-627
Pa Her	Understanding the intersection of culture, emotion and identity. Examining how the interaction of culture with these processes affects the psychological and physical well-being of the individual.	pher@citytech.cuny.edu	N-600
Jean E. Kubeck	Emotion, music, development, cognition, psychophysiology, job satisfaction, training performance.	jkubeck@citytech.cuny.edu	N-624
Fangxia Lin	Financial economics, risk management, financial statement analysis, copula methods in finance.	fxlin@citytech.cuny.edu	N-624
Sean P. MacDonald	Research interests include public policy, labor market trends, and sustainable economic development and policy. I am also interested in examining the long-term impact of shifts in taxation and spending policies that have contributed to widening income inequality in the U.S. economy.	smacdonald@citytech.cuny.edu	N-600
Laureen Park	My interests include Metaphysics, Phenomenology, and psychoanalysis. More recently, I've done work in Conflict Resolution Scholarship.	LPark@citytech.cuny.edu	N-627
Eric M. Rodriguez	Lesbian/Gay/Bisexual/Transgender/Queer/Intersex (LGBTQI) Issues, HIV/AIDS, Identity Conflict and Integration, Personality Psychology, Positive Psychology, Psychology of Religion, Research Methods and Statistics and Social Psychology. My current research builds upon my doctoral dissertation work on LGBTQI people of faith.	erodriguez@citytech.cuny.edu	N-625
Graciela Bardallo-Vivero	The determinants of graduation/dropout rates among first-generation minority college students (gender, work status, nativity, dominant language, marital status, income level). The role of the family in the college education of dependent and independent students.	GBardallo-Vivero@citytech.cuny.edu	N-600

HUMANITIES

Faculty Member	Research Interest	Email	Office
Sandra Cheng	Intersections of science, aesthetics, and art; production and reception of early modern caricature and comic art; history of photography.	scheng@citytech.cuny.edu	A-602B
Shauna Vey	Theatre history, especially performance spaces, stage direction, labor, and economic issues. Children's Studies. Professional juvenile performers within the context of shifting social constructions of childhood. Specialist in 19th- and 20th-century American and African-American theatre.	svey@citytech.cuny.edu	A-630

COMPUTER SYSTEMS TECHNOLOGY

Faculty Member	Research Interest	Email	Office
Ossama Elhadary	Research interests include all aspects of electronic commerce, technology adoption, and computer networks.	oelhadary@citytech.cuny.edu	N-913
Raffi Khatchadourian	Programming Languages, Software Engineering, Automated Software Evolution	rkhatchadourian@citytech.cuny.edu	N-913
Marcos S. Pinto	Client/Server Programming, Semantic Web, Web Services, Intelligent Networks, Artificial Intelligence, Expert Systems	mpinto@citytech.cuny.edu	N-912
Eric Sabbah	Wireless ad-hoc and sensor networks, security and privacy, embedded and ubiquitous systems, modeling and statistical applications.	esabbah@citytech.cuny.edu	N-1027
Ashwin Satyanarayana	Big Data and Data Analytics; Data Mining and Machine Learning with applications in Real World Learning Problems	asatyanarayana@citytech.cuny.edu	N-913

COMPUTER ENGINEERING TECHNOLOGY

Faculty Member	Research Interest	Email	Office
Ohbong Kwon	Spectrum analysis, Digital filter design, DSP (Digital signal processing) algorithm implementation, Digital Design using FPGA, Control systems	okwon@citytech.cuny.edu	V-619
Xiaohai Li	Robotics and control systems, embedded systems, wearable computing, wireless sensor networks, Internet of Things (IoT), cognitive radio mesh networks, and computer vision.	xhli@citytech.cuny.edu	V-642
Benito Mendoza	Multi-Agent and Bio-inspired Systems, Mobile Computing, Internet of Things and Cyber-Physical Systems, Technology and Artificial Intelligence for Education.	bmendoza@citytech.cuny.edu	V-620

ELECTRICAL AND TELECOMMUNICATIONS ENGINEERING TECHNOLOGY

Faculty Member	Research Interest	Email	Office
Asm Delowar Hossain	Network Protocol, Quality of Service, Resource Allocation Algorithm for Optical-Wireless Network at the access level.	ahossain@citytech.cuny.edu	V-742
Zory Marantz	Power Control, Wireless communications: WiFi, Bluetooth, Zigbee, and software defined radios.	zmarantz@citytech.cuny.edu	V-737
Viviana Vladutescu	Earth Remote Sensing and Target Surveillance	vvladutescu@citytech.cuny.edu	V-729
Xinzhou Wei	Research interests include computer networking and security, RFID and embedded device security	xwei@citytech.cuny.edu	V-727

ARCHITECTURAL TECHNOLOGY

Faculty Member	Research Interest	Email	Office
Phillip Anzalone	Research in design, engineering and prototyping active facade systems incorporating novel material and processes.	panzalone@citytech.cuny.edu	V-414 V-818
Alexander Aptekar	Current research includes high-performance architecture ("green and passive architecture") and structures including their construction assemblies and materials. Also development of building information modeling (BIM) and related collaborative and interoperability processes.	AAptekar@citytech.cuny.edu	V-205
Jill Bouratoglou	Chronological study of the construction of a single family house in Brooklyn, NY.	jbouratoglou@citytech.cuny.edu	V-818
Lia Dikigoropoulou	NY City Site Analysis Case Studies	ldikigoropoulou@citytech.cuny.edu	V-826
Jihun Kim	Simulating environment for high performance buildings; urban microclimate analysis; integrated design for energy and efficiency	jkim@citytech.cuny.edu	V-803

MECHANICAL ENGINEERING AND INDUSTRIAL DESIGN TECHNOLOGY

Faculty Member	Research Interest	Email	Office
Malek Brahimi	Research interest: Fuel Cell Technology, Composite Material, Vibration Simulation	MBrahimi@citytech.cuny.edu	V-523
Gaffar Gailani	Biomechanics, Strength of Materials, Computational work	ggailani@citytech.cuny.edu	V-533
Masato Nakamura	Energy and Environmental, Simulation, Materials and Energy Recovery, Manufacturing and Recycling Technology, Eco-Design, Sustainable Computing	mnakamura@citytech.cuny.edu	V-532
Angran Xiao	Engineering Design, Product Lifecycle Management, CAD/CAM, Optimization, virtual engineering	axiao@citytech.cuny.edu	V-534
Ozlem Yasar	Tissue Engineering, Biomechanics, Biofabrication	oyasar@citytech.cuny.edu	V-535

ADDITIONAL DISCIPLINES

Department	Faculty Member	Research Interest	Email	Office
Advertising Design and Graphic Arts	Lloyd Carr	How to get clean and perceptively similar color in both print and non-print graphic communications media.	LCarr@citytech.cuny.edu	P-100
Business	Lucas Bernard	Projects which involve international business, risk management, and structured finance. Interest in projects which explore the ways in which economics blends together human values, politics, rationality and irrationality; more specifically, how this interplay reveals itself in society at large.	lbernard@citytech.cuny.edu	N-1024
Construction Management & Civil Engineering Technology	Hamidreza Norouzi	Earth, Environment, and Climate Studies Using Remote Sensing Observations	hnorouzi@citytech.cuny.edu	V-424
Construction Management & Civil Engineering Technology	Anne Marie Sowder	Construction management, project analysis, risk analysis, sustainability, urban planning and history	amsowder@citytech.cuny.edu	V-425
Career and Technology Teacher Education	William Edward Roberts	3D Modeling, Cognitive load, NASA TLX, Cues (the use of cues to reduce cognitive load in multimedia instructions), 3D immersive virtual learning worlds and Teaching in the 3D virtual world	wroberts@citytech.cuny.edu	M-201
Entertainment Technology	Damon Loren Baker	My work centers around the creation and exploration of tools for human computer interaction that are based on current research in cognitive science. Particular areas of interest are virtual/augmented reality, spatial hypertext and electrophysiology.	dbaker@citytech.cuny.edu	V-205
Hospitality	Patrick O'Halloran	Any research associated with e-learning and employment opportunities in the hospitality industry	pohalloran@citytech.cuny.edu	N-221
Law & Paralegal Studies	Marissa J. Moran	Legal Technology in relation to existing laws, expectations of privacy, invention, art, and science.	mmoran@citytech.cuny.edu	N-622
Nursing	Aida Egues	Mentoring of registered nurses; professional and general incivility; health disparities; community and public health nursing; service learning; HIV/AIDS, chronic illness, ethical/moral reasoning	aegues@citytech.cuny.edu	P-505
Radiologic Technology and Medical Imaging	Jennett M. Ingrassia	Areas in radiologic technology specific to education. Research involves the effectiveness of allied health clinical instructors / preceptors from both the perspective of the clinical instructor and the student.	jingrassia@citytech@cuny.edu	P513
Vision Care Technology	Kara Pasner	Research pertaining to vision/ eye disease.	kpasner@citytech.cuny.edu	P-312

Undergraduate Research OpenLab

<http://openlab.citytech.cuny.edu/groups/undergraduate-research/>

City Tech's Chapter of National Society of Collegiate Scholars (NSCS)

<https://www.nscs.org/chapters/new-york-city-college-technology>

National Institute of Health (NIH) Bridges to Baccalaureate

<http://bridges.citytech.cuny.edu/>

National Science Foundation (NSF) Scholarships in STEM

<https://openlab.citytech.cuny.edu/groups/nsf-s-stem-advancing-stem-futures/>

Baccalaureate Degree Programs at City Tech

