51st

Annual Fall MACUB Conference

METROPOLITAN ASSOCIATION

of

COLLEGE AND UNIVERSITY BIOLOGISTS

Art of the Neuron

Keynote speakers:

Gregory Dunn, Ph.D.
Doctorate from the University of Pennsylvania
Artist

Alison Dell, Ph.D.
Assistant Professor, Department of Biology, Health Promotion, and Health Care Management
St. Francis College, Brooklyn, NY

Saturday, October 27, 2018

Queensborough Community College

Bayside, New York

Conference Schedule *At A Glance*

7:30 – 8 AM	Vendor Set up **RFK Building**. (Inside basketball court)
8 – 9 AM	Registration, Breakfast, Student Poster set up – **RFK lobby and Basketball court**
	• Breakfast sponsored by **President's Office**
9 – 9:15 AM	Welcome –**President** Timothy G. Lynch, Ph.D., introduced by Nidhi Gadura, Ph.D. Chair, Dept. of Biological Sciences—**M136 (Medical Arts Building**
	MACUB President Dr. Nolan introduces Keynote Speaker
9:15 – 10:30 AM	Keynote address Gregory Dunn, Ph.D.– **M136 (Medical Arts Building)**
	"Art of the Neuron"
10:45 AM– 12:45 PM	Poster presentations (Inside basketball court)
	Faculty Member workshops (**Medical Arts labs 1st Floor and 2nd Floor**)
	Faculty Member presentations (**Medical Arts classrooms 1st Floor**)
12:45 – 1:30 PM	Lunch and business meeting – **Student Union Upper level**
1:30 – 2:30 PM	Afternoon speaker: Alison Dell, Ph.D.
	"Intersecting Methods: Art and Science"

(**Student Union Upper level**)

2:30 – 3:30 PM	Poster Awards and Ice Cream Social (**Sponsored by Dean of Research in Student Union)**
3:30 PM	**Closing remarks: Shiang-Kwei Wang, Ph.D., Dean of Student Research**

MANY THANKS

TO

QUEENSBOROUGH COMMUNITY COLLEGE

FOR HOSTING

THE 51ST ANNUAL CONFERENCE

OF THE

METROPOLIATON ASSOCIATION OF COLLEGE AND UNIVERSITY BIOLOGISTS

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Member workshop chair Dr. Mangala Tawde Email: Mtawde@qcc.cuny.edu Phone 1-718-281-5506

Welcome from Queensborough Community College

Queensborough Community College and the department of Biological Sciences and Geology welcomes the members and guests of the Metropolitan Association of College and University Biologists to MACUB's 51st annual conference.

Queensborough Community College of The City University of New York (CUNY) is one of the most diverse campuses in the nation and is a critical gateway into higher education for many students who are the first in their families to attend college. The College's students have roots in 127 countries and speak 78 languages. The College is committed to open-admission access for all learners and provides a comprehensive educational experience for 16,000 students through its 40 academic programs, a personalized advisement program and faculty-led research opportunities.

Faculty mentors integrate undergraduate research into the classroom, preparing students to present their scientific work at national and regional conferences. Among these conferences is the Annual Biomedical Research Conference for Minority Students (ABRCMS), Metropolitan Association of College and University Biologists (MACUB), CUNY Research Scholars Symposium, New York's American Chemical Society Undergraduate Research Symposium and Queensborough's Annual Honors Conference.

Many Queensborough students have won regional and national awards for their outstanding scientific presentations. Their long-standing records of winning regional and national awards at prestigious scientific conferences is an additional testament to the caliber of research that is possible at Queensborough. Course study is complemented by hands-on internships and field experiences with local partners such as the FDA, Stony Brook University, and Albert Einstein Medical College.

Faculty are very active in winning significant awards as well.

A $1,594,202 award from The National Institutes of Health (NIH) to provide an additional five years of funding (9/1/18-8/31/18) for the Bridges to the Baccalaureate Program that started at Queensborough in 2002. The program is a partnership between Queensborough, Queens College and The City College of New York to achieve the long-term goals of training and graduating under-represented (UR) science students, and to facilitate their transfer to baccalaureate programs in biomedicine or behavioral science.

Awards from PSC CUNY, C3IRG, Copper Development Association, Perkins, part of CUNY2020 and U.S. Department of Education MSEIP, total over $1.7 million. These grants help engage students in research and increase STEM retention and graduation.

Additional grant awards include: a 2015 Fulbright Academic and Professional Excellence Award; a 2016 breakthrough prize; a multi-year award of $371, 056 from the National Science Foundation for *Freshman Year to GeoScience Career*, a project that prepares the next generation workforce in the STEM disciplines, with a focus on increasing diversity in the geosciences; and award funds from CUNY for its Joint Seed Program, a new funding opportunity for CUNY to leverage relationships with the CUNY Advanced Science Research Center.

Also, Queensborough received a New York State Education award of $450,000 over five years for the STEP program; and a Hands-on Opportunities to Promote Engagement in Science award for lab supplies to support a collaborative program with students from Cardozo High School.

Once again, and on behalf of Queensborough Community College's Biological Sciences and Geology department, we welcome you to the annual MACUB conference.

Dr. Timothy G. Lynch

Interim President

Queensborough Community College

Dr. Nidhi Gadura

Professor and Chair

Queensborough Community College

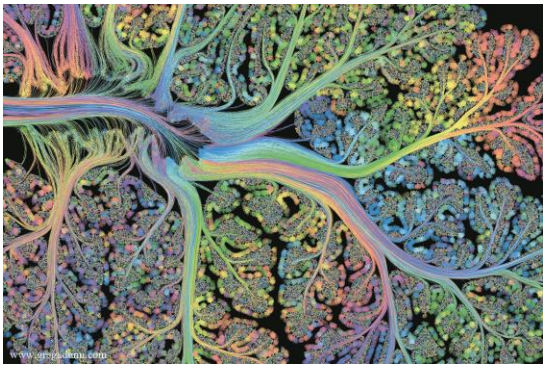
Department of Biological Sciences and Geology

Gregory Dunn, Ph.D.

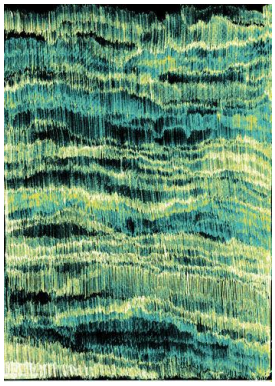
I enjoy Asian art. I particularly love minimalist scroll and screen painting from the Edo period in Japan. I am also a fan of neuroscience. Therefore, it was a fine day when two of my passions came together upon the realization that the elegant forms of neurons (the cells that comprise your brain) can be painted expressively in the Asian sumi-e style. Neurons may be tiny in scale, but they poses the same beauty seen in traditional forms of the medium (trees, flowers, and animals).

I admire the Japanese, Chinese, and Korean masters because of their confidence in simplicity. I try to emulate this idea.

In October 2011 I finished my doctorate in Neuroscience at University of Pennsylvania. Since then I have been devoting my time to painting. When I'm not doing this I'm enjoying reading scientific papers, playing music and watching "How Its Made".



Alison Dell, PhD is both scientist and artist -- combining research training in Cell and Molecular Biology, Neuroscience, and Environmental Science and Policy with a visual arts practice, which is largely based in print and works on paper. Her work explores the forms, patterns and structures inherent in biological systems, as well as the production of meaning in scientific images. Alison is an Assistant Professor of Biological Science at St. Francis College in Brooklyn, NY and Associate in the Department of Neuroscience at the University of Pennsylvania. Her research examines the cell signaling events in developing neurons as their axons navigate towards synaptic partners, and the impact of common environmental toxins on these processes. She is co-founder of Art in the Lab, an ongoing project bringing scientists and artists together for events that mix drawing and laboratory work. Exhibitions include: the Queens Museum of Art Bulova Gallery (NYC), Socrates Sculpture Park (NYC), Cuchifritos Gallery (NYC), Rutgers University (Newark, NJ) and the University of Pennsylvania (Philadelphia, PA). www.alisondell.net www.artinthelab.com



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NOTES

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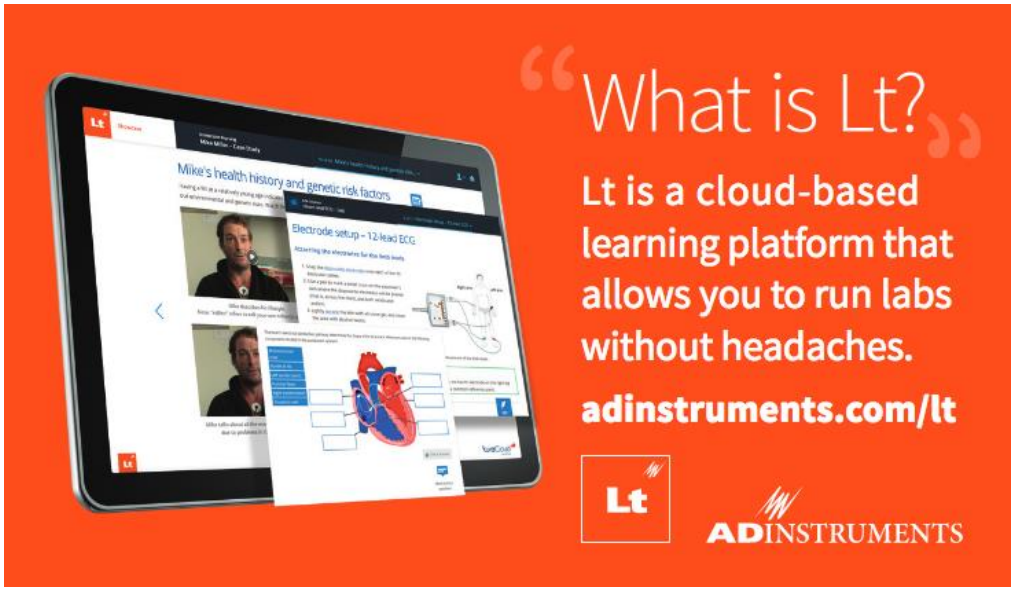
WORKSHOPS

RM S412 Science Building

Title: "BACK for Learning" (room S412)
By Mary Holland

Rm S423

Title: "Teaching biology to non-STEM students"
By Dr. Danzi Engoron, Sara- Biology Department, QCC



MEMBER PRESENTATIONS

I. Pedagogy involving undergraduates or undergraduate research:
Room: S223

Title: Modeling close collaboration among senior researchers for undergraduate students
Authors: Maria Entezari; A.Lucia Fuentes

Title: Incorporating undergraduate research experience in biology classroom.
Author: Dr. Mangala Tawde

Title: Unlocking Students' Research Potential: Expanding Undergraduate Research Experience in a Biology Classroom with a Curriculum-based Approach
Authors: Anuradha Srivastava and Anupam Pradhan

Title: Creating Science-Based Clubs in a Two-Year College: Promoting Student Academic Success
Authors: Dr. Denise Deal and Prof. Dolisha Jones

II. Pedagogy - teaching strategies
Room: S224

Title: Poems in a science classroom - collaborative writing between English and Biology classes
Authors: Urszula Golebiewska and Susan Lago

Title: A Revision of an Introductory Biology Laboratory.
Authors: William Velhagen, Agnes Berki, and Darryl Aucoin.

Title: Gaming in the Classroom: Active Learning, Student Engagement and Formative Assessment
Author: Mark K. Kenny

Title : The use of mini case studies to enhance learning of microbiological concepts
Authors: Susan K. McLaughlin and Joan Petersen

Title: Incorporating Peer Mentors into General Biology Labs: The Impact on Student Retention, Engagement and Grades
Authors: Peter A. Novick and Jennifer Valad

III. Basic research: From atom to cell
Room: S214

Title: Computational Analysis of Electronic Properties of S-Adenosyl Methionine Derivatives
Authors: Daily Despradel and Madhavan Narayanan

Title: Quantification of Protein Concentrations in Primula vulgaris: A comparison of soluble protein content of a Reproductive Tissue and a Non-Reproductive Tissue
Authors: Lisa M. Vetere and Farshad Tamari

Title: Developing an Inexpensive Method, Loop Mediated Isothermal Amplification for detection of Dengue Virus in Mosquitoes in Sri Lanka
Author: Andrew Nguyen

Title: Making Sense of Sensory Transduction in *Hydra*
Author: Dr. Susan McLaughlin

IV. Basic research: From cancer to ecology
Room: S314

Title: Dual Inhibition of Bcl-2/Bcl-xL and XPO1 is synthetically lethal in glioblastoma model systems
Author : Enyuan Shang, Yiru Zhang, Chang Shu, Chiaki Tsuge Ishida, Elena Bianchetti, Mike-Andrew Westhoff, Georg Karpel-Massler and Markus D. Siegelin

Title: Effect of cannabidiol extract of *Cannabis sativa* on the viability and structural integrity of human adenocarcinoma cells grown in monolayer culture.
Authors: S. M. Lipson, R. E. Gordon, D. Rodriguez, F. S. Ozen, K. Casares, L. Karthekayan

Title: Plant Tracer, an App to Quantify Movement in Plants
Authors: Eric D. Brenner, Winnie Zhao, Samantha Ciarfello, Yao Wang, Yixiang, Mao, Jiazhen Zhang, and Changyuan Li

Title : The Effect of Rising Sea Level on Coastal Vegetation in South Carolina
Authors : Richard Stalter, Rahema Nasary, Abiesha Smith, Khadija Yousuff, Jasmine Burkett, Teryn Mingo, Liya Thomas, Enxhi Seitllari, Kimarie Yap, and Meryem Toppa

POSTER TITLES

Microbiology and Immunology

1	Real Time PCR for Quantification of *Staphylococcus aureus* in Pharmaceutical Products Contaminated with Mixed Bacteria ***Arianna Pinto*, Stephanie Perez, Sibora Peca, Lisa Pincus, and Luis Jimenez*** Bergen Community College
2	Typing Method to Determine the Genetic Diversity of *Staphylococcus aureus* Isolated in Nasal Samples from a Suburban New Jersey Population ***Kadiatou Fadiga*, Arianna Pinto, Vanessa Molina, Adelajda Turku, and Luis Jimenez*** Bergen Community College
3	Real Time PCR for Quantification of *Escherichia coli* in Pharmaceutical Products Contaminated with Mixed Bacteria ***Adelajda Turku*, Arianna Pinto, Vanessa Molina, and Luis Jimenez*** Bergen Community College
4	The Human Microbiome ***Vanessa Molina*, Kadiatou Fadiga, Arianna Pinto, Adelajda Turku, and Luis E. Jimenez*** Bergen Community College
5	Frequency and Characterization of Pathogenicity Genes in *Staphylococcus aureus* Isolated from a Suburban Human Population ***Lisa Pincus*, Sibora Peca, Rozan Ramadan, Joy Bochis, Jenifer Vasquez, Stephanie Zapata, Matthew Gardner, Mahtab Tazehabadi, Juan Marte, Stephanie Perez, Arianna Pinto, Vanessa Molina, Adelajda Turku, Kadiatou Fadiga, and Luis Jimenez*** Bergen Community College
6	Beta-barrel Assembly Pathway and Quality Control in Gram-negative Bacteria (***Lindsey Njanja), Mentors (Dr. Matthew Doyle, Dr. Harris Bernstein)*** Bergen Community College
7	Efficacy of Infraslow Fluctuation Training (ISF) in the Attenuation of Anxiety, utilizing Brainmaster Discovery Quantitative Electroencephalogram (qEEG) and Self-Report ***Adelejda Turku, Jacqui Gonzalez, Alexander Thomas, Hynbin Kang, Sadik Erisen, Dr. Coleen DiLauro*** Bergen Community College
8	Salinity Tolerance of Bacteria Isolated from the Turtle Pond in Central Park ***Marie Sayas, Fadel Yerima Mentor: Christine Priano*** Borough of Manhattan Community College
9	Folk remedies as antibacterial agents ****Claudia Melo and Catarina Mata*** Borough of Manhattan Community College
10	*Cryptosporidium parvum* was not found in Eastern Oysters from Delaware Bay ***Sandra Perea, Lilja Nielsen, and Craig Hinkley*** Kingsborough Community College
11	Atlantic Oyster Drills (*Urosalpinx cinerea*) from the Hawk's Nest Site in Delaware Bay Do Not Contain DNA from the Dermo parasite (*Perkinsus marinus*) ***Fatima Kataria, Lilja Nielsen, and Craig S. Hinkley*** Kingsborough Community College
12	IFN-γ differentially regulates expression of genes for components of opsonized and non-opsonized phagocytic pathways in macrophage cells ***James Almodovar*, I'Nyaah Burrell*, Diego Guaman*, Saad Mian*, and Jodi F. Evan*** Molloy College

14	Unknown Bacteria from Ecuador with Strong Antibiofilm Activity ***Charlie Encalada, Daniel Antunes, Hagar Mustafa, Sommer Gomez, and Meriem Bendaoud PhD*** New Jersey City University
15	Expression and Purification of the *Streptomyces colicolor* SCO3855 ***Juan J Mesa 1, Yafit Muladjanov2, Naydu Carmona1, Monica Trujillo*** Queensborough Community College
16	The Anti-biofilm Activity of Black Tea Polyphenol ***Ayuni Yussof, Nayab Qamar and Tinchun Chu*** Seton Hall University
17	Antibacterial Effects of Yerba Mate ***Sabrina Lopez, Yan Wang, Alexandra Greco, and Tinchun Chu*** Seton Hall University
18	Bioinformatic Analysis of Heavy Metal Stress Response in Cyanobacteria ***Jose L. Perez and Tinchun Chu*** Seton Hall University
19	Testing exogenous rescue of adventurous motility in slime secretion mutants of *Myxococcus xanthus* ***Susan Gutekunst, Asia Alexander, David Zuckerman*** Iona College
20	How do primary and secondary cells respond to Zika virus infection? ***Bartosz Czuj1, Sidra Jabeen1, Joselyn Landazuri1, Sounak Ghosh Roy1, panayiotis Koumas1, Amirabbas Maghsoudi2, Richard Lockshin1, Zahra Zakeri1*** Queens College
21	Sex Dimorphism of Engulfment of Microspheres by Primary Murine Macrophages Infected by Influenza Virus ***Sidra Jabeen1, Sonia Nagvenkar1, Bartosz Czuj1, Joselyn Landazuri1, Mohammad Javdan3, Maria Entezari2, Richard Lockshin1, Zahra Zakeri1*** Queens College
22	Isolating Hydrocarbonoclastic Microorganisms from Newtown Creek ***Valeria Cevallos and Joby Jacob*** Queens College
23	Functional Characterization of the *Microbacterium Phage Paschali*sputative ADP ribosyl tranferase ***Camillah Shoo*** Nyack College
24	Microbes on the Rise in Hudson Raritan Estuary Sites Causing Detrimental Impacts to Water Quality ***Rameen Shah, Daniel Antunes, Charlie Encalada, Allison Fitzgerald PhD, Meriem Bendaoud PhD*** New Jersey City University
25	Can Ras-GTP Be Regulated in Cancer by NMDA Receptor Antagonists? ***Johanna Riera, Chevere Samuel, David Donatacci, Alix Duarte, Jan Osea and Natalia Coleman*, PhD*** New Jersey City University
26	Isolation of Marine Bacteria with Broad Range Antimicrobial Activity ***Daniel Antunes, Charlie Encalada, Rameen Shah, and Meriem Bendaoud Ph.D.*** New Jersey City University
27	There are Bacteriophages in Your Sponge ***Linesha Davis, Lovejit Kaur, Brianna Weiss, Bryan Gibb. New York Institute of Technology*** New York Institute of Technology
28	What Lurks in the Laboratory? Environmental Molds! ***Amber Tucker, Victoria Ruiz, Kathleen A. Nolan*** St. Francis College

30	Isolation Characterization of Mycobacteriophages at SUNY Old Westbury and annotation of *Rahel,* a C1 cluster Genome ***Adwoa Lewis, Karthik Madhira*** SUNY Old Westbury
137	Study of Penicillin Tolerance in Group B *Streptococcus* ***B. Fittipaldi; H. Amin; J. Flores; C. Wang; P.Basu*** Touro College of Pharmacy and New York Institute of Technology
129	Characterizing HPV16 induced cytoskeleton rearrangement events mediated by downstream signaling remodeling as a mode of viral entry ***Alyssa Biondo, Snezana Stankovic, Patricio I. Meneses PhD*** Fordham University Bronx, NY

Environmental Ecology

31	Quantification and characterization of microbial communities obtained from The Rocket® composter system to tackle a food waste problem at a community college campus ***Mallory Errichetti, Xaymaraliz Dumeng, Jacqueline Gonzalez, Yulkania Lopez, Adrianna Pinto, Kadiatou Fadiga, Hyunbin Kang, Stephania Vazquez, and Lindsey Njanja*** Bergen Community College
32	Direct PCR Detection, Cloning, and Characterization of 16S rRNA from Archaea Species in New Jersey Soils ***Stephanie Perez, Arianna Pinto, Sibora Peca, and Luis Jimenez*** Bergen Community College
33	Real Time PCR for Quantification of *Escherichia col*i in Soil and Compost Samples ***Hyunbin Kang*, Arianna Pinto, Vanesa Molina, Stephania Vazquez, and Luis Jimenez*** Bergen Community College
34	Investigating the Population Density and Developmental Biology of Juvenile American Horseshoe Crabs (*Limulus polyphemus*) at Plumb Beach, Brooklyn, New York ***Akankaye Waul, Christina P. Colon, PhD*** Kingsborough Community College
35	Comparison of the response of Microglia and primary murine macrophages upon exposure to Pesticides ***Amirabbas Maghsoudi , Mohammad Javdan, Zahra Zakeri*** Queensborough Community College
36	Examining environmental isolates of *Staphylococcus aureus* using loop mediated (LAMP) amplification ***Oscar Bermudes, Diana Mata, Gaozhen Li, Miguel Fernandez, Dr. Andrew Nguyen*** Queensborough Community College
37	Isolation of Actinomycetes from Plumb Beach Sediment Samples ***Nikita Alim, Saraf Nabiha, Dr. Joan Petersen*** Queensborough Community College
38	Native plants grow in natural areas; Invasive plants grow after a disturbance to the Ecosystem ***Stephanie Saintil, Catherine Jordan, Taesook Jun, Margaret Eiden Ph.D.*** Westchester Community College, Mercy College
39	The impact of urbanization on soil bacterial diversity and community composition in Long Island, NY ***Kaung Myat San, Jose Anadón, Jeffrey Bird, Nidhi Gadura, John Dennehy*** Queens College
40	Poor Girls and Rich Boys? Testing the Trivers-Willard Hypothesis ***Kaylin Dominquez*, Isabel Soriano*, Jonathan Torres*, Genesis Torres*, Amir Niknejad and Ioanna Visviki*** College of Mount Saint Vincent

41	An Increase in Three Species of Marine Mammals: "Repercussions" of the Marine Mammal Protection Act? ***Louis Ramirez, Kathleen A. Nolan and Kristy Biolsi*** St. Francis College
42	The Effect of Rising Sea Level on Coastal Vegetation in South Carolina ***Rahema Nasary, Abiesha Smith, Khadija Yousuff, Jasmine Burkett, Teryn Mingo, Liya Thomas, Enxhi Seitllari, Kimarie Yap, meryem Toppa, Richard Stalter*** St. John's University
43	Detection of Microcystins in the Tissues of Freshwater Shrimp Bought From a Fish Market Near Lake Tai ***Ronojoy P. Hem, **Kristen N. Slodysko and **Dr. Gregory L. Boyer*** St. Joseph's College
44	Project FeederWatch at Saint Peter's: How Four Years Have Flown By ***Alaa Barbour, Sara Gonzalez, Busayo Adewale, Gabriela Mosqueda, Brittanie Fils, Sherane Raymond, Alexis O'Callahan, Vasilios Orologas, Brandy Garrett Kluthe, Katherine Wydner*** Saint Peter's University
45	Identifying Cyanobacterial Communities in Barnegat Bay. ***Roksana Rahman, Christian J. Rios-Ruiz, Yan Wang, Paul (Jyung) Yoon, and Tinchun Chu*** Seton Hall University
46	Optimization Methods for Cyanobacterial Detection, Identification and Seasonal Monitoring in Recreational Water. ***Christian J. Rios-Ruiz and Tinchun Chu*** Seton Hall University
47	Diversity and abundance of plankton in the Hackensack River ***Margaret Ramirez & Allison Fitzgerald, PhD*** New Jersey City University
48	Predation interactions between oysters (*Crassostrea virginica*), mud crabs (Panopeidae) and blue crabs (*Callinectes sapidus*) ***Jessica Fernandez & Allison Fitzgerald, PhD*** New Jersey City University
49	Microplastics in Local Waters and its Accumulation in Bivalves ***Johanny Tejada & Allison Fitzgerald, PhD*** New Jersey City University
50	Feeding guilds and oyster predation on a restored oyster reef ***Laura Gonzalez & Allison Fitzgerald, PhD*** New Jersey City University
51	Use of minnow traps to analyze fish and macroinvertebrate usage on a restored oyster reef ***Christian Giraldo & Allison Fitzgerald, PhD.*** New Jersey City University
52	Assessment of Dead Wood Fungi Biodiversity in Urban Parks and Natural Reserves Across New Jersey ***Shazneka Blue, Abdurrahim Vardar, Christopher Zambell and Maria Shumskaya*** Nathan Weiss Graduate School, Kean University
131	Evaluation of Enterococcus levels in the East River and Coney Island Creek during recreational boating season ***Jenna Ellington, Marie Boutin, Amber Tucker, Luis Ramirez, Melissa Tiphaine, Robert Buchanan, Kathleen A. Nolan and Victoria E. Ruiz*** St. Francis College
138	Invasive species: do we stand a chance against them? ***Jordon Reid, Jasmine Pasan, faculty Mentor, Margaret Eiden***

	Touro College of Pharmacy and New York Institute of Technology
140	In Situ Observation of Pinnipeds in New York City, 2011-2018 ***Dareen Generoso1,3, Kevin L. Woo2,3 & Kristy L. Biolsi1,3*** St. Francis College, Empire State College, Center for the Study of Pinniped Ecology and Cognition
141	Microbial Diversity in Urban Environments: Concern for Antibiotic Resistance ***Ality Aghedo* and Dr. Mangala Tawde*** Queensborough Community College

Developmental Biology, Genetics

53	Quantification of Protein Concentrations in Primula vulgaris: A comparison of soluble protein content of a Reproductive Tissue and a Non-Reproductive Tissue ***Lisa M. Vetere and Farshad Tamari, Ph.D.*** Kingsborough Community College
54	American Horseshoe Crabs (*Limulus polyphemus*) Juvenile Population Growth on Plumb Beach, Jamaica Bay, NY ***Kera Mansfield, Christina Colon*** Kingsborough Community College
55	Identifying How Thiolase Functions Together with Linker Histone H1 in Blood Tumor Regulation Caused by Hyperactive JAK/STAT Signaling ***Mr. George Varvatsoulis, Dr. Na Zu*** LaGuardia Community College
56	Identifying How Signal Peptide Peptidase Functions Together with Linker Histone H1 in Blood Tumor Regulation Caused by Hyperactive JAK/STAT Signaling ***Si Man Ao Ieong*, and Dr. Na Xu*** LaGuardia Community College
57	Development of a Selection System to Identify Chloroplast Regulatory Genes in *Brassica napus* ***Liya Simon, Lisa LaManna, Pal Maliga Kerry Lutz*** Farmingdale State College and Rutgers University
58	Functional Validation of *Drosophila* Blood Cell Development Genes ***Brian Tang, Henry Wu, Harmeet Kaur, Dr. Rebecca Spokony*** Baruch College, CUNY
59	Juvenile Hormone mimics induce Lamellocytes through the JAK/STAT pathway in *Drosophila melanogaster* ***McGrail, Carolyn, Calero, Raquel, Ayisi-Boahene, Givenchy, Spokony, Rebecca*** Baruch College, CUNY
60	DNA Replication Genes Implicated in Heterochromatin Modulation ***Tasmiya Moghul1, Pragati Sharma2,3, Eve Reilly2 and Miguel A. Zaratiegui*** Medgar Evers College
61	Identification of Telomere Length Regulating Genes in *Drosophila melanogaster* ***Bobbi Kennedy, Priscilla Martinez, Tatiana Chauca, Juan Hurtado, Philip Mangerino*, Steena Samuel, and Chun Zhou*** Mercy College.
62	*IFN-γ regulation of canonical TLR pathways* ***Gabriele D'Orsi, Emily Calderon, and Dr. Jodi Evans*** Molloy College
63	Target Practice for Stem Cells: Modulation of Chemoresistance in Ovarian Cancer ***Julia Fiederlein, Brianna McNulty, Samantha Lines, Sandra Riad, Dr. Noelle Cutter*** Molloy College

64	THERAPY RNA INTERACTION WITH HNRNPS TO INDUCE ALTERNAIVE SPLICING IN GBM ***Michael R. Mazzucco, Flobater I. Gawargi, Koushik Muralidharan, Ryan N. Fink, Sawyer M. Hicks, Kevin Gallagher and Sarah Falotico Martin J. Hicks*** Monmouth University
65	Secondary Structure Analysis by SHAPE-MaP of the EGFR and VEGFR2 pre-mRNA Transcripts: Uncovering Novel Regions for RNA Anti-sense Targeted Therapy ***Ryan Fink, Sawyer Hicks, Martin Hicks*** Monmouth University
66	Synthesis of Exosome-Associated AAVs to Deliver RNA Therapeutic Strategies to Block VEGFR2 and Angiogenesis in Human Glioblastoma ***Koushik Muralidharan, Flobater I. Gawargi, Kerianne Fuoco, Hemangi Patel Martin J. Hicks, Ph.D*** Monmouth University
67	Determining the Role of the GABRA2 Gene in the *Gallus gallus* Chick ***Esra Celik, *Samantha Perez, *Nadine Khalil, *Orli Weiss, & Dr. Cathryn Kubera*** Monmouth University
68	Role of formins in morphogenesis and development of the *C. elegans* pharynx ***Jeff Martinez**, Angelica Barreto-Galvez*, Sofya Borinskaya*, and Martha Soto**** **New Jersey City University, *Rutgers University
69	An investigation in the immunity repressor of *Gordonia terrae* phage ShayRa (A15) ***Mariana P Moraes, Dr. Jacqueline Washington*** Nyack College
70	Expanding Our Knowledge of *Rhodococcus erythropolis* Phages by Determining Cluster Classification ***Sucely Ponce, Jacqueline Washington*** Nyack College
71	M05D6.2, an ortholog of human T-complex protein 11 (TCP11), is necessary for sperm function and fertility in Caenorhabditis elegans ***Danielle Cooley, Emily Lopes, Amber Jacob, Matthew Marcello*** Pace University
72	Evaluating the Function of Genes Implicating Glioblastoma Multiforme (GBM) Formation using *Caenorhabditis elegans* ***Agata A. Durda & Matthew R. Marcello PhD*** Pace University
73	Spatial Genomic Analysis of the Axolotl Wound Epithelium via HCR FISH ***Breanna Chandler, Kofi Acheampong, Alex Lovely, James Monaghan Ph.D.*** St. Francis College and Northeastern University
74	Understanding the Role of Motivation to Learn Science in Science and Non-Science Majors ***Sophia Touri, Rebecca Olcese, and Dr. Christina Mortellaro*** Saint Peter's University
75	Mechanisms of Genome expansions in C-cluster of Bacteriophages ***Iman Raja, Fernado Nieto and Christos Noutsos*** SUNY Old Westbury
76	Methylation and Expression Patterns of C3 and C4 Photosynthetic Genes ***Weil, Brian, Noutous, Christos*** SUNY Old Westbury
126	*Drosophila* Genetics: Mapping of *mps-1* Transgenes ***Angela Valle, *Steven Almazan, Kaitlyn Weiler, Kyra Hughes and Dr. Elizabeth A. Manheim*** Kean University
127	Isolation of EGFR RNA transcripts to detect low abundant transcripts ***Sawyer M. Hicks, Martin J. Hicks***

	Monmouth University
133	THE THEOPHYLLINE RIBOSWITCH; ITS DESIGN AND IMPLEMENTATION ***Mika Schievelbein1, Lauren Lucia, Sonia Dadlani, Toni Zangrilli, James Tilton, Jonathan Ouellet1*** Monmouth University

Biochemistry, Biophysics, Biotechnology

77	Poly(A) tail length of p21 increases upon UV-induced DNA damage ***Jessica Gonzalez, Emral Devany*** Kingsborough Community College
78	Image processing and 3D reconstruction of hard and soft tissues from contrast-enhanced high-resolution microCT images in an osteoarthritis animal model based on destabilization of the medial meniscus (DMM) ***Shadia Sarmin and Assia Bouizy-Dr. Louis Cardoso*** LaGuardia Community College
79	Effect of Single Walled Carbon Nanotubes on Breast Cancer Cell Migration ***Yingxian Tan, Tobore Edema, Sunil Dehipawala, Ph.D,Tirandai Hemraj-Benny, Ph.D. and Regina Sullivan, Ph.D.*** Queenborough Community College
80	Osteoclastic Signal transduction and activator of transcription-3 Enhances the Migration of Osteoblastic cell line MC3T3 ***Miguel Fernandez, Stephanie Lochan, Andrew V. Nguyen*** Queenborough Community College
81	Imidazole as a Novel and Robust Gold Binding Group at STM-BJ Method ***Shanelle Smith, Xiaofang Megan Yu, Tianren Fu, Jiayi Xue, Latha Venkataraman, Sujun Wei*** Queensborough Community College
82	BacM Isoforms are Generated through Alternative Start Site Selection ***Christopher Annabi, Dr. David Zuckerman*** Iona College
83	Effects of Manuka and Kumquat Essential Oils onthe Growth and Viability of Human Cancer Cell Lines ***Jive Jacob, Subah Soni, and Dorothy Lobo*** Monmouth University
84	Inhibitor of CBP Histone Acetyltransferase Downregulates p53 Activation- Potential to Prevent Toxicity from Chemotherapy ***Loveth Igbineweka, Vimal Arora, Mihaly Mezei , Michael Ohlmeyer and Shiraz Mujtaba*** Medgar Evers College
85	Barcoding of Invasive Plants ***Garcia-Sanchez, Johnny, R. Pate, Erica, Dr. Eiden, Margaret*** Mercy College
86	Sunscreen Properties of Organic Compounds ***Lokenauth Elizabeth, Hurtado Juan, Alvarado Victoria ,Surendran Geetha (mentor)*** Mercy College
87	PEA-15 Expression in Acute Promyelocytic Leukemia in Presence of HIV-TAT ***Andres Cabezas, Yufeng Wei*** New Jersey City University
88	PEA-15 phosphorylation homeostasis and allosteric regulation of cell proliferation and apoptosis ***Sergio Crespo, Sherouk Hassan, Andres Cabezas, Yufeng Wei Ph.D.*** New Jersey City University
89	Strong Antimicrobial Activity Displayed By Newly Synthesized Hydroxamic Acids And Their Derivatives

	Stephanie Ramirez, Rameen Shah, Hagar Mustafa, Daniel Antunes, Dr. Robert Aslanian, Dr. Meriem Bendaoud New Jersey City University
90	Cell Penetrable Inhibitory Probe of Human Cathepsin L ***Anna Alicent Dickson,# Ashif I Bhuiyan,# Jeremy Garcia,¥ Faiza Rafi,$ Uwa Ogbeta,$ Jasmine Kaur,$ Nisar Afzal,# Laura Joo,# Suneeta Paroly,$ Karl R Fath,¥ Sanjai Kumar,#,§*** Queens College
91	Nitroxide's protective effect on myoglobin catalytic cycle in oxidative environment ***Ike Ariza, Naomi Shohet, Liron Fedida, Dylan Xue, Jonathan Shadan, Jay Woo, Jorge Ramos, Uri Samuni*** Queens College
92	Optimizing Electrolytes for Dye-sensitized Solar Cells Using Ionic Liquid and Single-walled Carbon Nanotube Mixtures ***Rawlric A. Sumner1, Katelyn Urena2, Tirandai Hemraj-Benny2, Sharon I. Lall-Ramnarine2, and James F. Wishart*** Queens College
93	Quantifying bioaccumulation of low-level copper exposure in the embryonic zebrafish ***Najae Escoffery,* Robin Helburn, and Alison L. Dell*** St. Francis College
94	TFIIIB Alterations in Gliomas ***Paul Espiritu*, Keyla Payano*, and Laura Schramm*** St. John's University
95	Effect of K197E Mutation of Protein Tyrosine Phosphatase 1B in Epidermal Growth Factor Receptor Signaling ***Melody Young, Youngjoo Kim*** SUNY College at Old Westbury
128	Going Green in the Lab: Extent of green practices in academic labs in NYC Mar***cus Banks, Davida Smyth, Katayoun Chamany*** The New School
135	CHARACTERIZATION OF DNA CLEAVING DNA ENZYME USING KINE ***Artiom Efimenko, Kush Patel, Davis Jose and Jonathan Ouellet1*** Monmouth University
136	SELECTION OF AN APTAMER TO BIND 2-HYDROXYGLUTERATE THROUGH SELEX ***Danielle Guillen, Artiom Efimenko, Krima Patel, Jennifer Lee Jonathan Ouellet1*** Monmouth University
139	The Role Of Hexim1 in Stress Induced Apoptosis In Mouse Embryonic Fibroblast Cell Lines ***Pierre, Kristelle, Sadik.Sarah A. Maya Mascareno*** SUNY Old Westbury. NY

Physiology, Neuroscience, Clinical

96	Pharmacological inhibition of STAT6 suppresses viability and induces cell death of Hodgkin's lymphoma, *in vitro* ***Jessica Perng, Bo Zhang Ph.D. Stephen Redenti, Ph.D., Rajendra Gharbaran, Ph.D.*** Bronx Community College, Lehman College
97	Role of Gβγ G Protein Subunit in the Dopamine D2 Signaling Pathway on Ciliary Activity of Gill Lateral Cells in *Crassostrea virginica* ***Kameca Baxter1, Margaret A. Carroll2 and Edward J. Catapane2*** Kingsborough Community College

98	Role of Phospholipase C in the Dopamine D2 Signaling Pathway in the Control of Lateral Cilia in Gill of *Crassostrea virginica* ***Edna Georges1, *Krystle Ernest2, Edward J. Catapane2 and Margaret A. Carroll2*** Kingsborough Community College
99	Factors Influencing Pulmonary Edema Associated with Acute Airway Obstruction ***Tenise Bowman1, Amanda Wildstein2, Richard Kollmar2, Mark Stewart2 and Anna Rozenboym4*** Kingsborough Community College
100	Scavenger and c-type lectin receptors mediate phagocytosis of zymosan in LPS and HMGB1 stimulated microglia ***Gian Izquierdo, Dr.Maria Entezari, Dr. A. Lucia Fuentes*** LaGuardia Community College
101	The Role of Dectin-1 Receptor in LPS-Induced Phagocytosis Stimulation In Microglial Cells ***Darlene Urena; Dr.A.Lucia Fuentes; Dr.Maria Entezari*** LaGuardia Community College
102	A preliminary study on the effects of luteolin on Hodgkin's lymphoma, in vitro ***Evangelina Sarpong Stephen Redenti Ph.D. and Rajendra Gharbaran Ph.D.*** Lehman College, Bronx Community College
103	Taurine Protects Against the Neurotoxic Effects of Manganese on the Dopaminergic Control of Lateral Cell Membrane Potential and Ciliary Response in Gill of *Crassostrea virginica* ***Alecia Johnson1, *Aliyah Howard2, Margaret A. Carroll1 and Edward J. Catapane1*** Medgar Evers College
104	Immunohistofluorescence Study of the Actions of Manganese on the β-Arrestin and Gβγ Mechanisms of Dopamine D2 Signal Transduction Pathway in Crassostrea virginica ***Mohamed Eid1, *Rafael Santos2, Margaret A. Carroll1 and Edward J. Catapane1*** Medgar Evers College
105	Immunohistofluorescence Study of the Actions of Manganese on the DARPP-32 Mechanisms of Dopamine D2 Signal Transduction Pathway in Crassostrea virginica Na***omi Campos1, *Rosanne Wallach2, *Mohamed Eid1, Margaret A. Carroll1 and Edward J. Catapane1*** Medgar Evers College
106	The Role of Fatty Acid Oxidation in Astroglial Xenobiotic Detoxification ***Logan Brown, Moises Rodriguez, Jordan Rose, Rodrigo Franco*** Spelman College, Medgar Evers College, University of Nebraska-Lincoln
107	Retinoic Acid Induces a Potential Compensatory Mechanism in Response to Downregulated Sonic Hedgehog ***Doran, Caroline; Haskew-Layton, Renee*** Mercy College
108	The Effects of Caffeinated Drinks on Chick Embryo Development ***DiFeo, Gianna; Haskew-Layton, Renee*** Mercy College
109	Swelling Induced Volume Regulated Anion Channel Protein Expression ***Cespedes, Pedro; Ouseph, Annamma; Vargas, Julius; Haskew-Layton, Renee*** Mercy College
110	LRRC8a mRNA Expression in Chick Astrocytes ***Minkler, Joseph; Quijano, Alison; Ray, Antonio; Haskew-layton, Renee*** Mercy College
111	Identification of LRRC8a Protein in Chick Brain Cells

	Campbell, Daejah; Agbabiaka, Jael; Haskew-Layton, Renee Mercy College
112	Characterization of Excitoxicity Model in Chick Embryo Neuronal Culture ***Reyes Vigil, Fredy; Cabrera, Nohely; Natalia Elizarraras; Haskew_Layton, Renee*** Mercy College
113	Optimization of a Method to Enrich Chick Astrocytic Primary Cultures ***Stafford, Michele; Rosario, Yuribel; Haskew-Layton, Renee*** Mercy College
114	PTEN Inhibition in Astrocytes Plays a Potential Therapeutic Role in Protecting Neurons ***Dean, Jonathan; Haskew-Layton, Renee*** Mercy College
115	Effects of Novel Non-steroidal Anti-inflammatory Drugs on Vascular Developmen ***Parjohn, Keanna; Haskew-Layton, Renee t*** Mercy College
116	Are music genres that are broadly accepted as stress-reducing as effective at reducing physiologic stress parameters as one's own choice of music? ***Priyanka Moses*, Angelica Salgado*, and Jodi F. Evans*** Molloy College
117	Is Ironman Invincible?; Risk of Stress during Strenuous Exercise ***Frank Cristallo III, Emily Cruz, Rachel Julian, Kristen Lacey*** Molloy College
118	Using HEK Cells as a Model System to Study Autophagy and it's Regulation ***Mohammad Fauzan, Chelsea Anyaegbu, Azka Asim, Reed Carroll Ph.D*** New Jersey City University
119	Measures of Sustained Attention in a Rat Model of Sporadic Alzheimer's Disease ***Kaiming Wang, Julio Salas, Adrian Guerrero, Abbas Kouzani PhD, and Francisco Villegas PhD.*** Queens College
120	Synthesis And Biological Activity Of Substituted Pyrroles ***Shuai Ma, Sasan Karimi, Gopal Subramaniam, Sounak Ghosh Roy, Panayiotis Koumas, Zahra Zakeri*** Queens College and Queensborough Community College
121	Examining Microglia Structure through Extrinsic Manipulation ***Sara Mroziuk1, Alicia C. Barrientos2, Juan E. Muñoz1, Saleha Tahir1, and Joshua C. Brumberg*** Queens College
122	Effects of Tetrodotoxin Concentration on Action Potentials: a Computational Study ***Shaina Raklyar, Chiaki Yanagisawa, Ph.D.*** New York City College of Technology
123	Impaired vasodilation in type 2 diabetes (T2DM) is associated with vascular smooth muscle dysfunction and increased expression of PCAF. ***Bamwa Yakoub, Osina Lutz, Maria Alicia Carrillo-Sepulveda*** New York Institute of technology
124	Developmental Lead Exposure Causes Neurochemical Excitotoxicity Resulting in Lifelong Frontoexecutive Shaina Raklyar, Chiaki Yanagisawa, Ph.D, Dysfunction in the Rat: An Early Neurodegenerative Disorder Hypothesis ***Jourvonn C. Skeen1,2, Jalen R. Bonitto1,2, Ericka Canabas1,2, Isra Ahmed2,3, Cyrus Jo2,4, Jean-Martin J. Chrisphonte2, Kirsten Lynch2,3, Eric Khairi1,2, Arwa Ahmed1,2, Jewel Joseph1,2,***

	Samantha Rubi1,2, Asma Iqbal2,3, Nimra Hameed1,2, Eddy D. Barrerra2,3, Dr. Youngjoo Kim4,5 & Dr. Lorenz S. Neuwirth2,3 SUNY Old Westbury
125	Effects of Electroconvulsive Seizure on GABA Concentrations in Mouse Models of Autism ***Nicholas S Buhta, Alec Stepanian, Melissa M Staley, Cindy W Jiang, Mikhail V Pletnikov, Irving M Reti*** Wagner College
132	Nervous System Defects Result From Transient Low Level Copper Exposure In The Embryonic Zebrafish ***Amy Alfy,* Gwendolyn Roberts, Joeseph Pagnotta, and Alison L. Dell*** St. Francis College

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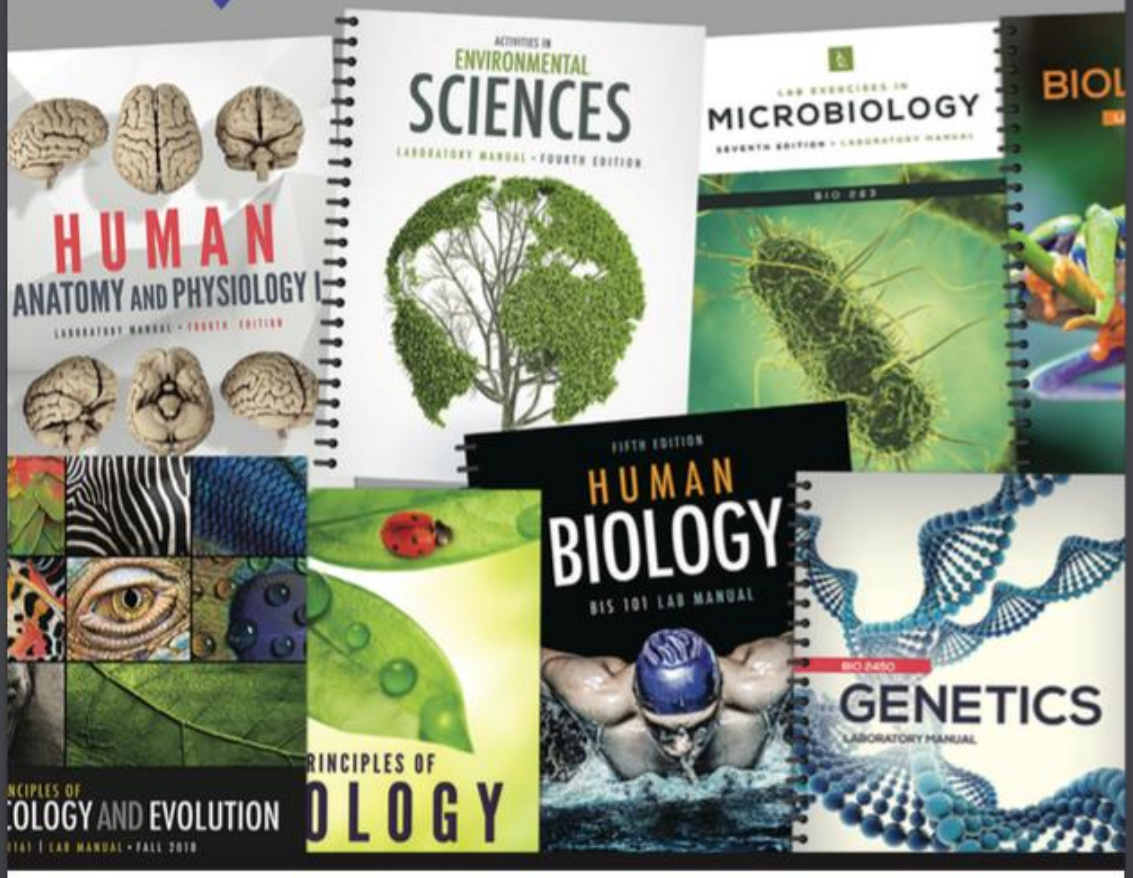

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