

Tinchun Chu, Ph.D.

Seton Hall University | Biological Sciences | Tinchun.Chu@shu.edu

EDUCATIONAL BACKGROUND

- 2002-2006 University of Medicine and Dentistry of New Jersey (UMDNJ), Newark, NJ
Ph.D. in Biomedical Informatics.
Recipient of Excellence for Outstanding Academic Performance
- 2001-2002 University of Medicine & Dentistry of New Jersey, Piscataway, NJ
Rutgers University, New Brunswick, NJ
Graduate Fellow, Molecular Biosciences Joint Program
- 1999-2001 Montclair State University (MSU), Montclair, NJ
B.S. in Molecular Biology. Honors in Biology

PROFESSIONAL EXPERIENCE

- 2020-present Professor, Dept. of Biological Sciences, Seton Hall University
- 2018-present Affiliated faculty, Seton Hall-Hackensack Meridian School of Medicine
- 2021-2023 Associate Dean for Faculty and Research, College of Arts and Sciences, Seton Hall University
- 2014-2020 Associate Professor, Dept. of Biological Sciences, Seton Hall University
- 2008-2014 Assistant Professor, Dept. of Biological Sciences, Seton Hall University
- 2007-2008 Adjunct Professor, Dept. of Biology, Montclair State University

LEADERSHIP POSITIONS

- 2022-2023 Organizer, Annual Success in Research and Scholarship Fair, Seton Hall University
- 2017-2018 President, Theobald Smith Society - American Society for Microbiology New Jersey Branch
- Apr. 20, 2018 Organizer and Conference Chair, 2018 Theobald Smith Society Meeting in Miniature and 65th Selman A. Waksman Honorary Lectureship at Seton Hall University
- 2016-2017 President-elect, Theobald Smith Society - American Society for Microbiology New Jersey Branch
- Nov. 26, 2015 Session Co-Chair, The BIT's 3rd Annual Global Health Conference – Session AGHC 01: Healthcare, Epidemiology and Infection Prevention and Control
- Jul. 2012 Session Chair, The 2012 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2012) – Session 10: Comparative Sequence, Genome Analysis, Genome Assembly, & Genome Scale Computational Methods

Oct. 29, 2011	Organizer and Conference Chair, The 44th Metropolitan Association of University and College Biologists Fall Conference at Seton Hall University
Jul. 2010	Session Chair, The 2010 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2010) – Session 9: Genome Computational Methods, Clinical Trials & Related Issues.

TEACHING ACTIVITIES

SETON HALL UNIVERSITY (SHU), South Orange, NJ

BIOL1101 Intro to Biology
 BIOL2141 Intro to Microbiology
 BIOL2142 Intro to Microbiology Lab
 BIOL3411 Microbiology
 BIOL3688 Emerging Infectious Diseases
 BIOL3999 Junior Biology Seminar
 BIOL4199 Senior Biology Seminar
 BIOL6421 Microbial Physiology
 BIOL6422 Microbial Physiology Lab
 BIOL7112 Intro to Bioinformatics
 BIOL9011-3 Readings in Molecular Biosciences

MONTCLAIR STATE UNIVERSITY (MSU), Montclair, NJ

BIOL255 Survey of Microbiology
 BIOL350 Microbiology
 BIOL100 Biological Sciences
 BIOL110 Biology of Human Life

SERVICE ACTIVITIES

EXTRA-INSTITUTIONAL

2023	Review Member, NIH-NSF P01 Centers for Oceans and Human Health 4 Program: Impacts of Climate Change on Oceans and Great Lakes, Research Triangle Park, NC
2022-2023	Guest Editor, <i>Antibiotics</i> journal, Special Edition: “Discovery and Development of Novel Therapeutic Agents in Infectious Diseases Treatment”
2021-present	Member, Reviewer Board, <i>Microorganisms</i> journal
2019-present	Appointed Member, Science Advisory Board (SAB), New Jersey Department of Environmental Protection (NJDEP)
2019-present	Member, Interstate Technology and Regulatory Council (ITRC) - ASCT
2019-present	Member, Interstate Technology and Regulatory Council (ITRC) - HCBs

2018-present	Team Member, NASA GeneLab Analysis Working Groups – Microbes
2020-present	<i>Ad hoc</i> reviewer for <i>Foods</i> journal
2018-2019	Invited reviewer for the book: <i>Microbiology with Diseases by Taxonomy</i> , 6th Edition. Pearson
2016-present	<i>Ad hoc</i> reviewer for <i>Marine Drugs</i> journal
2015-present	Panelist, National Science Foundation (NSF) Graduate Research Fellowships Program (GRFP)
2015-present	<i>Ad hoc</i> reviewer for <i>BMC Microbiology</i> journal
2015-present	<i>Ad hoc</i> reviewer for <i>Molecules – Medicinal Chemistry</i> journal
2015-present	<i>Ad hoc</i> reviewer for <i>Genes</i> journal
2015-present	<i>Ad hoc</i> reviewer for <i>International Journal of Molecular Sciences</i> journal
2014-present	<i>Ad hoc</i> reviewer for <i>British Biotechnology</i> journal
2013-present	Reviewing Editor, Science Postprint (SPP)
2013	Invited reviewer for the book: Atta-ur-Rahman FRS Ed. <i>Studies in Natural Products Chemistry (Bioactive Natural Products)</i> . Elsevier Science Publishers.
2012-present	<i>Ad hoc</i> reviewer for <i>Food and Chemical Toxicology</i> journal
2011-present	Board member, Metropolitan Association of College and University Biologists (MACUB) Executive Board
2011	Invited reviewer for the following textbook: <i>Concepts in Bioinformatics and Genomics</i> 1st Edition. Oxford University Press.
2011	Invited reviewer for the following textbook: Foster, J.W., Aliabadi, Z. and Slonczewski, J.L. <i>Microbiology: An Allied Health Perspective</i> . 1st Edition. W.W. Norton & Company.
2011	Organizer and Conference Chair, 44th Metropolitan Association of University and College Biologists (MACUB) Fall Conference at Seton Hall University.
2010	Invited reviewer for the following textbook: Joan L. Slonczewski and John W. Foster. 2nd Edition. W. W. Norton & Company. <i>Microbiology: An Evolving Science</i> .
2010-present	Member of the Society for Applied Microbiology (SfAM)
2009-present	<i>Ad hoc</i> reviewer for <i>Acta Histochemica</i> journal
2009-2011	Panelist, NJSGC (New Jersey Space Grant Consortium (NJSGC) and NASA – Sponsored Program Student Research Fellowship
2008-2009	Consulting Scientist, CONSortium for New Explorations in Coherent Teacher (K-12) Education (Connect-ED)

INSTITUTIONAL SERVICE

2023-2024	Committee member, Faculty Search Committee
2021-2022	Committee member, Faculty Culture Committee

2019-2021	Council member, University Research Council
2019-2021	Committee member, Educational Policy Committee
2018-2019	Committee member, Huron Graduate Task Force Committee
2018	Committee member, Merit Committee
2016-2021	Committee member, SHU Academic-Industry Planning Committee
2015-2021	Committee member, Patent Policy Committee
2014-16; 2017-19	Senator, Faculty Senate
2014-2021	Committee member, Faculty Senate IT Committee
2014-2021	Committee member, Instructional Technology Committee
2014-2021	Committee member, Intellectual Property Task Force Committee
2014-present	Committee member, Graduate Advisory Committee
2013-present	Committee member, Flow Cytometer Committee
2009-2021	Committee member, TLTR Innovative Technology Committee
2016-2017	Committee member, Faculty Search Committee
2014-2017	Committee member, College Planning Committee

SERVICE TO STUDENTS

2024-present	Advisor, MS in Biology Program, Department of Biological Sciences, Seton Hall University
2016-2021	Advisor, PhD in Molecular Biosciences Program, Department of Biological Sciences, Seton Hall University
2014-2018	Advisor, MS in Microbiology Program, Department of Biological Sciences, Seton Hall University
2011-2013	Advisor, Pre-Sciences, College of Arts and Sciences, Seton Hall University
2009-present	Advisor, Undergraduate Biology majors, Department of Biological Sciences, Seton Hall University

GRANTS ACTIVITY

Extramural Funding

- National Institute of Health – “NIH 1R41AI172420-01: Feasibility Study of Novel Hand Hygiene Formulations against Bacterial Spore Infection” Institutional PI, 11-01-2022 to 08-31-2024, \$ \$266,592
- William & Doreen Wong Foundation – “Development of Novel Antimicrobial Therapeutics, Algal Bloom Detection and Prevention, and Bioinformatics” PI, January 2011 to present, \$112,000

- Water Research Foundation – “Project #4983: Evaluating *Legionella* Detection Rates and Occurrence by Distribution System Characteristics in a Community Water System” Academic Partner, 11-01-2018 to 10-31-2022, \$101,152
- National Science Foundation – “DBI#1725932 MRI: Acquisition of a Shared Use Integrated Next-Generation Sequencing Platform” Senior Personnel, 10-1-2017 to 9-30-2020, \$202,125
- National Science Foundation – “DBI#1337426 MRI: Acquisition of a Bench-Top Flow Cytometer for Multi-Disciplinary Research and Education at Seton Hall University” Co-PI, 9-1-2013 to 8-31-2016, \$140,264
- National Institute of Health – “NIH/NIDCR 1R15DE019836-01: Identification of Early-detection and Therapeutic-responding Biomarkers Associated with Autoimmune-induced Destruction of Secretory Gland Cells” Collaborator, 10-1-2009 to 9-30-2012, \$150,000

Internal Funding

- SHU 2024 University Research Council – “Investigating the Impact of Government Carbon Footprint and Climate Policies on Public Health and Global Financial Markets” Co-PI, Summer 2024, \$10,000 (Pending Review)
- SHU 2016 University Research Council – “Development of a Sensitive and Rapid Method to Detect and Quantify Cyanotoxins in New Jersey’s Freshwater Bodies” PI, Summer 2016, \$10,000
- SHU 2012 University Research Council – “Black Tea Polyphenols as Synergistic Antibacterial Agents with Antibiotics” PI, Summer 2012, \$6,000
- SHU 2010 University Research Council – “Identification of Cyanobacteria related to Harmful Algal Blooms in New Jersey’s Freshwater Ecosystems” PI, Summer 2010, \$6,000

AWARDS AND HONORS

2024	Faculty mentor for STEM Undergraduate Research Award, College of Arts & Sciences, Seton Hall University
2021	Teacher of the Year Award, College of Arts & Sciences, Seton Hall University
2020	Faculty Merit Award, Seton Hall University
2016	University Research Council Award, Seton Hall University
2014	2013-2014 College Professor of the Year, College of Arts & Sciences, Seton Hall University

2013	University and College Researcher of the Year Award, College of Arts & Sciences, Seton Hall University
2012	Researcher of the Year Award, Department of Biological Sciences, Seton Hall University
2012	University Research Council Award, Seton Hall University
2012	Visiting Scholar, California State University Northridge Interdisciplinary Research in Science
2011	National Residence Hall Honorary (NRHH) <i>Spotlight of the Month</i>
2010	University Research Council Award, Seton Hall University
2005	Student Travel Grant, ASM Corporate Activities Program, American Society for Microbiology (ASM), 105th General Meeting
2001	\$10,000 Margaret & Herman Sokol Graduate Fellowship in Science, MSU
2001	National Collegiate Education Award, United States Achievement Academy
2001	Phi Kappa Phi National Honor Society
2001	American Scholar National Honor Society

GRADUATE STUDENTS MENTORED

Completed Theses (35 total: 6 PhDs, 18 MS Research and 11 MS Library Theses)

Myeong Gil Jun (MS, research). May 2024. Thesis title: "Antibacterial Activity of Novel Formulations"

Vanessa Guo (MS, research). May 2024. Thesis title: "Optimizing Biodiversity Analysis: Building a Bioinformatic Pipeline with R for Amplicon Sequencing"

Kassidy Beauzil (MS, research). May 2024. Thesis title: "Effects of Iron Chloride on *Anabaena flos-aquae*"

Ayuni Yussof (PhD). May 2022. Dissertation title: "Antibacterial, Anti-Spore, and Antibiofilm Effects of Theaflavin-3,3'-Digallate"

Elizabeth Wong (MS, research). May 2021. Thesis title: "Antibacterial Activity of *Pogostemon cablin*"

Danielle Maragh (MS, research). May 2021. Thesis title: "Evaluation of Nickel Stress on *Anabaena cylindrica*"

Sabrina Lopez (MS, research). May 2021. Thesis title: "The Effect of EGCG-P Containing Formulations on *Bacillus* spp."

Ashley Walsh (MS, library). August 2020. Thesis title: "Metagenomic Analysis of the Bacterial Communities in Cyanobacterial Blooms"

Jose L. Perez (PhD). May 2020. Dissertation title: "Effect of Zinc on *Microcystis aeruginosa* and its Toxin Production"

Paul Yoon (MS, research). December 2019. Thesis title: "Molecular Assay Optimization for Enhanced Detection of *Legionella* spp. in Passaic County, New Jersey"

Roksana Rahman (MS, research). May 2019. Thesis title: "Detection, Identification, and Metagenomic Characterization of Cyanobacteria in Barnegat Bay, New Jersey"

Xin Tao (PhD). December 2017. Dissertation title: "Development of Markers for Embryonic Reproductive Competence in Assisted Reproduction"

Robert Newby Jr. (PhD). May 2017. Dissertation title: "Characterization of Zinc and Cadmium Stress Response in Cyanobacterium *Synechococcus* sp. IU 625"

Zain Alvi (PhD). May 2017. Dissertation title: "A Bioinformatics Methodology for the Annotation and Analysis of Sperm Chromatin Remodeling Proteins in Sequenced *Drosophila* Species" ** Co-mentored with Dr. Angela Klaus

Gabriella Appice (MS, research). May 2017. Thesis title: "Comparative Evaluation of the Antibacterial, Anti-biofilm and Anti-spore Effects of Theaflavins and Palmitoyl-EGCG"

Jerry Jean-Louis (MS, library). May 2017. Thesis entitled "The Neuroprotective Activity of Quercetin against HSV-1: A Potential Therapeutic to Counter the Development of Alzheimer's Disease?"

Aline de Oliveira (PhD). May 2016. Dissertation title: "Modified Green Tea Polyphenol, Palmitoyl-EGCG and Black Tea Theaflavins: Promising Natural Herpes Simplex Virus 1 and 2 Agents"

Ruchit Patel (MS, research). May 2016. Thesis title: "Flow Cytometric Analysis for Cyanobacteria in 36 New Jersey Freshwater Bodies"

Derek Prince (MS, research). May 2015. Thesis title: "Effect of Chinese Knotweed Extract on HSV-1 Infection of Vero Cells"

Andy Demianicz (MS, research). May 2015. Thesis title: "Antibacterial Evaluation of *Polygonum multiflorum*"

Nicole Elia (MS, research). May 2014. Thesis title: "Identification and Characterization of Phytoplankton in Barnegat Bay, New Jersey"

Margaret Bell (MS, research). May 2014. Thesis title: "The Use of Natural Products as Potential Anti-Pseudomonas Agents"

Michael D. Quintanilla (MS, library). May 2014. Thesis title: "Non-therapeutic Use of Antibiotics in Livestock & the Human Risk"

Brian Nohomovich (MS, research). May 2013. Thesis title: "The effects of nickel chloride stress on freshwater cyanobacterium *Synechococcus* sp. IU 625"

Andrew K. Gewain (MS, library). May 2013. Thesis title: "Microbiota transplantation as a tool for treating metabolic syndrome"

Matthew J. Rienzo (MS, research). May 2012. Thesis title: "Bloom-forming cyanobacteria and other phytoplankton in northern New Jersey freshwater bodies"

Daniel J. Acosta (MS, library). May 2012. Thesis title: "Increased CO₂ availability on *hupL*-mutant on *Nostoc punctiforme* ATCC 29133 leads to improved hydrogen production"

Zain Alvi (MS, research). August 2011. Thesis title: "Putative protamine-like proteins in 12 sequenced species of *Drosophila*" ** Co-mentored with Dr. Angela Klaus

Robert Newby Jr. (MS, research). May 2011. Thesis title: "Identification, Cloning, and Characterization of Van Operon in Cyanobacterium *Synechococcus* sp. IU 625"

Jennifer L. Valente (MS, library). May 2011. Thesis title: "Effects of Frog Antimicrobial Peptides Temporin L and Dermaseptin S4 in a Mouse Model of *E. coli* Induced Septic Shock"

Robyn Jenkins (MS, library). December 2010. Thesis title: "Conservation of the p53 Protein in Oral Squamous Cell Carcinoma by Green Tea Polyphenols"

Darius Darabian (MS, library). May 2010. Thesis title: "The Effects of Rapamycin on Estrogen Receptor Negative Breast Cancer Cells"

Monika Wolinska (MS, library). May 2010. Thesis title: "Spirulina as a Potential Weight Loss Supplement"

Jessica Garcia (MS, library). May 2010. Thesis title: "Effects of Largazole Thiol on Human Lymphoma"

Sneha Bhatia (MS, library). December 2009. Thesis title: "Identification of genotoxicity, mutagens and carcinogens in a group of structurally related nitriles using *in silico* methods and correlation between *in silico* data and previously conducted *in vivo* and *in vitro* tests"

Current Graduate Students (3 total)

Chloe Anderson (MS, research). Working thesis title: "Evaluation of Antibacterial and Antifungal Properties of Peptides"

Kyle Calindas (MS, research). Working thesis title: "Establishing an Efficient Transcriptomic Analysis with R"

Alyssa Marino (MS, research). Working thesis title: "Assessment of Water Quality and Microbial Community in Lake Parsippany, NJ"

UNDERGRADUATE RESEARCH STUDENTS MENTORED

Completed Senior Honor Theses

Connor Dolan. May 2024. Thesis title: "Effect of Probiotics on Pathogenic Microorganisms"

Christian Rios-Ruiz. May 2018. Thesis title: "Cyanobacteria in Recreational Water: Optimization Methods for the Detection and Identification"

Jonathan Valsechi-Diaz. May 2017. Thesis title: "Natural Compounds as a Potential Solution to Antibiotic-Resistant and Spore-Forming Bacteria"

Sally Tarabey. May 2017. Thesis title: "Identification and Characterization of Cyanobacteria in NJ Freshwater Bodies: Greenwood Lake Focus"

Anaika Singh. May 2015. Thesis title: "Cyanobacteria-based Bioassessment in Northern Barnegat Bay, New Jersey"

Jillian Cortese. May 2015. Thesis title: "Flow Cytometry Analysis of Southern Barnegat Bay, New Jersey"

Franzie Edquilag. May 2013. Thesis title: "Antimicrobial Effects of Polymethoxylated Flavones (PMFs)"

Yansel Nunez. May 2013. Thesis title: "Antibacterial Effects of Myricetin with Anticeptics and Antibiotics"

Jennifer Todd. May 2011. Thesis title: "The Antimicrobial and Synergistic Effects of Polyphenolic Compounds"

Lauren Strawn. May 2011. Thesis title: "The Freshwater Cyanophage AS-1 Genome Project: DNA Purification, Sequencing, and Mapping"

Michelle Reed. May 2011. Thesis title: "Cyanobacteria Detection: A Case Study in Lake Wapalanne"

Biology Research and Independent Study Students Mentored: (more than 90 students)

James Primerano (2023-present), Ashlyn Mrachek (2024), Sean Vizzard (2024), Abdulrahman Y Abdualлах (2022-present), Connor Dolan (2022-present), Javid Saleh-Esa (2022-present), Ahmad S Edris (2023-present), Benjamin Carranti (2021-2024), Mudassir A Rahmani (2023), Vanessa Harrington (2023), Prendha G Mendez (2023), Harman Gill (2021-2023), Radha Patel (2021-2023), Rich K Patel (2021-2023), Shivani Patel (2021-2023), Augusta Saverimuttu (2021-2023), Zoe Raste (2021-2022), Ashley Postaski (2021-2022), Mariam Saleh-esa (2021-2023), Ammar Elshikh (2021-2023), Albert Dimaculangan Jr. (2021), Michael Lutz (2021), Christian Martinez (2021), Wendy Li (2021), Monika Wlodarski (2021), Faiza Bajwa (2020), Helan Thomas (2020), Narmeen Kahn (2020), Alexandra Gill (2020), Anna Lacandalo (2019-2020), Lisa Popovic (2019-2020), Sandra M. Hurtado (2019), Oluwanifemi Fayemiwo (2019), Brian Cammalleri (2019), Maria Villagran (2019), Sevgi Yavuz (2019), Katherine Klein (2018-2020), John Murzaku (2018-2020), Nathan Tremonti (2018-2019), Mhaimeed Basel (2018-2019), Alisha Nanda (2018-2019), Alexandra Greco (2018-2019), Sabrina Lopez (2018-2019), Kaitlyn Mangano (2018), Emily Russo (2018), Nicholas Decristofano (2017-2018), Ishani Rana (2017-2018), Christian Rios-Ruiz (2016-2018), Emily Curran (2017), Joshua Steier (2017), Jonathan Valsechi-Diaz (2014-2017), Sally Tarabey (2014-2017), Adam Kmeck (2016), Garrett Almeida (2015-2016), Nicolle Segarra (2014-2015), Leslie Landy (2014-2015), Kirsten Simmons (2014-2015), Connor McAuley (2014), Anaika Singh (2013-2015), Jillian Cortese (2013-2015), Jude Sanchez (2013-2014), Annamarie Fernandes (2012-2013), Mohammed Alam (2012-2013), Maggie LaForte (2012), Elaine Sanjuan (2012), Jonattan Morales (2012), Yansel Nunez (2011-2013), Franzie Edquilag (2011-2013), Evan Venino (2011-2012), Daniel Barnes (2011-

2012), Rohail Malik (2011-2012), Kerly Guerrero (2011), Kaitlyn Esposito (2011), Eric Morgenroth (2011), Hassan Aly (2011), Chloe Morales (2010), Kiri Whitaker (2010), Jennifer Todd (2009-2011), Lauren Pohren (2009-2011), Jonathan Jimenez (2009-2011), Catherine Jahn (2009-2010), Bijal Patel (2009-2010), Daniel Acosta (2009), Amanda Despotovich (2009), Michelle Joseph (2009), Kristen McCormack (2009), Christina Picciano (2009), Bijal Shah (2009), Michelle Reed (2008-2011), Lauren Strawn (2008-2011)

INVITED SEMINARS

- 2023 Keynote Speaker – Bonnie K. Lustigman Research Symposium, Montclair, New Jersey
- 2019 Invited Speaker - National Cheng Kung University Global Water Quality Research Center Binational Seminar, Tainan, Taiwan
- 2016 Keynote Speaker - The Theobald Smith Society – New Jersey Branch of the American Society for Microbiology Meeting in Miniature & Waksman Honorary Lectureship. April 27, 2016. New Brunswick, New Jersey
- 2015 BIT's 3rd Annual Global Health Conference. "Tea Polyphenols as Potential Therapeutic Agents for Herpes." Kaohsiung, Taiwan
- 2012 California State University Northridge Interdisciplinary Research in Science (IRIS) – "Modified Green Tea Polyphenols as a Novel Approach to Inhibit Herpes Simplex Viral Infections." Northridge, California
- 2009 Zhejiang University Department of Biochemistry & Genetics Seminar – "Induction of Temperate Cyanophage AS-1 by UV Radiation, Mitomycin C and Heavy metals." Zhejiang, China
- 2008 California State University Northridge Department of Biology Seminar – "Molecular and Bioinformatic Approaches to Study Cyanobacteria and Cyanophages" Northridge, California
- 2004 National Taiwan University – "Study of the Combined Effects of Selenium Oxide and Cadmium Chloride on the Growth of *Anacystis nidulans*." Taipei, Taiwan
- 2003 New Jersey Marine Sciences Consortium. – "Development of Environmental Probes for Detecting Cyanobacteria *Anacystis nidulans* and Cyanophage AS-1." Sandy Hook, New Jersey
- 2003 National Central University – "Bioinformatic Analysis of Cyanophage AS-1." Taoyuan, Taiwan

PATENT

- 2022 Compositions and Methods for inhibiting endospores using Green Tea Polyphenols

SCHOLARLY ACTIVITIES

PEER REVIEWED PUBLICATIONS

I have a total of 58 publications: 52 peer-reviewed journal articles, 2 peer-reviewed book chapters, 1 textbook instructor's manual, and 3 co-authored laboratory manuals.

Underline: Member of the laboratory of TC Chu at Seton Hall University

Double Underline: students I co-mentored with other faculty collaborators

1. Okorie, M.C., Yussof, A., **Chu, T.**, and Gorun, S. (2024) "Broad photodynamic antibacterial activity of a functionalized, highly fluorinated sensitizer," *J. Porphyrins and Phthalocyanines* 28:11-22.
2. Patel, R., Gill, H.S., Patel, R.K., and **Chu, T.** (2024) "Antibacterial Activity of Plant-based Phenolic Compounds, Curcumin and Carvacrol." *J. Chem. Health Risks*. 14(1): 268-274.
3. Frank, N., Dickinson, D., Garcia, W., Xiao, L., Xayaraj, A., Lee, L.H., **Chu, T.**, Kumar, M., Stone, S., Liu, Y., Yu, H., Cai, J., Yao, B., Jiang, X., and Hsu, S. (2023) "Evaluation of Aqueous Nanoformulations of Epigallocatechin-3-Gallate-Palmitate (EC16) Against Human Coronavirus as a Potential Intervention Drug." *Biomed J Sci & Tech Res* 50(1):41242-41253
4. Gleason, J.A., Newby, R., Gaynor, J.J., Lee, L.H., **Chu, T.**, Bliese, A.D., Taylor, C.W., Yoon, P., DeLorenzo, S., Pranitis D., and Bella, J. (2023) "Legionella monitoring results by water quality characteristics in a large public water system." *Environ Sci Pollut Res* (2023). <https://doi.org/10.1007/s11356-023-26198-9>.
5. Yussof, A., Cammalleri, B., Fayemiwo, O., Lopez, S., and **Chu, T.** (2022) "Antibacterial and Sporocidal Activity Evaluation of Theaflavin-3,3'-digallate," *Int. J. Mol. Sci.*, 23, 2153.
6. Montel, R.A.; Gregory, M.; Lila, D.; Benavente, X.; Khamar, R.; **Chu, T.**; Bitasktsis, C.; Cottrell, J.; and Chang, S.L. (2021) "Genetic Variants as Biomarkers for Progression and Resistance in Multiple Myeloma," *Cancer Genet.*, 252-253:1-5.
7. Shinde S., Lee L.H.; and **Chu T.** (2021) "Inhibition of Biofilm Formation by the Synergistic Action of EGCG-S and Antibiotics," *Antibiotics (Basel)*. 10(2):102. doi: 10.3390/antibiotics10020102. PMID: 33494273; PMCID: PMC7909832.
8. Yussof, A., Yoon, P., Krkljes, C.; Schweinberg, S.; Cottrell, J.; **Chu, T.**; and Chang, S.L. (2020) "A Meta-Analysis of the Effect of Binge Drinking on the Oral Microbiome and its relation to Alzheimer Disease," *Scientific Reports*, 10, 19872.
9. Reiss, B.T., Eggleston, M.C., Godbole, A.C., Marut, J.A., McCann, C.M., Cottrell, J.A., Chu, T., and Chang, S.L. (2020) "Bioinformatics Review of the Role of HSV-1 in Alzheimer's Disease," *Adv. Alzheimer's Dis*, 9(3): 57-75.
10. Masi, S.A., Nair, M.P., Vigorito, M., **Chu, T.**, and Chang, S.L. (2020) "Alcohol Modulation of Amyloid Precursor Protein in Alzheimer's Disease," *J Drug Alcohol Res*, 9: 236094.
11. **Chu, T.**, Lee, L. H., Yussof, A., Lopez, S., Herrera, G., Luna, P., Uddin, M., Wu, L., Murzaku, J. A., Dickinson, D., Hsu, S. (2020) Enhanced Sporocidal Activity of Alcohol and Epigallocatechin-Palmitate-based Hand Hygiene Formulations Comprised of Plant-Derived Compounds. *J Bio Med*, 8(6): 89-99.
12. Shao, X., Wang, L., Gu, S. W., **Chu, T.**, Hsu, S. (2020) Antiviral Effect of Extract from Fagopyrum buckwheats Against Two Nonenveloped Viruses. *Microbiol. Infect. Dis.*, 4(3), 1-8.

13. McCauley, J.; Bejar, J.F.A.; Ianni, J.S.; Georges, M.U.; Zachwieja, Z.; Gray., R.; **Chu, T.**; Cottrell, J.; and Chang, S.L. (2020). "A Meta-analysis of immune signaling pathways between human type 2 diabetic tissue and mouse bone repair," *Biomed Res. Clin. Prac.*, 5: 1-5.
14. Perez, J.L.; and **Chu, T.** (2020) "Effect of Zinc on *Microcystis aeruginosa* UTEX LB 2385 and its Toxin Production," *Toxins*, 12(2): 92, <https://doi.org/10.3390/toxins12020092>.
15. Rahman, R.; Greco, A.; Nanda, A.; Rios-Ruiz, C.; Wang, Y.; Yoon, P.; Restaino, D.J.; Gaynor, J.J.; Bologna, P.A.X.; and **Chu, T.** (2019). "Detection and Characterization of the Cyanobacteria and Cyanophage of Barnegat Bay, New Jersey," *J Env. Protection*, 10(11): 1472-1483.
16. Huang, W.; Penaherrera E.P.; Desir, D.F.; Gamarro, D.L.; Cottrell, J.; **Chu, T.**; Chang, S.L. (2019) "Bi-directional Acceleration of Alcohol Use and Opioid Use Disorder," *J Drug Alcohol Res.*, 8: 236084. doi:10.4303/jdar/236084
17. **Chu, T.**; Lee, L.H.; Aponte, T.; Lopez, S.; Lalata, G.; Herrera G.; Yussof, A.; Dickinson, D.; and Hsu, S. (2019) "Sporicidal Activity of Novel Formulations Containing Lipophilic Epigallocatechin-3-Gallate and Natural Ingredients," *Microbiol. Infect. Dis.*, 3(3): 1-6.
18. De Martini, W.; Rahman, R.; Ojegba, E.; Jungwirth, E.; Macias, J.; Ackerly, F.; Fowler, M.; Cottrell, J.; **Chu, T.**; and Chang, S.L. (2019) "Kinases: Understanding Their Role in HIV Infection," *World J of AIDS*, 9(3): 142-160.
19. Qamar N., Castano, D., Patt, C., **Chu, T.**; Cottrell, J.; Chang, S.L. (2019) "Meta-Analysis of Alcohol Induced Gut Dysbiosis and The Resulting Behavioral Impact," *Behavioural Brain Res.*, 376:112196. doi: 10.1016/j.bbr.2019.112196. PMID: 31476330.
20. Yussof, A.; Habiba, U.; Liaw, D.; **Chu, T.**; Lee, L.H. (2019) "Epigallocatechin Gallate-Stearate Enhances the Efficacy of Antibiotics," *Open Journal of Medical Microbiology*, 9: 77-94.
21. Tran, T.M.; Sosa, B.; O'Connell A.; **Chu, T.**; Cottrell, J.A.; Chang, S.L. (2019) "A Meta-Analysis of Non-Osteoarthritis and Osteoarthritis Chondrocyte Gene Expression to Determine the Efficacy of Autologous Chondrocyte Transplantation as a Viable Treatment Option," *Medical Case Reports and Short Reviews*, 1(1): 001-009.
22. Hedgpeth, B.; Missall, R.; Bambaci, A.; Smolen, M.; Yavuz, S.; Cottrell, J.; **Chu, T.**; Chang, S.L. (2019) "A Review of Bioinformatics Tools to Understand Acetaminophen-Alcohol Interaction," *Medicines*, 6(3):79, doi:10.3390/medicines6030079.
23. Patel, R.; de Oliveira, A.; Newby, R.; **Chu, T.** (2019) "Flow Cytometric Analysis of Freshwater Cyanobacteria: A Case Study," *Water*, 11(7): 1422.
24. Melok, A.L., Lee, L.H., Mohamed Yussof, S.A., **Chu, T.** (2018) "Green Tea Polyphenol Epigallocatechin-3-Gallate-Stearate Inhibits the Growth of *Streptococcus mutans*: A Promising New Approach in Caries Prevention," *Dent J*, 6(3). pii: E38.
25. Lee, L.H., Krumins, J.A. and Chu, T. (2018) "Microbiology Laboratory Manual" Fifth Edition. *Hayden-McNeil Publishing*, ISBN-13: 978-1-5339-0087-6

26. Tao, X., Landis, J.N., Krisher, R.L., Duncan, F.E., Silva, E. Lonczak, A. Scott, R.T. III, Zhan, Y. **Chu, T.** Scott R.T., Treff, N.R. (2017) "Mitochondrial DNA content is associated with ploidy status, maternal age, and oocyte maturation methods in mouse blastocysts," *J Assist Reprod Genet*, 34:1587.
27. Dolby, N. **Chu, TC.**, Nichols, D.B., Majumdar, S. (2017) Microbiology with Diseases by Body System Instructor's Manual 5th Ed. Pearson. ISBN-13: 978-0-13-461902-6
28. Newby, R., Lee, L.H., Perez, J.L., Tao, X. and **Chu, T.** (2017) "Characterization of zinc stress response in Cyanobacterium *Synechococcus* sp. IU 625," *Aquatic Toxicology*, 186: 159-170.
29. Ali, B., Lee, L.H., Laskar, N., Shaikh, N., Tahir, H., Hsu, S.D., Newby Jr, R., Valsechi-Diaz, J. and **Chu, T.** (2017) "Modified Green Tea Polyphenols, EGCG-S and LTP, Inhibit Endospore in Three *Bacillus* spp.," *Advances in Microbiology*, 7: 175-187.
30. Tao X. Franasiak, JM, Zhan Y, Scott RT III, Rajchel J, Bedard J, Newby R. Scott RT, Treff NR, **Chu TC.** (2017) "Characterizing the endometrial microbiome by analyzing the ultra-low bacteria from embryo transfer catheter tips in IVF cycles: next generation sequencing (NGS) analysis of the 16S ribosomal gene". *Human Microbiome Journal*. 3: 15-21.
31. Alvi Z. **Chu TC.** Schawaroch V, Klaus A. (2016) "Genomic and expression analysis of transition proteins in *Drosophila*". *Spermatogenesis*. Apr 27; 5(3):e1178518.
32. Zhao M, Zheng R, Jiang J, Dickinson D, Fu B, **Chu TC.** Lee LH, Pearl H, Hsu S. (2015) "Topical lipophilic epigallocatechin-3-gallate on herpes labialis: a phase II clinical trial of AverTeaX formula". *Oral Surg Oral Med Oral Pathol Oral Radiol*. 120(6): 717-24.
33. de Oliveira A. Prince, D. Lo, CY, Lee LH, and **Chu TC.** (2015) "Antiviral Activity of Theaflavin Digallate against Herpes Simplex Virus Type 1". *Antiviral Research*. 118: 56-67.
34. **Chu TC.** Wu M, Pohren L. Haghjoo B. Soman C, and Lee LH. (2014) "Molecular Identification of a Fungal Pathogen *Batrachochytrium dendrobatidis* and Its Impact on Urbanized New Jersey". *Adv. in Micro*. 4(16): 1164-1173.
35. Lee LH, Wu M, Peri A, and **Chu TC.** (2014) "Method Evaluations of *Escherichia coli* and Coliform Detection in Northern New Jersey". *GSTF Journal of BioSciences*. 3(1): 40-45.
36. **Chu TC.** Adams SD, and Lee LH. (2014) "Tea Polyphenolic Compounds on Herpes Simplex Viruses". In S.P. Gupta (Ed), Cancer Causing Viruses and Their Inhibitors, *CRC Press, Taylor and Francis Group*. ISBN 9781466589773. pp. 321-344.
37. Haghjoo B. Lee LH, Habiba U. Tahir H, Olabi M, and **Chu TC.** (2013) "The Synergistic Effects of Green Tea Polyphenols and Antibiotics against Potential Pathogens". *Adv. Biosci. Biotechnol*. 4(11): 959-967.
38. Lee LH, Riggio JA and **Chu TC.** (2013) "Biology of Human Life Laboratory Manual". *Hayden-McNeil Publishing*, ISBN-13: 978-0-7380-6407-9
39. Lee LH, Garrett RD. Slusarczyk A. Perez JL. and **Chu TC.** (2013) "Bioinformatics Analyses of Chromium Tolerant Genes in Cyanobacteria and Identification of Their Operon in

- Synechococcus* sp. IU 625". *Proceedings of The 2013 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2013)*. Vol. I: 129-135.
40. Nohomovich B, Nguyen BT, Quintanilla M, Lee LH, Murray SR, and **Chu TC**. (2013) "Physiological Effects of Nickel Chloride on the Freshwater Cyanobacterium *Synechococcus* sp. IU 625". *Adv. Biosci. Biotechnol.* 4(7B): 10-14.
 41. **Chu TC** and Rienzo MJ. (2013) "Bloom-Forming Cyanobacteria and Other Phytoplankton in Northern New Jersey Freshwater Bodies". In Nigel W.T. Quinn (Ed), *International Perspectives on Water Quality Management and Pollutant Control*, InTech Publishing. pp. 1-23. ISBN: 978-953-51-0999-0.
 42. de Oliveira A, Adams SD, Lee LH, Murray SR, Hsu SD, Hammond JR, Dickinson D, Chen P, and **Chu TC**. (2013) "Inhibition of Herpes Simplex Virus Type 1 with the Modified Green Tea Polyphenol Palmitoyl-epigallocatechin Gallate". *Food Chem Toxicol.* 52: 207-215.
 43. Alvi ZA, **Chu TC**, Schawaroch V, and Klaus AV. (2013) "Protamine-like Proteins in 12 Sequenced Species of *Drosophila*". *Protein Pept Lett.* 20(1): 17-35.
 44. Ohno S, Yu H, Dickinson D, **Chu TC**, Ogbureke K, DeRossi S, Yamamoto T, and Hsu S. (2012) "Epigallocatechin-3-gallate Modulates Oxidative Stress in Exocrine Glands of a Primary Sjogren's Syndrome Mouse Model Prior to Disease Onset". *Autoimmunity.* 45(7): 540-546.
 45. Newby R and **Chu TC**. (2012) "Identification and Bioinformatic Analyses of Vanillate Operon in Cyanobacterium *Synechococcus* sp. IU 625". *Proceedings of The 2012 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2012)* Vol. I: 96-101.
 46. Lee LH, Okafor C, Rienzo MJ and **Chu TC**. (2012) "Bioinformatic Analysis of Cyanobacterial Mercuric Resistance Genes and Identification of *Synechococcus* sp. IU 625 Putative Mercuric Resistance Genes". *Proceedings of The 2012 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2012)* Vol. I: 178-183.
 47. **Chu TC**, Murray SR, Todd J, Perez W, Yarborough JR, Okafor C, and Lee LH. (2012) "Adaption of *Synechococcus* sp. IU 625 to Growth in the Presence of Mercuric Chloride." *Acta Histochem.*, 114(1):6-11. Epub 2011 Mar 15.
 48. **Chu TC**, Murray SR, Hsu SF, Vega Q and Lee LH. (2011) "Temperature-induced Activation of Freshwater Cyanophage AS-1 Prophage." *Acta Histochem.*, 113(3): 294-9. Epub 2010 Feb 6.
 49. **Chu TC**, Jimenez J, Strawn L, Reed M, Pohren L and Lee LH. (2010) "Molecular Probes for the Detection of Cyanophage AS-1 and its Cyanobacterial Hosts". *Proceedings of The 2010 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2010)* Vol. I: 356-362.
 50. **Chu TC**, Oliveira A, Rana A, and Lee LH. (2009) "Identification of *Synechococcus* sp. IU 625 Phycocyanin Gene and Bioinformatic Analyses of Cyanobacterial Phycocyanin". *Proceedings of The 2009 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2009)* Vol. I: 376-381.

51. Gillespie K, Kodani I, Dickinson DP, Ogbureke KU, Camba AM, Wu M, Looney S, **Chu TC**, Qin H, Bisch F, Sharawy M, Schuster GS, Hsu SD. (2008) "Effects of Oral Consumption of the Green Tea Polyphenol EGCG in a Murine Model for Human Sjogren's Syndrome, an Autoimmune Disease". *Life Sciences*, 83(17-18): 581-8.
52. Lee LH and **Chu TC**. (2008) "Microbiology Laboratory Manual". *Hayden-McNeil Publishing*, ISBN-13: 978-0-7380-3085-2
53. **Chu TC**, Lee LH, Gaynor JJ, Vega QC, Lustigman BK and Srinivasan S. (2007) "Identification of *Synechococcus* sp. IU 625 Metallothionein Gene and its Evolutionary Relationship to the Metallothionein Gene of Other Cyanobacteria". *Proceedings of The 2007 International Conference on Bioinformatics & Computational Biology (BIOCOMP 2007)* Vol. I: 201-207.
54. Lustigman BK, Lee LH, Ganger M and **Chu TC**. (2007) "Epiphytic Bacteria of the Surface of Marine Macroalgae Collected from the NY/NJ Coast USA". *IN VIVO*, 28(3): 13-20.
55. Lee LH, Lui D, Platner PJ, Hsu SF, **Chu TC**, Gaynor JJ, Vega QC and Lustigman BK. (2006) "Induction of Temperate Cyanophage AS-1 by Heavy Metal - Copper". *BMC Microbiology*, 6:17.
56. **Chu TC**, Lee LH, Srinivasan S, Gaynor JJ, Vega QC and Lustigman BK. (2005) "CGKB-Cyanogroup Genomics Knowledge Base". *Proceedings of METMBS (Mathematics and Engineering Techniques in Medicine and Biological Sciences) 2005*, 18-24.
57. **Chu TC**, Lee LH and Srinivasan S. (2005) "Bioinformatic Analysis of the Metal-Binding Protein Families and Heavy Metal Resistance amongst Cyanobacteria". *Proceedings of ICISIP (International Conference of Intelligent Sensing and Information Processing)* 32: 507-511.
58. Awad S, **Chu TC**, Lustigman BK and Lee LH. (2005) "Effect of Cadmium on the Growth of *Chlamydomonas*". *Journal of Young Investigators*, 13(3): 416-420.

PUBLISHED ABSTRACTS

I have published 203 abstracts with 80+ student co-authors; 53 presentations received presentation awards.

* indicates the graduate and undergraduate students I've mentored

† indicates the graduate students I've co-mentored with other faculty collaborators

1. *Vanessa Guo and **Tinchun Chu**. Optimizing Biodiversity Analysis: Building A Bioinformatic Pipeline with R For 16s rRNA Amplicon Sequencing. 28th Annual Petersheim Academic Exposition/16th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/24, pg. 5
2. *Myeong Gil Jun and **Tinchun Chu**. Exploring the Antibacterial Properties of Innovative Formulations with Epigallocatechin-3-Gallate-Palmitate (EC16). 28th Annual Petersheim Academic Exposition/16th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/24, pg. 5

** Graduate Poster Presentation Award – 3rd Place
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3. *Kassidy Beauzil, *Javid Saleh, and **Tinchun Chu**. Effects of Iron Chloride on *Anabaena Flos-aquae*. 28th Annual Petersheim Academic Exposition/16th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/24, pg. 6
4. *Abdulrahman Abdullah, *Connor Dolan, and **Tinchun Chu**. Characterization and Antimicrobial Evaluation of *Lactobacillus* Spp. From Commercial Yogurt Brands. 28th Annual Petersheim Academic Exposition/16th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/24, pg. 11

** Undergraduate Poster Presentation Award – 2nd Place

5. *James Primerano, *Ahmad Edris, and **Tinchun Chu**. Palmitoyl-EGCG (P-EGCG) as Antibacterial and Antibiofilm Agents. 28th Annual Petersheim Academic Exposition/16th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/24, pg. 12
6. *Sean Vizzard, *Ashlyn Mrachek, and **Tinchun Chu**. The Impact of Temperature on Inhibition of Gram-Negative Bacteria by *Lactobacillus Rhamnosus*. 28th Annual Petersheim Academic Exposition/16th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/24, pg. 12
7. *Javid Saleh-Esa, *Ammar Elshikh, and **Tinchun Chu**. Antifouling Property of Phthalocyanine Dimethylformamide. 27th Annual Petersheim Academic Exposition/15th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/27/23
8. *Rich K. Patel and **Tinchun Chu**. Antibacterial Properties Evaluation of Carvacrol. 27th Annual Petersheim Academic Exposition/15th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/27/23
9. *Abdulrahman Abdualлах, *Connor Dolan, *Noah Ibasitas, and **Tinchun Chu**. Growth Optimization and Characterization of *Lactobacillus* spp. in Yogurt. 27th Annual Petersheim Academic Exposition/15th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/27/23
10. *Augusta Saverimuttu and **Tinchun Chu**. Evaluation of Antibacterial Activity of Patchouli and Lipophilic Green Tea Polyphenol-Containing Formulations. 27th Annual Petersheim Academic Exposition/15th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/27/23
11. *Mariam Saleh-Esa, *Javid Saleh-Esa, and **Tinchun Chu**. Phthalocyanine Dimethylformamide as a Potential Antifouling Agent in Aquatic Ecosystems. 55th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 11/05/22, 48
12. *Ayuni Yussof and **Tinchun Chu**. Theaflavin-3,3'-digallate: a Natural Antimicrobial Agent. 55th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 11/05/22, 70

13. *Harman Gill, *Radha Patel, *Rich Patel, and **Tinchun Chu**. Antibacterial Activity of Curcumin, Carvacrol, and Their Potential Synergy with Antibiotics. 55th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 11/05/22, 71

14. *Shivani Patel, *Monika Wlodarski, and **Tinchun Chu**. Antibacterial Activity Evaluation of a Surgical Rub on *Bacillus*, *Proteus*, and *Mycobacterium* spp. 55th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 11/05/22, 72

15. *Augusta Saverimuttu and **Tinchun Chu**. Antibacterial Activity of Patchouli Extract and Fenugreek Essential Oil. 55th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 11/05/22, 73

16. *Noah Ibasitas, *Connor Dolan, *Abdulrahman Abdullah, *Zoe Raste, and **Tinchun Chu**. In Silico Analysis of Antibacterial Proteins in *Lactobacillus* spp. 55th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 11/05/22, 74

17. *Ayuni Yussof and **Tinchun Chu**. Theaflavin-3,3'-digallate: a Natural Antimicrobial Agent. 26th Annual Petersheim Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 1

**** Graduate Poster Presentation Award – 1st Place**

18. *Jake Minnies and **Tinchun Chu**. Broad-Spectrum Synergistic Antibacterial Activity Evaluation of *Pogostemon cablin* and Antibiotics. 26th Annual Petersheim Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 9

**** Undergraduate Poster Presentation Award – 3rd Place**

19. *Radha Patel, *Harman Gill, *Rich Patel, and **Tinchun Chu**. Antibacterial Properties of Curcumin and Carvacrol on *Pseudomonas* spp. and *Staphylococcus* spp. 26th Annual Petersheim Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 9

**** Undergraduate Poster Presentation Award – 1st Place**

20. *Zoe Raste and **Tinchun Chu**. Comparative Antimicrobial Activity of Pterostilbene and Antibiotics. 26th Annual Petersheim Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 10

21. *Shivani Patel, *Monika Wlodarski, *Emily Arellano, and **Tinchun Chu**. The Broad-Spectrum Antibacterial Effect of Ethanol-based Surgical Rub. 26th Annual Petersheim Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 10

**** Undergraduate Poster Presentation Award – 2nd Place**

22. *Ashley Postaski, *Ashley Saverimuttu, and **Tinchun Chu**. Evaluation of the Synergistic Antibacterial Effects of Fenugreek Essential Oils and Patchouli Extract. 26th Annual Petersheim

Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 11

23. *Mariam Saleh-Esa, *Rich Patel, *Ammar Elsheikh, *Megan Perumpail, Lana Hannineh, *Ayuni Yussof, Abdul Azeez, Sergiu Gorun, and **Tinchun Chu**. Antifouling Effects of Phthalocyanine Dimethylformamide on Phytoplankton. 26th Annual Petersheim Academic Exposition/14th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/28/22, pg. 10

24. *Gill, Harman; *Patel, Radha; **Chu, Tinchun**. The Antimicrobial Properties of Curcumin and Green Tea Formulation on *B. subtilis* and *E. coli*. 54th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queensborough, NY, 10/30/21, pg. 46

25. *Minnies, Jake; *Postaski, Ashley; *Saverimuttu, Augusta; **Chu, Tinchun**. The Synergistic Antibacterial Effect of Patchouli with Antibiotics on *Klebsiella*, *Pseudomonas*, and *Staphylococcus* spp. 54th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queensborough, NY, 10/30/21, pg. 62

26. *Patel, Rich; **Chu, Tinchun**. Antibacterial Properties of Carvacrol on *P. fluorescens* and *S. epidermidis*. 54th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queensborough, NY, 10/30/21, pg. 65

27. *Patel, Shivani; *Wlodarski, Monika; *Arellano, Emily; **Chu, Tinchun**. The Antibacterial Effect of Ethanol-based Surgical Rub on *Bacillus* and *Mycobacterium* spp. 54th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queensborough, NY, 10/30/21, pg. 66

28. *Saleh-Esa, Mariam; *Patel, Rich; **Chu, Tinchun**. The Effect of Antifouling Biomaterials on Algal Growth and Biofilm Formation. 54th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queensborough, NY, 10/30/21, pg. 69

29. *Yussof, Ayuni; **Chu, Tinchun**. Antibacterial Effect of Phthalocyanine Zinc. 54th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queensborough, NY, 10/30/21, pg. 78

30. **T Chu**, R. Rahman, and **LH Lee**. Detection, Identification and Community Composition of Cyanobacteria and Cyanophages in Barnegat Bay. ASM Microbe 2020, Session AES14. 6/22/2020. <https://www.abstractsonline.com/pp8/#!/9103/presentation/13492>

31. *Sabrina Lopez and **Tinchun Chu**. Evaluation of Sporicidal Effects of Natural Formulations Containing Lipophilic Green Tea Polyphenol. 52nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Monmouth, NJ, 10/26/19, IN VIVO, 41(2):44

**** Graduate Poster Presentation Award – 1st Place**

32. *Jose L. Perez and **Tinchun Chu**. Molecular and Physiological Characterization of *Microcystis aeruginosa* Under Zinc Stress. 52nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Monmouth, NJ, 10/26/19, IN VIVO, 41(2):53

**** Graduate Poster Presentation Award – 1st Place**

33. *Roksana Rahman and **Tinchun Chu**. Bacterial Diversity and Community Composition of Cyanobacteria and Cyanophages in Barnegat Bay. 52nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Monmouth, NJ, 10/26/19, IN VIVO, 41(2):55

**** Graduate Poster Presentation Award – 3rd Place**

34. *Paul Yoon and **Tinchun Chu**. Molecular Detection of *Legionella pneumophila* in Water Samples across Passaic County, New Jersey. 52nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Monmouth, NJ, 10/26/19, IN VIVO, 41(2):60

35. *Ayuni Yussof and **Tinchun Chu**. Anti-spore Activity and Potential Application of Theaflavin. 52nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Monmouth, NJ, 10/26/19, IN VIVO, 41(2):61

**** Graduate Poster Presentation Award – 1st Place**

36. **Chu, T.**, Rios-Ruiz, C. J., Perez, J. L., and Lee, L. H. Seasonal Monitoring of Cyanobacterial Harmful Algal Blooms and their Toxins in Recreational Water in New Jersey. 119th American Society for Microbiology (ASM) MICROBE 2019, San Francisco, CA, June 20-24, 2019, AES-1122

37. *Ayuni Yussof and **Tinchun Chu**. Theaflavin as a Potential Anti-biofilm and Anti-spore Agent. 23rd Annual Petersheim Academic Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 9

**** Graduate Poster Presentation Award – 1st Place**

38. *Jose Perez, *Paul (Jyung) Yoon, and **Tinchun Chu**. *Molecular and Bioinformatic Analysis of Zinc Stress on M. aeruginosa*. 23rd Annual Petersheim Academic Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 10

39. *Roksana Rahman, *Alexandra Greco, *Alisha Nanda, *Paul (Jyung) Yoon and **Tinchun Chu**. Characterization and Metagenomic Analysis of Cyanobacterial Communities in Barnegat Bay, New Jersey. 23rd Annual Petersheim Academic Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 11

40. *Paul (Jyung) Yoon, *Jose Perez, and **Tinchun Chu**. The Growth and Zinc Stress Response of Freshwater *Microcystis aeruginosa*. 23rd Annual Petersheim Academic Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 11

41. *Sabrina Lopez and **Tinchun Chu**. Synergistic Antibacterial Effects of Yerba Mate. 23rd Annual Petersheim Academic Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 14

**** Undergraduate Poster Presentation Award – 2nd Place**

42. *Alexandra Greco, *Alisha Nanda, *Roksana Rahman, and **Tinchun Chu**. Detection and Identification of Cyanophages in Barnegat Bay, New Jersey. 23rd Annual Petersheim Academic

Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 15

43. *Brian Cammalleri, *Oluwanidemi Fayemiwo, *Sandra Hurtado, *Ayuni Yussof, and **Tinchun Chu**. The Antibacterial Effects of Turmeric. 23rd Annual Petersheim Academic Exposition/12th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/25/19, pg. 15

44. *Sabrina Lopez, *Yan Wang, *Alexandra Greco and **Tinchun Chu**. Antibacterial Effects of Yerba Mate. 51st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Bayside, NY, 10/27/18, IN VIVO, 40(2):70

45. *Jose L. Perez and **Tinchun Chu**. Bioinformatic Analysis of Heavy Metal Stress Response in Cyanobacteria. 51st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Bayside, NY, 10/27/18, IN VIVO, 40(2):76

**** Poster Presentation Award Winner**

46. *Roksana Rahman, *Christian J. Rios-Ruiz, *Yan Wang, *Paul (Jyung) Yoon and **Tinchun Chu**. Identifying Cyanobacterial Communities in Barnegat Bay. 51st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Bayside, NY, 10/27/18, IN VIVO, 40(2):78

**** Poster Presentation Award Winner**

47. *Ayuni Yussof, *Nayab Qamar and **Tinchun Chu**. The Anti-biofilm Activity of Black Tea Polyphenol. 51st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Bayside, NY, 10/27/18, IN VIVO, 40(2):90

48. *Christian J. Rios-Ruiz and **Tinchun Chu**. Optimization Methods for Cyanobacterial Detection, Identification and Seasonal Monitoring in Recreational Water. 51st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Bayside, NY, 10/27/18, IN VIVO, 40(2):94

**** Undergraduate Poster Presentation Award – 2nd Place**

49. L. H. Lee, S. Shinde, **T-C. Chu**. L. H. Lee. Modified Green Tea Polyphenol EGCG-S as a Synergistic Agent to Enhance Antibacterial Activity of Antibiotics on Bacterial Biofilm. 118th American Society for Microbiology (ASM) MICROBE 2018, Atlanta, GA, June 7-10, 2018, A-3957

50. *Jose L. Perez and **Tinchun Chu**. Physiological Effects of Freshwater Cyanobacteria to Zinc Stress. 22nd Annual Petersheim Academic Exposition/11th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/26/18, pg. 10

**** Graduate Poster Presentation Award Winner**

51. *Elda Ponce, *Lauren Fitzgerald, *Ayuni Yussof and **Tinchun Chu**. Comparison of the Antimicrobial Effect of Two Natural Compounds: Theaflavins and Yerba Mate on Biofilm Forming Bacteria. 22nd Annual Petersheim Academic Exposition/11th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/26/18, pg. 11

52. *Ashley Walsh, *Paul Yoon, *Roksana Rahman, *Ayuni Yussof and **Tinchun Chu**. Antimicrobial Effects of Tea Polyphenols on Germination and Sporulation on *Bacillus* spp. 22nd Annual Petersheim Academic Exposition/11th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/26/18, pg. 12

53. *Christian Rios-Ruiz and **Tinchun Chu**. Cyanobacteria in Recreational Water: Optimization Methods for the Detection and Identification. 22nd Annual Petersheim Academic Exposition/11th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/26/18, pg. 16

**** Undergraduate Poster Presentation Award – 1st Place**

54. *Ishani Rana, *Nicholas DeCristofano, *Emily Russo and **Tinchun Chu**. Antibacterial Activity of Green and Black Tea Extracts. 22nd Annual Petersheim Academic Exposition/11th Annual Biological Sciences Symposium. Seton Hall University, NJ, 04/26/18, pg. 17

**** Undergraduate Poster Presentation Award – 2nd Place**

55. *Ayuni Yussof, *Aline de Oliveira and **Tinchun Chu**. Inhibition of Herpes Simplex Virus Type 1 Binding and Penetration by Theaflavin-3,3'-digallate. 2018 Theobald Smith Society Meeting in Miniature. Seton Hall University, NJ 04/20/18, pg. 6.

**** Graduate Poster Presentation Award Winner**

56. *Emily Curran, *Nicholas DeCristofano, *Ishani Rana, *Christian Rios-Ruiz and **Tinchun Chu**. Evaluation of Antibacterial and Anti-spore Properties of Theaflavins and Green Tea Extract. 50th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Jersey City, NJ, 10/28/17, IN VIVO, 39(2):54

57. *Jose L. Perez and **Tinchun Chu**. Flow Cytometric and Microscopic Analyses of Zinc-Stressed Cyanobacteria *Microcystis aeruginosa* and *Synechococcus* sp. IU 625. 50th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Jersey City, NJ, 10/28/17, IN VIVO, 39(2):68

**** Graduate Poster Presentation Award Winner**

58. *Jessica Rajchel, *Xin Tao and **Tinchun Chu**. Establishing a Method of MicroRNA (miRNA) Profiling Simultaneously with Comprehensive Chromosome Screening (CCS) in the Same Trophectoderm Bioopsy. 50th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Jersey City, NJ, 10/28/17, IN VIVO, 39(2):69

**** Graduate Poster Presentation Award Winner**

59. *Christian Rios-Ruiz, *Joshua Steier and **Tinchun Chu**. Monitoring and Identification of Harmful Algal Bloom Causing Cyanobacteria in Drinking and Recreational Water. 50th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Jersey City, NJ, 10/28/17, IN VIVO, 39(2):71

60. *Ayuni Yussof, *Aline de Oliveira and **Tinchun Chu**. Potential Antiviral Mechanism of Theaflavin-3,3'-digallate (TF3) on Herpes Simplex Virus Type 1 (HSV-1). 50th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Jersey City, NJ, 10/28/17, IN VIVO, 39(2):78

61. *Xin Tao and **Tinchun Chu**. Characterizing Microbiome of the Embryo Transfer Catheter Tips is not Predictive of Sustained Implantation. 21st Annual Petersheim Academic Exposition/10th Annual Biological Sciences Symposium, SHU, NJ, 04/20/17, pg. 8

62. *Gabriella Appice and **Tinchun Chu**. Comparative Evaluation of Antibacterial and Antibiofilm Activities of Theaflavins and Palmitoyl-EGCG. 21st Annual Petersheim Academic Exposition/10th Annual Biological Sciences Symposium, SHU, NJ, 04/20/17, pg. 9

**** Graduate Poster Presentation Award – 2nd Place**

63. *Jonathan Valsechi-Diaz and **Tinchun Chu**. Natural Compounds as a Novel Solution to Antibiotic Resistance and Spore-forming Bacteria. 21st Annual Petersheim Academic Exposition/10th Annual Biological Sciences Symposium, SHU, NJ, 04/20/17, pg. 11

**** Undergraduate Poster Presentation Award – 1st Place**

64. *Sally Tarabey, *Christian J Rios-Ruiz and **Tinchun Chu**. What's in Your Water? Identification and Characterization of Cyanobacteria in NJ Freshwater Bodies. 21st Annual Petersheim Academic Exposition/10th Annual Biological Sciences Symposium, SHU, NJ, 04/20/17, pg. 11

**** Undergraduate Poster Presentation Award – 2nd Place**

65. *Gabriella Appice and **Tinchun Chu**. Antibacterial Activity and Biofilm Formation Inhibition of tea polyphenols. 49th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 10/29/16, IN VIVO, 38(2): 72

**** Best Graduate Poster Presentation Award Winner**

66. *Robert Newby Jr. and **Tinchun Chu**. Physiological Effect of Cadmium Chloride in Freshwater Cyanobacteria *Synechococcus* sp. IU 625. 49th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 10/29/16, IN VIVO, 38(2): 90

**** Graduate Poster Presentation Award Winner**

67. *Jose L. Perez and **Tinchun Chu**. Comparative Effects of Zinc Chloride on Cyanobacteria *Microcystis aeruginosa* and *Synechococcus* sp. IU 625. 49th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 10/29/16, IN VIVO, 38(2): 93

**** Graduate Poster Presentation Award Winner**

68. *Sally Tarabey, *Christian Rios-Ruiz and **Tinchun Chu**. Identification and Characterization of Cyanophage, Cyanobacteria and potential Cyanotoxins in New Jersey Freshwater Bodies. 49th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 10/29/16, IN VIVO, 38(2): 102

69. *Xin Tao and **Tinchun Chu**. Characterizing the endometrial microbiome by analyzing the ultra-low bacteria from embryo transfer catheter tips in IVF cycles: next generation sequencing (NGS) analysis of the 16S ribosomal gene. 49th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 10/29/16, IN VIVO, 38(2):103

**** Graduate Poster Presentation Award Winner**

70. *Jonathan Valsechi-Diaz and **Tinchun Chu**. One plus one is greater than two: Optimizing Synergistic Antibacterial Effect between Tea Polyphenols and Two Antibiotics. 49th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Old Westbury, NY, 10/29/16, IN VIVO, 38(2):104

**** Undergraduate Poster Presentation Award Winner**

71. S-A. B. Mohamed-Yussof, A. L. V. Melok, **T-C. Chu**. L. H. Lee. Green Tea Polyphenols as Synergistic Agents to Enhance Antibacterial Activity of Erythromycin. 116th American Society for Microbiology (ASM) MICROBE 2016, Boston, MA, June 16-20, 2016, A-4182

72. B. Ali, L. H. Lee, **T-C. Chu**. Lipophilic Green Tea Polyphenols as Potential Inhibitor for Endospore Germination in *Bacillus* spp. 116th American Society for Microbiology (ASM) MICROBE 2016, Boston, MA, June 16-20, 2016, A-4164

73. *Ruchit Patel, *Robert Newby and **Tin-Chun Chu**. Flow cytometric and molecular analysis of freshwater cyanobacteria and potential toxins in New Jersey. New Jersey Water Environment Association (NJWEA) John J. Lagrosa 101st Annual Conference and Exposition. May 18, 2016.

**** Research Poster Presentation Award Winner – 3rd Place**

74. *Robert Newby, Jr. and **Tin-Chun Chu**. Effect of cadmium chloride on freshwater Cyanobacterium *Synechococcus* sp. IU 625. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 7

75. *Xin Tao and **Tin-Chun Chu**. Characterizing the endometrial microbiome: next generation sequencing (NGS) of the 16S ribosomal gene. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 8

76. *Jose Perez and **Tin-Chun Chu**. Effect of zinc chloride on freshwater Cyanobacterium *Microcystis aeruginosa*. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 8

77. *Ruchit Patel and **Tin-Chun Chu**. Flow cytometric analysis of cyanobacteria in New Jersey freshwater bodies. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 9

78. *Gabriella Appice, *Kathryn Carroll, *Brian Montoya, *Chidozie Onyiuke, *Aditi Sojitra, *Catherine Suarez, *Robert Newby and **Tin-Chun Chu**. Antimicrobial effects of oolong tea and lemon juice on sporulation and germination of *Bacillus* spp. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 9

79. *Jerry Jean-Louis, *Allison Nadler, *Ruchit Patel, *Satshil Rana, *Anaika Singh, *Xin Tao, *Robert Newby and **Tin-Chun Chu**. Effects of Echinacea and Ginseng on biofilm formation. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 9

80. *Jonathan Valsechi-Diaz and **Tin-Chun Chu**. The effect of natural compounds on antibiotic resistant bacteria and spore-forming bacterial species. 20th Annual Petersheim Academic

Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 10

**** Undergraduate Poster Presentation – 1st Place**

81. *Sally Tarabey, *Robert Newby, *Ruchit Patel, *Jose Perez and **Tin-Chun Chu**. Cyanobacterial detection in freshwater bodies: a case study in greenwood lake, New Jersey. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 11

**** Undergraduate Poster Presentation – 2nd Place**

82. *Diana Glah, *Brianna Dixon, *Shatavia Knight, *Amadou Mbye, *Robert Newby and **Tin-Chun Chu**. The average spice can save your life: antibacterial effect of turmeric. 20th Annual Petersheim Academic Exposition/9th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/21/16, pg. 12

83. *Aline de Oliveira, *Gabriella Appice and **Tin-Chun Chu**. Antibacterial and Anti-Herpes Simplex Virus Activity of Black Tea Polyphenols. 48th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/7/15, IN VIVO, 37(2): 47

84. *Robert Newby Jr. and **Tin-Chun Chu**. Potential Zinc Stress Response Mechanisms in *Synechococcus* sp. IU 625. 48th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/7/15, IN VIVO, 37(2): 65

**** Best Graduate Poster Presentation Award Winner**

85. *Ruchit Patel, *Robert Newby Jr. and **Tin-Chun Chu**. Flow Cytometric and Microscopic Analysis of Cyanobacteria and Their Toxins in Greenwood Lake. 48th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/7/15, IN VIVO, 37(2): 67

**** Best Graduate Poster Presentation Award Winner**

86. *Sally Tarabey, *Ruchit Patel, *Robert Newby Jr., *Jose L. Perez and **Tin-Chun Chu**. Molecular Approaches in Detecting Cyanobacteria and Their Toxins in Greenwood Lake. 48th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/7/15, IN VIVO, 37(2): 76

**** Undergraduate Research Poster Presentation Award Winner – 2nd Place**

87. *Jonathan Valsechi-Diaz, *Garrett Almeida and **Tin-Chun Chu**. Evaluation of Synergistic Antibacterial Activity of Natural Compounds and Antibiotics. 48th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/7/15, IN VIVO, 37(2): 77

88. **Tin-Chun Chu**. Tea Polyphenols as Potential Therapeutic Agents for Herpes. BIT's 3rd Annual Global Health Conference. Kaohsiung, Taiwan. pg. 36

89. *Aline de Oliveira, *Derek Prince, Lee H. Lee and **Tin-Chun Chu**. A small molecule inhibits herpes simplex virus type 1 attachment and binding to cultured A549 and Vero cells. 115th

General Meeting of the American Society for Microbiology (ASM), New Orleans, LA, May 30-June 2, 2015, A-2604

90. Sitiayuni B. Mohamed-Yussof, Lee H. Lee and **Tin-Chun Chu**. Green tea polyphenols enhance the antibacterial activity of antibiotics. 115th General Meeting of the American Society for Microbiology (ASM), New Orleans, LA, May 30-June 2, 2015, A-43

91. *Robert Newby Jr., *Jose L Perez, and **Tin-Chun Chu**. Zinc stress response mechanism in *Cyanobacterium Synechococcus* sp. IU 625. 115th General Meeting of the American Society for Microbiology (ASM), New Orleans, LA, May 30-June 2, 2015, K-2546

92. *Robert Newby, Jr., *Ruchit Patel, and **Tin-Chun Chu**. "Long term study of physiological response to zinc stress in *Synechococcus* sp. IU 625". 19th Annual Petersheim Academic Exposition/8th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/23/15. pg. 8
Graduate Research Poster Presentation Award Winner – 1st Place

93. *Andy S. Demianicz and **Tin-Chun Chu**. "Antibacterial effects of *Polygonum multiflorum*". 19th Annual Petersheim Academic Exposition/8th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/23/15. pg. 8

94. *Derek Prince and **Tin-Chun Chu**. "Effect of Chinese Knotweed extract on herpes simplex virus type-1 infection of vero cells". 19th Annual Petersheim Academic Exposition/8th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/23/15. pg. 9

95. *Leslie Landy, *Nicolle Segarra and **Tin-Chun Chu**. "Evaluation of antibacterial activity and germination inhibition of patchouli oil and turmeric". 19th Annual Petersheim Academic Exposition/8th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/23/15. pg. 12
Undergraduate Research Poster Presentation Award Winner – 1st Place

96. *Jonathan Valsechi-Diaz, *Sally Tarabey, *Garrett Almeida, and **Tin-Chun Chu**. "Effects of crude oil on *Synechococcus* sp. IU 625". 19th Annual Petersheim Academic Exposition/8th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/23/15. pg. 12
Undergraduate Research Poster Presentation Award Winner – 3rd Place

97. *Anaika Singh, *Jillian Cortese and **Tin-Chun Chu**. "Flow cytometric analysis of water samples collected from Barnegat Bay, New Jersey". 19th Annual Petersheim Academic Exposition/8th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/23/15. pg. 12

98. †Zain Alvi, **Tin-Chun Chu** and Angela Klaus. Putative Transition Proteins in 12 Sequenced *Drosophila* Species. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 56
**** Best Graduate Poster Presentation Award Winner**

99. *Aline de Oliveira and Tin-Chun Chu. Antiviral Activity of Black Tea Theaflavins against Herpes Simplex Virus 1. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 64

100. *Andy S. Demianicz and **Tin-Chun Chu**. Antibacterial Effect of *Polygonum multiflorum*. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 65

101. *Robert Newby Jr. and **Tin-Chun Chu**. Physiological Molecular Analyses of ZnCl₂ Stress Response in Cyanobacterium *Synechococcus* sp. IU 625. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 84

**** Best Graduate Poster Presentation Award Winner**

102. *Jose Perez and **Tin-Chun Chu**. Extraction and Antibacterial Activity Evaluation of Freshwater Cyanobacterial Exopolysaccharide. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 87

103. *Derek Prince and **Tin-Chun Chu**. Antiviral Activity of *Polygonum multiflorum*. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 89

**** Best Graduate Poster Presentation Award Winner**

104. *Kirsten Simmons, *Nicolle Segarra, *Leslie Landy, *Jonathan Valsechi-Diaz and Tin-Chun Chu. Synergistic Antibacterial Activity of Turmeric and Garlic with Selected Antibiotics. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 94

**** Undergraduate Research Poster Presentation Award Winner – 2nd Place**

105. *Anaika Singh, *Jillian Cortese, *Robert Newby Jr. and Tin-Chun Chu. Flow Cytometry Analysis of Cyanobacteria in Barnegat Bay, New Jersey. 47th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Centre, NY, 11/1/14, IN VIVO, 36(2): 94

106. Nozrin Laskar, Hassan Tahir, **Tin-Chun Chu** and Lee H. Lee. Effects of Green Tea Polyphenols on Endospore Germination in *Bacillus cereus*, *B. megaterium* and *B. subtilis*. 114th General Meeting of the American Society for Microbiology (ASM), Boston, MA, May 17-20, 2014, A-505

107. Hassan Tahir, Lee H. Lee and **Tin-Chun Chu**. Green Tea Polyphenols and Modified Lipophilic Tea Polyphenols Inhibit Biofilm Formation in *Pseudomonas aeruginosa* and *Pseudomonas fluorescens*. 114th General Meeting of the American Society for Microbiology (ASM), Boston, MA, May 17-20, 2014, A-1952

108. *Aline de Oliveira and **Tin-Chun Chu**. Black Tea Theaflavins as a Novel Approach to Inhibit Herpes Simplex Virus Infections. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ 04/24/14. P.7

**** Graduate Research Poster Presentation Award Winner – 1st Place**

109. *Margaret Bell and **Tin-Chun Chu**. The Use of Natural Products as Potential Anti-*Pseudomonas* Agents. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/24/14. P.8

110. *Derek Prince and **Tin-Chun Chu**. Antimicrobial Activity of Sulfated Polysaccharide. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/24/14. P.8

111. *Nicole Elia and **Tin-Chun Chu**. Analysis of Marine Phytoplankton Species in Barnegat Bay, New Jersey. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/24/14. P.9

112. *Andy Demianicz, *Subasinghe Niss Dias, *Nicole Elia, *James McCauley, *Daniel Pinho, *Derek Prince, *Kyle Silbernagel, *Zakary Yermolenko and **Tin-Chun Chu**. Effect of Nickel, Iron and Selenium on Cyanobacterium *Synechococcus* sp. IU 625. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/24/14. P.8

113. †Zain A. Alvi, **Tin-Chun Chu** and Angela Klaus. Putative Sperm Chromatin Condensing Proteins and Conserved Domains in Drosophila: Histone H1 Linker-Like and Transition Proteins. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/14, P. 11

114. *Jillian Cortese, *Jude Sanchez, *Anaika Singh and **Tin-Chun Chu**. The Combined Physiological Effect of Nickel Chloride and Iron Chloride on Cyanobacterium *Synechococcus* sp. IU 625. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/24/14. P.12

115. *Leslie Landy, *Connor McAuley, *Kirsten Simmons and **Tin-Chun Chu**. Antibacterial Activity of Spices and Their Potential Synergy with Selected Antibiotics. 18th Annual Petersheim Academic Exposition/7th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/24/14. P.13

**** Undergraduate Research Poster Presentation Award Winner – 1st Place**

116. *Margaret Bell and **Tin-Chun Chu**. Red Algae Polysaccharide as a Potential Anti-*Pseudomonas* Agent. 46th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Paramus, NJ, 10/26/13, IN VIVO, 35(2): 39

**** Best Graduate Poster Presentation Award Winner**

117. *Aline de Oliveira, *Derek Prince and **Tin-Chun Chu**. Black Tea Theaflavins as a Novel Way to Inhibit Herpes Simplex Virus. 46th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Paramus, NJ, 10/26/13, IN VIVO, 35(2): 45

118. *Nicole Elia and **Tin-Chun Chu**. Identification and Isolation of Phytoplankton and Their Viruses from Barnegat Bay in New Jersey. 46th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Paramus, NJ, 10/26/13, IN VIVO, 35(2): 47

119. *Robert Newby Jr. and **Tin-Chun Chu**. Zinc Stress Response in *Acinetobacter baylyi* ADP1. 46th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Paramus, NJ, 10/26/13, IN VIVO, 35(2): 63

120. *Anaika Singh, Jillian Cortese, *Jude Sanchez and **Tin-Chun Chu**. Physiological Response of *Chlamydomonas* to Nickel Chloride. 46th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Paramus, NJ, 10/26/13, IN VIVO, 35(2): 72

121. *Aline de Oliveira and **Tin-Chun Chu**. Synergistic Antimicrobial Activity of Theaflavin and Antiseptics. 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 15-16

122. *Franzie Edquilag, *Evan Venino and **Tin-Chun Chu**. Antibacterial Activity of Polymethoxylated Flavones (PMFs). 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 17

123. *Nicole Elia and **Tin-Chun Chu**. Detection and Identification of Marine Phytoplankton in Barnegat Bay. 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 18

124. *Annamarie Fernandes, *Mohammed Junaid Alam, *Jonathan Morales and **Tin-Chun Chu**. Detection and Identification of Phytoplankton in Delaware River near New Hope, PA and Lambertville, NJ. 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 19

125. *Robert Newby Jr. and **Tin-Chun Chu**. Effects of Zinc Chloride on Two Freshwater Microbes: *Synechococcus* sp. IU 625 and *Caulobacter crescentus* NA1000. 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 33

**** Best Doctoral Poster Presentation Award Winner**

126. *Brian Nohomovich, *Michael Quintanilla and **Tin-Chun Chu**. Physiological Response of *Synechococcus* sp. IU 625 to Nickel Chloride. 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 33-34

127. *Yansel Nunez and **Tin-Chun Chu**. Potential Synergistic Effect of Myricetin and Antiseptics. 45th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 10/27/12, IN VIVO, 34(2): 34

128. *Franzie Edquilag and **Tin-Chun Chu**. Direct Bacterial Inhibition and Antibiotic Synergism of Polymethoxylated Flavones (PMFs). 17th Annual Petersheim Academic Exposition/6th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 42

129. *Aline de Oliveira and **Tin-Chun Chu**. Theaflavins as Potential Antimicrobial Coadjuvants for Antiseptics. 17th Annual Petersheim Academic Exposition/6th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 44

**** Graduate Poster Presentation Award Winner – 2nd Place**

130. †Zain A. Alvi, **Tin-Chun Chu** and Angela Klaus. A Bioinformatics Methodology for the Identification of Chromatin Condensing Proteins in *Drosophila* Testes. 17th Annual Petersheim Academic Exposition/6th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 46

131. *Robert Newby Jr. and **Tin-Chun Chu**. The Physiological Response of *Caulobacter crescentus* and *Acinetobacter* sp. ADP1 to Zinc Stress. 17th Annual Petersheim Academic Exposition/6th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 52-53/6

132. *Brian Nohomovich and **Tin-Chun Chu**. Responses of *Cyanobacterium Synechococcus* sp. IU 625 during Nickel Stress. 17th Annual Petersheim Academic Exposition/6th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 53

133. *Nicole Elia and **Tin-Chun Chu**. Identification of Bloom-Causing Phytoplankton in Barnegat Bay. 17th Annual Petersheim Academic Exposition/6th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 54

134. *Kimberly Bernard, *Annamarie Fernandes, *Daniel Pinho and **Tin-Chun Chu**. Antibacterial Effects of Spices on Selected Bacteria. 5th Annual Biological Sciences Symposium, Seton Hall University, NJ, 04/25/13, P. 54-55

**** Undergraduate Poster Presentation Award Winner – 3rd Place**

135. †Zain A. Alvi, **Tin-Chun Chu**, Valerie Schawaroch and Angela Klaus. Analysis of the sperm-specific histone H1 linker-like protein in 12 species of *Drosophila*. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 22

136. *Daniel Barnes, *Kaitlyn Esposito and **Tin-Chun Chu**. Potential Synergistic Effect of Fruit Peel Solutions on Antiseptics and Antibiotics. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 23

137. *Kerly Guerrero, *Yansel Nunez and **Tin-Chun Chu**. Potential Synergistic Effect of Polysaccharides and Antiseptics. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 30

138. *Aline de Oliveira, Lee H. Lee, Sandra Adams, Sean R. Murray and **Tin-Chun Chu**. Inhibition of Herpes Simplex Virus Type 1 with the Modified Green Tea Polyphenol Pamitoylepigallocatechin Gallate. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 38

139. *Matthew J. Rienzo and **Tin-Chun Chu**. Detection and Identification of Bacteria, Cyanobacteria, and Phytoplankton: A Biodiversity Study of Freshwater Lakes in Essex County, New Jersey. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 42

140. Jiayu Tan, **Tin-Chun Chu** and Lee H. Lee. Nickel Chloride on the Growth and Exopolysaccharides Production in *Cyanobacteria Synechococcus* sp. IU 625. 44th Annual Fall

Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 45

141. *Jeffrey Tsai and **Tin-Chun Chu**. Antibacterial Activity of Spices and Their Potential Synergistic Effect with Antibiotics. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 46

142. *Evan Venino, *Franzie Edquilag and **Tin-Chun Chu**. Antibacterial Activity of Polymethoxylated Flavones (PMFs) and Their Synergistic Effects with Antibiotics and Antiseptics. 44th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, South Orange, NJ, 10/29/11, IN VIVO, 33(2): 46

143. *Matthew J. Rienzo and **Tin-Chun Chu**. Identification of Common Bloom Forming Cyanobacteria and Other Phytoplankton in New Jersey Freshwater Ecosystems. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 67-68/17

**** Graduate Poster Presentation Award Winner – 1st Place**

144. *Evan Venino, Franzie Edquilag and **Tin-Chun Chu**. The Synergistic Effects of Polymethoxylated Flavones (PMFs) with Antibiotics and Antiseptics. 16th Annual Petersheim Academic Exposition, Seton Hall University. P. 69-70

**** Undergraduate Poster Presentation Award Winner – 3rd Place**

145. *Elaine Sanjuan, *Maggie La Forte and **Tin-Chun Chu**. Antibacterial Activity of Black and Green Tea Polyphenols. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 70-71/9

146. *Rohail Malik, *Daniel Barnes and **Tin-Chun Chu**. Synergistic Antibacterial Activities of Herb, Spice & Fruit Peels with Antibiotics and Antiseptics. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 71/11

**** Undergraduate Poster Presentation Award Winner – 2nd Place**

147. *Kerly Guerrero, *Yansel Nunez and **Tin-Chun Chu**. Synergistic Antibacterial Activities of *Fallopia multiflora* and Antiseptics. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 71-72/11

148. *Brian Nohomovich, *Matthew Rienzo, *Aline de Oliveira and **Tin-Chun Chu**. Effect of Nickel Stress on Freshwater Cyanobacteria. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 72-73/18

149. *Ahasis Ahmed, *Kristin Althausen, *Andrew Gewain, *Ria John and **Tin-Chun Chu**. Effect of Copper Stress on Freshwater Cyanobacteria. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 73/18

150. +Zain A. Alvi, **Tin-Chun Chu** and Angela V. Klaus. Sperm Nuclear Basic Proteins in *Drosophila*: Evidence for Conserved DNA-binding Domains and Protein-Protein interaction Regions. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 74/14

151. *Ryan Gelsinger, *Matthew Emery, *Mutaz Fakhry and **Tin-Chun Chu**. Effect of Cadmium Stress on Freshwater Cyanobacteria. 16th Annual Petersheim Academic Exposition/5th Annual Biological Sciences Symposium, Seton Hall University. P. 74-75/17
 152. *Matthew J. Rienzo and **Tin-Chun Chu**. Identification of Bloom-forming Cyanobacteria and Algae in Freshwater Bodies of Essex County, New Jersey. Hudson-Delaware Regional Chapters of the Society of Environmental Toxicology and Chemistry (HDC-SETAC) 2012 Annual Spring Meeting. April 26-27, 2012. Montclair State University, Montclair, NJ, P. 16
 153. †Umme Habiba, *Aline de Oliveira, †Bobak Haghjoo, Lee H. Lee and **Tin-Chun Chu**. Potential Usage of LTP as a Synergistic Agent for Antibiotic Therapy. 112th General Meeting of the American Society for Microbiology (ASM), San Francisco, CA, June 16-19, 2012, A-2142
 154. *Aline de Oliveira, *Jennifer Todd and **Tin-Chun Chu**. Theaflavins as Potential Synergistic Agents for Antiseptics. 112th General Meeting of the American Society for Microbiology (ASM), San Francisco, CA, June 16-19, 2012, A-2153
 155. *Matthew J. Rienzo and **Tin-Chun Chu**. Survey of Bloom-forming Cyanobacteria and Other Phytoplankton in Northern New Jersey Freshwater Lakes. 112th General Meeting of the American Society for Microbiology (ASM), San Francisco, CA, June 16-19, 2012, N-1407
 156. **Tin-Chun Chu**, †Jose L. Perez, *Robert Newby, Jr., †Chiedozi Okafor, and Lee H. Lee. Identification of Zinc Resistant Genes and Study of the Effect of Zinc on Cyanobacterium *Synechococcus* sp. IU 625. 111th General Meeting of the American Society for Microbiology (ASM), New Orleans, LA, May 21-24, 2011, 119/N-1303.
 157. *Robert Newby Jr., *Matthew J. Rienzo and **Tin-Chun Chu**. Physiological Responses of Freshwater Cyanobacterium *Synechococcus* sp. IU 625 to Zinc Chloride. Chesapeake-Potomac and Hudson-Delaware Regional Chapters Joint Regional SETAC Meeting. April 27-28, 2011. Blue Ball Barn, Alapocas Run State Park, Wilmington, DE, 04/27-28/11. p.23
- ** Graduate Poster Presentation Award Winner – 1st Place**
158. Bobak Haghjoo, **Tin-Chun Chu** and Lee H. Lee. (2011) The Effects of Heavy Metal Toxicity on the Morphology and DNA of Cyanobacteria *Synechococcus* sp. IU 625. 43rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Center, NY, 10/23/10, IN VIVO, 32(2):36
 159. *Robert Newby, Jr., Lee H. Lee and **Tin-Chun Chu**. (2011) Use of *Synechococcus* sp. IU 625 for Understanding the Role of Metallothionein in Heavy Metal Caused Freshwater Harmful Algal Blooms. 43rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Center, NY, 10/23/10, IN VIVO, 32(2):40
 160. †Dozie Okafor, †Jose L Perez, **Tin-Chun Chu**, and Lee H. Lee. (2011) Identification and Determination of Expression Levels of Mercuric Resistance Genes in *Synechococcus* sp. IU 625. 43rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Center, NY, 10/23/10, IN VIVO, 32(2):41
 161. †Jose Leovigildo Perez, †Dozie Okafor, **Tin-Chun Chu** and Lee H. Lee. (2011) Zinc and Cadmium Resistance and Their Effects on *Synechococcus* sp. IU 625. 43rd Annual Fall

Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Center, NY, 10/23/10, IN VIVO, 32(2):42

162. *Michelle Reed, *Matthew Rienzo, *Lauren Pohren, Lee H. Lee and **Tin-Chun Chu**. (2011) Cyanobacteria Detection: A Case Study in Lake Wapalanne. 43rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Center, NY, 10/23/10, IN VIVO, 32(2):43

163. *Jennifer Todd, *Lauren Strawn, *Jonathan Jimenez and **Tin-Chun Chu**. (2011) Phenol Power: A Study of the Antimicrobial Effects of Polyphenolic Tea Compounds. 43rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Rockville Center, NY, 10/23/10, IN VIVO, 32(2):48

164. **Tin-Chun Chu**, *Robert Newby, Jr. and Lee H. Lee. Evidence for Heterotrophic Growth and Plasmid Construct for Vanillate-Inducible Gene Expression in *Synechococcus* sp. IU 625. 110th General Meeting of the American Society for Microbiology (ASM), San Diego, CA, May 23-27, 2010, 05/25/10. N-1372.

165. *Robert Newby Jr., Lee H. Lee and **Tin-Chun Chu**. Potential use of vanillate inducible gene expression of metallothionein in heavy metal stressed *Synechococcus* sp. IU 625. Hudson-Delaware Regional Chapter of the Society of Environmental Toxicology and Chemistry. April 21-22, 2010. The Historic Prallsville Mills, Stockton, NJ, 04/22/10

**** Graduate Poster Presentation Award Winner – 2nd Place**

166. *Jonathan Jimenez, *Lauren Pohren, *Michelle Reed, *Lauren Strawn and **Tin-Chun Chu**. (2010) Freshwater Cyanophage AS-1 Genome Project: From Sequencing to Mapping. 42nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/24/09, IN VIVO, 31(2):53

167. *Robert Newby, Jr., Lee H. Lee and **Tin-Chun Chu**. (2010) Potential plasmid for vanillate-inducible gene expression in *Synechococcus* sp. IU 625. 42nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/24/09, IN VIVO, 31(2):55

168. †Dozie Okafor, †Jose L Perez, **Tin-Chun Chu**, and Lee H. Lee. (2010) Identification and Characterization of Mercury Resistant Genes in Cyanobacterium *Synechococcus* sp. IU 625. 42nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/24/09, IN VIVO, 31(2):55

169. *Bijal Patel, *Christina Picciano, *Jennifer Todd, Lee H. Lee and **Tin-Chun Chu**. (2010) Mercuric Chloride Resistance in *Synechococcus* sp. IU 625. 42nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/24/09, IN VIVO, 31(2):56

170. Arti Rana, Lina Halawani, †Aline Oliveira, **Tin-Chun Chu** and Lee H. Lee. (2010) Characterization of phycocyanin operon in Cyanobacterium *Synechococcus* sp. IU 625. 42nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/24/09, IN VIVO, 31(2):56

171. Vico Viggiano, Shyam Patel, †Jose L. Perez, **Tin-Chun Chu** and Lee H. Lee. (2010) Study of the Effect of Cupric Chloride and Cadmium Chloride on Cyanobacteria *Synechococcus* sp. IU 625. 42nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/24/09, IN VIVO, 31(2):59 .
172. **Tin-Chun Chu**, Jason Schifano, †Winder Perez, Quinn Vega, and Lee Lee. (2009) Increased copy number of plasmid pANL in *Synechococcus* sp. IU 625 is associated with increased resistance to mercuric chloride. American Society for Microbiology 109th General Meeting Abstract (ISBN: 978-1555815226) p.361
173. Sahar M Arekat, Rita Sheth, Jennifer Samy Garas, Lee H. Lee, and **Tin-Chun Chu**. (2009) The Effect of Phosphate on the Growth of the Cyanobacterium *Synechococcus* sp. IU 625. 41st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/01/08, IN VIVO. 30(2):5
174. Jean-Edson Belcourt, Arfa Nayyer, Lee H. Lee, and **Tin-Chun Chu**. (2009) Induction of Temperate Cyanophage AS-1 by Heavy Metal - Mercury. 41st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/01/08, IN VIVO. 30(2):6
175. Bobak Haghjoo, Alexandra Laurent, Lee H. Lee, and **Tin-Chun Chu**. (2009) Isolation and Purification of Cyanobacterium *Synechococcus* sp. IU 625 and Cyanophage AS-1. 41st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/01/08, IN VIVO. 30(2):11
176. †Aline Oliveira, Arti Rana, Lee H. Lee, **Tin-Chun Chu**, and Jack Gaynor. (2009) Study of Phycocyanin Gene and Primer Design in Cyanobacterium *Synechococcus* sp. IU 625. 41st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/01/08, IN VIVO. 30(2):19
177. Prayag Patel, Kathleen Thomas, Lee H. Lee, and **Tin-Chun Chu**. (2009) Induction of Temperate Cyanophage AS-1 by Phosphate. 41st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/01/08, IN VIVO. 30(2):19
178. †Winder Perez, Constantino Lambroussis, Lee H. Lee, Quinn Vega, and **Tin-Chun Chu**. (2009) Identification of Plasmids, Mercury Resistance Genes and Primer Design for PCR Based Assay in Cyanobacterium *Synechococcus* sp. IU 625. 41st Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Montclair, NJ, 11/01/08, IN VIVO. 30(2): 19-20
179. Nahid Shahidi, Sare Gomaa, Bijin J. Vadasserril , Lee H. Lee, **Tin-Chun Chu** , John J. Gaynor and Quinn C. Vega (2008) "Identification of Phycocyanin Gene in Cyanobacteriaum *Synechococcus* sp. IU 625." 40th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Queens, NY, 10/20/07, IN VIVO, 29(2): 20
180. Adriana Herrera, Jason Schifano, †Winder Perez, Lee H. Lee, Quinn Vega, **Tin-Chun Chu** and Bonnie Lustigman. (2007) "Study the Molecular Mechanism in the Heavy Metal Resistant

Cyanobacteria *Anacystis nidulans*". 39th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/28/06, IN VIVO, 28(2): 19

181. Aude Mugisha, Humaira Khalil, Tatiana Musulin, Se Na Hong, Lee H. Lee, **Tin-Chun Chu** and Bonnie Lustigman. (2007) "Study the Effect of Mercury and the Combined Effect of Iron and Mercury on the Growth of Cyanobacteria *Anacystis nidulans*". 39th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/28/06, IN VIVO, 28(2):22

182. **Tin-Chun Chu**, Lee H. Lee, John J. Gaynor, Bonnie K. Lustigman, Shankar Srinivasan and Quinn C. Vega. (2006) "Recognition of Metallothionein Gene in Cyanobacteria *Anacystis nidulans* and Comparative Analyses of Heavy Metal Resistance Gene amongst Cyanobacteria". ASM 106th General Meeting Abstracts: N-063

183. Lee H. Lee, **Tin-Chun Chu**, Bonnie K. Lustigman, Quinn C. Vega and John J. Gaynor. (2006) "Selection and Characterization of Heavy Metal Resistant Cells from Cyanobacteria *Anacystis nidulans*". ASM 106th General Meeting Abstracts: N-062

184. **Tin-Chun Chu**, Lee H. Lee, Shankar Srinivasan, Patricia Platner, Shi-Fang Hsu, John J. Gaynor, Quinn C. Vega and Bonnie K. Lustigman. (2005) "Genome Project of Cyanophage AS-1/ Cyanobacteria *Anacystis nidulans* and Establishment of a Cyanogroup Genomics Knowledge Base (CGKB)". ASM 105th General Meeting Abstracts: N-196

185. Lee H. Lee, **Tin-Chun Chu**, Patricia J. Platner, Shi-Fang Hsu, Doris Lui, John J. Gaynor, Quinn C. Vega and Bonnie K. Lustigman. (2005) "Induction of Temperate Cyanophage AS-1 by UV Radiation, Mitomycin C, and Heavy Metals Cadmium and Zinc". ASM 105th General Meeting Abstracts: N-001

186. Bonnie K. Lustigman, Venessa Heba, John Berger, Sandra Adams, **Tin-Chun Chu** and Lee H. Lee. (2005) "Isolation and Identification of Antimicrobial Substances Extracted from Epiphytic Bacteria on Seaweeds of the New Jersey/New York Coast". ASM 105th General Meeting Abstracts: N-030

187. **Tin-Chun Chu**, Patricia Platner, Doris Lui, Lee H. Lee, Shankar Srinivasan, Quinn C. Vega, Bonnie K. Lustigman and Jack Gaynor. (2005) "Bioinformatic Analysis of Metal-Binding Protein Families and Heavy Metal Resistance among Cyanobacteria". 37th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 11/06/04, IN VIVO, 26(2):10

188. Doris Lui, Patricia Platner, **Tin-Chun Chu**, Shi-Fang Hsu, Lee H. Lee, Quinn Vega, Bonnie Lustigman and Jack Gaynor. (2005) "Induction of a Temperate Cyanophage AS-1 by Heavy Metals". 37th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 11/06/04, IN VIVO, 26(2):19

189. Patricia Platner, Doris Lui, **Tin-Chun Chu** and Shi-Fang Hsu, Lee H. Lee, Quinn Vega, Bonnie Lustigman and Jack Gaynor. (2005) "Induction of Temperate Cyanophage AS-1 by UV Irradiation and Mitomycin C". 37th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 11/06/04, IN VIVO, 26(2):21

190. Bonnie K. Lustigman, Lee H. Lee, Darrin Wolsko, and **Tin-Chun Chu**. (2004) "Symbiotic Marine Bacteria Isolated From the Surface of Seaweeds of the New Jersey/New York Coast and their Production of Antimicrobial Substances". ASM 104th General Meeting Abstracts: N-217
191. Lee H. Lee, Shi-Fang Hsu, Patricia J. Platner, **Tin-Chun Chu**, and Bonnie K. Lustigman. (2004) "Study of the Effect of Iron and the Combined Effect of Iron and Mercury on the Growth of Cyanobacteria *Anacystis nidulans*". ASM 104th General Meeting Abstracts: N-180
192. **Tin-Chun Chu**, Patricia Platner, Shi-Fang Hsu, Lee H. Lee, John J. Gaynor, Quinn C. Vega, Chunguang Du and Bonnie K. Lustigman. (2004) "Establishment of a Knowledgebase for Cyanophage and Cyanobacteria Genomics". 36th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Staten Island, NY, 11/01/03, IN VIVO, 25(2):5
193. Shi-Fang Hsu, Patricia Platner, **Tin-Chun Chu**, Lee H. Lee and Bonnie Lustigman. (2004) "Study of the Effect of Ferric Chloride on the Growth of Cyanobacteria *Anacystis nidulans*". 36th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Staten Island, NY, 11/01/03, IN VIVO, 25(2):13
194. Patricia Platner, Shi-Fang Hsu, **Tin-Chun Chu**, John J. Gaynor, Lee H. Lee, Quinn C. Vega, and Bonnie K. Lustigman. (2004) "Characterization of Clones from Cyanophage AS-1 DNA Library". 36th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Staten Island, NY, 11/01/03, IN VIVO, 25(2):19
195. Ting-Hsiu Liu, **Tin-Chun Chu**, Masayuki Shibata, Thomas J. Dougherty, and Ravindra K. Pandey. (2003) "Bioinformatics and Structural Bioinformatics Analyses of Galectin Ligand Binding Specificities and its Implication in Developing Target Specific Photodynamic Therapy Agents". 226th ACS National Meeting Abstracts: No. 135:24
196. **Tin-Chun Chu**, Patricia J. Platner, Shi-Fang Hsu, Chunguang Du, Vega Quinn, John J. Gaynor, Bonnie K. Lustigman and Lee H. Lee. (2003) "Genome Project of Cyanophage AS-1 and Cyanobacteria *Anacystis nidulans*". ASM 103rd General Meeting Abstracts: N-068
197. Lee H. Lee, Bonnie K. Lustigman, Patricia J. Platner, Shi-Fang Hsu and **Tin-Chun Chu**. (2003) "Study of the Combined Effect of Selenium Dioxide and Cadmium Chloride on the Growth of Cyanobacteria *Anacystis nidulans*". ASM 103rd General Meeting Abstracts: N-069
198. **Tin-Chun Chu**, Shi-Fang Hsu, Patricia J. Platner, Lee H. Lee, Quinn Vega, John J. Gaynor, Chunguang Du and Bonnie K. Lustigman. (2003) "Bioinformatic Analysis of Cyanophage AS-1". 35th Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 10/26/02, IN VIVO, 24(1):15
199. Lee H. Lee, Bonnie K. Lustigman and **Tin-Chun Chu**. (2001) "The Effect of Sodium Selenate and Sodium Selenite on the Growth of *Anacystis nidulans*". ASM 101st General Meeting Abstracts: N-2, pg. 483
200. Bonnie K. Lustigman, Lee H. Lee, Darrin Wolsko and **Tin-Chun Chu**. (2001) "Effect of selenium, selenite and selenate on the growth of *Chlamydomonas reinhardtii*". ASM 101st General Meeting Abstracts: N-3, pg. 483

201. Patricia J. Platner, **Tin-Chun Chu**, Kristen Barber, Lee H. Lee, Bonnie K. Lustigman. (2001) "The Effect of Sodium Selenate on the Growth of Cyanobacteria *Anacystis nidulans*". 33rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 11/04/2000, IN VIVO, 22(2):5

202. Patricia J. Platner, Jeffrey Su, **Tin-Chun Chu**, John J. Gaynor, Quinn C. Vega and Lee H. Lee. (2001) "Preliminary Analysis of Yeast Cold Shock Induced Gene Expression Using a Yeast Gene Array Chip". 33rd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Brooklyn, NY, 11/04/2000, IN VIVO, 22(2):13

203. Lauren Capone, **Tin-Chun Chu**, Lee H. Lee, Bonnie K. Lustigman. (2000) "Study of the Combined Effects of Selenium and Cadmium on the Growth of Cyanobacteria *Anacystis nidulans*". 32nd Annual Fall Metropolitan Association of College and University Biologists (MACUB) Conference, Garden City, NY, 11/13/1999, IN VIVO, 21(2):10

CURRICULUM/COURSE DEVELOPMENT

- BIOL3688 Emerging Infectious Disease
- Hackensack Meridian School of Medicine (SOM) curriculum design team

PROFESSIONAL SOCIETY MEMBERSHIPS

2011-2012	Member of the Ecology Society of America (ESA)
2010-present	Member of the Society for Applied Microbiology (SfAM)
2008-present	Member of the American Association for the Advancement of Science (AAAS)
2007-present	Member of the Theobald Smith Society – New Jersey Branch of ASM
2001-present	Member of the American Society for Microbiology (ASM)
1999-present	Member of the Metropolitan Association of College and University Biologists (MACUB)
2003-2008	Member of the American Chemical Society (ACS)