

ACPHS Seventh Annual Research Forum

Saturday, January 28, 2017

**Albany Campus, Gozzo Student Center, Room 201
(with video to Vermont Campus, Room 310)**

This annual conference provides an update on scientific developments on the Albany College of Pharmacy and Health Sciences campus and, through invited conference speakers, relates these reports to the national context in which pharmaceutical research is proceeding.

8:00 – 8:30

Continental Breakfast

8:30 – 8:40

Welcome Message



ACPHS President Greg Dewey, PhD

8:40 – 9:15

Keynote Speaker

“Advancing Medicines for Tomorrow: Pressures, Paradigms and Progress – the Roles of Science and Collaboration”



Keith Horspool, PhD

*Vice President, Material and Analytical Sciences
Boehringer Ingelheim, Ridgefield, CT*

AGENDA

9:15 – 9:30

Safety First



*Shannon R. Magari, ScD, MS, MPH
Colden Corporation, Ballston Lake, NY*

9:30 – 9:40

Recognition of Faculty and Staff Services to Office of Research and Scholarly Activity



*Shaker A. Mousa, PhD, MBA
ACPHS Vice Provost of Research and Professor, Dept. of Pharmaceutical Sciences
Executive VP and Chairman, Pharmaceutical Research Institute*

9:40 – 9:50

ACPHS Chapter AAPS



Chiara Evans
(President)



Lilly Cheng
(Past President)

Panel Discussion

9:50 – 11:00

Oncology: Current Trends

Moderator: Shaker A. Mousa

Panel: James Gallo, PhD; Paul J. Davis, MD; Stewart Sell, MD; Badar Mian, MD

- I. *Neuro Oncology (Gallo)*
- II. *Novel Strategies in Cancer Management–Role of $\alpha v\beta 3$ Antagonist Targeting in Glioma and Other Cancers (Davis)*
- III. *Cancer Stem Cell and Impact of Immunotherapy (Sell)*
- IV. *Management Strategies in Urological Cancer (Mian)*

AGENDA

11:00 – 11:45

POSTER VIEWING & Networking

11:45 – 12:20

Keynote Speaker

“The Value of Innovation”



Nathan Tinker, PhD
Executive Director
NewYorkBIO

12:20 – 2:30

LUNCH and POSTER VIEWING

Oral Session

2:30 – 3:30

Ten Minute Talks



“Novel Non-Retinoid RPE65 Isomerase Antagonists for the Treatment of Age-Related Macular Degeneration and Stargardt Disease”

Christopher Cioffi, PhD
Assistant Professor, Basic & Clinical Sciences
Albany College of Pharmacy and Health Sciences



“Quantifying the Minimum Adherence Threshold Associated with the Development of Reverse Transcriptase Resistance Mutations Among HIV-infected Veterans’ Affairs Patients Receiving Antiretroviral Therapy”

Jenna Yager, PharmD x2017
Albany College of Pharmacy and Health Sciences

AGENDA



“Healthcare, Alliances, and Virtues in the Women’s Health Movement: An Initial Study of the Our Bodies, Ourselves Archives”

Barry DeCoster, PhD

Assistant Professor, Humanities & Communication

Wendy Parker, PhD

Assistant Professor, Basic & Clinical Sciences

Albany College of Pharmacy and Health Sciences



“ ‘I didn’t want them to tear apart everything I said’: Patient and Provider Perspectives on Sexual Assault Disclosure”

Ingrid V. Williams, BS

Humanities & Communication

Albany College of Pharmacy and Health Sciences

“Pharmaceutical Industry Team Presentation”

Presented by students who completed the ACPHS PHM 324 Pharmaceutical Industry and the Pharmacist’s Role course in Fall 2017. The course was an overview of the pharmaceutical industry and covered: research, development, medical, regulatory, marketing, sales, distribution, legal, ethics and compliance. The course was team taught by pharmaceutical industry experts.

3:30

Closing Remarks

ACPHS President Greg Dewey, PhD

POSTER SESSION TOPICS (see following pages for all poster titles and presenters)

Basic & Translational Research

Drug Design & Delivery

Health Outcomes

Infectious Diseases

Nanomedicine

Oncology

Pharmaceutical Industry and the Pharmacist’s Role Project

Poster Session

Basic & Translational Research

Effects of Ischemia/Reperfusion on Citrate Synthase and SERCA Activity in the Rabbit Urinary Bladder Treated with Ganoderma Lucidum

^{1,2}Connor M. Callaghan, ¹Catherine Schuler, ¹Robert E. Leggett, ³Alpha D-Y Lin, ^{1,2}Robert M. Levin
¹Stratton VA Medical Center, Albany, NY; ²Albany College of Pharmacy and Health Sciences, Albany, NY;
³Taichung Poh-Ai Hospital of Zhengzhou University, Taipei, Taiwan

The Functional Characterization of the BRPF3 Bromodomain

Chiara Evans, Jaime Gay, Karen C. Glass
 Albany College of Pharmacy and Health Sciences, Colchester, VT

Investigating the Role of Disulfide Bridge Formation on Histone Recognition

Jamie Gay, Samuel Carlson, Karen C. Glass
 Albany College of Pharmacy and Health Sciences, Colchester, VT

Novel Probes for Sirtuins: A Chemical Biology Approach

¹Elysian Graham, ¹Stacia Rymarchyk, ¹Marci Wood, ²Kangling Zhang, ³Hening Lin, ¹Yana Cen
¹Albany College of Pharmacy and Health Sciences, Colchester, VT; ²University of Texas Medical Branch, Galveston, TX;
³Cornell University, Ithaca, NY

Reversal of Anticoagulant Activities of Heparin and its Derived Low Molecular Weight Heparin by Poly-L-Lysine: Comparative Study with Protamine Sulfate

Jaehan Kim, Vandhana Muralidharan-Chari, Shaker A. Mousa
 Albany College of Pharmacy and Health Sciences, Albany, NY

Biological Function and Histone Recognition of Family IV Bromodomain-containing Proteins

Jonathan T. Lloyd, Amanda Poplawski, Mulu Y. Lubula, Samuel Carlson, Jamie Gay, Karen C. Glass
 Albany College of Pharmacy and Health Sciences, Colchester, VT

Structural Insights into Recognition of Acetylated Histone Ligands by the BRPF1 Bromodomain

¹Mulu Y. Lubula, ²Brian Eckenroth, ¹Samuel Carlson, ¹Amanda Poplawski, ³Maksymilian Chruszcz,
²Sylvie Doublié, ¹Karen C. Glass
¹Albany College of Pharmacy and Health Sciences, Colchester, VT; ²University of Vermont, Burlington, VT;
³University of South Carolina, Columbia, SC

The Link Between Tissue Hypoxia and Calcinosis in Systemic Sclerosis

¹Mitchell Miller, ²Lee Shapiro, ^{1,2}Jessica Farrell
¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Steffens Scleroderma Center at The Center for Rheumatology, Albany, NY

High Glucose Potentiates a Shift From Apoptosis to Necroptosis

¹Nicole L. Shakerley, ¹Tori A. Smiraglia, ¹Payal S. Patel, ¹Katharine Walker, ¹Miranda Craft, ²Sergey Sosunov,
²Vadim Ten, ¹Timothy J. LaRocca
¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Columbia University, New York, NY

Novel Probes for Nucleobase Transporters

¹Ai Tran, ¹Marci Wood, ¹Ryota Yokose, ²Jarrod B. French, ¹Yana Cen
¹Albany College of Pharmacy and Health Sciences, Colchester, VT; ²Stony Brook University, Stony Brook, NY

POSTERS

The Mediation of Prostaglandin E, D and F_{2α} in Centrally Injected Arachidonic Acid-induced Cardiorespiratory Effects

Murat Yalcin

Uludag University, Bursa, Turkey

The Key Role of Central Thromboxane A₂ on Central Cardiorespiratory and Neuroendocrine Regulation

Murat Yalcin

Uludag University, Bursa, Turkey

Drug Design & Delivery

Towards Better Structure-Based Models of P-Glycoprotein Efflux of Drugs

Stefan Balaz

Albany College of Pharmacy and Health Sciences, Colchester, VT

Targeted Drug Delivery and Drug Release Systems Using Macromolecules

Ozlem Ozen Karakus, Shaker A. Mousa

Albany College of Pharmacy and Health Sciences, Albany, NY

Design and Synthesis of Dual-functional Nucleobase Analogs for Labeling Nucleobase Transporters

¹Ai Tran, ²Jarrod B. French, ¹Yana Cen

¹Albany College of Pharmacy and Health Sciences, Colchester, VT; ²Stony Brook University, Stony Brook, NY

Health Outcomes

The Impact of Care Coordination on Provider Satisfaction in Lynch Syndrome Survivors and Previvors

¹Allison M. Burton-Chase, ¹Kelsey Hennig, ¹Alec LeBorgne, ¹Rebecca Chu, ²Lisa Campo-Engelstein, ¹Wendy Parker

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Albany Medical College, Albany, NY

Health-Related Quality of Life in Lynch Syndrome Patients

Kirsten M. Donato, Wendy M. Parker, Shannon McCormick, Thomas O'Grady, Allison M. Burton-Chase

Albany College of Pharmacy and Health Sciences, Albany, NY

Lynch Syndrome Survivors and Previvors as Educators in Their Health Care Provider Relationships

¹Kelsey Hennig, ¹Rebecca Chu, ¹Barry DeCoster, ¹Alec LeBorgne, ¹Wendy Parker, ²Lisa Campo-Engelstein,

¹Allison M. Burton-Chase

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Albany Medical College, Albany, NY

Evaluation of an Adjusted Body Weight-Based Vancomycin Dosing Guideline

¹Emily Falli, ¹Amilee Poucher, ²Christina L. Lombardi, ¹Daniella Ferri, ^{1,2}Monique R. Bidell

¹St. Peter's Hospital, Albany, NY; ²Albany College of Pharmacy and Health Sciences, Albany, NY

Disparities in Hypertension Among Women with Chronic Kidney Disease

Wendy M. Parker, Kirsten M. Donato, Daryl Nnani, Darren Grabe

Albany College of Pharmacy and Health Sciences, Albany, NY

Infectious Diseases

Assessment of Institutional Fluoroquinolone Use for Uncomplicated Infections

¹Steven J. Brown, ²Steven M. Lane, ^{1,2}Monique R. Bidell

¹St. Peter's Hospital, Albany, NY; ²Albany College of Pharmacy and Health Sciences, Albany, NY

Modeling the Genetic Basis for the Development of Antimicrobial Resistance

¹Jackson Lu, ¹Zhou Ma, ¹Sally Catlett, ²Amit Pai, ³Janice Pata, ³Kathleen McDonough, ¹Meenakshi Malik

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²University of Michigan, Ann Arbor;

³Wadsworth Center, New York State Department of Health, Albany, NY

Characterization of the Role of Transcriptional Regulator AraC of *Francisella tularensis*

¹Zhuo Ma, ²Dina Marghani, ²Chandra Shekhar Bakshi, ¹Meenakshi Malik

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²New York Medical College, Valhalla, NY

xCT as a Novel Restriction Factor of HIV Replication

¹Hunter Martin, ¹H. John Sharifi, ²Carlos de Noronha

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Albany Medical College, Albany, NY

The Suppression of HIV Early Replication by Tumor Suppressor p53

Sara DiGrigoli, Mark Paquette, Michaela Kinnetz, John Sharifi, Binshan Shi

Albany College of Pharmacy and Health Sciences, Albany, NY

Molecular Regulation of Host Inflammation During Influenza A Virus Infection

Rachel Visconti, Eric J. Yager

Albany College of Pharmacy and Health Sciences, Albany, NY

Identification and Characterization of Unknown Antioxidant Defense Mechanisms of *Francisella tularensis*

¹Madeline Worden, ¹Zhuo Ma, ²Chandra Shekhar Bakshi, ¹Meenakshi Malik

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²New York Medical College, Valhalla, New York

Impact of Host Glycosphingolipid Biosynthesis on Influenza Virus Infectivity

¹Clare Williams, ¹Hiram Adames, ²Shrivali Banerjee, ³Marie Pluvoise-Philip, ⁴Kouacou Konan, ¹Eric J. Yager

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Albany Academy for Girls, Albany, NY;

³Albany High School, Albany, NY; ⁴Albany Medical College, Albany, NY

Nanomedicine

Anti-CD24 Nano-targeted Delivery of Docetaxel for the Treatment of Prostate Cancer

¹Dhruba J. Bharali, ¹Thangirala Sudha, ¹Huadong Cui, ²Badar Mian, ¹Shaker A. Mousa

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Albany Medical College, Albany, NY

Self-assembly of Green Tea Catechin Derivatives Nanoparticles for Oral Lycopene Delivery

Weikun Li, Melamangalam S Jayaraman, Dhruba J. Bharali, Shaker A. Mousa

Albany College of Pharmacy and Health Sciences, Albany, NY

Targeted Delivery of Paclitaxel and Doxorubicin to Cancer Xenografts via the Nanoparticle of Nano-diamino-tetrac

¹Thangirala Sudha, ¹Dhruba J. Bharali, ^{1,2}Murat Yalcin, ^{1,3}Noureddien H. E. Darwish, ^{1,2}Melis Debreli Coskun,

¹Kelly A. Keating, ⁴Hung-Yun Lin, ^{1,5}Paul J. Davis, ¹Shaker A. Mousa

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Uludag University, Bursa, Turkey;

³Mansoura University, Mansoura, Egypt; ⁴Taipei Medical University, Taipei, Taiwan; ⁵Albany Medical College, Albany, NY

POSTERS

Targeted Delivery of Cisplatin to Tumor Xenografts via the Nanoparticle Component of Nano-diamino-tetrac

¹Thangirala Sudha, ¹Dhruba J. Bharali, ^{1,2}Murat Yalcin, ^{1,3}Noureldien H. E. Darwish, ^{1,2}Melis Debreli Coskun,

¹Kelly A. Keating, ⁴Hung-Yun Lin, ^{1,5}Paul J. Davis, ¹Shaker A. Mousa

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Uludag University, Bursa, Turkey;

³Mansoura University, Mansoura, Egypt; ⁴Taipei Medical University, Taipei, Taiwan; ⁵Albany Medical College, Albany, NY

Nanoparticulate Tetrac (Nano-diamino-tetrac, NDAT) Inhibits Growth and Vascularity of Glioma Xenografts

¹Thangirala Sudha, ¹Dhruba J. Bharali, ²Stewart Sell, ^{1,3}Noureldien H. E. Darwish, ^{1,4}Paul J. Davis, ¹Shaker A. Mousa

¹Albany College of Pharmacy and Health Sciences, Albany, NY; ²Wadsworth Center, New York State Department of

Health, Albany, NY; ³Mansoura University, Mansoura, Egypt; ⁴Albany Medical College, Albany, NY

Oncology

Development of Bioanalytical Method for Pharmacokinetics and Biodistribution of Novel Targeted Anticancer Drugs

Kazutoshi Fujioka, Mehdi Rajabi, Kavitha Godugu, Thangirala Sudha, Shaker A. Mousa

Albany College of Pharmacy and Health Sciences, Albany, NY

Improved Efficacy of Temozolomide (Temodar) Against Glioma by Nanotargeting Using Tetraiodothyroacetic acid (Tetrac)

Conor McCallion, Dhruba J. Bharali, Weikun Li, Sudha Thangirala, Kavitha Godugu, Shaker A. Mousa

Albany College of Pharmacy and Health Sciences, Albany, NY

The Effect of GANT61 on Mouse Mammary Tumor Stem Cells

Kayla Stuart, Jeffrey Voigt

Albany College of Pharmacy and Health Sciences, Albany, NY

Pharmaceutical Industry and the Pharmacist's Role Project (Fall 2016 course at ACPHS)

Nano-Diamino Propane Tetrac in the Management of Glioblastoma Multiforme

Thomas Bullis, Jordan Armeli, Giuliana Campo, Arianna Burton, Kwasi Ameyaw

Albany College of Pharmacy and Health Sciences, Albany, NY

Hicu-Gone: A Prospective Anti-Hiccup Medication

Jennifer Chen, Stephanie Cho, Kiera Clark, Shanice Coriolan, Patricia Drake

Albany College of Pharmacy and Health Sciences, Albany, NY

Diabest: The Revolutionary Antidiabetic Agent Combining a GLP-1 RA and a DPP-IV Inhibitor

Daniel Ghaly, Mina Girgis, Patrick Forlenza, Gabrielle Fernandez, Megan Gerken

Albany College of Pharmacy and Health Sciences, Albany, NY

Efficacy of Nano-formulated Temozolomide in Glioblastoma Multiforme Treatment

Shohan Jasim, Smith William, Stone Tyler, Suttie Mary, Tambasco Barbara, Umar Shiraz

Albany College of Pharmacy and Health Sciences, Albany, NY

Renerva: Potential Huntington's Disease Treatment

Kevin Le, Ariana Kalamaras, Mohsan Iftikhar, Melina Huynh, Matt Hoeffner

Albany College of Pharmacy and Health Sciences, Albany, NY

POSTERS

Development of Lipaxa® (gavicaserin) a More Specific Serotonergic Weight Loss Medication Also Indicated in Younger Populations

Gavin Leung, Brianna Lopez, Mei Cui Lu, Jeffrey MacDonald, Coral Mahay, Sami Shaheedul
Albany College of Pharmacy and Health Sciences, Albany, NY

Snoozeon: A Summary of a Blockbuster Insomnia Medication

Ali Nasser, Samantha Parente, Emily Ewell, Chukwuma Onumonu, Tom O'Brien
Albany College of Pharmacy and Health Sciences, Albany, NY

Complevir: A Long-Term Solution to the Global Pandemic of HIV

Mit Patel, Christopher Patterson, Nirvana Prashad, Nana Prempeh
Albany College of Pharmacy and Health Sciences, Albany, NY

eyeMAC for Macular Degeneration

James Mango, Yahya Rasouly, Kelsey Ross, Donya Rowe, Sarah Ruby, Karim Shama
Albany College of Pharmacy and Health Sciences, Albany, NY

ResuClick: A Reloadable, Reusable Epinephrine Auto Injector as an Answer to the Current Epinephrine Market Monopoly

Nick Vachon, Alexa Valentine, Amber Van-Heusen, Megan Ward, Ashia Wright
Albany College of Pharmacy and Health Sciences, Albany, NY

Evaluation of Procoagulant Compounds with Thromboelastography

Bridget Price, John Geurds, Ebunoluwa Iluyomade, Shaker A. Mousa
Albany College of Pharmacy and Health Sciences, Albany, NY