

Clinical Science Trumpet

Newsletter of the Association of Clinical Scientists

Henry Oh, Ph.D., FACSc, Editor

Vol. 42, No. 2—April 2022

We Are Back! 2022 Annual Meeting in Louisville

A chance to reunite with friends and colleagues!
143rd Meeting
May 11-14, 2022

Embassy Suites Louisville Downtown Hotel, Louisville, KY

he Association of Clinical Scientists is holding its usual in-person Annual Meeting in Louisville, Kentucky May 11-14, 2022 (a revisit to Louisville of 11 years ago). The University of Louisville Department of Pathology and Laboratory Medicine will be hosting this year's ACS Annual Meeting. The theme is "Analytical Demands and Informatics in Precision Medicine" with a subtitle of "Environment, Pandemics and Informatics in Health and Disease." The Program Committee (see below) has developed a full line-up of invited speakers.

ABSTRACTS AND UL REUNION

In addition to invited speakers, members and other scientists have submitted abstracts for oral presentation. We are also linking this Annual Meeting to a reunion of all of the Fellows trained over the past 32+ years in the University of Louisville Clinical Chemistry Postdoctoral Fellowship and affiliated programs.

KEYNOTE TALKS

There will be two keynote talks on Thursday, May 12: the Abraham J. Gitlitz Memorial Lecture, "Drug Development in Academia During a Pandemic", by Kenneth E. Palmer, Ph.D., Professor and Helmsley Chair in Pharmaceutical Plant-based Research, University of Louisville, and the Claude P. Brown Memorial Lecture, "The Many Roads to Steatohepatitis and its Treatment", by Craig James McClain, M.D., Professor and Distinguished University Scholar, University of Louisville School of Medicine. In addition, there will be an exciting luncheon seminar by Dr. Mark Slaughter, Chair of Cardiovascular and Thoracic Surgery at the University of Louisville on "Recent Advances in Artificial Heart Technology and Applications."

Preliminary plans for the Annual Meeting also include a visit to the world-famous Churchill Downs, home of the

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Dr. Craig James McClain



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2022 in Louisville...

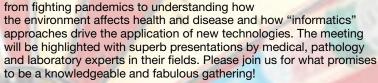
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Kentucky Derby, where we will have a narrated visit to the Kentucky Derby museum, a special luncheon, and horse racing.

The Annual Reception and Awards Banquet will feature a special invited speaker, **Susan Riegler**, a widely published writer and past president of the Bourbon Women Association, who will present "From Grain to Glass: The Science Behind Kentucky Bourbon." The reception will even include a special tasting of different bourbons. On Saturday evening we will conclude our program with our annual Musicale and Art Show.

SCIENTIFIC PROGRAM THEMES

The scientific program brings a focus on personalized and precision medicine and how pathology and the laboratory provide the required support. Precision medicine is driven by both our knowledge of the underlying pathology (diagnosis) and how effective are the treatments (therapy). These require a fundamental understanding of the molecular basis of health and disease, how we interact with the environment and the development of novel methods of analysis. We will tackle these areas with topics ranging





Dr. Mark Slaughter



Susan Riegler

A Message from the Program Chair

The Program Organizing Committee welcomes you to Louisville Kentucky in May 2022 for the 143rd Annual Association Meeting. We will focus on The Analytical and Informatics Demands of Precision Medicine with topics embracing "Environment, Pandemics and Informatics in Health and Disease." The practice of modern pathology and laboratory medicine, powered by advances in translational sciences, is key to advancing the practice of precision and personalize medicine.

Our May 2022 program embraces hot topics in managing pandemic responses, liver disease, bleeding disorders, artificial heart technologies, advances in ctDNA analysis, digital pathology, and novel mass spectrometry applications, among other clinical practice topics. In addition to our Annual Awards Banquet (to include a bourbon tasting reception and history presentaion) and our traditional Musicale, we will also visit Churchill Downs (home of the famous Kentucky Derby) for you to pick your winning horse! We look forward to the close social and professional comradery typical of our Association's meetings.

Looking forward to seeing all of you,



Roland Valdes Jr., Ph.D., DABCC, FACSc Chair, ACS Annual Meeting Organizing Committee

PROGRAM COMMITTEE

The full roster of the Program Committee includes: Roland Valdes, Jr., Ph.D., Chair, Mustafa Namir Ghani Al-Kawaaz, M.D., Chris Crutchfield, Ph.D., Philip R. Foulis, M.D., M.P.H., Dibson Dibe Gondim, M.D., Joshua Hayden, Ph.D., Jonathan B. Hoyne, Ph.D., Mark W. Linder, Ph.D., Tiffany Bratton, Ph.D., and Yusheng Zhu, Ph.D.

ACCOMMODATIONS AND TRANSPORTATION

The host hotel will be the Embassy Suites Louisville Downtown Hotel, 501 S. Fourth Street, Louisville, KY 40202 (telephone 502-813-3800) which is immediately adjacent to Louisville's famed Fourth Street Live entertainment and restaurant district. ACS has negotiated an excellent room rate of \$199 plus taxes (currently 16.07%). Please visit the ACS website (www.clinicalscience.org) and follow the menu "meetings," to get to the reservation information specific to our Annual Meeting. Reservations can be made at this guaranteed rate for up to three days before or after the meeting. Please note that the deadline to make a reservation at the guaranteed rate is April 22, 2022. After that cut-off date, rooms may or may not be available and may be at the hotel's current rate.

The Embassy Suites Louisville Downtown Hotel provides a complimentary shuttle to and from the Louisville International Airport. Call the hotel to request the shuttle. ACS attendees and guests will also enjoy many features including a complimentary made-to-order breakfast each morning, a complimentary evening reception, and other amenities.





Embassy Suites Louisville Downtown Hotel will be the Meeting accommodations

Among the Speakers to Present in Louisville

Other speakers and their information may be found at www.clinicalscience.org

Abraham J Gitlitz Memorial Lecture

"Drug Development in Academia During a Pandemic"

KENNETH E. PALMER, PHD

Dr. Palmer was trained in molecular virology and biotechnology, first at the University of Cape Town, and then at Cornell University. His research program is focused on developing broad-spectrum antivirals for prevention and treatment of emerging and re-emerging viral infections. He started his career in the biotechnology industry, returning to academia at the University of Louisville in 2006 to grow a translational research program. He is a Professor of Pharmacology and Toxicology and Helmsley Endowed Chair in Plant-based Pharmaceutical



Dr. Kenneth Palmer

Research in the University of Louisville School of Medicine. He is also Director of the University of Louisville Center for Predictive Medicine for Biodefense and Emerging Infectious Diseases, where he oversees the scientific operations of the University of Louisville Regional Biocontainment Laboratory.

Claude P Brown Memorial Lecture

"The Many Roads to Steatohepatitis and Its Treatment"

CRAIG JAMES MCCLAIN, MD, FACG, FAASLN, FACN

Dr. McClain is a widely recognized expert in liver injury/disease, nutrition, and cytokine research, as well as hepatic drug metabolism. His laboratory currently focuses on nutrition and the gut:liver axis, especially as it relates to alcoholassociated liver disease and environmental liver disease. He has had continuous federal funding as PI for his research since 1977. Dr. McClain is a Past President of the American College of Nutrition, has served on several NIH and VA Study Sections and has published over 460 peer-reviewed articles



Dr. James McClain

and 110 book chapters/reviews. He has mentored over 125 Residents and Fellows including over 30 junior faculty members with K-type career development awards. Dr. McClain is currently leading the effort to develop ACG guidelines for nutrition in liver disease.

Thursday Luncheon Speaker

"Recent Advances in Artificial Heart Technology & Applications"

MARK S. SLAUGHTER, MD, FABS, FABTSC

Dr. Slaughter is a clinician-scientist whose broad research focus is to understand the mechanisms of cardiac dysfunction and pathological remodeling in heart failure. He also has a particular interest in device-based therapy for cardiac disease, including mechanical circulatory support (MCS) devices, ventricular assist devices (VAD), and total artificial hearts (TAH). He is the Editor-in-Chief of the ASAIO Journal. In August, 2021, Dr. Slaughter and the cardiothoracic surgical team at UofL Health – Jewish Hospital implanted the Aeson® bioprosthetic



Dr. Mark Slaughter

total artificial heart into the first female patient in the world. The new device is intended as a bridge to a heart organ transplant, which is part of an Early Feasibility Study (EFS) sponsored by CARMAT, a French medical device company.

Other Confirmed Speakers

"Drug Development in Academia During a Pandemic"

DIBSON DIBE-GONDIM, MD

Dr. Gondim has 12 peer-reviewed publications and is the winner of the 2019 Surgical Pathology Award for a poster that demonstrated, for the first time, an artificial intelligence model that can correctly classify the majority of the most common types of kidney neoplasms, presented at the 108th Annual Meeting of the United States and Canadian Academy of Pathology.

"Application of Circulating Tumor DNA for Monitoring Response to Immune Check Point Inhibitors"

MARK W. LINDER, PH.D., DABCC

Dr. Linder's specialty is Clinical Chemistry and Toxicology. He has numerous publications and has developed the discipline of pharmacogenetics and its application to guide therapeutics. His research emphasis is now focused on circulating DNA analysis and applications to oncology.

Go to https://www.clinicalscience.org/meetings. html#SpeakerProfiles for additional speaker profiles.

2022 ACS Awards to be Presented in Louisville

Clinical Scientist of the Year

JONATHAN B. HOYNE, PHD, DABCC, FAACC

Jonathan B. Hoyne, Ph.D., DABCC, FAACC has served in the ACS Executive Committee as its secretary since 2019 and presently chairs the Virtual and Hybrid Meetings Oversight Committee. Dr. Hoyne currently serves as the director of clinical chemistry at Mayo Clinic in Jacksonville, Florida. He obtained his Ph.D. in Biomedical Research—



Dr. Jonathan Hoyne

Molecular Biology in 2006 from the Mayo Clinic Graduate School of Biomedical Sciences. **Jonathan** is a Fellow of the American Association for Clinical Chemistry (FAACC), a Diplomate of the American Board of Clinical Chemistry (DABCC), and a Fellow of the Association of Clinical Scientists (FACSc). He received the AACC Outstanding Speaker Award in 2012 for his presentation on "Neuron Specific Enolase Quantification: Utility and Caveats for Prognosis in Post Anoxic Coma." **Jonathan** also received the Distingulished Abstract Award in 2007 from the National Academy of Clinical Biochemistry.

Young Clinical Scientist Award

NORAH ALGHAMDI, PHD, NRCC

Norah Alghamdi, Ph.D.,
NRCC, is a clinical chemistry
fellow at the University of
Louisville, School of Medicine,
Louisville, Kentucky. Dr.
Alghamdi received her master's
degree in chemistry and
earned her Ph.D. in Clinical
Bioanalytical Chemistry from
Cleveland State University,
Cleveland, Ohio. She received
several grants including the
Young Investigator Educational
Grant, Mass Spectrometry:
Applications to the Clinical



Dr. Norah Alghamdi

Applications to the Clinical Laboratory (MSACL) in 2019 at the 11th Annual Conference & Exhibits, Palm Springs, CA; and the Society for Young Clinical Laboratorians (SYCL) Travel Grant in 2018 at the 70th AACC Annual Scientific Meeting & Clinical Lab Expo in Chicago, IL. Norah's primary research focus is discovering biomarkers and developing rapid, accurate and cost-efficient diagnostic methods to improve patient health outcomes.

F.W. Sunderman, Jr. Diploma of Honor

CONSOLATO M. SERGI, MD, PHD

Consolato M. Sergi, M.D.,
Ph.D. is the Chief of the
Anatomic Pathology Division at
the Children's Hospital of Eastern
Ontario, Professor of Pediatrics
and Pathology, University of
Alberta and Ottawa, Canada.
Dr. Sergi is Canadian, born in
Rome (Italy), obtained his M.D.
degree with honors, qualification
in Pediatrics, and Pediatric
Pathology Fellowship at the
University of Genoa, Italy. Dr.
Sergi obtained his qualification
in Pathology at the Ruprecht Karl
University of Heidelberg, Germany,



Dr. Consolato Sergi

the Clinical Reader title at the University of Bristol, UK, Ph.D./Habilitation at the University of Innsbruck, Austria, M.P.H. in Austria, and FRCPC from the Royal College of Physicians and Surgeons of Canada. In his research, he established his Canadian laboratory in August 2008. He welcomed more than 100 graduate M.Sc./Ph.D. students, fellows, undergraduate and summer students with on-going teaching in Genetics and Pathology.

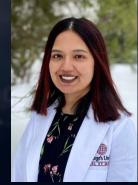
Young Clinical Scientist Award

DEBLINA MUKHERJEE

Deblina Mukherjee is a second-year medical student at St. George's University

at St. George's University
School of Medicine in St.
Georges, Grenada. She earned
her B.A. in Biological Sciences
from Rutgers University in
New Brunswick, New Jersey in
2018 after which she pursued
her career in education at the
Academy for Urban Leadership
Charter School in Perth Amboy,
New Jersey from 2018 to 2020.

Deblina has always found it
difficult to choose between
her two passions: education
and medicine. With the advent
and effects of the COVID-19



Deblina Mukherjee

pandemic, she decided to pursue medicine with the hope of becoming an academic physician in the future. **Deblina** has taken the opportunity to conduct epidemiological research at St. Joseph's University Medical Center in Paterson, New Jersey. She joined the NeuroPharmacoGenetics Lab at the Rutgers Center of Alcohol & Substance Use Studies, and the Tycko Lab at the Center for Discovery & Innovation in New Jersey.

Final Program Schedule for May 11-14, 2022 See meeting program book for last minute changes.

All events (u	nless otherwise noted) are held at Embas	sy Suites Louis	Sville Downtown Hotel, Louisville, KY		
Wednesda	y, May 11	Theme: Precision Medicine and Pharmaco-			
2:30-5:00 p.m.	Registration	tnerapy in F	lealth & Disease (Lewis Salon)		
3:00–5:00 p.m.	Executive Committee Meeting (Lincoln Boardroom)	1:00 p.m.	Claude P. Brown Memorial Lecture Craig McClain, M.D. (Louisville, KY) The Many Boads to Stoatshanditio and		
5:30–7:30 p.m.	Opening Reception (Jefferson Atrium)	1:45 n m	The Many Roads to Steatohepatitis and Its Treatment		
Thursday,	May 12 (Lewis Salon)	1:45 p.m.	Irina A. Kirpich, Ph.D. (Louisville, KY) Bioactive Lipid Metabolites: Novel Therapeutic Targets and Potential		
7:00 a.m.	Registration		Treatment Strategies in Alcohol- Associated Liver Disease		
7:00 a.m.	Complimentary Breakfast (Breakfast Sitting area)	2:15 p.m.	Josiah E. Hardesty, Ph.D. (Louisville, KY) Proteomic and Phospho-proteomic Signatures of Alcohol-Associated Hepatitis		
8:15 a.m.	Welcome – ACS President and Meeting Chair (Lewis Salon)	2:30 p.m.	Jeff B. Warner, B.S. (Louisville, KY)		
Theme: Pred Disease (Lew	cision Medicine in Health & vis Salon)		Beneficial Effects of Soluble Epoxide Hydrolase Inhibition in Alcohol-Associated Liver Disease: Application of a Novel Liver-Specific Drug Delivery Platform		
8:30 a.m.	Abraham J. Gitlitz Memorial Lecture Kenneth E. Palmer, Ph.D. (Louisville, KY) Drug Development in Academia During	2:45 p.m.	Robert Brown, M.D. (Houston, TX) COVID-19 and Early Post-Primary TB: Commonalities of Pathobiology Pneumonitis and Therapies		
	a Pandemic	3:00 p.m.	Afternoon Break (Embassy Foyer)		
9:15 a.m.		Theme: Mol Medicine (Lo	lecular Genomics in Precision ewis Salon)		
10:00 a.m.	a Pandemic David Hein, Ph.D. (Louisville, KY) Acetylation Pharmacogenomics: Paradigm for Informed Individual Risk Assessment Following Exposure to	Theme: Mol	ecular Genomics in Precision		
	a Pandemic David Hein, Ph.D. (Louisville, KY) Acetylation Pharmacogenomics: Paradigm for Informed Individual Risk Assessment Following Exposure to Environmental Carcinogens Morning Break (Embassy Foyer) Allen Helm, Ph.D. (Chicago, IL) Rolling with the Punches: A Biosafety Program at a Research University	Theme: Mol Medicine (Lo	ecular Genomics in Precision ewis Salon) Mark W. Linder, Ph.D. (Louisville, KY) Plasma ctDNA for Monitoring Response		
10:00 a.m.	a Pandemic David Hein, Ph.D. (Louisville, KY) Acetylation Pharmacogenomics: Paradigm for Informed Individual Risk Assessment Following Exposure to Environmental Carcinogens Morning Break (Embassy Foyer) Allen Helm, Ph.D. (Chicago, IL) Rolling with the Punches: A Biosafety Program at a Research University Addresses COVID-19 Saeed Jortani, Ph.D. (Louisville, KY) An Interdisciplinary Post-Operative	Theme: Mol Medicine (Lo 3:30 p.m.	ecular Genomics in Precision ewis Salon) Mark W. Linder, Ph.D. (Louisville, KY) Plasma ctDNA for Monitoring Response to Immune Check Point Inhibitors Evan Alexander, Ph.D. (Louisville, KY) Quantitative Methods of Monitoring		
10:00 a.m. 10:30 a.m.	a Pandemic David Hein, Ph.D. (Louisville, KY) Acetylation Pharmacogenomics: Paradigm for Informed Individual Risk Assessment Following Exposure to Environmental Carcinogens Morning Break (Embassy Foyer) Allen Helm, Ph.D. (Chicago, IL) Rolling with the Punches: A Biosafety Program at a Research University Addresses COVID-19 Saeed Jortani, Ph.D. (Louisville, KY)	Theme: Mol Medicine (Lo 3:30 p.m. 4:00 p.m.	Mark W. Linder, Ph.D. (Louisville, KY) Plasma ctDNA for Monitoring Response to Immune Check Point Inhibitors Evan Alexander, Ph.D. (Louisville, KY) Quantitative Methods of Monitoring Circulating Tumor DNA Mustafa Al-Kawaaz, M.D. (Louisville, KY) Value of Next Generation Sequencing in Myeloid Neoplasia James Wittliff, Ph.D., Hon. M.D. (Louisville, KY) Forecasting Clinical Behavior And		
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10:00 a.m. 10:30 a.m. 11:00 a.m. 11:30 a.m.	a Pandemic David Hein, Ph.D. (Louisville, KY) Acetylation Pharmacogenomics: Paradigm for Informed Individual Risk Assessment Following Exposure to Environmental Carcinogens Morning Break (Embassy Foyer) Allen Helm, Ph.D. (Chicago, IL) Rolling with the Punches: A Biosafety Program at a Research University Addresses COVID-19 Saeed Jortani, Ph.D. (Louisville, KY) An Interdisciplinary Post-Operative Personalized Pain Management Clinical Trial Session Adjourns Luncheon Seminar (Lewis Salon) Mark Slaughter, M.D. (Louisville, KY) Recent Advances in Artificial Heart	Theme: Mol Medicine (Lo 3:30 p.m. 4:00 p.m. 4:30 p.m. 5:00 p.m. 5:30 p.m. Evening	Mark W. Linder, Ph.D. (Louisville, KY) Plasma ctDNA for Monitoring Response to Immune Check Point Inhibitors Evan Alexander, Ph.D. (Louisville, KY) Quantitative Methods of Monitoring Circulating Tumor DNA Mustafa Al-Kawaaz, M.D. (Louisville, KY) Value of Next Generation Sequencing in Myeloid Neoplasia James Wittliff, Ph.D., Hon. M.D. (Louisville, KY) Forecasting Clinical Behavior And Therapeutic Response of Breast Carcinoma using Gene Expression Session concludes		
10:00 a.m. 10:30 a.m. 11:00 a.m. 11:30 a.m. 12:00 p.m.	a Pandemic David Hein, Ph.D. (Louisville, KY) Acetylation Pharmacogenomics: Paradigm for Informed Individual Risk Assessment Following Exposure to Environmental Carcinogens Morning Break (Embassy Foyer) Allen Helm, Ph.D. (Chicago, IL) Rolling with the Punches: A Biosafety Program at a Research University Addresses COVID-19 Saeed Jortani, Ph.D. (Louisville, KY) An Interdisciplinary Post-Operative Personalized Pain Management Clinical Trial Session Adjourns Luncheon Seminar (Lewis Salon) Mark Slaughter, M.D. (Louisville, KY) Recent Advances in Artificial Heart Technology & Applications	Theme: Mol Medicine (Lo 3:30 p.m. 4:00 p.m. 4:30 p.m. 5:00 p.m.	Mark W. Linder, Ph.D. (Louisville, KY) Plasma ctDNA for Monitoring Response to Immune Check Point Inhibitors Evan Alexander, Ph.D. (Louisville, KY) Quantitative Methods of Monitoring Circulating Tumor DNA Mustafa Al-Kawaaz, M.D. (Louisville, KY) Value of Next Generation Sequencing in Myeloid Neoplasia James Wittliff, Ph.D., Hon. M.D. (Louisville, KY) Forecasting Clinical Behavior And Therapeutic Response of Breast Carcinoma using Gene Expression Session concludes		

7:30-10:00 p.m. Young Fellows & CCFP Event (location TBD)

Friday, May 13

Theme: Advanced Technologies in Clinical Sciences (Lewis Salon)

7:00 a.m. Registration

7:00 a.m. Complimentary Breakfast

(Breakfast Sitting area)

Yusheng Zhu, Ph.D. (Hershey, PA) 8:15 a.m.

Imaging Mass Spectrometry:

Applications in Biomedical Research

and Clinical Diagnosis

Kavitha Yaddanapudi, Ph.D. (Louisville, KY) 8:45 a.m.

> Immune Landscape in Sentinel Lymph Nodes from Melanoma Patients by Single-Cell Mass

Cytometry (CyTOF) Analysis

9:15 a.m. Shuko Harada, M.D. (Birmingham, AL)

Application of MassARRAY

System in Molecular Diagnostics -Pharmacogenomics and Oncology

9:45 a.m. Morning Break (Embassy Foyer)

Alicia Algeciras-Schimnich, Ph.D. 10:15 a.m.

(Rochester, MN)

Implementation of Alzheimer's Disease Biomarkers in Clinical Practice: Pre-Analytical and Clinical Considerations

Bene Ekine-Afolabi, Ph.D. (Sandwich, Kent, UK) 10:30 a.m.

Evaluation of SARS-C0V-2 Viral RNA Detection, Using Massarray, RT-qPCR

and UltraFast RT-PCR Assays

10:45 a.m. Session Adjourns

11:00 a.m. **Buses board to Churchill Downs**

Museum (Mohamed Ali Blvd. Entrance)

11:00 a.m.-**Afternoon Tour:**

Churchill Downs, includes museum 4:30 p.m.

movie, lunch, and horse racing

6:00 p.m. Annual Reception (with bourbon tasting, see below)

and Awards Banquet (Edison I & II & Foyer)

Master of Ceremonies:

Joshua Bornhorst, Ph.D., ACS President

Presentation of Association Annual Awards: Myra Wilkerson, M.D., Awards Chair

Guest Speaker:

Ms. Susan Rieg

From Grain to Glass: The Science

Behind Kentucky Bourbon

Saturday, May 14

7:30 a.m. Registration

7:30 a.m. Complimentary Breakfast

(Breakfast Sitting area)

Morning Split Sessions:

A (purple) & B (pink) run concurrent

8:30 a.m.-Session A:

Clinical Pathology in Practice, part 1 9:45 a.m.

(Lewis Salon)

[sponsored by the Scientific Section on

Therapeutics and Toxicology]

Joshua Hayden, Ph.D. (Louisville, KY) 8:30 a.m.

> Triggered MRM for Untargeted Urine Drug Testing: Finding What You Aren't

Looking For

Joshua Bornhorst, Ph.D. (Rochester, MN) 8:45 a.m.

Advances in the Assessment of

Orexin-A (hypocretin-1) Deficiency in the

Diagnosis of Type 1 Narcolepsy

Frederick Kiechle, M.D., Ph.D. (Boca Raton, FL) 9:00 a.m.

Advances in the Assessment of

Orexin-A (hypocretin-1) Deficiency in the

Diagnosis of Type 1 Narcolepsy

9:15 a.m.

Rapidly Evolving and Fatal Military Tuberculosis and COVID-19 Infection in

an Infant

9:30 a.m. Fan Shen, M.D., Ph.D. (Edmonton, AB, CA)

paper to be presented by Consolato Sergi, M.D., Ph.D. (Ottawa, ON, CA)

A Postulated Cross Talk between Insulin Growth Factor Binding Protein 3 (IGFBP-3) and IGFBP-7 May Suggest a

Critical Role in Carcinogenesis

9:45 a.m. Morning Break (Embassy Foyer)

10:00 a.m.-Session A:

Clinical Pathology in Practice, part 2 11:45 a.m.

(Lewis Salon)

[sponsored by the Scientific Section on

Hematology and Transfusion Medicine]

10:00 a.m. Oksana Volod, M.D. (Los Angeles, CA)

> Measure Directly, Treat Efficiently. Critical Bleeding Management at the Speed of Sound

10:30 a.m. Claire Mena-Leist, M.D. (Louisville, KY)

Managing the Challenges of Running

a Transfusion Service During the

COVID-19 Pandemic





Association of Clinical Scientists

Registration for 143rd Meeting, Louisville, Kentucky, May 11–14, 2022

ATTENDEE INFORMATION

Last Name	First Name	Initial	Degree(s)			
Institution Street Address						
City	State	Postal/Zip Code	Country			
Telephone Number	Fax Number	Email Address				
Please record number of persons for all No Charge (NC) items			Unit Price (\$ US)	Number of Persons	Amount Charged	
Full Meeting Registration, Regular For all Fellows of the Association and non-members attending the full Meeting; includes luncheons, one banquet ticket and continuing education credits, if desired			\$475			
trainees), UofL CCFP Alum For all Emeritus or Associate F (except UofL trainees, resident	Emeritus, Assoc. Fellows & nni, and Invited Speakers At fellows of the Association, all trains, fellows—see below), all UofL (udes luncheons, one banquet tic	tending Full Meeting nees, residents, and fellows CCFP Alumni, and invited speakers	\$200			
	nplimentary—day of lecture ling the meeting for the day of	f their lecture; excludes banquet	NC		NC	
Full Meeting Registration, For all UofL trainees, residen	Complimentary nts, and fellows—excludes Bar	nquet	NC		NC	
Single Day Registration For either Thursday or Saturd	lay; includes luncheon and con	tinuing education credits if desired	\$200			
visit our website (https://www find information on how to re	ne Annual Meeting virtually throu v.clinicalscience.org/meetings.h	ntml#Registration) where you will line attendee. The cost is US\$200.	\$200	paid through Zoom	paid through Zoom	
Thursday, May 12						
Welcome Reception. Open to Indicate attendance for headc	o all meeting registrants and accom ount.	panying persons.	NC		NC	
Friday, May 13						
Tour. Churchill Downs, inc	cluding the bus, lunch, museu	m movie, and racing	\$60			
Extra tickets to Awards Ba	anquet and Reception		\$95			
Saturday, May 14						
		der; included with full or single tt estimation)	NC		NC	
	ors d'oeuvres Intermission dees (please indicate attendar	nce for headcount estimation)	NC		NC	
Include Renewal of Dues (Fellows)		\$225			
					_	

continues on page 9



Association of Clinical Scientists

Registration for 143rd Meeting, Louisville, Kentucky, May 11-14, 2022

PAYMENT OPTIONS

Cancellation with full refund will be accepted until May 6, 2022.

- 1. Register securely on-line at http://www.clinicalscience.org/annualmeeting.html#Registration.
- 2. Complete and mail this form (print both of form, pages 8-9) with a check, payable to Association of Clinical Scientists, or with credit card information, to Association of Clinical Scientists, 6431 Fannin Street, MSB2.292, Houston, TX 77030.
- 3. To charge using American Express, Visa, or MasterCard, call the ACS office at (713) 500-5381, Mon–Fri, 8:00 a.m.–5:00 p.m. Central Time. You may also fax this form with your credit card information to our secure Fax at (713) 500-0732.

CREDIT CARD INFORMATION

Credit card type (check only one)	Visa	MasterCard	American Express	
Card number				
Expiration (mo/yr)			Security Code (CVV) No.	
Name on the card				
Billing Address				
City			State (Province)	
Country			Postal (Zip) Code	
Signature				









Clinical Science Trumpet



President's Corner

As we gear up for our first in person annual meeting in some time. I would like to talk about fellowship and mentorship. This year's meeting at the University of Louisville should provide an excellent opportunity for both. Dr Valdes has an excellent program planned with many unique in-person educational scientific activities that Willy Nelson would appreciate (hint: whisky and horses).



Dr. Joshua Bornhorst

Fellowship has a strong tradition in the Association. From the founders, to the fellows, to the presenters, to the spouses: the intellectual interactions have exceeded that which can be conveved by the computer screen (or typewriter). While my interaction with the longstanding organizer Dr. F. William Sunderman Jr. (Bill) came only in my first few years of fellowship, mentoring was something that he and his father pursued tirelessly. Subsequently, those mentees became leaders and mentored others. And now it is our turn.

We have a strong tradition and future, a viable treasury, a solid journal, and a template for fellowship within the organization. Share that vision with others in the fields of a pathology and clinical chemistry. Encourage a new trainee within your organization to a meeting. Co-write an article or a review in the Annals of Clinical Laboratory science. Identify a member of the scientific community that you feel would benefit and give back to the organization. Let them and others know about the annual meetings and the organization. Create scientific collaboration with your fellows. Help somebody get a job within the field or supply professional advice. Use your creativity to find other ways to mentor. If we all took just one person under our wing and showed them the ropes each year, it would make our organization that much more dynamic.

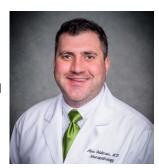
Josh Bornhorst, Ph.D., DABCC, FACSc



ASSOCIATION CLINICAL SCIENTISTS

The Young Fellows Section

The Young Fellows Section and CCFP Alumni will hold its venue at 7:30 PM on May 12. 2022, Thursday, immediately after the Opening Reception, at a location (to be announced later) on 4th Street Live, a short walking distance from the Embassy Suites. Sincerely,



Dr. Alex Feldman

Alex Feldman, M.D.

Chair, Young Fellows Section, Association of Clinical Scientists Assistant Professor, University of Alabama at Birmingham

email: afeldman@uabmc.edu





The Young Fellows Section is a great opportunity to network and meet other young scientists.



Auxiliary Event

After a hiatus in ACS meetings the Auxiliary enthusiastically looks forward to returning to an in person gathering in May to renew the feeling of camaraderie that is our cornerstone. A warm welcome



awaits all newcomers as well as friends of long-standing. Look for us at the registration desk for plans of exploring, socializing and reconnecting.

See you in Louisville!

Becky Hunter Past President



Becky Hunter at the 2015 Meeting



People Behind the Scenes: Those Who Make ACS Function

Starting this issue, and periodically, we will be featuring an individual who works and/or contributes to ACS in a role or capacity that keeps ACS functioning. These are people who work "behind the scenes."

Below is an interview between **Henry Oh, Ph.D., FACSc**, *Clinical Science Trumpet* Editor, and **Anara Baimetova, Ph.D.**, ACS Business Manager, with an introduction by **Nina Tatevian, M.D., Ph.D., FACSc**, Journal Editor-in-Chief.

Introduction

by Nina Tatevian, MD, PhD, FACSc

It has been eleven (11) years now when Anara came to apply for the Business Manager position at ACS. Despite being somewhat nervous when she came for the interview, I noticed right away that she had the qualities and personality that would perfectly fit for that position. I was impressed with her educational background, starting with her Ph.D. in music—she played a rather rare traditional folk string instrument. Then she made a bold decision to completely change her career and subsequently graduated with a Bachelor's degree in accounting with summa cum laude honors from the University of Houston-Downtown.

ACS was in the process of a difficult transition at that time, and we needed the right person—not only with appropriate skills, but with drive and enthusiasm to make the necessary changes and developments. I could say from my first meeting with Anara that she did have (and still has!) these so needed and valuable qualities—"palpable" enthusiasm and dedication, helping us to get through the transition. She has that sunny personality which makes people communicating with her to feel help and support. She is one of those people who will offer help even before being asked —a much appreciated value! She has a diversity of experience and background that is an asset and a welcome addition to the ACS team. Without any doubt and hesitation, Anara was the best candidate and fit for the position. Her work ethic is unparalleled, and we are fortunate that Anara joined ACS. Her role as the Business Manager has been essential in maintaining the day-to-day operations of the ACS and the Annals of Clinical and Laboratory Science journal.

After 11 years, I am happy to confirm that the decision to hire Anara Baimetova was one of the best decisions I have ever made.



Anara Baimetova

Interview with Anara

Henry Oh: Please tell me a little bit about yourself. Where did you grow up? Where did you go to school?

Anara Baimetova: Hello, my name is Anara Baimetova. I was born and raised in the City of Karaganda in Central Kazakhstan. I earned my associate degree from the Musical College named after Tattimbet, a central figure of instrumental tradition of Arka. I moved to Almaty, the south capital of Kazakhstan, where I was accepted into the Conservatory School of Arts. I completed my Ph.D. degree in Art in 2002 with summa cum laude honors.

Oh: What brought you to the U.S.? Where did you study in the U.S.? What did you study?

Baimetova: In 2005, I decided to change my career and came to the United States on a student visa to pursue a new degree. I went to study at the University of Houston, Downtown campus, and completed my bachelor's degree in accounting in 2011 with summa cum laude honors. I was torn between medical microbiology and going to med school for infectious diseases.

Oh: Before your work at ACS, where did you work before, or what work experience did you have?

Baimetova: Before coming to the USA, I worked at the Kazakh Ethno-Folklore Orchestra named after

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Behind the Scenes continued

continued from page 11

Tlendiev. I have played the Kazakh traditional instrument named "sherter," an ancient stringed plucking instrument.

Oh: When did you start working with ACS? When did you become an office manager?

Baimetova: I started working for ACS right after completing my degree at the University of Houston in 2011. When I applied for this position, my first interview was with Dr. Tatevian. It was an unforgettable event. I was nervous during the interview, but she offered me a cup of tea to make me comfortable. Dr. Tatevian was very friendly which gave me a sense of security. After she explained the job description, I felt that I wanted to join the Association of Clinical Scientists. Unfortunately, the Association lost its president, Dr. F. William Sunderman Jr., during that time. It was a challenging time for the Association. The executive members had to re-organize the Association, figure out where the Association was standing at, review the financial situation and look at many other matters. The journal, *Annals of Clinical and Laboratory Scientists*, was delayed in publication.

Dr. Roland Valdes took over as the new president during that time in 2011. The executive committee members made all possible steps or actions to ensure that the Association will survive and continue its mission and services. That was a teamwork, all efforts put together. As for me, when I saw how passionate Dr. Tatevian and Dr. Hunter were speaking to me about the Association, its future, its perspectives, I felt like I want to be a part of this amazing organization. It was an immediate decision. I wanted to become a part of this organization, where people come together for the benefit of the whole society in general, where they tirelessly work for new discoveries in medicine, striving for the better future, bringing up and cultivating a new generation of doctors and scientists.

Dr. Tatevian had become the Editor-in-Chief of the journal in 2011. She has taken full responsibility for the publication process. About two-thirds (2/3) of the revenue of the Association comes from journal. I had to learn a new set of skills as a managing editor of the journal. I had to quickly learn a new Adobe InDesign program, where the journal was designed, compiled, and put together. The process of journal publication and the communication with the print and online publishers taught me how to be flexible and learn about the whole new world called "Printing/Publishing."

The whole process of manuscript submissions, revisions and final acceptance or rejection for the publication, is another interesting aspect. I gained a glimpse of the knowledge in medical field by skimming the manuscripts or reading reviews.

Combining all parts of my job, being the office manager, managing editor of the journal, accountant, I probably would describe my job as a business manager.

Oh: What do you like or enjoy most about your job?

Baimetova: I would proudly say that I am one of those few people who love their job. It brings me great joy. I love everything about it. Many things depend on the environment, people around you, and the Association itself. I have met the most amazing people in my life. It is a big family where you always feel welcomed and have a full support. I love our annual meetings (though we did not have them for the past two years due to COVID), it is where you meet and re-unite with most of the members of the Association. Besides the members of the Association, the Auxiliary members are an amazing group. I became friends with them. They are lovely ladies, who treat you with respect, in some way as a daughter.

Regarding working as a managing editor of the Association, I have learned a lot from Dr. Tatevian. I consider her as my life coach. I go to her for advice for any work or life related issues. Her wisdom, and ability to capture the hearts of the people, have taught me a lot. She is the reason that I have become a better person. I hope that my technical support in the process of publishing the journal, even though it is small, contributes to the scientific world. Research and discoveries that we publish help many scientists to learn, to grow, and to share scientific knowledge. Our journal is worldwide. We have subscribers from around the world, and many of them are big libraries where students and scientists have access to our journal.

Regarding the accounting part of my job, I love when things are organized. To make sure that everything is paid on time, QuickBooks is reconciled and balanced with bank statements, numbers do match, and everything is correct down to the penny.

This job does give me sense of accomplishment, being valued and being in the right place.

Oh: What advice do you have for other people who want to become an office manager?

Baimetova: If you are a people person, if you like to serve for the better future of the organization, and the organization in return gives you the tools to strive, learn and become a better person, then it is the best job for you. Some say that theory differs from work experience, I would agree. The job or work experience will teach you things that are not written in books, such as communication, relationship with people and many others. The doors of the world are wide open where everyone of us with certain skills can contribute for the benefit of our society. Being an office manager, you may not be a major player in the organization, but your service, support and dedication can make a big difference for the organization. Our goal is to make the world a much better place to live.

Newsletter Trivia Question x 2!

Edited by Stephen M. Roper, Ph.D., FACSc

The first person to email the correct answer will have their name mentioned in the subsequent newsletter and the satisfaction of knowing they won. Please respond to, or if you have a trivia question you would like to submit, please email to Stephen M. Roper at: smroper@wustl.edu.

PREVIOUS QUESTION

Three photographic film manufacturers have, at various times, used their technology to develop dry chemistry applications for clinical laboratory diagnostics. What were the three companies, and what dry chemistry instrument platforms did they develop?

ANSWER

No one yet has answered, so we are including it again for another round—do you know the answer? The person submitting the first correct answer will have a chance to write the trivia question for the subsequent newsletter.

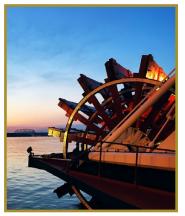
CURRENT QUESTION (SUBMITTED BY DR. ROGER BERTHOLF)

Reference intervals are key to decision making based on clinical lab results. A widely cited minimum sample size for nonparametric rank order reference interval calculation is n = 120. Why are at least 120 values required?

ANSWED

The answer will appear in the next *Clinical Science Trumpet*. The person submitting the first correct answer will have a chance to write the trivia question for the subsequent newsletter.

Submit your answer by email to Stephen M. Roper, Ph.D., FACSc, at: smroper@wustl.edu.



(Left above) Louisville skyline in early evening fronts the Ohio River; (Center above) On West Main Street: 30-ft. tall statue of David not far from the world's largest Louisville Slugger bat; (Right above) A paddle wheel boat on the Ohio River

The Grapevine: Member News

AWARDS, NEWS, PROMOTIONS...?

Please send your news of job changes, transfers, promotions, awards, etc. to:

Henry Oh, Ph.D., Newsletter Editor, at: henry.oh@msn.com.





New Members

NEW MEMBERS SINCE JANUARY, 2022 CLINICAL SCIENCE TRUMPET

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Kamaljeet Singh, M.D.

Department of Pathology and Laboratory Medicine Women & Infants Hospital of Rhode Island Providence, R.I.



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Clinical Science Trumpet

Newsletter of the Association of Clinical Scientists

The Clinical Science Trumpet Newsletter is the official newsletter of the Association of Clinical Scientists and is published three times per year. Back issues may be viewed at http://clinicalscience.org/news.html

Announcements, commentaries, and news/photos of members are welcome. Please send to the Editor at: henryoh@isu.edu.

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Henry Oh, PhD, FACSc

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