The Association of Clinical Scientists is pleased to announce its first-ever virtual symposium to be held from 2:00 – 5:00 p.m. EST on Friday, November 13, 2020. This free program will feature four speakers, with a live Question and Answer session following each talk. The program was developed by a new committee, co-chaired by Dr. Robert Hardy, University of Alabama at Birmingham, and Dr. Consolato Sergi, University of Alberta.

The program will be available using Zoom. Registration is required, but attendance is free of charge. Each speaker will participate in a 10-minute live Q&A following his/her talk. All talks and Q&A sessions will be recorded and archived on the Association’s website so that registrants can retrieve them at a time of their own choosing. This will be especially beneficial for members and scientists whose schedules do not permit attendance at the time of the live program or who are in an inconvenient time zone.

Register now at no charge for this exciting program at: https://zoom.us/webinar/register/WN_iN0qPYYTjmJmHhZ13kkQA

SPEAKERS AND TOPICS

The speakers for this first ever virtual symposium presented by the Association of Clinical Scientists will be:

1) Opening Remarks, Keri J. Donaldson, MD, MSCE, FACOP, President, Association of Clinical Scientists;

2) Epidemic and Pandemics Through the Centuries: A Historical Perspective. M. John Hicks, MD, DDS, PhD, Baylor College of Medicine;

continued on page 2

ACS Postpones Louisville Annual Meeting from 2021 to 2022

With the COVID19 viral pandemic still raging through the United States, the Association recognized that May, 2021 would be too soon for its members and other interested scientists to be willing to risk air travel and a traditional in-person live meeting in a hotel. Accordingly, the contract with the Embassy Suites Louisville for May 2021 was cancelled and we hope it will be replaced with a new contract for May 2022. All planning that had begun for 2021 is still in place, which will enable Dr. Roland Valdes and the Program Committee to put together a strong meeting for 2022 in Louisville.
Virtual Meeting... continued from page 1

3) Development of Molecular Testing for SARS-CoV-2: Insights in Viral Infection Identification During Pandemic. James J. Dunn, PhD, D(ABMM), Texas Children’s Hospital;

4) Saliva Testing for SARS-CoV-2: A Game Changer and the Challenges That Come With It. Salika M. Shakir, PhD, D(ABMM), ARUP Laboratories and University of Utah School of Medicine;

5) Serologic Testing for SARS-CoV-2: Much Ado About…Antibodies? Elitza S. Theel, PhD, D(ABMM), Mayo Clinic.

SPEAKER PROFILES

DR. KERI J. DONALDSON

Keri J. Donaldson, MD, MSCE, FACOP, President, Association of Clinical Scientists, is an Assistant Professor of Biochemistry and Molecular Biology; Assistant Professor of Public Health Sciences (Joint Appointment) as well as the Director of the CLIA Laboratory and The Institute of Personalized Medicine and Clinical Processing Specimen Laboratory at the Penn State Hershey College of Medicine, Penn State Health, Hershey, PA. He is the Founder and CEO of Prescient Medicine located in Hummelstown, PA, as well as CEO of Prescient Metabiomics, Chicago, IL. Dr. Donaldson is a graduate of Temple University School of Medicine, and the University of Pennsylvania, School of Medicine, Philadelphia, PA. He also holds an MSCE in Pharmacoepidemiology from the Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA.

DR. M. JOHN HICKS

M. John Hicks, MD, DDS, MS, PhD, is an attending pediatric pathologist at Texas Children’s Hospital and Professor of Pathology and Pediatrics at Baylor College of Medicine in Houston Texas. He is also an Adjunct Professor at the University of Texas Health Science School of Dentistry. He has published over 500 peer-reviewed manuscripts and over 30 chapters in various fields of medicine. Dr. Hicks is actively involved in collaborative translational and basic science research with colleagues at Texas Children’s Hospital, Baylor College of Medicine, University of Houston, and MD Anderson Cancer Center. He is the immediate past president of the Association of Clinical Scientists and has held several leadership positions with Children’s Oncology Group, Society for Pediatric Pathology, and Society for Ultrastructural Pathology. He is a strong advocate for the mission of the Association of Clinical Scientists.

SCHEDULE

The schedule for the November 13 Virtual Symposium “Problems and Challenges with COVID-19 Laboratory Testing”:

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 p.m.</td>
<td>Opening Remarks</td>
<td>Keri J. Donaldson, MD, MSCE, FACOP President, Association of Clinical Scientists</td>
</tr>
<tr>
<td>2:05 p.m.</td>
<td>Epidemic and Pandemics Through the Centuries: A Historical Perspective</td>
<td>M. John Hicks, MD, DDS, PhD Baylor College of Medicine</td>
</tr>
<tr>
<td>2:35 p.m.</td>
<td>Q &amp; A</td>
<td></td>
</tr>
<tr>
<td>2:45 p.m.</td>
<td>Development of Molecular Testing for SARS-CoV-2: Insights in Viral Infection Identification During Pandemic</td>
<td>James J. Dunn, PhD, D(ABMM) Texas Children’s Hospital</td>
</tr>
<tr>
<td>3:15 p.m.</td>
<td>Q &amp; A</td>
<td></td>
</tr>
<tr>
<td>3:25 p.m.</td>
<td>10-minute Break</td>
<td></td>
</tr>
<tr>
<td>3:35 p.m.</td>
<td>Saliva Testing for SARS-CoV-2: A Game Changer and the Challenges That Come With It</td>
<td>Salika M. Shakir, PhD, D(ABMM) ARUP Laboratories and University of Utah School of Medicine</td>
</tr>
<tr>
<td>4:05 p.m.</td>
<td>Q &amp; A</td>
<td></td>
</tr>
<tr>
<td>4:15 p.m.</td>
<td>Serologic Testing for SARS-CoV-2: Much Ado About…Antibodies?</td>
<td>Elitza S. Theel, PhD, D(ABMM) Mayo Clinic</td>
</tr>
<tr>
<td>4:45 p.m.</td>
<td>Q &amp; A</td>
<td></td>
</tr>
<tr>
<td>4:55 p.m.</td>
<td>Closing Remarks</td>
<td>Keri J. Donaldson, MD, MSCE, FACOP President, Association of Clinical Scientists</td>
</tr>
</tbody>
</table>

Speaker abstracts and other program details may be found on the ACS website at: http://clinicalscience.org/annualmeeting.html#Introduction.

Registration is required to attend and it also includes access to archived content.

COVID-19 source image credit:
COVID-19 Composition credit: Michael C. Hawker, MArch, MS
As I begin my tenure as President, we find ourselves in challenging times both personally and professionally. However, it has also provided an opportunity to grow and find new ways to interact with our members and society in general. Since travel restrictions have been in place and we do not have any idea about when they will be able to be lifted, the Association has brought together a team to implement a Symposium as an educational event in place of the annual in-person meeting. We are grateful to Drs. Hardy, Hawker, and Valdes for their leadership in developing this Symposium, as well the full committee (roster listed on page 7). This Symposium will be held on November 13th and the information and registration are listed here in the newsletter. We invite you to join us for timely talks on COVID that will highlight the successes and challenges of laboratory medicine as we fight to combat this virus. Our sincere thanks go out to all those working on the front line during this crisis.

We are grateful to Drs. Valdes and Hawker for their invaluable assistance in working with the Embassy Suites due to the need to cancel the meeting that was to take place in Louisville. Due to their efforts, we will be able to hold the next in-person Annual Meeting in Louisville in 2022 if travel restrictions are lifted without a financial penalty.

The Association continues to enjoy financial stability and security even through changes in economics and we rely on our membership for support both financially and as collaborators. We are indeed fortunate to have members that include national and international experts in clinical science, laboratory medicine, anatomic pathology and research. Since its inception in 1949, our members have enjoyed a camaraderie that is not usually found in some associations. We welcome you to join with us and to participate in all that the Association has to offer. Joining me this year are Dr. Joshua Bornhorst, President-Elect; Dr. Chris Crutchfield Vice President; Dr. Jonathan Hoyne, Secretary; Dr. Shuko Harada, Executive Committee Member 2020-22; Dr. Yusheng Zhu, Executive Committee Member 2020-21. We are grateful for their leadership and anticipate a prosperous year ahead.

Welcome to our newest members (all Fellows). Their institutions can be found in the Grapevine section.

- Kiran Kumar Panuganti, MD, MBA, FAAFP
- Denene Loftland, PhD
- Ayedh Al-Qarni, PhD
- Elie Besserer-Offroy, BMedSci, PhD
- Pavan Annamraju, MD, FACP FASN, FNKF
- Praesnijit Mitra, MD, MBBS
- Abubaker M Elhassan Sidahmed, MD, MSc, PhD, D(ABHI)
- Ronak Jani, MD

Kind regards,

Keri Donaldson, MD, MSCE
Interview: Dr. Sidney M. Hopfer

The Young Fellows Section arranges interviews between Young Fellows and more senior Fellows. Young Fellows can obtain scientific and career advice from a senior member who may offer valuable guidance. Below is an interview between Alex Feldman, MD, FACSc (Young Fellow) and Sidney M. Hopfer, PhD, FACSc.

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

Sidney Hopfer: I was born in New York City in 1946. Both my father and mother immigrated from Nazi Germany in the late 1930s. My father had completed a trade certification in accounting in Germany and my mother did not finish high school. They arrived in the United States without any worldly possessions. When the United States became involved in World War II, my father immediately enlisted in the US Army. I remember him saying that the United States gave him safe haven so he felt it his duty to protect and fight for it. He became a US citizen, in a mass ceremony, on the troop convoy to Europe. He was wounded in Normandy 6 weeks after D-Day but remained in the service in a non-combat role until the end of the war.

After the war, we lived in New York City. My father was a bartender working in upscale hotels. My parents decided that city life was not for them; so, when I was three, they purchased a small dairy farm in Connecticut. I was the oldest of four children, two sisters and one brother.

Life on the farm was difficult. Up at sunrise and to bed, if you were lucky, at sunset. Planting and harvesting crops and caring for the animals (cattle, horses, sheep, goats, rabbits, chickens and the usual complement of dogs and cats) kept everyone busy. Since money was scarce, my brother and I learned to repair anything that was broken, something that became a useful life skill.

I attended Norwich public elementary schools and Norwich Free Academy (NFA), a renowned private high school, graduating in 1964. The only reason I was able to attend NFA was that the city of Norwich did not have a public high school and instead paid tuition to NFA—lucky for me!

One more comment about my father. When I left for college, he realized that none of his children were interested in farming (my siblings and I all ended up working in medical fields). When I had returned from my first year of college, unbeknownst to me, he had sold all of the animals and was seeking employment. After a few months he accepted a job as janitor in a local manufacturing plant owned by American Sugar which produces Domino Sugar. During his tenure at American Sugar he moved from janitor to accounting to purchasing to vice president of purchasing. This showed me that anything is possible if you have the wherewithal to get there.

Growing up on a farm, I had decided to become a veterinarian. At that time, there were very few veterinary schools. I was fortunate enough to be accepted to Colorado State University for an undergraduate degree in biology and, hopefully, then progressing to veterinary school. Just when I was about to graduate I received my draft notice for military service. I remembered my father’s remarks about protecting your country, so in 1968, off to the Army I went. My military service included basic training, advanced individual training, infantry officer candidate school (OCS), long range reconnaissance school, jungle school, one year of duty in the Fifth Infantry Mechanized Division in Colorado Springs and then to Vietnam. I served as a combat infantry platoon leader and company commander in the First Battalion 20th Infantry for just under one year. I was discharged at Fort Lewis, Washington, a day after my return flight from Vietnam.

When I arrived at OCS, the battalion commander of the school sent a letter to my parents which included the following: “His typical day during the next six months will start early in the morning and end late at night. During the training day he will undergo a great deal of physical and mental stress. The standards are high and demanding in order to better prepare him for the task ahead.” It sounded amazingly like working on the farm and (unbeknownst to me at the time) my future career!

Feldman: How did you develop an interest in science and medicine?

Hopfer: After a 3 year hiatus, I went back to school. This time I could use the GI bill for funding. I enrolled in the Department of Pathobiology at the University of Connecticut (UCONN), which had a very good veterinary pathology training program. I was accepted in a master’s program where my thesis was “The Elimination of Equine Strongyles and Hematological and Pathological Consequences Following Larvicidal Doses of Thiabendazole.” I chose UCONN because if you were a veteran, in addition to the benefits of the GI bill, tuition was exempt. This occurred at a time when small laboratory automation was just beginning. I liked the evaluation of disease using laboratory results so much so that I switched from wanting

continued on page 5
Sidney Hopfer continued from page 4

to become a veterinarian to being some sort of clinical pathologist. For additional income, I assisted the on-duty pathologist performing necropsies and cleaning the suite at the end of the day.

When I was close to completing my master’s degree, my advisor introduced me to F. W. Sunderman Jr. at the University of Connecticut School of Medicine campus. Dr. Sunderman was looking for a doctoral candidate interested in nickel toxicity. At the time I had no idea who F. W. Sunderman Jr. was or where the road would lead! The interview lasted maybe 10 minutes when Dr. Sunderman asked how soon I could start. I believe that expedited offer was related to my status as a veteran and an officer in the military. We worked together in the clinical laboratory researching nickel from the Tuesday after Labor Day in 1975 until his retirement in 1998.

During my doctoral years, I was in a combined program between the main UCONN campus in Storrs and the medical school campus in Farmington. I had the opportunity to take classes with medical students and, more importantly, perform research with faculty from almost every specialty in medicine. The distance between the Storrs campus, the medical school campus and my then girlfriend (now wife, Adrienne), who was attending Southern Connecticut State University in New Haven, had me driving approximately 1,000 miles per week. Like most of my life before, a typical day started early in the morning and ended late at night.

Following the award of my doctoral degree, Dr. Sunderman introduced me to the clinical laboratory and the field of clinical chemistry. Even though many recommended I should continue to medical school, I knew this was where I belonged—behind the scenes diagnosing using lab results.

Feldman: Tell me about how your career progressed from there.

Hopfer: After completing residency in clinical chemistry in 1980, I stayed at UCONN. I liked the environment, a smaller institution where you knew everyone on a first name basis, with the opportunity to collaborate on many things. Just as important, my and Adrienne’s families both lived in Connecticut. I had been away for long enough to know that now I wanted to stay close to family. I started off as assistant professor and assistant director of clinical chemistry in 1980 and, through the years, eventually rose to the rank of Full Professor and became the director of the core laboratory in 1994. With each step of the way, I had to learn new skills, methodologies and disciplines. Because UCONN is an academic environment, my responsibilities included clinical service, research and teaching. Over the span of my career, I managed to juggle the three responsibilities. When research funding became more difficult to obtain, I could increase teaching or clinical service responsibilities. During my career, I have been able to publish over 100 peer-reviewed articles and deliver about as many abstracts at national and international meetings.

In 1993, at the time Bill was thinking about retirement, the department began newborn screening for cystic fibrosis (CF) using a non-traditional model. Most newborn screening is performed by public health laboratories where only screening is provided. The screening laboratory at UCONN is able to identify CF in a newborn, provide confirmatory testing, genetic counseling by telemedicine and face-to-face care in the CF clinic in usually less than a week. This has become my current research interest—working with the CF Foundation to nationally standardize the screening process.

Feldman: How did mentorship influence your professional career? How did you get involved with the Association?

Hopfer: Mentorship gives you a moral and professional compass. Being introduced to and working with Bill Sunderman Jr., although challenging at times, was a gift. Working on trace metal toxicity and metabolism took me all over the United States and Europe (Paris, Denmark, Helsinki, Moscow and Sudbury, Canada just to name a few), in some places touring the mines and, in Sudbury, the neutrino chamber as well.

The first ACS meeting I attended was in Puerto Rico. As Adrienne and I were married on April 11, 1976, and the Association meeting was a few weeks later, it ended up becoming our honeymoon. When we checked in to the hotel, the concierge told us to wait a moment, went to the back and had someone help us to our room on the top floor of the hotel. We looked at each other confused, and when we entered the room, it was way bigger than expected, with a fantastic view! We had obviously not ordered this room. Turns out it was the honeymoon suite, and to this day I have no idea who was responsible for getting us that room!

The Association meeting was indeed remarkable. We met and became life-long friends with Arnold Beckman, the Coulter brothers and Al and Helen Free (the chemists responsible for the urine dipstick). Many developers of laboratory science belonged to the Association and many brought their families as well. I’ve always felt attending a meeting was like seeing your family all over again.

The Auxiliary to the Association (which includes spouses, friends and family) was also noteworthy. Depending on meeting location, an Auxiliary member would organize separate events usually incorporating local attractions. On more than one occasion, I would mention to Adrienne that I was going to miss a meeting and her immediate response was, “No you are not; we are going!” Adrienne served as the treasurer for the Auxiliary for many years and one term as President.

Feldman: How has ACS helped you in your professional career?

Hopfer: A large advantage to the Association is there is no disparity between disciplines. In the event you require insight into a discipline you are unfamiliar with, just pick up the phone and discuss whatever is on your mind with an expert. I cannot emphasize enough how many times I have done just this. The number of scientists that helped to mentor me is almost limitless: F. W. Sunderman Sr., F. W. Sunderman Jr., John Savory, Armand Glassman, Charlie Hawker, Roger Bertholf, and many more too numerous to mention! Over the years, these people have helped me scientifically and administratively. Participation in the Associations committees, receiving awards, becoming an officer on the executive board, and serving on the editorial board for the Annals are important and, in many cases, useful for academic advancement.

Feldman: Describe the importance for faculty to be involved in national/international organizations and to have administrative responsibilities outside of your current institution.

Hopfer: Academic promotion is not possible without outside interaction. In order to achieve the rank of Associate Professor, there must be documented recognition at the local/state level. For Full Professor national/international recognition is mandatory. It is also helpful if letters of reference are written by leaders in the field and/or chairs of Pathology and Laboratory Medicine from throughout the country.

Being involved gives you an expanded perspective for any situation including new approaches to diseases or administrative changes.

continued on page 6
Sidney Hopfer  
continued from page 5

Standardization of testing regimens may have different barriers dependent on different populations nationally. Incorporation of genetic testing is likely be handled in a variety of ways at different institutions or in different states.

Feldman: How did you develop your network of colleagues over the years, and how has that been helpful in having such a successful career?

Hopfer: The development of colleagues begins at the place you work and increases with time. First, one must be knowledgeable and accessible to everyone. If a clinician comes to you for advice and you are helpful, they will ask again. Conversely, the opposite is also true. As your knowledge base increases in a similar fashion, you will develop colleagues away from work. If you are conscientious, the group of colleagues will continue to grow.

Feldman: What advice would you give to someone starting out in their career in clinical chemistry/laboratory medicine?

Hopfer: First, you should love what you do. Importantly, you should be willing to learn new things and to compromise. Nothing lasts forever. What may be right today may not be so tomorrow. Find a good base of people to work with. Finally, most things of worth in life require hard work and persistence.

Newsletter Trivia Question
Edited by Stephen M. Roper, Ph.D., FACSc

The first person to email the correct answer will have their name mentioned in the following 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

Measurement of plasma total homocysteine has utility for detecting defects in cobalamin (B12) absorption, transport, and metabolism. In these conditions, increased plasma total homocysteine is thought to result from decreased remethylation of homocysteine by methionine synthase, which requires cobalamin as a cofactor. What other enzyme requires cobalamin as a cofactor? (Hint: the acidic form of the substrate for this enzyme is also monitored to detect defects in cobalamin absorption, transport and metabolism).

ANSWER

Dr. Roger L. Bertholf correctly answered the May, 2020 trivia question: Methylmalonyl-CoA Mutase.

CURRENT QUESTION (SUBMITTED BY ROGER BERTHOLF)

In the early 20th century, the eminent statistician and editor of Biometrika, Karl Pearson, took a young protégé named William Sealy Gosset under his wing. Gosset was introduced by Pearson to the great Ronald A. Fisher, whose advice and encouragement inspired Gosset to develop and publish some of his most important work in statistics. Gosset published under a pen name, however, because his employer prohibited him from revealing his surname in scientific publications. What was Gosset’s pen name, and who was his employer?

ANSWER

Answer will appear in the next Clinical Science Trumpet. Person submitting the first correct answer will have a chance to write the trivia question for the next newsletter.

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

The Grapevine: Member News

AWARD

The Association has learned that one of its members, Henry Oh, PhD, FACSc, has been selected the US Professor of the Year in Health Sciences by Extraordinary People Awards, a group that identifies individuals who have achieved exceptional success in their professions and/or have made significant contributions to the community by empowering the lives of others. Dr. Oh is the Department Chair and Clinical Professor of Health Occupations at Idaho State University. He is currently the president of the Lambda Beta Society, the national honor society for respiratory therapists in the US. He is also vice president of the Utah State Society of American Medical Technologists.

Extraordinary People Virtual Awards 2020

U.S. Professor of the Year in Health Sciences
Dr. Henry Oh
New Members

**FELLOW**

Kiran Kumar Panuganti, M.D., M.B.A., FAAFP  
Department of Medicine  
Texas Health Presbyterian Hospital  
Frisco, TX

Denene Lofland, Ph.D.  
Department of Medical & Molecular Sciences  
University of Delaware  
Newark, DE

Ayedh Al-Qarni, Ph.D.  
Department of Clinical Chemistry  
Saad Clinical Biochemistry & Biochemical Genetics Laboratory  
King Fahad Specialist Hospital  
Dammam City, Saudi Arabia

Elie Besserer-Offroy, B.Med.Sci., Ph.D.  
School of Pharmacy  
Université de Montréal  
Sherbrooke, QC, Canada

Pavan Annamaraju, M.D., FACP, FASN, FNKF.  
Department of Internal Medicine  
Ballad Health Medical Associates  
Johnston Memorial Hospital  
Abingdon, VA

Prasenjit Mitra, M.D., M.B.B.S.  
Department of Biochemistry  
All India Institute of Medical Sciences  
Siliguri, West Bengal, India

Department of Pathology & Laboratory Medicine  
Schulich School of Medicine & Dentistry  
University of Western Ontario  
London, ON, Canada

Ronak Jani, M.D.  
Department of Neurology  
Baptist Health Lexington  
Lexington, KY
Clear some of the COVID-19 static.

Symposium:

Problems and Challenges with COVID-19 Laboratory Testing

The Association of Clinical Scientists presents a virtual half-day symposium with four outstanding speakers discussing the laboratory response to the viral pandemic.

John Hicks, MD, DDS, PhD  
Baylor College of Medicine  
History of Pandemics

Jim Dunn, PhD, D(ABMM)  
Texas Children’s Hospital  
Molecular Testing for SARS-CoV-2

Salika Shakir, PhD, D(ABMM)  
ARUP Laboratories  
Saliva Testing for SARS-CoV-2

Eliza Theel, PhD, D(ABMM)  
Mayo Clinic  
Serologic Testing for SARS-CoV-2

Friday, November 13, 2020
2:00–5:00 pm EST

Topics include:
• novel testing paradigms
• sample collection—what is valid?
• using testing to assess immune status

Free Registration:
https://zoom.us/webinar/register/WN_oiN0qPYYTjmJmHhZ13kkQA

Registration required to attend and includes access to archived content