ACS Presents Virtual Symposium on Diagnostic Management Teams

Thursday, November 4, 2021
1:00 p.m. CDT

by Charles D. Hawker, Ph.D., M.B.A.

In November 4, the Association of Clinical Scientists is presenting a virtual symposium on “Diagnostic Management Teams,” hosted by the University of Texas Medical Branch at Galveston’s Department of Pathology. This half-day program will describe what Diagnostic Management Teams are and how they function. Chairing the program is Michael Laposata, M.D., Ph.D., Professor and Chair of the Department of Pathology, a Fellow of the Association. Joining Dr. Laposata in this symposium are Christopher Zehner, M.D., Peter McCaffrey, M.D., and Eddie Salazar, Ph.D., MLS (ASCP).cm.

In September, 2015 the National Academy of Medicine issued a report on diagnostic error in the United States. The principal conclusion is that every adult American has experienced at least one diagnostic error. One of the major factors contributing to diagnostic error is the failure to order the correct diagnostic tests, with underutilization of tests more common than overutilization. The diagnostic management team is a clinical service focused on recommending the appropriate laboratory tests for individual patients in clinical context, and providing a correct interpretation of laboratory test results. It has been implemented for more than a dozen areas of diagnostic tests including coagulation, toxicology, autoimmunity, hematopathology, the misdiagnosis of child abuse, SARS-CoV-2 testing, and several others.

Diagnostic Management Teams are teams of expert laboratory-based consultants who assist patient facing caregivers with recommendations for the appropriate tests to order and the correct interpretation of complex test results. In this program you will learn how Diagnostic Management Teams work and what they do. Examples of teams that are specific to COVID-19 molecular, antibody

Above: Diagnostic Management Team laboratorians at the University of Texas Medical Branch at Galveston, Texas.

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www.clinicalscience.org
and antigen testing and to testing for both bleeding and clotting disorders will be described. The program will show how industry and academia can collaborate in the future development and use of Diagnostic Management Teams. It will describe a new curriculum to train doctoral level clinical laboratory scientists to optimize consultation by laboratory directors, and how these new doctoral scientists in clinical laboratory science participate in Diagnostic Management Teams. Registration for this half day program will be free. CE credit will be available. Full details about the program, registration, and CE can be found on the website at:

http://www.clinicalscience.org/meetings.html

Program for 2021 ACS Virtual Symposium: Thursday, November 4, 2021
12:00 pm CDT (all times CDT)

12:00 p.m. Joshua Bornhorst, Ph.D.,
ACS President, Symposium Moderator
Welcome

12:05 p.m. Michael Laposata, M.D., Ph.D.,
University of Texas Medical Branch–Galveston
The Diagnostic Management Team: How It Works and What It Does.

Note: each talk includes a 10 minute Q & A

12:35 p.m. Michael Laposata, M.D., Ph.D.,
University of Texas Medical Branch–Galveston
The Implementation of a COVID-19 Specific Diagnostic Management Team with Clinical and Financial Impacts.

1:05 p.m. Break

1:15 p.m. Christopher Zahner, M.D.,
University of Texas Medical Branch–Galveston
Length of Stay Reduction Using a Coagulation Diagnostic Management Team

1:45 p.m. Peter McCaffery, M.D.,
University of Texas Medical Branch–Galveston
Future of the Diagnostic Management Team: A Collaboration of Industry and Academia in a Global Network

2:15 p.m. Break

2:25 p.m. Eddie Salazar, Ph.D., MLS(ASCP)c.m,
University of Texas Medical Branch–Galveston
A New Curriculum to Train Doctoral Level Clinical Laboratory Scientists to Optimize Consultation by Laboratory Directors

2:55 p.m. Christopher Zahner, M.D.,
University of Texas Medical Branch–Galveston
The Participation of the Doctoral Scientist in Clinical Laboratory Science (DCLS) in the Diagnostic Management Team Service.

3:25 p.m. Break

3:35 p.m. General Discussion—asking the tough questions. Dr. Laposata and the speakers answer questions from the audience.

4:00 p.m. Program concludes

Above: a medical laboratory technician at the University of Texas Medical Branch at Galveston, Texas lab.
His basic research program has focused on fatty acids and their metabolites. Dr. Laposata’s clinical expertise, for both patient care and clinical research, is in blood coagulation, with a special expertise in diagnostic errors. He has authored more than 170 peer-reviewed publications in basic and clinical research. His work on diagnostic errors earned him an appointment to the 21-member panel of the National Academy of Medicine which issued the 2015 report on Improving Diagnosis in Healthcare.

Dr. Laposata is the recipient of 14 major teaching prizes at Harvard, the Massachusetts General Hospital, and the University of Pennsylvania School of Medicine. His recognitions include the 1989 Lindback Award, a teaching prize with competition across the entire University of Pennsylvania system; the 1998 A. Clifford Barger mentorship award from Harvard Medical School; election to the Harvard Academy of Scholars in 2002, and to the Vanderbilt University School of Medicine Academy for Excellence in Teaching in 2009; and the highest award—by vote of the graduating class—for teaching in years 1 and 2 at Harvard Medical School in 1999, 2000, and 2005.

His textbook, in its third edition, Laposata’s Laboratory Medicine, has been translated into multiple languages. It is used globally by those learning laboratory medicine and those using the clinical laboratory. In a peer nominated survey performed by The Pathologist, a journal reporting on the practice of pathology, the November 2015 issue identified Dr. Laposata as the most influential pathologist in the United States, and the third most influential pathologist in the world.
Symposium Speaker Profiles continued...

CHRISTOPHER ZAHNER, M.D.
UNIVERSITY OF TEXAS MEDICAL BRANCH–GALVESTON

Dr. Christopher Zahner is the Clinical Pathology Division Director, Diagnostic Management Team coordinator, the medical director of the Coagulation laboratory, and Point-of-Care testing in the Department of Pathology at the University of Texas Medical Branch. Dr. Zahner’s clinical research is focused on diagnostic error reduction using the diagnostic management team and related mobile app development. His research is focused on medical devices and resulted in hardware development, with patents in laboratory automation, sample processing, microbial growth, and hardware in sample tracking and hand hygiene.

Prior to medicine, Dr. Zahner was a mechanical engineer for the National Aeronautics and Space Administration (NASA) for the International Space Station (ISS) specializing in Environmental Control and Life Support systems.

J. EDDIE SALAZAR, PH.D., MLS(ASCP)CM
UNIVERSITY OF TEXAS MEDICAL BRANCH–GALVESTON

Dr. J. Eddie Salazar is Chair of the Department of Clinical Laboratory Science in the School of Health Professions at the University of Texas Medical Branch (UTMB) in Galveston, Texas. Dr. Salazar also holds a faculty appointment in the Department of Pathology at UTMB and serves as program director for the Doctorate in Clinical Laboratory Sciences (DCLS) program.

Dr. Salazar also chairs the American Society for Clinical Laboratory Sciences DCLS national committee.

Dr. Salazar received a Bachelor of Science in Clinical Laboratory Science from the University of Texas Medical Branch, a Master of Science in Instructional Technology from the University of Houston Clear Lake, and a Doctorate in Philosophy from Texas Tech University.

His research interests include advanced practice in clinical laboratory sciences, reduction in diagnostic error, interprofessional education, educational technology, and curriculum development.

PETER McCAFFREY, M.D.
UNIVERSITY OF TEXAS MEDICAL BRANCH–GALVESTON

Dr. Peter McCaffrey is director of the Division of Pathology Informatics and Artificial Intelligence in the Department of Pathology of the University of Texas Medical Branch. He is a graduate of Johns Hopkins School of Medicine, and completed a residency in clinical pathology/laboratory medicine at the Massachusetts General Hospital. He then was accepted into a prestigious 1-year fellowship in medical informatics in the Texas Medical Center in Houston.

At UTMB, Dr. McCaffrey also serves as assistant director of the clinical chemistry laboratory. He leads multiple multi-institutional groups focused on optimization of personalized interpretations as used in the diagnostic management team format. His research is focused on creation of expert diagnostic teams that can communicate globally with care providers in need of recommendations for test selection and interpretation of test results. Dr. McCaffrey is the architect of the information system which allowed UTMB to provide personalized interpretations about infectious status and antibody significance for all patients being tested for SARS-CoV-2.
Preliminary Announcement of 2022 Annual Meeting in Louisville

The Association of Clinical Scientists plans to resume holding in-person Annual Meetings beginning with Louisville, Kentucky May 11-14, 2022. Hosted by the University of Louisville Department of Pathology and Laboratory Medicine, the Program Chair, Roland Valdes, Jr., Ph.D., and the Program Committee (see below) has announced a meeting theme of “Analytical Demands and Informatics in Precision Medicine” with a subtitle of the theme of “Environment, Pandemics and Informatics in Health and Disease.” The Program Committee will have a full line-up of the invited speakers and keynote talks for the January newsletter. Dr. Valdes is 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.

Preliminary plans for the Annual Meeting include a visit to world-famous Churchill Downs, home of the Kentucky Derby, the Annual Reception and Awards Banquet (see elsewhere in this newsletter for announcement of the awards recipients), and the annual Musicale and Art Show.

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 Roberts, Ph.D., and Yusheng Zhu, Ph.D.

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%). The Embassy Suites Louisville Downtown Hotel provides a complimentary shuttle to and from the Louisville International Airport. ACS attendees and guests will enjoy many features including a complimentary made-to-order breakfast each morning, a complimentary evening reception, and other amenities. See the ACS website for more information.
Awards Committee Announces 2022 ACS Awards

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–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 Distinguished Abstract Award in 2007 from the National Academy of Clinical Biochemistry.

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, 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 FRCP 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

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 Laboratory (MSACL) in 2019 at the 11th Annual Conference & Exhibits, Palm Springs, CA; and the Society for Young Clinical Investigators (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.

Deblina Mukherjee,  a second-year medical student 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 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.
Association Holds Successful Virtual Annual Meeting for 2021

by Charles D. Hawker, Ph.D., M.B.A.

On May 13–14, 2021, the Association of Clinical Scientists held its Annual Meeting virtually as two half day sessions which included invited speakers and presentations by young scientists who submitted abstracts, as well as the Association’s annual Business Meeting. The attendance over the two days totaled 86 scientists, making the programs a huge success. Each day’s session started at 1:00 pm and concluded at 5:00 or 5:30 pm.

Dr. Keri Donaldson, President of the Association, served as the moderator each day.

The theme for the Thursday session was Emerging Technologies in Clinical Laboratory Medicine. The program began with the Claude P. Brown Memorial Lecture, presented by Faisal Khan, Ph.D., of the University of Calgary. This lecture was originally to have been the keynote lecture of our 2020 Annual Meeting in Banff. It was entitled “Towards Improved Outcomes of Hematological Malignancies: Three Approaches of Precision Medicine.” This was followed by the presentation by David Murray, M.D., Ph.D. of the Mayo Clinic entitled “The journey to replace immunofixation with mass spectroscopy for plasma cell disorders.” The third invited speaker for this session was James Broach, Ph.D. of the Penn State Cancer Institute who presented “Comprehensive identification of structural variants, the dark matter of cancer genomics.”

Following the presentation of the Young Clinical Scientist Award for 2020 (postponed from the Banff meeting) to Amanda Haynes, D.O. by Myra Wilkerson, M.D., Chair of the Awards Committee, there were eight 10-minute presentations by young scientists who had submitted abstracts to the meeting.

The theme for the Friday session was COVID-19 Surveillance in Public Health. The session began with the Abraham J. Gitlitz Memorial Lecture presented by Maria Elena Bottazzi, Ph.D. of the Baylor College of Medicine on “International Efforts in Combatting COVID19: Behind the Scenes of How to Develop a COVID-19 Vaccine Suitable for Global Access.” Her talk was followed by a lecture entitled “The Collaboration of Clinical and Public Health Laboratories to Provide COVID Testing Services” presented by Michael Pentella, Ph.D., D(ABMM) of the University of Iowa College of Public Health.

The Friday session then concluded with the Annual Business Meeting of the Association, which all were invited to attend, regardless of membership in the Association. The highlight of the agenda was the election of new officers and members of the Executive Committee, which included Joshua Bornhorst, Ph.D. as President, Chris Crutchfield, Ph.D. as President-Elect, Yusheng Zhu, Ph.D. as Vice President, and Neda Zarrin-Khameh, M.D., M.P.H. as a Member of the Executive Committee.

Roland Valdes, Jr., Ph.D. gave a presentation about the Annual Meeting being planned for Louisville in May, 2022.

Myra Wilkerson, M.D., Chair of the Awards Committee announced the awards that will be presented at the 2022 Annual Meeting: Jonathan Hoyne, Ph.D. will receive the Clinical Scientist of the Year, Consolato Sergi, M.D., Ph.D. will receive the FW Sunderman, Jr., Diploma of Honor, and Deblina Mukherjee, Ph.D. and Norah Alghamdi, Ph.D. will each receive the Young Clinical Scientist Award based on their presentations at this Annual Meeting.

ACCENT credit was requested by a total of 37 attendees at the meeting.

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President’s Corner

“The times they are a-changing,”

Those words, written 15 years after the founding of the Association of Clinical Scientists, are still applicable to today. The past year has brought upheaval in the external world, and in the way this association conducts business. On the surface things appear the same, the Association’s journal keeps publishing articles, the annual meeting takes place, the science rolls on. Yet, there are differences—Zoom instead of conference calls, virtual meetings filled with infectious disease topics instead of in-person meetings, new logos, YouTube videos, and so-forth.

Below is a pathology laboratory 120 years ago versus (to the right) a modern lab.

Folin Pathology Laboratory McLean Hospital: 1905

The coming change likely was relatively unimaginable to those in the first picture. Likewise, the state of pathology of a century from now is likely unpredictable to us. What helps makes all this change somewhat comprehensible? Shared experience and debate of new ideas may be one answer. The Association has a long history and had seen dramatic changes in its time. We play a small part in creating that change by discussing the frontiers of science in our time.

After forced cancellation of our planned spring 2020 annual meeting in Banff (thanks to Dr. Kurek for organizing the meeting, nonetheless), in the fall of 2020 we had our first successful virtual seminar on Problems and Challenges with COVID19 Laboratory Testing. The meeting was attended electronically by over 80 attendees, and was spearheaded by a committee of members chaired by Dr. Hoyne. In May of 2021, we had a virtual Annual Meeting, organized by Dr. Hoyne and a Program Committee, which discussed two topics over two half-days: "Emerging Technologies in Clinical Laboratory Medicine" and "COVID-19 Surveillance in Public Health." In many ways these digital forays were enabled by our younger members such as Dr. Chris Crutchfield, who helped stream the meetings and post related YouTube content.

An upcoming fall virtual meeting will explore Diagnostic Management Teams on the afternoon of November 4, 2021. This program (described on pages 1-4 of this newsletter) will be spearheaded by Dr. Michael Laposata and his colleagues at UT–Galveston. Furthermore, the Association is looking forward to hosting an in-person Annual Meeting in May 2021 at the University of Louisville with Dr. Roland Valdes as Program Chair with a meeting theme of “Analytical Demands and Informatics in Precision Medicine.” All of these conferences continue to help shape our understanding of an evolving world.

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President’s Corner

In many ways the Association is on good footing compared to some other scientific organizations. We have stable membership rolls and treasury, corporate sponsor support, a PubMed indexed journal with dedicated staff, editors and reviewers, and an expanding electronic footprint. In the coming year we should strive to welcome new and diverse scientists into our group, in order so they can help us think about new things, and additionally so that we have somebody to pass on our ideas and stories on to.

Josh Bornhorst, Ph.D., DABCC, FACSc

My thanks to:
Keri J. Donaldson, M.D., M.S.C.E.—Past President
Kyle Kurek, M.D., Chair, Banff Program Committee
Nina Tatevian, M.D., Editor in Chief, Annals of Clinical and Laboratory Science
Charles D. Hawker, Ph.D., M.B.A., Executive Director
Anara Baimetova, ACS Office Manager

Successful Virtual Meeting…

Survey Monkey was used to survey attendees and 35 participants responded to the survey. Key findings were:

- The majority of respondents learned of the meeting through the ACS newsletter, broadcast emails, the website, or by receiving an invitation from a committee member.
- Grades of Outstanding or Excellent were given by at least 85% of respondents to all three sessions of the program.
- Respondents particularly liked the program, speakers, presentations, organization, and ease of participation.
- The major “complaint” of respondents was the lack of seeing old friends and in-person interactions and contact.
- Several excellent topics suggested for future meetings were forwarded to the 2022 program committee.

Virtual Meeting Program Committee Fall 2020:
Robert W. Hardy, Ph.D., Chair
Consolato M. Sergi, M.D., Ph.D., Co-Chair
Christopher Crutchfield, Ph.D.
Alexander Z. Feldman, M.D.
Shuko Harada, M.D.
Charles D. Hawker, Ph.D.
Jonathan B. Hoyne, Ph.D.
Stephen M. Roper, Ph.D.
Roland Valdes Jr., Ph.D.

Program Committee of the 2021 Annual Meeting:
Jonathan B. Hoyne, Ph.D. (Chair), Mayo Clinic, Jacksonville;
Chris Crutchfield, Ph.D., Northwestern Memorial Hospital, Evanston, IL;
Keri J. Donaldson, M.D., M.S.C.E., Prescient Medicine and Penn State University, Hershey, PA;
Alexander Z. Feldman, M.D., Northwestern University, Evanston, IL
Shuko Harada, M.D., University of Alabama, Birmingham;
Robert W. Hardy, Ph.D., University of Alabama, Birmingham;
Charles D. Hawker, Ph.D., M.B.A., ARUP Laboratories (retired);
M. John Hicks, M.D., Ph.D., D.D.S., Baylor College of Medicine, Houston;
Stephen M. Roper, Ph.D., Washington University, St. Louis;
Consolato M. Sergi, M.D., Ph.D., University of Alberta;
Roland Valdes, Jr., Ph.D., University of Louisville.
Interview: Dr. Juliana Szakacs

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 Henry Oh, Ph.D., FACSc, Young Fellow/Editor and Juliana Szakacs, M.D., M.S.W., FACSc.

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

Juliana Szakacs: I was fortunate to grow up in a very happy home. As you know from reading about my father in a previous newsletter my parents arrived in the US after the war and I was born a year later in Chicago. My dad was an intern and my mom worked in the lab so I was surrounded by medicine and clinical science from my earliest memories.

We moved several times between Maryland and New York while my father was in the Navy and I remember as family friends many of the founding members of the Association: “Papa Sunderman”, Bill Junior and Vern Martens. I completed high school in Florida and I was a bit of a free spirit attending several colleges during my undergraduate years. I studied languages and philosophy and graduated from one of the University without Walls programs run by the Quakers, Friends World College. I managed to see the world and learned about different peoples and cultures which turned out to be helpful years down the road in managing a big lab.

I settled in Salt Lake City for a time getting a Masters in Social Work in community organization from the University of Utah (U of U) and worked with minority groups in the SLC area. It was actually while working on the Ute and Ouray Indian reservation that I became aware of the dire need for medical care in underserved areas and I began to think about going into medicine. One case in particular has stayed with me. A young woman I was working with had her children taken from her because she had epilepsy and there was inadequate medical care for her on the reservation. At that point I went back to the university and did the required premed coursework to apply for medical school.

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

Szakacs: My interest in science was “inborn”, surrounded as I was. We had many discussions at home about how life “works”. I was cutting and pasting pictures of chromosomes for my dad when I was in grade school, lining the pairs up in neat rows. For a science project in 6th grade I kept frog hearts beating in jars in various grades of salinity, and spent hours thinking about ways of creating a biologic mechanism to maintain the pumping action of a failing heart. As I started my preparatory work for medical school I found a real interest in clinical chemistry at a time when the measurement of estrogen and progesterone receptors by RIA was just beginning. One project was designing an artificial estrogen substrate for use in the assay. I had a great semester working in a clinical lab doing “wet chemistry” and learning about early automation on the SMAC, with miles of tubing and as big as a whole room.

Oh: Tell me about your career progression. Did your career progression exceed your expectations?

Szakacs: I graduated from medical school at University of South Florida (USF) and wanted to get back to working with people, helping the underserved. I completed a residency in Family Practice outside of Pittsburgh in a very poor post steel industry town. From there I took a position in Boston at a community clinic serving the working population and students. Here I learned about medical elitism. One of my young patients came in with a swollen leg and I diagnosed a DVT. I sent him to a well-known Boston teaching hospital for an ultrasound and treatment. Whereupon the patient was told by the cardiovascular fellow that the LMD (local medical doctor)
was wrong and told the young man to get more exercise. Luckily I called the patient at home the next morning after learning he had not been admitted and he told me his leg was now swollen up to the groin. I had him transported to another hospital where he underwent a thrombectomy and was thankful for the care. The patient’s father had died at the age of 45 and I strongly suspected protein C or S deficiency although at that time they were difficult to test for.

There were a number of other such incidents and after a year of having to send all the “interesting cases” to specialists, I decided it was time to look at specializing. Initially I thought about oncology and worked with Dr. Sinkovics in Tampa in the Oncology clinic providing the basic medical services for those patients, but in order to qualify for training in an oncology fellowship you have to have an IM or Pediatric residency and they would not accept FP. I was looking for a more mentally stimulating specialty.

As my father said I “finally came to my senses” when I realized that I could do research, teach and support both patients and physicians by going into Pathology. I did my Pathology AP/CP residency at the University of South Florida. I started my pathology career at the Moffitt Cancer Center in Tampa.

My career progressed quickly after finding my way from surgical pathology and teaching in my first years and then research with a group of Ph.D.s. I was lucky for the network of friends and colleagues at the ACS who pointed me in the right direction and the friends that I made along the way.

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

**Szakacs**: I joined the ACS when I was in FP residency after attending meetings with my dad from the time I was in Medical School. Many of the senior members of the group helped me improve my skills in writing manuscripts, looking more critically at my research and even finding jobs! My move to Salt Lake City was directly attributable to networking with friends in the association, Dr. Joe Knight urged me to come. There I was supported and advanced my career in teaching (Course Master of Pathology) and reaching full Professorship. Much of this thanks to publications in the ACS Journal and personal support from senior members in Utah.

**Oh**: What unexpected turns did you have in your career?

**Szakacs**: I have had many turns in my career and at the time they are always unexpected! Leaving Social Work because I saw a need for medical care on a Reservation; leaving Family Practice because there was limited ability to grow in the field; becoming a pathologist and developing interests in teaching, creating “new at the time” on-line teaching materials; becoming involved in research with a group at Dartmouth studying acetaminophen hepatic toxicity. Finally I took several courses in medical executive leadership and began running laboratories, ultimately becoming so involved in administration that I became the Senior Medical Director for Ancillary Services at Harvard Vanguard. There I was Chair of Pathology, (35 clinical labs) and designed and built a 30,000 sq ft Core Lab, and I was also in charge of Radiology, the Pharmacy and Physical Therapy. I also trained as a coach and began working with the Physicians Health Services, helping physicians who have various issues and stressors that interfere with their work.

**Oh**: How has ACS helped you in your career?

**Szakacs**: ACS was extremely supportive through networking, finding positions, publishing my research and providing CME through the annual meeting. I feel that I was mentored through my entire career by close connections to fellow members. I also gained experience in bringing the annual meeting of the Association to Salt Lake City (SLC) and Boston.

**Oh**: Did you have any instances where mentors influenced your professional career? How did they influence you?

**Szakacs**: The biggest move I made was directly related to a member of the Association encouraging me to take a position in SLC which, with their support, turned into the best career move of my life. There I was supported in broadening my scope of practice to administering a laboratory and eventually becoming the course master for the Pathology Department at the University of Utah. I was able to learn from excellent pathologists, teachers and researchers and fully enjoyed creating teaching materials for the students, residents and fellows.

**Oh**: Describe the importance for faculty to be involved in National/International organizations and to have administrative responsibilities outside of your current institution.

**Szakacs**: Being involved in national committees and organizations helps you to advance your academic career in publishing and presenting papers. It is also important to get feedback from colleagues outside of your own institution to help you grow and validate, or make course corrections in, your research hypotheses. Being exposed to other ideas and methods or seeing a question from a different viewpoint will also help one to progress quicker and further in their own career. For me serving on the committees of the Association and working to bring the annual meetings to my own institution over the years has given me experience in administration and given me connections to colleagues in my home town whom I would otherwise never have gotten to know.

**Oh**: How did you develop your network of colleagues over the years? How critical has this been towards success in your career?
**Dr. Szakacs Interview continued**

**Szakacs:** I found that the intimate relationships forged at the Association meetings have been extremely important to my development as a pathologist and as a person. I was lucky to have had mentors from my time in residency who encouraged me to teach and do research. I began presenting papers at the association meetings and learned from others in the same sections developing more connections. Local mentors such as my department Chairs were also important in helping me to advance my academic career giving me advice on developing teaching credentials and subspecialty areas to work in, opening up an even greater network. Always being open to help other clinicians in their research efforts provided me with opportunities, one of which became a career long interest in hepatotoxicity with a group of researchers at Dartmouth. Finally, I treasured the lifelong friends developed initially by my father in the Association who have helped me network and supported my career over the past 37 years.

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

**Szakacs:** When starting out, be open to all ideas, become involved with new projects and learn from as many different people as possible. Once you have gained a bit of knowledge and support in the community, you will be better able to dedicate yourself to the area that you are passionate about surrounded by friends and colleagues who will continue to mentor you.

Dedication and hard work as an Associate Professor is always needed to make the next step to Professor. But if you have a love for your work it will come through. I found that teaching energized me and so when I put in long hours creating new materials and even doing mundane work like grading tests I never felt tired but excited by my own growth and contribution to the growth of others. Finding an area where you truly want to make your mark and help the field grow is important to your career progression. Once you find your “sweet spot” hold onto it; that is where you will become the mentor for the next generation.

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**The Young Fellows Section**

The Young Fellows Section aims to foster career growth by providing opportunities to network and build relationships with other professionals in the field, give presentations and receive awards at our annual meeting and receive mentorship from more experienced members. If you are interested in establishing a mentor from within our organization, please contact me via email.

We encourage young fellows to submit case reports and review articles or original research manuscripts for publication to the Annals of Clinical and Laboratory Science, the journal for ACS. The instructions for authors can be found at: www.annclinlabsci.org. It would be great to see a young fellow or trainee submit an article each quarter for publication. The editorial board also encourages trainees to serve as reviewers for the journal, wherein you can be paired with senior reviewers to receive hands-on guidance in the reviewing process. If you are interested in serving as a reviewer, please contact me via email.

**Sincerely,**

**Alex Feldman, M.D.**
Chair, Young Fellows Section, Association of Clinical Scientists
Assistant Professor, University of Alabama at Birmingham

**YOUNG FELLOWS SECTION CHAIR:**
Alex Feldman, M.D.
email: afeldman@uabmc.edu

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*The Young Fellows Section is a great opportunity to network and meet other young scientists.*
Additional News: Annals of Clinical and Laboratory Science Update

The Annals of Clinical and Laboratory Science is in the process of some exciting changes. Recently, members of the Editorial Board were informed of the recommendations that followed a five-year comprehensive review of the Annals' editorial process and publications. The Annals is doing very well, but we realized that some operational changes were needed to ensure future growth in a changing environment. Most importantly, the Annals Editorial Board will now be divided into scientific sections, based on journal content and mirroring those of ACS. Each section will be led by an Associate Editor(s), who will have a more active role in the review process as leader(s) of their section. All ACS members are strongly encouraged to join a scientific section(s) aligned with their expertise. Sections will meet annually to further promote engagement of members and development of content for the Annals and ACS.

We have a large Editorial Board relative to other journals. We recognize that the Annals is a journal of, and for, the ACS, and therefore it should engage and promote active members of the ACS. In order to better achieve this goal, all members of the Board are now required to be active (dues-paying, unless emeritus) members of the ACS. Renewable appointment terms and nominal review expectations have been established for all Board members. Mechanisms to promote the mentorship of Editorial Board members belonging to the Young Fellows Section have also been developed, allowing us to take advantage of our phenomenal senior and emeritus members to ensure the continued growth and transition of Board members. We hope that all ACS fellows, including those who are not part of the Editorial Board, will contribute a small amount of their time annually to assist with peer review of a manuscript within their section.

With this large transition to be completed by the fall, we will then move on with plans for future growth currently in development, including a more engaging online presence for the Annals and ACS. Stay tuned for upcoming news on these developments.

Thank you to all members for the work you do to ensure the ongoing success of the Annals. We are most grateful for your participation.

Sincerely,

Kyle Kurek, Senior Associate Editor
Nina Tatevian, Editor-in-Chief

Association of Clinical Scientists Minutes
Annual Membership Business Meeting
Held Virtually via Zoom, Fri., May 14, 2021

1. The meeting was opened at 3:50 pm CDT by President Dr. Keri Donaldson.

2. Also present were, Dr. Joshua Bornhorst, Dr. Robert Hunter, Dr. Robert Hardy, Dr. Shuko Harada, Dr. Yusheng Zhu, Dr. Alexander Feldman, Dr. Nina Tatevian, Dr. Amadeo Pesce, Dr. Peter Hu, Dr. Roland Valdes, Dr. Kilmer McCully, Dr. Roger Bertholf, Dr. Charles Hawker, Dr. Christopher Crutchfield, Dr. Kyle Kurek, Dr. Myra Wilkerson, Dr. Stephen Roper, Dr. John Hicks, Dr. Jonathan Hoyne. Per the Association's Constitution and Bylaws these 20 members constituted a quorum.

3. The minutes of the May 18, 2019 Business Meeting of the members, submitted by Dr. Jonathan Hoyne (Secretary), were unanimously approved after a motion submitted in the zoom chat by Dr. Tatevian and a second by Dr. Harada.

4. President’s Report. Dr. Donaldson welcomed the members and visitors to the business meeting. He introduced the general structure of our annual meeting and encouraged members and visitors to join us at our next in person annual meeting. Dr. Donaldson thanked the organizing committees for the Fall Symposium and Virtual Annual Meeting. Dr. Donaldson reviewed some of the history of the Association of Clinical Scientists as well as the accomplishments of its members.

5. Treasurer’s Report. Dr. Roper presented a Treasurer’s Report. Finances continue to be strong, driven by revenue from our Journal as well as membership dues and donations. Major expenses include payroll and contractor fees as well as fees from cancelling/rescheduling the 2020 Annual Meeting.

6. Annals of Clinical & Laboratory Science. Dr. Tatevian reported that annual submitted manuscripts were 582 in 2020 (a small decrease from 618 in 2019) of which the Journal published 129 (from 120 in 2019). Revenues increased to $150,972 from $145,825 in 2019. Total expenses were relatively flat at $118,705 in 2019 and $119,050 in 2020. The result was a net profit of $31,922 in 2020 up from $27,120 in 2019. This is in stark contrast to a loss of $24,909 in 2014.

7. Dr. Kurek gave an update on the restructuring of the editorial board for the Journal. Drs Tatevian and Kurek studied the review process of papers published in the Annals of Clinical & Laboratory Science from 2015 – 2018. There were 85 members of the Editorial Board and 120 ad hoc reviewers used during this period. Review of distribution of published papers was crosswalked with the Scientific Sections. Discussed merging several sections due to low volume of submitted papers from those sections. The current

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Meeting Minutes... continued from page 13

board is 75% of the size of the number of papers submitted. Discussed re-organization of review process into Associate Editor, Chairs of Scientific Sections, Scientific Section Editorial Board Members and non-board members. Discussion of leveraging Emeritus Fellows to mentor junior ACS members on how to conduct peer review. Discussion that ACS members will be encouraged to complete 1 review per year. Discussion about potential/desire to have an online presence of the journal. Question from Dr. Bornhorst about page charges and whether an increase is in order. Dr. Tatevian stated that a bimonthly publication was the maximum publication schedule that we could support. Discussion that efforts to investigate offering an electronic companion product for the Journal are in their early stages. Discussion that journal is open access after 2 years.

Dr. Tatevian then asked Dr. Kurek, Senior Associate Editor, to discuss the reorganization of the Editorial Board. Dr. Kurek said that presently we have approximately 100 editors for annual totals of only 350 submitted manuscripts and 120 published papers, which is much too high a ratio, so the number of editors will be cutted. The Chairs of the Scientific Sections would be appointed as Associate Editors of sections of the journal corresponding to the scientific sections. These Associate Editors will assign manuscripts to members of the scientific sections to serve as reviewers. In order to serve on the Board of Editors members must be current in their dues. The terms of the members of the Board of Editors will be 6 years and will be renewable. Emeritus members will have renewable 3-year terms. As mentioned at the Friday luncheon, we are encouraging our young investigators to volunteer to review papers which will be good for their careers.

8. Dr. Crutchfield presented Association efforts to build and maintain a virtual presence and the related tools. In support of this the Association has moved the website to a commercial host, Goals of having an Association Youtube channel. Part of this is moving the website to a Drupal platform which can allow for content hosting. Dr. Crutchfield demonstrated an example of such a website—Amnesty International.

9. Constitution and Bylaws Committee. There was no report.

10. Nominations Committee. Dr. Donaldson presented the Nominating Committee Report. Dr. Yusheng Zhu would serve as Vice President. Dr. Zerrin-Khameh nominated to serve as a Member of the EC for two years. Dr. Donaldson would move from President to Past-President, Dr. Bornhorst from President-Elect to President, and Dr. Crutchfield from Vice President to President Elect. The Committee Recommendations were approved unanimously.

11. Dr. Donaldson passed the virtual gavel to Dr. Bornhorst while congratulating and thanking him.

12. Dr. Bornhorst reviewed the progress of the Association over the past 10 years.

13. Awards Committee. Dr. Myra Wilkerson reported on the 2021 awards. The Young Clinical Scientist Award winners are: Norah Alghamdi and Deblina Mukherjee. The Diploma of Honor awardee is Dr Consolato Sergi. The Clinical Scientist of the Year awardee is Dr. Jonathan Hoyne.

   b. 2022 – Louisville.
      i. Dr. Roland Valdes discussed call for volunteers for help with the program committee and topic suggestions. Dr Valdes will be the host and Chair of the Program Committee. The Theme is “Analytical Demands and Informatics in Precision Medicine”, potential topics include:
         1. Surgical applications of mass spectrometry (Surgical Knife),
         2. Mass Spectrometry in molecular tissue analysis,
         3. digital pathology practices and approaches,
         4. artificial intelligence in lab medicine,
         5. the environment and lab medicine,
         6. pandemic preparedness and laboratory medicine.
      ii. The organizing committee includes Drs. Valdes, Linder, Crutchfield, Roberts, Hayden, Foulis, Hoyne, Gondim, and Al-Kawaaz. Request for one or two more volunteers.
      iii. Discussion about outing to Churchill Downs, hosting of the ACS banquet.
      vi. Awardees will receive their awards at the Annual Meeting in Louisville

15. Young Fellows Section – Dr. Alex Feldman
   a. Expressed satisfaction and encouragement to the young scientists who presented at the annual meeting.
   b. Discussed virtual social we had last month with young fellows. Discussion that we should have more of these events. Either with the Fall Symposium or perhaps bimonthly. Discussion to use these events to incorporate mentoring.

16. New Business. Dr. Bornhorst discussed a focus on recruitment for his year as President. Discussion that the awardees need to be notified. Should this be done by the EC or by the Awards Committee Chair (Dr. Wilkerson?). Discussion on how to attract new members including direct recruit from current Fellows. Discussion about reaching out to authors who have submitted to the Annals. This would be facilitated by having a webcast component of the Annual Meeting.

17. Meeting was adjourned at 5:05 PM CDT.

Respectfully submitted,

Jonathan B. Hoyne, Ph.D., FACSc
Secretary

Clinical Science Trumpet www.clinicalscience.org
The Grapevine: Member News

Consolato M. Sergi, M.D., Ph.D., has started a new position as Chief of Anatomical Pathology at CHEO—Children's Hospital of Eastern Ontario, and Professor, University of Ottawa Ontario Pathology Laboratories in Ottawa, Ontario. Previously, he was Professor (adjunct) of Pathology and Pediatrics, University of Alberta, Edmonton, Alberta.

Dr. Sergi’s email address is biotechlab@gmail.com.

Henry Oh, Ph.D., has been officially recognized as “The Professor Who Earned the Highest Number of Post-Nominal Credentials” as judged by Dr. David Adamovich, president of Record Holders Republic (RHR). Dr. Adamovich, a Guinness World Record holder himself, reviewed the documents and evidences that included 33 professional credentials, 6 academic degrees, and 3 honorary doctorates. Dr. Oh has achieved a total of forty-two (42) post-nominal titles. A gold medal from RHR-UK and an official certificate from RHR-USA were presented to Dr. Oh by the city mayor, Brian Blad in Pocatello, ID, on July 19, 2021. Mayor Blad proclaimed July 19, as the “Dr. Henry Oh Health Education Day.” Dr. Oh is a Clinical Professor and Department Chair of Health Occupations at Idaho State University.

Dr. Oh’s email address is: henryoh@isu.edu.

Individual Annual Donors to ACS

The Association of Clinical Scientists gratefully acknowledges and appreciates the following individual donations to the Association during the past year:

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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

Which former president of the Association of Clinical Scientists performed the autopsy on President John F. Kennedy and later became Director of Laboratories at Bethesda Naval Hospital?

ANSWER

Dr. James J. Humes (submitted by Dr. John Savory).

CURRENT QUESTION

Which toxin was responsible for a large number of hemodialysis patients succumbing to a fatal neurological disease as well as metabolic bone disease in the 1970s and early 1980s?

ANSWER

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.
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