AMERICAN COLLEGE OF EPIDEMIOLOGY ONLINE MEMBER NEWSLETTER

FALL/WINTER 2024

SPECIAL YEAR-END DOUBLE ISSUE

ACE AMERICAN COLLEGE OF EPIDEMIOLOGY

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The American College of Epidemiology was incorporated in 1979 to develop criteria for professional recognition of epidemiologists and to address their professional concerns.

ACE serves the interests of its members through sponsorship of scientific meetings, publications, and educational activities, recognizing outstanding contributions to the field and advocating for issues pertinent to epidemiology.

Message from the American College of Epidemiology President,

Annette Adams, PhD, MPH, FACE, FASBMR

Dear ACE Members & Supporters:

As I begin my term as ACE president, I wish to use my first newsletter message to introduce myself, to share a bit about why I consider ACE an incredibly special organization, and to speak briefly about my vision for the coming year.

I am a proud Pacific Northwest native. I was born, raised, and educated in Oregon, except for my doctorate earned at the University of Washington (Go Huskies!). Professionally, I have been based in Southern California for over 15 years now, working as a research scientist for Kaiser Permanente. I joined ACE as an Associate member in 2006. Since then, I have served on five Program Planning Committees, including a stint as the Program Chair of the 2019 Annual Meeting held in Pasadena, as well as the Policy, Education, and Admissions Committees. I have served on the Board of Directors twice, once as an Associate Member and once as a Fellow.

The main drivers of my ongoing connection to and love for ACE, though, are not these CV-friendly opportunities. Rather, it is the people of the College that are my "why" – why I remain engaged in ACE, why I serve, and why I care about the direction and stability of ACE. Beginning with my very first Board meeting as an Associate Member, I was welcomed and accepted by the other Board members and by members on other committees. My opinions and perspectives were asked for, heard, and respected. I made connections and friendships that continue to this day.

The people of ACE – my friends, colleagues, and those I've yet to meet – are also the compass by which I plan to orient my term as president. Under the fantastic leadership of Melinda Aldrich last year (thank you, Melinda!) great progress was made to move ACE out of the pandemic years. We are a few months past the close of our first entirely in-person Annual Meeting since the Before Times (before the COVID pandemic, that is). There was much to enjoy about the meeting in Columbus, and I imagine I was not alone in feeling the excitement and joy of reuniting with colleagues and friends after so much time apart. I intend to continue to focus on tuning up our infrastructure and reinvigorating our committees. Last year saw the combination of the Ethics and Policy Committees and the merging of the Education and Career Mentorship Committees. The Admissions Committee rolled out a more streamlined process for review of applications. I am finishing committee leadership succession planning that will ensure continuity while also providing opportunities for interested volunteers to get involved. In addition, I will focus on initiatives intended to enhance value of ACE to our membership. I want to create a forum by which Associate Members may engage with the College leadership more readily. I will seek ideas from members at all levels about changes that may make our already terrific annual meetings even more exciting and engaging. And finally, I sincerely want to be user-friendly – my virtual door is open to all who have ideas, questions, or concerns about the College to discuss. I can be reached directly via email at Annette.L.Adams@kp.org. I cannot wait to start helping ACE become even more special than I already believe it to be.

ANNALS OF THE EPIDEMIOLOGY SPECIAL ISSUE: AI IN EPIDEMIOLOGY ANNOUNCED AT ANNUAL MEETING

The Annals of Epidemiology, ACE's affiliated publication, will be publishing a special issue on AI in Epidemiology. As we saw in the Annual Meeting in Columbus, machine learning, neural networks, and generative AI are being used in epidemiology.

This special issue of The Annals of Epidemiology's guest editors are Drs. Edward Trapido *(LSU School of Public Health-New Orleans)*, Tamara Litwin *(the National Institutes of Health)*, and Macarius Donneyong *(The Ohio State University)*. The issue is soliciting papers that focus on:

(1) Critically analyzing the uses and problems of AI in epidemiologic research,

(2) Improving AI to address technical, ethical, and practical challenges in epidemiology,

(3) Employing AI to effectively monitor participant health and behavior,

(4) Illustrating how AI has been used in exposure, disease, or outcome classifications,

(5) Addressing the education of future epidemiologists, and

(6) Furthering methods research in AI/ML.

We expect to publish 15 articles, with up to 5 being review articles and ten original articles. **Submissions are now being accepted, with a final submission deadline of May 30.** Call for Papers

Manuscripts should be submitted through the online system at Editorial Manager®.

Authors must select "VSI: AI in Epidemiology" from the dropdown when they reach the "Article Type" step in the submission process.

The Guide for Authors can be found on the Journal Homepage: *Guide for authors - Annals of Epidemiology - ISSN 1047-2797 | ScienceDirect.com by Elsevier*

UPDATES FROM THE EQUITY AND INCLUSION COMMITTEE

The ACE Board of Directors has approved the change in name for the Minority Affairs Committee (MAC) to the Equity and Inclusion Committee (EIC). The change in name and scope for the MAC is consistent with trends in recent years to expand research and conversations related to racial groups and minoritized populations to encompass concepts like diversity, equity, and inclusion more broadly. Moreover, the change signals a greater emphasis on inclusivity for membership in the committee itself and encourages more diversity in the college and profession more broadly.

At this year's ACE Annual Meeting, the committee held its last workshop under the old MAC name, featuring a dynamic speaker *(Dr. Chyke Doubeni, Chief Health Equity Officer, The Ohio State University Wexner Medical Center)*, a fun icebreaker, and a brainstorming/visioning session on the future of the EIC. MAC/EIC member Erik Rodriquez moderated the presentation, and immediate past MAC Chair (*and ACE President-elect)* Bertha Hidalgo moderated a lively brainstorming/visioning session.

Over the coming months, the EIC will work on activities such as updating our website, determining activities/projects for the committee to take on, and supporting the work of our ACE Scholar, Dr. Niclette Kibibi. If you are interested in getting involved in the EIC, please feel free to reach out to the EIC Chair, David Huang.

THE ANNUAL MEETING WAS A SUCCESS!

Thank You to All Who Attended, Shared Their Expertise, and Supported Our Conference!

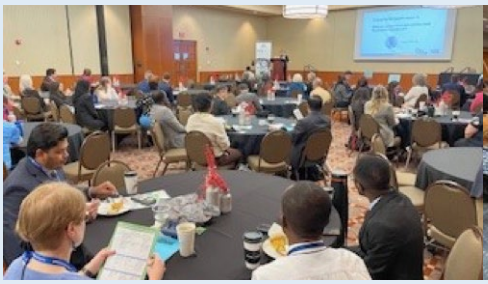
HERE ARE SOME OF THE RESOURCES THAT CAME OUT OF THE ANNUAL MEETING

Summary-Report Slides from the 2024 Annual Membership Meeting

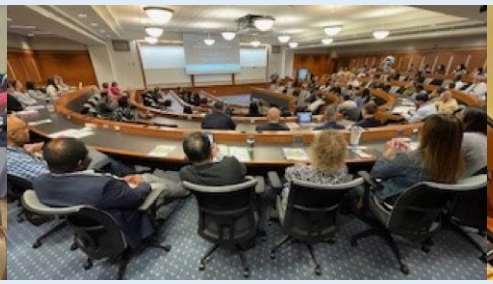
Meet ACE's New Board of Directors

View ACE's New Strategic Plan

View ACE's New Membership Snapshot



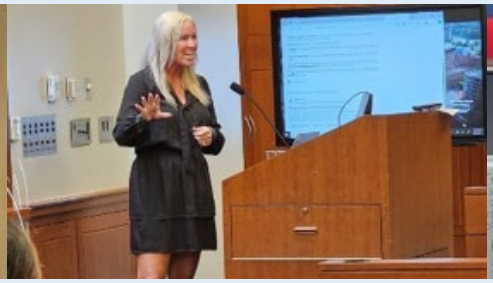
One of the General Sessions.



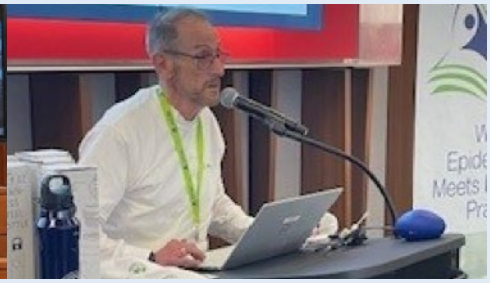
A Keynote Session.

Endowed Lecturer Dr. Linda Cottler thanked by Epidemiology Foundation Past President Ed Trapido.

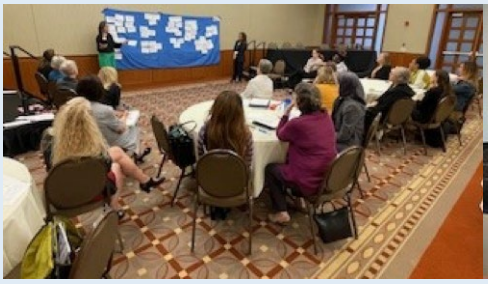
Dr. Miguel Hernan presents his Keynote Address.



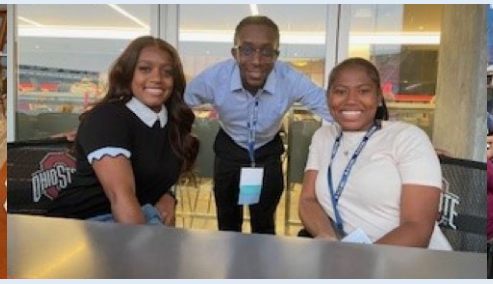
Dr. Randi Foraker presents her Keynote.



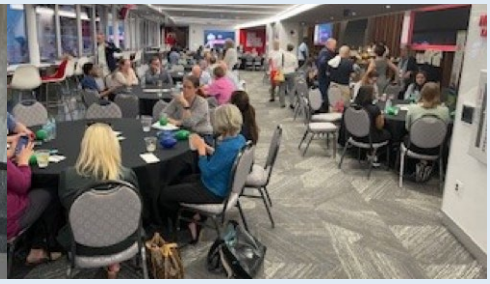
Dr. Ed Trapido raising support at The Epidemiology Foundation Reception held at OSU Stadium.



The inaugural session of the EpiVisionaries Program was a success.



Three first-time attendees to the Annual Meeting enjoy the proceedings.



Attendees at the Epidemiology Foundation Reception, where over $2,000 was raised!

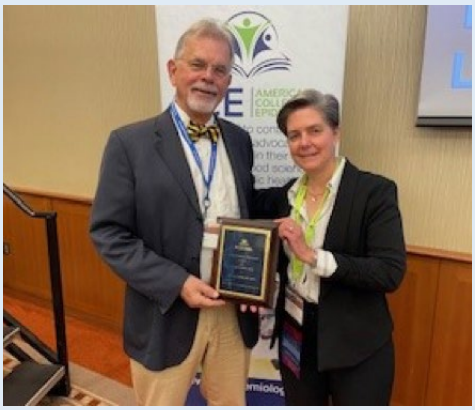
Far Left Pic: Dr. Melinda Aldrich presents the ACE Presidential Address following the Annual Membership Meeting.

Inside Left Pic: The Passing of the Gavel: Outgoing President Melinda Aldrich presents the College's Gavel to Incoming President Annette Adams.

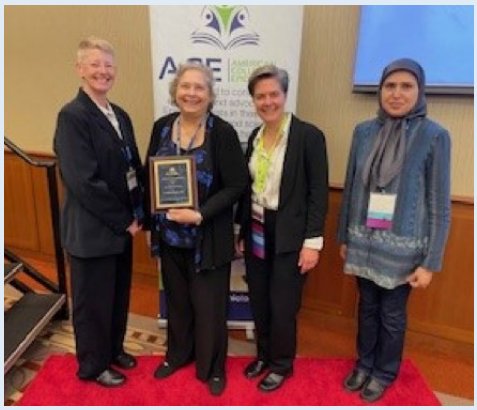
CONGRATULATIONS TO ALL OUR AWARD RECIPIENTS

The Awards Committee, Publication Committee, and Board of Directors of the College congratulated this year's Award Recipients who were honored at the 2024 Annual Meeting.

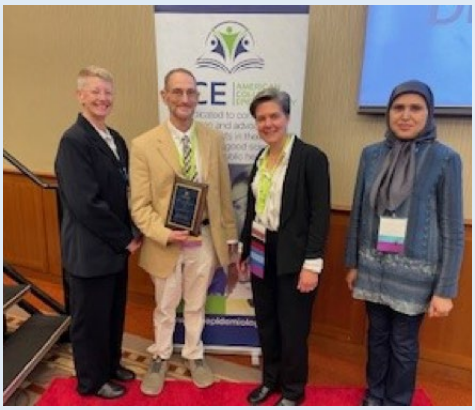
HERE ARE SOME SCENES FROM THE AWARDS CEREMONY & LUNCHEON:



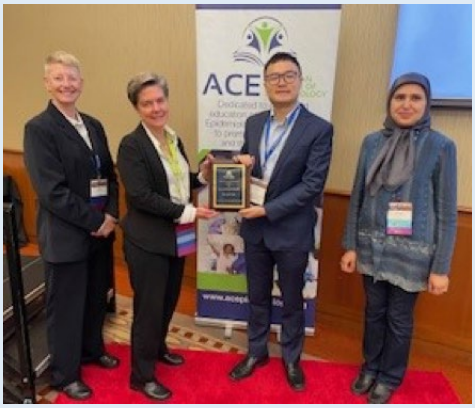
The Abraham Lilienfeld Award
Dr. Robert Hiatt



The Distinguished Service Award
Dr. Pauline Mendola

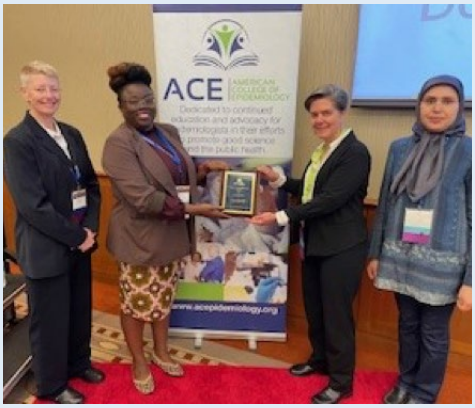


The Distinguished Service Award
Dr. Edward Trapido



Early Career Epidemiologist Award
Dr. Lang Wu (Etiology Stream)

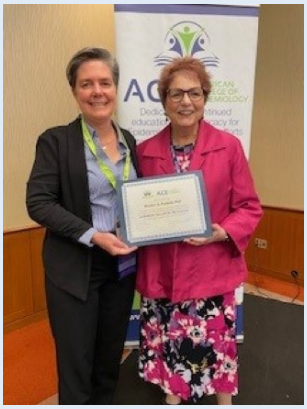
Early Career Epidemiologist Award
Dr. Maya Mathur (Methodology Stream)



Student Paper Prize
Doctoral Candidate, Adoma Manful

Best Poster Award
1st Place
Professional/ Non-Student: Shelby Alderman

Best Poster Award
2nd Place
Trainee/Student Regina Nwamaka Nechi



Inductee as Honorary Fellow of the College
Dr. Electra D. Paskett.

Award recipient's w/o photos listed below:

The Outstanding Mentorship Award (Inaugural Presentation)
Dr. Purnima Madhivanan

Annals of Epidemiology
Best Paper Award
Dr. Hilary Robbins

Annals of Epidemiology Early Career
Best Paper Award
Dr. Paul Wesson

Best Poster Awards
2nd Place - Professional/Non-Student: Martha Linet

1st Place - Trainee/Student: Stephen Phillip Colgate

Inductees as Honorary Fellows of the College
Dr. William J. Blot
Dr. Sherman James
Dr. Margaret Spitz
Dr. Walter Willett

EPIVISIONARIES HELD INAUGURAL EVENT AT 2024 ANNUAL MEETING

At the ACE Annual Meeting in Columbus, OH, we launched the highly anticipated ACE EpiVisionaries program with an inspiring planning session. The EpiVisionaries initiative is designed to support and enhance leadership development among ACE members, with an initial focus on women in the field. The inaugural event attracted 19 attendees and featured a powerful TEDx-style keynote from Dr. Melissa Perry, Dean of the College of Public Health at George Mason University and a former ACE President.

Dr. Perry's keynote was a standout moment, where she shared insights from her own leadership journey, emphasizing the importance of aligning your work with what truly matters to you. She introduced the concept of "four-way wins," encouraging us to find value across all areas of life—work, home, community, and self—without compromising one for another. Her message was clear: check in with yourself regularly to ensure you're doing what you truly care about.

The session continued with interactive group discussions facilitated by Dr. Jera Niewoehner-Green, Associate Professor of Community Leadership at Ohio State University, where participants explored barriers and opportunities in leadership development, as well as the qualities that foster effective leadership, particularly for women. Together, we synthesized these insights, identifying common themes and laying the groundwork for the program's future direction.

As we move forward, a team will be engaged to involve more ACE members in building the ACE EpiVisionaries program. Short term goals will be to refine the themes identified at the Annual Meeting and to and set concrete goals for future leadership development activities. Stay tuned as we shape a program that reflects the needs and aspirations of our ACE community! For more information or to get involved, contact the ACE office at **office@acepidemiology.org**.

LEVERAGING REFLECTIVE PRACTICE TO OPTIMIZE BIG DATA IN EPIDEMIOLOGY

Rossi A. Hassad, PhD, MPH, F.A.C.E.
Professor, School of Social & Behavioral Sciences, Mercy University, New York

Reflective learning, which emphasizes critical analysis and self-assessment, has gained traction across various disciplines. Grounded in the theories of Dewey, Schön, and Kolb, it fosters continuous improvement. In epidemiology, where big data is increasingly central, reflective learning enables deeper insights and more ethical public health outcomes. Big data, characterized by its volume, velocity, and variety, presents significant complexity, demanding not only advanced analytical skills but also a reflective mindset to ensure accurate interpretation and ethical application.

For epidemiologists, reflective learning provides a framework for evaluating analytical processes, questioning assumptions, and considering the broader implications of findings. This approach ensures that big data applications in epidemiology are both robust and socially responsible. A key benefit of reflective learning is its enhancement of critical thinking through structured self-assessment and peer feedback. This process aids epidemiologists in identifying relevant variables, understanding complex relationships, and refining methodologies.

Furthermore, as the reliance on algorithms in big data analytics grows, there is an increased risk of perpetuating biases, potentially leading to discriminatory outcomes. Reflective learning encourages epidemiologists to critically assess their analytical strategies, promoting fairness and equity. Additionally, it fosters a collaborative mindset, encouraging professionals from diverse fields to share insights and develop holistic approaches to complex health challenges.

In conclusion, reflective learning in epidemiology, particularly in the context of big data, is essential and should be a priority for educators and practitioners. It cultivates skills necessary to navigate complex datasets in a manner that is both methodologically sound and ethically responsible. Embracing reflective practice can help to ensure that epidemiologists are equipped to produce work that is rigorous and socially impactful.

THE LILIENFELD AWARD OF THE AMERICAN COLLEGE OF EPIDEMIOLOGY

Not Staying in Our Lane

September 11, 2024

Robert A. Hiatt, MD, PhD, FACE
Professor Emeritus and former chair Department of Epidemiology and Biostatistics
Associate Director of the Helen Diller Family Comprehensive Cancer Center
University of California San Francisco

I am deeply honored to receive the College's Abraham Lilienfeld Award. It is so gratifying to know that my colleagues feel that I deserve this recognition. When I look at the list of previous awardees, I am honestly humbled to know that the College feels that I belong in the company of people such a Sir Richard Doll, Bill Foege, my good friend Graham Colditz and many other luminaries in the field.

I'd like to make a few personal remarks about my perspective on the practice of epidemiology and what it has meant for me.

The other day, before I heard about receiving this award, I happened to pull out a little monograph called Basic Readings in Epidemiology, 2nd Edition, 1970, co-edited my faculty advisor Warren Winkelstein (we didn't call them mentors back then as I recall). In 1971 I was just beginning my master's degree in public health in epidemiology at Berkeley. So, last month I reached for this yellowed and well-thumbed little volume because of a discussion I was having with a colleague about the value of teaching the history of our field for new students of epidemiology. I have been concerned that the focus on new methods seems to have left behind the important learnings from the past that form the basis our current thinking.

The monograph was a compellation of readings from some of the greats in our field and meant to educate and stimulate new students on the accomplishments of those who have worked in the field over time. It was not meant to be comprehensive but to give the novice reader a sense of what had come before and the evolution of the principles of epidemiology. I was struck by the way the authors of these contributions often reached beyond their central area of expertise...'outside their lane" so to speak.

The first contribution was, of course, from Hippocrates' 'On Airs, Waters, and Places'. You will remember that in this classic, written around 500 BC, Hippocrates goes against the grain of the time that attributed health and disease to the influence of the gods. Rather when entering a community where he was to administer to an ill person, he stressed the importance of first understanding the nature of the environment, its winds, the quality of its waters, and the geographic setting of the community...maybe our earliest environmental epidemiologist.

The next reading was about the brilliant discovery of the origins of scrotal cancer in chimney sweeps by Percivall Pott. Pott was actually a surgeon in England in the late 18th century who was mainly known for his contributions to orthopedics (Pott's Tumor), but with his observations of chimney sweeps, he has also been credited with making the first association of a toxic environmental exposure to cancer, certainly something not especially expected of an orthopedic surgeon.

John Snow was the next reading and really nothing need be said to this audience to remind you of the story of the Broad St pump and the interruption of the cholera epidemic in early 19th century London. The key feature of the John Snow story for my remarks was that this well know physician and anesthesiologist had to fight the well-established belief that cholera was caused by a miasma or something in the foul air of London...again going against the grain and 'outside his lane'.

Others credited with the origins of epidemiology like Goldberger for pellagra, Semmelweis for purpureal fever and John Graunt for his analysis of London's Bill of Mortality all made legendary observations that we credit with foundational thinking in causal inference but who came at it from other disciplines or with innovative thinking at odds with prevalent understanding.

As it happened the next reading in this little volume was by Abraham Lilienfeld at Johns Hopkins in the form of a 1960 article in the Journal of Chronic Diseases entitled 'The Distribution of Disease in the Population'. In it, true to form as far as my theme

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THE LILIENFELD AWARD OF THE AMERICAN COLLEGE OF EPIDEMIOLOGY (CONT.)

goes, Lilienfeld, extended what was appreciated as useful in the study of infectious diseases to chronic diseases in populations with a focus, harkening back to Hippocrates, on time, place and person. Lilienfeld has been credited with helping to enlarge the field of epidemiology from its well-known successes with yellow fever, influenza, tuberculosis and other infectious diseases to chronic diseases such as heart disease and cancer. This paper drew from his own studies and those of MacMahon, Haenszel, Shimkin, Yerushalmy and others in the 1950s to re-orient the focus of epidemiology to its basic principles and not only to a disease of interest. Lilienfeld formulated that the study of population health served at least three useful purposes: 1) it generated hypotheses concerning etiologic factors, 2) it helped determine if a hypothesis developed in the laboratory or clinic was consistent with the population distribution of disease and 3) it served as the scientific basis for disease control measures. He advanced these and other principles that later formed the basis of how we determined causality in population observational studies. This publication anticipated the famous criteria of Bradford Hill on causality published in 1965.

I remember that this seeming dichotomy between infectious and chronic diseases was quite prevalent at the time of my introduction to field in the early 1970s. It was a rather 'big thing' that seemed to determine which direction one might go in an epidemiologic career. For me the fallacy of the dichotomy hit home when I began working at the CDC in the early 1970s and my contemporaries started using epidemiology to study abortion. It became clear subsequently that epidemiology as a method of scientific inquiry worked for infectious diseases, chronic diseases, abortion, gun violence and multiple other threats to population health. It was a rather liberating realization for me. What other discipline allowed one to range so widely over so many critical topics in health and medicine. But it required being willing to step out of traditional endpoints in the study of population health.

In the mid-1970s I was around when the American College of Epidemiology was formed and incorporated at the instigation of Abe Lilienfeld. I remember the SER meeting at Yale when he tried to introduce the idea of this new professional organization for epidemiologists. As we know, this early introduction had a rocky reception mainly because of the credentialing requirement. But there was another stream of objections from SER leaders and others about the importance of professional epidemiologists sticking with their strengths and not getting involved in 'policy' which was seen as 'outside our lane'. The feeling was that we should stick to doing good epidemiology, publish in first line journals and let the role of application fall to others. I was never sure who these 'others' were and became drawn to the idea that epidemiologists themselves were the best suited for interpreting their research and the diffusion and dissemination of results to other health professionals, the public and policymakers.

So, while happily maintaining my membership in SER, I also became an early member of the ACE and eventually became chair of the Policy Committee from 1993-98. In that role we wrestled with what policy actually meant for the ACE and whether we were talking about 'big P' like guidelines or legislation or 'little p' policy like clinical practices. After an early effort to summarize the best policy for mammography screening (a fool's errand for our little committee) we decided to focus on policy issues important to the practice of epidemiology. Foremost among these back then pre-HIPAA was the debate between data access and data confidentiality. In the mid-1990s we issued a policy statement that we thought struck was a good balance between these two legitimate concerns and published it online and in the Annals of Epidemiology. In subsequent years we took on other policy issues in our continued efforts to extend epidemiologic research into application. I continued to support this direction for the College when I became its president in 1998.

This orientation and work was reinforced for me personally when Barbara Rimer recruited me to be the first Deputy Director of the NCI's Division of Cancer Control and Population Sciences. One of the issues we felt had to be dealt with more rigorously was the lack of dissemination of cancer control research including cancer epidemiology, so we formed an Office of Research Diffusion and Dissemination under Jon Kerner. This proved to be a popular idea and has matured over the years to become known as Implementation Science, a whole new field for epidemiologist and others and not just restricted to cancer.

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THE LILIENFELD AWARD OF THE AMERICAN COLLEGE OF EPIDEMIOLOGY (CONT.)

Another thing I learned at the NCI was about the concept of transdisciplinary science which went beyond interdisciplinary science in an attempt to study larger areas of research for which one discipline was insufficient. Instead, epidemiologists had to come together with multiple disciplines including clinical scientists, molecular biologists, sociologists, anthropologists, biostatisticians and others to solve a common problem. Using this concept Barbara Rimer and I began a number of large transdisciplinary science programs on tobacco control, communications science, energy balance, and health disparities which had a lasting impact in the field for many years. Work on these large mutisite projects was tremendously rewarding and stimulated me to realize the central role of epidemiologists in the design, implementation and success of largescale population research if they were willing and able to bring their skills to work with other related disciplines. What I realized then was that no other biomedical discipline had applications at all levels of inquiry from 'cells to society'. We have genetic epidemiologists, clinical epidemiologists, behavioral epidemiologists, social epidemiologists, and many other subspecialties ... all sharing basically the same methods. I once wrote in a commentary that this put epidemiologists at the 'epicenter' of biomedical science which I thought was particularly apt coming from San Francisco.

I personally have continued to seek out collaborative research in which a common goal is being pursued by many different and complementary disciplines. My most recent area of interest is in using epidemiology to understand the impact of persistent poverty. The USDA defines and area as being in Persistent Poverty if at least 20% of the population reports living below the federal poverty level for 3 censuses in a row. In this NCI-supported program 5 sites around the country are studying how characteristics of the social environment influence cancer outcomes. Multidisciplinary teams have formed to study the impact of food and housing insecurity, social, structural racism and other factors on intermediate cancer outcomes. My colleagues at UCSF and I have joined with collaborators from Stanford and UC Davis to study the impact of income supplementation policies on cancer behavior and outcomes. Our joint studies are using epidemiologic approaches to evaluate the effects of a new Basic Guaranteed Income program in California and increases in the Earned Income Tax Credit on health behaviors relevant to colorectal cancer. This is certainly taking me on a new journey outside my previous experiences and challenging me and the rest of our team to understand how social determinants or social drivers influence health behavior and cancer biology. And look where our field of epidemiology appears to be going. We are rushing to keep up with the use of AI and ML. This is a new tool for us to use to study how to improve population health, but again it is stimulating us to get out of our comfort zone and explore new methods and designs.

I hope my point is clear. Epidemiology and the study of population health has frequently advanced because someone has stepped out of their lane to take a chance on a new idea or new methodologic approach. Like many scientific fields progress does not necessarily come from doing the same thing larger and with more bells and whistles, so called 'normal' science, but rather from new ideas that come in from the periphery of the field.

I think Abe Lillienfeld felt it was important to expand our horizons beyond infectious diseases to other topics of study. ACE was formed as professional society that supported the dissemination of epidemiologic research beyond the publication process into broader societal policy applications. I have enjoyed the opportunities afforded by College membership to step out of my lane from time to time to explore new applications of epidemiology to improve population health.

I am honored to receive the College's Abraham Lillienfeld Award in his memory. Thank you very much!