

**Article:**

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The Faces of Women in AACC: A Historical Reflection on AACC Leadership and Awards
Clin Chem 2021; 67:449-53 <https://doi.org/10.1093/clinchem/hvaa253>**Guest:** Drs. Ann Gronowski and Caroline Franks from Washington University School of Medicine in St. Louis.

Bob Barrett:

This is a podcast from *Clinical Chemistry* sponsored by the Department of Laboratory Medicine at Boston Children's Hospital. I'm Bob Barrett.

The impact of women on science and medicine has been enormous but, historically, they have often been overlooked. Recently, there have been several initiatives to recognize some of the important women in science. In March, the Science History Institute, a non-profit located in Philadelphia, launched a campaign to name the women scientists who appear in photos with famous men but were unnamed. Wikipedia has launched initiatives aimed at increasing the number of Wikipedia articles about women in science.

Within the AACC, people often think of pioneers and leaders like Donald Van Slyke, Sam Natelson, Leonard Skeggs, Richard Henry, or Max Friedman. What most people don't know is that of the nine people that formed AACC in 1948, two were women. Dr. Mary McKenna and Dr. Miriam Reiner. Most people also may not know that the prestigious AACC Lifetime Achievement Award established in 1952 went 41 years before being given to the first female, Dr. Jocelyn Hicks, in 1993 and has since been given to only three other women.

The February 2021 issue of *Clinical Chemistry* published a reflection by Dr. Ann Gronowski and Dr. Caroline Franks at the Washington University School of Medicine in St. Louis that looks back on the first women to serve in AACC leadership roles and the first women to receive AACC awards. They also examined the representation of women in AACC Leadership and Awards and provide five recommendations to promote the advancement of women.

And today, we have Dr. Gronowski, who is Professor of the Department of Pathology and Immunology and Obstetrics and Gynecology, and her co-author, Dr. Caroline Franks, a fellow in the Department of Pathology and Immunology again at the Washington University School of Medicine in St. Louis.

And Dr. Gronowski, let's start with you. What made you decide to write this reflection?

Ann Gronowski: Well, I'm happy to say that the idea for highlighting the under-recognized women in laboratory medicine was an idea that came from one of the editors of *Clinical Chemistry*, Dr. Jason Parks. I thought it was a terrific idea and I really jumped at the chance to be involved. Once Dr. Franks and I started, we realized that there were so many terrific and under-recognized women. We had to define a scope and so, we decided to focus on AACC's first female leaders and first award recipients. But honestly, we could have highlighted so many other women.

Once we started digging around and looking for the first, I was struck by the low representation by women in certain leadership positions and awards. While we now have better representation of women than we did 70 years ago when AACC formed, we can improve in certain areas, which is what led us to provide the five recommendations for continuing the advancement of women.

Bob Barrett: So, Dr. Franks, tell us about the women you highlighted.

Caroline Franks: Although we identified countless outstanding women, we chose to focus on just 10. These women were the first to hold AACC leadership positions and the first to receive each of the five most prestigious AACC awards. And you may notice a trend, these two categories overlap quite a bit. Many of AACC's first female leaders were also the first females to receive AACC awards.

You previously mentioned Drs. Mary McKenna and Miriam or Mim Reiner who are both founding members of AACC in 1948. Mary McKenna was also the first female to serve on the AACC Executive Board and Miriam Reiner became the first female to serve as AACC President in 1962.

The first female non-doctoral AACC President was Helen Free in 1990. She is actually the only non-doctoral individual who have ever served as president of AACC. She and her husband, Alfred, were of course famous for their work developing dry chemistry reagent like glucose dipsticks. They both received many accolades for their work and Helen received the AACC Award for Outstanding Contributions to Clinical Chemistry, now recognized as the Lifetime Achievement Award in 2006.

The first female to serve on the board of editors for *Clinical Chemistry* was Dr. Ellenmae Viergiver in 1953. She was a founding member of one of the first AACC local sections, the Philadelphia section, and served as their second female chairman also in 1953.

In 1959, AACC elected their first female treasurer, Dr. Margret Kaser. She was also the inaugural recipient of AACC's Outstanding Contributions through Service Award in 1966, which she earned through her many involvements in AACC.

The first female secretary was actually not elected until 1987, almost 40 years after AACC's inception. Dr. Karen Nickel was the first female to take on this role and went on to serve as AACC president four years later in 1991.

The first female to receive the Outstanding Contributions to Education Award was Dr. Marjorie, or Marge, Brewster in 1991, which was 20 years after the award was established. Her contributions to education are numerous and include authorship of many self-teaching texts and development of the certification ladder process between NRCC and ABCC.

Dr. Lena Armstrong Lewis was the first female to receive the Award for Outstanding Contributions to Clinical Chemistry in a Selected Area of Research for her expertise in the area of lipids and lipoproteins. She authored over 130 publications while also serving the AACC in many capacities.

The first female recipient of the Young Investigator Award was Dr. Marcie Hursting in 1993 for the development of novel coagulation assays. She said that receiving the award was validation that she had chosen the correct career path. And in a personal interview with her, she said, "I was proud to be the first woman awardee, the first with any research focus on coagulation and among the first with industry affiliation."

And, finally, the first female recipient of the AACC Lifetime Achievement Award was Dr. Jocelyn Hicks in 1993. She has also served as AACC Treasurer and AACC President and is the only female to have ever been elected as president of the International Federation of Clinical Chemistry.

I'd like to add that these descriptions of accomplishments and accolades are by no means comprehensive. There is a supplemental file that accompanies our paper that goes into more depth on each of these women which includes as many photographs as we could find and get permission to reprint that was inspired by the NIH Changing the Face of Medicine exhibition and I encourage you to check out both online.

Bob Barrett:

That is an impressive list of women. Of the women that you researched, did any stories stand out to you?

Caroline Franks: So, in preparation for this manuscript, we dug through yearbooks, old newspapers, some of the first publications of *The Clinical Chemist*, we even conducted personal interviews. It was a really great opportunity to learn about the history of these women and the paths they took that led to their success. And as a current fellow and trainee who spends a lot of time thinking about how to take the next step forward in my career, I found each story to be incredibly inspiring.

The first thing that really stood out to me was the fact that there were no defined paths for any of these women. For example, Dr. Marcie Hursting built an incredibly successful career as a clinical chemist in the industry setting. Helen Free built a legacy as a leader and scientist without ever obtaining a Ph.D. and Dr. Karen Nickel made a powerful impact fighting lab fraud serving as the first female Chief of Lab Field Services for the California Department of Public Health Services.

So, there really is no one defined paths to success.

Many women also shared powerful stories of gender inequity. Dr. Miriam Reiner, the first female AACC president, was actually initially told by her family that she needed to be a fashion designer. She pursued a career in chemistry against their wishes but recalled that she had to use a lot of persuasion and take a huge salary cut just to obtain a job as a research assistant as her workplace openly disapproved of women in the chemistry laboratory at the time. She recounted in an interview, "The bacteriologist, a man who had neither the publication, training, nor the size of the laboratory I had, received a substantial raise in pay. When I questioned the pathologist, he said, 'Oh, you don't wear the right kind of pants.'"

Dr. Jocelyn Hicks, the first woman to receive the Lifetime Achievement Award, shared similar stories. She shared that no one really wanted to help female scientists and there were no mentors at the time. One man said to me that I had no knowledge of physiology and biochemistry and I had a degree in both. All of this to say documentation of leaders in our field, both female and male, is vital. When we share the history and success of individuals, we're not only preserving the impact that they had on our community as we know it today, but we're also inspiring future generation.

And I want to give a quick shout-out to the AACC History Division who does an incredible job at this. They helped provide a number of resources that were instrumental in preparing this manuscript.

Bob Barrett: So, Dr. Gronowski, when you looked at the representation of women and AACC elected positions and awards, what did you find?

Ann Gronowski: We found that during AACC's 70-year history of the elected leadership, 17% of AACC Presidents, 17% of Secretaries, 22% of Treasurers and 25% of Board of Directors have been female. It's hard to assess how well these percentages reflect AACC membership since early AACC membership numbers broken down by sex are not readily available.

We're pretty sure that women have constituted at least 30% of AACC membership since 1962. If we look at the last 20 years, the representation of women in AACC leadership has increased for all elected leadership positions to be closer to the 30% female membership that they represent, which is reassuring.

Likewise, female representation on the *Clinical Chemistry* Board of Editors had increased dramatically. From 1954 to 2007, only six out of a hundred and thirty-four editors were women, or 4%. Today, there are 15 women serving on the board of editors, which represents 27%.

Female representation in AACC awards has also increased over time but, in my opinion, still needs a little bit of work. The AACC Lifetime Achievement Award has been given to only four women out of 68 recipients, or 6%. Three of those were in the last 20 years, so that's promising. AACC's Outstanding Contributions through Service Award was established in 1966 and has been given to 10 women out of 55 total recipients, or 18%. Since 2001, it's been awarded to four women.

The Outstanding Contributions to Education Award was established in 1971 and out of 50 recipients has been given to three women, or 6%, and two of those were in the last 20 years. The Award for Outstanding Contributions to Clinical Chemistry in a Selected Area of Research has been given to five women out of 50 recipients or 10%, two in the last 20 years. Interestingly, between 1987 and 2008, the award went 22 years without a female recipient.

I've heard people argue that well, the reason for the low numbers of women receiving this award during that period was because there just weren't women in science. However, I think it could be just as easily argued that women were frequently overlooked at that time. As a point of reference, during the same period of time, eight women received a Nobel Prize in physiology or medicine and in addition, as mentioned earlier, Helen Free and her husband, Alfred, were famous for their work developing dry chemistry reagents like glucose sticks and Al received this award in

2000 but Helen never did. She was later recognized by President Barack Obama in 2009 with the National Medal of Technology and Innovation.

I do find it very interesting that the AACC award with the highest number of female recipients is the newest award, Outstanding Scientific Achievements by a Young Investigator. Established in 1976, this award went 18 years before being given to a female but, since 2001, it's been given to 12 women, constituting more than half of the award recipients.

Bob Barrett: Dr. Franks, what are the five suggestions that you provide for continuing the advancement of women at AACC?

Caroline Franks: The first is to actively mentor women and provide opportunities for professional development. Second, recognize obligations that may be disproportionately placed on women. Third, and I really want to emphasize this one, nominate deserving women for awards and leadership positions. Without nomination, women will not win awards and will not be placed into leadership positions. And we encourage you not to assume a woman's willingness to take on leadership roles based on responsibilities outside the workplace. Fourth, request parity in the candidate pool. Nominations and award committees should demand that at least 25% of the candidate pool is represented by women before beginning the selection process. And lastly, five, examine diversity and inclusion and make it a priority.

We believe that these simple actions can help to ensure the representation of women within AACC. And in doing so, we honor the legacy of the women who came before us.

Bob Barrett: Well, finally, Dr. Gronowski, what do you want people to take away from reading this reflection?

Ann Gronowski: Well first, let me tell you what we don't want them to take away. We don't want anyone to think that we are criticizing AACC. Any lack of representation by women in science likely reflects society as a whole and is not in any way unique to our association. Over the past 20 years, I have personally served in a number of leadership roles within AACC and I always find it to be a nurturing and supportive environment.

What we do want people to take away is an appreciation for just a few of the remarkable women who have helped shape our association and our profession. They were strong and intelligent pioneers and we applaud them. We also hope that people will consider the recommendations that Dr. Frank listed and continue to support women in all aspects of science and medicine including within the AACC.

Bob Barrett:

That was Dr. Ann Gronowski and Dr. Caroline Franks talking about their article, "The Faces of Women in AACC: A Historical Reflection on AACC Leadership and Awards." It appears in the February 2021 issue of *Clinical Chemistry*. I'm Bob Barrett. Thanks for listening.