

# The Comparative Effectiveness and Safety Emerging Methods Symposium

## *A Tribute to Harry A. Guess: Father and Consummate Leader of Pharmacoepidemiology*

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This symposium and supplement dedicated to Harry Guess provides us with an opportunity to celebrate Harry's life and his myriad contributions to our knowledge about the development and application of methods pertaining to comparative effectiveness and safety. I was privileged to work with Harry in the field of pharmacoepidemiology, initially as one of the first 2 Merck/Society for Epidemiologic Research Clinical Epidemiology Fellows, a career development program designed by Harry to develop the field of pharmacoepidemiology. I subsequently collaborated with him as he masterfully mined the Rochester Epidemiology Project resources to provide unique insights about the occurrence and outcomes of conditions that were being targeted by therapies in the Merck drug development pipeline,<sup>1,2</sup> and periodically guest lectured in his pharmacoepidemiology classes at the University of North Carolina (UNC) at Chapel Hill and elsewhere. Along with his wife Gerry, Harry and I shared a deep love of UNC and an unwavering enthusiasm for its basketball team, particularly in its rivalry against Duke.<sup>3</sup> However, my first and most impressive interactions with Harry were during the early phase of his career as a clinician.

I distinctly remember meeting Harry in 1980 during morning report on the first day of my UNC pediatrics clerkship in medical school, when he was a pediatrics resident. I subsequently learned that, by this point in his long and distinguished career, he had already completed a PhD in Mathematics and an MS in Operational Research at Stanford University after having received a BS and MS in Applied Mathematics from Georgia Tech. During earlier clerkships in other clinical departments, I had been exposed to house staff who knew the core material of standard clinical textbooks verbatim and could recite that material in the care of patients. Against this backdrop, Harry stood out on that first morning and throughout the following 6 weeks of my pediatrics clerkship. He not only knew the didactic material that every physician selected into the highly coveted UNC Pediatrics resident program had mastered, but also had an ability to analyze and apply original research articles in the care of the patients on that pediatrics service in a manner that I had not previously observed. Even at UNC, which, as Kerr White observed "Epidemiology and Health Services" in *The Development of Modern Epidemiology*,<sup>4</sup> was light years ahead of many universities in the field that was to become known as evidence-based medicine, Harry's abilities in this arena and his approach to the practice of medicine were extraordinary and revolutionary for the time.

Although I had been exposed to the theory of "epidemiologic methods" as part of the class that pilot tested the material from Robert Fletcher, Suzanne Fletcher, and Edward Wagner that would become their landmark text, *Clinical Epidemiology: The Essentials*,<sup>5</sup> Harry was the first person I encountered who masterfully demonstrated the application of these methods to patient care. His example shaped my decision to "walk across the street"

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from the UNC School of Medicine to the School of Public Health for further studies in epidemiology. Harry had a similar influence on countless students and colleagues over the ensuing 25 years.

Harry will always be remembered with admiration and fondness by those of us who encountered him as a colleague or mentor during our academic or clinical training and careers. His influence, however, has been far more widespread, affecting both the scientific research community and clinical care settings. His pioneering work over 2 decades at Merck and Co. defined the field of pharmacoepidemiology. While working in the Mayo Clinic's Section of Clinical Epidemiology, my colleagues and I received many visits from pharmaceutical company personnel who thought that epidemiologic information might be relevant to products in their pipeline. Harry was unique among those visitors in his deep appreciation of the importance of understanding the occurrence and outcomes of conditions that new therapies targeted.<sup>6</sup> He spent endless hours poring over the records of the Rochester Epidemiology Project pursuing this knowledge and mentored many masters and doctoral students from UNC and elsewhere in detailed studies of disease etiology and outcome in a defined geographic population.<sup>7</sup> After his unique career as Vice President of Epidemiology at Merck Research Laboratories, Harry joined UNC full time in 2003, becoming Professor of Epidemiology and Pediatrics, and Director of the GlaxoSmithKline Center of Excellence in Pharmacoepidemiology. From 2003 until his death on January 1, 2006, Harry was also the UNC Centers for Education and Research on Therapeutics (CERT) Principal Investigator, guiding the Center's numerous and diverse initiatives.

Harry made ground-breaking contributions to research on vaccines,<sup>8</sup> the natural history of complex disease,<sup>9</sup> development and validation of clinical trial endpoints and patient-reported outcomes,<sup>10</sup> and other areas of pharmacoepidemiology.<sup>11</sup> He was a Fellow of the American Academy of Pediatrics, the American College of Preventive Medicine, and the American College of Epidemiology. He served on the editorial boards of *Epidemiology*, the *Journal of Clinical Epidemiology*, and the *Journal of Epidemiology and Biostatistics*, in addition to co-authoring more than 150 research

articles. In August 2005, Harry received the Award for Sustained Scientific Excellence from the International Society for Pharmacoepidemiology, recognizing his lifetime achievements in the field. His legacy continues with 2 scholarship funds in the UNC School of Public Health: The Harry Guess Scholarship in Epidemiology and The Harry A. Guess-Merck Scholarship in Pharmacoepidemiology.

Harry's influence has been ubiquitous and profound. This is true for the symposium that produced the articles in these proceedings, just as it has been throughout my professional life and the lives of countless students and colleagues in the field of pharmacoepidemiology. We miss him, and recall him fondly each time the Tar Heels take to the hardwood, and we know that his intellectual legacy will continue to guide our work in the field of pharmacoepidemiology and comparative effectiveness.

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