The year was 1975; the first issue of *Journal of Clinical Microbiology* (JCM) was published. The advertisers included Microbiological Associates, Clinical Sciences, Inc., and General Diagnostics. Fifty U.S. dollars bought a 1-year subscription. The subjects of the published articles included *Proteus morganii*, a novel satellite test for *Haemophilus* spp., and rapid hippurate hydrolysis testing of *Streptococcus agalactiae*. How apropos it is that as JCM commemorates its 40th anniversary, the subject of the February 2015 biographical feature is Dr. Henry Isenberg, one of the original editors of the journal.

Henry D. Isenberg was born in Germany in 1922. He emigrated alone to the United States at the age of 14 to escape Nazi persecution and settled in New York City with a distant relative. According to his son, Gerald A. Isenberg, M.D., Henry Isenberg “always had an inquisitive mind and was always curious about things. He was interested in the ‘why’ of things.” Such impetus drove his baccalaureate education at the City College of New York, from which he was graduated in 1947. Over the next 12 years, his additional scientific training resulted in master’s and doctorate degrees from Brooklyn College and St. John’s University, respectively. Gerald Isenberg noted that his father possessed “unbelievable drive, determination, and dedication.” Henry Isenberg was a lifelong learner; Lynne Garcia, editor in chief of the third edition of *Clinical Microbiology Procedures Handbook*, spoke of the phenomenal breadth of Isenberg’s knowledge, stating that “he was skilled and very knowledgeable, regardless of the topic.”

During the course of his graduate studies, Isenberg obtained
laboratory directorship appointments in the New York City area, including one as chief of microbiology at Long Island Jewish Medical Center (LIJ) in New Hyde Park, NY. He held this title from 1954 to 1997. According to Steven D. Douglas, M.D., professor of pediatrics at University of Pennsylvania School of Medicine, LIJ was a “community hospital that morphed into a major medical center” during this tenure. Isenberg maintained the basic operations of a diagnostic microbiology laboratory while developing a basic science research laboratory. Moreover, in his early career, Isenberg oversaw activities in the urinalysis, hematology, and blood bank departments. He was renowned for introducing young people to science and forging opportunities for their involvement in the laboratory. As high school or college students, several participated in research laboratory projects or (prior to the Clinical Laboratory Improvement Amendments [CLIA] of 1988) performance of complete blood counts in the hematology laboratory. Other affiliations held by him during his tenure at LIJ included research posts at Sloan Kettering Institute and the American Institute of Biological Science, as well as academic positions at SUNY—Stony Brook, Albert Einstein College of Medicine, and Mt. Sinai Medical Center.

His training and professional development resulted in certification with the American Board of Medical Microbiology (ABMM), licensure with the New York City Department of Health, and certification of qualification with the New York State Department of Health. Isenberg was granted fellowship in the American Academy of Microbiology, the New York Academy of Sciences, the Infectious Diseases Society of America, and the American Institute of Chemists, among other organizations. Isenberg was honored with the Becton Dickinson Award in Clinical Microbiology in 1979, the Alex C. Sonnenwirth Memorial Lectureship 10 years later, the ABMM Professional Recognition Award in 1994, and the American Society for Microbiology (ASM) Distinguished Service Award in 1996 and was granted ASM honorary member status in 1999. Other scholarly activities of his included consultations/memberships in the National Aeronautics and Space Administration, the American Association for the Advancement of Science, the National Committee for Clinical and Laboratory Standards, the Centers for Disease Control and Prevention, and the National Institutes of Health and several leadership positions within ASM and ABMM.

According to Dr. Douglas, Isenberg was a “great clinical microbiologist, biologist, and microbial biochemist.” This translated into a diverse, multidisciplinary research portfolio (refer to the selected bibliography at end of this biographical feature). Isenberg studied nutritional and metabolic mechanisms of microbes during the 1950s with Dr. Albert Schatz. Isenberg developed a unique protozoan model (Hymenomonas Mary Parke 156) for the study of calcification, with the ultimate goal of investigating hard tissue formation in mammalian hosts. He also demonstrated a lifelong interest in host-microbe relationships. For example, he investigated the role of Candida albicans in the overall ecology of the gastrointestinal tract. Isenberg also established a rat polyvinyl sponge model for assessment of microbial proliferation. In the words of Ms. Garcia, Isenberg was the “ultimate clinical microbiologist. He knew microbiology, he knew medicine, and he knew therapy.” At an early time, Isenberg recognized the importance of antimicrobial susceptibility testing and surveillance in the face of emerging antimicrobial resistance. While clinical microbiologists today desire increased automation in terms of daily laboratory workflow, Isenberg was already considering similar prospects in the 1960s and 1970s, pioneering automation advances in data management, bacterial identification, and antimicrobial susceptibility testing. As one example, he participated in early assessments of the precursor to today’s Vitek technology. Isenberg’s work also stressed the importance of the clinical microbiology laboratory in hospital infection control. Moreover, he investigated downstream clinical outcomes of data generated by the microbiology laboratory. With all of that said, Dr. Douglas stated that Isenberg “was a champion of med techs and students.” Ms. Garcia added that Isenberg was “very supportive of young microbiologists.”

Perhaps Isenberg’s greatest contribution to the field of clinical microbiology was his dissemination of information both to bench technologists and to clinical practitioners. Over 150 PubMed-indexed peer-reviewed publications are attributed to him; Isenberg also penned more than 50 books or book chapters. Isenberg has more than 6,000 Institute for Scientific Information (ISI) citations to his credit. He served as JCM editor from 1975 to 1989, assuming editor in chief activities from 1979 to 1989. Gerald Isenberg remarked that his father took extreme pride in being editor in chief of JCM. Henry Isenberg’s multidisciplinary outlook on the field of microbiology was pivotal to the creation of the ASM Journal Clinical and Diagnostic Laboratory Immunology, now known as Clinical and Vaccine Immunology. He was also a section editor for the third and fourth editions of Manual of Clinical Microbiology. Clinical microbiology laboratories worldwide have Clinical Microbiology Procedures Handbook at their disposal; beginning in 1992, Isenberg was editor in chief of the first two editions of this invaluable and authoritative series. Ms. Garcia recalled the genesis of this publication. “Henry was thinking about the procedures handbook long before it got started. He saw it as a need very early. It serves a purpose that no one had identified or tackled. He encouraged many microbiologists to become involved with this project; bench technologists did most of the writing and compiling at that time. Henry led the charge but didn’t take charge. He turned us loose to do this.” She further noted that Isenberg had the ability to recognize both the big picture and the importance of meticulous detail; he was a champion of a well-scribed Materials and Methods section. The attributes of precision, fastidiousness, and dedication that his peers described, with respect to his editorial duties, were indeed a reflection of the man himself.

In a retrospective essay published in 2003, Isenberg wrote, “...the practice of clinical microbiology is the application of knowledge gained to the betterment of the human condition, the goal of clinical microbiologists. To appreciate the history of microbiology, it must be said... that this practical side has earned us the disdain of those who emphasize theory exclusively. Our working behind the scenes is misinterpreted by colleagues in related fields whose egos require constant applause. Our role is belittled, but the wondrous ingenuity of our test objects underlies our contributions to health, disease diagnoses, and therapy” (1). Henry Isenberg died in 2006; may we, as present and future clinical microbiologists, continue to carry the torches of past pioneers, innovators, and contributors, while maintaining requisite duty and humility as we remember the true purpose for our discipline.

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REFERENCES


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