Nevin Stewart Scrimshaw, PhD, MD, MPH (1918–2013)

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Nevin Stewart Scrimshaw passed away peacefully 8 February 2013, having celebrated his 95th birthday only 2 wk earlier. Globally recognized as the Dean of International Nutritional Science and Policy, he held a PhD in biochemistry from Harvard University (1941), an MD from the University of Rochester (1945), and an MPH from the Harvard School of Public Health (HSPH; 1959). A Fellow of the ASN, Nevin accumulated awards from the Society in each of its 3 domains of basic, medical, and international contributions, these in parallel to his respective academic degrees. On a broader stage, he was elected to the US National Academy of Science and to the Institute of Medicine, he won the World Hunger Prize in 1991, and he received the Prince Mahidol Award, and a knighthood, from the kingdom of Thailand in 2004.

Nevin was born in Wauwatosa, Wisconsin, on 20 January 1918. His father, Stewart Scrimshaw, who began his career as a brick mason in rural England, emigrated to the United States in 1906 in pursuit of a college education; he rose to become a professor of economics at Marquette University. During his summers in northern Wisconsin, Nevin developed an avid interest in butterfly collecting and added to the collection of the Milwaukee Science Museum. His interest in biology continued through his years at Ohio Wesleyan College. His work on nutrition in pregnant fish for his Harvard doctoral degree led him to an interest in human nutrition and to seeking a medical degree.

He forged and directed major institutions by an irrepressible dint of vision, intellect, insight, and humanitarian dedication over 6 decades of senior leadership in the community of nutrition. At age 31, having completed residency training in obstetrics at the US Army Gorgas Hospital serving the Canal Zone of Panama, Nevin was tapped by the Pan American Health Organization to be the founding Director of the Institute of Nutrition of Central America and Panama (INCAP) in 1949; later, in 1962, he returned to the United States to become the founding Head of the Department of Nutrition and Food Science of the Massachusetts Institute of Technology (MIT). He completed his career leading and crafting the mission of the United Nations University (UNU) World Hunger Program (WHP; 1975–1985) and later (1982–2009) that of the International Nutrition Foundation for Developing Countries (INF). The INF, as of 2012 by decision of its board, added the founder’s name, Nevin Scrimshaw, to become the NSINF, with the object of preserving his legacy in support of capacity building in developing regions of the world.

The INCAP Years

In 1949, Nevin uprooted his family—his wife, Mary, and daughter, Susan—once again to Central America. However, far from the routine of hospital practice they had known at the southern end of the Isthmus, this would be an adventure into the unknown at the northern end of Guatemala. World War II had only ended 5 y earlier, and the UN was in its infancy. At that time, the model of a research outpost in the developing world was totally unprecedented. There was no script. So Nevin took on the role not only of director of the fledgling effort but also of the playwright for its first acts.

One immediate action was to identify the most talented local professionals across diverse fields of medicine, food science, biochemistry, statistics, etc., and send them abroad for doctoral training; meanwhile, he set to forging legitimate roles for their returns to INCAP. Within 4 y of the founding, he and his colleagues had shown the feasibility of replacing potassium iodide with potassium iodate to achieve better stability given the coarser and more humid salt supply of Guatemala (1). The worldwide paradigm of the postwar nutrition community, however, was centered on protein. On the clinical side, Nevin surrounded himself with clinicians such as Moises Behar and Fernando Viteri and basic scientists such as Guillermo Arroyave and Carlos Tejada. They examined the protein-energy deficiency syndrome, kwashiorkor, from all available angles (2, 3). On the food science and technology side, Nevin worked with Ricardo Bressani on the laboratory and feeding studies that led to the development and marketing of Incaparina (Central de Alimentos, S.A., Guatemala City, Guatemala), still a source of nutrient-rich, low-cost food product for children in Central America (4).

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3 Abbreviations used: EMF, Ellison Medical Foundation; HSPH, Harvard School of Public Health; INCAP, Institute of Nutrition of Central America and Panama; INF, International Nutrition Foundation for Developing Countries; MIT, Massachusetts Institute of Technology; UNU, United Nations University; WHP, World Hunger Program.
Nevin interrupted his period in Guatemala for a sabbatical year in Boston to obtain an MPH at the HSPH. He and the eminent epidemiologist John Gordon made seminal observations on diet, feeding, and infections in field studies in Guatemala. His master’s thesis, "The interaction of nutrition and infection," was published in 1959 (5). It was a transcendental treatise in which he documented synergistic interactions between undernutrition and infection. On the one hand, poor nutrition would predispose to a greater risk of incidence of infection, and of a longer and more severe course, whereas better nutrition conveyed resistance and resilience. On the other hand, infection would cause nutrient malabsorption and wasting and predisposition to malnutrition. A converse effect, antagonism, was identified, in which poorer nutrition conveys resistance to selected—usually intracellular—pathogens.

The MIT Years

Nevin arrived at MIT in 1961 and became the founding department head for the Department of Nutrition and Food Science 1 y later. If protein was king in his concerns in Central America, it remained on the central throne at MIT. Over the ensuing years, he would work closely with fellow faculty member Vernon Young to assess the protein requirements in healthy adults and the factors affecting its metabolism (6, 7). This would be carried to the UN agency level in the formulation of the daily intake needs for total protein and for individual amino acids (8).

As a physician, he competed successfully for one of the NIH Clinical Research Center grants, the only one not confined within a teaching hospital; this, in turn, enabled him to institute a unique MD-PhD program for doctoral candidates, who were already trained and qualified as physicians in internal medicine, surgery, or pediatrics. They came not only from the United States but from Thailand, Chile, Argentina, Guatemala, India, and other nations around the world.

While at MIT, the UNU was founded in Tokyo, and Nevin was named the director of its WHP in 1975. The WHP would evolve into the UNU’s Food and Nutrition Program. The Food and Nutrition Bulletin, which he edited for >2 decades, is now edited at Tufts. Meanwhile, within MIT as of 1971, he founded the International Nutrition Policy Program to focus on the solution of problems in developing countries.

Again, on a beyond-Cambridge basis, Nevin served as the President of the International Union of Nutritional Science from 1978 to 1981, which was characterized by an ambitious agenda of subcommissions; to fill these groups, he reached out worldwide for leadership and inclusion, especially of women. Nevin retired from MIT in 1988 as an Institute Professor Emeritus.

The Nevin Scrimshaw INF Legacy

The worldwide involvement stimulated by the UNU experience was somewhat cramped within the confines of MIT. Nevin stepped down as department head in 1982, and the same year founded the INF. Its mission was to facilitate the training of young scientists and to support the execution of research projects abroad. First housed at the HSPH, it then moved to the basement of his private Beacon Hill residence, and finally was invited by Dean Irwin Rosenberg into office space of the Friedman School of Nutrition Science and Policy. After Harvard and MIT, this now brought him into an academic connection with the Tufts University community.

Nevin used the auspices of the UNU and his foundation to facilitate the work of Susan Scrimshaw, working with Elena Hurtado of Guatemala, to develop and disseminate qualitative methods for Rapid Anthropological Assessment Procedures (RAP) to evaluate nutritional and primary health situations (9). More recently, the foundation was the recipient of the first grant of the Ellison Medical Foundation (EMF) for an INF/EMF Fellowship Program. From 2004 to 2011, it supported international centers of excellence to guide and train doctoral and postdoctoral candidates of high promise from Africa, Asia, and Latin America in sophisticated areas of nutrition- and/or infection-related health research.

The Synergistic Synthesis of a Life

Let us mention activities that Nevin carried into his 10th decade: his zest for downhill skiing in New Hampshire and his attendance at ASN meetings. Nevin never lost his desire to mentor young scientists, as was manifested in his cruising the poster exhibitions in the 2008 meeting in San Diego. When you hybridize 3 highest academic degrees with an unprecedented personal breadth of vision and an insatiable interest in nutrition and health, what you get is the legacy of Nevin Stewart Scrimshaw. The same synergy that underpins his theory on the interaction of nutrition and infection emerged within the linkages and combinations of ideas and disciplines. Fortunately, moreover, he did not keep all of this to himself, but rather shared it by befriending and mentoring innumerable beneficiaries from the professionals formed in Guatemala, to the graduate and undergraduate students at MIT and Tufts, to the young aspirants for modern nutrition knowledge among the UNU and later the INF/EMF fellows. In fact, in 2007, Nevin provided us in the Annual Review of Nutrition with an autobiographical sketch entitled, “Fifty-five-year personal experience with human nutrition worldwide” (10). The Text Box 1 above provides a few of the quotations (from reference 10) that he has left for the record for us to ponder.

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Acknowledgments
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References