

Host: A boy maturing in the 1950s would have had a hard time resisting the Horatio Hornblower novels. Set during the Napoleonic wars, the stories, which began appearing in 1938, combine sweeping adventure on the open seas with an interior journey. The rise of Hornblower, from self-doubting midshipman to brilliant Admiral who, over and over, saves the day, and yet rarely thinks of himself as a hero.

Jack Ladenson, the Oree M. Carroll and Lillian B. Ladenson Professor of Clinical Chemistry at Washington University School of Medicine in St. Louis was born in 1942, and still reads the series.

Dr. Jack Ladenson: Hornblower changes from a kid to a man through a series of books, and it's fascinating to watch a very scared young man develop in to a somewhat non-confident but brilliant leader.

Host: Some might say the same of Ladenson. He has made some of the most important discoveries in the history of clinical chemistry, holds all the main awards in his field, has trained some of its brightest stars, holds an endowed chair, and has helped create two others.

Yet Ladenson, imposing in appearance and stature, retains an almost old-fashioned sense of modesty. In fact, it is tempting to compare the story of Ladenson's life to Hornblower's tale. The rise from humble beginnings, the call to leadership, the life-saving missions, just as one might detect the texture of Ladenson's character and Hornblower's humility and his uncanny ability to solve problems.

Dr. Mitchell Scott: We often try to get students to see the forest for the trees, if you know what I mean, and Jack not only sees a forest, he actually can see through it. He can take a situation and develop solutions before they are clear to virtually anyone else.

Host: That's Mitchell Scott, a former student and a long-time colleague of Ladenson's at Washington University. A case in point, in the late 1970s, researchers were scrambling to develop an assay that would quickly and accurately tell if a heart attack had occurred.

Ladenson, working with colleagues, set out to find such a test, an arduous search that culminated in the development of the creatine kinase-MB monoclonal antibody assay. Over the following years, he would help transform the field of cardiology with the development of two more heart attack assays, troponin I, now the gold standard, and myoglobin. Of course, Ladenson downplays these achievements.

Dr. Jack Ladenson: You get a plan and you have to have the confidence to just try it. If something doesn't go right, so what? You try something else, so what is that, tenacity? If it is then I probably have that.

Host: Little in Ladenson's background suggested he would undertake such a journey. He grew up in Philadelphia, the only son of Ukrainian-born salesman and an American housewife, in a household that he calls "loose Jewish." His sisters were significantly older, but he was hardly a spoiled son.

Dr. Jack Ladenson: When I was about 11 or 12, I had an allowance. I wanted something that was more money, I honestly can't remember what it was now. My parents said no, so I walked out, I went across the street to an old-fashioned drug store, and got a job as a soda jerk. That was actually my first job, and I guess my first start at being independent.

Host: That independence would be forged in unexpected ways. After four lackluster years at Penn State.

Dr. Jack Ladenson: I would have to be called a late bloomer since I didn't take college very seriously.

Host: And a brief stint in the National Guard, he entered the graduate program in Analytic Chemistry at the University of Maryland. His advisor ran a laboratory that left students on their own.

Dr. Jack Ladenson: In hindsight, it was a very good thing for me.

Host: Graduate school was good in other ways. There Ladenson met his future wife, Ruth, a fellow chemistry graduate student. In 1970, the pair moved to Hartford Hospital, where Ladenson became the first postdoctoral fellow in clinical chemistry, and two years later, to Washington University, where he joined the faculty. He has been there ever since.

It was during his early years there that Ladenson set out to find the CK-MB antibody, a quest some thought quixotic because of the technical difficulties involved, Mitchell Scott recalls.

Dr. Mitchell Scott: Yeah, I can remember a conversation I was having with Jack in the hallway where I told him it wouldn't work. I would have been a second year fellow and that a student at my stage of my career could offer such pointed criticism and do it so casually, reflects on Ladenson's teaching style. He lets you figure it out.

Dr. David Bruns: At that time it seemed he was always trying to learn from me, but in retrospect I have realized it was part of his teaching style.

Host: That's David Bruns, Professor of Pathology at the University of Virginia and a former student. Ladenson, who takes obvious pride in his training program in clinical chemistry, the largest in the field, defines his teaching style as follows.

Dr. Jack Ladenson: My sense of teaching is not to make anyone a clone of me. It's to try to have students in a small group in order to see how they are going about thinking about particular problems as opposed to trying to change their mode of thinking. Once one understands how they think you can better tailor material for them to learn. People come from different backgrounds in this field, and I think that's why you have to let them learn in the mode with which they're comfortable.

Host: Ladenson's emphasis on individuality is evident in his own persona. He sports a long untrimmed beard and has generally refused to wear a tie, even to his daughter's wedding. At a dinner in his honor, he was presented with a jacket made out of the most outlandish ties his colleagues could find.

Dr. David Bruns: It was the only time anyone has seen him wear a tie. He was real gracious about it.

Host: But it's usually Ladenson who does the kidding. He has a wicked sense of humor, by all accounts.

Dr. David Bruns: That comes across very quickly.

Host: In 1996, at the suggestion of a former resident, Ladenson was invited by the Founder of Pathologists Overseas to tackle the problem of improving medical services in Eritrea, not an easy task considering its lack of resources.

Dr. Jack Ladenson: We came up with the idea of creating a reference laboratory for the entire country.

Host: He extended the plan to Bhutan in 2000 and has continued to work there and in Eritrea. Ladenson still travels to both countries at least once a year. Add to that, trips to Texas and Morocco to visit his daughter, Michele, and son, Jeff, and the growing covey of grandchildren, and it's a wonder there is time for a daily home routine. But he has one. Up at 5:30, he walks one of his two golden retrievers, has breakfast, and is at work by 9.

In the old days, he used to walk or bike much of the way, to the amazement of his harried students. David Bruns recalls.

Dr. David Bruns: I was a gung-ho resident, busy every moment. So I asked, what the hell do you think about when you're walking all that time? I thought he'd say something about work. "Oh," he said, "I see a bird, I think about the bird. I see a tree, I think about the tree." But you know there's something to it. He'll focus on a specific issue and ideas come to him. But he's always asking, "what can you do to help the patient?"

Total Duration: 7 Minutes