Dr. Bill Bunnag Oral History August 29, 2023

Higingbotham: Hello, my name is Haley Higingbotham. I am an Archivist at the Office of NIH History and Stetten Museum. Today is August 29, 2023, and I am speaking with Dr. Bill Bunnag. Dr. Bill Bunnag worked at NIH for 35 years at both the National Cancer Institute [NCI] in a variety of roles including the Chief of the Cytology Automation Section and a Health Scientist Administrator in the Office of Technology Development, and at the Center for Scientific Review [CSR] as a Scientific Review Officer as well as a Referral Officer. In addition, Dr. Bunnag served as one of the first President for the NIH Asian/Pacific Islander American Organization [APAO] and was involved in promoting AANHPI issues at NIH throughout his career. Thank you so much for joining me Dr. Bunnag. To get started, could you discuss your background including your early education and family life in Thailand?

Bunnag: I had read the question and wanted to start from when I was born, so that's where I'm going to start. I was born in 1939 in Bangkok, Thailand. I was born into a wealthy and strict household. My father was in the army and a disciplinarian. I had three brothers: one who joined the army, another one who joined the navy, and the other one was a comptroller for a company. I had one sister who was the oldest child in the family. My eldest brother was a volunteer for the Korean War, and we lost him during the war. He was a navy pilot and was killed. My father constantly reminded me very much of the importance of discipline. My mother would remind us often of our roots dating back to the founding of the country. In fact, that family name dates back to the royal lineage that founded Thailand. It is unusual to have a two-syllable name in Thai culture. We carried the name Bunnag with pride for many, many generations. Both my parents, but especially my mother, reminded me often of the importance of education. At that time, Thailand was still practicing discrimination, some of which was in several ways. Some of it was in overt ways and was generally accepted. I'm touching on this because we are going to talk about some inequality in the workplace at NIH so I thought I would just mention this early. Our family prided ourselves in being in the upper class and coming from a privileged family. I recognized and took full advantage of being in the upper class to help me in my interest throughout my high school and college years. Now I recognize how unfair it is to those who do not have this advantage. However, at that time, I was only interested in pursuing my passion. Prejudice is pernicious and subtle on my young mind. For those reasons, I felt that I was in a class different from other ethnic Chinese and Indians who were not considered our equal. To me, they are just different. Obviously, I don't feel that way now. Ethnicity and culture are not indicative of inferiority. It has been my observation throughout my life that most people, regardless of their race, excel in various ways.

Higingbotham: What first sparked your interest in science as a child? Did you have any scientific role models?

Bunnag: At that time, my sister was married to a pediatrician, and they all wanted me to be an MD. I was inspired by his practice; I looked up to him. My sister, who was 14 years older than I, also encouraged me in some subtle way to get medical education. At that time, I was still in high school, but my passion was trying to excel in science. My main interest was in how things were in the body and trying to understand the physiology of the body. I first studied frogs. I have been interested, or I have always been interested in working with human physiology. That is still always has been my main interests throughout all of these years. It's ironic that later my mother died of ovarian cancer and that influenced my thesis study. In fact, it was coincidental. I was planning on doing research in ovarian cancer long before she was diagnosed, but it's just unfortunate. The next question is,

"Your sister seems to be a big proponent for your education. Could you speak about her role in your life and how she assisted with your immigration to the U.S.?"

Higingbotham: Yes, I was very interested in hearing the answer to this question after our conversation last time.

Bunnag: Well, it's a very interesting story. It fits a general definition of "by chance", and it is so, so fortunate that I had several very, very fortunate chances. Let me tell you why. My sister is much older than I am. She influenced my early interest in medicine. She did not expressly say it in so many words but through actions reminded me of how important it is to be interested in science and medicine. Her influence directed me to get involved in physiology in general and medicine in particular. When my sister divorced her husband, she remarried an American diplomat and brought me over with her family to America. I was a second-year student in university in Bangkok. To this day, I still do not understand why she included me in the clan. When she moved to America, she must have recognized some quality that I have, and that America would be a place to pursue my interest in science and technology. I was definitely happy to be here, not knowing what the future holds.

Higingbotham: As a follow up, had you thought about moving to America for your research before your sister kind of prompted you to move?

Bunnag: Interesting question. Yes and no. America seemed to be the land of opportunity, and I had always had this image of me doing some kind of science research here, but it was just a thought – a dream, if you will. So, yes, so the answer is yes. I did have that in mind.

Higingbotham: We can go to the next question. You completed your Bachelor of Science, Master of Science, Master of Philosophy, and your PhD at George Washington University [GW] in Washington, DC, while a full-time employee on employee scholarships. What program was this part of and how did you find balancing school and work when you first immigrated to America?

Bunnag: Well, I consider it a privilege to be able to study and have somebody pay me during the day. I did not have a social life, so to speak. I sort of had just had a one-track mind in trying to excel in what I was doing and to get to the top of what I was doing. I was again by chance and fortunate that I did find GW to pay for my tuition, and where I would work in the afternoon and evening depending on the schedule. I was relying on the schedule of the courses and time, and then I would pick the subject that I was interested in and if it happens to be in the slot that I am available – that would be great. So that's what I did. Let me go back to the last question. I got a part time job through my brother-in-law at GW. We came here, and I did not have a job. We both looked around, and through the employee employment agency, we did find a job for me. My brother-in-law and I did go around, and we did find a job to support me during the day. Throughout the early years, my interests in science had been reinforced by my interest in physiology and medicine, although I was not accepted yet for the MD degree. I was accepted at GW to continue for a bachelor's degree. This was an opportunity then I was very happy to have received. Reflecting on the past, there are in my life so many chances given to me, and I don't remember not taking any. I took full advantage of whatever opportunity I had.

Higingbotham: Yeah, if you want to move on to the next question. You seemed very focused on cytology, especially in your early career, and I think in your work and university perhaps. What interested you in cytology?

Bunnag: Well, it was not so much of an interest. I was always an interested in science. In cytology, you look at cells and try to get as much information on the cell that we see. By chance, I got an opportunity to work at the cytology laboratory at GW, and I did not miss the chance.

Higingbotham: You also seemed interested in data mining, which I don't necessarily associate with cytology all the time. What interested you in that field?

Bunnag: Well, data mining was at that time relatively new. It was a technology that would look at data points and try to get as much information from them. It was something exciting to me, so I pursued the study of data mining, together with the cytology. There are several interesting information that one can keep from looking at a cell and tell us. Other than the sex chromosomes, you can tell the various aspect of the physiology within the cell.

Higingbotham: If you are done with that question, what brought you to NIH, specifically NCI in 1974? What was your first job at NCI?

Bunnag: Let's see, I believe it was in 1974 President Nixon declared war on cancer. NCI was looking for someone who was a certified cytotechnologist. I was certified then, and they were looking for someone with my background and experience, and I did contribute to the association of the data available in cancer. I maintained my association with GW and continued as an instructor which was beneficial to my career. The opportunity opened to me by chance and to take advantage of the new research program to detect cancer early. By now, you probably could sense that my whole life has been dependent on opportunity and chances. Even today, I still don't understand why some of the opportunities just opened up for me. By chance, I happened to be at the right place at the right time and I certainly took the opportunity to take advantage of whatever information there was that I could get into both from an academic point of view and two, from a self-preservation. Meaning that I could at the same time earn some living from being paid, so to speak. Along that line, it is interesting that we conduct ourselves according to the opportunity that has been opened to us. Some we did not take and we regret, some we did take, and some we just wonder why it just happened. So, that was the reason why I was involved in in cancer research.

Higingbotham: You worked on a lot of projects while you were at NCI including high altitude reconnaissance technology from the Cold War to the typology of malignant cells. Can you discuss some of the projects you worked on?

Bunnag: The high-altitude reconnaissance was new. We tried to—from way above, we look at the topology of a field and we see mountains, we see valleys, etc. That can be applied also to cytology. They can make the association between the anomalies found in cells and abnormal finding in cells that we came very easily, painlessly and readily available to us to study. Hopefully that answers some questions up to now about the topology. That's why I was involved in high altitude reconnaissance. It was a big field at the time, and the money was there.

Higingbotham: Okay. When you first came to NCI, you mainly worked in overseeing grants and contracts and you were a cytotechnologist, but you eventually became the Chief of the Cytology Automation Section of the diagnosis branch at NCI. Could you talk about what that role meant to you and also some of the work you did in that role?

Bunnag: Cytology has proven itself to be useful in early detection of cancer by morphology, and I took advantage of the abnormal morphology of the cell to look at the abnormality of cells to see if these are just simply anomalies or pre-cancer cells. The Congress had appropriated a lot of money for NCI that year, and NCI took advantage of that. We simply try to look at early detection of cancer. The emphasis has always been early detection because early detection means early cure and possible cure. That's why it's important. In the

pathology cytology section of the diagnosis branch, I was to advance our knowledge of the centrality in early detection of cancer. If that was possible, we certainly would try to advance science in that area.

Higingbotham: After you worked in the cytology automation section, you joined the Office of Technology Development at NCI in 1988. Could you discuss some of the work in that office and how it was different from being in a lab and how you helped to implement the Technology Transfer Act?

Bunnag: Again, because there was money appropriated by Congress, there was money to advance the technology in the Office of Technology Development. There were questions of if there was a mandate to provide funding for new technology development, and this primarily was given to NCI to continue their funding of the research and to try to implement the new findings so that we can find early detection of cancer. The emphasis has always been cancer. And number two, early detection is the next stage. The next question is, "The last two decades of your career were spent at Center for Scientific Review. What was your role?" The Center for Scientific Review has many, many offices. Each office as a committee that specializes in certain areas of science—in cytology, in automation, in instrumentation, and so forth. Those fall in one of my committees, and that's the role I played in Center for Scientific Review. My primary role in that office was to organize our committees to review grant applications in certain areas of science. This has been very fruitful for NCI and many grants were given to deserving universities and research entities. My job later expanded to being a Referral Officer, which involve selecting applications for certain areas of science, and this has been very informative and very beneficial for the country.

Higingbotham: During your work at NCI and also CSR, you received several awards for Outstanding Performance and achievements while working at NIH. What does this acknowledgement of your hard work mean to you?

Bunnag: It has always been gratifying to be acknowledged for the work that one has done. I was involved in several fields in areas, and I appreciate the acknowledgement. Over the years, I think about how important it is. It's very important to have the diversity of thoughts and contributors in our world. It is the main reason that I got involved in helping minorities.

Higingbotham: This flows pretty well into the next question. Beyond your work that you did in your job, you were also prominent in promoting Asian American and Pacific Islander employees interested at NIH. What made you first interested in getting involved with these issues?

Bunnag: I recognized in my early years that some people did a lot of work, and they added a lot to the field of science, but they have been left behind. They should be acknowledged for their work. Diversity at an organization is good. It is important that the efforts of all be recognized. We have a number of very productive people, and it was a shame not to recognize them formally, appropriately, and accordingly.

Higingbotham: I'm going to change the wording a little bit from what how it was written on the page. In 1998, you became the first president of the NIH Asian/Pacific Islander American Organization APAO. What did you do in this role? And what were some issues you noticed that you wanted to address? And, since I now know you were the first president, did you help like organize this group? And how did you do that?

Bunnag: I recognized the need for one because to have it in an office or an organization that recognizes the work of good people is only beneficial to the main entity, in this case NIH. I noticed that many of my colleagues were left behind or not promoted. It was not because they're incapable or less capable. They were just left behind because they did not speak up. This was the big issue with the Asian communities. We seemed to be shy, at least in those years. I don't know about the current situation. But in those years, it seems that they were somewhat shy in speaking up, speaking out, and trying to get acknowledged for what they have done. This has been in my mind since my early years at an age when I recognized the importance of the contribution of everyone, and because NIH is the premier research institution and should not be impervious to some of this group of scientists. I strive from our early years, that diversity is good, and no diversity is social discrimination, and social injustice is not acceptable. This has been my main concern. When I came to America, I was disappointed to see that groups were segregated along ethnic lines in the workplace. This was demeaning and an affront to productivity and efficiency. I have strived to rectify this injustice, and as the president of the organization, there was nothing before me. I take pride in being able to organize the first group to tackle the problem.

Higingbotham: How did you organize it? Like what steps did you have to take to organize this group?

Bunnag: NIH is good at helping people work together, and I knew some people that are not very happy. These are the ones that I targeted to help me. We finally achieved in getting together, and we were able to get to work together. I achieved some of the goals that I set for myself and APAO. I take comfort in that.

Higingbotham: The last formal question I had was do you have any words of advice for anyone else that wants to help promote equity in their workspace or even the world?

Bunnag: The only way to do it is to number one: find time, [and] number two: find people. Of these, you try to find out what is happening, what is not happening, how these scientists can contribute more to NIH, and from then it should not be that difficult to get together with these likeminded people. And that's how I would get started. The only way to rectify the injustice is to acknowledge that they exist and try to correct what is not just. That has been my theme all through my career. I was incredibly grateful to be acknowledged for the accomplishments that I achieved during my tenure at NIH, because, as you know, NIH is the premier research institution. Its employees should be acknowledged. After I left, I believe there were several people who had their careers move forward in part due to the recognition of APAO to focus on their work in the advancement of science. APAO is not there to push individuals forward, but to make sure that they are recognized for their contribution and are not left behind. That's it for [that] question. I am ready to add any extra questions that you may have. This is going to be impromptu.

Higingbotham: Yeah. One of the things I had was you mentioned that you felt as though the Asian American employees at NIH were very shy and didn't want to promote themselves. What do you think was the reason why they felt this way?

Bunnag: Oh, cultural really. That is the way people are. I must tell you that this was some 30 years ago, so the situation then and the situation now are different. The whole organization may be different. The whole setup of personnel certainly are different. I don't feel that I can address why to a greater detail than that is just the cultural development. Girls are not usually allowed to speak out for example, and that has gone over into the job situation. Because of that, unless you speak out, you are going to not be known. You're not going to be recognized, because nobody knows who you are. And that's essentially the problem.

Higingbotham: The other question I had was you mentioned when you first came to the U.S., you were a witness and experienced the segregation that was very prominent in the country. Can you just discuss how you've seen perhaps NIH specifically change since the beginning of your career to when you retired? I know you can't speak to now, but it'd be nice to have a little snapshot of you during your career.

Bunnag: Yeah, I think the workplace has changed over the years for the good. When I came in 30 some years ago, it's a different place than now. It's for the better, and I've always been very proud of having been

associated with such a premier institution. I have nothing but praise for the success and the goals that NCI and NIH had and the accomplishments that this organization is brought to the country.

Higingbotham: That seems like a great note to end on. Do you have anything else you would like to add just in general or anything in your career or about Asian American issues at NIH? Just anything you would like to add?

Bunnag: I don't really have anything to add. I just want to thank you for the opportunity to express my feelings. As you can tell from my speech pattern, it's not normal. That's because the amyloidosis. I have a big dose of that. And it has deposited in the various organs of the body. My sister had her deposit in the brain, and she died of Alzheimer's. I'm fortunate that it has not gone to my brain; it's gone to the various organs, like kidneys, lungs, etc. In a way I'm fortunate, but it's a progressive, non-curable disease, so I appreciate the opportunity to give you my impression of what I had with NIH in my early years. And thank you again.

Higingbotham: Oh, no, thank you for telling us your story. We are so happy to be able to capture it and to add it to our collection. It was very interesting.