

# **Waun Ki Hong, MD**

Interview #40

## **Interview Navigation Materials**

### **This binder package contains:**

Interview profile edited to new format

Original Interview Profile

Table of Contents

Original Chapter Summaries

# Waun Ki Hong, MD

Interview #40

## Interview Profile

**Interview description submitted:** 2013

### Interview Information:

Two interview sessions: 16 September 2013, 16 October 2013  
Total approximate duration: 3 hours 10 minutes  
Interviewer: Tacey A. Rosolowski, Ph.D.

**To request the interview subject's CV and other supplementary materials, please contact:**

Tacey A. Rosolowski, PhD; [Trosolowski@mdanderson.org](mailto:Trosolowski@mdanderson.org)

Javier Garza, MSIS; [jjgarza@mdanderson.org](mailto:jjgarza@mdanderson.org)

### About the Interview Subject:

Medical oncologist Waun Ki Hong, MD (b. 13 August 1942, Cheung Pyung [near Seoul], Republic of Korea) came to MD Anderson in 1984 as a full professor to serve as Chief of the Section of Head and Neck Medical Oncology. Dr. Hong's research has had a translational focus, beginning with his studies of Vitamin A derivatives and publication of the first demonstration that a chemical product could reverse the course of cancer. He specializes in head/neck and lung cancers, with research focus in the areas of molecular therapeutics, cancer prevention, organ preservation, and personalized targeted therapy.

Dr. Hong he chaired the Department of Thoracic/Head and Neck Medical Oncology from 1993 until August 2013. Since 2001 he has served as Head of the Division of Cancer Medicine. Shortly after the completion of these interview sessions, he was named to the National Academy of Science.

### Major Topics Covered:

Personal and educational background; military experience

Research: organ preservation (especially of the larynx), studies of leukoplakias, Vitamin A, chemoprevention, and personalized, targeted therapy; multi-disciplinary approaches to diseases of the aero-digestive system

Approaches to research design, team science, translational research

The Department of Thoracic and Head and Neck Medical Oncology: organization, fellowship program, creating an environment for excellence

The Division of Cancer Medicine

MD Anderson growth; the presidents

Leadership; leading teams, fostering collaboration

**A note on transcription and the transcript:**

This interview had been transcribed according to oral history best practices to preserve the conversational quality of spoken language (rather than editing it to written standards).

The interview subject has been given the opportunity to review the transcript and make changes: any substantial departures from the audio file are indicated with brackets [ ].

In addition, the Archives may have redacted portions of the transcript and audio file in compliance with HIPAA and/or interview subject requests.

**University of Texas MD Anderson Cancer Center  
Making Cancer History Voices® Oral History Project**

**Research Medical Library: Historical Resources Center**

Original Interview Profile # 40: Waun Ki Hong, MD

Submitted by: Tacey A. Rosolowski, Ph.D.

Date revised: 11 July 2014

This interview with medical oncologist Dr. Waun Ki Hong (b. 13 August 1942, Cheung Pyung [near Seoul], Republic of Korea) takes place over two sessions in October 2013 (duration 3 hours and 10 minutes).

Dr. Hong came to MD Anderson in 1984 as a full professor to serve as Chief of the Section of Head and Neck Medical Oncology. After administrative reorganizations, he chaired the Department of Thoracic/Head and Neck Medical Oncology from 1993 until August 2013. Since 2001 he has served as Head of the Division of Cancer Medicine. Dr. Hong has had enormous impact on the development of translational research beginning with his studies of Vitamin A derivatives and publication of the first demonstration that a chemical product could reverse the course of cancer. This interview takes place in a conference room in the Division of Cancer Medicine on the Main Campus of MD Anderson. Tacey A. Rosolowski, Ph.D. is the interviewer.

Dr. Hong received his B.S. in 1963 from the College of Engineering Science at Yonsei University in Seoul, Republic of Korea (South Korea). He continued at the University School of Medicine and received his M.D. in 1967. From 1967 to 1970 he served as a flight surgeon in the Korean Air Force. Dr. Hong then came to the United States for his internship at the Bronx/Lebanon Hospital in New York ('70-'71) and his medical residency at the Boston Veterans Affairs Medical Center, Boston ('71 – '73). He had a fellowship in Medical Oncology at Memorial Sloan Kettering Cancer Center, New York ('73 – '75) and joined the faculty of Boston University School of Medicine as an Assistant Prof of Medicine in 1975. He came to MD Anderson as a full professor in 1984.

Dr. Hong has received numerous honors and awards. Shortly after the completion of these interview sessions, he was named to the National Academy of Science. Also in 2013, the American Association for Cancer Research made him a Fellow of the AACR Academy. In 2012, the American Cancer Society awarded him the Medal of Honor in Clinical Research. Other awards were made systematically throughout his career.

In this interview, Dr. Hong talks about opening up new areas for research in the evolving field of medical oncology, stressing his early advocacy of innovative treatment and multi-disciplinary approaches to diseases of the aero-digestive system. He talks about his research contributions in organ preservation (especially of the larynx), studies of leukoplakias, chemoprevention, and personalized, targeted therapy. Throughout he gives insight into his strategy of asking "bold questions" that take research in new directions. Dr. Hong also reflects on his administrative service and the opportunities it has afforded to develop a culture of collaborative and translational research at MD Anderson. He also speaks about a training initiatives to support young faculty embarking on research careers. Dr. Hong also sketches his experiences in his native South Korea, including the impact of seeing the effects of four wars.

## **Waun Ki Hong, MD**

Interview #40

### **Table of Contents**

Interview Session One: 16 September 2013

*Interview Identifier*

Chapter 00A

*Experiences of War and Emigration*

Chapter 01 / A: Personal Background

*Choosing to Specialize in Cancer Research and Treatment*

Chapter 02 / A: Professional Path

*New Fields and the Discovery of Vitamin A's Role in Chemoprevention*

Chapter 03 / A: The Researcher

*Recruited by Irwin Krakoff; Research and Program-Development Skills*

Chapter 04 / A: Joining MD Anderson/Coming to Texas

*A Chemoprevention Study and Reflections on Research, Team Science, and Clinical Trials*

Chapter 05 / A: The Researcher

*Early Larynx Preservation and Current Work on Targeted Therapy*

Chapter 06 / A: The Researcher

Interview Session Two: 16 October 2013

*Interview Identifier*

Chapter 00B

*Bold Research: Opening the Field of Personalized Therapy*

Chapter 07 / A: The Researcher

*Administration: Focusing on Collaboration and Education*

Chapter 08 / A: The Administrator

*The Department of Thoracic and Head and Neck Medical Oncology: Reorganization; A New Fellowship Program*

Chapter 09 / A: The Administrator

*Head of the Division of Cancer Medicine*

Chapter 10 / A: The Administrator

*How Research Has Changed; the Future of the Division of Cancer Medicine*

Chapter 11 / A: Overview

*Administrative Roles; On the MD Anderson Presidents; Looking Ahead to Retirement*

Chapter 12 / A: The Administrator

## Waun Ki Hong, MD

Interview #40

### Chapter Summaries

Interview Session One: 16 September 2013

Chapter 00A  
*Interview Identifier*

Chapter 01  
*Experiences of War and Emigration*  
A: Personal Background

Story Codes  
A: Personal Background  
C: Formative Experiences  
A: Character, Values, Beliefs, Talents  
C: Offering Care, Compassion, Help  
D: On Care  
A: Professional Values, Ethics, Purpose, Commitment to Work  
A: Military Experience  
A: Professional Path

In this Chapter, Dr. Hong talks about key experiences in his homeland of South Korea. He explains that in his family of seven children, his oldest brother became a prominent bio-scientist and served as his mentor and “a second father,” who went to the United States for his Ph.D. training, returning to inspire the young Waun Ki Hong.

[The recorder is paused for approximately 10 minutes.]

Dr. Hong next talks about the impact of living in a country where he experienced three wars: the Second World War, the Korean War, and the Vietnam War, during which he served in the Korean Air force as a flight surgeon. Seeing the devastation of war, he explains, instilled in him the spirit of service and collaboration. His military experience helped him establish his own sense of discipline and accountability, the capacity for team effort and respect for chains of command.

Dr. Hong explains that when his military service ended (in 1970), he came to the United States for an internship. He says that arriving as an immigrant was a challenge, but he is “an eccentric and doesn’t play it safe. He then explains why he was only able to get an internship at a community hospital.

[The recorder is paused for about 11 minutes.]

## Chapter 02

### *Choosing to Specialize in Cancer Research and Treatment*

A: Professional Path

#### Story Codes

A: Professional Path

A: Inspirations to Practice Science/Medicine

A: Influences from People and Life Experiences

A: The Researcher

C: Evolution of Career

A: Experiences re: Gender, Race, Ethnicity

C: Patients

C: Patient, Treatment, Survivors

After explaining why his internship at Lebanon Hospital in New York was disappointing, Dr. Hong describes his move to the Veterans Affairs Hospital in Boston, Massachusetts. He talks about cross-cultural adjustments. He also explains that he saw many cancer patients in Boston and decided to work on smoking related cancer. He was, at the time, thinking about cancer treatment from a new perspective (which would create an entirely new field), as he was not approaching head and neck cancer as a surgeon. He describes his next move to Memorial Sloan-Kettering in New York, where he was part of a top fellowship program and met “good people,” among them Dr. Irwin Krakoff, who would later come to MD Anderson and serve a role in recruiting Dr. Hong for that institution. Dr. Hong next traces his move back to Boston, where he joined the faculty of the Veterans Affairs Hospital as an assistant professor (1975-1984). Dr. Hong was the only medical oncologist on staff, and he describes how he was able to prove himself able to build a medical oncology program. Dr. Hong also states that he was “lucky” because the drug Cisplatin had become available, and he was able to obtain and test the drug on head and neck patients –he was one of the first individuals to treat head and neck patients with chemotherapy and the first to demonstrate its effectiveness in preserving the larynx. He explains that the human motive of preserving patients’ ability to speak and swallow motivated him. Dr. Hong tells a story about his connection to George H.W. Bush.

## Chapter 03

### *New Fields and the Discovery of Vitamin A’s Role in Chemoprevention*

A: Professional Path

#### Story Codes

A: The Researcher

C: Evolution of Career

C: Discovery and Success

C: Professional Practice

C: The Professional at Work

C: Patients

C: Patients, Treatment, Survivors

D: On Research and Researchers

D: Understanding Cancer, the History of Science, Cancer Research

D: The History of Health Care, Patient Care

A: Overview

A: Definitions, Explanations, Translations

A: The Clinician



Dr. Hong first describes the trial that demonstrated chemo's effectiveness for patients of head and neck cancer. (One group was given the standard treatment of surgery and radio therapy and the second treated with chemotherapy and radiation therapy.) Dr. Hong then explains the process by which academic medicine came to recognize medical oncology as a subspecialty. He then explains that many head and neck patients develop second cancers. He defines leukoplakias, the white patches or pre-cancerous lesions that appear in smokers. He explains that he learned about leukoplakias from head and neck surgeons and that these lesions are also associated with Vitamin A deficiencies, a connection that led him to use Vitamin A and its derivatives as chemoprevention agents. Dr. Hong describes the first trials in which patients with leukoplakias were treated with high dose retinoic acid (synthetic Vitamin A) vs. a placebo, yielding a sixty percent response in the former group. This demonstrated for the first time that a chemical treatment could reverse a cancer process. Dr. Hong explains the implications of this discovery as well as how retinoic acid works with cell mechanisms. He also notes that toxicity effects associated with high doses of retinoic acid.

#### Chapter 04

##### *Recruited by Irwin Krakoff; Building Research Teams*

A: Joining MD Anderson/Coming to Texas

##### Story Codes

A: Professional Path

A: Joining MD Anderson

B: Critical Perspectives on MD Anderson

C: MD Anderson Past

C: Evolution of Career

Dr. Hong begins by describing how he became acquainted with Dr. Irwin Krakoff while he was in Boston. When Dr. Krakoff became head of the Division of Medicine at MD Anderson, he saw the institution's need for head and neck medical oncology and recruited Dr. Hong. Dr. Hong explains that he had reached the limit of what he could do at the Boston Veterans Affairs Hospital, and that MD Anderson was the right place to advance the field by involving more basic and translational research. Dr. Hong describes MD Anderson in 1984 when he arrived: collaborative and committed to patient care, with many resources and good faculty. He saw the need, however, to integrate biology and the basic sciences more fully into clinical care.

Dr. Hong next reflects on how he was able to build sophisticated research teams by reaching out to people. He notes that he was very effective at winning peer reviewed grants, and states that he advocates scientific research that asks bold questions.

#### Chapter 05

##### *A Chemoprevention Study and Reflections on Research, Team Science, and Clinical Trials*

A: The Researcher

##### Story Codes

A: Overview

A: Definitions, Explanations, Translations

A: The Researcher

A: The Clinician

D: On Research and Researchers  
D: On Leadership  
A: The Administrator  
B: Multi-disciplinary Approaches  
C: Collaborations  
C: The Professional at Work  
C: Professional Practice

Dr. Hong begins by discussing the first project he undertook after coming to MD Anderson –a study of the biology and chemoprevention of head and neck cancer funded by an NCI Program Project R01 grant. This was a fifteen-year project of almost twenty million dollars that clarified the genetic processes of head and neck pre-cancers and cancers.

Dr. Hong summarizes the personal qualities he has drawn on to create his research projects: talent, passion, and curiosity. He notes that his research areas –organ preservation, chemoprevention, and personalized, targeted therapy—are all difficult areas that present obstacles. He stresses the importance of supportive collaborators, funds, and posing “bold, impactful questions.” He notes that complex studies take time to unfold and require patience, stubbornness, and the ability to encourage and sustain the energy of collaborators.

Dr. Hong notes that to open up a field, a researcher must do something new. He recalls a joke: If you are too smart, you can’t do research, and notes the importance of knowing how to articulate good questions. He touches on the challenge of clinical trials and gives an example of the time frames involved in getting clinical results.

Dr. Hong explains that collaborations with talented colleagues are only successful if one shares common goals and recognizes individual contributions. He also stresses the importance of sharing resources and credit to build trust with collaborators. Dr. Hong then makes a few comments on the increase in team science since the 1980s.

## Chapter 06

A: The Researcher

*Early Larynx Preservation and Current Work on Targeted Therapy*

### Story Codes

A: The Researcher

A: The Clinician

C: Discovery and Success

A: Overview

A: Definitions, Explanations, Translations

D: On Research and Researchers

A: The Administrator

B: Multi-disciplinary Approaches

C: Collaborations

C: The Professional at Work

C: Professional Practice

A: Obstacles, Challenges

C: Patients

C: Patients, Treatment, Survivors

Dr. Hong begins with a story of his uphill battle to initiate a pilot study of larynx preservation in the 1980s. The project was eventually funded by the VA Cooperative Studies Program [certificate mentioned]. The results of the landmark study were published in the *New England Journal of Medicine* in 1998. Next he talks about the BATTLE Project (Biomarker Based Approaches of Targeted Therapy for Lung Cancer Elimination Project (BATTLE –funded by Defense Dept.). With this study he has moved into personalized treatments based on genetic studies that address multiple pathways leading to many different molecular subtypes of cancer. He talks about the challenges this landmark study presents. [There is a brief interruption near the end of this session.]

## Interview Session Two: 16 October 2013

Chapter 00B  
*Interview Identifier*

Chapter 07  
*Bold Research: Opening the Field of Personalized Therapy*  
A: The Researcher

Story Codes  
A: The Researcher  
A: The Clinician  
C: Discovery and Success  
A: Overview  
A: Definitions, Explanations, Translations  
D: On Research and Researchers  
A: The Administrator  
B: Multi-disciplinary Approaches  
C: Collaborations  
C: The Professional at Work  
C: Professional Practice  
A: Obstacles, Challenges  
C: Patients  
C: Patients, Treatment, Survivors  
B: Controversy

[Note: At the beginning of this Chapter Dr. Hong refers to “my file”: this is a PowerPoint presentation that is available as a supplement to this interview.]

In response to a question about his strategy of asking “bold” research questions, Dr. Hong speaks in detail about his third area of bold research –personalized, targeted therapy. He defines personalized therapy and returns to a discussion of the BATTLE trials discussed in Chapter 7 (Biomarker Based Approaches of Targeted Therapy for Lung Cancer Elimination Project). Dr. Hong describes the trials’ central hypothesis: by acquiring genetic information about a tumor, one can identify what drives the cancer and then hijack it, therefore blocking cancer. He notes that colleagues were very skeptical when he developed the study, but the published results opened up the new field of personalized therapy at an institutional, national,

and global level. Dr. Hong notes that he takes a lot of pride in taking this approach from an idea to a force that galvanized an entire field. He believes that this approach can make an impact on cancer science and treatment of cancer at all stages of the disease.

Dr. Hong then notes that as the Institute for Personalized Therapy was being founded, the results of the BATTLE trial gave confirmation that the approach was sound. Dr. Hong explains that personalized therapy requires a different paradigm of treatment and new research modalities based in genomic medicine and he then gives reasons why people were skeptical of the approach at first. He also notes that this approach is fundamentally multi-disciplinary and lists the disciplines that collaborate.

Dr. Hong next speaks briefly about team science –an approach essential to personalized, targeted therapy. He then lists his contributions to cancer science.

## Chapter 08

### *Administration: Focusing on Collaboration and Education*

A: The Administrator

#### Story Codes

A: The Administrator

B: Building/Transforming the Institution

B: Multi-disciplinary Approaches

B: Growth and/or Change

B: Education

B: Critical Perspectives on MD Anderson

C: Professional Practice

C: The Professional at Work

C: Collaborations

Dr. Hong notes that he came to MD Anderson in 1984 to capitalize on research opportunities, but discovered that research was not as collaborative nor as transitionally based as he had expected. He was one of the first researchers to actively reach out to people and also to develop the program projects. In his administrative roles, he actively developed a culture of collaboration: the successes he had with research designed in this way insured that “collaboration was contagious,” with people following the research template he designed.

Dr. Hong also explains that education was also part of the developing culture of collaboration. He names some fellows who have gone on to important leadership positions in the field. He also lists important collaborators with his own projects.

## Chapter 09

### *The Department of Thoracic and Head and Neck Medical Oncology: Reorganization; A New Fellowship Program*

A: The Administrator

#### Story Codes

A: The Administrator

B: Building/Transforming the Institution

B: Multi-disciplinary Approaches

B: Growth and/or Change

B: Education  
B: Critical Perspectives on MD Anderson  
C: Professional Practice  
C: The Professional at Work  
C: Collaborations  
C: Mentoring

Dr. Hong explains the reorganization that integrated the sections of Head and Neck Medical Oncology and Thoracic into a single Department. Dr. Hong headed the section of Head and Neck from '84 – '93. Thoracic was included in that section in '87. The section became a department in '94 and Dr. Hong was chair until 2001. He explains that he was brought in to head the Section of Head and Neck because of his work on lung and head and neck cancers. Since these were specific to aero-digestive cancers, it made sense to bring in Thoracic. Dr. Hong explains that he developed clinical and research programs. He specifies the links between that integrated these specialties, making it clear that they should be identified as a single unit. (He acknowledges that some physicians still have reservations about sharing their patients, even at MD Anderson.) Trans-disciplinary research depends on a culture of collaboration, which also attracts younger researchers. He notes that the Department of Thoracic and Head and Neck Medical Oncology has been particularly effective at stimulating research. He lists the awards program begun six or seven years ago. Awards to faculty, instructors, fellows, and staff are listed in the annual reports.

Dr. Hong also talks about the Department's Fellowship program designed to cultivate more young medical oncology researchers. Dr. Hong himself created the Advanced Scholar Program that allows a fellow to extend his or her fellowship period for one year to focus completely on research. He explains why this period is so important for a researcher's maturation. Dr. Hong also talks about the time, mentorship, and support that physician-scientists need to be successful.

Chapter 10  
*Head of the Division of Cancer Medicine*  
A: The Administrator

Story Codes  
A: The Administrator  
B: Building/Transforming the Institution  
B: Multi-disciplinary Approaches  
B: Growth and/or Change  
B: Education  
B: Critical Perspectives on MD Anderson  
C: Professional Practice  
C: The Professional at Work  
C: Dedication to MD Anderson, to Patients, to Faculty/Staff  
A: Professional Values, Ethics, Purpose

Dr. Hong explains that he had no real interest in heading the Division of Cancer Medicine, but he was drafted into the role by the Department chairs (after an external search produced no viable candidates), and their choice was approved by Dr. John Mendelsohn. He took the job out of a sense of obligation to the institution (and took it without an increase in pay). The position allowed him additional opportunities for impact and Dr. Hong explains his commitment to

helping departments in the Division build their team research program. He talks about the process of achieving aligned action among seventeen departments and lists some of the key players in implementing his programs. Dr. Hong next list his accomplishments in the Division: improved quality of the faculty; increased transparency among the departments; raising the bar for research; improved patient care; building the fellowship program; the creation of the Advanced Scholar Program.

## Chapter 11

### *How Research Has Changed; the Future of the Division of Cancer Medicine*

A: Overview

#### Story Codes

A: The Researcher

D: On Research and Researchers

D: Understanding Cancer, the History of Science, Cancer Research

D: The History of Health Care, Patient Care

B: MD Anderson in the Future

A: Career and Accomplishments

A: Professional Values, Ethics, Purpose

A: Character, Values, Beliefs, Talents

C: Portraits

Dr. Hong next comments on how the environment and requirements for conducting research have changed, creating “an unprecedented time for translational research.” He observes that one must be opportunistic to survive in the current research landscape. He sees his role as one of inspiring the faculty to open up to the new era of science and research. Dr. Hong then observes that faculty need access to resources to implement their research. With grant monies shrinking, competition is keen, though the NCI and NIH are both encouraging multi-investigator studies more now than in the past.

Dr. Hong observes that he is nearing retirement and he looks ahead to what is next for the Division of Cancer Medicine. The Division needs a person with passion and great intellectual capacity, he says.

Dr. Hong notes that he continues with his work on chemoprevention and personalized therapy. He uses a football metaphor to explain how he sees his research accomplishments: “I don’t want to take the credit,” he says. “I brought the ball to the 50-yard line.”

## Chapter 12

### *Administrative Roles; On the MD Anderson Presidents; Looking Ahead to Retirement*

A: The Administrator

#### Story Codes

A: The Administrator

B: Building/Transforming the Institution

B: Multi-disciplinary Approaches

B: Growth and/or Change

A: Overview

A: Definitions, Explanations, Translations

- A: Contributions
- A: Activities Outside Institution
- A: Career and Accomplishments
- A: Post Retirement Activities
- C: Portraits
- D: On Research and Researchers

Dr. Hong explains how he came to serve the role of Vice Provost for Clinical Research, overseeing the institution's research and laying ground rules for working with patients. Clinical research is "very complicated and requires meticulous attention and rigorous conduct," he observes. He reviews the range of challenges clinical trials present and also describes the lessons he learned by serving as Vice Provost. Most importantly, he became aware of how much the faculty struggles to conduct research, and his new knowledge of this influenced recommendations he made to the executive administration.

Next he offers his views on the presidents of MD Anderson. He speaks about Dr. Charles LeMaistre's role in opening up cancer prevention. Dr. John Mendelsohn was more translational in approach: Dr. Hong notes the similarity in their approaches and backgrounds. (He quips that they play tennis together.) Dr. Hong observes that Dr. Ronald DePinho is a brilliant scientist with vision who fits the institution perfectly. He also notes that Dr. Margaret Kripke was another key leader who understand science and translational research.

Dr. Hong next discusses his role as presidential appointee (under George W. Bush) to the National Cancer Advisory Board (NCAB), a board that reviews research and makes recommendations on allocating funds. He explains process of reviewing proposals (and appeals of rejections). Dr. Hong observes that funding has been flat in the past years and he talks about the impact of this reduction of resources on research. He expresses concern that "America has been powerful and successful because of the substantial funding of research," but this is no longer the case.

Dr. Hong briefly talks about his work with Chinese cancer institutions while he was President of the American Association for Cancer Research. In 2001 he created a travel fund to bring Chinese researchers to meetings.

Dr. Hong briefly speaks about his retirement plans. He anticipates that he will work with Dr. John Mendelsohn at the Institute for Personalized Therapy.

The Research Medical Library  
The Making Cancer History Voices Oral History Project

MDA-RML\_Hong, Waun Ki  
Session 1—September 16, 2013

A note on transcription and the transcript:

This interview had been transcribed according to oral history best practices to preserve the conversational quality of spoken language (rather than editing it to written standards).

The interview subject has been given the opportunity to review the transcript and make changes: any substantial departures from the audio file are indicated with brackets [ ].

In addition, the Archives may have redacted portions of the transcript and audio file in compliance with HIPAA and/or interview subject requests.

**Chapter 00A**  
**Interview Identifier**

*Tacey A. Rosolowski, PhD*

0:00:00.8

And here we go. All right. We are now recording. And I'll just say that I'm Tacey Ann Rosolowski, and today I'm interviewing Dr. Waun Ki Hong. Am I pronouncing your name correctly?

*Waun Ki Hong, MD*

0:00:11.7

Sure, yes.

*Tacey A. Rosolowski, PhD*

0:00:12.5

Okay, Waun Ki Hong, at the University of Texas, MD Anderson Cancer Center in Houston, Texas. Dr. Hong came to MD Anderson in 1984 as a full professor and chief of the section of head and neck medical oncology. He chaired the Department of Thoracic, Head and Neck Medical Oncology from 1993 until August 2013. And I know there was some department—



Interview Session: 01  
Interview Date: September 16, 2013

***Waun Ki Hong, MD***

0:00:37.1  
In 2001.

***Tacey A. Rosolowski, PhD***

0:00:38.3  
Oh, 2001, okay. Thank you for correcting that.

***Waun Ki Hong, MD***

0:00:41.8  
In fact, in 2003. But in 2001, I became head of Cancer Medicine.

***Tacey A. Rosolowski, PhD***

0:00:48.4  
Right, and then since 2001, he has served as head of the Division of Cancer Medicine. I know there was some departmental reorganization.

***Waun Ki Hong, MD***

0:00:55.8  
Yes, there were two years overlapping. I was the head of Cancer Medicine, and also at the same time I was the chair of the Department of Thoracic, Head and Neck Medical Oncology.

***Tacey A. Rosolowski, PhD***

0:01:06.9  
Okay. Thank you. This interview is being conducted for the Making Cancer History Voices Oral History project run by the Historical Resources Center at MD Anderson. The interview is taking place in a conference room in the Division of Cancer Medicine on the main campus of MD Anderson. This is the first of two planned interview sessions, and today is September 16, 2013. The time is 1:11. So thank you, Dr. Hong, for giving your time to the project.

***Waun Ki Hong, MD***

0:01:38.2  
It's my pleasure to have this wonderful opportunity.

***Tacey A. Rosolowski, PhD***

0:01:42.2  
Yes, well, everyone that I've spoken to has said, "Have you spoken to Waun Ki Hong?" So finally, I am speaking to you, and I'm delighted.



Interview Session: 01  
Interview Date: September 16, 2013

*Waun Ki Hong, MD*  
0:01:49.0  
It's an honor.

Interview Session: 01  
Interview Date: September 16, 2013

**Chapter 1**  
**A: Personal Background**  
**Experiences of War and Emigration**

Story Codes

A: Personal Background  
C: Formative Experiences  
A: Character, Values, Beliefs, Talents  
C: Offering Care, Compassion, Help  
D: On Care  
A: Professional Values, Ethics, Purpose, Commitment to Work  
A: Military Experience  
A: Professional Path

*Tacey A. Rosolowski, PhD*

0:01:51.2

So I wanted to ask you to start with just some personal background. Where were you born and when? And tell me a little bit about where you grew up.

*Waun Ki Hong, MD*

0:01:58.4

Okay. I'm quite old; I'm not a youngster anymore. I was born in 1942, in a small town outside of Seoul, South Korea.

*Tacey A. Rosolowski, PhD*

0:02:17.6

What's the name of the town?

*Waun Ki Hong, MD*

0:02:20.0

It's a very long name for a small town outside of Seoul—that people can remember.

*Tacey A. Rosolowski, PhD*

0:02:30.9

But for the record, actually, I'd love to have it. Just the name.

*Waun Ki Hong, MD*

0:02:35.7

The name is Chung Pyung.

Interview Session: 01  
Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*  
0:02:48.3  
Does it mean something?

*Waun Ki Hong, MD*  
0:02:50.8  
It's peaceful and blue—or clear.

*Tacey A. Rosolowski, PhD*  
0:03:01.7  
Peaceful and clear.

*Waun Ki Hong, MD*  
0:03:02.7  
That's the Tao name. So I was born in 1942—

*Tacey A. Rosolowski, PhD*  
0:03:09.5  
And the date?

*Waun Ki Hong, MD*  
0:03:10.5  
August 13, 1942. That's during the—you know—World War II. And so World War II was over in 1945, so I was a country boy from a small town. And I was six of seven children.

*Tacey A. Rosolowski, PhD*  
0:03:43.2  
Was anyone in your family involved in the sciences?

*Waun Ki Hong, MD*  
0:03:49.0  
Yes. My eldest brother was perhaps the most prominent bio-scientist, and he was at Buffalo. He was at SUNY Buffalo Medical School. He passed away.

*Tacey A. Rosolowski, PhD*  
0:04:15.3  
I'm sorry. When did he pass away?

*Waun Ki Hong, MD*  
0:04:19.1  
I think about ten years ago.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

0:04:26.6

So how did he influence you?

*Waun Ki Hong, MD*

0:04:30.7

It's an interesting story. After high school, my parents could not really afford to financially send me to college after school. But he got a PhD and also a faculty position at the University of Rochester and then SUNY Buffalo. And he returned to Korea in 1960 or 1959. He inspired me to go to medical school. So he was like my second father, because he picked me up and enrolled me in medical school, and so I graduated medical school in 1967.

*Tacey A. Rosolowski, PhD*

0:05:31.7

And this was the—well, you did your BS at the Yonsei University? And you got your BS in '63, correct?

*Waun Ki Hong, MD*

0:05:41.0

Yes, that was the undergraduate—the pre-medical school.

*Tacey A. Rosolowski, PhD*

0:05:46.8

Right, so there was a pre-med major?

*Waun Ki Hong, MD*

0:05:49.5

Yes, pre-med and engineering. Then I went to medical school. It was connected, pre-med and the medical school.

*Tacey A. Rosolowski, PhD*

0:05:58.2

Oh, I see. That makes it convenient.

*Waun Ki Hong, MD*

0:06:00.4

Yes, it's convenient, exactly.

*Tacey A. Rosolowski, PhD*

0:06:02.8

And I saw that you have your specialization listed as medical oncology, even during your MD. Tell me how you got to be interested in cancer so early.

Interview Session: 01

Interview Date: September 16, 2013

*Waun Ki Hong, MD*

0:06:16.2

There was the experience that took place in Boston.

*Tacey A. Rosolowski, PhD*

0:06:32.8

Okay. So was I mistaken then that you didn't specialize in medical oncology for your MD?

*Waun Ki Hong, MD*

0:06:39.7

No, no. The MD is just medical doctor here in the United States.

*Tacey A. Rosolowski, PhD*

0:06:44.8

Right. I don't know where I got that from.

*Waun Ki Hong, MD*

0:06:46.8

So to be an MD you have to graduate medical school. You don't have to do post medical school training.

*Tacey A. Rosolowski, PhD*

0:06:56.5

What specialty were you thinking about during your MD?

*Waun Ki Hong, MD*

0:07:01.3

Well, at the time it wasn't quite clear. And then—

0:07:17.6 (End of Audio One)

[The recorder is paused while Dr. Hong takes a phone call.]

*Tacey A. Rosolowski, PhD*

0:00:03.7

So we're back on track and it's 1:27. I wanted to ask you—you know—you mentioned that you were born during the Second World War, which meant that your childhood was post war.

*Waun Ki Hong, MD*

0:00:19.9

Yeah, and then there is the Korean War that broke out in 1950, when I was eight years old.

Interview Session: 01

Interview Date: September 16, 2013

***Tacey A. Rosolowski, PhD***

0:00:28.8

So tell me about that experience of growing up in a war torn—

***Waun Ki Hong, MD***

0:00:32.9

It was devastating.

***Tacey A. Rosolowski, PhD***

0:00:34.0

It was devastating.

***Waun Ki Hong, MD***

0:00:36.0

I was not—I would not recommend any war. It's just terrible.

***Tacey A. Rosolowski, PhD***

0:00:47.9

Was your family—were there older siblings or your parents involved in it?

***Waun Ki Hong, MD***

0:00:54.2

Yeah, obviously, I think North Korea invaded the South. And we were with the refugees. And you see what the people—how much they struggled. And they destroyed everything—losing people. It's just an absolutely devastating experience. And the interesting thing is, talking about the wars, in 1967, I graduated medical school, and then I had to serve a three-year term in Korea for military service. So I was deployed into Vietnam, and so I was a flight surgeon. With the job as flight surgeon I was responsible for transporting wounded soldiers from Vietnam to the Philippines, to Korea by airplane. Basically, I experienced three wars. All that I can't remember came after World War II, but the Korean War I remember and the Vietnam.

***Tacey A. Rosolowski, PhD***

0:02:32.6

And certainly you grew up in a family that remembered the World War. Two questions following up on that. The first is, prior to the experience that you had serving in the military, how do you think that growing up in a family that was experiencing war in a war-torn country—did that have any influence on your career or your skills or your thinking about medicine?

***Waun Ki Hong, MD***

0:03:01.5

Yeah, I think it's—I was not really mature enough to think about those kinds of things. But I think definitely that I was affected and influenced by it, even though it was at a subconscious level.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

0:03:20.3

How do you think—how were you affected, do you think?

*Waun Ki Hong, MD*

0:03:24.2

I think the spirit of service—the spirit of collaboration came. Then I think when I experienced the transporting of the wounded soldiers, obviously, the feeling was so bad and so sad to see young people losing their arms and legs or with brain injuries from war. I think that has inspired me to think about human nature and human beings and humanity. And then I would say—again, that was later on, but I think maybe that inspired me to do some more research—patient care research.

*Tacey A. Rosolowski, PhD*

0:04:53.8

Was there anything about your military experience that enhanced your skills as a physician or as a researcher, administrator?

*Waun Ki Hong, MD*

0:05:03.1

I would say that I think that experience—the military experience—I think has helped me to establish my own discipline and accountability and diligence. You do some military service, you learn something. It's not a goal to participate in war, but I think it's an experience in team effort and chain of command. I would focus more on the positive side.

*Tacey A. Rosolowski, PhD*

0:06:04.2

Now, what led to your decision to come to the United States after your military service was over?

*Waun Ki Hong, MD*

0:06:11.3

At the time it was interesting. I married my wife in 1969 and came to this country in 1970 as an immigrant. At that time, it was open.

*Tacey A. Rosolowski, PhD*

0:06:29.2

Can you tell me, what is your wife's name?

*Waun Ki Hong, MD*

0:06:31.5

Mihwa. Do-re-mi-fa, okay? And the immigration door was open. At the time there was a shortage of



Interview Session: 01

Interview Date: September 16, 2013

medical doctors in the States, so they imported some more doctors from foreign countries. You had to pass a certain test. So I think I capitalized on that opportunity.

*Tacey A. Rosolowski, PhD*

0:07:16.7

And was it difficult to make the decision to leave Korea?

*Waun Ki Hong, MD*

0:07:23.0

No, I think I was determined. I was a bit of a brave person, because I like to tackle some challenging projects. Most people, they're too conservative, and they don't want a challenge, but I think I was considered a bit eccentric. So I saw this—and, again, nobody talked to me, but I felt that if you're going to do something significant in the aspect of the medical field, then I think the United States is the right place to challenge yourself. I think that's so neat. I set an ambitious goal and somebody could have said, "You're crazy." But that was motivation, because I want to swim in some big pond.

*Tacey A. Rosolowski, PhD*

0:08:53.5

So you came to the US. Now you were a rotating intern at the Bronx-Lebanon Hospital in New York. Now, did you have that internship set up when you came, or did you get that?

*Waun Ki Hong, MD*

0:09:08.2

No, you have to apply for the internship position.

*Tacey A. Rosolowski, PhD*

0:09:11.8

So you came to the US, and then you applied?

*Waun Ki Hong, MD*

0:09:14.6

No, no, from Korea.

*Tacey A. Rosolowski, PhD*

0:09:14.9

Oh, from Korea, okay.

*Waun Ki Hong, MD*

0:09:17.1

So I was not able to obtain some internship position in a decent teaching hospital, because obviously as a foreigner there were some language barriers, and I didn't go to medical school here, so there were handicaps. So some community hospital is not able to fit it in.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

0:09:46.1

Okay. So we're pausing again at 1:26.

0:09:49.7 (End of Audio Two)

[The recorder is paused for about 11 minutes while Dr. Hong takes a phone call.]

Interview Session: 01  
Interview Date: September 16, 2013

**Chapter 2**  
**A: Professional Path**  
**Choosing to Specialize in Cancer Research**

Story Codes  
A: Professional Path  
A: Inspirations to Practice Science/Medicine  
A: Influences from People and Life Experiences  
A: The Researcher  
C: Evolution of Career  
A: Experiences re: Gender, Race, Ethnicity  
C: Patients  
C: Patient, Treatment, Survivors

***Tacey A. Rosolowski, PhD***

0:00:02.3

Okay, we were talking about your internship program at Bronx-Lebanon Hospital. And you were explaining how you came to be at a community hospital. What did you learn from that experience at a community hospital?

***Waun Ki Hong, MD***

0:00:19.4

Not a whole lot. And I was very disappointed. They used to house their interns like labor—and it was incredibly long hours of work. So they hired me as an intern, because they needed somebody. There was very minimal teaching. I was disappointed from that internship.

***Tacey A. Rosolowski, PhD***

0:01:06.0

How was that?

***Waun Ki Hong, MD***

0:01:07.5

Then I was lucky to get a very decent residency program in Boston.

***Tacey A. Rosolowski, PhD***

0:01:18.0

Because you were in New York for one year, '70 to '71. And so how did you make that move to the Boston Veterans Affairs Medical Center?

***Waun Ki Hong, MD***

0:01:34.3

Interview Session: 01

Interview Date: September 16, 2013

There was a lot of teaching there. Again, I tried to get a residency position, but I was never to get it. And somebody was supposed to come to the Boston VA as a resident and changed their mind and dropped out.

*Tacey A. Rosolowski, PhD*

0:02:03.2

Lucky for you.

*Waun Ki Hong, MD*

0:02:05.6

So I didn't have a job or position until April. They contacted me and said, "Are you still interested?" So I had no choice but to say, "Yes."

*Tacey A. Rosolowski, PhD*

0:02:17.2

Now before you tell me about that, tell me how the adjustment went coming to the US. You mentioned there were language issues. How was that whole cross-cultural adjustment?

*Waun Ki Hong, MD*

0:02:29.9

It was—you can imagine—there are obvious language barriers and cultural barriers. My son was born right after that year so—you know—

*Tacey A. Rosolowski, PhD*

0:02:47.1

New family.

Waun Ki Hong, PhD

0:02:49.0

And then it's very tough to adjust to a new environment.

*Tacey A. Rosolowski, PhD*

0:02:59.3

Did you feel as though—just to say it honestly—did you feel discriminated against in any way?

*Waun Ki Hong, MD*

0:03:06.4

No, I didn't feel they were discriminating. Obviously, it was hugely challenging to adjust to a different culture. And obviously, I was not able to communicate smoothly. I didn't feel that they were. They treated me reasonably well. I never felt they were, because I had always my own pride. I don't speak as well as you do, but my brain can be as smart as you are.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

0:03:52.0

Absolutely.

*Waun Ki Hong, MD*

0:03:53.9

And then I was fairly confident in that.

*Tacey A. Rosolowski, PhD*

0:04:02.0

So in terms of moving to the medical residency at Boston Veterans, tell me about that experience there. It sounds like it was a whole lot better.

*Waun Ki Hong, MD*

0:04:13.6

Yes, it was a hundred percent improvement and more teaching and opportunities. It was also a teaching hospital, so there are medical students from Boston University and Tufts University. And I was very independent and more autonomous. I was expected to manage the patients. So I was very happy. Lo and behold, I was able to really quickly establish my own identity. It was interesting, you saw doctors from foreign countries that came, and some of them were really smart. The guy that used to work in my department, we worked side-by-side, and he turns out a very famous guy. He's on CNN constantly, Deepak Chopra. He and I, we did residency together. He and I constantly hang around together. It turns out to be such a great experience.

*Tacey A. Rosolowski, PhD*

0:06:10.1

Now, you mentioned Boston as the place where you decided to focus on cancer studies. Did that happen during this period?

*Waun Ki Hong, MD*

0:06:17.9

Yeah, that's a good point, because at Veterans Hospital there were tons of cancer patients suffering from smoking-related cancer, head and neck cancer and lung cancer. That really inspired me to think about something and medical oncology as a subspecialty. I did a very good residency training, so I was able to get a very good recommendation letter. I was enrolled into fellowship at Memorial Sloan-Kettering in 1973.

*Tacey A. Rosolowski, PhD*

0:07:09.4

Now I was going to ask you, too, because as I've spoken to people about this particular period of time and they've emphasized over and over that there wasn't a whole lot of treatment available for cancer. So approaching head and neck cancer from the position, not as a surgeon, but as someone from

Interview Session: 01

Interview Date: September 16, 2013

medicine, you were thinking about it quite differently. Tell me about that. What were you thinking about at that time?

***Waun Ki Hong, MD***

0:07:34.8

Well, at the time I was just thinking about it as a new field. There were more opportunities than you can imagine. It was a tremendous time. And then at that time, a diagnosis of cancer was the same as a death sentence of cancer. So I think, again, I like a challenge. And I decided to pursue it with medical oncology training.

***Tacey A. Rosolowski, PhD***

0:08:23.0

And that was 1973 to 1975 at Memorial Sloan-Kettering. So tell me about what you did there and who you worked with.

***Waun Ki Hong, MD***

0:08:32.6

It was a fellowship, so just general training, not specific or subspecialized. But I met very good people. At the time, the Chief of Medical Oncology was Dr. Irwin Krakoff. He was the first head of Cancer Medicine. And then he left Memorial Sloan-Kettering and became director at Vermont. He was in a comprehensive cancer center. Then he came to MD Anderson in 1983 as head of medicine. So he was the one who recruited me to come to MD Anderson in 1984, so I think that he was the most influential person in my career.

***Tacey A. Rosolowski, PhD***

0:09:40.1

At the time when you were at Memorial Sloan-Kettering, how did Dr. Krakoff help shape your education to get—because you mentioned earlier that you're eccentric. And it sounds like your experience in Boston—you were enjoying the autonomy and thinking outside the box. So how did that start to show itself, and how did he help it along?

***Waun Ki Hong, MD***

0:10:05.8

I got to this fellowship, and I was only foreigner then, and it was the big fellowship program at the time. It was the top fellowship program in the country. So I must have said that I was very mediocre, and then I tried to just learn as much as I could. I wrote just a couple of research projects that I never finished. And so it was a two-year fellowship that I completed, and then I tried to get the job in Boston, because I wanted to come back to Boston. And then nobody from Sloan-Kettering offered a job to me to stay there. The only job that was available in Boston was at the VA Hospital as a medical oncologist.

***Tacey A. Rosolowski, PhD***

0:11:19.3

Interview Session: 01

Interview Date: September 16, 2013

Okay, I'm confused here because I have—let's see—from your CV that in 1975 you were at Boston University School of Medicine.

***Waun Ki Hong, MD***

0:11:29.2

That's the same, Boston Veterans and Boston University.

***Tacey A. Rosolowski, PhD***

0:11:36.4

Okay. Got it. All right. Now, in that position, how did your career develop?

***Waun Ki Hong, MD***

0:11:46.4

That's a very good question. In 1975, after I finished the fellowship, I started with tons of cancer patients. And I was the only one trained formerly in medical oncology. Then I had some sense of responsibility taking care of cancer patients, because the VA hospital had tons of cancer patients. And I was alone, so I was the Indian and nobody was above me, so I was the Indian and the Chief. So I started a program really from scratch, from nothing. Then in 1984, nine years I spent at the Boston VA Hospital, and I manufactured a thirteen-person team of medical oncologists. And it was considered one of the better clinical oncology programs in the world. So I think there is something—I tested myself. I can be good enough to build some program. In my own experience, I think that's really a core experience. I feel like I proved to somebody that I can do it. And there I was very lucky, too, because there was a new drug called cisplatin that was available. And I was one of the only investigators. I was able to obtain the drug and then test it in the head and neck cancer patients. It does not come from my idea.

***Tacey A. Rosolowski, PhD***

0:14:48.6

Right place at the right time.

***Waun Ki Hong, MD***

0:14:49.9

I happened to be in the right place and seeing the right patients, and I was able to obtain the drugs. And then I developed a small study in head and neck cancer patients. As you mentioned earlier, there is a predominant preoccupation with surgery, nothing but surgery and radiation. So I probably was one of the only people to give the treatment of chemotherapy and then see a response. And then if there is substantial response after chemotherapy—and then comes out the idea. We were not sure at the time. We used to do surgery anyway, regardless. So even though I was very young, removing the human voice box from laryngeal cancer is—I felt—is such radical overtreatment, especially losing the voice box and losing communication skills. That is devastating for quality of life. That really motivated me to do the studies all on preservation. So that's what started—you can see on the back—Cancer Therapeutics. That's what the story—this guy, a gentleman, was doing an autobiography. That gentleman is Babe

Interview Session: 01

Interview Date: September 16, 2013

Ruth. Babe Ruth, you know the baseball player? He was giving his autobiography to the baseball player—see that here under my picture?

*Tacey A. Rosolowski, PhD*

0:17:07.6

Yes, I can.

*Waun Ki Hong, MD*

0:17:08.4

That is George Bush the senior, when he was captain of the baseball team in 1948, and the story is of Cancer Therapeutics. Can we have a cure for Babe? Babe Ruth received the treatment regimen I developed of chemotherapy and radiation.

*Tacey A. Rosolowski, PhD*

0:17:37.5

Would you mind if next time I take a picture of that?

*Waun Ki Hong, MD*

0:17:39.5

You bet.

*Tacey A. Rosolowski, PhD*

0:17:40.1

That'd be great, because then I can put it right in your interview.

*Waun Ki Hong, MD*

0:17:42.9

I have it in some file too. And I can send it to you in a PDF.

*Tacey A. Rosolowski, PhD*

0:17:49.0

That would be terrific.

*Waun Ki Hong, MD*

0:17:51.4

That's the story. And Andy von Eschenbach used to be here. He was the NCA Director and [also FDA Commissioner]. He was very close with George Bush the senior. So he took me—Andy was sitting over there. I explained to Andy, and then he took me to George Bush's office. Then he created the photograph, and then he signed. The picture was taken in 1948.



Interview Session: 01  
Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*  
0:18:24.0  
That's a great story.

Interview Session: 01  
Interview Date: September 16, 2013

### Chapter 3

#### A: The Researcher

#### New Fields and the Discovery of Vitamin A's Role in Chemoprevention

Story Codes

A: The Researcher

C: Evolution of Career

C: Discovery and Success

C: Professional Practice

C: The Professional at Work

C: Patients

C: Patients, Treatment, Survivors

D: On Research and Researchers

D: Understanding Cancer, the History of Science, Cancer Research

D: The History of Health Care, Patient Care

A: Overview

A: Definitions, Explanations, Translations

A: The Clinician

#### *Waun Ki Hong, MD*

0:18:27.1

Yeah, it is. So I think, again, I was very lucky. And then I developed a trial. One group gets standard treatment, which is surgery and then radiation treatment. That is the standard treatment, and compared it to chemotherapy and then radiation. So I was the principal—this is the Veterans Administration certificate of appreciation. There is a strategy to preserve the human life, and it turns out, the same survival rate.

#### *Tacey A. Rosolowski, PhD*

0:19:25.7

Really? But preserving the voice box.

#### *Waun Ki Hong, MD*

0:19:29.7

Yes, that's the beauty.

#### *Tacey A. Rosolowski, PhD*

0:19:33.2

You know—I was so struck when you said that you were the only person trained as a medical oncologist when you started as a faculty member there. And that—what was that process like of establishing a place for medical oncologists in academic medicine at the time? Was that controversial? It was a new field. What was it like establishing it?

Interview Session: 01

Interview Date: September 16, 2013

***Waun Ki Hong, MD***

0:20:00.9

It was a new field, but I think that the academic institution at the time had begun to recognize the importance and significance of medical oncology as a subspecialty. Again, you have to be in the right place at the right time. I was in a VA Hospital. Obviously, I was a government employee, and the salary was the lowest one. Then you had to do a lot of things for yourself. Many people, after training, they stayed in the medical school or in private practice. But I ended up to go—and I signed up to be in the VA Hospital. In fact, there is some coincidence, like to catch the tiger and to kill the tiger, you have to go in a cave where tigers live. So—you know—this is a very great coincidence. So I got there, and then I felt some sense of responsibility and obligation to take care of cancer patients, especially about head and neck cancer patients. Then I obtained some drugs in my hand and had an opportunity to conduct a small trial, and I had seen some interesting results. That motivated me to develop a randomized study, and it turns out the same survival. And based on that result and on the trials, related and similar cases became rapidly disseminated worldwide.

***Tacey A. Rosolowski, PhD***

0:22:20.0

Was it controversial at first?

***Waun Ki Hong, MD***

0:22:22.7

Of course it was controversial.

***Tacey A. Rosolowski, PhD***

0:22:23.8

Why?

***Waun Ki Hong, MD***

0:22:24.4

Because surgeons were losing their opportunities. When they do a laryngectomy they make money. And then it changed the concept and the culture. At the time there was no one talking about the preservation of the organ. They talked about it, but at the time there was no track record of chemotherapy.

***Tacey A. Rosolowski, PhD***

0:23:00.0

So you went out to—you were lucky enough to be able to have the cisplatin and then to prove it so people can't argue with the numbers.

***Waun Ki Hong, MD***

0:23:07.8

Yeah, exactly.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

0:23:09.6

Well, they can but—now I read somewhere that it was in 1980, while you were at the Veterans Affairs Hospital, that you first heard the term “chemoprevention.” And so that’s a whole really important part of the story.

*Waun Ki Hong, MD*

0:23:26.4

That was at the same time—you know. I had all the cancer patients related with a lot of smoking or smoking and drinking. All the head and neck patients can be treated effectively with surgery or radiation, but many of them come back with a second cancer. Also many patients presented with oral leukoplakia—that is the pre-cancer lesion in invasive cancer.

*Tacey A. Rosolowski, PhD*

0:24:10.8

Now, I read that leukoplakia translates as “white patch.” So what exactly is that?

*Waun Ki Hong, MD*

0:24:18.5

Well, if you look in the mouth on an area like the tongue or the throat, it’s like a white patch. It’s islands of white patches.

*Tacey A. Rosolowski, PhD*

0:24:34.1

So that indicates cells that—what has happened to those cells?

*Waun Ki Hong, MD*

0:24:39.4

That’s infected. It’s a pre-cancer cell that produces keratin. This accumulation of keratin is manifested as white patches. Again, there is a coincidence, too. There was something that I learned from head and neck surgeons. I didn’t know that until they taught me. This is a pre-cancerous lesion, oral leukoplakia. That is also associated with some vitamin A deficiency. And some pre-clinical studies show some vitamin A compound or synthetic vitamin A is capable of reversing a process.

*Tacey A. Rosolowski, PhD*

0:25:46.8

Because I was going to ask you where you got the idea to use retinoids to treat it.

*Waun Ki Hong, MD*

0:25:53.9

That was some pre-clinical work and then some publications. Then, again, I’m a very lucky person. Then I

Interview Session: 01

Interview Date: September 16, 2013

was supposed to buy help from La Roche, and they had a drug at the time that was synthetic vitamin A, cis retinoic acid. And then some people used that thing in lozenge form.

*Tacey A. Rosolowski, PhD*

0:26:29.8

I'm sorry.

*Waun Ki Hong, MD*

0:26:31.0

Lozenges.

*Tacey A. Rosolowski, PhD*

0:26:31.4

Oh, lozenges.

*Waun Ki Hong, MD*

0:26:33.1

And they had seen some dramatic response. And then they manufactured pills, and I had the opportunity to obtain the drug.

*Tacey A. Rosolowski, PhD*

0:26:48.4

So this was prior to your coming to MD Anderson?

*Waun Ki Hong, MD*

0:26:51.2

Right.

*Tacey A. Rosolowski, PhD*

0:26:52.5

So tell me about the first trials that you did with that.

*Waun Ki Hong, MD*

0:26:58.3

The individuals presented with oral leukoplakia and then were treated with high dose retinoic acid and compared to placebo. And it was a dramatic response, like a sixty percent response in the retinoid group versus about ten percent placebo. It was an exciting discovery. That's the first time that a chemical treatment can really reverse the process. What that means—reversing the process means that it has the potential to prevent the cancer.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

0:27:51.8

So what chemically happened in the cells?

*Waun Ki Hong, MD*

0:27:56.4

Obviously, the pre-cancer cell shows some inability for differentiation. Okay, and also once a rapid differentiation takes place, then in all the cells it can be proliferated. And the retinoic acid can induce normal differentiation and turn the cell back into normal behavior. It's a simple strategy. Then the cell proliferation can be regulated. Like you see bad actors on the street and they can kill people. But from the bad actors being identified, you can prevent the crime. Retinoic acid can really modulate the cell behavior.

*Tacey A. Rosolowski, PhD*

0:29:15.9

That's amazing.

*Waun Ki Hong, MD*

0:29:17.5

It is. That's the good news. The bad news is that there is toxicity.

*Tacey A. Rosolowski, PhD*

0:29:22.8

Okay. So tell me about that.

*Waun Ki Hong, MD*

0:29:26.0

Really people who take high-dose retinoic acid—if you offer it to friends, it will break up the relationship. It makes your life miserable.

*Tacey A. Rosolowski, PhD*

0:29:45.5

So when we're talking about a toxic lever, or when we're talking about a high dose, how high is that dose? What is the dosage?

*Waun Ki Hong, MD*

0:29:52.7

That drug has been used for treatment of acne. It's a similar dose.

*Tacey A. Rosolowski, PhD*

0:30:02.4

And what is the dose? I'm not aware.

Interview Session: 01  
Interview Date: September 16, 2013

*Waun Ki Hong, MD*

0:30:04.6

About two milligrams per kilo.

*Tacey A. Rosolowski, PhD*

0:30:05.5

About two milligrams per kilo. And that's considered a toxic dose?

*Waun Ki Hong, MD*

0:30:11.4

Yeah.

*Tacey A. Rosolowski, PhD*

0:30:12.5

How long do you have to take it before it becomes dangerous to you?

*Waun Ki Hong, MD*

0:30:16.4

You can see the biologic effect in three to six months. And long-term treatment—there is some problems with that. Problems with the skin toxicity, eye toxicity and bone toxicity.

*Tacey A. Rosolowski, PhD*

0:30:37.2

So what happens when a person is going toxic with vitamin A?

*Waun Ki Hong, MD*

0:30:40.7

Life can be miserable.

*Tacey A. Rosolowski, PhD*

0:30:43.2

Okay.

*Waun Ki Hong, MD*

0:30:43.8

The cancer course can be reversed, but other qualities of life can be really affected.

*Tacey A. Rosolowski, PhD*

0:30:52.9

What are the symptoms?

Interview Session: 01

Interview Date: September 16, 2013

*Waun Ki Hong, MD*

0:30:54.9

Dry skin, cheilitis, and also the lipid level—hypertriglyceridemia. I think that is the downside. But that's the first evidence that a chemical drug can really reverse the process of carcinogenesis.

*Tacey A. Rosolowski, PhD*

0:31:29.5

Now was that a very new idea about cancer? I mean, at the time when you—

*Waun Ki Hong, MD*

0:31:37.3

Fairly new idea.

*Tacey A. Rosolowski, PhD*

0:31:38.7

That you could actually reverse it?

*Waun Ki Hong, MD*

0:31:41.0

Yeah, but I was not the first one to talk about it. I was lucky to have the drugs and patients there. But clinically it was the first time that demonstrated that, yes.

*Tacey A. Rosolowski, PhD*

0:31:59.5

And so what year did you publish those results?

*Waun Ki Hong, MD*

0:32:03.8

I think that was 1986.



Interview Session: 01

Interview Date: September 16, 2013

## Chapter 4

### A: Joining MD Anderson/Coming to Texas

#### Recruited by Irwin Krakoff; Research and Program-Development Skills

#### Story Codes

A: Professional Path

A: Joining MD Anderson

B: Critical Perspectives on MD Anderson

C: MD Anderson Past

C: Evolution of Career

A: Professional Values, Ethics, Purpose

A: Character, Values, Beliefs, Talents

B: Multi-disciplinarity, Teams, and Collaborations

A: Contributions to MD Anderson

D: On Research and Researchers

#### *Tacey A. Rosolowski, PhD*

0:32:05.1

In 1986. And you were recruited—in the *New England Journal of Medicine*, right. Now you were recruited to MD Anderson by Dr. Krakoff in 1984. Now tell me about that process, and tell me why you were the person who was recruited.

#### *Waun Ki Hong, MD*

0:32:24.9

There was—again, the head and neck area was predominant among the surgeons and radiation oncologists. And that medical field was beginning to emerge. And Krakoff got to know me when I was in Boston VA, so he would stop by time and time again. He saw my program that I developed, so he was very impressed. Then he became head of medicine here, and there was an opportunity in head and neck medical oncology. So he recruited me. Again, I like a challenge. It was not easy for me and my family to live in Boston, and I'd never been to Texas. So I think that really in order for me to move here—obviously, this is a more comprehensive cancer center. And the program I developed in Boston VA—I felt like it had reached the ceiling, and there were limitations. I realized that to advance the field, I felt like I had to work some more on basic research and translational research. MD Anderson was the right place to do that. I arrived here and was the chief of the head and neck medical oncology section. Again, I started by myself, and I added one more to the faculty.

#### *Tacey A. Rosolowski, PhD*

0:34:40.6

But you had done that already.

#### *Waun Ki Hong, MD*

0:34:49.5

Interview Session: 01

Interview Date: September 16, 2013

And then I continued to pursue the organ preservation approach by giving chemotherapy and radiation treatment, and Henry 0:35:10.6 (???) (inaudible) was a strong supporter.

*Tacey A. Rosolowski, PhD*

0:35:11.7

I bet he was.

*Waun Ki Hong, MD*

0:35:15.1

And the chemoprevention research has continued.

*Tacey A. Rosolowski, PhD*

0:35:23.3

I'm going to want to talk more about that but I wanted to ask you—before we go in that direction—what were your impressions of MD Anderson when you arrived in 1984? What kind of institution was it, and how did it work?

*Waun Ki Hong, MD*

0:35:37.2

Initially, I was very impressed by the collaborative and multi-disciplinary patient care. The most impressive second thing was that I had the opportunity to interact with more basic scientists and to develop some more translational research projects. Number three is, obviously, compared to the VA Hospital, the institution is very generous with more resources and more infrastructure. And there are more collaborative efforts. As soon as I came here I was able to establish a team. It wasn't really difficult for me, it was not, compared to where I was.

*Tacey A. Rosolowski, PhD*

0:37:34.3

As you look back just on the flipside, were there things that you noticed about the institution that you felt could work better or that maybe didn't work as effectively as you would have liked?

*Waun Ki Hong, MD*

0:37:52.5

What do you mean?

*Tacey A. Rosolowski, PhD*

0:37:53.9

I don't know. I'm just sort of looking critically at the institution in 1984. Were there things that you would have wanted to improve?

*Waun Ki Hong, MD*

0:38:02.9

Interview Session: 01

Interview Date: September 16, 2013

Yeah. I think the area I felt we should improve at the time was integrating some biology and some basic research into clinical care, because this institution is a more comprehensive cancer center. So the institution has more patient resources, faculty talent, and more posturing for structure. Again, it was a tremendous opportunity, and I wanted to develop some really sophisticated research. I think I felt that in considering all of those strengths that MD Anderson has, and I think MD Anderson should have been better there.

*Tacey A. Rosolowski, PhD*

0:39:27.5

I wanted to ask you what you would like to do next in terms of conversation. Would you like to talk about the research that you did when you came? Or would you like to talk more about your administrative roles?

*Waun Ki Hong, MD*

0:39:41.8

I would like to share the research aspect. I moved to MD Anderson, and I'm a good team player, so I reached out to people in what I wanted. Then I inspired them to be excited, and we shared some science and exchanged some ideas. Then I created a culture of collaborative science. I really focused on more comprehensive translational research in head and neck cancer, especially chemoprevention. Then, later on, I expanded the same approach to lung cancer. Again, this idea alone is not good enough, and people alone are not good enough to answer the questions unless you've got some money—grants. So I was quite effective to obtain the grant through the peer-reviewed grant. So you have resources and you have ideas, you have talented faculty. Then I started asking some very serious questions. Why is it that people who used to smoke and stopped smoking are getting lung cancer? And is there any way we can really prevent some head and neck cancer and lung cancer? So, again, the questions are very, very bold questions. I think if you're going to ask that kind of question, you ought to get the answer. I don't think that we got all the answers we wanted, but it's asking step-by-step.

Interview Session: 01  
Interview Date: September 16, 2013

## Chapter 5

### A: The Researcher

#### A Chemoprevention Study and Reflections on Research, Team Science, and Clinical Trials

Story Codes

A: Overview

A: Definitions, Explanations, Translations

A: The Researcher

A: The Clinician

D: On Research and Researchers

A: The Researcher

D: On Leadership

A: The Administrator

B: Multi-disciplinary Approaches

C: Collaborations

C: The Professional at Work

C: Professional Practice

*Tacey A. Rosolowski, PhD*

0:42:12.0

Tell me about the evolution of that. I mean, when you first arrived in '84, what were some of the first projects you undertook with these new collaborations you put in place?

*Waun Ki Hong, MD*

0:42:25.9

This project was biology and chemoprevention of head and neck cancer. So to do this successfully the prevention research became—you have to understand the biology of the disease. That's the first priority.

*Tacey A. Rosolowski, PhD*

0:43:01.2

So how was that project funded, and how long did it last?

*Waun Ki Hong, MD*

0:43:08.4

That was funded by the National Cancer Institute through the program project—through the program project grant. It lasted almost fifteen years. I think we obtained almost \$20 million for that.

*Tacey A. Rosolowski, PhD*

0:43:44.8

Can you tell me before you go on—can you tell me some of the results of that? What were some of those answers to the bold questions?

Interview Session: 01

Interview Date: September 16, 2013

***Waun Ki Hong, MD***

0:43:52.2

Obviously, it's all the results in all the multiple projects that have been published on understanding genetic processes of head and neck cancer development, retinoid as a differentiation mechanism, and also identifying some high-risk individuals who are predisposed to develop the head and neck cancers. Also, using some combined agents in the treatment of the far advanced pre-cancerous lesions.

***Tacey A. Rosolowski, PhD***

0:45:08.5

So really this was very comprehensive.

***Waun Ki Hong, MD***

0:45:10.7

Oh, yes. Genotypic and phenotypic—the change of the pre-cancerous lesion after treatment. I think that kind of highlighted so many important discoveries. I think the most important thing is understanding the biology—the biology of pre-cancer and the biology of the cancer.

***Tacey A. Rosolowski, PhD***

0:46:02.3

Why is that so important?

***Waun Ki Hong, MD***

0:46:05.3

Well, if you understand the biology you can basically—that is understanding the strengths and weakness of the enemy. You understand what the strengths of the enemy are, and then you can target that.

***Tacey A. Rosolowski, PhD***

0:46:35.9

One thing I didn't ask you about when we were talking about your education and the early part of your career is your training to do research and designing research studies. Where do you feel you gathered the most experience and information to do that well? Designing research—how did you get the skills to do that?

***Waun Ki Hong, MD***

0:47:07.3

That's a good question. I think it is from the spontaneous leadership. I didn't take any extra courses. I didn't take any extra training. It was just a motivation and a talent, and then a passion and through curiosity.

***Tacey A. Rosolowski, PhD***

0:47:50.1

Interview Session: 01

Interview Date: September 16, 2013

Is there a way that you would characterize—how would you characterize your approach to a question? You said to ask bold questions, because otherwise you won't get answers that really are significant in a field. Is there a way that you—you know—as you think about your own approach, how would you describe it?

***Waun Ki Hong, MD***

0:48:14.7

I think that's an interesting question. I've been very lucky. I always say that. I've been recognized as more than I deserve during my career. So if you—I think you read some of my studies already—there are three important areas I feel like I made some small contributions. One is in the organ preservation, like laryngeal preservation. The other one is in chemoprevention. The third one is—I'm not sure you've heard about this—the BATTLE trial (Biomarker Based Approaches of Targeted Therapy for Lung Cancer Elimination Project (funded by Defense Dept.).

***Tacey A. Rosolowski, PhD***

0:49:11.3

I'm sorry?

***Waun Ki Hong, MD***

0:49:11.9

BATTLE trial.

***Tacey A. Rosolowski, PhD***

0:49:13.3

Oh, yes. I wanted to ask you about that.

***Waun Ki Hong, MD***

0:49:16.1

Yes, it was personalized. I'll get to that. All those three areas are difficult. All three areas are very difficult to conduct studies.

***Tacey A. Rosolowski, PhD***

0:49:31.7

Why? Why are they particularly challenging?

***Waun Ki Hong, MD***

0:49:33.9

Because number one, you have to really tackle multiple obstacles. Two, you have to have a strong, supportive collaborator. Number three, you have to have a fund. Number four, it's really very bold questions, impactful questions. And it takes such a length of time to get the answer too. To ask the correct questions, obviously, you have to have some innovations. And also you have to be stubborn. And also you have to have the capability to capture the funds, and you have to mobilize the people and

Interview Session: 01

Interview Date: September 16, 2013

teams. So I don't know how I did it. I guess I'm a stubborn guy and people trust me. If they don't trust, they don't work hard. In that regard I think the—also those three areas are involved—this is important for you to know—in an opening field. It opened up the field to something new. People can do a lot of research and follow up research, confirmatory research, deliberate research. But the things that I have done are asking very fundamentally good questions that nobody has done before. So it sort of has a forefront in that regard. That's exciting. Can you have that again—if you ask that question to me and I ask you, "Maybe not." You know—there is a joke that if you're too smart then you cannot do research. You know that?

*Tacey A. Rosolowski, PhD*

0:52:53.7

I don't know that joke.

*Waun Ki Hong, MD*

0:52:55.0

Because they're more calculated. So they know already the answers before you tackle it. "Oh, it's not going to work. That's too much. They don't want to sweat." And they try to work on easy subjects.

*Tacey A. Rosolowski, PhD*

0:53:16.2

That's a wise joke—a very wise joke.

*Waun Ki Hong, MD*

0:53:20.0

A guy like me, I'm not smart. I'm very stubborn.

*Tacey A. Rosolowski, PhD*

0:53:29.6

So it's better to be stubborn than smart.

*Waun Ki Hong, MD*

0:53:31.6

I think you have to have some combination. And to be innovative you have to have a certain level of inner talent. But I think the more important thing is to ask good questions. Many people ask questions, but they don't know how to articulate their questions, and also they don't know how to conduct—how to complete their questions. You understand what I'm saying?

*Tacey A. Rosolowski, PhD*

0:54:08.2

No, I don't quite understand.

*Waun Ki Hong, MD*

0:54:09.8

Interview Session: 01

Interview Date: September 16, 2013

You ask questions, you have questions, but you have to formulate those questions to answer those questions. Like a clinician like me, to answer the questions you have to be able to do clinical trials. The clinical trials like I developed are very complicated. There are multiple people involved and multiple disciplines. So you have to know how to conduct a trial in a timely fashion. You understand?

*Tacey A. Rosolowski, PhD*

0:54:44.4

Uh-hunh (affirmative).

*Waun Ki Hong, MD*

0:54:45.2

And then once you conduct a trial, then you've got to see when you can close and wrap it up to complete the trial. Then the results can be analyzed.

*Tacey A. Rosolowski, PhD*

0:55:00.2

No one's ever talked about the time frame of a clinical trial before. I didn't realize that that was so key.

*Waun Ki Hong, MD*

0:55:08.5

Some new drug testing takes a short period of time to get an answer. A study like this one on organ preservation and chemoprevention, or a BATTLE trial, takes a long time. The processes are very complicated.

*Tacey A. Rosolowski, PhD*

0:55:24.9

Can you take me through one of those complicated processes so I understand better what you're talking about? Why is the time so critical?

*Waun Ki Hong, MD*

0:55:35.7

Like in chemoprevention studies, initially you identify the patients, and you do some biopsies to understand the biology of the disease. Then you can give them some chemopreventive agent and it takes some time—three to five years—to get some answers to develop cancer. So you have to be very patient. It's not like it's treating in metastatic cancer patients.

*Tacey A. Rosolowski, PhD*

0:56:19.0

Where it's really fast.

*Waun Ki Hong, MD*

0:56:21.3



Interview Session: 01

Interview Date: September 16, 2013

Yeah. And the same thing with organ preservation too. So I don't know how I did—if you ask me if you're going to repeat again, I answer, "Maybe not."

***Tacey A. Rosolowski, PhD***

0:56:40.8

Yeah. Now I suppose it would also—when you have a trial that lasts quite that long—that means you also have to manage all the people involved for a very long time as well.

***Waun Ki Hong, MD***

0:56:57.8

Yeah, it's good to put the whole people together. People can be separated, but you have to keep the people in succession. So that's the challenge.

***Tacey A. Rosolowski, PhD***

0:57:12.6

And also—this has come out in my conversations with other people who do clinical trials and also working with basic scientists and physician scientists—that you're working with very high intensity personalities, too. How do you get these high intensity personalities to work collaboratively? What have you found as answers to those kinds of challenges?

***Waun Ki Hong, MD***

0:57:43.1

That's a challenge. The answer—I give this from my own view—I think sharing common goals and taking time to recognize individual's contributions. So if I ask you to do all the work for me, they are not going to be so good. They're highly educated and well-trained people. They're smart. They have their own agenda. Okay. Why do they have to sacrifice their time for my research project? So I think you have to share some common goals, and at the same time let the individual person carry on with recognition. Then also, share the resources. Like I was quite capable to raise some grants, and then I shared a grant. I was not only sharing a grant, it was also sharing the credit. This is not my work, this is not you, this is our work. And then people trust. So if you do all the work and then I go around and give a presentation and act like I'm the one that did all the work, then people have no respect. So I think you have to be very careful.

***Tacey A. Rosolowski, PhD***

0:59:46.2

Is there more discussion now of team science than there was, say, in the early 80s?

***Waun Ki Hong, MD***

0:59:54.9

I think that's true. We are promoting more and more team science. And again, comparing 1980 and 1990—when I developed that VA larynx trial, I was young. I was an associate professor. But I had to

Interview Session: 01

Interview Date: September 16, 2013

work with all the senior people, and I had to organize a national cooperative group. So I didn't know how I did it.

*Tacey A. Rosolowski, PhD*

1:00:37.3

What did you learn from that process?

*Waun Ki Hong, MD*

1:00:40.3

I don't know.

*Tacey A. Rosolowski, PhD*

1:00:41.8

You're not sure?

Interview Session: 01

Interview Date: September 16, 2013

## Chapter 6

### A: The Researcher

#### Early Larynx Preservation and Current Work on Targeted Therapy

Story Codes

A: The Researcher

A: The Clinician

C: Discovery and Success

A: Overview

A: Definitions, Explanations, Translations

D: On Research and Researchers

A: The Administrator

B: Multi-disciplinary Approaches

C: Collaborations

C: The Professional at Work

C: Professional Practice

A: Obstacles, Challenges

C: Patients

C: Patients, Treatment, Survivors

### *Waun Ki Hong, MD*

1:00:45.5

It's interesting. In 1982, I had a good idea at this time. I wanted to do the study that organ preservation—larynx preservation trials—through the Boston Head and Neck Group. So I was quite curious and nobody listened to me. So I went to the Dana-Farber Cancer Institute. I met Emil Frei. He was the one proponent of neoadjuvant chemotherapy. Then I got to know him so he knew that my work was—I said, "Dr. Frei, you've got to help me do this trial through the Boston group." So he was very kind and organized some dinner meeting at 1:01:55.4 (???) (inaudible). Then I presented my pilot study, and about a dozen people showed up, and we had some interesting discussions. Then the follow up meeting was scheduled and nobody showed up, except for Frei and I. Then I think I was referred to a team for the Boston group. So I didn't give it up. And then I went to National Cancer Institute. And Frei was at the time director of the CTEP. The Cancer Treatment Evaluation Program was what was used at Memorial Sloan-Kettering, which was my attending. Then I proposed the same study—randomized study. And he really liked that idea, and he was the one that helped me to develop the initial pilot study. But NCI was not interested to fund. So that's two strikes. And then I didn't give it up, so I went to the VA Cooperative Group.

### *Tacey A. Rosolowski, PhD*

1:03:48.4

So this is the certificate of appreciation?

Interview Session: 01

Interview Date: September 16, 2013

***Waun Ki Hong, MD***

1:03:51.9

This is for a new strategy to preserve the larynx in the treatment of advanced laryngeal cancer. So I convinced the VA Cooperative Study program, and they funded about \$3.2 million. The point I think you're asking is how I did that—stubbornness. I went to Boston Head and Neck Group, that failed, NCI failed, and then I was successful at the VA Cooperative Study Program. It turns out to be a really landmark trial. And we published the paper in the New England Journal of Medicine in 1991. So I think that team science at that time, again, was not like these days.

***Tacey A. Rosolowski, PhD***

1:05:04.4

It sounds like, too, at that time since it doesn't sound like there were as many mechanisms to set it up you had to be really, really persistent about finding those supporters—one of those keys that you mentioned earlier.

***Waun Ki Hong, MD***

1:05:20.9

It was fairly junior with this. Now I think there's some more sitting here—the then the 1:05:29.2 (???) (inaudible) cancer. People—if I say something people listen now. But at the time, I wasn't.

***Tacey A. Rosolowski, PhD***

1:05:37.7

Just out of curiosity, since team science is becoming so much more important, is that changing the culture of medicine in academic institutions at least?

***Waun Ki Hong, MD***

1:05:49.7

Yes, that is true. And I think especially in the cancer field. We are better together than separate. Working together you can really answer questions more quickly. Otherwise, it would take a longer time. And MD now is also, in a public way, recognized more and more for team science. Again, when you talk about team science, so many people are involved. I think you have to really lay out clearly the credit. Even though you are the main person or architect that develops some research project—to articulate that research project, you have to have troops. And you have to figure out how to recognize the individual people to share the same credit.

***Tacey A. Rosolowski, PhD***

1:07:15.8

In addition to—we've got about five minutes left. Is that okay? You want to stop at 3 o'clock?

***Waun Ki Hong, MD***

1:07:23.7

Sure.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

1:07:24.3

Okay, so I just wanted to ask you—I mean, you talked about that great big study that was established with that PO1 grant with you first arrived. Were there other areas that you were researching, other studies that were initiated after you first came?

*Waun Ki Hong, MD*

1:07:38.5

Recently it's been the BATTLE project.

*Tacey A. Rosolowski, PhD*

1:07:40.9

And tell me about that.

*Waun Ki Hong, MD*

1:07:42.5

That is a very simple idea. There's some more—again, more personalized treatment, especially now we know that cancer is a genetic disease. And there are multiple pathways that really exist and that culminate to develop invasive cancer. So now I think there are so many new agents—targeted agents—available. Like in the old days we would look at cancer under the microscope. This is phenotypic change, this is a squamous carcinoma or adenocarcinoma. That's still—we use it, but in terms of science and specific treatment, we need to know something more than that, which is so-called molecular cell types. And the molecular cell type means that even though the histology shows the same tumor—adenocarcinoma—but there are different drivers, cancer drivers. And the idea basically is to really identify major cancer drivers. There are a lot of genetic changes still, but many of them function as passengers. So the passengers are very innocent. If you give chemotherapy, you try to kill everyone. That's not good. So targeted therapy is really identifying, pinpointing some target that is a cancer driver. And then the idea is how you can really hijack that cancer driver by giving the right match agent. So BATTLE means “biomarker approaches targeted therapeutic for lung cancer elimination.” So like in lung cancer patients who present with metastatic disease, they got chemotherapy, and they're not doing well. So we did a biopsy, take out the tissue. And then identify molecular cell types. The biopsy is not easy. Analyzing biomarkers is not easy. Then based on biomarker findings, we try to match with the right agent.

*Tacey A. Rosolowski, PhD*

1:11:16.6

Why is the biopsy not easy? And why is finding the biomarker not easy?

*Waun Ki Hong, MD*

1:11:21.3

Biopsies are not easy. You have to put a long needle in. It's not easy. It's a procedure.

Interview Session: 01

Interview Date: September 16, 2013

*Tacey A. Rosolowski, PhD*

1:11:34.2

Is it painful for the patient, or it's difficult to find the tumor?

*Waun Ki Hong, MD*

1:11:38.0

Well, it's expensive, too. And then the front of the needle gets the tip in the tissue, and people in the past would consider it not quite feasible. Then the biomarker—and that also is not easy because you have to have a dedicated lab. Turnaround time is about two to three weeks to get the answer, and we thought about delaying the treatment.

*Tacey A. Rosolowski, PhD*

1:12:22.2

Can I ask you why do you need a dedicated lab, and what are the biomarkers that you're looking for?

*Waun Ki Hong, MD*

1:12:32.4

Yeah, okay. When we developed that trial it was 2004. It was not really CLIA Lab. We had to analyze all of the biomarkers through a dedicated fluoroscopic molecular pathology lab. Again, for us to do that, you have to have the lab, you have to have pathologists.

*Tacey A. Rosolowski, PhD*

1:13:01.6

We can close off for today.

*Waun Ki Hong, MD*

1:13:16.9

So that can be quite expensive. Nonetheless, that still turned out to be a landmark trial and highly successful. Sorry I can't talk in more detail.

*Tacey A. Rosolowski, PhD*

1:13:37.3

Absolutely, we have another appointment set up for Friday. So I can just remind you of where we left off today. Thank you very much.

*Waun Ki Hong, MD*

1:13:46.5

You have all of my background CV?

*Tacey A. Rosolowski, PhD*

1:13:50.0

I have some. I do not have the CV. Maybe I can e-mail Sandra on that.

Interview Session: 01

Interview Date: September 16, 2013

*Waun Ki Hong, MD*

1:13:54.7

Oh, yes, Sandra can send that and a short biography of my research contributions.

*Tacey A. Rosolowski, PhD*

1:14:00.7

Excellent.

*Waun Ki Hong, MD*

1:14:01.7

Why don't you stop by and see her?

*Tacey A. Rosolowski, PhD*

1:14:02.7

I will do that. And let me just say for the record, I am turning off the recorder at 3 o'clock.

1:14:07.1 (End of Audio Three)

**MDA-RML\_Hong, Waun Ki**  
**Session 2—October 16, 2013**

**Chapter 00B**  
**Interview Identifier**

*Tacey A. Rosolowski, PhD*

0:00:04.6

Okay. I'll just put the identifier on. I'm Tacey Ann Rosolowski, and today is October 16, 2013. The time is about three minutes after 2 o'clock. And I am on the 11th floor of the faculty center on the main campus of MD Anderson talking with Dr. Waun Ki Hong. This is our second interview session. And thank you for doing this today.

*Waun Ki Hong, MD*

0:00:32.5

Again, thank you, Tacey—I think all of us are on such a busy schedule—for visiting my office to have some informal chatting on my research and my administrative role, et cetera.

*Tacey A. Rosolowski, PhD*

0:00:51.6

Well, I appreciate you giving me the time.



Interview Session: 02  
Interview Date: October 16, 2013

## Chapter 7

### A: The Researcher

#### **Bold Research: Opening the Field of Personalized Therapy**

#### Story Codes

A: The Researcher

A: The Clinician

C: Discovery and Success

A: Overview

A: Definitions, Explanations, Translations

D: On Research and Researchers

A: The Administrator

B: Multi-disciplinary Approaches

C: Collaborations

C: The Professional at Work

C: Professional Practice

A: Obstacles, Challenges

C: Patients

C: Patients, Treatment, Survivors

B: Controversy

#### ***Waun Ki Hong, MD***

0:00:56.5

I think I touched upon the periphery last meeting on the area of organ preservation and also chemoprevention. I think you covered it quite extensively those two areas. You can see things in my file; it is easy to read there. And you can verify all the things that I talk about.

#### ***Tacey A. Rosolowski, PhD***

0:01:38.2

Sure, and just for the recorder let me say that Dr. Hong is referring to a PowerPoint, which he has kindly agreed to share with the archive. And that will be available via the interview.

#### ***Waun Ki Hong, MD***

0:01:51.1

So the third area of so-called “very bold” research that I had the opportunity to implement was the so-called personalized targeted therapy. What that means is cancer is basically an alteration in the genetics—abnormal DNA proliferates a cell and becomes cancer. And then obviously there are genetic changes that are heterogeneous. And the genetic changes are heterogeneous and then become the cancer. That’s the difficult part. They’re so heterogeneous you cannot really pinpoint—

#### ***Tacey A. Rosolowski, PhD***

0:03:06.1

Interview Session: 02

Interview Date: October 16, 2013

You know—I hadn't realized that until I talked to Dr. [John] Mendelsohn [Oral History Interview] and he began speaking about personalized therapy and targeted therapy. Now when it became clear that cancer was a moving target in this way, did that dramatically change your thinking and your approach?

***Waun Ki Hong, MD***

0:03:26.1

In fact, my study, the so-called BATTLE trial on lung cancer, once successfully completed there was impetus of establishing an Institute of Personalized Cancer Therapy where Dr. [John] Mendelsohn is the director.

***Tacey A. Rosolowski, PhD***

0:03:49.0

I didn't realize that.

***Waun Ki Hong, MD***

0:03:50.5

I was the first director of IPCT. So let me tell you just a brief background. The idea is very simple, which is there is a tumor there, and you can do the biopsy. Then you can visualize changing of the genetic cord. Then, once the genetic changes took place, then the next thing is sending signals—signals to the cells to proliferate. The signaling pathways are extremely heterogeneous. And you can block the one signal, and that's not good enough. But you have to understand—this is very important—that there is always a driver—a cancer driver gene. And the rest of the things are genetic changes. But many genetic changes can be just the passages. It's not harmful. So the idea is that we do the biopsy, identify and visualize genetic changes, and then identify the cancer driver. Then we hijack the cancer driver by giving the right treatment. It's a simple concept. So we basically developed a hypothesis, which was that cancer drivers can be identified through the biopsy materials, so then cancer drivers can be hijacked with specific drugs. So that's the story. To answer the questions, we did a study called the BATTLE, which is biomarker-based approaches of targeted therapy for lung cancer elimination. That's BATTLE. You can see the slide here.

***Tacey A. Rosolowski, PhD***

0:06:47.3

And that was actually funded by the Defense Department.

***Waun Ki Hong, MD***

0:06:51.4

Yes.

***Tacey A. Rosolowski, PhD***

0:06:51.7

Okay. How did that happen?

Interview Session: 02

Interview Date: October 16, 2013

***Waun Ki Hong, MD***

0:06:53.6

I wrote up the grant and then competed for funding through the DOD. It was a substantial amount of funding, about \$7 million. So we proved that we could do it. When I developed that study, everybody was skeptical. They said it would be impossible to do the biopsy, and, "There is no way that you can analyze the genetic changes through the comprehensive molecular analysis," but we did in two weeks. And somehow we did that. Basically, once we completed the trial and we published a paper and presented to the opening plenary session [Hong: AACR 2001], it really galvanized the whole field and opened up the field of personalized targeted therapy. Initially, we studied lung cancer. Now, I think, that concept of biopsy and treatment at the biomarker innovated targeted therapy to hijack cancer drivers. So it opened up the whole field. Now it's not only within institutions, but nationwide and worldwide that so-called BATTLE-like approaches have been developed and investigated. I take a great deal of pride about this BATTLE initiative and starting something from an idea, then proving it, then demonstrating it's feasible, and galvanizing the whole field. So the bottom line is that whether this unique type of approach can make an impact, I think that remains to be seen. But I think we're moving in that direction. I think definitely we will make an impact, because we now understand more and more about cancer genetics and genetic tissues. And a lot of new agents are coming out of the pipeline, and we can have opportunities to really identify the cancer drivers. Then, also, at the same time we have now more tools that we can really kill those cancer drivers. If they're sold, I think they really would make an impact.

***Tacey A. Rosolowski, PhD***

0:10:28.0

What do you think is the next wave of research coming from or building on this opening up of the field?

***Waun Ki Hong, MD***

0:10:38.9

Already this kind of trial is rapidly proliferating—increasing. Then eventually, that kind of approach can be applied in the treatment of all different stages of cancer, not only advanced stages, and also intermediate stages, and even the early stage after surgery. Not everybody can be cured. But once you do the surgery, then you will find those molecular cancer drivers. Then based on drivers, you can give the right agent to kill the drivers. In the past, we used to give the agent empirically, like shooting in the dark. That strategy didn't work that well. So this is a more personalized, pinpointed and targeted bullet. That's the bottom line.

***Tacey A. Rosolowski, PhD***

0:12:11.0

Now you said that this research—the research that came immediately out of the first BATTLE trial—resulted in the founding of the Institute for Personalized Therapy here at MD Anderson.

***Waun Ki Hong, MD***

0:12:27.0

When I was doing that trial everybody was so skeptical, but they were encouraging. Then the institution

Interview Session: 02

Interview Date: October 16, 2013

was about to turn to develop this institute in targeted therapy, so completion of the BATTLE trial reassured the confidence of the institution to establish that IPCT. Do you understand what I'm saying?

*Tacey A. Rosolowski, PhD*

0:13:12.9

Yes.

*Waun Ki Hong, MD*

0:13:14.6

So if that trial was a failure, obviously, people would be discouraged. Then they would lose their confidence, and the institution would be down.

*Tacey A. Rosolowski, PhD*

0:13:32.6

What connection do you have now with the Institute of Personalized Therapy?

*Waun Ki Hong, MD*

0:13:38.8

I closely interact. In fact, when I was in Cancer Medicine, we had more than fifty trials asking those kinds of questions.

*Tacey A. Rosolowski, PhD*

0:13:55.8

When I talked to Dr. Mendelsohn, he was speaking about the real importance of just collecting so many tissue samples—the kind of stock—for an encyclopedic knowledge of how cancer morphs. What are some challenges or requirements that you see in laying the groundwork for understanding the approach to cancer in this targeted way?

*Waun Ki Hong, MD*

0:14:36.1

It's changing the paradigm of cancer treatment. Traditionally, we just stick around with surgery, radiation, and chemotherapy. Now, I think, there is a new model to treatment, like a personalized cancer therapy, immunotherapy, based on the understanding of genomic medicine. Again, to accomplish that goal, then you have to obtain the tissues, and you have to store and preserve the DNA. Then a comprehensive genomic analysis can be done. Based on the discovery of the specific abnormal gene and abnormal pathway associated with cancer progression, then that can be hijacked with targeted therapy. It's a beautiful concept.

*Tacey A. Rosolowski, PhD*

0:15:59.1

Why do you say it's a beautiful concept?

Interview Session: 02

Interview Date: October 16, 2013

***Waun Ki Hong, MD***

0:16:02.3

The thing is, again, that that makes sense. Again, it was a concept that when I brought it up, it wasn't that new. People thought about it. But I think I was the first one to do the BATTLE trial that demonstrated that it was biopsy driven—biopsy mandated, biomarker driven—and personalized cancer therapy can be done. So that's important.

***Tacey A. Rosolowski, PhD***

0:16:52.0

Why were people so skeptical when you first proposed this?

***Waun Ki Hong, MD***

0:16:57.3

Because of lack of experience, lack of confidence, lack of infrastructure. And it was also very expensive. If you're too smart, you cannot be a good researcher. So if you have a good idea, you have to have some drive. I convinced the people, and it was multi-disciplinary teams—medical oncologists, surgeons, pathologists, interventional radiologists. It was about six or seven different disciplines in a collaborative effort. So it's not easy to construct at all.

***Tacey A. Rosolowski, PhD***

0:18:00.4

How has the need for these interdisciplinary collaborations been a challenge? Because it sounds like research is increasingly multidisciplinary.

***Waun Ki Hong, MD***

0:18:12.3

Yes, team science is the new word. This is not your science, this is not my science, this is our science. So executing that kind of BATTLE trial, you have to have a collaborative team effort. And that is challenging, because every individual is the same, and every individual is not the same—heterogeneous. So to put all of those people under one umbrella is a huge challenge. I think I was able to do that, because people trusted me and my leadership, and I was sharing credit with others. I was able to achieve that agenda effectively. A lot of people—there are a lot of good people, good scientists and good doctors, but if you don't trust, then you cannot build up the morale, and then people schedule out. And they don't work together. That's doomed to failure.

***Tacey A. Rosolowski, PhD***

0:19:50.4

Do you find that younger scientists are educated with more of a mindset of collaboration than they were?

Interview Session: 02

Interview Date: October 16, 2013

***Waun Ki Hong, MD***

0:19:59.4

Yeah, that's what I've been emphasizing and promoting more and more, that concept.

***Tacey A. Rosolowski, PhD***

0:20:08.8

I'm sure we'll get to that when we talk about your administrative roles. Are there any other observations that you'd like to make right now about your research? Any other stories you'd like to tell?

***Waun Ki Hong, MD***

0:20:21.4

I'd like to say this again. My studies are all on perseverance, and that was a very bold trial. I felt like I made some significant contributions in that area. Second, in chemoprevention—that's a very provocative concept and, I think, it's the way to go. We have not really reached a point where people can practice, but we have the potential. And the third one is personalized cancer therapy through the BATTLE trial. I think that's really opened up this field and has a tremendous potential to make an impact. And it's so gratifying to see the incredible proliferation of BATTLE-like trials worldwide. That's an important impact.

***Tacey A. Rosolowski, PhD***

0:21:34.9

Why do you think that's so important?

Waun Ki Hong, PhD

0:21:36.7

That's like you're driving some science. And, ultimately, it's connected to patient benefit. So that's the bottom line. You're doing something good. Yes, you can do it as individual faculty, you help some patients and you treat the patients, you cure the patients. That's the most gratifying thing. And so things that I have done that really opened up the field and then let other people follow through, and then, ultimately, make some benefit for the patients. That's the—I feel very gratified.

***Tacey A. Rosolowski, PhD***

0:22:44.5

Let me just pause the recorder real quickly.

Interview Session: 02  
Interview Date: October 16, 2013

**Chapter 8**  
**A: The Administrator**  
**Administrative Roles to Build Collaboration and Education**

Story Codes

A: The Administrator  
B: Building/Transforming the Institution  
B: Multi-disciplinary Approaches  
B: Growth and/or Change  
B: Education  
B: Critical Perspectives on MD Anderson  
C: Professional Practice  
C: The Professional at Work  
C: Collaborations

***Tacey A. Rosolowski, PhD***

0:00:04.1

All right, we're back recording again. Well, thank you so much for that overview of your perspective on your contributions to the field. I wanted to talk now about the many administrative roles that you have held, and also kind of talking about that with a mind to exploring how you helped shape and develop the research environment here at MD Anderson. Also, in a time when science was changing, the speed of research was changing, and there were new needs in order to support kind of modern, up-to-the-minute cancer research at every stage. So I wanted to begin just with when you came with the situation in 1984. What were your goals? What were you looking at?

***Waun Ki Hong, MD***

0:01:02.7

I think I touched on it briefly through the previous meeting. The main reason I joined MD Anderson in 1984 was to capitalize on the incredible research opportunities through collaborative translational research. So at the time the environment was not really—you know—the mode was not collaborative translational research.

***Tacey A. Rosolowski, PhD***

0:02:01.5

It was not? Interesting.

***Waun Ki Hong, MD***

0:02:04.1

But I came here, and I realized right away that the patient volume was different, talent of faculty, and the infrastructure was better than where I was. So I was one of the first people that reached out to people and really inspired them to be excited about collaborative translational research. So we were the first ones to develop some program projects. And to be successful as a program project, you have to work with many clinical level investigators from different disciplines. So I was one of the first people that

Interview Session: 02

Interview Date: October 16, 2013

cultivated that kind of culture—the culture of collaboration and culture of translational research as a Vanguard group. So I take a great deal of pride. Through those kinds of interactions I made many friends, and people trusted me. Once you build up the trust, then you can 0:04:08.5 (???) (inaudible), and people have been behind me. So I think I made some small contributions to that area. Then the important thing is that next that is contagious. Once I show them that I can do it, then other people followed—followed exactly the template that I developed. I think really it created this new paradigm of collaborative translational research.

*Tacey A. Rosolowski, PhD*

0:05:01.1

Now when you saw you developed a template, what are you referring to there?

*Waun Ki Hong, MD*

0:05:05.1

Template is a team science template.

*Tacey A. Rosolowski, PhD*

0:05:07.6

And so what did that template look like? I mean, was it like kind of a program? And what did that look like? What were your instructions for this template so that other people could follow it?

*Waun Ki Hong, MD*

0:05:26.7

Like I started doing in head and neck cancer and lung cancer. Then the people involved some GI cancers or some melanoma, even leukemia. Basically, they followed our model. Then they used the same strategy.

*Tacey A. Rosolowski, PhD*

0:06:04.7

So you mean that they asked similar research questions but in their own area?

*Waun Ki Hong, MD*

0:06:08.8

Right. Exactly, that's the point.

*Tacey A. Rosolowski, PhD*

0:06:12.6

When you came, you were head of the section of head and neck medical oncology. Is that correct? Now, what was your mandate? I mean, when you came in you were—



Interview Session: 02

Interview Date: October 16, 2013

***Waun Ki Hong, MD***

0:06:29.4

I was seeing only head and neck cancer patients. That was my primary responsibility.

***Tacey A. Rosolowski, PhD***

0:06:43.6

Now, were you also—was your goal also to build up that section and to strengthen—

***Waun Ki Hong, MD***

0:06:51.9

Sure, to build up the section and then strengthen some research programs.

***Tacey A. Rosolowski, PhD***

0:06:57.7

And how did you go about doing that? What was your strategy for doing that?

***Waun Ki Hong, MD***

0:07:03.5

That's the strategy, just to promote the team science and reach out to good people to work together.

***Tacey A. Rosolowski, PhD***

0:07:13.5

Who were some of your collaborators?

***Waun Ki Hong, MD***

0:07:18.4

Numerous collaborators. Basically, I created a culture of collaboration and respect, trust, and then tackled the science by asking good questions.

***Tacey A. Rosolowski, PhD***

0:07:41.6

Was there an educational component to that too? How did that work? How did you educate your peers and the next generation?

***Waun Ki Hong, MD***

0:07:52.6

It was spontaneous. And then, obviously, let the young people follow. And then I invited them to be a participant in a research project and shared the credit and then helped them to be successful as independent investigators. So I build up the good reputation, and people constantly report to me, because they know to come to me, and at the end of the day they will get something out of it. All the people that have been with me, ever since I've been at Anderson, have become independent, and they moved out of here. Everyone has been successful as the cancer center director or chairman.

Interview Session: 02

Interview Date: October 16, 2013

***Tacey A. Rosolowski, PhD***

0:09:12.8

That's a very good track record. Who are some of those individuals? Can you share some of their names?

***Waun Ki Hong, MD***

0:09:19.5

Scott Lippman. He is the director at UC San Diego, Moores Cancer Center. The other guy is Fadlo Khuri, who is Chairman of Hematology Oncology at Emory University Winship Cancer Center. And Roy Herbst is Chief of Medical Oncology at Yale. Many, many people—Roman Perez, Chairman of Medical Oncology at Albert Einstein Medical School in New York.

***Tacey A. Rosolowski, PhD***

0:10:11.6

Who are some of the really important collaborators that you worked with when you first arrived—people that you felt were really on your wave length?

***Waun Ki Hong, MD***

0:10:23.1

One of the guys was Ruben Lawton (?). He was the retinoid biochemist. And he and I came here at the same time in 1984. So he was a basic scientist, and I'm the clinician. We were close to each other and then became friends and colleagues and team players. Unfortunately, he passed away. And Walter Hittelman, he is still here as faculty. Also, he comes from a basic science background. He was a terrific collaborator, and he helped me immensely to build up the translational research program.

***Tacey A. Rosolowski, PhD***

0:11:17.0

What made him such a good collaborator?

***Waun Ki Hong, MD***

0:11:19.3

His communication. He tried to understand clinical issues. I tried to understand what the basic science issues were, and we used the same languages to make connections.

***Tacey A. Rosolowski, PhD***

0:11:37.4

That translation process, yeah. Were there other important collaborators?

***Waun Ki Hong, MD***

0:11:46.0

Yeah, there are many of them.

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:11:55.7

I know, you don't want to leave people out.

*Waun Ki Hong, MD*

0:11:57.1

Yeah, there's just so many people—Ignacio Wistuba, Jack Lee. Wistuba is now Chairman of the Department of Translational Molecular Pathology. And Jack Lee is a senior biostatistics professor.

*Tacey A. Rosolowski, PhD*

0:12:30.4

So people from a wide variety of areas.

*Waun Ki Hong, MD*

0:12:32.6

Oh yes.

Interview Session: 02  
Interview Date: October 16, 2013

## Chapter 9

### A: The Administrator

#### The Department of Thoracic and Head and Neck Medical Oncology: Reorganization; A New Fellowship Program

#### Story Codes

A: The Administrator  
B: Building/Transforming the Institution  
B: Multi-disciplinary Approaches  
B: Growth and/or Change  
B: Education  
B: Critical Perspectives on MD Anderson  
C: Professional Practice  
C: The Professional at Work  
C: Collaborations  
C: Mentoring

#### *Tacey A. Rosolowski, PhD*

0:12:34.6

Very interesting. How long were you section head of Head and Neck?

#### *Waun Ki Hong, MD*

0:12:45.6

I was appointed in 1984 and then continued until 1993. Then I became section head of Thoracic Medical Oncology in 1987, so I combined both.

#### *Tacey A. Rosolowski, PhD*

0:13:08.9

Now how were those different? Because when I was looking over this, I was kind of confused about the reorganization. Could you explain that?

#### *Waun Ki Hong, MD*

0:13:16.0

Initially, the section was a small part. Then the lung section was bigger than the head and neck section. Then my chief asked me to cover the thoracic section, so I ended up covering both Head and Neck and Thoracic. That was in 1987.

#### *Tacey A. Rosolowski, PhD*

0:13:43.3

In 1987?

Interview Session: 02

Interview Date: October 16, 2013

**Waun Ki Hong, MD**

0:13:44.8

In 1987. And then we called this the section of the Thoracic, Head and Neck Medical Oncology.

**Tacey A. Rosolowski, PhD**

0:13:58.6

Did this reorganization reflect a strengthening of medical oncology at MD Anderson?

**Waun Ki Hong, MD**

0:14:05.4

Oh, yes.

**Tacey A. Rosolowski, PhD**

0:14:06.9

Tell me about that process of developing the specialty here at MD Anderson.

**Waun Ki Hong, MD**

0:14:10.9

This is a comprehensive cancer center, so it was so specialized. It's not like a general oncologist. So the area of head and neck and lung I covered was the so-called aerodigestive cancer—smoking-related cancer. So there is some sharing and some similar biology in head and neck cancer and lung cancer. I think I happened to be the person that opened up that field, because when I was in the Boston VA Hospital at that time, because of VA populations, I had seen some more head and neck cancer and lung cancer patients than other general hospitals. So it was a very smooth transition for me here focusing on those areas. Then in 1994, it became a department, because all those sections were expanding substantially. And also I had developed multiple research programs and had very strong clinical and translational research. Everybody agreed that this group should be recognized as a department. So I became department chair in 1994 and continued until 2001. Then I was drafted to be the head of the Division of Cancer Medicine.

**Tacey A. Rosolowski, PhD**

0:16:33.5

So am I understanding you correctly—and of course, we will talk about your role as the head of the Division of Cancer Medicine—but I wanted to make sure we get all of the story about Head and Neck and Thoracic. Am I understanding you correctly in that it was largely through pieces that you put in place that these three groups structurally were linked?

**Waun Ki Hong, MD**

0:17:03.3

Yes, right. I made some connections, yes.

Interview Session: 02

Interview Date: October 16, 2013

***Tacey A. Rosolowski, PhD***

0:17:08.6

Could you tell me a little bit more about the inner workings of these departments? You know—like what projects did you initiate? Not only research, but other kinds of projects that helped coalesce these groups into an identifiable unit.

***Waun Ki Hong, MD***

0:17:28.1

It's truly from the head and neck cancer and lung cancer—each area requires multidisciplinary approaches. It desperately requires collaboration from radiation oncologists and medical oncologists. Just to talk about patient care again, we discuss together what is the best treatment that we can offer to this particular patient. I was not the first person, but I really did promote strong collaborative multidisciplinary patient care. There are some concerns that still exist. That is that some doctors don't like sharing the patients. "This is my patient, this is your patient." So I think that is very selfish. I discourage that kind of approach and promote more and more multidisciplinary team patient care.

***Tacey A. Rosolowski, PhD***

0:19:14.8

Were you saying that there are still some physicians at MD Anderson that resist sharing their patients?

***Waun Ki Hong, MD***

0:19:20.7

Yes, that's human nature. Then, also, at the same time, they developed some multidisciplinary and transdisciplinary translational research in both lung and head and neck cancer. Like organ preservation and chemoprevention and personalized targeting therapy—like a BATTLE trial—is a final product of the transdisciplinary team research effort. I cannot do it. You cannot do it, unless we work together as a team. I think once you develop that kind of culture, then that's a magnet to attract some more young people to join, and also it's an opportunity to provide any research project to youngsters. That's more on the menu that you can offer. I think we have done very well there. It's strong multidisciplinary patient care and state-of-the-art transdisciplinary translational research, and then offer the young people the opportunity to do the research through the education process. So it's a triple threat—patient care, research, and education.

***Tacey A. Rosolowski, PhD***

0:21:20.4

When I've spoken to some other people, they've talked about instituting certain rewards or building encouragement for collaboration into the evaluation process. Were there strategies like that that you used?

***Waun Ki Hong, MD***

0:21:37.1

That's always the carrot in your pocket.

Interview Session: 02  
Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:21:40.4

It certainly helps to reinforce.

*Waun Ki Hong, MD*

0:21:43.3

Oh, yeah. That's always an underscore, constantly.

*Tacey A. Rosolowski, PhD*

0:21:49.0

Were there any particularly effective techniques that you felt you instituted? Those kind of brownie points or however you would call it.

*Waun Ki Hong, MD*

0:21:59.3

Oh, yes. I recognized them by giving awards. You can see my annual report there. Did I give an annual report to you last time? I'll give you one. There's about five different categories—patient care—I have one right over here.

*Tacey A. Rosolowski, PhD*

0:22:26.0

I'll just pause the recorder briefly.

0:22:29.6 (End of Audio Two)

*Tacey A. Rosolowski, PhD*

0:00:03.5

Okay, we're back again after a quick break while Dr. Hong went to get some copies of the annual report. So when did you start the awards?

*Waun Ki Hong, MD*

0:00:11.9

I started the—I don't know exactly what year it was. I think it was six or seven years ago. It's been very successful and really helped to inspire the people to do a better job.

*Tacey A. Rosolowski, PhD*

0:00:43.5

And these awards are for faculty?

Interview Session: 02

Interview Date: October 16, 2013

***Waun Ki Hong, MD***

0:00:45.7

Yeah, this is a faculty award. Let me see—I think this is the faculty recognition award—team science—

***Tacey A. Rosolowski, PhD***

0:01:18.5

I see, and it says, "Faculty recognition and awards program celebrates dedication to patients, research, and education." So in each of these areas you give an award.

***Waun Ki Hong, MD***

0:01:28.1

Yeah. And then there is a team science one. It inspires young people, like the non-tenure track instructors. We created the Division of Cancer Medicine Research Award.

***Tacey A. Rosolowski, PhD***

0:01:48.1

And there is the junior research faculty awards, instructor awards, and post-doctoral fellows awards and classified research staff awards.

***Waun Ki Hong, MD***

0:01:57.5

And then we have recognition for outstanding employees, too.

***Tacey A. Rosolowski, PhD***

0:02:04.2

So who came up with this idea to give the awards?

***Waun Ki Hong, MD***

0:02:08.0

We worked together. I wouldn't say it was my idea. It was a collective idea.

***Tacey A. Rosolowski, PhD***

0:02:14.5

It's a great—and what impact has this had? What impact do you see from this since you've been issuing awards?

***Waun Ki Hong, MD***

0:02:22.9

Again, the impact is very simple—encourage them, inspire them to do more and better work. There is quite a bit of recognition, and everybody will receive their award and take a great deal of pride. It's just simple. Like I got something, and now I'm very happy. That's human nature. I use some more carrots and rewards.



Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:03:10.4

I'm also seeing it connecting up with a number of themes that you talked about earlier, like being generous with giving credit and also creating trust that when people make an effort it will be rewarded. It will be recognized, and it will be part of the community. I mean, those are all really, really important. Well, thank you. Can I take these?

*Waun Ki Hong, MD*

0:03:29.7

Sure, absolutely.

*Tacey A. Rosolowski, PhD*

0:03:30.8

Fantastic, that's great.

*Waun Ki Hong, MD*

0:03:32.1

This is our fellowship program. Then another very exciting thing I implemented was to cultivate some more young people to be successful academic oncologists. A fellowship alone is not good enough. So I created an advanced scholar's program, where I had to raise the money through philanthropy. Then each person can really focus a hundred percent on research—a hundred percent research.

*Tacey A. Rosolowski, PhD*

0:04:19.7

And this is for fellows?

*Waun Ki Hong, MD*

0:04:21.1

This is advanced scholar.

*Tacey A. Rosolowski, PhD*

0:04:23.7

Advanced scholar?

*Waun Ki Hong, MD*

0:04:24.3

Yes, so this has been very exciting.

*Tacey A. Rosolowski, PhD*

0:04:27.0

And so—I'm not clear. So these folks are younger than fellows?

Interview Session: 02  
Interview Date: October 16, 2013

***Waun Ki Hong, MD***

0:04:31.7

No, older than fellows.

***Tacey A. Rosolowski, PhD***

0:04:33.4

Older than fellows?

***Waun Ki Hong, MD***

0:04:34.5

After completing the fellows, then there is a gap. A three-year fellowship is completed, but they're not quite good enough to be appointed as a tenure track assistant professor. So we give them one more year of an extension to work with a hundred percent effort in research so that they can really be productive. And then they publish some good papers, and then they can be ready to be appointed as assistant professors. That was my idea.

***Tacey A. Rosolowski, PhD***

0:05:16.6

So why is—what is so complicated about medical oncology that the three-year fellowship cannot prepare an individual to do real high-quality research?

***Waun Ki Hong, MD***

0:05:33.1

Again, this is science and medicine. It's not like the stock market or Wall Street. I think you have to have some experience. You have to have gone through a maturation stage. So that's why this is a huge advantage. But they are good enough to be doctors in the community or even here as oncologists. Once you complete the fellowship, you're good enough to practice, but these people are beyond that. They have practice plus research, so physician scientists. Then you have to work in the lab. That requires an extra year to be matured. Like you cannot play major league baseball first, you have to spend a couple of years in a farm league. Not everybody can make it to the major league, only select people. Same thing, it's very competitive.

***Tacey A. Rosolowski, PhD***

0:07:00.5

You know—that reminds me of conversations I've had with individuals who talk about how difficult it is to operate as a physician scientist given that pull between laboratory and clinic. What do you see as the challenge and the solution to that problem?

***Waun Ki Hong, MD***

0:07:25.0

The challenge is that you have to have some adequate protected time so that the individual can really

Interview Session: 02

Interview Date: October 16, 2013

focus on really cutting-edge research. Also, another challenge is that mentorship is important. You have to mentor—

*Tacey A. Rosolowski, PhD*

0:07:58.7

I'll just pause this.

0:08:01.4 (End of Audio Three)

*Tacey A. Rosolowski, PhD*

0:00:00.4

All right. Okay. Let me ask you, why is mentorship so important?

*Waun Ki Hong, MD*

0:00:10.5

It's like having good parents. Some people can be successful without a mentor but—a guy like Obama, he became President, and I don't think he comes from a silver spoon. It happens. For me, I didn't come from a silver spoon, I came from a blue collar background. If you're smart and thoughtful, then you know how to create an environment where you can be comfortable and the environment where you can find the right mentor. There are two ways to it. I think some smart kids—I see them constantly—but many smart kids don't have any sense. You have to bring them to water to drink, and they will never be successful. That's the challenge. Human beings are not heterogeneous. Not everybody can be successful. I think that's the huge challenge. In terms of solutions, I don't know. The solution is you have to work hard, number one. And you have to have passion and commitment, and you have to ask the right questions. Then, also, you have to be in the right place at the right time and work with the right people.

*Tacey A. Rosolowski, PhD*

0:02:16.5

There always is an element of luck.

*Waun Ki Hong, MD*

0:02:18.0

Yeah, and then you have to have luck too.

*Tacey A. Rosolowski, PhD*

0:02:25.8

You talked about luck the last time we met.

*Waun Ki Hong, MD*

0:02:28.7

I've been very lucky.

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:02:30.3

Yeah, I mean it is—that's the right place at the right time.

*Waun Ki Hong, MD*

0:02:33.8

Some people can be their own worst enemies. That's their problem. You have to be more generous. You have to be creative. And then, I think, you have to give more than you receive. Then people who receive, they will pay it back to you. That's Oriental Confucianism, but sometimes it works.

*Tacey A. Rosolowski, PhD*

0:03:20.9

A lot of people talk about that formula—sending things out and then they come back. Sure.

Interview Session: 02  
Interview Date: October 16, 2013

**Chapter 10**  
**A: The Administrator**  
**Head of the Division of Cancer Medicine**

Story Codes

A: The Administrator  
B: Building/Transforming the Institution  
B: Multi-disciplinary Approaches  
B: Growth and/or Change  
B: Education  
B: Critical Perspectives on MD Anderson  
C: Professional Practice  
C: The Professional at Work  
C: Dedication to MD Anderson, to Patients, to Faculty/Staff  
A: Professional Values, Ethics, Purpose

***Tacey A. Rosolowski, PhD***

0:03:20.9+

Well, tell me about becoming Deputy Head of the Division of Cancer Medicine.

***Waun Ki Hong, MD***

0:03:40.3

That's a long time ago, and it was only temporary.

***Tacey A. Rosolowski, PhD***

0:03:44.4

Right, but how did that happen? Who asked you?

***Waun Ki Hong, MD***

0:03:48.0

My boss, Krakoff, asked me. What do you have there—that was 1992?

***Tacey A. Rosolowski, PhD***

0:03:57.2

I was not sure about that date. I have that you became head of the division in 2001.

***Waun Ki Hong, MD***

0:04:04.5

Yeah, that's right.

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:04:05.5

And then for one year you were an interim or deputy?

*Waun Ki Hong, MD*

0:04:09.1

No, no.

*Tacey A. Rosolowski, PhD*

0:04:11.4

When did you become Deputy Head under Krakoff?

*Waun Ki Hong, MD*

0:04:16.1

Well, he left in 1994.

*Tacey A. Rosolowski, PhD*

0:04:26.4

Okay, and were you—you served as Deputy Head with him for a time and then—was there anything significant about that role?

*Waun Ki Hong, MD*

0:04:41.9

No, there isn't.

*Tacey A. Rosolowski, PhD*

0:04:42.8

Okay. Let's talk about your becoming head of the division then of Cancer Medicine in 2001. Tell me how that happened.

Wuan Ki Hong, MD

0:04:52.4

This is the largest division, and I have seventeen academic departments, 350 faculty members. That's a huge job. But in 2001, I was Chairman of the Department of Thoracic, Head and Neck Medical Oncology. I think I was doing extremely well at the time. I was also President of AACR—American Association for Cancer Research. So at the time, my stock value was very high. You have peaks and valleys. I was not really that interested to be the division head. I was not a candidate. They hired a search committee and interviewed many people and failed to recruit the right person to be the head of Cancer Medicine. So I was sort of drafted by the department chairs to be the head of the Department of Cancer Medicine. Then that was accepted by Dr. John Mendelsohn. So he appointed me as the head of Cancer Medicine in 2001.

Interview Session: 02  
Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:06:34.0

What was the search committee that you were on? What were you looking for that you weren't finding among all of these candidates?

*Waun Ki Hong, MD*

0:06:42.0

The institution had a search committee.

*Tacey A. Rosolowski, PhD*

0:06:43.7

Okay, you were not on that search committee?

*Waun Ki Hong, MD*

0:06:45.4

No, and I was not a candidate. The search committee was chaired by Josh Fidler [Isaiah Joshua Fidler, DVM, PhD [Oral History Interview]] and Stan Hamilton.

*Tacey A. Rosolowski, PhD*

0:06:55.2

And Stan Hamilton. Do you know what they were looking for?

*Waun Ki Hong, MD*

0:06:58.5

A translational researcher.

*Tacey A. Rosolowski, PhD*

0:07:00.5

A translational researcher, and they just couldn't find anybody.

*Waun Ki Hong, MD*

0:07:03.6

They interviewed people, and it was mismatched.

*Tacey A. Rosolowski, PhD*

0:07:10.1

Were you surprised? What made you take the job that you hadn't thought about taking?

*Waun Ki Hong, MD*

0:07:20.5

There is some sense of obligation to the institution. The institution had been very good to me. So I thought that when the institution asked me to do something, I felt some sense of obligation. Also, it is a

Interview Session: 02

Interview Date: October 16, 2013

good job—a very honorable job, a more prestigious job. So I accepted that job without accepting an increment in my salary. That was a stupid mistake I made. My wife constantly talks about that. I don't want to give the impression to other people that I took that job because of money. So in retrospect, I made a mistake.

***Tacey A. Rosolowski, PhD***

0:08:22.8

Twenty-twenty hindsight. When you assumed this responsibility, what kinds of opportunities did you see for having an impact?

***Waun Ki Hong, MD***

0:08:37.9

I thought about that a lot. And the opportunities—the major opportunity was my commitment to help a lot of people to build up the collaborative team science research program. Just like what I did before. So that notion was very well received and embraced by everyone.

***Tacey A. Rosolowski, PhD***

0:09:32.7

Why had things changed? Or had things changed so that people were suddenly enthusiastic about this approach?

***Waun Ki Hong, MD***

0:09:45.3

Obviously, I think people thought about doing that kind of thing but were insecure and not able to execute that kind of team science before. I demonstrated that I can do it—even I can do it, why not you? They regained some of their confidence. That's important. I inspired them to build up their confidence. So it sort of became contagious. That's the impact. You assist some people, help some people and to make things happen.

***Tacey A. Rosolowski, PhD***

0:10:35.6

What were the conversations? You mentioned that there were seventeen departments in the Division of Cancer Medicine. I can't imagine that they were all in the same place in developing this kind of program. So what was that process like of kind of getting everybody together?

***Waun Ki Hong, MD***

0:10:56.9

You cannot force them to do that. You have to create the culture and establish the environment and establish the common ground where the people can play together and succeed together and share together on science and patient care.



Interview Session: 02  
Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:11:21.7

How did you make that happen?

*Waun Ki Hong, MD*

0:11:24.8

I don't think I made anything. I just happened to be the person that was an instrument to help them march in that direction.

*Tacey A. Rosolowski, PhD*

0:11:40.2

But I'm curious, were there different kinds of meetings with different agendas? I mean, did you bring up certain—was there kind of a sense that, "Okay, now we need to have transparency among the departments?" What were some of the invitations you made?

Waun Ki Hong

0:12:04.1

I think leading by example is important. Then that's kind of how the culture can be established as the norm. Nothing extra. So bars are high and goals are high, and we all want to make some progress. Without doing research, there is no way one can make any progress. Then to make progress, we have to work together.

*Tacey A. Rosolowski, PhD*

0:12:43.1

So research was really set out as the high priority.

*Waun Ki Hong, MD*

0:12:47.5

Research and patient care.

*Tacey A. Rosolowski, PhD*

0:12:48.6

Research and patient care. And which of the departments were kind of the quickest to embrace this and understand that was a win-win?

*Waun Ki Hong, MD*

0:13:02.1

I think most of the departments, except one or two. I cannot mention them. Some department chairs can be stubborn in spite of my really extraordinary hard work. But that happens.

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:13:20.1

That, too, is human nature.

*Waun Ki Hong, MD*

0:13:24.4

Exactly.

*Tacey A. Rosolowski, PhD*

0:13:25.3

How long did you feel it took you to establish that kind of communication and culture?

*Waun Ki Hong, MD*

0:13:33.0

It was—it didn't take too much, because before even I became the head of Cancer Medicine, I had a good reputation and becoming head was sitting in the cockpit, and people followed.

*Tacey A. Rosolowski, PhD*

0:13:56.3

So people were ready.

*Waun Ki Hong, MD*

0:14:01.1

I never forced it to them. People who had been working with me—I think you interviewed two, Wendy Austin and Sue Davis—they were my right-hand people. They're the ones implementing certain things. I think if people really hate me, then they attack with resistance. But that was not the case. Again, you can verify through their conversations. That's the human nature. If there's a certain boss and I don't like it and a marching order came through the intermittent level, then people become resistant. I think a level of respect was very reasonable, so I wanted to implement something and through my people, Wendy [Austin] and Sue [Davis], the level of resistance was minimal. There was minimal resistance. Do you understand what I'm saying?

*Tacey A. Rosolowski, PhD*

0:15:45.9

Yeah, I do. I do. Looking at—because you've been division head for twelve years now—looking back over that period of time, what are you really gratified to have seen come about? Because there must be tremendous changes in the division.

Wuan Ki Hong, MD

0:16:10.7

Again, number one, the quality of the faculty within the division. I've been working with the chairs on transparency. I'm very gratified to see each area raising the bar for research. Again, I don't take credit.

Interview Session: 02

Interview Date: October 16, 2013

All I did was to help them be successful. That's important. I'm the point guard or the quarterback, and I passed the ball to the right person and the right time to make the basket. Obviously, when that happens, automatically patient care can be improved. Another thing is that the fellowship program was okay, and now I think it's one of the top in the country with an incredible reputation. So that's something I'm gratified by. And the creation of the advanced scholar program. Again, that was something that wasn't there. That was something I manufactured, and it's already produced thirteen advanced scholars. All of those graduates are in the academic setting as assistant or associate professors. So they're going to be future leaders. That's an opportunity that I was able to develop and conduct and complete all of those major research trials that were timely and successful. And I have been able to open up a new field. So I'm a very happy person.

Interview Session: 02

Interview Date: October 16, 2013

## Chapter 11

### A: Overview

#### How Research Has Changed; the Future of the Division of Cancer Medicine

#### Story Codes

A: The Researcher

D: On Research and Researchers

D: Understanding Cancer, the History of Science, Cancer Research

D: The History of Health Care, Patient Care

B: MD Anderson in the Future

A: Career and Accomplishments

A: Professional Values, Ethics, Purpose

A: Character, Values, Beliefs, Talents

C: Portraits

#### *Tacey A. Rosolowski, PhD*

0:18:57.7

Yeah, you seem it. I'm interested again—I mean, you mentioned raising the bar with research as the first thing you mentioned when I asked about the accomplishments that you felt you'd been able to affect. I have a two-part question. The first part is, how has doing research changed in the last fifteen years? Which would include, of course, the period in which you've been division head. How is it different from the 80s, the 90s?

#### *Waun Ki Hong, MD*

0:19:38.1

Well, I think obviously it's more high technology, and there are more tools, and it's more sophisticated. There's more science-oriented research. I think, in my opinion, this is an incredible time—just an unprecedented opportunity to do the research, because we know more science. We know more biology and challenges as to how you can translate a basic understanding of biology to cancer genomic medicines to the patients through the translational research. So that's exciting.

#### *Tacey A. Rosolowski, PhD*

0:20:42.6

Now I can see from that snapshot that you've painted—I mean, obviously the need for multidisciplinary research is critical. How have some of those other elements, though—the need for more technology and more tools—how has that influenced the way that you've developed research within the division?

#### *Waun Ki Hong, MD*

0:21:12.5

Again, the research—the landscape of research is changing constantly. So you have to be opportunistic. If you don't capitalize on opportunities, then you become outdated. Part of my job is to inspire the

Interview Session: 02

Interview Date: October 16, 2013

faculty to open up to a new era. But for them to implement that kind of new, exciting research, you have to have the funding. You have to have tools and researchers. So that's challenging.

***Tacey A. Rosolowski, PhD***

0:22:17.1

How does the division provide support to the faculty in getting funding and getting tools?

***Waun Ki Hong, MD***

0:22:24.3

We have to get the funds. I don't have much money, so I had some philanthropy fund. I used it without hesitation to help the young people to do some basic groundwork to generate some primary data. Then I helped them to get some peer-reviewed grants. That's all I do.

***Tacey A. Rosolowski, PhD***

0:22:54.2

Are there shared resources? I mean, shared technology. And give me some examples of that.

***Waun Ki Hong, MD***

0:23:01.4

There is NCI—the National Cancer Institute—that's a comprehensive cancer center. We have about fifteen or sixteen of us that share the resources for cytometry and genetic shared resources. You can name anything—imaging, et cetera, biostatistics. People can use that kind of sharing of the resources.

***Tacey A. Rosolowski, PhD***

0:23:34.3

Was there—has there been a change? I know sometimes people can be very proprietary about their tools and their resources. And part of collaboration is sharing.

***Waun Ki Hong, MD***

0:23:46.9

That's a constant battle, sharing resources. Again, you're right. Some people hesitate to share something. That's human nature.

***Tacey A. Rosolowski, PhD***

0:24:08.7

With the faster pace of research, is there also a sense of competitiveness that sort of works against collaboration at times?

***Waun Ki Hong, MD***

0:24:18.8

That's in everyone. That happens. Especially in some basic research areas there is some degree of competitiveness leading to lack of collaborations. I think that's getting better now nationwide.

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:24:49.0

Why do you think that's the case?

Waun Ki Hong, PhD

0:24:51.3

Even NCI and NIH are promoting more and more multi-investigator initiative research. It used to be sole investigators, and now it's multi-investigators. They recognize each individual with equal credit. Even a paper will have two senior authors—two first authors—equal, fifty percent, they shared it. It wasn't like that in the old days, it was first author—single author. But now they are sharing some more credit.

*Tacey A. Rosolowski, PhD*

0:25:46.9

What's next for the Division of Cancer Medicine? What are your plans?

*Waun Ki Hong, MD*

0:25:53.0

I think I'm getting older. That's true. When the time comes, I will have to step aside. I think they need some new blood—a young person. Ultimately, they need some person who has passion and intellectual property and experience and commitment, and who promotes research-driven patient care and promotes more translational research to make some impact. I think they have to find that in their leader. I'm getting older.

*Tacey A. Rosolowski, PhD*

0:27:00.4

Do you have firm plans to retire at this point? Do you have a date?

*Waun Ki Hong, MD*

0:27:05.8

Of course, yes.

*Tacey A. Rosolowski, PhD*

0:27:06.4

Oh, you do? Can you share that? You're not going to share that, all right. I understand. Fair enough. What do you have—what projects or initiatives do you have in progress right now that you want to see finished?

*Waun Ki Hong, MD*

0:27:23.5

My research?

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:27:25.2

Or administrative projects that you have underway.

*Waun Ki Hong, MD*

0:27:30.6

Basically, I am helping other people's research projects and the continuation of personalized cancer therapy, continuation of chemoprevention research. You have to understand that research is like playing football, and the research that I developed will take a longer time to make a touchdown. So I feel like I brought that some certain yards, and the next generation will pick it up. I don't want to take credit from whoever comes after me to succeed in the project. I took credit. I brought up the ball to the fifty-yard line. So I don't like to be stalled, but somebody can carry on. You understand what I'm saying?

Interview Session: 02  
Interview Date: October 16, 2013

## Chapter 12

### A: The Administrator

#### Administrative Roles; On the MD Anderson Presidents; Looking Ahead to Retirement

#### Story Codes

- A: The Administrator
- B: Building/Transforming the Institution
- B: Multi-disciplinary Approaches
- B: Growth and/or Change
- A: Overview
- A: Definitions, Explanations, Translations
- A: Contributions
- A: Activities Outside Institution
- A: Career and Accomplishments
- A: Post Retirement Activities
- C: Portraits
- D: On Research and Researchers

#### *Tacey A. Rosolowski, PhD*

0:28:56.9

I do. I have just a few more questions. I know that it was in 2012 that the executive committee created Vice Provost for Clinical Research. Can you tell me about that, why it was needed, and what's the mission of that post?

#### *Waun Ki Hong, MD*

0:29:26.6

There was a call from the president, Ron DePinho, asking me to serve as Vice Provost of Clinical Research, because the institution needed a senior faculty. We all received a clinical research agreement and laid out some groundwork. They asked that I do that, and I did that for twelve months. It was a very rewarding experience. I learned a lot. Then I relinquished that position, and I was just the head of Cancer Medicine. I think the institution—Ethan Dmitrovsky, who is the provost, is doing that job until he finds a new person through a national search.

#### *Tacey A. Rosolowski, PhD*

0:30:51.8

Tell me why you found that so rewarding.

#### *Waun Ki Hong, MD*

0:30:59.8

Clinical research is very complicated. It's not the same as doing some experiment in an animal in a laboratory, because clinical research is targeting the human. It requires very meticulous attention and rigorous conduct. They ensure a clinical research project so that anyone who can implement it is



Interview Session: 02

Interview Date: October 16, 2013

ensured it is complete. You make some errors, and then you cannot repeat. Any one of my [animal] experiments you can repeat in another animal. [But clinical research is] a more serious human experiment. It requires some meticulous science. Also, human subject participation is required and a consent form, an IRB. To do that kind of a study, you have to acquire some new drugs from the drug company or NCI. That's not an easy task at all. It's very challenging. Some young faculty don't know how to do it. I think I have to help them to do the right studies.

*Tacey A. Rosolowski, PhD*

0:33:18.3

And what did you feel you learned from serving that role for a year?

*Waun Ki Hong, MD*

0:33:28.4

I learned about how much the faculty are struggling. And also, to do the clinical investigation, you have to have some protected time. We're all so busy taking care of the patients, obviously, we're not able to carry out sophisticated clinical research. That's very important.

*Tacey A. Rosolowski, PhD*

0:34:08.6

Has that information changed anything that you're going to do as[Vice Provost of Clinical Research]?

*Waun Ki Hong, MD*

0:34:19.4

Yeah, I came up with specific recommendations, and then forwarded it. I think they are under consideration to implement my recommendations that I made.

*Tacey A. Rosolowski, PhD*

0:34:43.7

I just had a couple of other questions. I wanted to ask you about the presidents and other top administrators that you've worked with. Maybe you could comment on your work with the different presidents—Dr. [Charles] LeMaistre, Dr. Mendelsohn, and Dr. [Ronald] DePinho.

*Waun Ki Hong, MD*

0:35:10.3

All of them are great.

*Tacey A. Rosolowski, PhD*

0:35:12.0

How are they different? What are the different things they've done for MD Anderson in your opinion?

*Waun Ki Hong, MD*

0:35:19.5

Interview Session: 02

Interview Date: October 16, 2013

Dr. LeMaistre was a gentleman—a Southern gentleman. He had a tremendous vision. He was the one that recruited me to come. He was the first person who really opened up the cancer prevention program, which is considered the top in the country, like the chemoprevention area is part of cancer prevention, and basically, administration of the chemical compound that halts cancer development. He was a fan of mine. Then John Mendelsohn, he is more of a translational researcher. We come from similar backgrounds. So he and I worked out together, not only in the institution, also outside the institution. We played tennis.

*Tacey A. Rosolowski, PhD*

0:36:59.1

Who wins?

*Waun Ki Hong, MD*

0:37:00.8

I cannot tell. He wins more than I do. He's older than me so—he has been very [shrewd tennis player]. I think he was the guy that really expanded immensely the research component. LeMaistre was the president who was very strong in the clinical area. He opened up the prevention. But basic science was lukewarm. And Mendelsohn expanded it immensely and more research-driven patient care and clinical research and translational research. Also, he invested quite a bit in the education area. DePinho is a new guy and he is, perhaps very, the smart guy—a brilliant scientist. I think he has tremendous vision. He is a more seasoned researcher, a doctor clearly about modern science. He fits the institution just perfectly as a president.

*Tacey A. Rosolowski, PhD*

0:38:45.8

Are there other leaders who you've worked with who you would say have had a special impact on the institution? Aside from the presidents, other people on the executive team or other division heads, department heads—

*Waun Ki Hong, MD*

0:39:12.3

That's a tough question. There are so many good people, I cannot pinpoint. I respected most of them. To single out a person that had influence to me to build up and establish not only my programs but cancer medicine—Margaret Kripke. She is no longer with us. She was a past EVP and provost. She was quite influential.

*Tacey A. Rosolowski, PhD*

0:40:16.0

What impact do you feel she had?

*Waun Ki Hong, MD*

0:40:18.7

Interview Session: 02

Interview Date: October 16, 2013

She understands science and understands about issues related to translational research. She was a good listener. All the department chairs, actually, they are wonderful.

***Tacey A. Rosolowski, PhD***

0:40:49.5

You've been appointed to a number of boards, worked on advisory committees. Are there any of those that you feel deserve discussion in terms of that they helped you think differently, or helped you grow, or that you felt you had a particular impact on?

***Waun Ki Hong, MD***

0:41:07.0

Extramural?

***Tacey A. Rosolowski, PhD***

0:41:09.3

Extramural. There's the NCI appointment.

***Waun Ki Hong, MD***

0:41:11.6

That's the National Cancer Advisory Board.

***Tacey A. Rosolowski, PhD***

0:41:14.7

Yes, the Cancer Advisory Board.

***Waun Ki Hong, MD***

0:41:16.9

That was a presidential appointment.

***Tacey A. Rosolowski, PhD***

0:41:19.1

Right, in 2008 until 2014. So tell me about that.

***Waun Ki Hong, MD***

0:41:27.1

That's the only board within NIH that has a presidential appointment. Within NIH there are hundreds of different boards. That's the only board that is appointed by a president. That's a unique, highly prestigious thing. Basically, the NCAB advises NCI's research activities and also funding allocations. Anyone who receives a grant beyond \$50,000 must be approved by the National Cancer Advisory Board. So you are a grantee, but your grant was not fairly reviewed. You can make an appeal. The appeal can be discussed at NCAB and then accepted or rejected. It's a very powerful committee. As an outstanding

Interview Session: 02

Interview Date: October 16, 2013

investigator, the NCI wanted to give a merit extension that should be approved by NCAB. And for new program development, if NCI's interested to fund it it must be approved by NCAB.

*Tacey A. Rosolowski, PhD*

0:43:20.9

Over the course of your service to that committee since 2008, have there been some trends that you've noticed or particularly interesting discussions? What can you tell me about that?

*Waun Ki Hong, MD*

0:43:37.5

The short answer is that it's not a good time in the funding situation. Funding is now flat. The government is shut down.

*Tacey A. Rosolowski, PhD*

0:43:47.2

Recently, that's true.

*Waun Ki Hong, MD*

0:43:52.4

I think that is a huge issue.

*Tacey A. Rosolowski, PhD*

0:43:56.2

And is that kind of the culmination of a flat—since 2008?

*Waun Ki Hong, MD*

0:44:02.2

Yes, the sequestration and flat budget.

*Tacey A. Rosolowski, PhD*

0:44:10.6

Now what kind of pressure has that put on academic institutions and funding?

*Waun Ki Hong, MD*

0:44:20.7

It's quite tangible. The major concern is losing good researchers to industry and discouraging young people from being devoted to research because of lack of funds. Research is an investment. They see that they've got their MD or PhD, they're already married with a couple of kids—if they go out to private practice, they can make tons of money. But they stay in academia because they're interested in research and completing research. But if there is no fuel supply, you cannot drive the car. That dampens the enthusiasm, and they get really fed up. That's enough. They pack up, and they go on the street [to open up private practice].

Interview Session: 02  
Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:45:46.7

What do you see in the future for this particular situation? Any change?

*Waun Ki Hong, MD*

0:45:52.3

Gloomy.

*Tacey A. Rosolowski, PhD*

0:45:53.2

It's very gloomy.

*Waun Ki Hong, MD*

0:45:54.1

Yeah.

*Tacey A. Rosolowski, PhD*

0:45:57.6

And you're going to be on that committee until—

*Waun Ki Hong, MD*

0:45:59.3

Next year.

*Tacey A. Rosolowski, PhD*

0:46:00.9

Next year, 2014.

*Waun Ki Hong, MD*

0:46:03.5

Thank God, I'm counting down.

*Tacey A. Rosolowski, PhD*

0:46:06.0

Oh, are you?

*Waun Ki Hong, MD*

0:46:09.1

Yeah, so again, America has been very powerful and very successful because—you know why?—because there used to be a substantial amount of funds for research. That is no longer the case. There, I think, because they have an opportunity to attract a lot of good people to come from foreign countries. A

Interview Session: 02

Interview Date: October 16, 2013

brain is good and coming here for research opportunity—they have discovered some exciting stuff and been successful. But if there is no money for researchers, then they're not going to come. We even lose our own people.

*Tacey A. Rosolowski, PhD*

0:47:18.9

There are a couple other committees you were on. You were appointed to a three-year term to the Board of Scientific Counselors of the Division of Cancer Prevention and Control.

*Waun Ki Hong, MD*

0:47:30.0

That was a long time ago.

*Tacey A. Rosolowski, PhD*

0:47:32.5

Okay, not so significant? Then you also served as President of the American Association for Cancer Research.

*Waun Ki Hong, MD*

0:47:38.3

That was in 2001.

*Tacey A. Rosolowski, PhD*

0:47:40.5

Too long ago?

*Waun Ki Hong, MD*

0:47:43.4

That was eleven or twelve years ago.

*Tacey A. Rosolowski, PhD*

0:47:45.6

Okay.

*Waun Ki Hong, MD*

0:47:48.4

I made some impact there in promoting more international collaborative efforts and promoting more translational research throughout the world's countries and more prevention research. That was in 2001. At the time, in China, they could not send the people to the United States to attend a meeting. So I created some fund to provide the travel fund—a travel fund—airfare from China to the United States and the hotel lodging. Through the abstract—based on the abstract review, it was a good abstract that

Interview Session: 02

Interview Date: October 16, 2013

was represented, and we gave them the fund. At the time, GNP in China was down. Not anymore. So now they can come with their own money. The world is changing. But I did very good things.

*Tacey A. Rosolowski, PhD*

0:49:20.0

Are there some other initiatives that I've missed that you'd like to tell me about?

*Waun Ki Hong, MD*

0:49:24.6

No, that's the international collaborative research effort and education training and prevention research, more translational research.

*Tacey A. Rosolowski, PhD*

0:49:42.3

You don't want to share the date of your retirement, but what are you looking forward to when you retire?

*Waun Ki Hong, MD*

0:49:50.7

Family—spending more time with family. Even after I retire, I'm going to work part-time with John Mendelsohn at IPCT [Institute for Personalized Cancer Therapy]. That's the area I am studying the science.

*Tacey A. Rosolowski, PhD*

0:50:16.4

Is there anything else you'd like to add?

*Waun Ki Hong, MD*

0:50:18.9

No. No, I think you did a wonderful interview. Look over this. A lot of things I talked about are covered in there.

*Tacey A. Rosolowski, PhD*

0:50:29.4

Sure. And it will be great to have the images as well. There are some neat things from your family and mentors.

*Waun Ki Hong, MD*

0:50:36.7

Then you can read this one. All right, Tacey.

Interview Session: 02

Interview Date: October 16, 2013

*Tacey A. Rosolowski, PhD*

0:50:43.0

Well, thank you very much. Thank you very much for your time. I appreciate it very much. And I'm turning off the recorder at 3:50.

0:50:51.7 (End of Audio Three)