

# Robert S. Benjamin, MD

Interview # 57

## Interview Profile

### Interview information:

Three interview sessions: 12 December 2014, 16 January 2015, 6 March 2015  
Approximately 5 hours 50 minutes total duration  
Interviewer: Tacey A. Rosolowski, PhD.

For a CV, biosketch, and other support materials, contact:

Javier Garza, Archivist, Research Medical Library  
jgarza@mdanderson.org; 713.792.2285

### About the Interview Subject:

Robert S. Benjamin, MD (b. 20 April 1943, Brooklyn, New York) came to MD Anderson in 1974 as a fellow in the Department of Developmental Therapeutics. He is now a Professor in the Department of Sarcoma Medical Oncology. He first focused his research in the entirely new area of the pharmacology of cancer drugs. After a few years at MD Anderson, however, Dr. Benjamin shifted his focus to sarcoma medical oncology, and conducted landmark studies establishing chemotherapy treatments for the disease, leading to limb salvage and multi-modality treatment approaches. Dr. Benjamin served as Chair of the Department of Melanoma/Sarcoma and then the Department of Sarcoma—from 1993 to 2012. He has been known within MD Anderson culture as “King Pin” because of many pins patients have given him to wear on his lab coat.

### Major Topics Covered:

Personal and educational background

History of research into the pharmacology of cancer drugs

Research: landmark work on the cardiac toxicity of Adriamycin; intra-arterial delivery of Cisplatin to treat osteosarcoma

Culture of Department of Developmental Therapeutics; Emil J Freireich, MD [Oral History Interview]

Research collaborations with surgeons; building a multi-disciplinary service

History of the Departments of Melanoma and Sarcoma

The Melanoma/Sarcoma Center

A clinician's critical perspective on institutional changes under Dr. Ronald DePinho

## Robert S. Benjamin, MD

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### Original Interview Profile

This interview with sarcoma medical oncologist, Robert S. Benjamin, MD (b. 20 April 1943, Brooklyn, New York) takes place over three sessions in 2014/2015

Dr. Benjamin came to MD Anderson in 1974 as a fellow in the Department of Developmental Therapeutics. He is now a Professor in the Department of Sarcoma Medical Oncology, where he served as Chair from 1993 to 2012. He is also the P.H. and Fay E. Robinson Distinguished Professor in the Division of Cancer Medicine. The sessions are conducted in Dr. Benjamin's office in the Department of Sarcoma Medical Oncology in the Faculty Center on the main campus of MD Anderson. Tacey A. Rosolowski, Ph.D. is the interviewer.

Dr. Benjamin received his BA in Chemistry from Williams College in 1964 and continued at the New York University School of Medicine, receiving his MD in 1968. He undertook his Medical Internship at NYU Bellevue Med. Center in 1969 and his Medical Residency at the same institution in 1970. Dr. Benjamin then had a Fellowship in Medical Oncology, with a focus on chemotherapy at the NCI Baltimore Cancer Research Center from 1970 to 1973. Dr. Benjamin then took a position as an Assistant Professor of Medicine in the Section of Oncology at the University of Southern California School of Medicine in Los Angeles (1973-1974). Dr. Benjamin came to the MD Anderson Hospital and Tumor Institute in 1974 as an Assistant Professor of Medicine in the Department of Developmental Therapeutics. He first focused his research in the entirely new area of the pharmacology of cancer drugs. After a few years at MD Anderson, however, Dr. Benjamin shifted his focus to sarcoma medical oncology, and conducted landmark studies establishing chemotherapy treatments for the disease, leading to limb salvage and multi-modality treatment approaches. Dr. Benjamin served as Chair of the Department of Melanoma/Sarcoma and then the Department of Sarcoma—from 1993 to 2012. He has been known within MD Anderson culture as “King Pin” because of many pins patients have given him to wear on his lab coat.

This interview provides a portrait of very dedicated clinician and a critical observer of MD Anderson. Dr. Benjamin provides a picture of the early days of research into the pharmacology of cancer drugs and the fertile environment of MD Anderson's Department of Developmental Therapeutics under the leadership of Emil J Freireich, MD [Oral History Interview]. Dr. Benjamin explains the shifting institutional structure that first linked melanoma and sarcoma and then split them. He tells the story of how successes in treating sarcoma with chemotherapy helped pave the way for cordial and very collaborative relationships with surgeons, causing sarcoma to become one of the first sections/departments to function in a fully multi-disciplinary manner. He explains the unique dimensions of the Melanoma/Sarcoma Center, which grew from this collaborative culture and which Dr. Benjamin helped develop into a model of how patients should be treated. Dr. Benjamin also talks about his landmark work on the cardiac toxicity of Adriamycin and his collaboration with Interventional Radiology to develop a technique for the intra-arterial delivery of Cisplatin to treat osteosarcoma, an approach that became the standard of care at MD Anderson. Dr. Benjamin also provides a clinician's critical perspective on changes that the institution had undergone since Dr. Ronald DePinho [Oral History Interview] assumed leadership.

# **Robert S. Benjamin, MD**

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# Robert S. Benjamin, MD

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## Chapter Summaries

Interview Session One: 12 December 2014

Chapter 00A  
*Interview Identifier*

Chapter 01  
*An Educated Family and an Early Interest in Science*  
A: Personal Background;

Story Codes  
A: Personal Background;  
A: Inspirations to Practice Science/Medicine;  
A: Influences from People and Life Experiences;  
C: Funny Stories;

In this segment, Dr. Benjamin talks about the influence of his parents. His father, Bernard, was a pediatrician who had his office in their home. His mother, Helen, was a PhD biochemist who eventually taught physiology at Hunter College. They instilled in him a love of learning, and listening to the babies screaming in his father's office convinced him not to be a pediatrician. His father taught him about chemistry before he took it in school and Dr. Benjamin explains what he found fascinating about the subject.

Chapter 02  
*Experiences at Williams College*  
A: Educational Path;

Story Codes  
A: Personal Background;  
A: Professional Path;  
A: Influences from People and Life Experiences;

In this segment, Dr. Benjamin explains his selection of Williams College for his undergraduate studies in chemistry (BA conferred in 1964). He also explains why this small and rurally located institution was not suited to him and made him realize that he is a "city person." Dr. Benjamin talks about his love of music, his first experiences with opera, and the cultural advantages that growing up in New York City offered. He notes that Williams College had few cultural opportunities and the student body was not as intellectually driven as he would have liked. He

explains that he took summer school courses throughout his education and fondly recalls a language immersion program at Colby College, where he also met his wife, Nancy, whom he asked to marry him after only nine days.

### Chapter 03

#### *An Interest in People*

A: Personal Background;

#### Story Codes

A: Character, Values, Beliefs, Talents;

A: Personal Background;

A: Professional Path;

A: Influences from People and Life Experiences;

D: Cultural/Social Influences;

D: Women and Diverse Populations;

C: Experiences of Injustice, Bias;

Dr. Benjamin begins this segment by noting that he elected to go into medicine during college because laboratory work in chemistry made him realize that he is a “people person.” He talks about his mother’s influence on this part of his character. She taught him to “stand up for what he believes in.” Dr. Benjamin also comments on his growing awareness of the Civil Rights Movement when he was in college and he describes an “incredibly moving” experience of attending a lecture by Martin Luther King on campus. He notes that he grew up in a largely black neighborhood in Brooklyn and is to this day color blind when he deals with people. Dr. Benjamin also explains his support of women, another influence from his mother. He sketches some of his wife, Nancy’s, career, experiences with sexism, and her current with a Federal law court.

### Chapter 04

#### *A Rounded Education During Medical School*

A: Professional Path;

#### Story Codes

A: Personal Background;

A: Professional Path;

A: Character, Values, Beliefs, Talents;

Dr. Benjamin begins this segment by explaining that he elected to go to New York University School of Medicine because he wanted to return to a big city (MD conferred in 1968). He also explains that he always took summer school courses to round out his education: he was interested in a liberal education. Dr. Benjamin explains that in college he took music electives and this is where his interest in music, particularly opera, developed.

### Chapter 05

#### *A Mentor in Medical School Teaches Important Research Lessons*

A: Professional Path;

#### Story Codes



A: The Researcher;  
A: Influences from People and Life Experiences;  
C: Formative Experiences;  
D: On Research and Researchers;  
D: Understanding Cancer, the History of Science, Cancer Research;

Dr. Benjamin begins this segment by describing how well his memory serves him in recalling details of patient histories. He also notes that while working in laboratories during the summers of his medical school education he met Dr. Max Schubert, who put him to work on glycosaminoglycan. Through this research, Dr. Schubert taught him the importance of having the right controls in research and not accepting what books say about results until you have collected the data, a lesson that Dr. Benjamin says holds true in medicine. He talks about the need to exercise flexibility when interpreting research results.

#### Chapter 06

##### *Clinical Experiences and Learning to be a Doctor*

A: Professional Path;

##### Story Codes

A: Professional Path;  
C: Evolution of Career;  
C: Professional Practice;  
C: The Professional at Work;  
D: The History of Health Care, Patient Care;  
C: Patients, Treatment, Survivors;

Dr. Benjamin begins this segment by explaining why he elected to go into internal medicine rather than surgery. He explains the differences in the mindsets of surgeons, who fix problems, versus internists, who are diagnosticians and need to know the origins of problems. He underscores that clinical rotations taught him to be a physician. Dr. Benjamin tells a story about treating “Bowery bums” at Bellevue Hospital during his internship. He describes the stress of dealing with emergency room situations and the benefits of hands-on acute medicine, which he came to like. He also notes that in the late sixties, physicians held the belief that there was nothing to be done about cancer.

#### Chapter 07

##### *Plans to be a Cardiologist and a Key Fellowship with the NIH*

A: Professional Path;

##### Story Codes

A: Professional Path;  
C: Evolution of Career;  
C: Professional Practice;  
C: The Professional at Work;  
D: Understanding Cancer, the History of Science, Cancer Research;  
D: The History of Health Care, Patient Care;  
A: Inspirations to Practice Science/Medicine;  
A: Influences from People and Life Experiences;

In this segment, Dr. Benjamin explains that he planned to be a cardiologist when he got his medical degree in 1968. He applied for a public health fellowship with the NIH to avoid going to Vietnam and got into a program at the Baltimore Cancer Research Center treating septic shock in leukemia patients. He believed that this experience would be transferable to cardiology patients. He notes that he was selected because of his laboratory experience, but he negotiated opportunities to work with cancer patients during his laboratory year as well as his clinical year. Dr. Benjamin then describes the Cancer Center in Baltimore and how the staff knew very little about oncology (as the field was in its infancy). He says that, because of his training during his internship and residency, "I was perfect for it," though others were very stressed by working with the cancer patients.

## Chapter 08

### *Stories about Work with Cancer Patients and a Switch to Oncology*

A: Professional Path;

#### Story Codes

A: Professional Path;

A: Character, Values, Beliefs, Talents;

C: Evolution of Career;

C: Professional Practice;

C: The Professional at Work;

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

D: The History of Health Care, Patient Care;

A: Inspirations to Practice Science/Medicine;

A: Influences from People and Life Experiences;

B: Discovery and Success;

C: Human Stories;

C: Offering Care, Compassion, Help;

C: Patients;

C: Cancer and Disease;

C: Formative Experiences;

C: Patients, Treatment, Survivors;

C: The Life and Dedication of Clinicians and Researchers;

In this segment, Dr. Benjamin tells stories of his work with cancer patients at the Baltimore Cancer Research Center, work that convinced him to focus on oncology. He first tells a story about a patient with stage four Hodgkin's disease who achieved a long-term complete remission with the MOPP treatment. He next tells a story of a lung cancer patient "who had more effect" on Dr. Benjamin "than anybody." After treatment with Adriamycin, this patient lived for eight months. Dr. Benjamin is very affected by telling these stories and stresses the "life and death" issues that working with cancer patients brings to the surface. He notes that the standard practice at the time was to withhold a cancer diagnosis and specifics of the prognosis from patients (and demonstrates with an anecdote). Dr. Benjamin stresses that patients are "smarter than you think" and that transparency is important. He mentions the film "Ikiru," by Akira Kurosawa, that tells the story of a man with stomach cancer and shows the "strength of the human spirit." Dr. Benjamin stresses that the dilemmas of cancer patients "are moving, people are important."

## Chapter 09

*NIH Fellowship: Researching Drugs with Amazing Effects on Patients*

A: The Researcher;

Story Codes

A: Professional Path;

A: Character, Values, Beliefs, Talents;

C: Evolution of Career;

C: Professional Practice;

C: The Professional at Work;

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

D: The History of Health Care, Patient Care;

A: Inspirations to Practice Science/Medicine;

A: Influences from People and Life Experiences;

B: Discovery and Success;

C: Human Stories;

C: Offering Care, Compassion, Help;

C: Patients;

C: Cancer and Disease;

C: Formative Experiences;

C: Patients, Treatment, Survivors;

Mention of patient  
Elmer Wheatley by  
name. HIPPA

In this segment, Dr. Benjamin talks about his work with anthracyclines and daunorubicin at the Baltimore Cancer Research Center. Dr. Benjamin determined the pharmacology of the recently introduced drug, Adriamycin. He describes the protocol and comments on the policies regarding consent forms at that time and now. He then talks about the results, which showed that Adriamycin was the most active drug in solid tumors up to that point. He tells a very dramatic story of the effects on a patient with metastatic sarcoma.

Dr. Benjamin next explains that he became involved studying the pharmacology of cancer drugs and that no one had really done that before. He stayed an extra year on this fellowship to continue his studies. He explains changes in credentialing rules that resulted in his time with the NIH to satisfy the requirements for both Internal Medicine and Oncology.

Chapter 10

*A Lesson on Sharing Credit with Colleagues*

A: The Leader;

Story Codes

A: The Researcher;

A: The Clinician;

A: The Administrator;

A: The Educator;

A: The Leader;

A: The Mentor;

C: Formative Experiences;

C: Leadership;

C: Mentoring;

D: On Leadership;

In this segment Dr. Benjamin tells a story about Dr. Nick Bachur presenting the results of the studies of Adriamycin in his laboratory. Dr. Bachur stated, "All the work was done by Dr. Benjamin." This made a deep impression on Dr. Benjamin, who learned about the importance of giving credit to junior people. This is one of the "tricks" he says of an effective department chair.

#### Chapter 11

##### *The Path to Developmental Therapeutics at MD Anderson*

A: Joining MD Anderson/Coming to Texas;

##### Story Codes

A: Professional Path;

B: MD Anderson History;

A: The Researcher;

B: MD Anderson Culture;

In this segment, Dr. Benjamin explains how he first took an assistant professorship at the University of Southern California. After an "unproductive year," Dr. Jeff Gottlieb at MD Anderson told him the institution needed a clinical pharmacologist. Dr. Benjamin came to MD Anderson in 1974 thinking he would work with Dr. Gottlieb, who also studied Adriamycin, but Dr. Gottlieb passed away. Because of his interest in sarcoma, Dr. Benjamin joined the Department of Developmental Therapeutics and he took over the area of sarcoma in 1975. Dr. Benjamin ends the interview session describing some of the working conditions in the department. He explains that he took on more patient care responsibilities and eventually eased out of clinical pharmacology.

#### Interview Session Two: 16 January 2015

#### Chapter 00B

##### *Interview Identifier*

#### Chapter 12

##### *Family Life and Life Balance*

A: Personal Background;

##### Story Codes

A: Character, Values, Beliefs, Talents;

A: Personal Background;

A: Character, Values, Beliefs, Talents;

C: The Life and Dedication of Clinicians and Researchers;

In this segment, Dr. Benjamin talks about his children and his family life. He begins by talking about the career choices his sons have made and why they chose not to go into medicine. He then talks about the commitment to patients that a medical career demands. Dr. Benjamin then

explains how his very close family relationships have enabled him to do the very emotional work of practicing medicine with cancer patients.

### Chapter 13

#### *Developmental Therapeutics in the 1970s: A Place of Optimism*

B: MD Anderson Past;

#### Story Codes

B: MD Anderson History;

B: MD Anderson Snapshot;

B: Institutional Mission and Values;

B: MD Anderson Culture;

B: Institutional Politics;

B: Controversy;

In this segment, Dr. Benjamin notes that the MD Anderson was intellectually challenging and exciting when he arrived in 1974. His colleagues, he says, had “incredible optimism that we were going to make a difference.” He explains that since not much was known about cancer at that time, they did not feel they had to abide by accepted standards of care and were always looking to improve care. In the Department of Developmental Therapeutics (DT), in particular, each faculty member had patient care responsibilities but their primary purpose was to improve care and each patient was part of an experiment. He also notes that DT was an insular department. He sketches the history of the founding of DT and its relationship to the Department of Medicine.

### Chapter 14

#### *The Research Environment in Developmental Therapeutics*

B: An Institutional Unit;

#### Story Codes

B: Institutional Processes;

B: Institutional Mission and Values;

B: Building/Transforming the Institution;

C: Research, Care, and Education;

In this segment, Dr. Benjamin explains the climate for research that Dr. Emil J Freireich [Oral History Interview] created in the Department of Developmental Therapeutics. He begins by explaining the approval process for conducting research studies –a much simpler process than today’s. He notes that all patients were provided with care, irregardless of ability to pay, and that this obligation was written into the institution’s bylaws. Next he explains how the clinical and research territories were divided among faculty members. Dr. Benjamin then describes the “noon meetings” held in DT to review cases and determine treatments. He describes the “no holds barred discussions” and recalls how Dr. Freireich handled these meetings. He recalls that there was “remarkable cohesion” in the department, despite the antagonism that could break out.

### Chapter 15

#### *Memories of J Freireich*

B: Key MD Anderson Figures;

Story Codes

C: Portraits;

C: Mentoring;

B: MD Anderson Impact;

A: Professional Values, Ethics, Purpose;

D: Ethics;

D: On Research and Researchers;

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

D: The History of Health Care, Patient Care;

C: Healing, Hope, and the Promise of Research;

C: Patients, Treatment, Survivors;

C: Patients;

In this segment, Dr. Benjamin talks about the impact of Dr. J Freireich on researchers in Developmental Therapeutics and outside the institution. He explains that Dr. Freireich “made you think” and refers to “Freireich’s Laws” first presented when Dr. Freireich gave the Karnofsky lecture in 1976. He explains Dr. Freireich’s perspective on statistical models and gives his version of the Hippocratic Oath, which stressed the urgency of caring for a patient in the here and now.

[Redacted]

Chapter 16

*Research Projects at MD Anderson: A Shift from Clinical Pharmacology to Sarcoma*

A: The Researcher;

Story Codes

A: The Researcher;

C: Evolution of Career;

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

D: The History of Health Care, Patient Care;

In this segment, Dr. Benjamin explains that he spent his first two years at MD Anderson establishing how to evaluate the function of various cancer drugs. He notes that clinical pharmacology was a nascent field at that time. He then explains that Dr. Jeff Gottlieb’s clinical areas were divided and he inherited sarcoma. At the same time, the faculty’s clinical responsibilities were increasing. Dr. Benjamin focused more on sarcoma and less on clinical pharmacology.

Chapter 17

*Studies of Adriamycin and Cardiac Toxicity*

A: The Researcher;

Story Codes

A: The Researcher;

C: Discovery and Success;

C: Patients, Treatments, Survivors;

In this segment, Dr. Benjamin talks about his clinical studies aimed at reducing the cardiac toxicity of Adriamycin. He explains how his work was based on pathology studies conducted at Stanford University. He talks about how he adapted the protocols and discovered how to modify the administration of the drug. He talks about the results that were published, noting in particular those achieved when the drug was administered by continuous infusion. He notes that this protocol has been used at MD Anderson since the 1970s, though it is now being supplanted by a cardio-protective drug.

Dr. Benjamin then notes that MD Anderson had no interventional cardiologist on staff in the seventies, however the faculty interested in cardiac toxicities were able to learn how to do cardiac biopsies. In collaboration with Interventional Radiology, he went on to develop a technique for the intra-arterial delivery of Cisplatin.

## Chapter 18

### *Studies Relating to Sarcoma Treatment*

A: The Researcher;

57:30 – 1:02:10

#### Story Codes

A: The Researcher;

C: Discovery and Success;

B: MD Anderson Impact;

A: Overview;

In this segment, Dr. Benjamin explains that he worked in collaboration with Interventional Radiology to develop a technique for the intra-arterial delivery of Cisplatin to treat osteosarcoma: this became the standard of care at MD Anderson and at least one other institution. Dr. Benjamin explains the goals of the treatment of osteosarcoma treatments based on the fact that patients die of lung metastasis.

## Chapter 19

### *Anthracyclines and Liver Function*

A: The Researcher;

1:02:10 – 1:05:10

#### Story Codes

A: The Researcher;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

In this segment, Dr. Benjamin describes studies he did to show that anthracyclines could be successfully used to treat cancer patients with compromised liver function.

## Chapter 20

### *The Controversy over Randomized Trials*

A: The Researcher;

1:05:10 – 1:14:20

#### Story Codes

A: The Researcher;

B: Controversy;

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

D: The History of Health Care, Patient Care;

C: Patients, Treatment, Survivors;

D: Ethics;

D: On Research and Researchers;

A: Professional Values, Ethics, Purpose;

A: Critical Perspectives;

Dr. Benjamin begins this segment by commenting on how today's research approval processes would hinder studies of anthracyclines in patients with abnormal liver function. He states the research philosophy at MD Anderson: treat everyone, regardless of how sick they are and determine why they are ill. Dr. Benjamin then talks about the belief held in the Department of Developmental Therapeutics that randomized trials were unethical.

#### Chapter 21

##### *Drug Treatments and Multi-disciplinary Treatments for Sarcoma; A View on the Moon Shots Program*

A: The Researcher;

1:14:20 – 1:32:00?

#### Story Codes

A: The Researcher;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

B: Multi-disciplinary Approaches;

In this segment, Dr. Benjamin talks about his research focus on sarcoma treatments, neoadjuvant therapy, and the treatment of metastatic disease.

Next, he talks about collaborations resulting in multi-disciplinary treatments. He notes that as the Division of Medicine was divided into disease groups, it was easier to build collaborations.

Dr. Benjamin describes results achieved by treating bone tumors with intra-arterial Cisplatin. He describes the "one of the most amazing results" that saved a patient from having a hemipelvectomy.

With such successes, Dr. Benjamin says, it was easy to convince surgeons of the benefits of collaboration. He also notes that multi-disciplinary treatments were aided by advances in imaging.

Finally, Dr. Benjamin offers some comments on the Moon Shots Program.

#### Chapter 22

##### *Studies of Gastro-Intestinal Stromal Tumor*



A: The Researcher;  
1:32:00? – 1:40:00

Story Codes

A: The Researcher;  
D: Understanding Cancer, the History of Science, Cancer Research;  
D: The History of Health Care, Patient Care;  
A: Overview;  
A: Definitions, Explanations, Translations;  
C: Discovery and Success;

In this segment, Dr. Benjamin talks about the area where the greatest advances have been made: gastro-intestinal stromal tumor (GIST). He explains that these advances built on the work of Jeffrey Gottlieb in the 1970s. He explains the successful treatments with Gleevec and notes that this is an example where the “low hanging fruit” idea associated with the Moon Shots paid off.

Next Dr. Benjamin explains the value of developing good, non-toxic treatments that will inhibit the majority of pathways that become dominant in cancer. He advocates a poly-targeted approach, acknowledging that the clinician’s view is that all drugs have toxicity and putting toxic drugs in combination is not as easy as it looks.

Chapter 23

*Limb Salvage; an Informal Connection with an Italian Institute*

A: The Researcher;  
1:40:00 – 1:49:00

Story Codes

A: The Researcher;  
D: Understanding Cancer, the History of Science, Cancer Research;  
D: The History of Health Care, Patient Care;  
A: Overview;  
A: Definitions, Explanations, Translations;  
C: Discovery and Success;  
B: Beyond the Institution;

In this segment, Dr. Benjamin gives an overview of his work with limb salvage treatments, based on the osteosarcoma model. This work was greatly facilitated by advances in prosthetics, he observes. He notes that in 1974, MD Anderson was just beginning to do limb salvage work in connection with radiation therapy. He then explains how limb salvage works with chemotherapy. He cites an important study of limb salvage conducted at the Istituto Ortopedico Rizzoli in Bologna, Italy. He explains that faculty from the Istituto learned chemotherapy from MD Anderson in the 1980. He explains some of the good results they achieved using MD Anderson techniques.

Next, Dr. Benjamin talks about the national and international community of individuals who focus on sarcoma.

Chapter 24

A: The Researcher

*Assessment of Response to Therapy*

1:49:00 – 2:02:45 [end]

Story Codes

A: The Researcher

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

D: The History of Health Care, Patient Care

A: Overview

A: Definitions, Explanations, Translations

C: Discovery and Success

Dr. Benjamin talks about his focus on assessing responses to therapy. He explains why this is a complex process, giving examples of confusing results that a clinician might confront. For example, GIST tumors only reduce slightly in size with treatment, but change structure. He describes a study in which patients responded well to Imatinib, but there was no way to document their improvement with the current guidelines.

Dr. Benjamin says he collaborated with Dr. Choi in studying GIST tumors, work leading to the creation of the Choi Criteria for assessing therapy. These criteria, he says, have had some impact, then talks about the challenges of getting the model out and accepted. Dr. Benjamin explains what is needed for the model to be improved and expanded.

Session Three: 6 March 2015

Chapter 00C

*Interview Identifier*

about :36

Chapter 25

*The Section of Melanoma/Sarcoma: A History of Reorganization at MD Anderson*

B: An Institutional Unit;

Story Codes

A: Character, Values, Beliefs, Talents;

A: The Clinician;

A: The Administrator;

A: Professional Values, Ethics, Purpose;

A: Critical Perspectives;

B: MD Anderson History;

B: Building/Transforming the Institution;

B: Growth and/or Change;

B: Obstacles, Challenges;

B: Institutional Politics;

B: Controversy;

C: Portraits;

In this segment, Dr. Benjamin explains the administrative structure in which the Section of Melanoma/Sarcoma was situated. He talks about political issues at work in the merging of Developmental Therapeutics and Internal Medicine in the early eighties. He explains why he

was a good choice to head the section of Melanoma/Sarcoma. He says that as section chief he tried to build an adequate group of people to do clinical research and care for patients. He observes that the section was always behind in staffing, as sarcoma is not considered a high priority at the institution, despite the fact that the section/department is the most productive in the country. He explains the section initially conducted many clinical trials and succeeded very well, also providing leadership to national organizations. Dr. Benjamin notes that he is one of the founding members of the Connective Tissue Oncology Society.

Looking back at his administrative roles, Dr. Benjamin acknowledges that this area of service was not his top priority and he was ultimately a better clinician than administrator.

Dates of Administrative Service:

Section Chief, Melanoma-Sarcoma, Departments of Internal Medicine and Developmental Therapeutics 9/1981-8/1983

Section Chief, Melanoma-Sarcoma, Department of Internal Medicine 9/1983-8/1985

Section Chief, Melanoma-Sarcoma, Department of Medical Oncology 9/1985-8/1991

Section Chief, Sarcoma, Department of Medical Oncology 1/1991-1/1992

Chapter 26

*From Section to Departments: Reorganizing Melanoma and Sarcoma*

B: An Institutional Unit;

Story Codes

A: Character, Values, Beliefs, Talents;

B: Obstacles, Challenges;

B: Institutional Politics;

B: Growth and/or Change;

Dr. Benjamin sketches the reorganizations that led to the division of Melanoma and Sarcoma into different departments. He explains why, for political reasons, Dr. Irwin Krakoff asked him to serve as Chair of the Department of Melanoma/Sarcoma.

Next he explains that the combined department was split in 2000 and a new person recruited to head Melanoma, while Dr. Benjamin continued as Chair of Sarcoma. He explains that the only rationale for the two specialties being together was they could not be associated with a disease site.

Dr. Benjamin then talks about his role as chair, stressing again that because of his personality and commitment to patients, he did not allow his administrative role to decrease his clinical work.

Chapter 27

*The Melanoma/Sarcoma Center: An Early Multi-Disciplinary Center*

B: Building the Institution;

#### Story Codes

A: The Clinician;  
A: The Administrator;  
C: Discovery and Success;  
B: MD Anderson History;  
B: Building/Transforming the Institution;  
B: Growth and/or Change;  
C: Patients;  
C: Patients, Treatment, Survivors;  
D: The History of Health Care, Patient Care;  
B: Institutional Mission and Values;  
B: MD Anderson Culture;  
B: Multi-disciplinary Approaches;  
C: This is MD Anderson;

In this segment, Dr. Benjamin talks about the evolution of the Melanoma/Sarcoma Center --one of the first multi-disciplinary centers at MD Anderson. He headed the Center from 1996 to 2006.

Dr. Benjamin talks about the culture of collaboration between surgeons and oncologists that made the Center possible. He also notes that the tradition goes back farther, to earlier studies of amputation and then radiation as sarcoma treatments.<sup>1</sup> He tells some of the history of multi-modality treatments.

Dr. Benjamin then talks about why the Center is a model of patient care. He speculates on the future of cancer treatment. He says he expects there will always be some kind of surgery, but that radiation treatments and cyto-toxic chemotherapy will be replaced with targeted medical treatments.

#### Chapter 28

##### *The Clinical Research Committee*

B: Building the Institution;  
about 5 minutes

#### Story Codes

A: Contributions;  
B: Institutional Processes;  
B: MD Anderson Culture;  
C: Research, Care, and Education;

In this segment, Dr. Benjamin talks about a major contribution he made to the institution by setting up a Clinical Research Committee to administer detailed protocol review. He explains why this was necessary at the time, as there lay people on the institutional review boards were not able to fully review clinical trials. Dr. Benjamin notes that current CRC is the one he established. He sketches some changes in the roles and connections between the IRB and CRC.

---

<sup>1</sup> Dr. Benjamin mentions Dr. R. Lee Clark's article: Clark, Jr, RL, Martin, RG, White, EC. Clinical aspects of soft-tissue tumors. *AMA Arch Surg.* 1957 Jun; 74(6): 859-870.

## Chapter 29

### *Changes at MD Anderson Under New President, Ronald DePinho*

B: Institutional Change;

#### Story Codes

B: Growth and/or Change;

B: Obstacles, Challenges;

B: Institutional Politics;

B: Controversy;

A: Critical Perspectives;

B: Institutional Mission and Values;

B: MD Anderson Culture;

Dr. Benjamin begins this segment on change by noting that Dr. John Mendelsohn served as president. He explains that Dr. Mendelsohn brought an emphasis on scientific accomplishments of the faculty, in addition to clinical work and patient care.

Next, Dr. Benjamin offers “the perspective of a clinician” on changes that have occurred since Dr. Ronald DePinho took over as the fourth president of the institution.

He explains the revenue-generating burdens that have been shifted to physicians to pay for research and a growing administrative structure. He then talks about the deterioration of morale among clinical faculty, who feel they must meet quotas rather than focus on delivering optimal care for patients.

Dr. Benjamin next talks about the institution’s budget process to explain the broader arena in which the rift between the faculty and administration came from.

Dr. Benjamin then gives his view of what the current situation means for MD Anderson’s future. He explains that he has “always felt that MD Anderson would succeed despite its leadership,” but this depends on a committed faculty. Dr. Benjamin says that he feels his time would be better spent teaching young faculty and gives examples of the training he would provide.

## Chapter 30

### *Major Contributions and On Being “King Pin”*

A: View on Career and Accomplishments;

#### Story Codes

A: Career and Accomplishments;

A: Post Retirement Activities;

A: Character, Values, Beliefs, Talents;

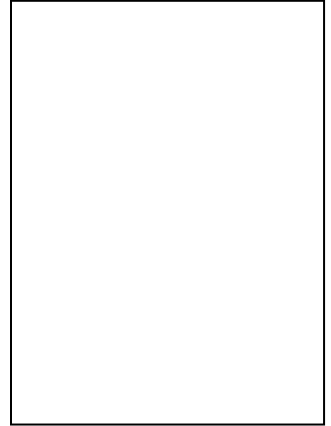
A: Personal Background;

A: The Researcher;

Dr. Benjamin lists his most important contributions to patient care. He then talks about his collection of pins, many of which he wears on his lab coat and which earned him the nickname, “King Pin.”

Dr. Benjamin then talks about his plans to retire to part time so he can select the projects he wishes to work on. He will teach and write up current projects. He notes that he likes what he does and wants to keep doing it.

\



## ***Robert Benjamin, MD***

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### **About 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.

**The views expressed in this interview are solely the perspective of the interview subject. They are not to be interpreted as the official view of any other individual or of The University of Texas MD Anderson Cancer Center.**

### **Chapter 00A**

#### ***Interview Identifier***

[00:00:00]

#### ***Tacey Ann Rosolowski, PhD***

[00:00:00]

All right. We are recording. I'm Tacey Ann Rosolowski, and today is December 12<sup>th</sup>, 2014. I am in Sarcoma Medical Oncology in the Faculty Center, the twelfth floor, in the office of Dr. Robert S. Benjamin, and I'm conducting this interview for the Making Cancer History Voices Oral History Project run by the Research Medical Library at MD Anderson. Dr. Benjamin came to MD Anderson in 1974. Is that correct?

[00:00:33]

#### ***Robert Benjamin, MD***

[00:00:34]

Yes.

[00:00:34]



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***Tacey Ann Rosolowski, PhD***

[00:00:34]

And what was the department affiliation for you at that time?

[00:00:36]

***Robert Benjamin, MD***

[00:00:37]

Developmental Therapeutics.

[00:00:38]

***Tacey Ann Rosolowski, PhD***

[00:00:38]

Okay. Because I had not found that detail at this point. Today, however, Dr. Benjamin is Chair of the Department of Sarcoma Medical Oncology in—

[00:00:48]

***Robert Benjamin, MD***

[00:00:48]

No.

[00:00:48]

***Tacey Ann Rosolowski, PhD***

[00:00:49]

No? When did you leave that position?

[00:00:51]

***Robert Benjamin, MD***

[00:00:51]

A couple of years ago.

[00:00:54]

***Tacey Ann Rosolowski, PhD***

[00:00:55]

Oh, okay. So 2012?

[00:00:57]

***Robert Benjamin, MD***

[00:00:57]

I don't know. Let's see. 2012 is what it says on the chair.

[00:01:00]

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***Tacey Ann Rosolowski, PhD***

[00:01:01]

Okay. Okay. You can tell that I didn't have fully updated information. (laughs)

[00:01:05]

***Robert Benjamin, MD***

[00:01:06]

Retired chair.

[00:01:07]

***Tacey Ann Rosolowski, PhD***

[00:01:07]

Retired chair. But you were chair from 2000 to 2012, as I understand. Is that correct?

[00:01:14]

***Robert Benjamin, MD***

[00:01:14]

Yeah. Well, complicated. I mean, I was basically chair from 1993 on, but the department changed names.

[00:01:24]

***Tacey Ann Rosolowski, PhD***

[00:01:25]

Okay. Well, we'll get that story, I'm sure, which will be very interesting, because it's all about the structure, structure, and all of that.

[00:01:33]

***Robert Benjamin, MD***

[00:01:33]

Yeah.

[00:01:33]

***Tacey Ann Rosolowski, PhD***

[00:01:33]

Okay. But today you're in the Department of Sarcoma Medical Oncology, and you are also the P.H. and Faye E. Robinson Distinguished Professor in the Division of Cancer Medicine.

[00:01:48]

***Robert Benjamin, MD***

[00:01:48]

Correct.

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[00:01:49]

***Tacey Ann Rosolowski, PhD***

[00:01:49]

Okay, good. This interview is being conducted in Dr. Benjamin's office. I think I mentioned that. This is the first of two planned interview sessions, and the time right now is twenty-five minutes after nine. So, thank you very much, Dr. Benjamin, for agreeing to participate in this.

[00:02:08]

***Robert Benjamin, MD***

[00:02:09]

My pleasure.

[00:02:10]

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## **Chapter 01**

### ***An Educated Family and an Early Interest in Science***

#### **A: Personal Background;**

Story Codes

A: Personal Background;

A: Inspirations to Practice Science/Medicine;

A: Influences from People and Life Experiences;

C: Funny Stories;

#### ***Tacey Ann Rosolowski, PhD***

[00:02:11]

I wanted to start in the traditional beginning for an oral history project, oral history interview, and ask you can you tell me where you were born and when, and tell me a little bit about where you grew up.

[00:02:21]

#### ***Robert Benjamin, MD***

[00:02:25]

I was born and grew up in Brooklyn, New York. My father was a pediatrician. His office was the ground floor of our house. My mother had a PhD in biochemistry. Mind you, she was born in 1900.

[00:03:01]

#### ***Tacey Ann Rosolowski, PhD***

[00:03:02]

I was going to say that I'm sure that was very unusual.

[00:03:04]

#### ***Robert Benjamin, MD***

[00:03:06]

But not the most unusual member of her family, because her older sister, who was somewhere approximating ten years older, was the first woman to graduate with a Doctor of Medicine from Columbia P&S.

[00:03:27]

#### ***Tacey Ann Rosolowski, PhD***

[00:03:28]

Wow.

[00:03:31]

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***Robert Benjamin, MD***

[00:03:32]

My mom was a biochemist and a physiologist and who, after I grew up to the point where she felt comfortable leaving the house again, she went on to teach physiology at Hunter College.

[00:03:52]

***Tacey Ann Rosolowski, PhD***

[00:03:53]

What were your parents' names?

[00:03:55]

***Robert Benjamin, MD***

[00:03:55]

My mother was Helen. My father was Bernard.

[00:03:59]

***Tacey Ann Rosolowski, PhD***

[00:04:00]

Would you care to share your birth date?

[00:04:04]

***Robert Benjamin, MD***

[00:04:05]

I was born April 20<sup>th</sup>, 1943.

[00:04:09]

***Tacey Ann Rosolowski, PhD***

[00:04:11]

Wow. So that's really an incredible legacy to have in your family with all of this education. So tell me how that affected you.

[00:04:18]

***Robert Benjamin, MD***

[00:04:25]

Well, I guess they instilled in me a love of learning, and my proximity to my father's office convinced me very early in life that I did not want to be a pediatrician, because every afternoon when I came home from school, I always heard children crying downstairs. I figured, I didn't know, I didn't think my father was that mean, but I didn't like the crying, so I decided that pediatrics was not for me.

[00:05:23]

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***Tacey Ann Rosolowski, PhD***

[00:05:24]

But you were thinking about becoming a physician then?

[00:05:26]

***Robert Benjamin, MD***

[00:05:26]

Well, no, I was just thinking about being a scientist, maybe being a physician, maybe being a biochemist like my mom. Wasn't quite sure. Probably not till I was in college did I decide that I'd sort of rather do medicine than chemistry.

[00:06:01]

***Tacey Ann Rosolowski, PhD***

[00:06:03]

Tell me how your interest in the sciences evolved.

[00:06:06]

***Robert Benjamin, MD***

[00:06:16]

I went to high school at Brooklyn Friends, which was a wonderful school, and I had very good teachers in math and science, and my father tutored me a little bit in chemistry before I actually even took a course.

[00:06:51]

***Tacey Ann Rosolowski, PhD***

[00:06:54]

Why was that?

[00:06:55]

***Robert Benjamin, MD***

[00:06:57]

He was interested. He was reading a book—I don't remember the author, but it was called the *Electronic Theory of Valency*—and he really liked that book. And I saw him reading it and he was saying, “Oh, gee, this is interesting and this is interesting.” And curiosity. I asked him what, you know, and he started teaching me from that book.

[00:07:29]

***Tacey Ann Rosolowski, PhD***

[00:07:29]

You still remember the title.

[00:07:30]

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***Robert Benjamin, MD***

[00:07:31]

Yeah.

[00:07:31]

***Tacey Ann Rosolowski, PhD***

[00:07:31]

So, what—I mean, were you jazzed by it at the time?

[00:07:33]

***Robert Benjamin, MD***

[00:07:38]

I don't know. I mean, I really enjoyed learning it. I enjoyed chemistry. It was very logical, and just understanding how compounds got together, how elements got together to form compounds was interesting. I had very good teachers when I was growing up. My math teacher in high school always sort of gave me challenging problems outside of what we were learning in class, so that there was always something to be learning about, and so I did that and really enjoyed it.

[00:08:41]

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## **Chapter 02**

### ***Experiences at Williams College***

#### **A: Educational Path;**

Story Codes

A: Personal Background;

A: Professional Path;

A: Influences from People and Life Experiences;

***Tacey Ann Rosolowski, PhD***

[00:08:43]

How did you select the college that you went to? You went to Williams College?

[00:08:47]

***Robert Benjamin, MD***

[00:08:48]

Yes. (laughs)

[00:08:50]

***Tacey Ann Rosolowski, PhD***

[00:08:53]

Uh-oh.

[00:08:53]

***Robert Benjamin, MD***

[00:08:52]

So that was probably a mistake, but the answer as to how I selected it was they took me early admission. My sister was seven years older than I was, and I remember distinctly her anxiety at the time of college admission of “Am I going to get in here? Am I going to get in there? What’s going to happen?” And I actually thought it would be a good idea to avoid that if I could, so I looked at a number of small colleges. I’d gone to a very small high school.

So another bit of historical information on me is we used to spend our summers camping in the Adirondacks, getting away from the city and getting out into nature, and I always enjoyed that period of time. So I thought it would be really fun to go to college in the country in a small place. It was that experience that convinced me that I am absolutely a city person. (laughter) Because I had culture shock when I was in college, in the sense that I was in this little small town and there were obviously things to do related to the college, but your choices, especially musical choices, were extraordinarily limited. And I also had grown up in a house where music was important. I played the piano as a child. I was okay, not great, but I enjoyed listening to music. My parents took me to concerts, and I went to my first opera when I was a senior in high school. But all of



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those things, probably more than anything, I went to a number of orchestral concerts when I was growing up, and it was just something, okay, yeah, you just went. And I missed that terribly when I went to college.

So I just felt that opportunities were limited. I mean, New York is a difficult place to grow up as a child in certain senses, but it's also an extremely enriching place because of all of the things that were there. So, I mean, I remember as a child going to the Metropolitan Museum and looking at the armor because I was big into King Arthur and his knights, you know, and going to the Museum of Natural History and looking at the dinosaurs. I guess every kid does that, but those are things that made a profound impression on me. When I went to college, there was a wonderful art museum there, but that was it. So it was sort of limited.

But, anyway, I chose Williams because it was a good school and it was a pretty place when I went to visit. I went to visit in the spring, maybe it was even the summer, probably still late spring, and the other thing that I didn't realize when I went to visit was that you didn't see the ground between November and May. It was covered with various layers of either snow, slush, or mud. So I had visited at the optimum time for the beauty, but being there, it wasn't like that.  
[00:14:31]

***Tacey Ann Rosolowski, PhD***

[00:14:37]

How did the education work out to be there?

[00:14:39]

***Robert Benjamin, MD***

[00:14:41]

It was good, but I didn't really like it. I didn't have the kind of real intellectual stimulation that I had had when I was in high school. It was a liberal arts college, and I particularly chose it as a liberal arts college, but I found that the sciences there were not great. I didn't think the teachers were the best. But mainly the reason that I didn't really like Williams was that the atmosphere was not intellectual. People didn't leave class and talk about, "What a wonderful lecture," and, "Gee, wasn't this interesting and wasn't that interesting." The discussions outside of class were predominantly emphasizing the social aspects of college.

All of the students were all very bright. I didn't think that they were particularly interested in learning. There were sort of two distinct groups: the fun type that I wasn't part of and the studying not to be able to learn more, but to get that extra tenth of a point on your average so you would be better off. We had a twelve-point system for our averages.

[00:17:07]

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***Tacey Ann Rosolowski, PhD***

[00:17:08]

How long did it take you to realize what was missing, you know, and that you were basically an intellectual that was not in an intellectual environment?

[00:17:16]

***Robert Benjamin, MD***

[00:17:17]

Oh, very quickly, I mean probably not more than a couple of months or so.

[00:17:25]

***Tacey Ann Rosolowski, PhD***

[00:17:26]

How come you never considered transferring?

[00:17:27]

***Robert Benjamin, MD***

[00:17:31]

Well, every year I went to—"every year." The summer before I went to Williams and the next two summers, I went to summer school somewhere. The year before I went to Williams, after I graduated from high school but before I was there, I went to Colby College Summer School of Languages, and I studied German, because my father said German is a good language to know as a physician. Probably at that time it was a valid point. Certainly I didn't think it really helped me down the road in terms of that aspect, but anyway, I studied German. At Colby you lived with the people who spoke your language, you ate with the people who spoke your language, and you only spoke the language that you spoke. It was a fantastic school. I went in knowing no German and came out speaking broken English in six weeks.

But more importantly, I met a girl who was still in high school but who went there to take a course in German because she wanted to get some extra things at that time, and she is now my wife of going on fifty years. But it took me nine days to ask her to marry me.

[00:19:35]

***Tacey Ann Rosolowski, PhD***

[00:19:36]

And her name?

[00:19:36]

***Robert Benjamin, MD***

[00:19:36]

Her name is Nancy.

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[00:19:37]

***Tacey Ann Rosolowski, PhD***

[00:19:40]

That's a lovely story.

[00:19:41]

***Robert Benjamin, MD***

[00:19:42]

And I knew that she was the one, and so she said, "Yes, but we're not going to get married until after I graduate from college, because I'm sure my parents won't let me do that, and besides which I want to go to college and I want to go to graduate school and I want to do things." She was much more like me than most of my friends at Williams.

So when I met her at Colby, she wanted to go to Stanford. She lived in Philadelphia, by the way. She wanted to go to Stanford, and I convinced her that that was a very bad idea because that was a very long way from Williams. (laughs) So she went to Smith because I was at Williams. So we spent just about every weekend together either at Williams or at Smith. I guess it would have been more convenient and probably better off intellectually for me to have transferred to Amherst, which, as I have gotten to know from visiting there and from some of my relatives who've gone there, is a more intellectually oriented school than Williams is. But I don't know, it was fine. It worked out okay.

[00:21:32]

***Tacey Ann Rosolowski, PhD***

[00:21:32]

Yeah, and it's hard to make that assessment when you're just visiting a place. It's hard to pick up on that dimension of college experience.

[00:21:38]

***Robert Benjamin, MD***

[00:21:39]

Yeah. And again, I might have gone to Amherst if they'd offered me early admission, but the place that offered me early admission was Williams, so I went.

[00:21:49]

***Tacey Ann Rosolowski, PhD***

[00:21:50]

Sure. So tell me about your realization that, yes, medicine was going to be for you.

[00:21:57]

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## **Chapter 03**

### ***An Interest in People***

#### **A: Personal Background;**

Story Codes

A: Character, Values, Beliefs, Talents;

A: Personal Background;

A: Professional Path;

A: Influences from People and Life Experiences;

D: Cultural/Social Influences;

D: Women and Diverse Populations;

C: Experiences of Injustice, Bias;

#### ***Robert Benjamin, MD***

[00:21:58]

So, I don't know, somewhere in the middle of college, I decided that although I liked the theoretical and the laboratory work in chemistry, that I was more of a people person and that I would do better to go into medicine than into chemistry.

[00:22:41]

#### ***Tacey Ann Rosolowski, PhD***

[00:22:42]

What were you seeing in yourself that made you say, "Yeah, I'm a people person"?

[00:22:47]

#### ***Robert Benjamin, MD***

[00:22:48]

No clue. No clue. But the interesting thing is, I actually—if you ask me in terms of my parents, it was mother the chemist, rather than my father the pediatrician, who probably nurtured that in me.

[00:23:15]

#### ***Tacey Ann Rosolowski, PhD***

[00:23:16]

How did she do that?

[00:23:17]

#### ***Robert Benjamin, MD***

[00:23:17]

She was just the sweetest person in the entire world. She was just, I don't know, somehow a person who loved others and who always tried to help. I'm sure my father was that way, too, but

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it wasn't so outwardly apparent. My father was sort of considered the person who knew everything, but my mother was the person who could deal very effectively with other people. So I probably got some of my political incorrectness from my father, although could have been from my mother too.

I forgot to mention, I told you about her older sister who graduated from P&S. So that same older sister was active in the protest movement for women's suffrage, and she always used to bring my mother along with her. My mother was approximately ten years younger. And she did that because she figured if she had a little kid with her, she wouldn't get arrested. Very smart lady. (laughter) But my mother probably had some of that protest and—

[00:25:22]

***Tacey Ann Rosolowski, PhD***

[00:25:24]

Sure. Great experience for your mother.

[00:25:25]

***Robert Benjamin, MD***

[00:25:26]

—that in her as well.

[00:25:31]

***Tacey Ann Rosolowski, PhD***

[00:25:32]

Do you have an element—is there a little bit of that element of an activist in you as well?

[00:25:37]

***Robert Benjamin, MD***

[00:25:37]

Yeah, I think so.

[00:25:38]

***Tacey Ann Rosolowski, PhD***

[00:25:39]

How so?

[00:25:39]

***Robert Benjamin, MD***

[00:25:39]

Oh, I don't know. I did not learn how to be politically correct from my mother, and I sort of say what I think and get myself into trouble all the time, but it doesn't stop me from saying what I

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think, so that's, I guess, part of the political activist stuff in me, carried on into at least my older son, probably my younger son as well, but especially my older son.

[00:25:39]

**Tacey Ann Rosolowski, PhD**

[00:26:19]

That's not a bad thing to pass on.

[00:26:24]

**Robert Benjamin, MD**

[00:26:25]

No, no. It's standing up for what you believe in. So, I mean, I got some of that, I guess, when I was in college. The big issue was civil rights, and I was actually incredibly naïve and didn't realize what was going on in terms of the Civil Rights Movement before I went to college, because I grew up in a neighborhood that during the time I was probably five years old or so to the time I was eight years old, the neighborhood changed from entirely white to entirely black, with the exception of my parents. So all the kids that I played with on the block were black, and I never thought about them as being the black kids on the block, they were the kids on the block, and they were my friends and I was their friend.

And it wasn't until I went to college that I realized how intense the antagonism between blacks and whites was, and, of course, like one of the good things at Williams in the middle of a bad thing, we were required—we had compulsory chapel. We had to go to a certain number of services each year. It didn't matter what place you went or what religion, but you had to go and say you did it. Of course, many of us cheated, especially me, because I'd go to Smith and take the Smith College Chapel program and bring it back to Williams and say, "Oh, yeah, I went at Smith," which I didn't do.

But one of the people who came to our chapel at Williams was Martin Luther King [Jr.], and so I actually heard Martin Luther King talk in a small church, small chapel, and he was incredibly moving. And I got chapel credit for it too. (laughter)

[00:29:42]

**Tacey Ann Rosolowski, PhD**

[00:29:45]

Did you become involved at all in college with this?

[00:29:48]

**Robert Benjamin, MD**

[00:29:49]

So, yeah, I mean to a certain extent. I never went to any of the organized protests, but I was a

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very strong supporter of the Civil Rights Movement and trying to get things done and trying to help out.

[00:30:08]

***Tacey Ann Rosolowski, PhD***

[00:30:09]

It's a very interesting background. You have the early experiences with a very integrated play space and then having this legacy of really strong educated women in your family. Very unusual. How has that affected you, do you think, as an adult?

[00:30:23]

***Robert Benjamin, MD***

[00:30:31]

I'm still pretty much colorblind when I see or meet people or talk to them. I mean, it's just they're people. They've always been that way.

I'm a strong supporter of women, so my wife, as an example, when we came here, we had young kids and she stayed home and helped raise the kids and get things done. When I was an intern resident, she taught at a high school out on Long Island. She taught English. But when we came here, and for, I guess, a few years before while the kids were just beginning to grow up, she stayed at home with them and took care of them. They didn't have daycare at that time. But one of the things that she did while she was here was she would take some courses at the University of Houston to give her a little bit of an intellectual break from the kids, and we'd be able to get somebody to take care of the kids one day and she could go to classes and she could go to some classes at night. Then as they got a little older, she went back and got a PhD in English for fun. And I remember during that period of time that people looked at me as if there were something wrong, "Why do you let your wife go to school, get a PhD? What's the use of that?"

I said, "Why not? Education is good, you know." She should have education.

[00:33:05]

***Tacey Ann Rosolowski, PhD***

[00:33:05]

Well, even the phrasing, "Why do you let your wife?"

[00:33:05]

***Robert Benjamin, MD***

[00:33:06]

"Why do you let your wife?" I mean, the other thing I remember of a time when she went to look at a new car, and the guy at the car dealership said to her, "Well, why don't you bring your

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husband here and I'll show him what to do," as if she couldn't make a decision about whether or not she wanted to buy a car. Needless to say, she didn't buy the car from that dealership.

But she went on and got her PhD in English, and then she decided that since she couldn't get a tenure-track teaching job in English here, because I guess the only two real options for tenure track were Rice, which didn't have any openings, and U of H, which wouldn't hire its own graduates immediately, so she had the option of taking an non-tenure-track position, and she said, "No. I'm too good for that. I'm not going to do that."

One of her teachers suggested that she consider going to law school because he thought she'd be good at that, so she went and turned around, and after she got her PhD, she went to law school and got a law degree. And since then, she's been working in the federal courts as a judicial law clerk, which is sort of the equivalent of a physician's assistant, I guess, a mid-level provider, if you will, in the courts, except she's been doing it for twenty-five years, or I guess more by now. So she pretty much writes the opinion and the judge signs off.

[00:35:23]

***Tacey Ann Rosolowski, PhD***

[00:35:23]

Very neat, and I'm sure her writing skills—

[00:35:26]

***Robert Benjamin, MD***

[00:35:26]

And her writing ability and her—

[00:35:28]

***Tacey Ann Rosolowski, PhD***

[00:35:28]

—and analysis of language and that. Yeah.

[00:35:30]

***Robert Benjamin, MD***

[00:35:30]

Oh, yeah. I mean, how she got the job was also—it's fascinating. It doesn't say a lot about me, but it says a lot about her. (laughs) At one point during her law school at U of H, one of the options for a course was you could take what they called an internship with a judge. She'd applied, and she got a position with one of the federal judges and was working there and obviously knew how to do literature researches well and knew how to write well. And he was the one who said to her, "Have you ever considered getting a clerkship after you graduate?"



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She said, “No.”

He said, “Well, you really ought to consider it, because it’s good experience, teaches you how to do this and this and this.”

She said, “Yeah, that sounds like a good idea.”

He said, “Well, you need to apply. There are some openings in the courthouse now. Just apply for all of them, but you’ve got to submit an application, because it’s very competitive, and so you’d better put in your application as quickly as possible, because you’re in a small window of time.”

She said, “Okay.”

And a couple of days later he asked if she’d put in her application, and she said, “No, I haven’t had time yet.”

He said, “Well, you’d really better hurry up and do it.”

She said, “Okay,” and so she put in her applications, and a couple days later he asked her if she’d put in her applications yet, and she said, “Yes, I did, Judge.”

He said, “Fine. You’re hired.”

[00:37:40]

***Tacey Ann Rosolowski, PhD***

[00:37:41]

(laughs) Sounds like you’re really proud of her, actually.

[00:37:47]

***Robert Benjamin, MD***

[00:37:48]

Oh, yeah. Yeah. She’s very much a part of my life.

[00:37:54]

***Tacey Ann Rosolowski, PhD***

[00:37:54]

That’s neat, very cool. Sounds like that feeling that you’d met a kindred spirit all those years ago was right on. So did you get married at the end of college?

[00:38:03]

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***Robert Benjamin, MD***

[00:38:04]

At the end of college, when she graduated from college. So she was a year behind me, she graduated from Smith, and probably within two or three days, we got married.

[00:38:22]

***Tacey Ann Rosolowski, PhD***

[00:38:22]

Wow. Great. And then off to medical school?

[00:38:30]

***Robert Benjamin, MD***

[00:38:30]

Well, I was already in medical school, because I was a year ahead, so I'd already started. So I had one year there without her, and that was a hard year.

[00:38:40]

***Tacey Ann Rosolowski, PhD***

[00:38:41]

Yeah, I bet.

[00:38:42]

***Robert Benjamin, MD***

[00:38:44]

Then we got married and got a place, an apartment near medical school, which was good. We were lucky that my parents clearly helped out financially, but she got a job teaching. Well, I guess she didn't get a job initially, because when we first got married, she had to take some extra graduate courses to be able to get a teaching certificate in New York.

[00:39:26]

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## **Chapter 04**

### ***A Rounded Education During Medical School***

#### **A: Professional Path;**

Story Codes

A: Personal Background;

A: Professional Path;

A: Character, Values, Beliefs, Talents;

***Tacey Ann Rosolowski, PhD***

[00:39:27]

Now, you went to NYU Medical School?

[00:39:28]

***Robert Benjamin, MD***

[00:39:28]

I went to NYU Medical School, because, as I told you, the first thing I learned at Williams was I was really a big-city person, so I couldn't wait to get back to New York.

[00:39:38]

***Tacey Ann Rosolowski, PhD***

[00:39:39]

And did you also take a look at that program for more of the intellectual component as well, since you had missed that, you know, the feeling that people would [unclear]?

[00:39:48]

***Robert Benjamin, MD***

[00:39:48]

No. You know, I had the feeling that in medical school people would be really interested in medicine. I don't think that was a question of where I went. I just wanted to go to a good school. I had never been the one to study to the point of trying to get my 11.9 average, so I didn't think I was going to make Harvard. Actually, I spent one summer at Harvard summer school. I told you I went to summer school for like three years, and I did that just because my parents also taught me that there were a lot of courses that you really had to take in order to get into medical school and manage in medicine, but if you just took those courses, you missed out on a lot of life, and that the most important thing for you to do while you were in college was get yourself educated.

[00:41:22]

***Tacey Ann Rosolowski, PhD***

[00:41:22]

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Well, you mentioned specifically one of the reasons you selected Williams because of its liberal arts focus.

[00:41:27]

**Robert Benjamin, MD**

[00:41:27]

Right, yeah. Right. So I wanted to be able to get the education in these other areas that I wasn't going to get a chance to study later on in my life.

[00:41:38]

**Tacey Ann Rosolowski, PhD**

[00:41:41]

What kinds of things did you take? I mean, where was your heart when you were taking those other classes?

[00:41:45]

**Robert Benjamin, MD**

[00:41:46]

So, I mean, initially I didn't know, and after about a year or two, it was clearly in music, and my music courses at Williams were wonderful. They were. They were terrific.

[00:42:02]

**Tacey Ann Rosolowski, PhD**

[00:42:02]

I mean, was this music appreciation or composition?

[00:42:05]

**Robert Benjamin, MD**

[00:42:05]

More music appreciation, but dealing with different things. So one of the things that happened to me when I was in college and I had stopped playing piano, was I realized how much I missed the music that I had grown up with at concerts and whatever, and so I started listening much more critically to classical music and especially to opera. I'm an avid opera buff, and I developed that true love of music and opera while I was in college. So I guess going back to New York, where there was so much available, was obviously a plus, although I realized, you know, in medical school I wasn't going to be able to spend all that much time doing it.

[00:43:31]

**Tacey Ann Rosolowski, PhD**

[00:43:32]

Yeah, but nice to know it's there when you have the time, for sure.

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[00:43:35]

***Robert Benjamin, MD***

[00:43:35]

Right, right.

[00:43:36]

***Tacey Ann Rosolowski, PhD***

[00:43:36]

And the top of the music world.

[00:43:39]

***Robert Benjamin, MD***

[00:43:40]

I used to go to the Metropolitan all the time, because it was always sold out, but if you knew the right person, you could always get in, and one of my cousins had learned that trick and showed me how. So there was a particular ticket taker that you would slip a couple of bucks to, and an usher that you would slip a couple of bucks to, and then there was always an empty seat because somebody didn't come, and once the lights went down, they closed the doors, so if there was an empty seat, you went into the empty seat and sat there. So I used to go all the time when I had time.

[00:44:27]

***Tacey Ann Rosolowski, PhD***

[00:44:29]

So tell me about your medical education. How did you interest evolve [unclear]?

[00:44:32]

***Robert Benjamin, MD***

[00:44:33]

So the first two years, which were science-heavy, especially the first year—maybe that's because Nancy wasn't there, but maybe just because it was the first year—where we took anatomy, which I thought was really hard because you just had to remember all of the names of these things, which seemed totally irrelevant, or at least there was no context for them, so that was hard. As we got into physiology, that became more interesting, and pathology, more interesting,

because we started talking about really medicine, as opposed to just science. And when we started dealing with patients, I really liked that.

[00:45:34]

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## **Chapter 05**

### ***A Mentor in Medical School Teaches Important Research Lessons***

#### **A: Professional Path;**

Story Codes

A: The Researcher;

A: Influences from People and Life Experiences;

C: Formative Experiences;

D: On Research and Researchers;

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

***Tacey Ann Rosolowski, PhD***

[00:45:35]

It sounds like you're kind of a systems thinker, that you look at the big picture.

[00:45:39]

***Robert Benjamin, MD***

[00:45:39]

I don't know.

[00:45:40]

***Tacey Ann Rosolowski, PhD***

[00:45:42]

But that inability or difficulty recalling individual details that you can't hang on a system is like one of the measures of a person who is a systems thinker, yeah.

[00:45:53]

***Robert Benjamin, MD***

[00:45:53]

So I have a very good memory. People have commented on it. But it's highly selective. I'm terrible at remembering people's names, but when it comes to details of their medical history going back, I can probably remember the whole thing.

[00:46:31]

***Tacey Ann Rosolowski, PhD***

[00:46:31]

Wow. When did you know you had that ability?

[00:46:33]

***Robert Benjamin, MD***

[00:46:36]

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Long after I started getting into practice. (laughter) I mean, it's not something I had thought of early on.

[00:46:48]

***Tacey Ann Rosolowski, PhD***

[00:46:49]

Yeah, it kind of occurred to you.

[00:46:50]

***Robert Benjamin, MD***

[00:46:51]

But while I was in medical school, I shifted from going to summer school to working in a lab in the summer, and so probably after—I don't remember whether I did it after the first year, but after the second year, I started working in one of the labs at NYU.

[00:47:25]

***Tacey Ann Rosolowski, PhD***

[00:47:26]

What were you doing?

[00:47:27]

***Robert Benjamin, MD***

[00:47:28]

I was doing basically biochemistry, studying glycosaminoglycans from cartilage and trying to figure out what was there. And I worked in the laboratory of a doctor whose name was Max Schubert [phonetic], and he taught me some important lessons.

[00:48:08]

***Tacey Ann Rosolowski, PhD***

[00:48:08]

What did he teach you?

[00:48:10]

***Robert Benjamin, MD***

[00:48:14]

So the thing that I remember just absolutely crystal clear was I had come through at the time we had very limited tools, but we used a colorimeter and measured the absorption of the different compounds that we tried to analyze. And I had extracted, worked out a way of extracting the cartilage and coming up with some compounds that I could actually show some peaks on the colorimeter. And I brought them in to him and I said, "Well, I don't know what this represents because, you know, it should have been chondroitin sulfate, but chondroitin sulfate is supposed

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to have a maximum peak at 468 nanometers,” or whatever, I don’t remember the number, “but it had this absorption pattern. And my compound didn’t fit that because it was 482.”

And Dr. Schubert looked at me and he said, “Well, you know, Bob, I don’t know as much as you do about the precise spectrum of chondroitin sulfate on this machine, but it sort of looks to me like maybe it is chondroitin sulfate, so why don’t you do this experiment where you take some chondroitin sulfate and put it in and extract it the same way and see what it looks like.” And, of course, it was exactly identical to the stuff that I had found, and it hadn’t read the rulebook that knew that it was supposed to be at 475. It was at 468 or whatever.

And I realized, first of all, the importance of having the right controls in your experiment, but, more important, not accepting what the book says about something unless you can actually demonstrate what it is. So the book may say that this shouldn’t be that way, but if, in fact, that’s what happens when it’s there, it is that way and the book’s wrong. So always get the data rather than what people say about the data. And that holds true especially in medicine, where things are never as clear cut as they should be. So you have to accept the flexibility in your interpretations that the tumor might not have read the textbook, but it is what it is.

[00:51:56]

***Tacey Ann Rosolowski, PhD***

[00:51:58]

Thank you, Dr. Schubert. (laughs)

[00:51:59]

***Robert Benjamin, MD***

[00:51:59]

Right. Thank you, Dr. Schubert. Great lesson.

[00:52:02]

***Tacey Ann Rosolowski, PhD***

[00:52:02]

Yeah. Huh.

[00:52:06]



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## **Chapter 06**

### ***Clinical Experiences and Learning to be a Doctor***

#### **A: Professional Path;**

Story Codes

A: Professional Path;

C: Evolution of Career;

C: Professional Practice;

C: The Professional at Work;

D: The History of Health Care, Patient Care;

C: Patients, Treatment, Survivors;

#### ***Robert Benjamin, MD***

[00:52:09]

So when I went to NYU, first couple of years, first two or three years, I guess, I worked with Dr. Schubert, and then the last two years or the last year, starting when I was the summer of my third year and, I guess, through my fourth year of medical school, I worked in the lab of Dr. Farber, who was our chairman of Medicine. He also happened to be a personal friend of the family that I had known since I was a little boy. Certainly I never had the feeling working with him or being a student at NYU that I had any kind of unfair advantage for having known Dr. Farber. It was just he treated everybody the same. He was also a wonderful teacher. But I worked in his lab for a couple of years, and that was studying basically nephrology. We were studying the effects of various things on the kidneys of rabbits.

I enjoyed almost all—I think all of my clinical rotations, really, tremendously. I thought sick people were fascinating, so I ended up going into internal medicine rather than surgery for I'm not sure what reason, because some of my mindset is more surgical than medical.

[00:54:36]

#### ***Tacey Ann Rosolowski, PhD***

[00:54:37]

What do you mean by that?

[00:54:40]

#### ***Robert Benjamin, MD***

[00:54:46]

Internists spend an inordinate amount of time trying to figure out precisely what's wrong and make sure that they prove every bit of what they suspect, and surgeons like to do things to correct a problem. I like to do things to correct a problem. I mean, it's important to figure out what the problem is, because I guess my internal medicine training didn't totally escape me, but my direction is completely in terms of trying to figure out how to fix the problem rather than

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what it is. And if I can fix it and I don't know exactly what it is, that's okay, and that's much more a surgical mindset.

[00:56:05]

***Tacey Ann Rosolowski, PhD***

[00:56:07]

Interesting. I've never heard anybody articulate it quite like that, but it makes a lot of sense.

[00:56:12]

***Robert Benjamin, MD***

[00:56:13]

So most of the things, as we're getting more and more knowledgeable about medicine, more and more things that fall under the realm of the internist are specifically treatable problems, but the surgeons have always done that. That's what surgery is about, is treating.

[00:56:45]

***Tacey Ann Rosolowski, PhD***

[00:56:48]

When did your interest in oncology develop? Was that also in medical school?

[00:56:53]

***Robert Benjamin, MD***

[00:56:55]

Yeah. (laughs)

[00:56:55]

***Tacey Ann Rosolowski, PhD***

[00:56:55]

Okay. Well, do you want to finish your medical school story?

[00:56:56]

***Robert Benjamin, MD***

[00:56:56]

Let me at least go through my internship residency story, because that probably tells you something. So, anyway, I went into medicine, not surgery. One of the reason that I didn't go into surgery was I thought that the surgeons kept ungodly hours, and I remember thinking, you know, there's more to life than medicine, and I don't want to be in a situation where all I'm doing is that.

[00:57:42]

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***Tacey Ann Rosolowski, PhD***

[00:57:43]

I was going to say, no opera for you. (laughs)

[00:57:44]

***Robert Benjamin, MD***

[00:57:44]

Right. I remember my comment at the time was, “Living is part of life.” But I liked the fact that surgeons could fix things, and as it turns out, I went into medicine and I still spend the vast majority of my time at work or working, so it didn’t matter whether it was medicine or surgery, it’s me. But I went into medicine I liked when I was an intern. So you graduate from medical school and you get a degree, I’m a Doctor of Medicine, and you know absolutely nothing about actually treating, actually being a doctor. You learn how to be a doctor when you’re a resident. I did my internship and residency at Bellevue, and you were thrown into the middle of a series of disasters, and it was the best training in the entire world.

[00:59:23]

***Tacey Ann Rosolowski, PhD***

[00:59:24]

Can you give me an example?

[00:59:25]

***Robert Benjamin, MD***

[00:59:26]

Yeah. So back then, a significant portion of the Bellevue population were the homeless alcoholics that lived on the Bowery, so-called Bowery bums. And the Bowery bums would come into our emergency room 90 percent dead, and you had to sort of deal with the disaster and make them better, and when you were successful, they walked out of the hospital absolutely fine and doing really well, but they went back to the Bowery, they didn’t take their medications, and three months later they would be back in the emergency room with exactly the same problem to teach the next intern how to deal with that emergency.

So for reasons that I don’t understand, I was blessed with being on a rotation where our internship was every other night every other weekend that you were on call, and on my nights there would be six admissions, and on my partner’s night there would be one. So despite the fact that I was on only every other night, I got to see almost all the good cases, also never got to sleep. But, again, I mean, I had some—it was a really good place. The house staff was excellent, the attendings were good, but basically you learned from the more experienced house staff. The Bellevue motto was “See one, do one, teach one.”

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So like when I was a medical student, I had probably done twenty or so liver biopsies, and I knew how to put in subclavian catheters and I knew how to do a lot of procedures because, frankly, the interns were much too busy to try to do that sort of thing, so they would pass that off to the fourth-year medical students. And after the fourth-year medical students got tired of doing it, they would pass it on to the third-year medical students. So you got a chance to learn how to do a lot of things at Bellevue.

But when you get all of these really sick people coming into the emergency room, you're dealing with them and the first time it's your turn and you really feel, "Oh, my god, this guy is dying and I don't have a clue how to take care of him."

And I remember so distinctly that there was an ER nurse who was probably a clone of my mother in terms of her political savvy, and she said, "Well, you could call your resident and he'll tell you what to do, but the last time we had a patient like this and we called the resident, this is what he said to do, so you could, if you want, try that and call the resident and say that's what you did, is it okay."

So I did that and said, "Thank you very much," and the resident said, "Yeah, very good."  
(laughs)

But after you had seen a group of critically ill patients coming in with one problem after another, you really learned how to take care of them. And I'm sure a few of them died because we didn't know enough, but you still learned. So it was hands-on acute medicine learning.

There was very little interest in oncology. As a matter of fact, I distinctly remember one of my attendings saying, "Well, you know, chemotherapy is really pretty worthless. Sometimes it makes lumps and bumps go away, but it never really does anything to improve the patient's outcome. So the best thing you can do—." And I remember being taught this in medical school is, "Well, the best thing you can do about cancer if somebody has diagnosis of cancer, just ignore it, because since there's nothing you can do about it, don't tell the patient, because then he knows he's going to die and that's terrible."

[01:05:43]

***Tacey Ann Rosolowski, PhD***

[01:05:49]

That's amazing. And this was in the mid sixties, early sixties?

[01:05:52]

***Robert Benjamin, MD***

[01:05:52]

This was late sixties.

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[01:05:53]

***Tacey Ann Rosolowski, PhD***

[01:05:54]

Late sixties. Wow.

[01:05:54]

***Robert Benjamin, MD***

[01:05:54]

Late sixties. But I love medicine, I love the intellectual challenge of medicine, and I love taking care of sick patients, and I knew that that's what I wanted to do. And I liked the idea of academic medicine because I like to learn and to teach, and it sounded like a good idea to me. My dad had been in private practice. He actually started out in academic medicine, stopped because of some political conflicts with people around him, I think, but he was always curious and liked to figure out how to do things. He probably discovered a few things that he never reported, and then later on somebody else reported them, and he said, "Oh, yeah, I did that twenty years ago."

[01:07:14]

***Tacey Ann Rosolowski, PhD***

[01:07:16]

Interesting.

[01:07:17]

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## **Chapter 07**

### ***Plans to be a Cardiologist and a Key Fellowship with the NIH***

#### **A: Professional Path;**

Story Codes

A: Professional Path;

C: Evolution of Career;

C: Professional Practice;

C: The Professional at Work;

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

D: The History of Health Care, Patient Care;

A: Inspirations to Practice Science/Medicine;

A: Influences from People and Life Experiences;

#### ***Robert Benjamin, MD***

[01:07:17]

But I wanted to go into academic medicine. I didn't know what I wanted to do. I also knew that I wanted to go into medicine, not surgery. So this is 1968 when I graduated from medical school. A hundred percent of doctors got drafted, so I was set to go into the air force. The only way you didn't get drafted was if you got into the Public Health Service and went to NIH. But since I was interested in academic medicine, I thought NIH is a good thing. I knew a lot about NIH because one of my father's friends had gone there as a section head when I was a little boy, and I remember my father making a big deal out of the fact that he had a position at NIH. So I thought well, going to NIH is good and, of course, hard to get in.

This is probably where some of Dr. Farber's recommendations probably helped me a little bit, because he was there. But basically I looked at the application for NIH and they listed all of these different programs that they were working on, and you were allowed to apply to any that you wanted to go to, and you weren't supposed to rank them. And I was told basically most people choose three or four of the programs that they want, and the programs choose which people they're going to take. And I looked down the list and I said, "Would I rather do this or Vietnam? This or Vietnam? This or Vietnam?" And I listed forty-two programs.

And then so they wrote back to me and said, "Well, ordinarily we don't ask you to rank your programs, but since you have such a comprehensive list of interests, could you please give us a ranking so we can get an idea of where your interests really lie?"

And so I gave them a ranking, and the program I ranked first was a program at the Dental Institute, because they were studying other aspects of glycosaminoglycan metabolism, and I thought that was similar to what I had been working on in the lab with Dr. Schubert, so I would clearly have a fit there. And the second program I listed was at the Baltimore Cancer Research

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Center, and I listed that program because among the many things they had in their description, one of them was a program in treating septic shock in patients with leukemia. And I thought, septic shock, doesn't matter whether the patient has leukemia or not, that's something that will apply to all of medicine. And I actually thought I was going to be a cardiologist at the time, but I figured that was a good thing.

So that ended up being the program that chose me. They chose me not at all because of any of the clinical things, but because I had had so much laboratory experience in medical school and they thought that that would clearly be a candidate for one of the laboratory programs that they were working in. Didn't matter what it was on, at least I knew my way around a lab.

When I went down to visit, I guess when I first came down after I'd been accepted, I went down to visit them, and I said, "Well, you know, I've just come out of my first year of medical residency, and I don't want to forget everything I've learned about medicine. If I just spend the next two years working in the laboratory, would I be able to see some patients as well?"

And they looked at me as if I was entirely crazy, said, "You want to see patients with cancer?"

I said, "Yeah."

And so they said, "Oh, great. We can work out a program. Here's something where you can spend your first year, you're going to be primarily clinical, and your second year, you're going to be primarily in the laboratory, but you can spend one half a day a week in the clinic seeing some patients for continuity."

I said, "That sounds great." And so I wound up at the Baltimore Cancer Research Center.  
[01:13:56]

***Tacey Ann Rosolowski, PhD***

[01:13:57]

And so what year did you start there?

[01:13:58]

***Robert Benjamin, MD***

[01:13:59]

1970.

[01:14:00]

***Tacey Ann Rosolowski, PhD***

[01:14:00]

1970. So tell me about that. I mean, that must have really changed things for you. (laughs)

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[01:14:06]

***Robert Benjamin, MD***

[01:14:06]

So that changed everything. So the one other bit of pre-Baltimore information is that one of my senior residents when I was a resident applying for these NIH positions had said to me, “You know, NIH is absolutely great on your CV. It will give you a major advantage in terms of applying for future positions. But the very best thing is if you actually like what you’re doing there, stick with it, because that will give you not only the NIH criteria on your CV, but it’ll give you two years of advantage over all of your contemporaries who weren’t doing that for the previous two years.”

[01:15:17]

***Tacey Ann Rosolowski, PhD***

[01:15:19]

Good advice.

[01:15:21]

***Robert Benjamin, MD***

[01:15:21]

Went into the memory bank, because I was going to be a cardiologist, but I figured at least at the Cancer Institute I would see some sick patients and I could remember how to take care of sick patients. So, started out in the clinical period when I was taking care of these sick patients, and it was also a transition time in the Baltimore Cancer Research Center, which was a freestanding branch of the National Cancer Institute but totally separate. It was located at the Public Health Service Hospital in Baltimore as opposed to the Bethesda main campus. And the laboratory people who were there had all sort of established themselves pretty well, and I had been hired basically by one of these laboratory researchers as his clinical associate—research associate, he thought, when he hired me, but then I turned out to be clinical associate because I was seeing patients.

But the summer before I got there, I guess the spring before I got there, because I got there in the summer—July is the beginning of the academic medical career sort of everywhere, the branch chief—I don’t remember. I guess the branch chief was still there, but he had a major conflict with the clinical chief at that unit, and the clinical chief had wanted to be the branch chief, and this other guy got the position, and so he left. And it was a pretty small operation, so they didn’t have a whole—I mean, oncology was totally in its infancy. Nobody really knew very much about it. There weren’t a lot of people there.

So my teachers at the Baltimore Cancer Research Center when I got there, there was one guy who I still for the life of me don’t know why he was there or what he did, but he was one of the



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head people. There was a second-year clinical associate who was the major teacher, but that was sort of like Bellevue. I mean, the resident taught the intern, the second-year resident taught the first-year resident, so I was used to that sort of thing. But there was nobody who really knew very much about things. There was a former clinical associate at the program who was doing formal oncology fellowship at Hopkins, and he would come by once a week and make rounds and sort of help us with our complicated cases. The guy who left and went into private practice would come once a week and make rounds with us. So those were my teachers, that and my second-year resident, who had learned something.

So it was pretty much on the Bellevue model of you see a sick patient, you figure out what you think you want to do, and then you sort of run that plan by the next level up and make sure that it's not totally crazy. But usually the next level up didn't know much more than you did, so you did what you wanted to do.

[01:20:14]

***Tacey Ann Rosolowski, PhD***

[01:20:18]

Did you think of this as stressful or was it a good opportunity?

[01:20:22]

***Robert Benjamin, MD***

[01:20:22]

No, this was fun. I mean, this was what I had been doing at Bellevue before. I was perfect for it. My colleagues, who had trained at Harvard and Yale and wherever, were the ones who were stressed by it, because they were used to being told what to do. Plus they didn't know how to put in a subclavian catheter, they'd never done a liver biopsy, because liver biopsies were done by the liver fellow. What liver fellow? And I could put an IV into a stone, because we never had an IV team to teach us, and I had learned as a medical student at Bellevue how to do IVs. So from the point of view of these sort of minor but critically important procedural things, plus dealing with a situation where there wasn't an authority figure to tell you exactly what to do, my training was absolutely on target in terms of dealing with this situation, and I loved it.

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## **Chapter 08**

### ***Stories about Work with Cancer Patients and a Switch to Oncology***

#### **A: Professional Path;**

Story Codes

A: Professional Path;

A: Character, Values, Beliefs, Talents;

C: Evolution of Career;

C: Professional Practice;

C: The Professional at Work;

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

D: The History of Health Care, Patient Care;

A: Inspirations to Practice Science/Medicine;

A: Influences from People and Life Experiences;

B: Discovery and Success;

C: Human Stories;

C: Offering Care, Compassion, Help;

C: Patients;

C: Cancer and Disease;

C: Formative Experiences;

C: Patients, Treatment, Survivors;

C: The Life and Dedication of Clinicians and Researchers;

#### ***Robert Benjamin, MD***

[01:20:22]+

But the other thing I learned very quickly was sort of from the Mac Schubert point of view of, well, you know, I don't care what the book says; show me the data. So we took care of the patients who were in the hospital with—I don't remember exactly how the rotational system worked, but we rounded on the various groups of patients, and then one day a week you were in clinic and you saw some follow-up patients. And one of the first follow-up patients I saw was a patient named \$\$Norma Halligan [phonetic], who had stage-four Hodgkin's disease involving her liver and her bone marrow, and she came into clinic to see me and had basically no problems whatsoever. She had been on this experimental protocol called MOPP four years before.

[01:23:03]

#### ***Tacey Ann Rosolowski, PhD***

[01:23:05]

What does that stand for?

[01:23:06]

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***Robert Benjamin, MD***

[01:23:07]

Mustard, nitrogen mustard, Oncovin, procarbazine, and prednisone. And that was the first combination chemotherapy regimen in any solid-tumor patient, again designed at the NCI, and the Baltimore group had participated with the Bethesda group in doing this. Vince DeVita was the first author on the paper about MOPP, saying that there were long-term complete remissions in Hodgkin's disease. And, you know, but I'd been taught that chemotherapy never helped anybody, but I'd also been taught that if you had Hodgkin's disease involving your liver and your bone marrow, you're going to be dead in three months. Well, this lady was alive and well four years later, you know. Teaching was wrong. One patient could teach that.

[01:24:22]

***Tacey Ann Rosolowski, PhD***

[01:24:23]

What was your reaction when you saw her?

[01:24:25]

***Robert Benjamin, MD***

[01:24:27]

I was so excited seeing, you know, this is somebody who is supposed to die, and she was absolutely fine, and the chemotherapy that I'd been taught never worked and never helped anybody, if it hadn't cured her, it clearly had had a major impact on her life and she was great. So that's part of the reason that I went into oncology, because I found that it was fun taking care of these patients and that there were things you could do to help them.

Baltimore was—the program was basically the experimental drug. The Phase One group of the NCI was Baltimore. So we used all of these experimental drugs and tried to find out what they did to people. And I had another patient, whose story I remember but whose name I don't, who had lung cancer, and I saw him and he was clearly doing badly. He had been on three different experimental protocols and none of them had helped him. I asked him about each of the drugs that he'd had, and he told me that, "This drug caused my fingers to go numb, and this drug caused terrible nausea and vomiting and I wound up in the hospital with an infection, and this drug made my mouth really sore and I couldn't eat for days, but then I got over it." And none of these things had helped him, and he came to me and said, "So what's next, Doc?"

And I looked at him and said, "Why are you doing this to yourself? Why are you here? All of these drugs have made you sick. None of them have helped you. Why do you keep coming?"

And he said, "Oh, that's easy. The doctors and the nurses here take care of me. They care about what my problems are. When I have nausea, they give me medication for it. When I have pain, they give me medication for it. When I have whatever problem, they treat me, and they treat me

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like a human being.” He said, “When my doctor at home found out that I had cancer, he was so frightened of me because he didn’t know what to do, that he basically shut me out. So I would call with a problem, and he really didn’t want to see me. The doctors here at least care for you and try to deal with your problems. And I know they haven’t helped me, but they at least treat me with respect and try to help out with the problems that they can.” And I wish I remembered his name, because he probably had more effect on me than anybody.

One of the things that I did get formally taught when I hit the BCRC was the Kübler-Ross stuff about death and dying and dealing with the emotional aspects of what’s there, and the idea that given that a patient is going to die and there is little or nothing you can do to prevent that, that it’s much better to be straightforward and talk about it and give the patient the opportunity to live out his last days, weeks, months in the way that he wants to, knowing what’s going to happen, and dealing with families and dealing with the issues, that it’s the initial blow is hard, but it’s much better to deal with the problem that’s there rather than to avoid it, and that patients are usually smarter than you think. And if they’re really sick and you tell them they’re well, they know that you’re lying. They may not know exactly what the problem is. They may actually think that the problem is worse than it really is. They may think, “Oh, I’m going to die tomorrow,” when, in fact, they may have six good months. So it’s better to just say, “Here’s the facts. Let’s figure out how to deal with them.”

[01:31:12]

***Tacey Ann Rosolowski, PhD***

[01:31:14]

Was it standard procedure that if someone had a cancer diagnosis that looked really dire, that that information would be withheld from the patient at that time?

[01:31:26]

***Robert Benjamin, MD***

[01:31:26]

Absolutely. Absolutely. I mean, the teaching that I had in medical school was we discussed that issue, and it was the most dramatic representation of it that I can ever imagine. One of the students asked the professor, “Why don’t you tell the patient what’s happening?”

And the professor looked at him and said, “What’s your name?” He said, “Okay, pack up your things. You’re not in medical school anymore.” And the guy sat there stunned. He said, “Get out of here. I don’t want you in my lecture. You’re not going to be here anymore. Why are you sitting here?” So finally the guy got up and walked to the back of the room, and then the professor called to him and said, “See, that’s what it feels like when you tell them they have cancer. You can come back now.” So that’s what we were taught. It’s such a terrible thing to say to someone that, “You have cancer,” that your job as the physician is simply to hide it.

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So around this time, there was one of the best movies ever made, Akira Kuorsawa's *Ikiru*. If you haven't seen it, you should get it.

[01:33:49]

**Tacey Ann Rosolowski, PhD**

[01:33:50]

*Ikiru?*

[01:33:50]

**Robert Benjamin, MD**

[01:33:51]

Akira, A-k-i-r-a. Kurosawa. *Ikiru*, I-k-i-r-u. The translation is "to live."

[01:34:06]

**Tacey Ann Rosolowski, PhD**

[01:34:07]

Oh, interesting. I don't know that movie.

[01:34:07]

**Robert Benjamin, MD**

[01:34:10]

It's just incredibly powerful. It's the story of a man who is sort of bureaucratic lower-level government office worker who has stomach cancer, and it's his reactions to finding out that he has stomach cancer and dealing with it, and it brings out just some of the wonderful strengths of the human spirit that you don't see, and it's all done in the context of Japanese culture where people are never told they have cancer.

[01:35:20]

**Tacey Ann Rosolowski, PhD**

[01:35:25]

You obviously find that movie very moving.

[01:35:28]

**Robert Benjamin, MD**

[01:35:28]

Yeah. Well, it's just—it's people are moving. People are important. And it's a great exploration of the strengths and weaknesses of the human spirit and different ways of doing things. But the way it's put, it's just brilliant. So, anyway, I saw that around the same time that I had these experiences with these couple of patients, and that's what got me into oncology.

[01:36:29]

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***Tacey Ann Rosolowski, PhD***

[01:36:34]

As you're talking, something in me is saying that this sounds almost like a spiritual practice. Is that something that resonates with you at all? I mean—

[01:36:43]

***Robert Benjamin, MD***

[01:36:44]

No, not really.

[01:36:48]

***Tacey Ann Rosolowski, PhD***

[01:36:50]

It sounds like you are dealing with some very, very fundamental, just very human issues in cancer and—

[01:36:56]

***Robert Benjamin, MD***

[01:36:57]

Life and death is very human.

[01:36:59]

***Tacey Ann Rosolowski, PhD***

Yeah, yeah. Wow.

[01:37:02]

***Robert Benjamin, MD***

[01:37:02]

It's what we're about.

[01:37:03]

***Tacey Ann Rosolowski, PhD***

[01:37:12]

Yeah. So this was all in 1970, early seventies, that this is like a complete transformation of your perspective on what your future would be.

[01:37:14]

***Robert Benjamin, MD***

[01:37:14]

Yeah, yeah, right.

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[01:37:15]

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## **Chapter 09**

### ***NIH Fellowship: Researching Drugs with Amazing Effects on Patients***

#### **A: The Researcher;**

Story Codes

A: Professional Path;

A: Character, Values, Beliefs, Talents;

C: Evolution of Career;

C: Professional Practice;

C: The Professional at Work;

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

D: The History of Health Care, Patient Care;

A: Inspirations to Practice Science/Medicine;

A: Influences from People and Life Experiences;

B: Discovery and Success;

C: Human Stories;

C: Offering Care, Compassion, Help;

C: Patients;

C: Cancer and Disease;

C: Formative Experiences;

C: Patients, Treatment, Survivors;

***Tacey Ann Rosolowski, PhD***

[01:37:15]

Wow. So what were the—

[01:37:17]

***Robert Benjamin, MD***

[01:37:17]

And then I got into my second year of this program, started working in the laboratory, and I worked with a wonderful boss, Nick Bachur.

[01:37:33]

***Tacey Ann Rosolowski, PhD***

[01:37:34]

I'm sorry, his name?

[01:37:35]

***Robert Benjamin, MD***

[01:37:35]

Nick, Nicholas Bachur, B-a-c-h-u-r. And Nick was a quiet guy. He worked completely in the



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laboratory, never saw patients there. He was the laboratory scientist in a sense, but MD, not PhD. He was interested in studying the anthracycline antibiotics. We used Daunorubicin extensively in the treatment of leukemia, and it was a reasonably new drug during some of that period of time but a few years before I got there, and it had become established as one of the main drugs used to treat leukemia. And Nick had performed the original clinical pharmacology studies of that drug with another one of the clinical associates who was a year ahead of me, and I helped them a little bit with that, but it was primarily their studies on Daunorubicin.

Around that time, the Italians had introduced a drug called Adriamycin into oncology, and it had not been used at the NCI before. So Nick thought that the methodology that he'd used to study Daunorubicin would be applicable to Adriamycin, so that we should do a study and study the clinical pharmacology of Adriamycin because although it had been used previously, there was no information on the pharmacology, or what was there was probably wrong because of methodological aspects. So my job as a clinical associate was to study the clinical pharmacology of Adriamycin. So Nick said, "Write up a protocol to give Adriamycin to these patients, and let's study the clinical pharmacology, and you can do both aspects."

So I went to Peter Wernick [phonetic], who was this former clinical associate there who had gone for oncology fellowship at Hopkins and now came back to lead the clinical program during my second year. So I said to him, "Nick wants to study the clinical pharmacology of Adriamycin."

And he looked at me and said, "You know, it's an analog, Bob. Analogs never work any better than the parent compound. It's sort of not important. But you want to study the pharmacology, that's fine. We can certainly find a few patients. How long will it take you to do a patient?"

I said, "Well, probably about a week, because we've got to get the drug. I've got to collect the samples for three days. It's going to take me a couple days in the lab to analyze them. So probably a week for a patient."

And Peter thought and said, "Yeah, sure. Go ahead. Write a protocol."

So I wrote a protocol. And Nick had said to me, "Make sure that in the protocol you specify that you want to study not only patients with carcinoma, but sarcoma, because the Italians reported some responses in patients with sarcomas, and I don't remember ever seeing a drug that works on sarcomas. So it might be interesting to get some patients like that."

So I said, "Sure." So I wrote this protocol to give Adriamycin, and I included patients with sarcomas, and I got the drug. There were actually some patients in the Public Health Service Hospital that weren't BCRC patients, they were just hospital patients, but there were some patients who were there who had cancer that they weren't really doing anything for. So they

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allowed me to include some of those patients on the study as well, as long as they agreed. And informed consent then was very easy. You walked up to them and said, “I want to try this new drug. I’m going to give it to you. I’m going to take all these blood samples, analyze it in the lab, see what happens to the drug, see what happens to you. Is that okay?”

And they say, “Yeah, sure.” And that was your informed consent. Probably a lot better than the informed consent that we have now, which is so long and so complicated that nobody pays any attention to it, except that they, “You have to sign this form to get on the study.”

“Okay, Doc.”

So Adriamycin turned out to be the most active drug in solid tumors that had been introduced up until that point in time. The second patient that I treated on the study was a patient with metastatic sarcoma, and his name was \$Elmer Wheatley [phonetic]. Elmer was one of these Public Health Service Hospital patients that wasn’t a BCRC patient, and he had been in the hospital for two weeks and he was bedridden. He never would qualify for a protocol in our current studies because his performance status was four, his life expectancy was probably two weeks, but back then we didn’t care about those things. He was getting injections of morphine pretty much around the clock and it really wasn’t controlling his pain. Probably he didn’t get enough morphine, but that’s back then. I guess we weren’t so good at treating pain either.

But I went and saw him, and because I was drawing all of these blood samples like every fifteen minutes for the first hour and then every half an hour and then every hour and then every two and four and whatever, I kept seeing him multiple times during the period. And probably by about my four-hour sample, he looked at me and he said, “You know, Doc, I think I’m feeling better.”

And I said, “Gee, that’s great,” and I thought to myself, wow, placebo effect is really striking, isn’t it. By the time I got the twenty-four-hour sample the next day, he was sitting up in the bed. He hadn’t been sitting up in the past two weeks. When I drew my seventy-two-hour sample, which was the end of the study, he got up and walked out of the hospital, and came back to see me in the clinic a few weeks later, and he actually ended up living for about eight months. We didn’t have anything else to treat him with. But it was truly remarkable.

Before I had started him on the study, I had to present his case to Peter Wernick, because he was the clinical boss and he was in charge of all of this stuff. He said to me—his description of this guy was, “Well, I hope he lasts long enough for you to get all your samples, because he has one foot in the grave and the other on a banana peel.” And he lived eight months. So that’s my first sarcoma patient.

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So Adriamycin turned out to be a really important drug. I totally lucked out by getting that drug to study, and I got involved with studying Adriamycin and doing clinical pharmacology on chemotherapy drugs, and nobody had really done that before. Nick Bachur's studies were sort of pioneering in that aspect.

So I ended up staying an extra year at the NCI because my studies were going well. I didn't want to stop in the middle, and they let me stay on as a—I don't know, whatever their title was, for an extra year. So I spent three years there instead of two. During that third year, the American Board of Internal Medicine changed its rulings about what was a formal oncology fellowship, and anyone who had been at the NCI at the Cancer Center was considered to have gone through an oncology fellowship. So if I'd left after two years, I would have gone somewhere else and done a two-year oncology fellowship. By staying the extra year, I actually satisfied all of my requirements for internal medicine and oncology and came out board-eligible for medicine and oncology at the end of the three years at NCI. So I had very little formal training but—  
[01:50:19]

***Tacey Ann Rosolowski, PhD***

[01:50:20]

But clearly a lot of luck. (laughter)

[01:50:21]

***Robert Benjamin, MD***

[01:50:21]

A lot of luck.

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## **Chapter 10**

### ***A Lesson on Sharing Credit with Colleagues***

#### **A: The Leader;**

Story Codes

A: The Researcher;

A: The Clinician;

A: The Administrator;

A: The Educator;

A: The Leader;

A: The Mentor;

C: Formative Experiences;

C: Leadership;

C: Mentoring;

D: On Leadership;

#### ***Robert Benjamin, MD***

[01:50:21]+

The other thing that Nick Bachur taught me, because he is associated in everyone's mind with the initial clinical pharmacology studies of Adriamycin, but during my second year, there was an internal meeting at NCI among the various branch chiefs. So both Peter Wernick and Nick Bachur were presenting at this meeting to the NCI hierarchy, and I was invited just to attend but not to present anything. So Peter presented the clinical story of Adriamycin, because we had by that point treated about sixty patients and had some pretty impressive results in patients with solid tumors, so clearly this was a really important drug, and then Nick presented the clinical pharmacology and showed the things that had been done. It went in that order, and then at the end of Nick's talk, he said, "And I want you all to know that the work that Dr. Wernick presented and the work that I presented are all done by one of our clinical associates, Dr. Benjamin." And that, again, made a tremendous impression on me because he lost nothing by saying it, because his name is always associated with the work, but my name is associated with the work.

[01:52:41]

#### ***Tacey Ann Rosolowski, PhD***

[01:52:45]

Certainly a lot of people don't think to do that.

[01:52:47]

#### ***Robert Benjamin, MD***

[01:52:48]

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And Dr. Wernick hadn't thought about doing that. But I've tried subsequently in my career working with junior faculty and fellows to always try to give them the credit rather than me, because it doesn't hurt me at all and it helps them. So, an important life lesson from Dr. Bachur.  
[01:53:29]

***Tacey Ann Rosolowski, PhD***

[01:53:31]

A lot of generosity there.

[01:53:33]

***Robert Benjamin, MD***

[01:53:37]

But that's the trick, I think one of the tricks, to be an effective department chair or section head or whatever, it's you've got to be able to promote and give credit to the junior people around you, because that's what stimulates them to do good work and to want to keep doing it. If you go through all of the hard work and it ends up being stolen from you by your boss, that's not the boss you want to be working for.

So, anyway, I don't know how much time we have.

[01:54:49]

***Tacey Ann Rosolowski, PhD***

[01:54:50]

We have until eleven-thirty. Is this a good—

[01:54:53]

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## **Chapter 11**

### ***The Path to Developmental Therapeutics at MD Anderson***

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

Story Codes

A: Professional Path;

B: MD Anderson History;

A: The Researcher;

B: MD Anderson Culture;

#### ***Robert Benjamin, MD***

[01:54:53]

So let me—there's one minor small part of my career that I can go over, and then that'll get me up to MD Anderson.

[01:55:01]

#### ***Tacey Ann Rosolowski, PhD***

[01:55:02]

Great.

[01:55:02]

#### ***Robert Benjamin, MD***

[01:55:04]

So when I thought I was going to do an oncology fellowship, I asked where the good programs were, and one of the places that had been recommended to me was the University of Rochester, where a man named Tom Hall [phonetic], who was sort of also interested in biochemical pharmacology, had a program, and he had previously been in Boston. And I thought, "Okay, I'll do my fellowship there. That'll be a good place for me." But then when I didn't need to do a fellowship, I didn't go there.

During the year that I stayed on at NCI, Tom Hall moved from Rochester to the University of Southern California to establish a new Cancer Center there, and so he offered me a job as an assistant professor to help build their program. And I thought, "Gee, that sounds like a good idea," and so I went to USC for a year. It was very instructive but a totally nonproductive year in terms of doing things, because building the new Cancer Center was dealing with a lot of internal politics and poor infrastructure, and I sort of looked at it in terms of saying, "Gee, maybe in ten years I'll be able to accomplish something here, but I'm at the point in my career where I need to be accomplishing something now, not waiting ten years. This is clearly not the program for me."

Actually, one of the other places that I thought about for fellowship, aside from Rochester, was here, and I had met Dr. Freireich [oral history interview] when I was still in Baltimore at a

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meeting, and he had offered me a position as a fellow. But since I didn't need to be a fellow anymore, I thought, well, better to go with Dr. Hall and be an assistant professor than go with Dr. Freireich and be a fellow again. So I said no to Dr. Freireich.

But the other person that I had met when I was at NCI and continued to interact with the year that I was out in California was Dr. Gottlieb. Jeff Gottlieb was, I guess, two years ahead of me, and he had also been a clinical associate at the Baltimore Cancer Research Center. May have been three years ahead of me, but he'd been at the Baltimore Cancer Research Center, and a number of the patients that I took care of when I was there had been his patients before and were on some of the protocols that he'd set up there. And he's the person who did the majority of the initial work here on Adriamycin, so he and I met several times at NCI meetings about Adriamycin and Adriamycin cardiac toxicity, various other things. We got to know each other, and he's the person who said to me, "Well, you really need to come to MD Anderson. That's where you can get all of the things done that you want to get done. We need a clinical pharmacologist because we don't have anybody who does that kind of work. We have some of the PhD pharmacologists who are studying pharmacology, but they don't understand the clinical portion, and you would fill a niche that we need."

So when things were frustrating in California, I said, "Yeah, maybe I should come to Houston." So I came here thinking that I would be working with Jeff Gottlieb, and when I got here, Jeff was in the terminal phase of his testicular cancer and was actually in the hospital in one of the protected environments when I first showed up. So instead of working with him for my career here, I sort of helped take care of him, but had some interaction with him, but clearly it was significantly limited by his illness at the time.

But he was the person who had the most interest in sarcomas in Developmental Therapeutics. He was interested in other cancers as well, other solid tumors. When he died in 1975, those of us who were here sort of divided up the kinds of cancer that he had been interested in, and there was somebody who was interested in everything except for sarcomas, so that went to me. So I started basically a major focus on sarcomas in 1975, and I was still doing clinical pharmacology for a number of years.

When I first came here, the fellowship here was very similar to the training I'd had in Baltimore where the first-year fellow did the majority of the patient care with, at least here, much greater supervision by the attending staff, but clearly the bulk of the work and the bulk of the patient care was done by the first-year fellows. During the time, the first few years that I was here, that changed. The fellows didn't want to do as much, they felt overworked and underappreciated, and more and more of the patient-care responsibility fell on the attending physicians, where the fellows became much more either helpers or observers of what happened, rather than the primary physicians managing the patients. In terms of workload, it's good. In terms of training, it's not as good, but—

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[02:05:20]

***Tacey Ann Rosolowski, PhD***

[02:05:20]

Yeah. Tradeoffs.

[02:05:23]

***Robert Benjamin, MD***

[02:05:23]

—it's what happens. But there was much more emphasis on the role of the attending physician as the primary physician, and so I took on increasing responsibility in terms of dealing with patients primarily but not exclusively those with sarcomas, but much more patient-care responsibilities, and I sort of eased out of the clinical pharmacology area. So that's a good transition to where we are.

[02:06:16]

***Tacey Ann Rosolowski, PhD***

[02:06:17]

Yeah, and you timed it perfectly. We're right at eleven-thirty. (laughs)

[02:06:18]

***Robert Benjamin, MD***

[02:06:18]

Good.

[02:06:18]

***Tacey Ann Rosolowski, PhD***

[02:06:21]

Well, thank you very much. I mean, this has been great. Thank you for your time this morning.

[02:06:25]

***Robert Benjamin, MD***

[02:06:26]

You're very welcome. Happy to tell the story. So what happens to these stories?

[02:06:32]

***Tacey Ann Rosolowski, PhD***

[02:06:33]

Well, let me just close off the recorder, and then I'll answer your question. I'm turning off the record at just exactly eleven-thirty.

[02:06:33] (end of session one)



***Robert Benjamin, MD***

**Session 2 – January 16, 2014**

**Chapter 00B**

***Interview Identifier***

[00:00:00]

***Tacey Ann Rosolowski, PhD***

[00:00:00]

All right. So we are officially recording, and the time is about just shy of five minutes after two. I'm Tacey Ann Rosolowski, and I'm in the office of Dr. Robert Benjamin today for our second session together. So thank you very much for continuing our conversation.

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Interview Session: 02

Interview Date: January 16, 2014

## **Chapter 12**

### ***Family Life and Life Balance***

#### **A: Personal Background;**

Story Codes

A: Character, Values, Beliefs, Talents;

A: Personal Background;

A: Character, Values, Beliefs, Talents;

C: The Life and Dedication of Clinicians and Researchers;

***Tacey Ann Rosolowski, PhD***

[00:00:00]+

You had mentioned before we turned on the recorder that you hadn't talked about your sons, so I wanted to ask you just quickly to tell me what you had in your mind about telling that story.

[00:00:38]

***Robert Benjamin, MD***

[00:00:39]

Yeah. So I think I told you a lot about my wife, who did her English PhD for fun, couldn't get her teaching position and so went to law school. And our sons have both taken up her careers. So my older son is a professor in the English department, or an associate professor in the English department at SUNY/Albany.

[00:01:10]

***Tacey Ann Rosolowski, PhD***

[00:01:11]

Oh, really. And his name?

[00:01:11]

***Robert Benjamin, MD***

[00:01:12]

His name is Bret, with one *t*. And he's my fishing buddy. He's a lot better fly fisherman than I am, because he gets more chance to do it.

[00:01:31]

***Tacey Ann Rosolowski, PhD***

[00:01:33]

That's a great part of the country, too, to do fishing, too.

[00:01:36]

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***Robert Benjamin, MD***

[00:01:36]

Right. So whenever we go up there to visit, usually he and I will go off somewhere and go fishing, at least one day out of the visits.

My younger son, who was the more difficult of the two growing up, has finally settled down and he's taken up Nancy's second career, so he's an attorney, not completely sure how his legal career will end up because he's still fairly new at that position. He's had a number of other careers before that, but now finally he's an attorney.

[00:02:52]

***Tacey Ann Rosolowski, PhD***

[00:02:52]

And his name?

[00:02:52]

***Robert Benjamin, MD***

[00:02:53]

And that's Jeremy. And they each have one child, so we have a couple of grandchildren, and they're loads of fun to be with.

[00:03:07]

***Tacey Ann Rosolowski, PhD***

[00:03:07]

I bet.

[00:03:08]

***Robert Benjamin, MD***

[00:03:08]

And they like each other. They're a year apart in age. Jeremy's son, Aki [phonetic], is six days shy of a year older than Bret's daughter, Jolie [phonetic]. So that's, anyway, more family stuff, but that's important.

[00:03:35]

***Tacey Ann Rosolowski, PhD***

[00:03:36]

Yeah. Now, was it significant that your sons chose not to go into medicine? What was that about?

[00:03:44]

***Robert Benjamin, MD***

[00:03:44]

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Oh, they just never saw me because I was working too hard, so they decided that medicine meant too much time away. Actually, they saw me on weekends, but they didn't see me a lot during the week. So they decided that they didn't want to be in that kind of a career, but they're both extremely busy at what they do, and I think it's always true that the more you enjoy your job, the longer you work.

[00:04:34]

***Tacey Ann Rosolowski, PhD***

[00:04:36]

Yeah, that's so true. Absolutely true. When you look back, because obviously family is really, really important to you—

[00:04:42]

***Robert Benjamin, MD***

[00:04:43]

Mm-hmm.

[00:04:43]

***Tacey Ann Rosolowski, PhD***

[00:04:44]

When you look back, I mean, what is your view of the time you spent at work versus time you spent at home, you know, the whole life-balance thing?

[00:04:52]

***Robert Benjamin, MD***

[00:04:58]

I don't have a great—how shall I put this? I think once you make a commitment to a career in medicine, that is the life balance, and it's wonderful and nice to be able to have a life outside, but your primary responsibility is taking care of your patients, and that's in a lot of ways a twenty-four-hour-a-day job. And, yeah, clearly there are times when you're not doing it, somebody is covering for you, but most of the time work is work.

[00:06:13]

***Tacey Ann Rosolowski, PhD***

[00:06:15]

I'm wondering, too, you know, it seems to me that both with research and also clearly with patient care, it isn't something that you really put down and put out of your mind when you're away from the institution you work at, because, you know, it's like it's always on the back burner of your mind somehow. I mean, is that the case?

[00:06:35]

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***Robert Benjamin, MD***

[00:06:39]

Pretty much. I mean, I don't spend my time away from here obsessing over what happened or what might be happening to my patients, but I always feel that I have to be available for them. So it's just—but I don't think my mind fixates on that when I go.

[00:07:28]

***Tacey Ann Rosolowski, PhD***

[00:07:29]

So you are able to—

[00:07:30]

***Robert Benjamin, MD***

[00:07:30]

Yeah. I can—

[00:07:30]

***Tacey Ann Rosolowski, PhD***

[00:07:31]

—put it aside then.

[00:07:32]

***Robert Benjamin, MD***

[00:07:33]

—turn things off temporarily.

[00:07:34]

***Tacey Ann Rosolowski, PhD***

[00:07:35]

Thank goodness for that. (laughs)

[00:07:36]

***Robert Benjamin, MD***

[00:07:36]

Yeah. Yeah.

[00:07:38]

***Tacey Ann Rosolowski, PhD***

[00:07:39]

Is there anything else you wanted to say about your family or—

[00:07:42]

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***Robert Benjamin, MD***

[00:07:46]

No, I think that's—I just sort of felt that I'd left out the kids. We're very close, and it's fun to see when your kids grow up, how they turn into real people and have their own lives, and how some of the things that you think you tried to teach them when you were kids actually come through in what they do and how they do it.

[00:08:36]

***Tacey Ann Rosolowski, PhD***

[00:08:37]

Has your close family had any effect on your ability to work at MD Anderson or any impact on your professional career? Some people have mentioned that it's a real help to them. I'm wondering if you find that.

[00:08:53]

***Robert Benjamin, MD***

[00:09:01]

I don't—I mean, I think the answer is yes, but I don't know, because it's just that's part of life, and I don't go home and say, "Oh, thank goodness I'm home, I can forget about the trials and tribulations of work," but at the same time, I guess, I don't think I would have been able to do what I do if I didn't have a close family.

[00:09:48]

***Tacey Ann Rosolowski, PhD***

[00:09:51]

Why would you say that?

[00:09:53]

***Robert Benjamin, MD***

[00:10:04]

The practice of medicine is a very emotionally—what should I say—emotionally laden profession. It's one thing about the scientific dealing with what are the answers to the medical mysteries that come up and how do you fix that scientifically, but a very big portion of it is the emotional attachment to the person who's sick and dealing with that person's problems as best you can, and that just deals with humanity. So who I am as a person is a part of what happens with me and my family and what happens with me and my patients, and they're intertwined.

[00:11:58]

***Tacey Ann Rosolowski, PhD***

[00:12:02]

Thanks for talking about that. That's interesting. I'm glad you brought up the whole family

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connection. And I have to say you have a big smile on your face when you talk about you family, so that's pretty neat. (laughs)

[00:12:13]

***Robert Benjamin, MD***

[00:12:14]

Yeah. Well, they are pretty neat.

[00:12:15]

***Tacey Ann Rosolowski, PhD***

[00:12:15]

Yeah. Would you like to shift gears now?

[00:12:19]

***Robert Benjamin, MD***

[00:12:20]

Sure.

[00:12:20]

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## **Chapter 13**

### ***Developmental Therapeutics in the 1970s: A Place of Optimism***

#### **B: MD Anderson Past;**

Story Codes

B: MD Anderson History;

B: MD Anderson Snapshot;

B: Institutional Mission and Values;

B: MD Anderson Culture;

B: Institutional Politics;

B: Controversy;

#### ***Tacey Ann Rosolowski, PhD***

[00:12:22]

Okay. Well, at the end of our last session together, we were talking about—we got you here to MD Anderson, you were talking about making that move and kind of gave a sketch of kind of what you were doing when you arrived. So I'd like to go back to that moment and ask you kind of for your impressions of the institution when you got here, what was the institution like, what was the climate like for research, what was the environment you suddenly became immersed in?

[00:12:54]

#### ***Robert Benjamin, MD***

[00:12:55]

So the environment was very much intellectually challenging and stimulating and exciting, and there was an incredible optimism among most of my colleagues that we were going to make a difference, and it was all within the framework of Developmental Therapeutics. I think the basic premise was that we didn't know enough about how to treat cancer to consider anything as the standard that couldn't be improved, and there were always challenges of how do you move the bar further. It was a relatively small department, and although we clearly had patient-care responsibilities, our purpose was to try to figure out better ways to do things. So essentially every patient was part of an experiment to try to improve things.

[00:15:29]

#### ***Tacey Ann Rosolowski, PhD***

[00:15:33]

Can I just clarify something? When you were describing the qualities of that atmosphere, intellectually challenging and this optimism, was that something very special in Developmental Therapeutics, or was that in the institution as a whole?

[00:15:48]



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***Robert Benjamin, MD***

[00:15:55]

I don't know the answer to that question because Developmental Therapeutics was pretty much an insular department. We had our own patients that we treated with all sorts of problems. I mean, certainly we interacted with surgeons when there were problems that required surgery and radiation when there were problems requiring radiation, but I don't think there was as much of the interdisciplinary approach to treating all patients as developed later, because as treatments got better, they were more able to be integrated into what might be considered mainstream.

There was another Department of Medicine. There were some interactions between the two departments, but those interactions, at least initially, were pretty antagonistic.

[00:17:41]

***Tacey Ann Rosolowski, PhD***

[00:17:44]

Why was that?

[00:17:45]

***Robert Benjamin, MD***

[00:17:48]

Unclear. That's the way people are.

[00:17:51]

***Tacey Ann Rosolowski, PhD***

[00:17:53]

Was it kind of territory wars?

[00:17:54]

***Robert Benjamin, MD***

[00:17:54]

Yeah. Yeah, I think it was. There was a Department of Medicine that was here that had been established before Developmental Therapeutics ever got here, and Developmental Therapeutics was basically brought in as a new department to concentrate on the research that would try to change what had been done in the past and make it better. I don't know because I wasn't here when that started, but I've seen similar issues in another institution where I was. It's always hard to have two different departments that do sort of the same thing not necessarily the same way, and where neither is required to get along with the other. So each one always tried to push its own agenda, and there were always considerations of, I think, some threat on the part of those in the more traditional Department of Medicine felt from the new group of "crazy people" that had come in in Developmental Therapeutics.

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## **Chapter 14**

### ***The Research Environment in Developmental Therapeutics***

#### **B: An Institutional Unit;**

Story Codes

B: Institutional Processes;

B: Institutional Mission and Values;

B: Building/Transforming the Institution;

C: Research, Care, and Education;

#### ***Robert Benjamin, MD***

[00:17:54]+

As I said, I wasn't there when it first started, so it's a little hard to tell, but by the time I got here, Developmental Therapeutics was well enough established as a department to be able to exist within itself. The whole idea was to do studies, and doing studies was easy. You simply wrote a protocol and had it blessed by the Surveillance Committee, which was the predecessor of the IRB, to say, yes, this is a reasonable experiment to be done on people, and then you did it.

It was a much simpler time to be able to carry out therapeutic research. I don't think that there were any greater risks to patients. There was never a question of was the insurance company going to pay for it, and there was never a question of a patient not being able to get in because he couldn't pay, because when MD Anderson was established, one of the ground rules was that we would provide care to any Texan with cancer, regardless of his ability to pay. That was written into the bylaws of the institution.

[00:22:50]

#### ***Tacey Ann Rosolowski, PhD***

[00:22:52]

I didn't know that. No one's ever mentioned that before.

[00:22:55]

#### ***Robert Benjamin, MD***

[00:23:00]

So we had indigent patients as well as full-paying patients, and everybody got treated the same way. Testing was a lot cheaper and a lot less effective than it is now, but at least within the constraints of what was available, we did everything we could. And I guess everyone had some area that he concentrated on in terms of research, but the only division in terms of taking care of patients was whether they had solid tumors or leukemia, and so all solid tumors, including lymphoma, were taken care of by those of us who dealt with solid tumors, and leukemia was specialized to the leukemia service. And every day we had a noon meeting that we all attended,

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and it was different things on different days, and I don't remember what they were. Dr. Freireich might. He basically ran all of those meetings.

[00:25:13]

***Tacey Ann Rosolowski, PhD***

[00:25:16]

So there was a topic for discussion or some kind of activity planned?

[00:25:20]

***Robert Benjamin, MD***

[00:25:20]

Yeah. So there was one day when we discussed patient problems, and various people from the inpatient services would say, "We have this patient with whatever problem, and we're not sure what to do. Does anybody have any good ideas?" And we would all put in our good ideas, and sometimes they would be followed and taken up, and sometimes they actually worked, and then we'd develop some program around that. But there was a tremendous amount of dialogue back and forth where people expressed their opinions in a more or less no-holds-barred type of discussion.

[00:26:39]

***Tacey Ann Rosolowski, PhD***

[00:26:44]

There's some pretty vivid memories, from the look on your face. (laughs)

[00:26:47]

***Robert Benjamin, MD***

[00:26:48]

Well, Dr. Freireich, in his youth, was a force to reckon with, and most of the time he would be highly critical of whoever came up to talk, often in a very unpleasant way, to the point where those who were easily cowed would be sometimes reduced to tears. Usually if you knew what you were doing and you stood up for what you thought and said, "This is why I said this and this is why I said that," you would be able to convince him.

Often at the end of the hour, you thought, "Gee, I've done a terrible job," and a couple hours later, after telling you how terrible you were and insulting your parentage and things like that, he would call you up on the phone and say, "Hey, you know, you gave a really good talk at noon, and I just wanted you to know that I liked that."

[00:28:39]

***Tacey Ann Rosolowski, PhD***

[00:28:39]

Was that your experience from time to time?

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[00:28:40]

***Robert Benjamin, MD***

[00:28:40]

Oh, yeah.

[00:28:40]

***Tacey Ann Rosolowski, PhD***

[00:28:41]

Oh, gosh. So it sounds like you were able to stand up well for your ideas.

[00:28:47]

***Robert Benjamin, MD***

[00:28:48]

Yeah. So you learn to defend yourself under fire.

[00:28:55]

***Tacey Ann Rosolowski, PhD***

[00:28:55]

So it was kind of a mentoring against the wall. (laughs)

[00:28:59]

***Robert Benjamin, MD***

[00:28:59]

Absolutely. It was actually terrific. But despite some of the outward antagonism within the group, there was actually remarkable cohesiveness and remarkable, as I said, optimism that we were going to make things better, and we would always be trying to figure out ways of pushing the envelope and getting better results.

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## **Chapter 15**

### ***Memories of J Freireich***

#### **B: Key MD Anderson Figures;**

Story Codes

C: Portraits;

C: Mentoring;

B: MD Anderson Impact;

A: Professional Values, Ethics, Purpose;

D: Ethics;

D: On Research and Researchers;

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

D: The History of Health Care, Patient Care;

C: Healing, Hope, and the Promise of Research;

C: Patients, Treatment, Survivors;

C: Patients;

#### ***Robert Benjamin, MD***

[00:28:59]+

And it's hard—I mean, there are so many things that I learned from Dr. Freireich after I was on the faculty, more so than what I learned from any of my teachers when I was in training.

[00:30:27]

#### ***Tacey Ann Rosolowski, PhD***

[00:30:32]

What were some of the lessons?

[00:30:32]

#### ***Robert Benjamin, MD***

[00:30:33]

Because he made you think. So, you know, it's hard to say, oh, you know, he taught me this or he—but I talk about sometimes in some of the lectures that I give some of the specific things that Dr. Freireich would say or the principles that he would make you adhere to.

[00:31:17]

#### ***Tacey Ann Rosolowski, PhD***

[00:31:19]

I'm really curious. What were some of those?

[00:31:21]

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**Robert Benjamin, MD**

[00:31:22]

So actually there's a wonderful paper. So I came here in '74. In '76, Freireich gave the Karnofsky Lecture at ASCO. The Karnofsky Lecture is probably the most prestigious lecture in medical oncology. And he talked about some of his laws. At conference, Freireich would always be saying, "Freireich's Law number seventeen is this, and Freireich's Law number thirty-two is this," and the numbers always changed, but you got a feeling for these sort of this is the word of God from above that you must believe because it's a law; it cannot be challenged. So the first six laws are in this Karnofsky Lecture, and they're published, so now those numbers are fixed because they're etched in stone.

[00:32:44]

**Tacey Ann Rosolowski, PhD**

[00:32:45]

And the year of that lecture again? I'm sorry, I missed it.

[00:32:46]

**Robert Benjamin, MD**

[00:32:47]

Well, the year was 1976, but the publication didn't occur until much later, and it was the first year of *Cancer Clinical Research*, and I'll send you—I have the reference for it.

[00:33:03]

**Tacey Ann Rosolowski, PhD**

[00:33:03]

Oh, I'd love to. That would be great. Yeah.

[00:33:04]

**Robert Benjamin, MD**

[00:33:05]

It's a wonderful thing. So he sort of speaks from the point of view of a clinical investigator, who is primarily clinical, about the rigidity of statistical analysis. So, for example, he talks about the P-less-than-.05 as being the magic temple that we all pay homage to, and he says, "You know, if I had something that had a 90 percent chance of being better than something else, I'd probably want to take that rather than the other. Why does it have to be 95 percent better?"

So there are a number of principles. What's one of the other ones? His modification of the Hippocratic Oath, which is, "First do no harm," and his modification is, "First do what is necessary," because anyone can do no harm. That doesn't require a medical license or any training at all. You can just sit back and watch people die. You have to do what's needed to make the patient better. It's the sense of urgency at taking care of the patient who's here today rather than just worrying about the one who's going to be here tomorrow, because you have to

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figure out what's there and what's needed. One of the things that I'm sure—I mean, you've interviewed Dr. Freireich, right?

[00:36:19]

***Tacey Ann Rosolowski, PhD***

[00:36:20]

Mm-hmm, yeah.

[00:36:20]

[Redacted]

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## **Chapter 16**

### ***Research Projects at MD Anderson: A Shift from Clinical Pharmacology to Sarcoma***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

C: Evolution of Career;

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

D: The History of Health Care, Patient Care;

***Tacey Ann Rosolowski, PhD***

[00:39:21]

So when you arrived, tell me about how your research evolved.

[00:39:27]

***Robert Benjamin, MD***

[00:39:28]

So I started off, in the first couple of years that I was here, I worked almost exclusively in the laboratory developing ways of studying clinical pharmacology of new drugs in Developmental Therapeutics, where there was a big program for doing clinical trials of new drugs. There were some basic pharmacologists who knew how to run assays for drugs and measure drug levels, but they didn't really interact closely with the clinical people, and my job when we started was to say, "Okay, if we have a new drug to study, let's figure out ways of measuring what happens to these drugs in patients."

[00:40:34]

***Tacey Ann Rosolowski, PhD***

[00:40:37]

Now, was clinical pharmacology—I'm making an assumption here. I mean, I'm assuming that it was pretty much a nascent field, is that—

[00:40:44]

***Robert Benjamin, MD***

[00:40:45]

Oh, yes, yeah, very, very much. It was. There were very few studies of the clinical pharmacology of antineoplastic agents.

[00:41:02]

***Tacey Ann Rosolowski, PhD***

[00:41:03]

So it was not merely at MD Anderson, you know, that were sort of figuring it out.



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[00:41:07]

**Robert Benjamin, MD**

[00:41:07]

No.

[00:41:08]

**Tacey Ann Rosolowski, PhD**

[00:41:08]

It was just nationwide, international [unclear].

[00:41:10]

**Robert Benjamin, MD**

[00:41:10]

Yeah. It was just sort of beginning to start, I mean, and that's what I had done when I was at NIH, so I tried to translate that and bring that here, and we were able to get some grants to help develop that field as we started and worked it out within the framework of the new drug-development program. So for the first, I would say, two years, that's mostly what I did.

Then I guess sort of starting my second year here, which was around the time that Jeff Gottlieb, who had recruited me to come here, died, his clinical areas ended up being divided up among a number of people, and within Developmental Therapeutics I inherited sarcoma. It wasn't that I had had a special interest in sarcoma before. I'd seen a number of the patients with sarcomas when we did the original clinical and clinical pharmacological studies of Adriamycin, but I also saw patients with lymphoma and breast cancer and all sorts of other things, and initially within Developmental Therapeutics, as I said, we all saw all of the solid tumors, and I actually even did some studies, some pharmacology studies in leukemia, because one of the drugs I brought in was a drug which was more likely to be effective in leukemia than in solid tumors.

[00:43:47]

**Tacey Ann Rosolowski, PhD**

[00:43:48]

I just want to observe, you know, it seemed like it was a really special environment to have everybody kind of exposing themselves to this wide variety.

[00:43:56]

**Robert Benjamin, MD**

[00:43:56]

Oh, yes.

[00:43:57]

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***Tacey Ann Rosolowski, PhD***

[00:43:57]

It seemed like it gave you a lot of practical and creative flexibility in dealing with cancer research.

[00:44:03]

***Robert Benjamin, MD***

[00:44:03]

Yeah, it did. So what we did, I mean, we were all general oncologists at the time, but clearly we needed people to focus on the different areas so that they could develop protocols and figure out new strategies to deal with the individual tumors. So it's almost sort of the one that was left over was sarcomas. Nobody else had a particular interest in it. I was very junior at the time, and I had just come a year before. But I said, "Yeah, I like sarcomas. I'll do that."

Over the next couple of years, the amount of clinical responsibility that the faculty, as opposed to the fellows, had started to rise, and so we got more involved in patient care, but it was still all within the framework of, okay, what's going to be the next protocol? What is the next thing that we do? And that's the way things always developed. So as I began to focus more and more on sarcomas, I ended up focusing less and less on clinical pharmacology, and as the patient-care demands went up, I ended up spending less time in the lab and basically eventually just gave the laboratory aspect of it up. There were other people who were interested in doing the laboratory things. I was helpful in terms of interacting with the patients on those studies, but mostly working in more patient-directed research.

[00:46:47]

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## **Chapter 17**

### ***Studies of Adriamycin and Cardiac Toxicity***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

C: Discovery and Success;

C: Patients, Treatments, Survivors;

***Tacey Ann Rosolowski, PhD***

[00:46:48]

So tell me about some of those first projects, the patient-directed projects.

[00:46:51]

***Robert Benjamin, MD***

[00:46:54]

Hard to remember. So I guess the first thing, again, challenge from Dr. Freireich, was the studies on Adriamycin cardiac toxicity.

[00:47:11]

***Tacey Ann Rosolowski, PhD***

[00:47:11]

We talked a bit about that last time.

[00:47:14]

***Robert Benjamin, MD***

[00:47:14]

Yeah. So that I understood the pharmacology of Adriamycin pretty well, probably better than just about anybody else, having been involved in the actual initial studies. So Freireich said one day, "Isn't there something we can do about cardiac toxicity? Why don't you go and study that."

And around that time, I'd heard a presentation from one of the pathologists at Stanford, Margaret Billingham, who had done some studies on the pathology of Adriamycin cardiac toxicity using cardiac biopsies, and they had used cardiac biopsies at Stanford in assessing rejection from cardiac transplants, so they'd developed the techniques for how to do it pretty easily, and I realized that if we could do these cardiac biopsies early on with patients getting Adriamycin, we'd have a much better idea of what was actually happening to the heart and, therefore, have a better way of figuring out which manipulations would modify it.

So we developed a series of protocols looking at different strategies of modifying Adriamycin cardiac toxicity. We looked at weekly administration, because some people had said that that's less cardiac-toxic than standard every-three-week administration, and we saw a little bit of

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difference, not a major one, but enough to make us think that, okay, what are the differences between weekly Adriamycin and standard every-three-week Adriamycin. And the major difference was the peak level of the drug and how long that peak was present. So the basic principle of pharmacology is if you want to reduce a peak, you just give the drug over a longer period of time. So we said why not give the drug over several days by continuous infusion rather than giving it all at one, and we were lucky that that coincided with the time when we developed—or when others had developed the use of silicone central venous catheters. So we started implanting central venous catheters in patients and giving continuous infusion Adriamycin, and we were able to do that on an outpatient basis, because there were portable infusion pumps that could be used, so we didn't have to keep people in the hospital and do it. [00:51:22]

***Tacey Ann Rosolowski, PhD***

[00:51:23]

Wow. It sounds like a win-win.

[00:51:24]

***Robert Benjamin, MD***

[00:51:25]

Yeah. But so we were able to look at what happens when you get continuous infusion Adriamycin.

[00:51:33]

***Tacey Ann Rosolowski, PhD***

[00:51:33]

What year was this? Just approximately. Was it into the eighties or was it still late seventies?

[00:51:41]

***Robert Benjamin, MD***

[00:51:41]

Seventies, late seventies. I'd have to go back and look at the data on the first problem.

[00:51:49]

***Tacey Ann Rosolowski, PhD***

[00:51:50]

Sure, no problem. So what were the results? I mean, it's sounding like it's really promising.

[00:51:54]

***Robert Benjamin, MD***

[00:51:54]

Yeah. So we found that we could actually markedly reduce the incidents of cardiac toxicity by continuous infusion, so we published those results and then had developed, based on that, a

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series of other studies using the continuous infusion of Adriamycin. So that's been used here since the seventies and only now is getting supplanted by—there's a cardioprotective drug that can be given that also has a marked effect, possibly even more marked than the continuous infusion. But that was my major area of research, drug-related research during my early years.  
[00:53:03]

***Tacey Ann Rosolowski, PhD***

[00:53:09]

Were there any special lessons that you learned from doing that study that you kind of carried to other studies? (Benjamin sighs.) Oh-oh. (laughs)

[00:53:18]

***Robert Benjamin, MD***

[00:53:19]

I don't think so. I think the way we approached the study is just based on sound research training in terms of what's the goal of the study. So what we did was we measured the Adriamycin levels and showed that as predicted the peak would go down, and it did that. We used the cardiac biopsy endpoint as a way of getting early information as to what was happening to the heart before the heart failed. Cardiac functional measurements were just developing at that time, and they were okay but really not very precise, and you only saw the functional changes after too much damage had been done to the heart, and so it wasn't safe. Now we have better functional tools, so I think we're a little bit better prepared to do that.

[00:55:00]

***Tacey Ann Rosolowski, PhD***

[00:55:02]

I mean, in case you were wondering, I didn't have any agenda in asking that question. It was more that, you know, you were saying this kind of represented a new, slightly new area of activity, so I wondered if there were any kind of light-bulb, eureka moments there.

[00:55:15]

***Robert Benjamin, MD***

[00:55:15]

So we did studies with some of the other anthracyclines similar to Adriamycin, to sort of assess the cardiac toxicity using the same strategy, and the biopsies were things—so at Stanford, these were done by the cardiologists. Well, here, the cardiology department had no interventional cardiologists. They did only echocardiograms until Dr. Ewer came, and he had at least been trained in interventional cardiology, so he knew how to do cardiac catheterizations, and he was interested in participating in these studies as well, so he got involved.

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## **Chapter 18**

### ***Studies Relating to Sarcoma Treatment***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

C: Discovery and Success;

B: MD Anderson Impact;

A: Overview;

#### ***Robert Benjamin, MD***

[00:55:15]+

But we didn't have the kind of setup that a big interventional cardiology department would have in terms of trying to do these things, but we were able to, with the great assistance of Sid Wallace [oral history interview] in Interventional Radiology, who was known as somebody who would biopsy anything, he and Dr. Ewer and I learned how to do cardiac biopsies from the cardiologists at Stanford, had them come here, show us how to do it, and we learned how to do it. We started off doing this, and we were all there with the patient and figured out ways of doing this. Eventually Ewer probably ended up doing more than anybody, because he got really slick at it. But we managed to do studies where we did hard, I don't know, several hundred cardiac biopsies on patients with Adriamycin.

[00:57:48]

#### ***Tacey Ann Rosolowski, PhD***

[00:57:53]

Did you have any other studies that resulted in kind of the remarkable results that you found with the continuous-pump studies?

[00:58:03]

#### ***Robert Benjamin, MD***

[00:58:05]

So I don't think anything early on was quite that good at changing how we did things. We developed, in treating patients with osteosarcoma, the intra-arterial administration of Cisplatin, again using interventional radiology to place arterial catheters going to the areas of the tumors and delivering drug so that the primary tumor would get effectively a bigger dose of treatment than you could get by just systemic administration and still getting full systemic doses. And again, we measured the platinum levels to prove that we could do that. And for a while, I think that really was the cornerstone of at least the treatment here of osteosarcoma and at a couple of other institutions, or at least one major other institution. But since the primary goal in the treatment of osteosarcoma is not so much what effect you have on the primary tumor but what effect you have on the microscopic pulmonary metastases, those are no different if you give the

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drug intra-arterially or intravenously. So if you look down the road, intra-arterial administration wasn't that much more helpful than intravenous administration.

[01:00:33]

***Tacey Ann Rosolowski, PhD***

[01:00:34]

Can I ask—I mean, this is, I'm sure, a very naïve question, but why is that the goal of osteosarcoma treatment?

[01:00:40]

***Robert Benjamin, MD***

[01:00:41]

Because you die of lung metastases.

[01:00:43]

***Tacey Ann Rosolowski, PhD***

[01:00:43]

Okay.

[01:00:43]

***Robert Benjamin, MD***

[01:00:44]

Anybody can chop off a leg.

[01:00:46]

***Tacey Ann Rosolowski, PhD***

[01:00:46]

Okay.

[01:00:46]

***Robert Benjamin, MD***

[01:00:49]

But the better the effect on the primary tumor, the less surgery is required to effectively remove the tumor, so there actually are advantages in doing the intra-arterial administration. I still do it, but I think I'm the only one of my group that still hangs onto that, because there are other—it's just it's more expensive, more cumbersome, lots of other associated issues.

[01:01:30]

***Tacey Ann Rosolowski, PhD***

[01:01:31]

Interesting. Okay. Now, my conversation—

[01:01:36]

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***Robert Benjamin, MD***

[01:01:36]

But sometimes—

[01:01:36]

***Tacey Ann Rosolowski, PhD***

[01:01:36]

I'm just remembering my conversation with Dr. Kleinerman and the inhaler treatments that she uses and stuff, so I'm putting that together.

[01:01:45]

***Robert Benjamin, MD***

[01:01:45]

Yeah, it's the same sort of thing, but it's the lung that's the [unclear] step.

[01:01:53]



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## **Chapter 19**

### ***Anthracyclines and Liver Function***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

#### ***Tacey Ann Rosolowski, PhD***

[01:01:53]

Yeah, okay. So I had on your list on the metabolism of anthracyclines, I also had a note here the study of how they influence liver function as well as cardiac function. Is that another dimension of what you did?

[01:02:13]

#### ***Robert Benjamin, MD***

[01:02:13]

So it's not how the anthracyclines influenced liver function; it's how abnormalities of liver function influence the toxicity of the anthracyclines. And that's based on the very original studies that I did when I was still in Baltimore, where we were able to demonstrate that patients with marked abnormalities of liver function had markedly elevated levels of anthracyclines, given the same dose, and that's because hepatic excretion is the primary mode of elimination. There's very little urinary excretion. So if the liver can't get rid of the drug that you give, it all hangs around, the levels go up, the toxicity goes up, the effects go up, but the patient may well not survive the treatment.

So the simple answer is you shouldn't put people with abnormal liver function on anthracyclines or on chemotherapy in general because, you know, we don't know how they're going to do. But the alternative strategy is so you're just going to let them die? And in fact, we were able to show that if you give a quarter dose of Adriamycin to somebody with markedly abnormal liver function, you get the same levels that you get when you give a whole dose to a normal person. And that's one of the things that clinical pharmacology can do and can be very effective in doing. And so figure out strategies not to simply eliminate patients from treatment, but to figure out how to treat them effectively. So, again, it's very easy to treat effectively if you just watch out for the bilirubin level, basically.

[01:04:59]

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## **Chapter 20**

### ***The Controversy over Randomized Trials***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

B: Controversy;

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

D: The History of Health Care, Patient Care;

C: Patients, Treatment, Survivors;

D: Ethics;

D: On Research and Researchers;

A: Professional Values, Ethics, Purpose;

A: Critical Perspectives;

***Tacey Ann Rosolowski, PhD***

[01:05:01]

So this may be a loaded question, but would that study—what would be different about doing that study now, you know, in terms of getting approval? (laughs)

[01:05:12]

***Robert Benjamin, MD***

[01:05:13]

Okay. So, first of all, we would not have learned that in the initial study, because the initial study would have excluded all patients with significant abnormalities of liver and kidney function, because everybody protocol today that's written says, you know, everything has to be within certain parameters, even if they're irrelevant. But the basic boilerplate for every protocol has that information in it, so we always copy it. We always do it that way.

We could have written a specific separate protocol to see what happens to people who have abnormal liver function, and there have been some protocols like that written where pharmacology of drugs in people with abnormal end organ function has been studied, and the ones that I can think of were actually written by a physician who became sort of probably the preeminent clinical pharmacologist of antineoplastic drugs, who was a student working in the laboratory where I was doing the Adriamycin studies.

[01:07:03]

***Tacey Ann Rosolowski, PhD***

[01:07:04]

His name?

[01:07:05]

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***Robert Benjamin, MD***

[01:07:05]

Merrill Egorin.

[01:07:06]

***Tacey Ann Rosolowski, PhD***

[01:07:06]

Marilee Gorin [phonetic]?

[01:07:08]

***Robert Benjamin, MD***

[01:07:08]

Merrill.

[01:07:09]

***Tacey Ann Rosolowski, PhD***

[01:07:09]

Oh, Merrill. And then—

[01:07:10]

***Robert Benjamin, MD***

[01:07:12]

\$\$\$Egorin, E-g-o-r-i-n. He, unfortunately, died a couple of years ago of myeloma. But he's done some very interesting studies of the effects of abnormal organ function on the pharmacology of drugs, where the pharmacology had already been known in patients with normal organ function. When we did it, it was just treated everybody, and we treated people that we probably shouldn't have, because they got very sick. But because we were measuring the blood levels, we knew exactly why they were getting sick, and we were then able to compensate for that pretty quickly. So that's in my original clinical pharmacology paper on Adriamycin.

[01:08:19]

***Tacey Ann Rosolowski, PhD***

[01:08:22]

And I'm kind of seeing by some of the work done in Developmental Therapeutics was controversial, because this whole—I mean, these drugs are incredibly powerful, and you administered them.

[01:08:33]

***Robert Benjamin, MD***

[01:08:33]

Oh, yeah.

[01:08:33]

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***Tacey Ann Rosolowski, PhD***

[01:08:34]

People get sick. Ostensibly they're making the patient worse. So I can see where this was a large subject for discussion in the institution at the time.

[01:08:43]

***Robert Benjamin, MD***

[01:08:44]

Yeah. We sometimes made sick people sicker.

[01:08:54]

***Tacey Ann Rosolowski, PhD***

[01:08:56]

How did you respond to any comments or those arguments against what the kind of philosophy of Developmental Therapeutics?

[01:09:05]

***Robert Benjamin, MD***

[01:09:07]

So, I mean, it's what's the alternative? Does a patient really care whether he dies of drug toxicity when you're trying to make him better versus whether he dies of cancer because you tell him there's nothing you can do? Most patients, if they're not too sick to begin with and just ready to die, will tell you, "Well, isn't there something you can try for me?" As I say, patients don't want to die. They don't not want to die of drug toxicity; they don't want to die, period. If there's any chance that you can make them better, they want to take that chance. We see that all the time with people who come here.

The problem now is now we're much better at treating cancer than we were when I started doing it, but at the same time, we're also much more limited. The only way you got treated when we started off was to be on some sort of a study, because there was no established treatment. And in Developmental Therapeutics we argued that in most cases, having a control group was unethical because we knew how bad those results were, and it wasn't a question of was the new treatment worse than control. That didn't matter. It had to be better than control. You had to have something that offered the patient some chance of doing better than on the minimally effective therapies that were there at the time.

But we got criticized for that because we would make a leap of faith that says if end results of the treatment are better than we expected, that that was due to the treatment, and people would always say, "Well, how do you know it wasn't just due to the selection that you used and the criteria and whatever?" And that's very hard to deal with. I mean, the argument is scientifically sound. It's just there's sort of an absolute minimum acceptable status for each patient, and if the

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patient is about to die and you don't do anything to show that they're going to die, that's not something that any of us would want to be put into the position of having, and sometimes you run out of things to do. Now we don't have all of those studies that we can put patients on because the studies are much more restrictive. Then what do you do? Do you do something you know doesn't work just because the patient says, "I want treatment"? I think the answer is no, you can't do that. But that's—

[01:13:45]

***Tacey Ann Rosolowski, PhD***

[01:13:46]

Interesting.

[01:13:48]

***Robert Benjamin, MD***

[01:13:50]

There are times that even I give up, but not often.

[01:13:55]

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## **Chapter 21**

### ***Drug Treatments and Multi-disciplinary Treatments for Sarcoma; A View on the Moon Shots Program***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

B: Multi-disciplinary Approaches;

***Tacey Ann Rosolowski, PhD***

[01:13:57]

(laughs) I'm looking at the list of some of the other things that you worked on, and these I kind of just gleaned from background research that Javier at the Archives sent me. So I can go through this or you could tell me what you recall as being kind of the next significant thing you worked on after the toxicity studies.

[01:14:22]

***Robert Benjamin, MD***

[01:14:24]

So I think after the anthracycline studies and the cardiac toxicity, my focus got more and more on sarcomas, and we continued to study a number of new drugs in the treatment of sarcomas, usually with very little success after the initial Adriamycin-based combinations. The initial therapies really all came from Jeff Gottlieb, minor modifications within them, so our standard regimen for soft-tissue sarcomas was either ADIC, Adriamycin and Dacarbazine, that used to be known as DIC and is commercially now called DTIC, but ADIC or CYADIC, adding Cyclophosphamide to that regimen, and that became the backbone of our sarcoma chemotherapy. We used those regimens for soft-tissue sarcomas with the multidisciplinary interaction with surgery, so often doing both chemotherapy and surgery for patients, even with metastatic disease.

[01:16:47]

***Tacey Ann Rosolowski, PhD***

[01:16:47]

Were these chemos that were given prior to surgery?

[01:16:53]

***Robert Benjamin, MD***

[01:16:54]

Yes. Often even in patients with metastatic disease, because for soft-tissue sarcomas, for the

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majority of soft-tissue sarcomas, like osteosarcoma, the lung is the primary target organ and they don't tend to spread everywhere in the body. So, often if you could limit the number of pulmonary metastases and the growth rate of the pulmonary metastases, you could add on surgery to remove those and help to demonstrate that patients could actually live sometimes for a very long time after removal of metastatic disease.

[01:17:57]

***Tacey Ann Rosolowski, PhD***

[01:17:58]

I was just curious. I mean, I'm sorry if I'm derailing you. But suddenly we're involving surgeons in this as well, and I'm curious, like, was there a process by which you were able to identify the surgeons who were interested in taking part in those multidisciplinary treatments? You know, what was that all about?

[01:18:19]

***Robert Benjamin, MD***

[01:18:21]

So as the Developmental Therapeutics era ended and medicine became much more subdivided into disease groups, it was actually much easier to get some of the interdisciplinary interactions, because the surgeons who dealt with sarcomas knew the medical oncologists who dealt with sarcomas, and we all found that we needed each other's help. So multidisciplinary therapy basically is based on the fact that no one group is usually successful in treating these patients. So the surgeons would find that, you know, they would do all of their therapy on their patients only to find that the majority of them would wind up with pulmonary metastases. We would find that even if we got a good response to chemotherapy, we could rarely get everything to go away, and we needed to enlist the aid of the thoracic surgeons, who sometimes took some of these out by themselves. So we were just able to get better interdisciplinary therapy going.

And I think part of the interdisciplinary therapy occurred when the surgeons sent us some patients with sort of extreme problems with localized disease, and they just didn't know what to do, so they sent them on to Medicine. Every once in a while, we would treat them and get a good result and have them go back to the surgeon and say, "Well, now can you do something?" I mean, there were a few patients who really tilted the balance in that sort of therapy.

When we started using intra-arterial Cisplatin, we got some profound local effects, especially with primary bone tumors. So there was one patient who had come to us who had a tumor of her pelvis, of her pubic bone, and she'd been treated outside with radiation and some chemotherapy, and was getting worse, came here, and went to the surgeons for radical surgical treatment. And the surgeons said, "We can't do a hemipelvectomy on this woman because her tumor is too extensive and we won't be able to get around it." So they sent her to us, and we treated her with intra-arterial Cisplatin, and she had one of the most dramatic responses I've ever seen. It's a story I don't forget, because we treated her with intra-arterial platinum and had her go back

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home, and she was set to come back in three weeks for another treatment. About a week and a half after she got her treatment, she called up and said, “I have a new mass. I’m coming back.” And I tried to explain to her that it didn’t help her to come back because I couldn’t treat her yet until she recovered from the toxicity of the previous therapy, but she was somewhat anxious, so she appeared on our doorstep the next day.

The new mass that she had was her iliac crest, that she hadn’t been able to feel for months because she had so much edema around it from her tumor, and the tumor had, with one treatment, shrunk more than in half, and with a couple more treatments basically disappeared, except for whatever was left in the bone.

So I sent her back to the surgeon and said, “Do you think you can cut this out now?”

And he said, “Well, yeah, I think I can cut this out, and I don’t even think I have to do a hemipelvectomy. I can just remove her pubis anteriorly, and we should be able to get around this whole tumor.” So he cut out the bone, and the pathologist couldn’t find any tumor in it.

So the surgeons thought that was something that we did all the time, and we tried not to discourage that misconception. So we started being able to interact with them, where we would try on patients with primary tumors to treat them preoperatively with chemotherapy and then do surgery. So it was relatively easy to convince the surgeons who dealt with bone tumors to do that, and the therapy for bone tumors was better.

But we also eventually got the surgeons dealing with soft-tissue sarcomas to also accept the concept of neoadjuvant chemotherapy. We’d been doing that here for quite a long time, and as the systemic therapy improves, the likelihood of benefit from the multidisciplinary therapy improves. And, of course, it’s all been aided by advances in imaging, where we can actually see what we’re doing now much better than we could in the past. So we slowly developed multidisciplinary approaches that occasionally result in better-than-expected outcomes. And, again, this is not something that we achieve all the time or even most of the time, but the fact that we can achieve it sometime is remarkable compared with where we were before.

[01:26:59]

***Tacey Ann Rosolowski, PhD***

[01:27:07]

This is kind of a side question, not doing the chronology of your research, but just the way you framed that statement, “It’s not something we can achieve all the time, but we can achieve it sometime,” that just kind of—

[01:27:26]

***Robert Benjamin, MD***

[01:27:26]



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And part of that goes back to Dr. Freireich's approach, which is if you don't try, you never succeed.

[01:27:38]

***Tacey Ann Rosolowski, PhD***

[01:27:38]

I'm wondering, too, how it—you know, working from that perspective, what is your view of, like, the Moon Shots program and the whole low-hanging fruit? I value your commentary on that.

[01:28:00]

***Robert Benjamin, MD***

[01:28:03]

Um—

[01:28:05]

***Tacey Ann Rosolowski, PhD***

[01:28:05]

We can also turn off the recorder briefly, if you'd like. (laughter)

[01:28:07]

***Robert Benjamin, MD***

[01:28:19]

I think the basic concept is a good one. I think the low-hanging fruit is more likely to be bird-pecked.

[01:28:45]

***Tacey Ann Rosolowski, PhD***

[01:28:46]

(laughs) And what do you mean by that?

[01:28:50]

***Robert Benjamin, MD***

[01:28:51]

So, I mean, I think that some of the approaches, although highly sophisticated in terms of what's being done, are relatively simplistic in terms of the concept that if you just take care of this area of low-hanging fruit, we will address the problem. I think the cancers maybe a lot smarter than that. But I'm not the right person to judge that sort of an issue. I mean, I don't have sufficient detailed knowledge in the areas where the particular studies are being done to be able to say whether they will or won't succeed. I think they're for sure worth exploring. I think they may be more effective in some areas than in others.

[01:30:18]

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## **Chapter 22**

### ***Studies of Gastro-Intestinal Stromal Tumor***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

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

D: The History of Health Care, Patient Care;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

#### ***Tacey Ann Rosolowski, PhD***

[01:30:20]

I was just curious because it seems like, I mean, it's a very different model for conducting research than the institution has seen before, and, you know, I mean, I'm not asking for, you know, harpoons or anything. (laughs) I'm just, like, what's an evaluation of it, and also how, you know, there's what's evolving is publicly a slightly different research culture now that that model has been established.

[01:30:45]

#### ***Robert Benjamin, MD***

[01:30:52]

I think eventually the much more detailed knowledge of cancer biology is going to get us to much more sophisticated strategies for treatment than we currently have, but I don't know that it's likely to be quite as straightforward as proposed. But I may be totally wrong in that. I mean, within the area of sarcomas, the place where the greatest advances have been made during my career have been in the treatment of gastrointestinal stromal tumors, and because those are tumors where initially those of us who were smart clinicians paid attention to what Jeff Gottlieb said when he analyzed some of the original studies of Adriamycin and Dacarbazine treating soft-tissue sarcomas and he went back and said, you know, it's funny that the site of the primary tumor has marked influence on the results of treating metastatic tumors, and the example he gave was that tumors that arose in the gastrointestinal tract responded much less well than tumors that arose in the genitourinary tract. And the pathologists called them all leiomyosarcomas. So this is 1975 that he said there's got to be something different about these tumors even though they look the same. So it took another twenty years before the concept of GIST was recognized.

[01:33:49]

#### ***Tacey Ann Rosolowski, PhD***

[01:33:50]

The concept of—

[01:33:51]

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***Robert Benjamin, MD***

[01:33:51]

GIST, gastrointestinal stromal tumor. And that, in fact, the reasons why those GI leiomyosarcomas didn't respond to therapy were, in fact, that they weren't leiomyosarcomas at all, they were GISTs, and they had a totally different biology from all other sarcomas. But interestingly, that biology was driven almost exclusively by mutations in the KIT gene, and that KIT mutation just happened to be a mutation that could be targeted by the tyrosine kinase inhibitor Gleevec that was being used in the treatment of chronic myelogenous leukemia. And when we started to use Gleevec for GI stromal tumors—and we didn't initiate this, but several other people had the same ideas around the same times, and somebody else got there first, but we saw that these tumors that had never responded to anything all of a sudden were melting away with a simple nontoxic pill. So that's an example of where the low-hanging fruit paid off. But it's also been said that most cancers are not as stupid as GIST. So when they have abnormalities in a particular metabolic pathway, if you block that pathway, they quickly find an alternative pathway that they can use just as effectively that you haven't blocked. And I think the majority of cancers fall into that model rather than into the GIST model.

[01:36:37]

***Tacey Ann Rosolowski, PhD***

[01:36:42]

You know, it's an interesting terrain, you know, of perspectives on the problem, and because as I'm listening to you, I'm thinking, wow, you know, is there a difference between the perspective that you bring because you're a clinician versus someone who operates more predominantly out of a laboratory scenario, at any rate, and how that experience makes you frame the problem. And now I'm wondering, well, you've got a clinician, you've got someone who's a basic scientist, and you have people who believe in personalized therapy, and the kind of constant ability of cancer to morph itself, that brings an entirely different perspective. So I think the argument of how you best approach a problem can be very complicated indeed, you know. No one answer.

[01:37:41]

***Robert Benjamin, MD***

[01:37:42]

No, no one answer. But if we can develop good, relatively nontoxic treatments that will effectively inhibit the majority of pathways that end up becoming dominant in different cancers and figure out ways of putting them together, then perhaps the personalized approach will work very well, if we can just say, okay, this is a cancer that has this, this, and this abnormalities, or it has this abnormality, and we know whenever this abnormality is blocked, then we get this next one, come in with a poly-targeted approach to managing it, that'll be fine. But the practicalities from the point of view of the clinician is that all drugs have toxicity, and putting toxic drugs together is not always as easy as it looks. So, I mean, I think there's going to be plenty of opportunity to develop things. I have no question that cancer treatment twenty years from now is

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not going to look like cancer treatment today. But I think there's some areas, some parts of it, where it may.

[01:39:39]

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## **Chapter 23**

### ***Limb Salvage; an Informal Connection with an Italian Institute***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

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

D: The History of Health Care, Patient Care;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

B: Beyond the Institution;

***Tacey Ann Rosolowski, PhD***

[01:39:41]

That's interesting. I'm looking at the work that you've done with the limb-salvage regimens and also with prostheses, and I'm wondering how that work evolved from the work that you've described so far.

[01:40:03]

***Robert Benjamin, MD***

[01:40:03]

So that's this osteosarcoma model where you say let's optimize the chemotherapy treatment for the osteosarcoma, and if we can get enough of an effect on the tumor that the tumor can be removed in an oncologically sound surgical fashion without requiring taking the entire leg off—

[01:40:43]

***Tacey Ann Rosolowski, PhD***

[01:40:43]

Mm-hmm, or the pelvis.

[01:40:46]

***Robert Benjamin, MD***

[01:40:46]

Or pelvis.

[01:40:46]

***Tacey Ann Rosolowski, PhD***

[01:40:46]

Yeah. (laughs)

[01:40:48]

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***Robert Benjamin, MD***

[01:40:48]

—then that’s the model for doing some sort of limb salvage. I mean, the work with the prostheses is the work of the orthopedic surgeons, not mine, but we can help facilitate that.

When I came here, they were just beginning to do limb-salvage surgery for soft-tissue sarcomas, and there the effective additional treatment that was required was radiation, but we can do that with chemotherapy as well, and/or in addition to radiation. As I said, the primary target organ of the chemotherapy is really the pulmonary metastases that we don’t see, but if in helping to destroy those pulmonary metastases we can also destroy or eliminate most of the primary tumor, then the surgeon can get away with less extensive surgery.

And for osteosarcoma, the group at the Rizzoli Institute in Bologna has done the best study and the best analysis of that, the effects of the results of the chemotherapy on the ability to do limb salvage in terms of what kind of margin of resection do you need, and I like the Rizzoli group particularly. Number one, they have tremendous experience. They see essentially all of the osteosarcomas in all of Italy in one institution. Second of all, they learned how to do the chemotherapy from us, because they spent a few months here visiting, and they’ve gone way beyond what we had done what we taught them, but they basically followed some of the same principles.

[01:43:24]

***Tacey Ann Rosolowski, PhD***

[01:43:24]

When was this relationship established?

[01:43:26]

***Robert Benjamin, MD***

[01:43:26]

Oh, probably early eighties.

[01:43:34]

***Tacey Ann Rosolowski, PhD***

[01:43:38]

How did you make contact with them? How was that established?

[01:43:42]

***Robert Benjamin, MD***

[01:43:43]

I made contact with them by their showing up here on my doorstep. I think the arrangements were all made through Dr. Wallace in Interventional Radiology, actually. They came to visit him

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to see how we did the intra-arterial chemotherapy. But we have continued just sort of interchange with them over the years.

They did a really nice study where they showed that if you had a good, effective chemotherapy, defined as 90 percent tumor necrosis or better in osteosarcoma, then you could get away with a marginal resection. So the surgeon didn't have to take as much normal tissue around the tumor because most of the tumor was dead, and it was less likely to occur, whereas if you had a bad response to the chemotherapy, if you didn't take a radical margin, the incidence of local recurrence was very high. So it's a nice example of the fact that the local effect actually does make a difference in terms of what needs to be done surgically. If you can get away with a wide resection regardless of the response, then it doesn't matter, but if you can't get a wide resection and you know the response to chemotherapy is not very good, then you're probably better off doing the amputation, because local recurrence causes more problems than just initial amputation.

[01:46:06]

***Tacey Ann Rosolowski, PhD***

[01:46:12]

Have there been ways—I mean, as the relationship with the Rizzoli group has continued, because that's a long time, you know, it's a twenty-year relationship, but what has that brought to MD Anderson?

[01:46:24]

***Robert Benjamin, MD***

[01:46:27]

Oh, it's not a continued interaction. I mean, we haven't been collaborating on projects over a twenty-year period. We just set them off in a direction they did things similar to what we were doing, so each of our studies sort of complemented each other.

But the sarcoma community—sarcomas are rare tumors. Sarcoma community in the world is very small, so we all know each other, and at one point we formed a society called the Connective Tissue Oncology Society, which is sort of a platform for continued global interaction among all of the people interested in sarcomas.

[01:47:33]

***Tacey Ann Rosolowski, PhD***

[01:47:34]

When you say “we,” were you one of the people that helped plan that?

[01:47:37]

***Robert Benjamin, MD***

[01:47:37]

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I was one of the people that helped. It wasn't my idea. The person who came up with the idea was Herman Suit, who was a radiation oncologist who was here initially and then went to Harvard, and most of his career was spent at Harvard, and he's been considered one of the pioneers in sarcoma radiation and new developments in radiation. But he's the person who basically initiated the programs allowing for limb-salvage surgery here, working with Dr. Martin [phonetic] in Surgery.

[01:48:25]

***Tacey Ann Rosolowski, PhD***

[01:48:27]

I'm sorry, his last name is Suit?

[01:48:29]

***Robert Benjamin, MD***

[01:48:29]

Suit, S-u-i-t.

[01:48:31]

***Tacey Ann Rosolowski, PhD***

[01:48:31]

Okay. Thank you.

So your research in the limb-salvage area was pretty much it's worked with the chemotherapy dimension and then collaborating with surgeons to kind of see how that would support their decisions on exactly what to amputate.

[01:48:55]

***Robert Benjamin, MD***

[01:48:56]

Correct. Yeah. And to amputate less and less.

[01:49:02]

***Tacey Ann Rosolowski, PhD***

[01:49:02]

Yeah. (laughs)

[01:49:03]

***Robert Benjamin, MD***

[01:49:05]

Surgeons don't like to do amputations.

[01:49:07]



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***Tacey Ann Rosolowski, PhD***

[01:49:08]

Yeah, I can't imagine.

[01:49:09]

***Robert Benjamin, MD***

[01:49:09]

They pretty much prefer to be able to get away with limb salvage if they can. So it's an easy decision to make.

[01:49:20]

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## **Chapter 24**

### ***Assessment of Response to Therapy***

#### **A: The Researcher;**

Story Codes

A: The Researcher;

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

D: The History of Health Care, Patient Care;

A: Overview;

A: Definitions, Explanations, Translations;

C: Discovery and Success;

#### ***Tacey Ann Rosolowski, PhD***

[01:49:22]

What are some other areas of study that have been really significant for you?

[01:49:27]

#### ***Robert Benjamin, MD***

[01:49:28]

So I think the other area that's been a longstanding interest and has sort of cut across the different tumors and different therapeutic approaches I deal with is the assessment of the response to therapy, which sounds like it ought to be very simple, and it isn't. It's very clear. When oncology first started, the patients with leukemia would have bone-marrow aspirations done, and you would count the number of leukemia cells before and after the treatment, and you had a very good quantitative measure of what were the effects of treatment. When solid-tumor oncology started, people tried to come up with quantitative measures of the effects of treatment, and so they measured the size of the mass that they could feel and tried to equate what happened to that mass as to how much tumor was destroyed. I mean, it's pretty intuitive that if the mass gets smaller, the tumor is probably getting better, and if the mass continues to grow, the tumor is probably getting worse. And the first is true and the second is not necessarily true, because the size of the mass doesn't necessarily reflect the number of tumor cells present.

So in bone tumors, since we started doing chemotherapy before surgery, but surgery was always part of the treatment, we could measure the effects of the chemotherapy by having the pathologist take out the bone and cut through the bone and see how much was dead and how much was alive. And it was very clear, because of peculiarities of osteosarcoma, osteosarcoma when it heals sometimes forms a rim of bone around the tumor, and if there's a rim of bone around it, it can't shrink, but everything in the middle may be dead or everything in the middle may be totally alive. And so the only way we really knew was to ask the pathologist, and we found that, okay, if a rim of bone formed, that was almost always associated with a good response, so that was evidence of response to therapy.

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So we knew from treating osteosarcoma, probably by the 1980s, that just measuring tumor size was not necessarily the right answer. And we knew from treating patients with liver metastases with tumor embolization, blocking off the blood supply, that often we could get a profound effect on the growth of the tumor, but the CT scan would still have a hole in it. We knew from treating giant cell tumors of bone that there could still be a major abnormality in the residual bone that was embolized, but the patient could live without any progressive disease for decades.

But when we started treating gastrointestinal stromal tumors with Gleevec, we found that tumors sometimes got smaller, they usually got smaller, but they didn't usually get a lot smaller, they just got a little bit smaller, but their imaging characteristics changed markedly. So they went from being hyper-vascular, intensely enhancing lesions to basically being holes within the liver, but they were still there.

[01:56:01]

***Tacey Ann Rosolowski, PhD***

[01:56:04]

And I will assume that the patients were getting better.

[01:56:07]

***Robert Benjamin, MD***

[01:56:08]

The patients were getting better. And if you did a PET scan in the setting of the gastrointestinal stromal tumor, the PET scan could go from very, very hot, showing active metabolic tumor, to very, very cold showing no residual tumor, but the size of the hole in the liver could remain the same.

So when we started the work with Imatinib, Gleevec, for treating GIST, it was very apparent that the vast majority of the patients were getting better, but only a minority of the patients qualified as having responded to therapy under the arbitrary rules that had been set up. So we decided—and, I mean, I think everybody else probably saw that as well, but, I don't know, they didn't comment on it. So we describe for the first time here that these patients could have either minor shrinkage or no shrinkage at all, even tumor growth, but have change in the imaging characteristics such that you could very easily call them responders to therapy and that the responders by those criteria did just as well as responders by the traditional standard criteria.

[01:58:14]

***Tacey Ann Rosolowski, PhD***

[01:58:17]

Wow.

[01:58:19]

***Robert Benjamin, MD***

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[01:58:19]

So a lot of the work that we did in with gastrointestinal tumors was done in collaboration with Dr. Choi in Radiology, so we put forward new criteria and called them Choi Criteria to look at alternative strategies for determining the effectiveness of treatment, because if you think about the clinical experiment, if you do your clinical experiment to determine how many patients respond to your new treatment, and you haven't defined response correctly, you get the wrong answer.

[01:59:16]

***Tacey Ann Rosolowski, PhD***

[01:59:16]

Right. Well, then there's also the administrative in patient care. You can't document there's been a change, there's no reason to change standard of care, and to bill for it, you know. It just keeps cascading down the line.

[01:59:32]

***Robert Benjamin, MD***

[01:59:32]

Right. So we figured out new ways of looking, and those apply probably at least—they're applied to a large fraction of the patients with soft-tissue sarcomas that we treat with various forms of chemotherapy as well. So I've been interested in trying to figure out better ways to evaluate who's getting better and who's not.

[02:00:18]

***Tacey Ann Rosolowski, PhD***

[02:00:20]

So these Choi Criteria are kind of one formal way the institution has found—

[02:00:25]

***Robert Benjamin, MD***

[02:00:25]

It's one formal way. It's something which is used by some but not all, some but probably not most people working with GI stromal tumors. But it's being used by more and more people in more and more areas or at least being investigated by them. So I think we've at least—and the Choi Criteria were never designed to be the final say on what was there. It's just the major point being that the criteria that we've always accepted as written in stone don't always work and therefore shouldn't necessarily be applied.

[02:01:20]

***Tacey Ann Rosolowski, PhD***

[02:01:22]

Is there a—I mean, I don't know quite how to contextualize this. So you're developing these new

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observations, new way of systematizing how a patient is assessed for response and improvement, and is the obstacle, or however you want to use the word, to having other people acknowledge that, is it just ignorance or is it controversial? Like what's going on there with getting this system out and disseminating and either having it discussed or accepted?

[02:01:58]

***Robert Benjamin, MD***

[02:02:06]

I wish I knew the answer to that question. (Rosolowski laughs.) The simple answer is that sometimes it takes a little more work, and, as I said, it's far from perfect, so I think those are the key things. But I think it's clearly an area that needs to be addressed in continuing fashion and appropriately modified for each of the situations that people deal with, because I don't think that what happens in a gastrointestinal tumor treated with Gleevec necessarily applies to what happens in a colon cancer treated with whatever regimen they now use. I just know that the old criteria that had been applied don't necessarily work.

So basically, at least with sarcomas, I know that the tumors never got the opportunity to read the book, as in terms of what they were supposed to do when they responded. The initial observations, you treat the tumor, it gets smaller, that's good, come from the initial tumors that responded to the first generation of chemotherapeutic drugs that were out there. And those tumors did read the book, or maybe those tumors wrote the book, but they only wrote the book for themselves. It's a leap of faith to say that other tumors treated in other ways necessarily will behave the same way.

And my bottom line is looking at the pathology and looking at the bone tumors, because if there's a big mass present and you take that whole mass out and you can't find any tumor cells in it, that means the treatment worked. So the fact that the mass didn't know to disappear is a different problem, but the efficacy of the therapy is based on going back to the leukemia model and counting how many tumor cells there are after you treat. And it's clearly a leap of faith that the number of tumor cells is necessarily proportional to the size of the mass. So we see tumors that become scarred, we see tumors that fill up with fluid, and it's tricky to figure out what to do. Part of what makes the medicine fun, it's figuring out are you really helping or are you not helping, and realizing that how the reports are written and how the tumor measurements come out may or may not be representative of what's really happening.

[02:06:31]

***Tacey Ann Rosolowski, PhD***

[02:06:33]

Well, it's reflective, too, of an entirely new state of knowledge. I mean, as you were going through all of the situations that are really counterintuitive based on the old model, I'm thinking, wow, I mean, the depth of experience with tumors and the numbers of patients that represents is staggering. And that comes from institutions that have long experience, have done many, many,

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many studies with many, many, many patients. Of course you're going to have a more nuanced view of the entire terrain of cancer after going through that.

[02:07:09]

**Robert Benjamin, MD**

[02:07:09]

Oh, yeah, yeah.

[02:07:09]

**Tacey Ann Rosolowski, PhD**

[02:07:10]

Yeah, so you're changing knowledge base at that point, and rightly so. That's really fascinating. No wonder you think it's fun. (laughs)

[02:07:20]

**Robert Benjamin, MD**

[02:07:20]

Yeah. It is.

[02:07:23]

**Tacey Ann Rosolowski, PhD**

[02:07:25]

Well, Dr. Benjamin, we're actually at ten after four, and I know I've sort of abused your time here, but thank you for going over—

[02:07:30]

**Robert Benjamin, MD**

[02:07:31]

No problem.

[02:07:32]

**Tacey Ann Rosolowski, PhD**

[02:07:33]

I hope we can talk about having another session, because we haven't talked about certain questions that I'd like to ask you.

[02:07:39]

**Robert Benjamin, MD**

[02:07:39]

Okay, sure.

[02:07:39]

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***Tacey Ann Rosolowski, PhD***

[02:07:40]

We can talk about that tomorrow.

[02:07:42]

***Robert Benjamin, MD***

[02:07:42]

No problem. I'm happy to help out.

[02:07:44]

***Tacey Ann Rosolowski, PhD***

[02:07:46]

Well, great. Well, let me just close off. So I'm turning off the interview at about twelve minutes after four. Thank you very much for your time today.

[02:07:58]

***Robert Benjamin, MD***

[02:07:58]

Sounds good. Good. You're welcome.

[02:07:58] (end of audio session two)

***Robert Benjamin, MD***

Session 3 – March 6, 2015

**Chapter 00C**

***Interview Identifier***

[00:00:00]

***Tacey Ann Rosolowski, PhD***

[00:00:00]

Okay. We are recording, and today is March 6<sup>th</sup>, 2015, and this afternoon I am in the office of Dr. Robert S. Benjamin, in Sarcoma Medical Oncology. This is our third session together, and, let's see, the time is about fourteen minutes after two. And I wanted to thank you, Dr. Benjamin, for making the time for me today.

[00:00:29]

***Robert Benjamin, MD***

[00:00:30]

You're more than welcome.

[00:00:31]

***Tacey Ann Rosolowski, PhD***

[00:00:32]

It's been a while since we've chatted.

[00:00:33]

***Robert Benjamin, MD***

[00:00:33]

I'm happy to chat with you.

[00:00:34]



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## **Chapter 25**

### ***The Section of Melanoma/Sarcoma: A History of Reorganization at MD Anderson***

#### **B: An Institutional Unit;**

Story Codes

A: Character, Values, Beliefs, Talents;

A: The Clinician;

A: The Administrator;

A: Professional Values, Ethics, Purpose;

A: Critical Perspectives;

B: MD Anderson History;

B: Building/Transforming the Institution;

B: Growth and/or Change;

B: Obstacles, Challenges;

B: Institutional Politics;

B: Controversy;

C: Portraits;

#### ***Tacey Ann Rosolowski, PhD***

[00:00:35]

Yes. So we, as I mentioned before we started, we're really at the point to start talking about your administrative work and contributions within the institution, and I know that you had first served as Chief of Section of Sarcoma. This was in '81 to '91. So I wanted to ask you if that was significant to talk about during that period, and I don't mean to say that in a, you know, dismissive way, but I don't know if that was an important period to discuss.

[00:01:09]

#### ***Robert Benjamin, MD***

[00:01:12]

So that's, I guess, the time that I switched over from clinical pharmacology to disease-oriented medical oncology. I mean, I was always a medical oncologist, but my administrative role previously had been in pharmacology rather than in medical oncology. And it was the time when the Departments of Developmental Therapeutics and Internal Medicine were merged into a single department, which I think was called Medical Oncology at that time.

[00:02:16]

#### ***Tacey Ann Rosolowski, PhD***

[00:02:16]

Oh, wow. I haven't heard that history. (laughs) Now, was that controversial?

[00:02:24]

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***Robert Benjamin, MD***

[00:02:24]

Yeah, if you were in DT it was controversial.

[00:02:28]

***Tacey Ann Rosolowski, PhD***

[00:02:28]

I can imagine.

[00:02:30]

***Robert Benjamin, MD***

[00:02:31]

I think that's about the right time. I came in '74. It may have been earlier than that that some of this happened. I don't remember the timing. I remember what happened, but I can't tell you exactly when.

[00:02:55]

***Tacey Ann Rosolowski, PhD***

[00:02:55]

So why was that decision made to merge those two groups?

[00:02:59]

***Robert Benjamin, MD***

[00:02:59]

It was part of a power play to downgrade the role of Dr. Freireich in the institution while still realizing that a number of the people that had been in his department were still considered important members of the institution.

[00:03:56]

***Tacey Ann Rosolowski, PhD***

[00:03:58]

What was the perception of Dr. Freireich that there was a political move to kind of push him to the side?

[00:04:05]

***Robert Benjamin, MD***

[00:04:06]

Oh, Dr. Freireich was a bit of a firebrand. He was a genius. He was clearly, and still is, one of the absolute giants in the history of medical oncology, but he could be personally offensive, and he sort of lived on the edge and so managed to offend a lot of important people at various—not just within the institution, but within the oncologic community in general, I think.

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[00:05:00]

***Tacey Ann Rosolowski, PhD***

[00:05:00]

So the reservations about him were focused more on personal issues than on his research?

[00:05:05]

***Robert Benjamin, MD***

[00:05:06]

Oh, yeah, absolutely. Well, yeah, almost completely. There were some issues about the way in which some of the research was done, but it was largely, I think, personal. At least that's my interpretation. The person who could give you a different perspective on it would be Mickey LeMaistre [oral history interview], because he was the president at the time.

[00:05:47]

***Tacey Ann Rosolowski, PhD***

[00:05:48]

So you mentioned that as background to you becoming Chief of Section of Sarcoma. So how are those things connected, the organization—

[00:05:58]

***Robert Benjamin, MD***

[00:05:58]

So the thing which is of interest is Sarcoma was a group that had membership both from Department of Medicine and from Developmental Therapeutics, and they chose to allow me from Developmental Therapeutics to become the section head in that area.

[00:06:32]

***Tacey Ann Rosolowski, PhD***

[00:06:33]

Why do you think that was?

[00:06:34]

***Robert Benjamin, MD***

[00:06:38]

I don't know. Maybe because I was the right one for the job. But—

[00:06:44]

***Tacey Ann Rosolowski, PhD***

[00:06:44]

But do you have a sense of why that might have been at that time? I mean, different people bring different things to the plate, who can be useful at different times in an institution.

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[00:06:52]

**Robert Benjamin, MD**

[00:06:56]

I'm a good spokesman.

[00:07:00]

**Tacey Ann Rosolowski, PhD**

[00:07:00]

Oh, okay.

[00:07:03]

**Robert Benjamin, MD**

[00:07:06]

And I was sort of the heir apparent, as it were, to Jeff Gottlieb in terms of the research of developing new treatment strategies for sarcoma, and I guess that was considered important, because there were certainly others at that time who probably knew as much as I did about the disease itself, but who may not have been as effective as leaders or as national spokesmen for what we do. I think that's probably the reason for it.

[00:08:15]

**Tacey Ann Rosolowski, PhD**

[00:08:16]

Let me ask you kind of a related question. Did you have concerns yourself, coming from Developmental Therapeutics? Did you have some concerns about how your activities would be able to evolve in this new combined department? What was the context like?

[00:08:36]

**Robert Benjamin, MD**

[00:08:43]

I was a fervent and outwardly vocal supporter of Dr. Freireich to be the leader of the combined department, and that was clearly not the path that the institution wanted to take.

[00:09:15]

**Tacey Ann Rosolowski, PhD**

[00:09:16]

Who was chair?

[00:09:18]

**Robert Benjamin, MD**

[00:09:19]

So Dr. Krakoff ultimately was recruited to become the first Chair of the Division of Cancer

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Medicine, or I guess it was called Division of Medicine at that time. And I guess before Dr. Krakoff was recruited to that position, there may have been others who served as an interim role. It may have been Dr. Raber, but I'm not sure of exactly when, when all of what happened.  
[00:10:16]

***Tacey Ann Rosolowski, PhD***

[00:10:18]

So tell me about your activities as section chief.

[00:10:24]

***Robert Benjamin, MD***

[00:10:26]

So I tried, first of all, to build up an adequate group of people to be able to take care of the patients and then to do some clinical research in the area. We were always behind in terms of staffing of number of people required to do adequate patient care and have a lot of time for research, and that was true from the beginning when I was section chief to the time when I retired as department chair.

[00:11:20]

***Tacey Ann Rosolowski, PhD***

[00:11:21]

Really. Why is that?

[00:11:22]

***Robert Benjamin, MD***

[00:11:24]

I think you'll have to ask somebody else. (laughs)

[00:11:28]

***Tacey Ann Rosolowski, PhD***

[00:11:29]

I was just wondering if you had any suspicions.

[00:11:31]

***Robert Benjamin, MD***

[00:11:33]

I think Sarcoma was never considered to be a high-priority institutional area, although it clearly—we had a program that for a long time, I think, was probably the largest and at least initially probably the most productive department or section or whatever it was at the time, depending on where it was in the history of the various transitions, of any in the country. But sarcomas are rare tumors, and there are always other tumors that either by their frequency or for some other reasons attract higher levels of funding than sarcomas do. But we were never able to

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really fully develop, or even not even fully—significantly to any extent develop a laboratory-based research program in sarcomas because there were never open slots to do that—  
[00:13:39]

***Tacey Ann Rosolowski, PhD***

[00:13:40]

Wow.

[00:13:40]

***Robert Benjamin, MD***

[00:13:40]

—and finding, and there wasn't a person who was a high-priority target recruit who said, "This is what I want to do," where the institution might have wanted to find the resources to be able to get that done. But initially, we were able to do a large number of clinical trials, and I think the program on the whole developed pretty well.

[00:14:23]

***Tacey Ann Rosolowski, PhD***

[00:14:25]

What were some of the measures that said, yeah, we're succeeding at developing the program?

[00:14:30]

***Robert Benjamin, MD***

[00:14:45]

Probably the most important would be the people who were chosen as and developed leadership positions within the Connective Tissue Oncology Society, which is a global organization that I was one of the founding members of, that has sort of served as the scientific clinical research organization where everybody interested in sarcomas belongs, and we interact and have discussions. We have very prominent positions, even through today. Dr. Patel just finished his stay as president of CTOS. I was one of the former presidents of CTOS. So we've had people who've been on the CTOS board from the very beginning and frequently we're among those who have platform presentations at CTOS. So I think, and similarly, within the sarcoma subsection of ASCO, which is a much bigger organization and a much smaller subsection, but still we've had fairly prominent positions there. But I think if you ask me how I view my administrative accomplishments as head of Sarcoma, I would say it was never my top priority to be an administrator, and so I'm a much better physician and clinical researcher than I am an administrator, in terms of developing or running a department.

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## **Chapter 26**

### ***From Section to Departments: Reorganizing Melanoma and Sarcoma*** **B: An Institutional Unit;**

Story Codes

A: Character, Values, Beliefs, Talents;

B: Obstacles, Challenges;

B: Institutional Politics;

B: Growth and/or Change;

***Robert Benjamin, MD***

[00:14:45]+

But Sarcoma went through a series of iterations. So first we had a Sarcoma section within the Division of Medicine, and I guess at that time we probably had a Melanoma section as well. Actually, when the section was first created, it was Melanoma/Sarcoma.

[00:18:23]

***Tacey Ann Rosolowski, PhD***

[00:18:23]

Yeah. That's what I saw from your CV. Yeah.

[00:18:25]

***Robert Benjamin, MD***

[00:18:25]

So it started off as Melanoma/Sarcoma, but I as a Sarcoma person was the lead. There were few enough of us that some of us sort of preferred Sarcoma, some preferred Melanoma, some went equally across the two. As we developed under the Division of Medicine, the sections split off at one point to be a Sarcoma section and a Melanoma section, and then later—and I guess this is when Dr. Krakoff came or shortly after he came—he divided the Division of Medicine into a group of departments as opposed to a Department of Medicine with a group of sections. And because of the person who was the leader in Melanoma, he asked me to become Chair of Melanoma/Sarcoma and have it as a single department rather than separate departments, and that was primarily not because—well, it was because each would have been small, but it was primarily because he didn't want this other person to be a department chair.

[00:20:18]

***Tacey Ann Rosolowski, PhD***

[00:20:18]

Huh. What were the reasons?

[00:20:20]

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***Robert Benjamin, MD***

[00:20:26]

It was actually a very smart move on Dr. Krakoff's part, because the person who had been head of Melanoma section and under me when we made the department really was a very poor manager of people, and he tried to take credit for everybody else's work and to sort of put them all down if they had ideas of their own. So rather than foster the development of the faculty, he was basically very disruptive, to the point where eventually we asked him to leave. So as I said, Dr. Krakoff was smart—

[00:21:40]

***Tacey Ann Rosolowski, PhD***

[00:21:41]

Yeah, was a smart man.

[00:21:42]

***Robert Benjamin, MD***

[00:21:42]

—by not making him a chair, because had he been a chair, it would have been much more difficult to have had him go. It was difficult enough under me.

[00:21:56]

***Tacey Ann Rosolowski, PhD***

[00:21:58]

So let's see. You became chair—I'm trying to find that part—1993. You were Chair of the Department of Melanoma/Sarcoma, and then the two departments split.

[00:22:12]

***Robert Benjamin, MD***

[00:22:13]

Right.

[00:22:13]

***Tacey Ann Rosolowski, PhD***

[00:22:13]

That was around 2000?

[00:22:14]

***Robert Benjamin, MD***

[00:22:15]

Yeah. And the two departments split because after we basically eliminated this person who had been the section head of Melanoma, and he by his actions had caused the person who should have taken that on after him to leave the institution, so we had to go and try to recruit a new



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person to run Melanoma. And at that point I said, “It’s not fair to recruit somebody from the outside to run the Melanoma program at MD Anderson and then have him have to report to me because I run the Sarcoma program and I report directly to the division head. We ought to have two departments.” There’s nothing scientifically that connects Melanoma and Sarcoma. The only reason they were together is they didn’t have a home. Neither one of them had a home in an organ system.

[00:23:43]

***Tacey Ann Rosolowski, PhD***

[00:23:46]

Interesting. Yeah. So often when I discover these reorganizations and someone’s buried in someone’s CV, there’s just some odd little reason that causes it. It has nothing to do with, oh, you know, there’s like a major rationale for it.

[00:24:03]

***Robert Benjamin, MD***

[00:24:04]

Yeah, there was never a rationale for Melanoma and Sarcoma being together. The only rationale was that initially organ areas were divided surgically. There was somebody who operated on the chest and somebody who operated on the abdomen and soft tissues and somebody who operated on the head and neck and somebody who operated on the brain, and those are the divisions of the way things went through. Then you got sarcomas, which can occur anywhere, and melanomas, which occur on the skin but basically can occur anywhere, and sort of said, “Okay, well, you do melanoma/sarcoma. That’s what’s left.”

[00:25:05]

***Tacey Ann Rosolowski, PhD***

[00:25:06]

Interesting. Now, tell me, when you shifted to becoming department chair, did you feel as though your activities, the scope of your administrative reach changed in a substantial way? Was your mission different, your personal mission as an administrator?

[00:25:30]

***Robert Benjamin, MD***

[00:25:32]

Not really, you know. It sounded good. It felt as if I had had a promotion. (Rosolowski laughs.) But what I did—well, actually, I should take that back. No, I did a lot more as department chair administratively than I did when I was section chief administratively just because there were more other people who ultimately reported to me and whose problems I inherited. I think the job of the department chair, in a sense, very much becomes dealing with everybody else’s problems rather than your own. It did not because either of my—well, not either. Because largely due to my personality and my dedication to the patients that I see, it didn’t decrease the amount of work

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that I did clinically, so I was probably a bad department chair because I still spent too much time doing my own job. So the people who are probably better at managing everybody else are the ones who don't do quite so much themselves, and that just doesn't fit with my style of doing things.

[00:28:15]

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## **Chapter 27**

### ***The Melanoma/Sarcoma Center: An Early Multi-Disciplinary Center***

#### **B: Building the Institution;**

Story Codes

A: The Clinician;

A: The Administrator;

C: Discovery and Success;

B: MD Anderson History;

B: Building/Transforming the Institution;

B: Growth and/or Change;

C: Patients;

C: Patients, Treatment, Survivors;

D: The History of Health Care, Patient Care;

B: Institutional Mission and Values;

B: MD Anderson Culture;

B: Multi-disciplinary Approaches;

C: This is MD Anderson;

#### ***Tacey Ann Rosolowski, PhD***

[00:28:17]

Tell me about the Sarcoma Center, which was originally the Melanoma/Sarcoma Center, and it's from my records that you were clinical medical director of that from 1996 on. Was that Center already in existence? Did you set it up?

[00:28:38]

#### ***Robert Benjamin, MD***

[00:28:39]

No, we set it up. It was one of the first multidisciplinary centers that we had here, and we had had longstanding good collaborations with the surgical oncologists and the orthopedic oncologists. So when the institution made the commitment to let's have multidisciplinary centers, ours fit in very well, and it just brought us all physically into the same place. But since we'd already had the long collaboration and interaction, it was very easy to make that happen and to keep it going. And I think it's worked out. It had worked out very well. I eventually gave up that role, I think probably when I became department chair or shortly after I became department chair, just because there are only so many things you can be running. But I'm very proud of the development of the Sarcoma Center because I think it's a model for how patients should be taken care of.

[00:30:30]

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***Tacey Ann Rosolowski, PhD***

[00:30:30]

Tell me more about how it works, what it offers.

[00:30:32]

***Robert Benjamin, MD***

[00:30:33]

So, I mean, unlike some of the areas where there are a large number of patients who end up needing just surgery or just radiation or just chemotherapy, I would say the vast majority of the patients that we see who don't have just extensive metastatic disease end up needing all or at least several of the modalities available for treatment. So the majority of the patients that we have who have localized tumors end up getting, at the minimum, surgery and radiation, and more commonly end up getting chemotherapy, surgery, and radiation. And even patients with metastatic disease, who in most other areas are treated just with chemotherapy, frequently will have surgery added on to the mixture because the metastases in sarcomas are often localized in one spot or another, most commonly in the lungs.

[00:32:07]

***Tacey Ann Rosolowski, PhD***

[00:32:08]

Can I interrupt you just for a second? Okay. My apologies for interrupting you.

[00:32:15]

***Robert Benjamin, MD***

[00:32:15]

No problem. So I think what I was saying is frequently sarcomas metastasize to one organ system, most commonly to the lungs, and so even in patients with metastatic disease, it makes sense to use surgery in the management of metastases. So we have a longstanding tradition of multimodality therapy for our patients, and unlike some other centers where there is a very forceful surgical group that thinks they can do everything, the surgeons that we've worked with here are very willing to take help from the medical oncologists or the radiation oncologists, and so the interaction has actually been very good over time. We have a good group and very good interplay between the disciplines.

[00:33:56]

***Tacey Ann Rosolowski, PhD***

[00:33:59]

I remember you telling me about when you were working on some of those drug studies about collaborating really effectively with surgeons, and it sounds like that interaction, the cordiality of

that kind of interaction was really evolved over a very long period of time of involving all kinds of people in treatment. I mean, is that correct or—

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[00:34:27]

***Robert Benjamin, MD***

[00:34:28]

No, I think that's probably true. We had some good luck early on in a few cases that definitely got the surgeons to open their minds to the use of chemotherapy and the incorporation of it into the treatment of the patients.

But that mindset in our surgeons goes back even before the use of chemotherapy and certainly before I came to the institution, where the traditional treatment for a sarcoma of the extremity was an amputation, because one of the earliest papers on just resection of soft-tissue sarcomas comes from Dr. Clark, among others. I think it was Clark, White, and Martin. But what they found was when they just resected the sarcomas, they came back 75 percent of the time, and so their recommendation was that the only way to really treat these effectively was with amputation. Now, that's in the days before we had good imaging to be able to tell exactly where the tumors began and ended and all sorts of other factors. But that was the traditional approach.

Dr. Martin, one of those authors, who later became Chief of Surgery here, worked with Dr. Herman Suit from Radiation Oncology, and Dr. Suit said, "Well, let me try radiating these people and seeing whether we can get away without amputation, because I can radiate a bigger area than you can effectively remove."

So probably in the late sixties or—I think probably in the late sixties, they did their initial studies and showed that, yes, if you gave radiation, which wasn't supposed to work for sarcomas, in addition to surgery, you could get away with saving limbs. And that had been pretty well established here before I came in '74, and Dr. Suit had already left, I think, in '73 or '72 to go up to Harvard. So the surgeons were open to ways of trying to not have to do mutilating surgery, especially when patients usually died anyway. So when we found some chemotherapy drugs, which sometimes had a really good effect on sarcomas, they were willing to say, "Oh, okay, let's try that."

[00:39:22]

***Tacey Ann Rosolowski, PhD***

[00:39:30]

So tell me more about setting up the Sarcoma Center. How did you go about planning it, and what was the history of it evolving? How many patients did it treat originally and how did that—

[00:39:44]

***Robert Benjamin, MD***

[00:39:46]

Oh, boy, I can't tell you that.

[00:39:47]

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***Tacey Ann Rosolowski, PhD***

[00:39:48]

Oh, okay. I mean, you know, did you—

[00:39:52]

***Robert Benjamin, MD***

[00:39:53]

The person who might be able to give you some of the actual details is Wenonah Ecung, who was the initial Center administrative director and was with us until she got moved into some of her current positions. But she was there when we started it, and she would know from the point of view of numbers and how the physical units got set up. But our job was simply to identify the surgical people interested, the medical people interested, and the radiation people interested and make sure that we could—

[00:40:55]

***Tacey Ann Rosolowski, PhD***

[00:40:55]

So, building the teams.

[00:40:55]

***Robert Benjamin, MD***

[00:40:55]

—we could work out a situation where we had clinics which at least existed immediately adjacent to each other so that we could easily move patients back and forth among the people there. And as I recall, before we moved into our current space, we basically took the space that we had used medically for Melanoma/Sarcoma and separated out the Melanoma group medically and put in the Sarcoma group surgically into the same physical area.

[00:42:10]

***Tacey Ann Rosolowski, PhD***

[00:42:10]

Where was the clinic located—or center located?

[00:42:13]

***Robert Benjamin, MD***

[00:42:13]

It was Station 55. So originally down on what then was called the fifth floor, but pretty much the same area, more or less.

[00:42:33]

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***Tacey Ann Rosolowski, PhD***

[00:42:33]

And that was in the Main Building?

[00:42:34]

***Robert Benjamin, MD***

[00:42:35]

That was in the Main Building. There wasn't another building.

[00:42:40]

***Tacey Ann Rosolowski, PhD***

[00:42:40]

There wasn't another building. Right. (laughs)

It's really hard. I was just doing a presentation on kind of earlier iterations of MD Anderson, and there's a picture from the 1960s, late sixties, early seventies, and not only is MD Anderson so much smaller, but Houston is so much smaller. There's trees all around, kind of amazing. It's hard to imagine it.

[00:43:08]

***Robert Benjamin, MD***

[00:43:08]

Even in the seventies, when I came here, it was infinitely smaller.

[00:43:17]

***Tacey Ann Rosolowski, PhD***

[00:43:17]

Yeah, yeah. So tell me about now when the Center split into a Melanoma and a Sarcoma, did that follow the split of the departments into two or—okay. So tell me how that [unclear].

[00:43:33]

***Robert Benjamin, MD***

[00:43:33]

No. So, no, because there were people who worked in both Centers from the medical side, and there may have been some people that worked in both Centers from the surgical side, but I don't think so. I think they were pretty much separate already.

Those of us who worked in either one or the other for outpatient management did it there, but our inpatient service was a united service. And we had an attending-physician structure so that, you know, somebody was on the inpatient service for a block of time, I think usually a month. Or maybe not. Maybe we had it where we just took care of our patients, but on weekends we

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covered the whole service. So those of us who did primarily sarcoma would still be seeing melanoma patients on the weekends.

[00:44:58]

**Tacey Ann Rosolowski, PhD**

[00:44:58]

Interesting.

[00:44:59]

**Robert Benjamin, MD**

[00:45:03]

And then later it split completely when the departments split.

[00:45:07]

**Tacey Ann Rosolowski, PhD**

[00:45:08]

Now, you said that you felt the Center was really a model for how care should be delivered. Why is that? I mean, what is so exemplary about it?

[00:45:16]

**Robert Benjamin, MD**

[00:45:17]

So I think the key thing is when it started was there wasn't the concept that a patient who came in to see me was *my* patient. He was *our* patient, and if he needed primarily surgical management, he would pass easily to the surgical team. People who needed multidisciplinary management passed very quickly from one team leader to another during the course of the therapy. There was just a very cordial interaction and much more so than I've seen certainly in other institutions and probably—I don't have sufficient direct exposure to some of the other departments and groups within this institution, but I think some of the interactions that I've witnessed in some of the other groups are, let's just say less cordial. (laughs) I think there's much more of the sort of typical possessive nature that a patient who comes in to a surgeon is a surgical patient, and he'll do surgery and then refer off to a medical oncologist or a radiation oncologist or whatever. Here we actually talk about the patients in the beginning, and very frequently the surgeon is not the first treating physician. So if we're going to do multimodality therapy, we usually do chemotherapy first so we can see what the chemotherapy is doing, and then frequently we'll also do radiation before surgery, and then do surgery as sort of a last step in the multidisciplinary process. It's very different from the interactions that I see in a number of the other departments.

[00:48:44]

**Tacey Ann Rosolowski, PhD**

[00:48:47]



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What's the experience like for the patient? Because I think a lot of patients have the ideas like, "Oh, X is going to be my doctor."

[00:48:57]

**Robert Benjamin, MD**

[00:48:58]

Yeah.

[00:48:58]

**Tacey Ann Rosolowski, PhD**

[00:48:58]

What's the experience like being flipped between different physicians?

[00:49:02]

**Robert Benjamin, MD**

[00:49:02]

So, no. So it's not usually a problem. X, who is his doctor, usually will continue to see him over a long period of time, but there are just times when, okay, your treatment now needs to be this, so for this period of time, Dr. Y is in charge, and when he's finished, you'll come back to me. It actually works out very well.

[00:49:38]

**Tacey Ann Rosolowski, PhD**

[00:49:39]

Wow. Interesting.

[00:49:41]

**Robert Benjamin, MD**

[00:49:42]

And the people who end up usually spending the most time with the patients, just because of the nature of the modality, are the medical oncologists, because a surgeon goes in and does a surgery, and a big surgery may be twelve hours and two weeks or three weeks in the hospital, but once you're through with that, you're through with it. And the chemotherapy goes on for months at a time, so there's a lot more repetitive visits with the medical oncologist than there are with some of the other disciplines of treatment.

[00:50:40]

**Tacey Ann Rosolowski, PhD**

[00:50:44]

Is there anything else—well, let me ask you this. I mean, what's kind of in the future for the Center? How would you like to see it evolve? How will it evolve?

[00:51:01]

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***Robert Benjamin, MD***

[00:51:02]

Very, very difficult question to ask, and it's all going to depend on how much we learn, you know. Fifty, a hundred years from now, the treatments are all going to be much, much different than they are right now. So it's hard to predict. I expect that we will always have some form of surgery for the majority of patients, but what it will be I can't tell you. I expect that maybe in a naïve fashion I expect that maybe radiation therapy will disappear, and I expect that the current approaches of cytotoxic chemotherapy will disappear because we'll have much more specific, highly targeted medical treatments that will get used. But I think even fifty years from now, we'll still be doing surgery, just probably not quite so much, and we'll be doing some forms of systemic therapy. So how everyone will interact and how we'll do things, I don't know. I won't have to worry about that in fifty years, since I won't be along for that long. Or if I'm around, I won't remember.

[00:53:26]

***Tacey Ann Rosolowski, PhD***

[00:53:26]

(laughs) Well, as we're—I'm sorry, go ahead.

[00:53:34]

***Robert Benjamin, MD***

[00:53:36]

I'm just thinking in the interim, I just think we'll continue to evolve slowly and get a little bit more specific about the ways that we use drugs, and what gets done surgically will always be a function of how effective the general systemic therapy is. I mean, we rarely use surgery for lymphoma. We just cure it with drugs. So maybe we'll get that good at treating other things.

[00:54:40]

***Tacey Ann Rosolowski, PhD***

[00:54:42]

Interesting. Yeah.

[00:54:43]

***Robert Benjamin, MD***

[00:54:44]

But I think it's got a way to go before we do that.

[00:54:48]

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## **Chapter 28**

### ***The Clinical Research Committee***

#### **B: Building the Institution;**

Story Codes

A: Contributions;

B: Institutional Processes;

B: MD Anderson Culture;

C: Research, Care, and Education;

#### ***Tacey Ann Rosolowski, PhD***

[00:54:49]

Well, let me ask you, as you kind of look at the scope of the administrative dimension of your career, there are things that you've contributed to that we haven't hit on. I mean, I know, for example, I have on my list that you've helped develop some of the practice algorithms and also been involved in the annual conference, you know. Are some of those things that I've missed asking you about that you would like to talk about a bit here?

[00:55:21]

#### ***Robert Benjamin, MD***

[00:55:23]

No, I think actually my major administrative contribution, both good and bad, to the institution was in instituting detailed protocol review. When we first had the Division of Cancer Medicine, I set up a Clinical Research Committee within the Division of Cancer Medicine because I was a member of the IRB, and I found that the IRB was spending a lot of time going into details of protocols that really required medical expertise, but the IRB, by the way it's constituted, has to have a large number of people who are laypeople or who bring other areas of expertise than medicine and clinical research, and there was no way that they could deal with the details of how the clinical research was organized.

So what we now have as the CRC in the institution is something that I set up, and when we first set it up, the idea was the CRC would go over the science very carefully and make sure that the protocols really were well written, and then if the science was approved, the IRB only had to deal with issues of the ethics regarding the way the protocol was done, what were the risks to the subjects, and was the informed consent adequate.

We now have a very complex CRC mechanism, but they review so many protocols that the protocol review is sort of random, I would say, in its applications. So it really depends on who your reviewers are and what happens, and there isn't a cadre of people who really have major clinical research expertise who are involved in the review process, but they still have definite clinical review of the protocols.

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The IRB has gotten more back into second-guessing the scientific questions rather than just the ethics, so it sort of makes it double jeopardy for the investigator and doesn't do it the way I had originally set it up. So that's why I said "better or worse." But I think having careful protocol review is a good idea, and we now have it, and we didn't before I set it up. So I think that's my single outstanding administrative contribution to the institution. I don't know that some of the other things that you mentioned are really all that helpful or important.

[01:00:12]

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## **Chapter 29**

### ***Changes at MD Anderson Under New President, Ronald DePinho***

#### **B: Institutional Change;**

Story Codes

B: Growth and/or Change;

B: Obstacles, Challenges;

B: Institutional Politics;

B: Controversy;

A: Critical Perspectives;

B: Institutional Mission and Values;

B: MD Anderson Culture;

#### ***Tacey Ann Rosolowski, PhD***

[01:00:13]

Okay. Yeah. Well, I wanted to ask you some questions about institution change, because since 2011, when John Mendelsohn left the institution, and we have a new executive leader, Dr. DePinho came in, who has changed the executive leadership of the institution, MD Anderson has been going through a substantial period of change. So what I'd like is kind of your impression, you know, on what MD Anderson was before that period of transformation and what you see kind of shifting in the institution.

[01:00:54]

#### ***Robert Benjamin, MD***

[01:01:11]

So I think some of the shifts actually started during the time that Dr. Mendelsohn was the president, and he certainly brought in an emphasis on the scientific accomplishments of the institution as opposed to just the clinical and patient-care accomplishments. When Dr. DePinho came, at least from the point of someone on the clinical side of the street, I think the pendulum swung far towards let's develop the institution as a world-class basic science institution, and, oh, by the way, there's a hospital associated with it that can help to pay for this research.

The financial strain that's being placed on the physicians to generate more and more revenue to help support either the research or the burgeoning administration has resulted in a very different atmosphere among the clinical faculty. So rather than working to try to help the patients that they see and optimize the care of every patient that they see, I think they all feel compelled to meet certain quotas of productivity which are defined as dollars. So as a result, I think the quality of care that goes into each patient has gone down. Whether by sacrificing quality a little bit but spreading it over more patients we're doing more good is debatable, but I think many clinicians feel that it really doesn't matter how good they are or how well they care for the patients; it simply matters how many patients get billed.

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So that's led, I think, to a significant deterioration of morale of the clinical faculty. I can't speak for the research faculty, but I think many of the research faculty that I've heard, the small sample that I see also sort of feel that they're second-class citizens, because it's the people brought in by DePinho are given much more in the way of resources and compensation, and some of them are very, very good, but some of those who were there before were also very, very good. But you'd have to talk to them more to feel out what their concerns are. But I think I can reflect the clinical side pretty accurately by saying that there's a lot of discouragement.

[01:07:55]

***Tacey Ann Rosolowski, PhD***

[01:07:57]

What do you identify as the sources of the tension? And here I'm asking more like is it communication, is it basic value system? I mean, I'm asking that kind of a question. Where did the break come?

[01:08:18]

***Robert Benjamin, MD***

[01:08:42]

It's very hard to answer. I think there has been for a long period of time, not just after Dr. DePinho but before, for several years, the budget process is a top-down-driven system that really doesn't make logical sense to me. As a department chair, I had very little say on anything related to the budget. I was simply given a small amount of money to divide among the faculty members, said, "Here, you do it. Here's the amount that you're going to get as an increase. Figure it out." We were asked to project how many patients we were going to see, and we would put in a number and say this is what I think we can do, and then we'd get back a request from the division saying, "Well, the division has been given this assignment, and so in order to do your part, these are the numbers that you have to put into your budget."

[01:11:22]

***Tacey Ann Rosolowski, PhD***

[01:11:22]

And what you're referring to is basically the request for clinical hours to general revenue?

[01:11:27]

***Robert Benjamin, MD***

[01:11:29]

Right. It's how many new patients are you going to see, and it's like how many can we see? This is how many we can see. Oh, sorry, the answer is really 50 percent more than you project, because that's what we need to put into our budget to make the projections work, because we want our budget to be this much more than what our last year's one was. And somehow they always managed to make what was projected, so they always said, "Okay, well, see, it works."

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We can do this, so therefore let's ask for more." But everybody is thinking that each year it becomes less and less realistic.

But at least, again, when I was department chair, I'd do my annual evaluation of the faculty, and faculty would put in how much time they thought they were going to spend clinically and how much research and how much whatever, and it was rare that I would think that I would try to readjust their percentage effort. Now you're told, "Oh, no, you can't do this much. You have to be this much clinically, because that's the only way we can work on justifying generating the numbers that we need to generate," of whatever.

So it's gotten to the point where several faculty members have just decided that it's not worth it. They came here to be doing something different from that, and if they can't do what they had wanted to do here, they'll try to do it somewhere else. So I haven't seen this much disquiet among the faculty that I can remember during the time I've been here.

[01:14:38]

***Tacey Ann Rosolowski, PhD***

[01:14:42]

What do you think all this situation now means for MD Anderson as it evolves?

[01:14:50]

***Robert Benjamin, MD***

[01:14:57]

I don't know. I've always been of the impression that MD Anderson will succeed, despite its leadership, because of the quality of the faculty and the commitment of the faculty. But that requires that the faculty retain their commitment, and so it's hard to say. I mean, my feeling for myself, for example, is that I would be a lot more effective in spending more time teaching younger members of the faculty some of the things that I've learned than in seeing more new patients myself, but I can't adjust my time to be able to do that unless I retire, and then I can do it because I can voluntarily spend the time. But that's not the way I think it ought to evolve. It ought to evolve that the department chair should be able to figure out how optimally to divide up the responsibilities of his faculty and not be told, "Oh, no, this is a clinical position. There has to be this much revenue associated with it." Or not even revenue, because it's new patients associated with it. So that's a discouraging situation.

[01:17:47]

***Tacey Ann Rosolowski, PhD***

[01:17:51]

If you had the time, what is it that you would teach the young faculty?

[01:17:57]

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***Robert Benjamin, MD***

[01:17:58]

Oh, you know, I mean, we see all these patients with weird sarcomas, and a lot of them, you know, will come in and they'll come to our Center, and it's one of the few Sarcoma Centers in the world, and they'll come in with this weird diagnosis, and nobody's ever seen one. I may have seen a few, but at least I know that much more than the other guy. But there are subtleties in just dealing with how best to manage different clinical situations that you learn over time, and it's solely to rediscover the wheel.

[01:18:55]

***Tacey Ann Rosolowski, PhD***

[01:18:56]

Right. Is it something you could give me an example of? I mean, sometimes I know that's tough, but—

[01:19:02]

***Robert Benjamin, MD***

[01:19:11]

So a patient came in the other day to see one of our new faculty members who had a—not so new, but young faculty members who had a patient with an epithelioid sarcoma, and the patient had had some treatment before at Sloan-Kettering and treatment somewhere else with her local physician, and came in and basically said, “Well, you know, I really don't know. I'm not sure there's anything more to be done for me, and I'm happy to sort of go along but just wanted to check in to see.”

We basically said, “Well, we can send you to our Investigational Therapeutics Group and do some testing on your tumor and try to figure out what to do.” But the patient hadn't had the treatment which is the single most effective treatment for that tumor because nobody knows it exists.

[01:20:34]

***Tacey Ann Rosolowski, PhD***

[01:20:35]

Oh, my gosh.

[01:20:38]

***Robert Benjamin, MD***

[01:20:39]

There's only one publication that even mentions it, and that's in a small journal, and I only know about it not because of the publication, but because I've seen a couple of patients and had some astonishingly good results with one of our regimens that this patient hasn't had. But I've had several cases where that's what happens.



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[01:21:04]

***Tacey Ann Rosolowski, PhD***

[01:21:05]

So this was a treatment that was perfected here at MD Anderson?

[01:21:08]

***Robert Benjamin, MD***

[01:21:10]

No, it's a treatment that other people have used in a number of different situations. It's just nobody has put two and two together and realized that it's particularly effective for this unusual subset of patients with sarcomas.

[01:21:25]

***Tacey Ann Rosolowski, PhD***

[01:21:26]

Wow. Huh.

[01:21:28]

***Robert***

***Benjamin,***

***MD***

[01:21:28]

So that's the sort of thing.

[01:21:29]

***Tacey Ann Rosolowski, PhD***

[01:21:29]

Yeah, yeah. So what's the lesson for a young faculty member to learn from that situation? I mean, I'm like astonished or amazed, but if I were the young faculty member, what would you want me to take away from that?

[01:21:43]

***Robert Benjamin, MD***

[01:21:47]

Don't try to do your own literature search, which will be a waste of time. Ask somebody who has actually seen the disease. There are only a few cases. There are only a few patients I've seen.

[01:22:03]

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## **Chapter 30**

### ***Major Contributions and On Being “King Pin”***

#### **A: View on Career and Accomplishments;**

Story Codes

A: Career and Accomplishments;

A: Post Retirement Activities;

A: Character, Values, Beliefs, Talents;

A: Personal Background;

A: The Researcher;

***Tacey Ann Rosolowski, PhD***

[01:22:04]

Yeah. Interesting. Well, I wanted to—you’ve talked a lot about the things that you felt you had accomplished since you’d been here. Is there anything else in research areas? We’ve talked about your administration, but is anything you’ve accomplished in your time here that you feel particularly satisfied with?

[01:22:30]

***Robert Benjamin, MD***

[01:22:34]

Probably spoke about most of them during the past several interviews. Working out ways of giving higher cumulative doses of Adriamycin to patients, the use of intra-arterial Cisplatin in the treatment of primary bone tumors, I guess those are probably the two most important things. And, I guess, the atypical criteria for response to treatment is another.

[01:24:05]

***Tacey Ann Rosolowski, PhD***

[01:24:05]

Yeah, we did talk about that one, yeah.

[01:24:06]

***Robert Benjamin, MD***

[01:24:06]

Because that really has much broader implications than just sarcoma.

[01:24:14]

***Tacey Ann Rosolowski, PhD***

[01:24:16]

Well, I want to mention one other accomplishment that’s sort of staring me in the face, which is

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that you have an amazing collection of buttons. (laughs) Or pins. And you're known as "King Pin." (laughs)

[01:24:34]

***Robert Benjamin, MD***

[01:24:38]

This is an interesting sidelight. I had one patient who gave me a pin, and I put it on, and a few months later, somebody else said, "Oh, you like pins. Let me give you one." So I put the second pin on, and then from then on, people have been giving them to me, so I keep putting them on. And as you can see, there are far more than can possibly fit on the lab coat.

[01:25:25]

***Tacey Ann Rosolowski, PhD***

[01:25:25]

Right. Do you rotate them ever?

[01:25:27]

***Robert Benjamin, MD***

[01:25:28]

Some, a few, and there's some that I've sort of retired, only because of, you know, technical issues.

[01:25:37]

***Tacey Ann Rosolowski, PhD***

[01:25:37]

(laughs) Pin malfunctions.

[01:25:40]

***Robert Benjamin, MD***

[01:25:40]

Yeah.

[01:25:41]

***Tacey Ann Rosolowski, PhD***

[01:25:48]

What do they mean to you? I mean, why did you wear them?

[01:25:52]

***Robert Benjamin, MD***

[01:25:55]

Because white coats are dull, and I don't believe in dull. But it's also part of—it's sort of become

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a signature and people like them. They comment on them all the time, and I figure sometimes it can give a little joy in an otherwise difficult situation, and so worthwhile doing.

[01:26:32]

***Tacey Ann Rosolowski, PhD***

[01:26:32]

Are there any special stories about any of them?

[01:26:33]

***Robert Benjamin, MD***

[01:26:35]

Oh, I'm sure there are plenty of special stories, but—

[01:26:37]

***Tacey Ann Rosolowski, PhD***

[01:26:39]

So you don't know why, like, a patient may have selected to give you any particular one? I'm looking at "Sarcoma Sucks." (laughs)

[01:26:45]

***Robert Benjamin, MD***

[01:26:46]

"Sarcoma Sucks," one of our research nurses made. Because there's been a longstanding "Cancer Sucks" pin, and we thought that "Sarcoma Sucks" had much better alliteration.

[01:27:03]

***Tacey Ann Rosolowski, PhD***

[01:27:04]

It does.

[01:27:05]

***Robert Benjamin, MD***

[01:27:06]

So it was special to us, so one of our research nurses in the past designed pins, and so she made a batch of "Sarcoma Sucks" pins for us for a while. There are a couple of fishing pins and a couple of opera pins, and most of them are just ordinary.

[01:27:32]

***Tacey Ann Rosolowski, PhD***

[01:27:34]

Ordinary pins, yeah. What do you plan on doing with the collection eventually?

[01:27:39]

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***Robert Benjamin, MD***

[01:27:42]

Oh, I don't know. I don't think anybody will want it when I get through with it.

[01:27:46]

***Tacey Ann Rosolowski, PhD***

[01:27:46]

Oh, really. I can kind of see it in a [unclear] on your lab coat, you know, an MD Anderson kind of landmark.

[01:28:02]

***Robert Benjamin, MD***

[01:28:02]

Yeah, that's okay.

[01:28:03]

***Tacey Ann Rosolowski, PhD***

[01:28:04]

That would be pretty cool.

I mean, do you have plans to retire? What would you like to do before your retire, and what are your plans for retirement?

[01:28:18]

***Robert Benjamin, MD***

[01:28:19]

Don't know. Right now I'm thinking about probably retiring at the end of this year and continuing to work full-time.

[01:28:30]

***Tacey Ann Rosolowski, PhD***

[01:28:30]

(laughs) On what you want to work on. (laughs)

[01:28:34]

***Robert Benjamin, MD***

[01:28:38]

On my terms, 20 percent of which will get paid by the institution, so that can be on their terms, but the other 80 percent is me.

[01:28:45]

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***Tacey Ann Rosolowski, PhD***

[01:28:46]

And what will that 80 percent consist of?

[01:28:48]

***Robert Benjamin, MD***

[01:28:49]

Oh, I don't know. Haven't decided. I'll certainly try to see patients that I currently see, and I'll try to spend more time with the younger people, trying to teach them how to do things. I may even get a chance to sit down and look over some of the things I've done and write them up. But we'll see. Unclear.

[01:29:29]

***Tacey Ann Rosolowski, PhD***

[01:29:29]

Mm-hmm. Anything else on your long-term to-do list?

[01:29:34]

***Robert Benjamin, MD***

[01:29:36]

Not really. No, I think I'm pretty close to finishing off.

[01:29:47]

***Tacey Ann Rosolowski, PhD***

[01:29:50]

What about after, when you finally do retire fully, I mean, what's—

[01:29:53]

***Robert Benjamin, MD***

[01:29:54]

No clue.

[01:29:54]

***Tacey Ann Rosolowski, PhD***

[01:29:55]

No clue. And that feels good, it sounds like.

[01:29:57]

***Robert Benjamin, MD***

[01:29:59]

Yeah. I have plenty of things that will keep me interested. But there are very few things that I like more than what I actually do right now. So I'll probably keep doing most of it.

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[01:30:20]

***Tacey Ann Rosolowski, PhD***

[01:30:24]

Well, is there anything else you'd like to add, Dr. Benjamin?

[01:30:26]

***Robert Benjamin, MD***

[01:30:26]

Don't think so. I think you probably got most of what you need.

[01:30:32]

***Tacey Ann Rosolowski, PhD***

[01:30:33]

Good. Well, I really thank you for devoting the time to the project.

[01:30:36]

***Robert Benjamin, MD***

[01:30:36]

You're very welcome. My pleasure.

[01:30:36]

***Tacey Ann Rosolowski, PhD***

[01:30:37]

And I am closing off the interview at quarter of four. Thank you so much.

[01:30:38] (end of audio session three)