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## The Honor Society of Food Science and Technology

Who was Dr. Carl R. Fellers? And what did he do that warranted an Award named after him?

**Memories of Dr. Carl R. Fellers:** (\*Used with permission of Phi Tau Sigma Member Dr. John J. Powers)

"CARL FELLERS, THE MAN            By JOHN J. POWERS\*            INTRODUCTION

Much of the material in this book dealing with Dr. Carl R. Fellers will naturally revolve around his research and teaching accomplishments. Carl Fellers, however, was no one-sided individual. He was a family man through and through. He had interests outside of his scientific field. He was an aggressive tennis player, an avid fisherman, a trapper of muskrats and mink, and he had scientific interests other than that of food. He studies the nutrition of mink, especially as related to anti-thiamin factors. David, his son, in a letter to Guy Livingston commented that his father had a great interest in English and Literature, that he considered majoring in those fields rather than in chemistry and that he had committed to memory many passages from Shakespeare and other classic literature and often recited them throughout his life." (Powers, 2005, page 1)

Thus begins Section 1. Dr. Carl R. Fellers by John J. Powers, Ph.D. in "Pioneers of Food Science – Volume 2" Food & Nutrition Press, Inc., Trumbull, CT, 2005. (Currently out of print)

Subsequent issues of the Phi Tau Sigma Newsletter, contained sections of this review of Dr. Fellers' career and life for your enjoyment and illumination. These sections from the book can be read in the Phi Tau Sigma Newsletters, October 2012 to February 2018.

**We proceed here to articles that have been printed exclusively in the Phi Tau Sigma Newsletter:**

## **Memories of Dr. Carl R. Fellers – Compilation of personal memories**

Phi Tau Sigma Newsletter: October 2010 to November 2012

**October 2010**

### **Memories of Dr. Carl R. Fellers:** (Contributed by Anthony W. Kotula, Ph.D.)

During the summer of 1953 to the summer of 1954, while studying for my Master of Science Degree, I met Mohamed Zouiel, from Egypt, who was studying for his Ph.D. He was struggling with English and that made his pursuit of that degree all the more difficult. Some thirty years later I was able to visit Mohamed, in Egypt. He was Dean of Agriculture, at the University of Alexandria. When I entered his spacious office, I was struck by the starkness of the walls. The polished wooden walls contained only one picture. At eye level, behind Mohamed's comfortable chair, was the photo of Dr. Carl R. Fellers. The message of what Dr. Fellers meant to Mohamed could not have been made any clearer. Mohamed was extremely grateful to Dr. Fellers, the sentiment which was shared by undergraduate and graduate students alike.



*Dr. Carl R. Fellers*

**November 2010**

### **Memories of Dr. Carl R. Fellers:**

(Contributed by Nathan Hale, Ph.D., Professor Emeritus, University of Connecticut)

I remember Dr. Fellers from my induction into college teaching under Dr. V.A. Rice at the Massachusetts State College (now the University of Massachusetts) back in 1946 -1953. I visited Carl on several occasions while teaching the meat science program at the college. He was most helpful, especially when I had to share with John Vondell of the poultry group, a course for Home Economics students. To say we were intimidated by the task would be a gross understatement. But with Carl's kind encouragement, and insight into how the course should be taught, which he shared with us, we were not only successful in teaching the students, but found the experience exhilarating. His friendship and teaching advice served me well, not only at the Massachusetts State College, but also in my 30 years teaching at the University of Connecticut.

**December 2010**

### **Memories of Dr. Carl R. Fellers:**

(Contributed by Reverend Joseph Angelini, M.S.)

After I obtained my Master of Science Degree in Agronomy, I took a course in Food Science, while I pondered whether I wanted a Ph.D., or whether I should pursue another direction in my career. A friend of mine, returning from the war in Korea, visited me and indicated he no longer remembered much of the chemistry he had earned for his B.S. Degree, two years ago. Because I had met Dr. Fellers, I felt comfortable telling the veteran to consider a Masters Degree in Food Science. I found Dr. Fellers to be a dynamic man, charged with

enthusiasm, and I was correct. When I introduced the veteran to Dr. Fellers, he was immediately made to feel comfortable because of Dr. Fellers' personality. Then and there, Dr. Fellers told him which two summer courses in Food Science to take, and if he obtained grades of B or better, he would be accepted as a Master's Degree Candidate. In one year the Master's Degree was obtained, and the veteran moved into the ranks of the employed. It seems Dr. Fellers helped everyone he could. I am still impressed that he was such a wonderful man.

**January 2011**

**Memories of Dr. Carl R. Fellers:**

(Contributed by Pio Angelini, Ph.D., Member Phi Tau Sigma)

People don't know how many individuals Dr. Fellers helped, but his students and coworkers do. While studying for my B.S. in Food Technology, I seem to remember being told that he knew students from The Amherst High School, who were deserving of attending college, but could not afford the costs. He then personally funded their expenses toward a college degree. He was a complete man. He loved his family, he was industrious, he took responsibility for his actions, he considered everyone important regardless whom they were. Former students like me, continue to hold him in their greatest esteem.

**February 2011**

**Memories of Dr. Carl R. Fellers:**

(Written by Frederick J. Francis (1921-2009), Phi Tau Sigma Member, Executive Secretary 1955-57, Vice President 1978-79, President 1979-80, taken from "Seventy-Five Years of Food Science 1918-1993 at the University of Massachusetts".)

"Dr. Carl R. Fellers was hired on December 1, 1925. He already had considerable experience at the USDA, National Canners Association and the University of Washington. In 1941 Dr. Carl R. Fellers was appointed Head, in which capacity he served until his retirement in 1957. In the 1940's and the 1950's the Department dominated research at the University of Massachusetts, regularly producing more than half of the total number of Ph.D.'s. In the 16 year period from 1945 to 1960, the university graduated 140 Ph.D.'s and 75 of them were in the Department of Food Technology. In 1954, the Department founded Phi Tau Sigma, the Honor Society of Food Science."

**March 2011**

**Memories of Dr. Carl R. Fellers:**

(Contributed by Rauno A. Lampi, Ph.D., Charter member of Phi Tau Sigma, UMass Amherst)

I had known Doc (Dr. Fellers) as an undergraduate, but my first one-on-one contact with him was in 1953 when I was still in the Air Force, but about to be separated from active duty. I had obtained a meeting with him to search where there might be jobs. We met in his office and talked over half an hour – partly because I was still in the military and Doc was proud of his contribution in WW II, so we were in the same "fraternity". Suddenly, he jumps up and goes to leave, loudly saying over his shoulder that he was 20 minutes late to give a speech next door in Stockbridge to half the bankers in Massachusetts on why the

food industry could be a good venture. An example of his selective memory and the priority he gave students.

His selective memory was recognized and accepted by many of us close to him. He was known to go hunting early in the morning, occasionally with his sons, and not think of his 8 o'clock class. So, there were, I believe, three of us grad students who would take turns showing up at 8 o'clock on these days just in case he did not make it. In some natural way, none of us considered this an imposition, but just as an opportunity to help.

(Memories of Dr. Lampi to be continued in June)

### **May 2011**

#### **Memories of Dr. Carl R. Fellers:**

(Contributed by Dr. John J. Powers, Phi Tau Sigma Vice President 1965-66, President 1968-69)

After graduating in 1940, with a B.S. in chemistry, I couldn't get a job. Frank Yourga suggested I check with Dr. Fellers to see if he knew of any openings. I didn't know who Dr. Fellers was, nor what Horticultural Manufacturing encompassed.

Once I told Dr. Fellers I was a very recent graduate from the Chemistry Department, he hired me on the spot into a graduate program, at \$30 per month. He suggested I study Ascorbic acid as an antioxidant. By Spring, Bill Fitzpatrick, Dr. Fellers, and I had a paper accepted for the Fall meeting of the American Chemical Society. Though I was a major contributor, there was no need of both Bill and me going to the same meeting. However, Dr. Fellers favored having all his graduate students attend meetings, so we could meet the foremost scientists. Ultimately, he took me to three of the IFT meetings for the same reason. In many other ways he saw to it that he arranged for us to have our best foot forward.

When World War II began, he appointed me an instructor literally overnight. I was a graduate student at 4:00 pm, an instructor at 4:30 pm, and teaching the next morning at 8:00 am. Dr. Fellers served in the United States Army as a Captain. The Draft Board exempted me because I was teaching astronomy and navigation to the Air Force Cadets, stationed on campus. Later, when the cadets were gone, I was still exempted from service because I taught 100% of the Food Science courses. The others were in the military, or keeping up with their research obligations. After the war, Dr. Fellers returned as Chairman of the Department, teacher, research scientist, and possibly most important, as student advisor, mentor, and friend.

### **June 2011**

#### **Memories of Dr. Carl R. Fellers:**

(Contributed by Rauno A. Lampi Ph.D., Charter member of Phi Tau Sigma, UMass Amherst)

An anecdote of Dr. Feller's consideration for students. Doc invited three of us grad students to go with him to an IFT meeting in Cambridge, MA, in his new Buick Roadmaster. When we got to the designated restaurant, Doc turned to us and said that the food was mediocre in the restaurant, gave the keys to the Buick to one of us to go find a more suitable place to eat, and expected us back for the verbal part of the meeting. Obviously, we did as he suggested and returned the Buick with no scratches or other harm.

Dr. Fellers supported students in any way he could – dollars from industry contracts and grants, mostly. I had the G.I. bill plus he got me half an instructor's pay; but I in return agreed to earn this via teaching one University course, one for Stockbridge, and assist with a lab session. And, when I was out of action for 6-8 weeks with polio (1955), he let my salary go on (legal or not; I never asked). (I had a wife and son to support.) So, when I became mobile again, the first steps I took was to teach my classes.

Dr. Fellers was benevolent and trusting. But, if he was misled or taken advantage of, he could extract retribution. I was sitting in the department library one day when Doc came in, went to a specific student, asked the student for a loan of money since apparently the student was flush. Strange moment. I found out that the student had gone to Doc pleading for money on which to continue to get food and other life's essentials, got some, and then had gone out and purchased a car. I did not see that student on campus the next semester.

(Memories of Dr. Lampi to be continued in July)

### ***July 2011***

#### **Memories of Dr. Carl R. Fellers:**

(Contributed by Rauno A. Lampi Ph.D., Charter member of Phi Tau Sigma, UMass Amherst)

I have used the term selective memory for Doc (Dr. Fellers) advisedly. His memory of those items that mattered to him was phenomenal. I recall once at the end of a meeting, Doc getting up and reciting a long poem that ended with "and be aware of those that fly in the night". His point was to recognize those who are independent and original. I asked one of his sons as we were leaving the meeting where did Doc ever learn that poem. The answer was that it probably was in high school and that such quotations were not rare.

Another case of unbelievable memory was in 1954. I was muttering in the library area about finding a reference that described an analysis for pectic substance. Doc happened to be nearby and told me that the reference was in "The Journal of Food and Agricultural Chemistry", in either the August or September issue of 1948. It was in the August issue.

My most endearing, most enduring and vivid memory of Doc (Dr. Fellers) happened at Cooley-Dickenson Hospital. I had just been there a very short time with polio, perhaps a day, when I had a visitor at the door of the room (I was in isolation so the door was the nearest anyone other than hospital staff could be.) It was Doc, with rainwater dripping off the plastic cover over his fedora, overcoat beaded with rain drops, asking how I was. He had been in Chicago and came directly from the airport to see me, not even stopping at his home. I will never forget that picture; that a man of his stature and station would do that for one of his many students. He simply cared.

### ***November 2012***

#### **Memories of Dr. Carl R. Fellers: Some Thoughts about Dad**

By Paul J. Fellers, Ph.D., Phi Tau Sigma Member, son of Dr. Carl R. Fellers; Reviewed and typed by Becky Fellers Etzler, M.S. (daughter of Paul) and Reviewed Paul's brother David A. Fellers, Ph.D.

One of the more interesting results of growing up being one of the eight children of Carl and Josephine Fellers was getting to meet faculty and a plethora of Food Technology graduate students from here and abroad in Dad's department. Memorable picnics in our woods and yard, which included softball with Dad, were a great place for mingling.

One of Dad's passions was providing the best education possible for the undergrad and graduate students so that when they went out into industry or whatever, they were well prepared. Courses that were extremely valuable for undergrads were Food Tech 51 and 52 (general Food Tech with accompanying labs taught mostly by Dad), and then Food Tech 61 and 62, Industrial Food Tech and accompanying labs taught by Dr. Levine (when I was there).



*Dr. Paul and  
Mrs. Donna Fellers  
(50<sup>th</sup> Wedding Anniversary)*

Dad also had grad students oversee the running of a small canning and freezing operation at the lab where products such as frozen strawberries and raspberries, canned corn and beans, apple sauce, apple butter, cranberry sauce, maple syrup, and mincemeat were all produced mostly for use in the University dining commons. The raw produce was all college grown. I spent some summers working in the cannery; my pay as I remember was a rousing and welcome 55 cents/hour. During the growing season, a side benefit was being able to raid the walk-in-cooler where there were fresh apples and perhaps other goodies. We Food Techers did a bit of trading with some of our products (like frozen strawberries) for ice cream from the Dairy Techers across the street.



*Dr. Carl R. Fellers*

Dad was my professor for four courses: FT 51 and 52, Fisheries Technology (Dad was a world fisheries expert), and seminar. So I knew about both sides of the coin, that of the professor and that of the student. It was fun to hear a classmate brag about getting away with something or other with Dad, then at the supper table hearing Dad say how a certain student thought he was getting away with something (ears burning Marty?).

In seminar, after one of the students would mess up an answer to a question, Dad would quite often quote the page number in Prescott and Proctor where he or she could find the answer, much to the student's amazement. I must admit that I would always be stressed in class when Dad would say "Paul, tell the class..." At least one of those I knew—it was how to spell "desiccate," a really tough English word to spell correctly. For students wishing to know the results of their tests, Dad positioned himself at the door and would grade the exam on the spot.

On occasion, I know that he made my mother anxious. He would call home during the day and say that there would be one more for supper, and often it would be an eminent person such as Clarence Birdseye, Emil Mrak, Francis Griffiths, Fred Voit, or Jack Clague.

To illustrate just how UM dominated the Food Science scene from my point of view, I'll share some names of UM alumni. My major prof. (and brother-in-law) on my MS at VA Tech was Dr. Anthony Lopez (PhD '47), and my major prof. on my PhD at MSU was Dr. Irving Pflug (PhD '53). One of the men who hired me was Dr. Fred Wenzel with the University of Florida's Citrus Research and Education Center (PhD '42); and members of the Scientific Research Staff, Florida Department of Citrus, which was my organization for 31 years, were Andy McCornack (MS, '39) and Dr. Edwin Moore (PhD, '42). Dr. Moore was one of three men who invented the Cinderella product, Frozen Concentrated Orange Juice in the mid-40's.

During my lifetime, I have heard stories about Dad from former students once they knew my name. Many of those folks told of jobs waiting for them upon graduation, both undergrad and grad students, made possible by Dad and/or some of the other profs. One story that I heard more than a few times was that at various IFT meetings, the students were joined at their tables by the eminent Dr. Fellers, instead of the good Doctor joining the other profs, something the students couldn't believe. Many of the grad students enjoyed financial aid with the help of Dad. Some aid came from "The Russia Cement Co"—go figure—Dad had a hard sell sometimes.

Many of the grad students came from abroad, a boon for stamp collectors such as my sister Martha and myself when the correspondence had exotic stamps; most of the envelopes I still have with their little bit of history intact. Of course, each grad student was required to write a thesis, and since many of the students were foreigners, their command of the English language was less than 100%. Thus Dad spent many an hour, many of those at home, getting the manuscripts in acceptable form.

Dad himself was a prolific writer and had numerous publications. One he was particularly proud of was a bulletin called Cranberries and Cranberry Products by Dad and Dr. Bill Esselen in 1955, the year I graduated from UM. Dad was especially pleased with the cover, a first for the University in color and which had to be okayed by the Massachusetts legislature.

Believe me, Dad was a going concern—husband of Josephine, father of eight children, Public Health Service official in the early years, department head, military officer (retiring as a Lt. Colonel after 30 years of service, with about three of those years in Australia with a big job during WWII with food and subsistence for the allies in the Southwest Pacific Theater), author, lecturer, Boy Scout leader, Norwotock Fish and Game club leader, outdoorsman, Knight of Columbus member, tennis and badminton player, inventor (for example, ever hear of Dromedary dates or Blue Channel Corp./Harris' crab meat?), gardener, Cape Cod property proprietor, etc; you might say a man for all seasons.



*Dr. Carl R. Fellers, WWII*

Many thanks are due Phi Tau Sigma Leadership for resurrecting the Society, especially the quality Newsletter, in these recent times.

**September 2012**

**Memories of Dr. Carl R. Fellers:** (Contributed by Anthony W, Kotula, Ph.D., Lifetime Member Phi Tau Sigma)

For the last two years former food science students of Dr. Carl R. Fellers, provided their insight into the family man, educator, scientist, Army Officer, who had such a profound impact on their life. The Phi Tau Sigma Newsletter is grateful to so many individuals who shared their memories of Dr. Fellers.

Dr. Fellers, and his faculty, taught students the basic and applied science and technology, needed for a career in agricultural production, sea-foods, processing, quality evaluation/maintenance, nutrition, and food safety. In addition to meeting the requirements of the university in courses such as chemistry, math, English, physics, biology, etc., undergraduates and graduate students were required to display proficiency in food microbiology and safety, food chemistry and analysis, food processing, and engineering. Additionally, Bachelor of Science undergraduates were taught to reason logically, Master of Science students were taught to think independently, and Doctorate of Science students were taught to solve problems.

The reason we, the former students of Dr. Fellers, have such fond memories of his mentoring, is that he taught us by example, how to have a successful career in Food Science and Technology.