round robin letter where we got news of his travels about the world, what Jim and John were doing, etc. My family visited them several times in Chicago, in Michigan, and in California. What I do recall about these visits is that Bernie would invariably comment, "I trust that you and Harold have provided for the higher education of this fine family," (we have 8), and I'd reply, "Well, Bernie, they will work for it like we all did." And they did - that pleased him so, for we all know how he valued education. Meanwhile, Alta, bless her, kept the home front operating, mothered and often fathered the boys, entertained visiting dignitaries and occasionally accompanied him on a trip. They also contributed financially to Alta's family and to our parents during these years.

When Alta died two years ago, the tender soft-hearted Bernie emerged into my life again - it was the first time in years I got a glimpse of the facade of self confidence, capability, and self-sufficiency failing - and I heard him cry. The team members were scattered - Jim, a dentist, in Michigan with Diane and grandchildren Jimmy and Amy; John in the banking business in Fresno married to Dona and busy with grandchildren Nicholas and Jennifer.

I find it fascinating that Bernie's life made a complete cycle these past 2 years and that God saw it fit that he found time to visit all his family. In May of '88 after Alta died, Harold and I visited him here, had a tour of his offices and laboratories at Davis, golfed at the Country Club, and even had a great dinner cooked by Bernie - steaks on the grill. I must also comment, since I am being very honest about my feelings, that the honesty and integrity that Bernie showed in the classroom, in research, and in industry did not always carry over onto the golf course, but his enthusiasm certainly did. It was so good to spend some leisure time with him.

There was a visit that spring to Cincinnati to visit sister Irma Osterman and husband Gerry. In June of '88 after a Universal Foods Board meeting in Milwaukee, he came to Madison again and we had brother Fred here - the two had not seen each other for 20 years.

Then in August of 1988, I drove him and my sister Eileen up to northern Wisconsin to the 50th reunion of his high school graduating class - he had never been back for a reunion - what memories flooded in. We walked some of the country roads to the site of the old one room country school, we visited brother Gerry and family, we toured the

old farmstead house and tumbled down barn - we even visited his eighth grade sweetheart, and spent an hour with one of his grade school teachers. For me it was another time of sharing with him - for Bernie was a man of few words in the area of feelings - if he's said it once, don't expect him to repeat it - and roses and gifts and sweet nothings were not his manner of expressing love. He showed his love by working hard, being a success in his career and giving his loved ones financial security.

That Christmas of '88 we began hearing about Dianne - he had found someone to again love and be on his team. He thoroughly enjoyed that holiday with her and his sons and their families - so much he called us on the phone to tell us about it - and Bernie was not one to waste money on phone calls. Dianne brought to Bernie's life encouragement, a reason to live - she loved him for himself - as both the scientist and the tender little boy - for Bernie needed to be loved - and that's how I loved him too, not for what he did, or what he had, but for being Bernie. Bernie and Dianne were married in March of 1989.

It was at his suggestion that we had a Schweigert Reunion in June of this year - he wanted all of us to meet his Dianne. Unfortunately they were unable to attend due to his ill health, but he saw videos of it, and chatted to us via the phone that day - at his expense.

This summer he also saw John and Dona move from Fresno to Napa Valley, and in August of '89 to help complete the cycle, he and Dianne got back to Michigan to visit Jim and family, old friends, and to take grandson Jimmy fishing.

On September 13, 1989, Dianne made it possible for Bernie to attend the Universal Foods Board of Directors Meeting in Milwaukee - and to complete the cycle, my sister Eileen, her daughter Mary, Harold and I were their guests at dinner and spent an evening visiting. Here it was that I finally realized how ill he was - but the spark was still there. He asked about all the families - he told us of his plans to begin really enjoying life with Dianne - and in typical Bernie fashion commented that our new Buick car was "not too shabby." Thank you, Dianne, for making this last visit possible, for we could really see the love you two shared. Bernie had made the circuit, he had touched all the bases and seen all his family once more.

And to you, Bernie, I must say about your life - "Not too shabby" - that's about as sentimental as you can handle.

Again to Bernie, to you Dianne, Jim and John and families, to my family, and to all of Bernie's friends and colleagues here and not here:

My Love to You, May God Bless You and Keep You.

- Beatrice Schweigert May

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Also from the family is this letter from Jim Schweigert. It was written a couple of years ago at the time of a symposium honoring Bernie. I haven't asked permission from Jim to share it, so I hope it is okay to do so.

Thank you for your letter of invitation to the Bernie S. Schweigert Symposium. Unfortunately I will be unable to attend.

Having known Bernie S. Schweigert for almost 42 years, I would like to make a few observations concerning his abilities and character.

First, I recall several instances where his intelligence and impartiality have been called into question. I must concede that these instances involved his serving as a Little League Umpire while his eldest son was pitching.

Secondly, I seem to remember that he is not much of a cook. The meal plans were terrific, but when the rain was pouring down and the Boy Scout troop was getting restless, Bernie always knew just what to do. Those hot dogs sure were good!

Finally, I know that Bernie has a sportsman's heart. He is an expert fisherman, as I have seen him catch trout on Mt. Whitney when no one else could. His skill as a golfer is legendary, although you will have to ask him which legend you should believe.

Yes, Bernie Schweigert does have many talents and abilities. His greatest ability was, I feel, that of being a good dad.

> Sincerely, James B. Schweigert

Next on the program are thoughts from those who worked closely with Bernie every day, those in the Department of Food Science and Technology. Pat Poirier is the management services officer in the department now and worked daily with Bernie for 10 years.

\* \* \*

Professor Schweigert was an important person to staff in FS&T. For 10 years he was certainly the most important person in my work life. He was the person in charge, the boss, the leader. Ed Moore used to call him the

chief. Dr. Schweigert established the environment we worked in. He set the pace -- that was difficult to keep up with. And he set the standards -- that were high.

It is an understatement to say that he was a strong leader. However, his forceful leadership was coupled with fairness, his great concern for the welfare of our department, and his deep caring for

He was a superb administrator and manager. He had naturally used for years some of the techniques that current management experts now recommend -for example: MBWA -- Management By Walking Around. He would casually walk through Cruess, IMR and Chemistry Annex to briefly visit with faculty, staff and students and "see how things were going."

Clara Robison commented that outside the department, Dr. Schweigert was truly an ambassador for us with his gregarious personality and many contacts. He knew so many people and so many

Dennis Shimek, the Associate Vice Chancellor for Staff, said he was the friendliest man he knew.

He was intelligent, influential, perceptive, organized, and he had a remarkable memory and because of that, as Diane King said, he had answers, he was a resource.

With his remarkable memory he could remember students' names, and who they worked for, he could remember specific details having to do with various accounts funded in the department, he could remember who he wrote to when and why (so that we could be successful in retrieving correspondence from our files!).

Teri Wolcott said that Dr. Schweigert was totally dedicated to his profession, extremely hardworking and efficient.

Al Wilson said he was especially sensitive to maintaining the dignity of others. Dr. Schweigert knew he could be intimidating to others because he was such a powerful figure both physically and because of who he was, and he was careful about overwhelming other people. I remember that he and I did not always agree on some things and he told me more than once that "he didn't think he would have handled it quite that way." He was a master at making his point in the most subtle way. Carol Cooper said he was a diplomat.

He earned the respect of the staff. I admired and respected him and learned so much from him. We all did.

I saw him grow to appreciate our staff more and more as time went by.

Of course he always referred to the staff as the TEAM. Although we always smiled when he used this cliche, there is no doubt that the TEAM was a term of encouragement, support and endearment -and we consider ourselves a TEAM. Through his leadership in shaping our department, and his example, he developed our pride in being part of the TEAM of the very best Department of Food Science and Technology. He left that legacy.

He loved his work and had a tremendous capacity for work. He loved this department, and of course the department is the people in it.

Dr. Schweigert's passing is the end of an era. Yes. But Dr. Schweigert, BERNIE, I know that where you are, you will continue to follow all our careers with a great deal of interest.

- Pat Poirier

"On behalf of faculty, staff and students..."

Bernie started a lot of memos and ceremonial speeches with that phrase. Pat has given you one view - a personal view - of how Bernie interacted with staff. Let me comment now for students and faculty.

Bernie was good at knowing people. He genuinely cared about them and always had a personal greeting about something of mutual concern. Students were no exception. He took pride in knowing the students; it always surprised me that he could do this because it's hard to stay in contact with students when he had so many administrative duties.

He apparently kept in close contact with his own graduate students from earlier days. Last week his first Ph.D. student Ann Akers wrote me this letter when she heard of Bernie's death.

Thirty-eight years ago in my Doctoral thesis I wrote of my "deep appreciation to Dr. B.S. Schweigert for his continual interest and encouragement - and for his wide interests and enthusiasm that were a constant source of stimulation.' Throughout these many years of our friendship, I have also come to realize and appreciate even more, Bernie's honesty, loyalty and patience. He was always ready to listen and give honest advice to anyone seeking it.

But above all, Bernie was a warm and fun-loving person, always ready for the "next challenge", whether work, play, a new experience, or a new relationship. In that vein I will always remember:

- the friendship that developed between Bernie and my parents

- baby sitting for Jim and John when they were small

- the hotly contested ping-pong matches before evening seminars

- careening from drift to drift in an epic Chicago blizzard as we attempted to get to my graduation exercises

- the comraderie of the personnel in Bernie's lab at the AMIF - and their tolerance and help to us graduate students

- coffee every afternoon for everyone with Bernie never too busy to be there for informal discussions

- the fact that Bernie's office door was always open

- the fun of trying ourselves to build equipment now taken for granted a fraction collector, a pipette washer

- Bernie's ready welcome to any of my fellow grad students in whatever department and no matter how "far-out" some may have seemed to him

- my graduation gift of a tiny silver coffee cup and saucer charm

- the uproarious engagement party during Federation meetings in San Francisco at which my fiance convinced Bernie that he was a "big Texas cattle rancher."

- Bernie's move to Michigan State University while we were in Egypt and our delight when we returned - also to MSU

- Bernie and Alta caring for our 5-year old daughter for ten days so our infant son would not be exposed to her chicken pox

- the wine-tasting adventure (Bernie's first) on the hottest day of the year when Bernie and family first visited California

- Bernie's and Alta's first visit to South Lake Tahoe where we introduced them to the casinos, too much sun, and a California campground with too-rare steaks and frozen beer

- Bernie's 6-month sabbatical in a trailer so tiny the telephone was in the bathroom

- "doing" San Francisco together, with everything from the symphony to Columbus Avenue

- my birthday-present weekend with them at Tahoe that included a bag-full of dimes and a bottle of Margaux

- the long evening in Davis when Bernie, Alta, my husband and I hammered out the pros and cons of our offer from Tulane University

- Introducing Bernie to New Orleans culture, food and the French Quarter Jazz

- my husband's and Bernie's "who was

worse" golfing afternoons

I am especially grateful that my husband and Bernie became close and lasting friends in a relationship of mutual respect and great warmth - and that all of Tom's and my children were able to know and love Bernie as Tom and I did.



Bernie and Alta Schweigert, 1987

In 1987 when Bernie announced his intention to step down from the department chairmanship, faculty and former students and friends put on the Bernard S. Schweigert Symposium in his honor. (Bob Pearl was one who was instrumental in organizing that, and I mention that because Bob himself is recently retired, traveling in Europe, and may not know of Bernie's death.) At that time a scholarship was established to help students studying food science. When his wife Alta died later that year the scholarship name was changed to the "Bernard S. and Alta G. Schweigert Food Science Award" to honor both Dr. Schweigert and Alta. The first winner of that award was selected this year. At the risk of embarrassing her I'm going to ask her to stand up. This is Pojjanee Paniangvait. We call her Bee. I know many of you have contributed to this award, and I thought you might appreciate this opportunity to see scholarship in person.

Yesterday I spoke with Charley Hess, former Dean of our College and now Assistant Secretary of Agriculture in Washington, D.C. We were wondering together how he could participate in today's program from such a great distance. We agreed that I should read to you excerpts from some remarks that he made in tribute to Bernie at the Schweigert Symposium in 1987. I have changed this to past tense for today.

Bernie brought national recognition to the Department in addition to that generated by faculty research, teaching and service through participation in professional societies, scientific advisory committees and editorial boards. His membership on the Board of Agricultural and Renewable Resources of the National Academy of Sciences, Presidency of IFT, and Chairman of the Dietary Guidelines Advisory Committee are three examples in a very impressive list of activities. His contacts at the national level helped bring industry support to the Department, helped attract graduate students and faculty, as well as establishing the presence of the Department and UC Davis throughout the U.S. But what really made Bernie a true leader and friend was his style of operation. He was a dynamic force in every meeting I attended with him. He got his point across forcibly, but with great diplomacy in either spoken or written form. Let me give you a few examples of "Bernie-ese":

In asking for a Ph.D. program in Food Science: "We trust that you will put the full power of your office toward meeting the objectives we have desired."

Or for additional space: "Your high priority attention to meeting this request will be much appreciated."

will be much appreciated."

On funds: "This is a special funding opportunity for the Dean's office." (and after just hearing there were none) "If your office will have any flexibility in meeting these important funding needs..."



A friendly point...

Bernie was a master of presenting faculty strengths in letters supporting merits and promotions. Each letter would have "May I call your special attention to..." and then point out the faculty member's most recent accomplishments as a teacher or researcher. And later he would follow up with: "If any additional documentation or clarification of the record is needed, please let me know. We will appreciate your reconsideration on this personnel action."

A true measure of the support for Bernie was that after 17 years as Chair, the faculty, staff and students wanted more. If I could not convince Bernie to serve, the least I could do was clone him - in view of all the emphasis I had been giving to biotechnology.

Bernie was not all work and no play. He did enjoy a round of golf now and then. When Bernie was asked about his score, he often replied, "the fellowship was great," or "I'm glad I have another way to make a living." The other day when he made a

particularly long putt, Bernie said, "Well, even a blind pig gets an acorn once in awhile."

One thing about Bernie at meetings - he liked to keep them moving. Usually as the time approached for an ending he began to shift his weight around a bit. Then there were frequent glances at his watch. And finally, "Isn't it time we moved on to the next issue?"

These quotes were not the whole of Dean Hess's remarks and I hope that I have not omitted the parts that reflected the genuine respect and affection that Charley had for Bernie.

From a faculty point of view - we appreciated Bernie as our department chairman for 17 1/2 years. During that time:

He hired 17 faculty members - each outstanding in his own field and some of the best young scientists on campus. Bernie was proud of these people and in the words of Robert Gray, Dean of the Division of Biological Sciences, "Food Science and Technology has followed an enlightened hiring policy during the past years under Dr. Schweigert."

He worked hard to establish a Ph.D. in Food Science at the Davis campus. His efforts were not wasted, and a Ph.D. has been approved for implementation next fall. Ironically, approval came last week, within a few days after Bernie's death.

He was instrumental in establishing an endowed chair (the Peter J. Shields Chair in Dairy Food Science, currently filled by Tom Richardson) and also in helping to establish the California Dairy Foods Research Center.

Bernie was amazing at finding space in the department buildings for squeezing in one more professor. He converted porches into laboratories and departmental storerooms. Then he made a compressor room into a laboratory. Then he made a walk-in incubator into Marty Miller's office, which was fitting for a microbiologist. And he converted the men's shower room into offices for emeritus professors. But his crowning achievement was the office for our endowed chair. There really was no more space in Cruess Hall. But one day he took Ernie Burton out to the foyer and said, "Look up there," and pointed up to the two story entry way and staircase in Cruess Hall. "We'll put his office right there." And they did. They put some beams across the empty space and hung the office over the entry way.

We could continue this list of accomplishments, and there are many, but I would rather talk more about the man himself.

Bernie's gift was administration. His favorite phrase was "We're here to serve." And he did.

Every year he sat down with each faculty member "for a good visit" as he called it. He would check up on our progress and encourage as needed, ask about our families and give advice. Frankly, he scared me to death with these "visits." I would work for days before, outlining all my accomplishments and papers published and projects underway and plans for student funding. But these meetings were effective in making sure we were all "fully harnessed," to use another of his favorite phrases.

Apparently he had these good visits with the dean as well. Former Dean Hess who had great affection for Bernie used to say, "Half the time you take Bernie's advice and the rest of the time you receive his advice." Actually he was quoting John Whitaker who is also in the Dean's office - but you get the point.

Bernie was known as the "fastest memo in the west." If you had a meeting with him he would have a memorandum about the decision waiting for you by the time you got back to your office. There was a rumor that he used two dictating machines: after one overheated he would use the second one.

\* \* \*

I'm sure Bernie would think this ceremony is much too long and from somewhere on the other side he is shifting in his chair and looking at his watch.

I tried to think of how he would have done this ceremony about himself, and in best Bernie Schweigert style, with all his favorite phrases, it might have gone something like this:

Actually, I do feel a short speech coming on about the good professor. Bernie Schweigert, you achieved a Ph.D. in Biochemistry and Physiology from the University of Wisconsin in just 3 years time, and started your academic career at Texas A&M as an Associate Professor with tenure by the time you were 25 years old. Not too shabby. You published over 200 papers in your years with the University of Chicago, American Meat Institute Foundation, Michigan State University and the University of California. I want to

congratulate those institutions on having the wisdom to hire you.

You got my attention with that point, young man, but now it's time for your promotion to a new team. A friendly point. Please give my special greetings to those folks over there, and we'll be following your new career with a great deal of interest.

\* \* \*

Let me close my part of the program by reading a letter from Jim Kirk that he faxed to me yesterday from Hong Kong. Jim was Bernie's former student, a faculty member at Michigan State under Bernie, and is currently a Vice President at Campbell Soup.

How fortunate I was to have known this man. Bernie had a wonderful combination of knowledge, insight and personal caring about people. In graduate school Bernie believed in my potential. I have spent my career trying to meet his expectations.

From being my advisor at Michigan State University, Bernie became my mentor and general counsel. While his passing will leave a personal void, his contributions have enriched us all and will not be forgotten.

Paulette and I will miss him. Jim Kirk

I know we must quit, but one phrase in that wonderful letter caught my attention: "I have spent my career trying to meet his expectations."

That statement touched a responsive chord in me, and I want to say to Jim and John and to me and others who are trying to live up to the legacy that Bernie left us: We heard what Bernie's sister said about why Bernie worked so hard and was the way he was. He had his circumstances that shaped his life. As we carry on without him, we must shape our own lives - not trying to live up to what we think are his expectations for us. Bernie would want it that way.

In our faculty meetings, the last item on the agenda was always "Comments from the Faculty," and Bernie would go around the room and call on each person present by name to make his views known. I won't do that today, but it would be fitting for a few of you in the short time we have to come up here to the microphone and share a brief memory you may have.

[There were remarks from colleague John Whitaker, former staff employee Cathy England and student Tim Taylor.]

Bernie was 68 years old when he died. The 90th Psalm says:

The length of our days is seventy years, or eighty if we have the strength.

In that same 90th Psalm are the words of the University Hymn. Listen to these words as the closing hymn before the benediction:

O God, our help in ages past, Our hope for years to come, Our shelter in the stormy blast, And our eternal home!

Before the hills in order stood, Or earth received her frame, From everlasting, thou art God, To endless years the same.

Father,

We thank you for the comfort we have received today. We want once more to commit Bernie to his eternal home. To his home in our hearts, and to his eternal home in your everlasting love.

Amen.

Go in peace, or as Bernie would say,

With Special Good Wishes.



Graduate school, 1943

# Faculty Publications January 1988 - June 1989

## **Everett Bandman**

An immunological method to assess protein degradation in post-mortem muscle. E. Bandman and D. Zdanis. 1988. Meat Science 22:1-19.

Expression of fiber type specific proteins during ontogeny of canine temporalis muscle. G.D. Shelton, G.H. Cardinet, III and E. Bandman. 1988. Muscle and Nerve 11:124-132.

Altered patterns of myosin heavy chain expression in avian dystrophic muscle. E. Bandman and T. Bennett. 1988. p. 181-192, IN: U. Carraro (ed.), Scaromeric and Non-Scaromeric Muscles: Basic and Applied Research Projects for the 90's. Unipress Padova, Padova, Italy.

Myosin heavy chain expression during development and following denervation of fast fibers in the red strip of the chicken pectoralis. C.R. Shear, E. Bandman and B.W.C. Rosser. 1988. Developmental Biology 127:326-337.

Diversity of fast myocin heavy chain expression during development of gastrocnemius, bicep brachii, and posterior latissimus dorsi muscles in normal and dystrophic chickens. E. Bandman and T. Bennett. 1988. Developmental Biology 130:220-231.

Distribution of fast myocin heavy chain isoforms in thick filaments of developing chicken pectoral muscle. L.D. Taylor and E. Bandman. 1989. The Journal of Cell Biology 108:533-542.

Myogenic and non-myogenic factors regulate the expression of myosin heavy chains in developing and regenerating chicken skeletal muscle. E. Bandman, L.C. Cerny and T. Bennett. 1989. p. 429-439, IN: Cellular and Molecular Biology of Muscle Development, Alar R. Liss, Inc.

#### Ericka L. Barrett

Heat resistance of alkaline phosphatases produced by microorganisms isolated from California Mexican-style cheeses. E.L. Pratt-Lowe, R.M. Geiger, T. Richardson, and E.L. Barrett. 1988. Journal of Dairy Science 71:17-23.

Formate-nitrate respiration in Salmonella typhimurium: Studies of two rha-linked fdn genes. M.T. Paveglio, J.S. Tang, R.E. Unger and E.L. Barrett. 1988. Journal of Bacteriology 170:213-217.

Characterization of anaerobic sulfite reduction by Salmonella typhimurium and purification of the anaerobically induced sulfite reductase. P.C. Hallenbeck, M.A. Clark and E.L. Barrett. 1989. Journal of Bacteriology 171:3008-3015.

#### Richard A. Bernhard

Evaluation of mechanical deaeration parameters for high vacuum canned foods. J.R. Heil, C.L. Hamblin, R.A. Bernhard, R.L. Merson and H. Patino. 1988. Journal of Food Science 53:157-161.

Effect of nitrogen source on pyrazine formation. J.M. Wong and R.A. Bernhard. 1988. Journal of Agricultural and Food Chemistry 36:123-129.

Flow characteristics of supercritical carbon dioxide through an integrally restricted capillary. C.K. Huston, Jr. and R.A. Bernhard. 1989. Journal of Chromatographic Science 27:231-234.

## Christine M. Bruhn

Observations on the whipping characteristics of cream. C.M. Bruhn and J.C. Bruhn. 1988. Journal of Dairy Science 71:857-862.

Food irradiation and consumer values. C.M. Bruhn, H.G. Schutz and R. Sommer. 1988. Ecology of Food and Nutrition 21:219-235.

Irradiation: Risk or benefit? C.M. Bruhn. 1988. School Food Service Journal 42(7):62.

Perspectives of consumer advocates. S.O. Archibald, C. Bruhn, S. Lane and R. Marsh. 1988. p. 5-8, IN: Regulatory Chemicals: A Public Policy Quandry, Agricultural Issues Center, University of California, Davis, CA.

Perspectives of consumers. C. Bruhn, S. Lane and L. Walton. 1988. p. 9-13, IN: Regulatory Chemicals: A Public Policy Quandry, Agricultural Issues Center, University of California, Davis, CA.

## John C. Bruhn

A survey of coliforms and Staphylococcus aureus in cheese using impedimetric and plate count method. F.A. Khayat, J.C. Bruhn and G.H. Richardson. 1988. Journal of Food Protection 51:53-55.

Observations on the whipping characteristics of cream. C.M. Bruhn and J.C. Bruhn. 1988. Journal of Dairy Science 71:857-862.

Protein and major cations in California market milks. J.C. Bruhn and A.A. Franke. 1988. Journal of Dairy Science 71:917-924.

Milk quality surveys in California: 1974 and 84. J.C. Bruhn, A.A. Franke, G.D. Reif and D.R. Frazeur. 1988. Dairy and Food Sanitation 8:404-408.

Distribution of protein in California milk in 1983. A.A. Franke, J.C. Bruhn and

C.M. Lawrence. 1988. Journal of Dairy Science 71:2373-2383.

Protein and major cations in California cottage cheese and yogurt. J.C. Bruhn and A.A. Franke. 1988. Journal of Dairy Science 71:2885-2890.

## Walter L. Dunkley

Business management of the American Dairy Science Association: Historical review. W.L. Dunkley. 1989. Journal of Dairy Science 72:288-304.

## Robert E. Feeney

Inhibition and promotion of freezing: Fish antifreeze proteins and ice-nucleating proteins. R.E. Feeney. 1988. Comments in Agricultural and Food Chemistry 1:147-181.

Importance of cross-linking reactions in proteins. R.E. Feeney and J.R. Whitaker. 1988. Advances in Cereal Science and Technology 9:21-46.

Structure-function studies on antifreeze glycoproteins from blood serums of Antarctic fish. R.E. Feeney, D.T. Osuga, D.S. Reid, T.S. Burcham, W.L. Kerr and Y. Yeh. 1988. Antarctic Journal of the United States 21:199-200.

Reflections on chemical modification of proteinases and their protein inhibitors. R.E. Feeney. 1988. Biochimie 70:1171-1177.

Egg white and blood-serum proteins functioning by noncovalent interactions: Studies by chemical modification and comparative biochemistry. R.E. Feeney and D.T. Osuga. 1988. Journal of Protein Chemistry 7:667-687.

Antifreeze glycoproteins: Physical, chemical and functional properties. R.E. Feeney, D.T. Osuga and Y. Yeh. 1988. Antarctic Journal of the United States 22:215-217.

Food technology and polar exploration. R.E. Feeney. 1989. Food Technology 43(5):70, 72, 74, 76-82.

## J. Bruce German

Relative inhibitory potencies of flavonoids on 12-lipoxygenase of fish gill. R.J. Hsieh, J.B. German and J.E. Kinsella. 1988. Lipids 23:322-326.

Lipoxygenase in fish tissue: Some properties of the 12-lipoxygenase from trout gill. R.J. Hsieh, J.B. German and J.E. Kinsella. 1988. Journal of Agricultural and Food Chemistry 36:680-685.

Docosahexaenoic acid and other dietary polyunsaturated fatty acids suppress leukotriene synthesis by mouse peritoneal macrophages. B.R. Lokesh, J.M. Black, J.B. German and J.E. Kinsella. 1988. Lipids 23:968-972.

Differential effects of docosahexaenoic acid and eicosapentaenoic acid on suppression of lipoxygenase pathway in peritoneal macrophages. B.R. Lokesh, J.B. German and J.E. Kinsella. 1988. Biochimica et Biophysica Acta 958:99-107.

#### Norman F. Haard

Effects of bacterial protease on the quality of cheddar cheese. T.M. Tye, N.F. Haard and T.R. Patel. 1988. Canadian Institute of Food Science and Technology Journal 21:373-377.

Astaxanthin formation by the yeast *Phaffia* rhodozyma on molasses. N.F. Haard. 1988. Biotechnology Letters 10:609-614.

The effect of carotenoid-protein association on pigmentation and growth rates of rainbow trout (Salmo gairdneri).

A.M. Long and N.F. Haard. 1988. p. 98-100, IN: Proceedings, Aquaculture International Conference, Aquaculture Association of Canada, St. Andrews, New Brunswick.

Contribution of cathepsin C to the fermentation of fish sauce from capelin (Mallotus villosus) and aided by squid (Illex illscbrosus) hepatopancreas. N. Raksakulthai and N.F. Haard. 1988. p. 658-670, IN: Proceedings of the 12th Annual Tropical and Subtropical Fisheries Technology Conference and 32nd Annual Atlantic Fisheries Technology Conference, Orlando, FL.

On the mechanism of enzyme action: Digestive proteases from selected marine organisms. B.K. Simpson, M.V. Simpson and N.F. Haard. 1989. Biotechnology and Applied Biochemistry 11:226-234.

## Jerald M. Henderson

Preliminary design considerations for a human powered vehicle lighting system. D. Petersen, M.F. Hardwick and J.M. Henderson. 1988. Vehicle Design 9:295-305.

Simulation of a hydraulic hybrid vehicle using bond graphs. G. Pease and J.M. Henderson. 1988. Journal of Mechanisms, Transmissions and Automation in Design 110:365-369.

Strength characteristics of pressurized cans. P.L. Brewbaker and J.M. Henderson. 1988. Journal of Food Process Engineering 10:199-216.

## Walter G. Jennings

Influence of dispersion medium on aroma intensity and headspace concentration of menthone and isoamyl acetate. S.E. Ebeler, R.M. Pangborn and W.G. Jennings. 1988. Journal of Agricultural and Food Chemistry 36:791-796.

#### John M. Krochta

Thermochemical conversion of polysaccharides in concentrated alkali to alycolic acid. J.M. Krochta, S.J. Tillin and J.S. Hudson. 1988. Applied Biochemistry and Biotechnology 17:23-32.

Thermochemical conversion of biomass with concentrated alkaline solution to organic acids. J.M. Krochta, J.S. Hudson and S.J. Tillin. 1988. p. 399-410, IN: J. Kuester and T. Bridgewater (eds.), Research in Thermochemical Biomass Conversion, Elsevier Publishers. Ltd., London.

Kinetics of alkaline thermochemical degradation of pollysaccharides to organic acids. J.M. Krochta, J.S. Hudson and S.J. Tillin. 1988. p. 119-128, IN: T.A. Milne and E.J. Soltes (eds.), Production, Analysis and Upgrading of Pyrolysis Oils from Biomass, ACS Symposium Series, Washington, D.C.

Edible films from casein-lipid emulsions for lightly-processed fruits and vegetables. J.M. Krochta, J.S. Hudson, W.M. Camirand and A.E. Pavlath. 1988. ASAE Paper No. 88-6523. American Society of Agricultural Engineers, St. Louis, MO.

## Michael J. Lewis

Differentiation of Robust and Morex barley by isozyme electrophoresis. C.K. Huston, Jr., A. Vie and M.J. Lewis. 1988. American Society of Brewing Chemists Journal 46:18-20.

Evaluation of the potential use of Mexican-grown triticale in malting and brewing. R. Perez-Escamilla, H. Patino and M.J. Lewis. 1988. Brewers Digest 63(12):28-32.

## Bor S. Luh

Improving efficiency, safety, and quality of meat processing using solid state temperature monitoring systems. G. Zeidler, G. Pasin, B.S. Luh, J.F. Thompson, L.A. Gabriel and D.R. Rice. 1988. p. 70-102, IN: Proceedings of the 30th Annual Meat Science Institute, Athens, GA.

Application of actinidin from kiwifruit to meat tenderization and characterization of beef muscle protein hydrolysis. D.A. Lewis and B.S. Luh. 1988. Journal of Food Biochemistry 12:147-158.

Development and distribution of actinidin in kiwifruit (Actinidia chinensis) and its partial characterization. D.A. Lewis and B.S. Luh. 1988. Journal of Food Biochemistry 12:109-116.

Commercial Vegetable Processing, 2nd ed. B.S. Luh and J.G. Woodroof (eds.). 1988. Van Nostrand Reinhold, New York, 784 pp.

General principles and methods. B.S. Luh and G.K. York. 1988. p. 1-31, IN: B.S. Luh and J.G. Woodroof (eds.), *Commercial* 

Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Tin, glass and plastic containers. H.C. Chen, C.Y. Wang and B.S. Luh. 1988. p. 87-133, IN: B.S. Luh and J.G. Woodroof (eds.), *Commercial Vegetable Processing*, 2nd ed., Van Nostrand Reinhold, New York.

Canning of vegetables. B.S. Luh and C.E. Kean. 1988. p. 195-285, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Vegetable juices, sauces and soups. E. Karlsson and B.S. Luh. 1988 p. 287-342, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Freezing of vegetables. B.S. Luh and M.C. Lorenzo. 1988. p. 343-386, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Vegetable dehydration. L.P. Somogyi and B.S. Luh. 1988. p. 387-473, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Pickling and fermenting of vegetables. C.S. Pederson and B.S. Luh. 1988. p. 475-518, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Grades and standards. G. Niketic-Aleksic, B.S. Luh and Y.H. Hui. 1988. p. 519-559, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Quality control. H. Patino and B.S. Luh. 1988. p. 561-609, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

Nutrition labeling. C.A. Raab and B.S. Luh. 1988. p. 713-725, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

## Mendel Mazelis

Lack of homology between the alliin lyases of garlic and onion. L.P. Nock and M. Mazelis. 1989. Phytochemistry 28:729-731.

## Kathryn McCarthy

A finite element method to model steam infusion heat transfer to a free falling film. K.L. McCarthy and R.L. Merson. 1989. Journal of Food Process Engineering 11:43-54.

An integral method analysis of steam infusion heating of a free falling film. K.L. McCarthy and R.L. Merson. 1989. Journal of Food Science 54:734-737, 747.

## Michael McCarthy

Measurement of acid diffusion in canned vegetables using pH sensitive indicators. M.J. McCarthy and J.R. Heil. 1988. Journal of Food Science 53:494-495, 499.

Influence of gluconic acid on enzyme inactivation and color retention in canned apricots and peaches. J.R. Heil, M.J. McCarthy and R.L. Merson. 1988. Journal of Food Science 53:1717-1719.

## Richard Larry Merson

Evaluation of mechanical deaeration parameters for high vacuum canned foods. J.R. Heil, C.L. Hamblin, R.A. Bernhard, R.L. Merson and H. Patino. 1988. Journal of Food Science 53:157-161.

Factors influencing Clostridium botulinum spore germination, outgrowth, and toxin formation in acidified media. D.M. Wong, K.E. Young-Perkins and R. L. Merson. 1988. Applied and Environmental Microbiology 54:1446-1450.

Influence of gluconic acid on enzyme inactivation and color retention in canned apricots and peaches. J.R. Heil, M.J. McCarthy and R.L. Merson. 1988. Journal of Food Science 53:1717-1719.

Heat penetration and bacteriological properties of foods for heat sterilization process design. R. L. Merson. 1989. IN: R.P. Singh and A.G. Medina (eds.), Food Properties and Computer-Aided Engineering of Food Processing Systems, Kluwer Academic Publishers, Dordrecht, The Netherlands.

A finite element method to model steam infusion heat transfer to a free falling film. K.L. McCarthy and R.L. Merson. 1989. Journal of Food Process Engineering 11:43-54.

An integral method analysis of steam infusion heating of a free falling film. K.L. McCarthy and R.L. Merson. 1989. Journal of Food Science 54:734-737, 747.

## Martin W. Miller

Extracellular enzyme production in species of the genus *Penicillium*. M. Petruccioli, F. Federici and M.W. Miller. 1988. Mycologia 80:726-728.

Semicontinous production of glucoamylase using immobilized growing cells of *Aureobasidium pullulans*. F. Federici, M.W. Miller and M. Petruccioli. 1989. Yeast 5:S175-S179.

## David M. Ogrydziak

Kinetics of batch fermentations with Kluyveromyces fragilis. M. Ozilgen, D.F. Ollis and D. Ogrydziak. 1988. Enzyme and Microbial Technology 10:165-170.

Intracellular precursors and secretion of alkaline extracellular protease of *Yarrowia lipolytica*. S. Matoba, J. Fukayama, R.A. Wing and D.M. Ogrydziak. 1988.

Molecular and Cellular Biology 8:4904-4916.

Development of genetic maps of nonconventional yeasts. D.M. Ogrydziak. 1988. Journal of Basic Microbiology 3:185-196.

Production of alkaline extracellular protease by *Yarrowia lipolytica*. D.M. Ogrydziak. 1988. CRC Critical Reviews in Biotechnology 3:177-187.

A novel location for dipeptidyl aminopeptidase processing sites in the alkaline extracellular protease of *Yarrowia lipolytica*. S. Matoba and D.M. Ogrydziak. 1989. The Journal of Biological Chemistry 264:6037-6043.

## Michael O'Mahony

Sensory difference and preference testing: The use of signal detection measures. M. O'Mahony. 1988. p. 145-175, IN: H. Moskowitz (ed.), Applied Sensory Analysis of Foods, Vol. 1, CRC Press, Boca Raton, FL.

The warm-up effect as a means of increasing the discriminability of sensory difference tests. M. O'Mahony, U. Thieme and L.R. Goldstein. 1988. Journal of Food Science 53:1848-1850.

Time-intensity scaling with judges trained to use a calibrated scale: Adaptation, salty and umami tastes. M. O'Mahony and S.-Y. Wong. 1989. Journal of Sensory Studies 3:217-236.

Triangular difference testing: Refinements to sequential sensitivity analysis for predictions for individual trials. A. Vie and M. O'Mahony. 1989. Journal of Sensory Studies 4:87-103.

Replacement of sodium chloride by modified potassium chloride (cocrystallized disodium-5'-inosinate and disodium-5'-guanylate with potassium chloride) in fresh pork sausages: Acceptability testing using signal detection measures. G. Pasin, M. O'Mahony, G. York, B. Weitzel, L. Gabriel and G. Zeidler. 1989. Journal of Food Science 54:553-555.

## Rose Marie Pangborn

Regional aroma preferences. R.M. Pangborn, J.-X. Guinard and R.G. Davis. 1988. Food Quality and Preference 1:11-19.

Influence of fat, citric acid and sodium chloride on texture and taste of a cheese analog. O. Eymery and R.M. Pangborn. 1988. Sciences des Aliments 8:15-32.

Prediction of reported consumption of selected fat-containing foods. H. Tuorila and R.M. Pangborn. 1988. Appetite 11:81-95.

Time-dependent aspects of food flavor perception. R.M. Pangborn. 1988. p. 33-42, IN: Proceedings, International

Aroma Symposium, University of Turku, Turku, Finland.

Sensory-instrumental correlation of food aroma. R.M. Pangborn. 1988. p. 103-109, IN: *Proceedings, International Aroma Symposium*, University of Turku, Turku, Finland.

Influence of dispersion medium on aroma intensity and headspace concentration of menthone and isoamyl acetate. S.E. Ebeler, R.M. Pangborn and W.G. Jennings. 1988. Journal of Agricultural and Food Chemistry 36:791-796.

Behavioural models in the prediction of consumption of selected sweet, salty and fatty foods. H. Tuorila and R.M. Pangborn. 1988. p. 267-279, IN: D. Thomson (ed.), Food Acceptability, Elsevier Publishers, Ltd., London..

Sensory attributes and acceptance of fat, sugar and salt in dairy products. R.M. Pangborn. 1988. p. 413-429, IN: D. Thomson (ed.), Food Acceptability, Elsevier Publishers, Ltd., London..

The influence of tastants on oral irritation by capsaicin. C.W. Nasrawi and R.M. Pangborn. 1989. Journal of Sensory Studies 3:287-294.

Evaluation of bitterness of caffeine in hot chocolate drink by category, graphic, and ratio scaling. R.M. Pangborn, J.-X. Guinard and H.L. Meiselman. 1989. Journal of Sensory Studies 4:31-35.

Enzymes responsible for off-flavor and off-aroma in blanched and frozen-stored vegetables. P.J. Velasco, M.H. Lim, R.M. Pangborn and J.R. Whitaker. 1989. Biotechnology and Applied Biochemistry 11:118-127.

Ad libitum preferences for salt in chicken broth. R.M. Pangborn and K.S. Braddock. 1989. Food Quality and Preference 1:47-52.

#### Herman J. Phaff

Identification of yeasts found in decaying cactus tissue. M.-A. Lachance, W.T. Starmer and H.J. Phaff. 1988. Canadian Journal of Microbiology. 34:1025-1036.

Yeasts vectored by insects feeding on decaying saquaro cactus. W.T. Starmer, H.J. Phaff, J.M. Bowles and M.-A. Lachance. 1988. The Southwestern Naturalist 33:362-363.

Trends in yeast systematics (Introductory Lecture). H.J. Phaff. 1989. Yeast 5:S341-S349.

Candida populi, a new species of yeast occurring in exudates of Populus and Betula species. A.N. Hagler, L.C. Mendonca-Hagler and H.J. Phaff. 1989. International Journal of Systematic Bacteriology 39:97-99.

### Chester W. Price

Early-blocked sporulation mutations alter expression of enzymes under carbon control in *Bacillus subtilis*. S.A. Boylan, K.T. Chun, B.A. Edson and C.W. Price. 1988. Molecular and General Genetics 21:271-280.

Use of  $\lambda$ gt11 and antibody probes to isolate genes encoding RNA polymerase subunits from *Bacillus subtilis*. C. Price, S. Boylan, M. Duncan, S. Kalman, J.-W. Suh, S. Thomas and B. Van Hoy. 1988. p. 183-188, IN: A.T. Ganesan and J.A. Hoch (eds.), *Genetics and Biotechnology of Bacilli*, Vol. 2, Academic Press, San Diego, CA.

Gene encoding the alpha core subunit of *Bacillus subtilis* RNA polymerase is cotranscribed with the genes for initiation factor 1 and ribosomal proteins B, S13, S11, and L17. S.A. Boylan, J.-W. Suh, S.M. Thomas and C.W. Price. 1989. Journal of Bacteriology 171:2553-2562.

## Robert J. Price

Paralytic shellfish poisoning and red tides. R.J. Price. 1988. Sea Grant Extension Program, Cooperative Extension, University of California, Davis. UCSGEP 88-1 (Revision).

Smoking Fish. R.J. Price and P. Tom. 1988. Sea Grant Extension Program, Cooperative Extension, University of California, Davis. UCSGEP 88-2.

Safe handling and storing of seafood. R.J. Price. 1988. Sea Grant Extension Program, Cooperative Extension, University of California, Davis. UCSGEP 88-3. (Revision).

Manejo y conservación de pescados y mariscos sin riesgos de envenenamiento (Safe handling and storing of seafood). R. J. Price. I. Tenney, translator. 1988. Sea Grant Extension Program, Cooperative Extension, University of California, Davis. UCSGMAP86-6 (Revision).

Processing yields and proximate composition of cultured white sturgeon (Acipenser transmontanus). R.J. Price, S.S.O. Hung, F.S. Contes and E.M. Strange. 1989. Journal of Food Science 54:216-217.

Effect of processing on proximate composition and mineral content of sea cucumbers (*Parastichopus* spp.). M.V. Chang-Lee, R.J. Price and L.E. Lampila. 1989. Journal of Food Science 54:567-568, 572.

On-board handling of albacore tuna for alternative markets. R.J. Price and E.F. Melvin. 1989. Final report for U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service grant #NA-86-ABH-00030.

Why seafood spoils. R.J. Price. 1989. Sea Grant Extension Program, Cooperative Extension, University of California, Davis. UCSGEP 89-3.

## David S. Reid

Degradation of pectic substances in carrots by heat treatment. D. Plat, N. Ben-Shalom, A. Levi, D. Reid and E.E. Goldschmidt. 1988. Journal of Agricultural and Food Chemistry 36:362-365.

Structure-function studies on antifreeze glycoproteins from blood serums of antarctic fish. R.E. Feeney, D.T. Osuga, D.S. Reid, T.S. Burcham, W.L. Kerr and Y. Yeh. 1988. Antarctic Journal of the United States 21:199-200.

Effect of blanching and drying on pectin constituents and related characteristics of dehydrated peaches. A. Levi, N. Ben-Shalom, D. Plat and D.S. Reid. 1988. Journal of Food Science 43:1187-1190, 1203.

## Thomas Richardson

Heat resistance of alkaline phosphatases produced by microorganisms isolated from California Mexican-style cheeses. E.L. Pratt-Lowe, R.M. Geiger, T. Richardson, and E.L. Barrett. 1988. Journal of Dairy Science 71:17-23.

Molecular cloning and expression of bovine κ-casein in *Escherichia coli*. Y.C. Kang and T. Richardson. 1988. Journal of Dairy Science 71:29-40.

Genetic modification of food proteins. L.K. Creamer, R. Jimenez-Flores and T. Richardson. 1988. Trends in Biotechnology 6:163-169.

Genetic engineering of caseins to modify the behavior of milk during processing: A review. R. Jimenez-Flores and T. Richardson. 1988. Journal of Dairy Science 71:2640-2654.

## Gerald F. Russell

Mini and microcomputers in the food industry. G.F. Russell. 1988. Control 1:118, 123-124.

## Barbara O. Schneeman

Intestinal zinc and carboxypeptidase A and B activity in response to consumption of test meals containing various proteins by rats. J. Berger and B.O. Schneeman. 1988. Journal of Nutrition 118:723-728.

The effects of guar gum or wheat bran on the disappearance of <sup>14</sup>C-labeled starch from the rat gastrointestinal tract. L.F. Tinker and B.O. Schneeman. 1989. Journal of Nutrition 119:403-408.

Reduction in plasma and hepatic triacylglycerides with whole milk-containing diets in rats. B.O. Schneeman, R. Rice and B.D. Richter. 1989. Journal of Nutrition 119:965-970.

Interaction of bile acids, phospholipids, cholesterol and triglycerides with dietary fibers in the small intestine. K. Ebihara and B.O. Schneeman. 1989. Journal of Nutrition 119:1100-1106.

## Bernard S. Schweigert

Changing technical processes in U.S. food industries. G.W. Sanderson and B.S. Schweigert. 1988. p. 83-115, IN: C.O. McCorkle, Jr. (ed.), Economics of Food Processing in the United States, Academic Press, San Diego, CA.

#### Charles F. Shoemaker

Rheological characterization of commercially processed fluid milks. J.E.B. Wayne and C.F. Shoemaker. 1988. Journal of Texture Studies 19:143-152.

Computerized Food Pocessing Operations. A.A. Teixeira and C.F. Shoemaker. 1988. Van Nostrand Reinhold, New York. 202 pp.

Evaluation of the helical screw rheometer as an on-line viscometer. M.S. Tamura, J.M. Henderson, R.L. Powell and C.F. Shoemaker. 1989. Journal of Food Science 54:483-484.

# R. Paul Singh

Application of time-temperature indicators in monitoring changes in quality attributes of perishable and semiperishable foods. J.H. Wells and R.P. Singh. 1988. Journal of Food Science 53:148-156.

Estimation of heat of moisture sorption and improved criteria for evaluating moisture isotherm equations for foods. M. Balaban, C. Zuritz, R.P. Singh and K. Hayakawa. 1988. Journal of Food Process Engineering 10:53-70.

Prediction of freezing and thawing times of foods using a numerical method based on enthalpy formulation. J.D. Mannapperuma and R. P. Singh. 1988. Journal of Food Science 53:626-630.

Thermal properties of agricultural materials. R.P. Singh. 1988. p. 193-202, IN: CRC Handbook of Engineering in Agriculture, Vol. III, Environmental Systyems Engineering, CRC Press, Boca Raton, FL.

Thawing of frozen foods in humid air. J.D. Mannapperuma and R.P. Singh. 1988. International Journal of Refrigeration 11:173-186.

A digital imaging system to sort squid (Loligo opalescens) by sex and size. R.P. Singh and N. Smith. 1988. p. 59-64, IN: Proceedings of International Symposium on Automatic Controls and Optimization of Food Processes, Elsevier Publishers, Ltd., London.

Response characteristics of full-history time-tempoerature indicators for perishable food handling. J.H. Wells and R.P. Singh. 1988. Journal of Food Processing and Preservation 12:207-218.

Quality changes in hamburger meat during frozen storage. H.C. Chen, R.P. Singh and D.S. Reid. 1989. International Journal of Refrigeration 12:88-94.

A quality based inventory issue policy for perishable foods. J.H. Wells and R.P. Singh. 1989. Journal of Food Processing and Preservation 12:271-292.

Time-temperature indicators in food inventory management. R.P. Singh and J.H. Wells. 1989. p. 195-198, IN: 1989 Food and Beverage Technology International USA.

Food Properties and Computer-Aided Engineering of Food Processing Systems. R.P. Singh and A.G. Medina (eds.), 1989. Kluwer Academic Publishers, The Netherlands.

Computer-aided inventory management using time-temperature indicators. R.P. Singh. 1989. IN: R.P. Singh and A.G. Medina (eds.), Food Properties and Computer-Aided Engineering of Food Processing Systems. Kluwer Academic Publishers, The Netherlands.

## Gary M. Smith

15N and <sup>1</sup>H NMR studies of *Rhodopirillum* rubrum cytochrome c<sub>2</sub>. L.P. Yu and G.M.
 Smith. 1988. Biochemistry 27:1949-1956.

pH-induced changes of *Rhodopirillum* rubrum cytochrome c<sub>2</sub> and subsequent renaturation: An <sup>15</sup>N NMR study. L.P. Yu and G.M. Smith. 1988. Proceedings of the National Academy of Science 85:2894-2898.

## Lloyd M. Smith

The effect of dietary fatty acid composition on liver retinyl ester (vitamin A ester) composition in the rat. H.C. Furr, A.J. Clifford, L.M. Smith and J.A. Olson. 1989. Journal of Nutrition 119:581-585.

# Al L. Tappel

Consequences of biological lipid peroxidation. C.J. Dillard and A.L. Tappel. 1988. p. 103-115, IN: C.K. Chow (ed.), Cellular Antioxidant Defense Mechanisms, Vol. 1, CRC Press, Boca Raton, FL.

Aurothioglucose effect on sulfhydryls and glutathione-metabolizing enzymes: In vivo inhibition of selenium-dependent glutathione peroxidase. M.-L. Hu, C.J. Dillard and A.L. Tappel. 1988. Research Communications in Chemical Pathology and Pharmacology 59:147-160.

In vivo effects of aurothioglucose and sodium thioglucose on rat tissue sulfhydryl levels and plasma sulfhydryl reactivity.

M.-L. Hu, C.J. Dillard and A.L. Tappel.

1988. Agents and Actions 25:132-138.

Interactions of gold with cytosolic selenium-containing proteins in rat kidney and liver. M.-L. Hu, A.J. Viljoen and A.L. Tappel. 1988. Journal of Inorganic Biochemistry 32:281-290.

Damage to DNA concurrent with lipid peroxidation in rat liver slices. C.G. Fraga and A.L. Tappel. 1988. Biochemical Journal 253:893-896.

Effect of chronic aurothioglucose treatment of rats on kidney catalase and

cytochromes. M.-L. Hu, C.J. Dillard and A.L. Tappel. 1988. Journal of Inorganic Biochemistry 33:1175-181.

Interactions of selenium and cadmium with metallothionein-like and other cytosolic proteins of rat kidney and liver. A.J. Viljoen and A.L. Tappel. 1988. Journal of Inorganic Biochemistry 34:277-290.

Lipid peroxidation measured as thiobarbituric acid-reactive substances in tissue slides: Characterization and comparison with homogenates and microsomes. C.G. Fraga, B.E. Leibovitz and A.L. Tappel. 1988. Free Radical Biology and Medicine 4:155-161.

Selenium-containing proteins of rat kidney. A.J. Viljoen and A.L. Tappel. 1988. Journal of Inorganic Biochemistry 33:263-275.

Selenoprotein P receptor from rat. B. Gomez, Jr. and A.L. Tappel. 1989. Biochimica et Biophysica Acta 979:20-26.

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Damage to protein synthesis concurrent with lipid peroxidation in rat liver slices: Effect of halogenated compounds, peroxides and vitamin E. C.G. Fraga, R. Zamora and A.L. Tappel. 1989. Archives of Biochemistry and Biophysics 270:84-91.

## John R. Whitaker

Solubility and emulsifying properties of caseins modified enzymatically by Staphylococcus aureus V8 protease. J.-M. Chobert, M.Z. Sitohy and J.R. Whitaker. 1988. Journal of Agricultural and Food Chemistry 36:220-224.

Importance of cross-linking reactions in proteins. R.E. Feeney and J.R. Whitaker. 1988. Advances in Cereal Science and Technology 9:21-46.

Purification and characterization of a cysteine proteinase inhibitor from the endosperm of corn. M. Abe and J.R. Whitaker. 1988. Agricultural and Biological Chemistry 52:1583-1584.

Parameters involved in binding of porcine pancreatic  $\alpha$ -amylase with black bean inhibitor: Role of sulfhydryl groups, chloride, calcium, solvent composition and temperature. J.R. Whitaker, F.F. Filho and F.M. Lajolo. 1988. Biochimie 70:1153-1161.

Proceedings of the UCDINIFAP Conference on Agricultural Research Opportunities for U.S. and Mexico Collaboration. J.R. Whitaker and C.E.G. Vicente (eds.), 1988. Guadalajara, Mexico. 315 pp.

Enzymes responsible for off-flavor and off-aroma in blanched and frozen-stored vegetables. P.J. Velasco, M.H. Lim, R.M. Pangborn and J.R. Whitaker. 1989. Biotechnology and Applied Biochemistry 11:118-127.

Biocatalysis in Agricultural Biotechnology. J.R. Whitaker and P.E. Sonnet (eds.). 1989. ACS Symposium Series No. 389. American Chemical Society, Washington, D.C.

Interdependence of enzymology and agricultural biotechnology. J.R. Whitaker. 1989. p. 1-9, IN: J.R. Whitaker and P.E. Sonnet (eds.), Biocatalysis in Agricultural Biotechnology. ACS Symposium Series No. 389. American Chemical Society, Washington, D.C.

Introduction: Tailoring enzymes for industrial uses. J.R. Whitaker. 1989. p. 12-13, IN: J.R. Whitaker and P.E. Sonnet (eds.), Biocatalysis in Agricultural Biotechnology. ACS Symposium Series No. 389. American Chemical Society, Washington, D.C.

Introduction: Biosyntiesis and degradation of polymers. J.R. Whitaker. 1989. p. 82-83, IN: J.R. Whitaker and P.E. Sonnet (eds.), Biocatalysis in Agricultural Biotechnology. ACS Symposium Series No. 389. American Chemical Society, Washington, D.C.

Introduction: Specialty uses of enzymes. J.R. Whitaker. 1989. p. 174-175, IN: J.R. Whitaker and P.E. Sonnet (eds.), Biocatalysis in Agricultural Biotechnology. ACS Symposium Series No. 389. American Chemical Society, Washington, D.C.

Characteristics of some enzymes used in genetic engineering. J.R. Whitaker. 1989. p. 44-64, IN: J.R. Whitaker and P.E. Sonnet (eds.), Biocatalysis in Agricultural Biotechnology. ACS Symposium Series No. 389. American Chemical Society, Washington, D.C.

Synthesis and degradation of nitrate reductase during the cell cycle of *Chlorella sorokiniana*. P.J. Velasco, R. Tischner,

R.C. Huffaker and J.R. Whitaker. 1989. Plant Physiology 89:220-224.

## George K. York

Replacement of sodium chloride by modified potassium chloride (cocrystallized disodium-5'-inosinate and disodium-5'-guanylate with potassium chloride) in fresh pork sausages: Acceptability testing using signal detection measures. G. Pasin, M. O'Mahony, G. York, B. Weitzel, L. Gabriel and G. Zeidler. 1989. Journal of Food Science 54:553-555.

General principles and methods. B.S. Luh and G.K. York. 1988. p. 1-31, IN: B.S. Luh and J.G. Woodroof (eds.), Commercial Vegetable Processing, 2nd ed., Van Nostrand Reinhold, New York.

## Gideon Zeidler

Improving efficiency, safety and quality of meat processing using solid state temperature monitoring systems. G. Zeidler, G. Pasin, B.S. Luh, J.F. Thompson, L.A. Gabriel and D.R. Rice. 1988. p. 70-102, IN: Proceedings of the 30th Annual Meat Science Institute, Athens, GA.

Consumer use and attitude toward luncheon/sliced meats. H.G. Schutz, K. Diaz-Knauf and G. Zeidler. 1988. Food Technology 42(10):162, 164, 166, 168-169.

Replacement of sodium chloride by modified potassium chloride (cocrystallized disodium-5'-inosinate and disodium-5'-guanylate with potassium chloride) in fresh pork sausages: Acceptability testing using signal detection measures. G. Pasin, M. O'Mahony, G. York, B. Weitzel, L. Gabriel and G. Zeidler. 1989. Journal of Food Science 54:553-555.

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