

IN MEMORIAM

Marian Weinbaum Fischman, 1939–2001

On October 23, 2001, the substance abuse research community lost one of its pioneers, ACNP lost a Fellow who had been one of its most helpful and beloved female members, and I lost my colleague and partner of the last 14 years. Marian Weinbaum Fischman died at the age of 62 of complications from cancer of the colon. Diagnosed 3 1/2 years earlier, she never let the disease get her down and fought it with the same energy and tenacity she put into her innovative research. During those years, she continued to have the same dedication to science that made our division at Columbia, in a relatively few years, one of the leaders in the country. Until near the end, we thought she would win this battle as she had overcome numerous other obstacles in her life. But it was not to be.

Marian Rita Weinbaum was born in Queens October 13, 1939 and grew up in an apartment above her father's drugstore. She graduated from Barnard College, earned a M.A. in Psychology from Columbia University, and went to the University of Chicago to pursue her doctorate, receiving it in 1972. Her dissertation on "Behavioral effects of methamphetamine in the Rhesus monkey" found persisting effects on decreased dopamine and serotonin in Rhesus monkey brain, suggesting long-term damage. Carried out under the guidance of Bob Schuster and Lou Seiden, it opened up the study of long-term methamphetamine toxicity, which is still being pursued today.

After earning her Ph.D., she joined the Chicago faculty but soon switched her focus from nonhuman primates to humans and from methamphetamine to cocaine. There was an increasing use of cocaine among the "beautiful people" in the 1970s and cocaine was widely regarded as safe ("No more dangerous than skiing," Dr. Peter Bourne who was President Carter's drug advisor was to state a few years later). However, some scientists were concerned and with encouragement from Bob Schuster and Norm Krasnegor at NIDA, Marian submitted her first cocaine grant and it was funded. Her research became the model for how behavioral pharmacology studies with drugs of abuse involving



healthy, nonincarcerated human participants should be accomplished.

Cocaine addiction remains one of the critical medical and public health problems facing both the United States and other countries today with numbers running into the millions. Marian's contributions in the area of cocaine research fall in two principal areas. The initial one was to develop techniques for studying the effects of cocaine in humans. Hers was the first laboratory in the United States, in the mid-1970s at the University of Chicago, to be given permission to administer cocaine to human subjects and the first funded by the National Institute on Drug Abuse for that work. In spite of 25 years of safe and productive research with this technique, now carried out at a number of universities including Johns Hopkins, Yale, Minnesota, and University of California at San Francisco, it remains the subject of controversy, which at times boils over into vituperative articles in the media. Marian became an articulate spokesman for both the importance of this research and how to carry it out safely and ethically. As she said in an interview, "This research is badly needed. Not to do it would be unethical." Marian's laboratory was the

first to correlate behavioral and physiological effects with cocaine blood levels in humans, the first to combine these measures in carrying out parametric studies of drug interactions in humans, and the first to develop a laboratory model for studying stimulant self-administration by humans. Such knowledge has been vital to understanding the patterns of cocaine use and possible interventions. Her work was the most systematic human research on cocaine since Freud's "Uber Coca" in 1885. Her second focus was on a method for evaluating potential medications to treat stimulant abuse using a laboratory-based model. This approach provides a bridge between pre-clinical studies with nonhumans and large-scale outpatient trials, contributing an improved basis for developing treatment interventions in substance abuse disorders. Her cocaine research led to her receiving in 1987 the first NIDA Merit Award, which provided 10 years of funding for her research grant, "Cocaine Effects in Humans: Physiology and Behavior." Her cocaine work was carried out over these years with her longtime collaborator, Richard Foltin.

In 1984, Marian left Chicago to become Associate Professor at Johns Hopkins, joining their Division on Behavioral Biology. In addition to her career-defining studies on cocaine, her research expanded to address the behavioral pharmacology of smoked marijuana and then to study how workplace and other contingencies can alter drug self-administration. In 1990, she was promoted to Professor at Johns Hopkins and in 1992 she was appointed to Professor with tenure at Columbia.

A few years after receiving her Ph.D., Marian was divorced and raised her 3 young children on a budget that, as one of her children said at the funeral, "would make most people cringe." However, what came through to them was her ability to make fun out of adversity, to make them feel they were taking part in an adventure rather than feeling deprived. Her children went on to prestigious colleges and graduate schools with two now lawyers and one in public relations. All children are married and between them, they have 4 children. Her grandchildren became the joy of her life. One of her profound regrets when she knew the end was near was that she would not be around to take part in their growing up.

In 1987, when I was still at Yale and she at Johns Hopkins, we began to see each other on a regular basis, commuting on weekends either to New Haven or Baltimore and enjoying our trips together to scientific meetings or more interesting places such as Hong Kong, London, and Tokyo. In 1989, I moved to Washington to be the Deputy Director of ONDCP under Bill Bennett and President Bush and we were able to be together on a more regular basis. By late 1991, after weighing offers from a number of schools, we succumbed to the charms of Columbia and our friend Herb Pardes, the Dean and Chair of Psychiatry, who would call on a regular basis

wanting to know why we had not made our minds up yet and what would be needed to convince us? We moved to New York in 1992 after finding a wonderful apartment overlooking Central Park and near Lincoln Center. Together we founded and codirected the Division on Substance Abuse at Columbia University and the New York State Psychiatric Institute and, in addition, she founded and directed the Substance Use Research Center, the centerpiece of which was a state-of-the-art residential center Columbia built for her for over one million dollars.

The 14 years with Marian have been the happiest of my life, and I believe hers as well. Working together, we built from scratch one of the finest substance abuse research programs in the country, recognized as such year after year by U.S. News and World Report. She was the brains, the soul, and truly the mother of the enterprise. Starting with just a few colleagues, she mentored a wonderful group of young scientists and we grew to over 100 staff. She possessed an uncommon ability to both conceptualize new approaches and to oversee their carrying out, the nuts and bolts of science. Her door was always open and on an average day 15-20 people, both from our division and elsewhere in Columbia, passed through with difficult or impossible questions. Once she had answered them, whether they were space, organizational, ethical, or research problems, they knew they could proceed with confidence. She was our sage and guru.

Her passion for science coupled with her love of mentoring brought a sense of teamwork to our division that inspired loyalty to a degree rarely found elsewhere. She has played an integral mentorship role in the development of many scientists including at Columbia: Richard Foltin, Ned Nunes, Frances Levin, Suzette Evans, Sandra Comer, Margaret Haney, David McDowell, Eric Collins, Eric Rubin, Adam Bisaga, Maria Sullivan, Evaristo Akerele, Diana Martinez, and Carl Hart. All of them now have their own funding. She especially took pleasure in mentoring the young women on how to combine career and family. Along with other leaders in the field such as Nancy Mello, Chris-Ellyn Johanson, Maxine Stitzer, and Linda Dykstra, she fought for the scientific role of young women.

She was brave and outspoken about her ethical and scientific beliefs: whether defending before hostile audiences her *JAMA* article with Dorothy Hatsukami on why the crack vs. cocaine powder sentencing rules did not make sense scientifically or defending to hostile reporters her pioneering research.

While at Columbia, she not only focused on developing medications for cocaine abuse, but, in addition, continued her marijuana research and moved into working with heroin addiction. Her research with Meg Haney demonstrated the presence of physical dependence on smoked marijuana with a clear-cut withdrawal syndrome,

an idea still disputed by pro-marijuana groups. This led to research trying to develop medications to treat the withdrawal, which appears to be associated in many marijuana smokers with frequent relapse. Her heroin research with Sandra Comer provided new data on heroin use by the fast-growing routes of intranasal and smoking. Using a modification of her cocaine laboratory model, she published a number of important papers comparing the intravenous with these other routes and evaluated the effectiveness of several new medications including buprenorphine and a month-long formulation of depot naltrexone.

Dr. Fischman was an important figure on the national level as well, using her expertise to shape the field. She served on the NIH National Advisory Council on Drug Abuse, and the Board of Scientific Counselors of NIDA's Addiction Research Center. She was an Advisor to the World Health Organization, Division of Mental Health and chaired the Clinical-Behavioral Initial Review Group of NIDA. She was a member of the Boards of Scientific Advisors to major university research centers (e.g., Yale, Johns Hopkins); consulted to many university research centers (e.g., Minnesota, Kentucky, Vermont, Chicago, North Carolina); served on two important committees of the Institute of Medicine/National Academy of Sciences; and served on the National Advisory Committee to set federal research priorities for the Office of AIDS Research. She was an editorial reviewer and on the editorial board of a number of distinguished scientific publications; was elected a fellow in the most prestigious organizations in her field (e.g., American Psychological Association, American College of Neuropsychopharmacology, College on Problems of Drug Dependence) and served them in a variety of capacities on boards and committees. She was a consultant to numerous federal commissions and councils, and was awarded the American Psychological Association Solvay Award for outstanding psychopharmacological research. She received frequent requests to speak and consult throughout the world and was to have given the Okey Memorial Lecture in London the week before her death. She served on the American Psychological Association's Task Force, which wrote "Ethics in Research with Human Participants," and continued her participation as an ad hoc advisor to that group. She is the author or coauthor of over 200 publications.

But our life was much more than our work. We played together, laughed together, traveled all over the world together, shopped for Art Deco antiques, and enjoyed the pleasures of New York City: a walk in Central Park, a fine restaurant, an opera, the museums. She picked out my ties in the morning, and regularly criticized my dreadful color combinations, which she never let me wear out of the house. Whenever I came to work with a tie that was mismatched, my colleagues would know she was out of town! We enjoyed our children and grandchildren. As the numbers of the latter grew, they became her pride and joy. She was beloved not only by her children and grandchildren but by mine as well; thus together, 6 children and their spouses and 8 grandchildren blessed us. She and her friends were gourmet cooks; I was the gourmet eater. She passed her cooking skills on to her children.

We especially loved to travel together. I remember her snorkeling at the Great Barrier Reef; walking with a koala bear on Kangaroo Island; bowing back to a bowing deer in Japan; treading the 2000 year old path of the Delphi priestess in Greece; enjoying the beauties of Positano; London; Paris; Florence; Istanbul; and on and on. She was an energetic, enthusiastic, and exciting travel companion. We had planned at some point to cut back on work and travel even more. Her untimely illness did not make that possible.

She could be tough. I remember her waking me frequently at 6 a.m. so we could power walk in Central Park. My argument that more people die of sleep deprivation than exercise deprivation was handily dismissed by the scientist with whom I shared my life. "Show me the data, " she insisted, as I sleepily yielded and put on my sneakers.

She had a love of life that was infectious. Those who knew her and those who barely knew her returned the love. She died as she lived: with elegance, warmth, bravery, and wisdom. Even in the intensive care unit, the physicians remarked how her smile lit up the room when they entered. A surgical intern who was no longer even taking care of her would stop by every morning. He wrote to me later, "Talking with her every morning was a cherished respite from the rest of the hospital. I learned a lot from watching her endure with such an unquenchable and sprightly spirit. I will not forget her for a long time." The internist who oversaw her care wrote, "Marian was one of the most unique patients I have ever had. I cannot think of anyone in my 33 years in medicine who faced death as bravely and with the dignity and control that Marian exhibited." People of different religions said prayers for her recovery all over the world.

Marian fought for her life through devastating illness and I believed almost until the end that she would again recover. I will never forget the Friday, four days before her death. We had an electric candelabra brought in and, short of breath as she was, she sat up in bed, covered her tracheotomy, and led her daughters in Hebrew in the prayer over the Sabbath candles, a role model to the end. She was my colleague, my companion, and the love of my life.

Marian is survived by a son, Eric Fischman; 2 daughters, Amanda Fischman Henshon and Sharon Fischman; a step-son Marc Kleber, 2 step-daughters, Elizabeth Kleber and Pamela Kleber Shad; her mother, Sarah Weinbaum; a brother, George Weinbaum; 4 grandchildren, 4 step-grandchildren, and myself, her husband. To honor her many contributions, the College on Problems of Drug Dependence (CPDD) will present on an ongoing basis the Marian W. Fischman Memorial Lectureship Award to an outstanding woman scientist in the drug abuse field at its yearly scientific meeting. Columbia University will also sponsor on an annual basis

a Memorial Lectureship Award in Marian's honor for an outstanding scientist in the substance abuse field.

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