Resolution on the Retirement of Professor Frances Sez-Ling Chew

The faculty of the Department of Biology joins others of the Faculty of Arts and Sciences to record our admiration and warm appreciation for our retiring colleague Professor Francie Chew. Tufts University has benefited and been greatly enriched by her forty-one years of service.

Frances Sze-Ling Chew was born in California, but at a very young age her family moved first to Florida and then to Mississippi before moving back to California where she attended high school and then matriculated at Stanford University. Upon entering Stanford Francie had plans on becoming a journalist working on Asian Issues. However she enjoyed and did well in a zoology class and started thinking of doing pre-med or perhaps becoming a science librarian. Then she took a course called Biochemical Ecology taught by Ward Watt and Hal Mooney and became very interested in this new field. When she started asking what other things she could read in this area she drew the attention of Ward Watt who invited her into his research lab. After getting over her fear of insects, working with butterflies and their caterpillars in the research laboratory of Ward Watt was a happy experience and Francie decided that science was her métier. In the summer following graduation from Stanford Francie did field work with Ward Watt at the Rocky Mount Biological Laboratory in Colorado, a research station she returned to for much of her graduate work.

Upon receiving her undergraduate degree Francie enrolled in a doctoral program in biology at Yale University where she was thrilled with the intellectual freedom to explore science on her own terms and happy to have a fellowship. At Yale she studied Ecology and Evolutionary Biology under the auspices of Charles Remington and was introduced to mustard plants as a means to study the chemistry of plant-herbivore interactions. After a brief postdoc at Stanford with Paul Ehrlich, Francie successfully competed for an assistant professor position in the department of biology at Tufts University. Soon after she had accepted this position, Barnum Hall, the long time home of the biology department, burned down, an incident she learned about from the San Francisco Chronicle. Since this was in the days before email and the members of the biology department at that point had no access to a telephone, Francie sent a postcard to the then chair of biology, Mary Ella Feinleib, to find out whether or not she still had a job. Fortunately, the answer was yes and Francie started a successful forty-one year career at Tufts. She was granted tenure in 1981 and was promoted to Full Professor of Biology in 1992.

Francie has taught and co-taught myriad courses in Biology including but not limited to: an Introductory Biology Course, Population & Community Experiments in Ecology, Ecology and Evolution, and Chemical Ecology. While immersed in her teaching and research in Biology Francie made major contributions to discussions of race, ethnicity and multicultural awareness on campus. One of the ways she addressed these issues was through her interdisciplinary teaching in several departments and programs. As an example, she taught and co-taught in American Studies courses that included Ecology of the Americas, and Haiti: Interdisciplinary Views. For several years Francie and Alice Trexler in Drama and Dance offered an interdisciplinary course Viewing African American Dance. Francie also taught Multicultural Awareness & Leadership in the Ex-College and Collaborative Learning in the Education Department. She has also served as advisor and mentor to generations of Tufts Biology majors as well as students in other departments and programs. Her excellence in teaching and advising was
recognized in 2015 by her receiving the Seymour Simches Distinguished Teaching & Advising Award.

Professor Chew is widely recognized in the scientific community for her research on insect chemical ecology and coevolution interaction between herbivorous insects and their host plants. With keen focus maintained over many decades, she has traced the ecological and evolutionary counterplay between several species of the cabbage butterfly, *Pieris*, and its native and introduced host plants. The overarching question of her research is what determines insect-host plant specificity. Her approach has been to investigate the natural history of the system and the components of the system as analyzed by lab work. Using this approach she and her students have made major contributions to the field by showing how differential host utilization of closely-related insect species is mediated by differential sensitivity to plant chemistry, plant population biology, plant apparency and the “community profile” of plant chemistry.

Her research program encompassed graduate students and undergraduates alike, who caught butterflies, tested females’ oviposition preferences, and measured how different diets influenced the development and survival of many thousands of very hungry caterpillars. Francie has maintained an active research program ever since her arrival at Tufts, with 15 peer-reviewed publications since 2000. Through the 1980s and 1990s, USDA, NSF, and the National Geographic Society funded her research. In 1990, she was a Fellow at the Radcliffe Institute for Advanced Study. Even after severe space constraints made it necessary for her to sacrifice her laboratory space to make room for a new faculty member, Francie managed to continue her research activities during summers by mentoring undergraduate students through Tuft Biology’s NSF-funded Research Experiences for Undergraduates program and co-advising M.S. students in Biology and UEP. She has also been an outstanding research mentor during the academic year for dozens of Tufts students enrolled in our Department’s Independent Research courses. More than a few of these students subsequently entered excellent PhD programs in Ecology, and have gone on to pursue successful academic careers.

Francie’s research has taken her all over the world to do her fieldwork, sometimes accompanied by her students and other collaborators. In addition to her early fieldwork at the Rocky Mountain Biological Laboratory in Colorado, she has traveled and done research at the Smithsonian Tropical Research Institute as well as in Panama, Martinique, French West Indies, England and Australia, and gone to the Yukon Territory, Canada in a trip sponsored by National Geographic. She has also gone to Costa Rica, China and Manchuria, Hanoi and the Galapagos. A 6-7 month trip with an international team of 13 researchers to the Atlas Mountains in Morocco was productive and noteworthy. While there Francie communicated in French and handled the money for the group. Since the men in Morocco are generally the ones who speak foreign languages and handle money Francie gained their respect and was treated as an “honorary man”. The Morocco trip was memorable for another important reason for it was while here Francie received a telegram informing her she had received tenure in the biology department at Tufts.

Francie’s service to Tufts University is equally worthy of admiration. She was deeply involved in the American Studies program, where as its director from 2000-2006 she helped to continue and realize the interdisciplinary vision put forth by its founders, Jesper Rosenmeier and Saul Slapikoff, of the importance of the natural sciences in cultural studies. Francie has also had a
strong commitment to the Asian American student community and been an advocate for Asian American student concerns and for issues of equity in their college experience. In 1982, recognizing the need to address issues of racism, she led the faculty team, and worked with the student committee, that successfully pushed the administration to establish the Asian American Center. She also chaired the search committees for the directors. Francie has also been serving as Vice-Chair of the Biology Department since 2014 and has both chaired and served on numerous University committees- including a heroic run as chair of the curriculum committee- task forces, and working groups including Budget & Priorities, Tenure & Promotion, Task Force on the Undergraduate Experience, and Working Group on Race & Ethnicity. Not surprisingly Francie has also served on several committees, numerous panels and has done considerable consulting for scientific organizations in her field. Since 1990 Francie has continuously been involved with the Re-evaluation Foundation where she has been a workshop leader for Re-evaluation Counseling in classes, and a workshop leader for local, national and international workshops Southeast Asian & Chinese Heritage, Asians, People of Color.

In her retirement Francie will continue her work with the Re-evaluation Foundation, spend more time with her flower and vegetable gardening and sailing with her husband Richard.

On behalf of the Department of Biology, be it resolved that this resolution on the retirement of Professor Frances Chew be spread on the minutes of the faculty of Arts and Sciences and that copies of it be sent to our honored colleague and to her husband, Richard.

Respectively Submitted:
Harry Bernheim
Susan Ernst
Sara Lewis
Sergei Mirkin