



Left to right: Nina Federoff, Barbara McClintock, Elliot Meyerowitz, and DeLill Nasser at Cold Spring Harbor.
Photo by Rolf Nöthinger.

In Memoriam

DeLill Nasser (1929–2000)

IF “real genetics” ever had a patron saint, it was DeLill Nasser. DeLill’s death from lung cancer in late 2000 cost the science of genetics one of its strongest supporters and best friends. DeLill was the Program Director for Eukaryotic Genetics at the National Science Foundation (NSF) for over 22 years and there hangs a bit of a story.

She loved genetics and she loved the people who do genetics. At the same time she had a strong dislike for bureaucracy and bureaucrats. One of my first memories of DeLill is of being firmly chided in 1985 for letting a departmental administrator prepare a budget for a grant. DeLill’s words still ring in my ears: “I don’t care what some administrator thinks this will cost; I want to know what *you* think it will cost.” It was a mistake I did not repeat. She had even less tolerance for the bureaucracies of National Institutes of Health and the NSF, especially the NSF.

She ran her proposal review panels with an irreverence for policy and procedure that struck me as almost quixotic. I remember a confused new panelist, who seemed determined to evaluate “other issues,” being told quite sternly by DeLill to “just discuss the science. The rest is my problem.” I never saw DeLill happier than when in the late 1980s a frustrated panel turned on a senior NSF official and demanded that s/he “bring us one of those congressmen that are supposedly confused about the mission of the NSF, so we can explain it to them!” DeLill gloried both in the senior official’s obvious discomfiture and in her sense of rebellion. Her comments before and after those talks by senior folk at NSF revealed over and over the difficulty of fitting a peg like DeLill, who only cared about the science and the scientists, into a complex government bureaucracy with a panoply of different goals and objectives. And still she succeeded in advancing the cause of the science of genetics.

At a time when much of the senior staff at NSF were arguing that “genetics was just a tool that was used by all biologists,” DeLill and her colleague Philip Harriman argued forcefully that genetics was and is a separate and distinct scientific discipline that needed to be nourished. Much has been said by others about DeLill’s critical role in developing *Arabidopsis* as a model system. One cannot overestimate her contribution to that effort. But the crucial point is not that DeLill chose to champion an *Arabidopsis* effort, but rather that in 1980 she encouraged a small group of superb geneticists, most notably Elliot Meyerowitz, to begin the work that would establish the system. In time, as the field reached the critical mass, it was DeLill who funded the highly successful sequencing project. But it began with DeLill’s interest in helping good scientists approach intriguing genetic problems.

A similar story can be told of DeLill’s efforts in the area of *Drosophila* neurogenetics. DeLill was as fascinated by the idea of the genetic analysis of behavior as she was by Seymour Benzer himself and his students. Supporting Benzer’s efforts on the genetics of behavior and nervous system function in *Drosophila* was a strong passion for DeLill. I had the privilege of accompanying DeLill on two site-visit trips to Cal-Tech; both trips revealed just how much respect she had both for Benzer and his approach and her willingness to provide significant support over a long period of time to allow a system like his to develop and flourish.

There are many such stories, but the ones I like best are the cases in which DeLill encouraged people to work on seemingly obscure genetic problems, giving them the time and the resources to build a story. Her support of Barry Ganetzky and his work on segregation distortion in *Drosophila* is one prime example of a stunning success by this approach, but there are numerous

others. Not that DeLill's support was confined to those people with big labs and celebrity status. As one of my colleagues wrote, "DeLill's unique talent was that she recognized the value of all good science, not just the fashionable science. To use an analogy, she recognized the contributions of the orchestra . . . that is to say, those of us who provide the background music for the soloists."

Indeed, DeLill never seemed really impressed by fashionable science. A sound mutant screen reported in *GENETICS* was more likely to draw a comment or praise from her than was a paper in one of the "flashier" journals. The same was true for talks at meetings. DeLill seemed far more interested in the talks by young investigators, or those based solely on genetic analysis, than she was by the major talks on "hot topics" at the plenary sessions. She truly loved and really appreciated elegant genetic approaches, such as clever mutant hunts. She also understood the real value of those who were willing to unearth genetic problems whose origin was many decades ago and to look at them with modern tools.

But perhaps DeLill was most fully *DeLill* at her panel meetings. She was perpetually standing sideways in the doorway, with her head in the room and her cigarette outside, demanding that the panel describe the science, that we NEVER read our reviews, that we get to the point, and that we write helpful constructive critiques. All the time she made it clear to us that our job was not to make funding decisions—that was her job. Our mission was simply to advise her. She listened with equanimity to senior and junior scientists alike, and she had little patience for prima donnas who did not feel the need to attend the entire meeting. She displayed uniformly good judgement in finding the obligate outside reviewers and was unashamed to use whatever tactic it took, usually guilt, to get those reviews completed.

When the dust settled, DeLill made time for the successful and unsuccessful applicants alike. DeLill told me often that no one had ever accused her of being tactful,

and perhaps that is true. But she certainly could be supportive, and she was honest. If a grant was just "never going to be funded," DeLill knew how to convey that to an applicant. She also knew how to encourage the right type of resubmission. She especially encouraged young scientists and people trying to open new areas of genetic inquiry. A colleague remembers that DeLill was devoted to helping people fit their lives with their science, especially in terms of "supporting (personally and with grant funds) new mothers until their time was more their own again, young scientists unfairly untenured, and so on. She wasn't just a force in genetics, but also in some ways our conscience."

I know there are many of us who feel strongly that DeLill, and thus the Eukaryotic Genetics program at NSF, was truly a major force in fostering the development of genetics for more than two decades. Indeed, DeLill was a very forceful woman, a very strong woman. In the year that she died, the NSF gave DeLill its Director's Award for "her longstanding commitment to scientific excellence and dedication to the research and education community, which have enabled real progress in genetics research." DeLill did that and so much more; in addition to fostering genetics, she fostered geneticists as well. Many of my colleagues feel, as I do, that DeLill was essential to the development of their careers. We who still till the vineyards of classical genetics were fortunate to have known her as a mentor. Some fewer of us were fortunate enough to have known her as friend. She will be sorely missed.

There have been many fitting memorials to DeLill's memory. One is described in the ANNOUNCEMENT in this issue of *GENETICS*. But the best memorial would be the continuation of the Eukaryotic Genetics Program at NSF. Each few years brings a new generation of talented young geneticists. DeLill would want us to take care of them.

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