

After making the difficult decision to turn in their adviser for scientific misconduct, a group of graduate students is trying to recover from the resulting damage to their careers

Truth and Consequences

MADISON, WISCONSIN—In those first disorienting months, as fall last year turned to winter and the sailboats were hauled out of nearby lakes, the graduate students sometimes gathered at the Union Terrace, a popular student hangout. There, they clumped together at one of the brightly colored tables that look north over Lake Mendota, drinking beer and circling endlessly around one agonizing question: What do you do when your professor apparently fakes data, and you are the only ones who know?

Chantal Ly, 32, had already waded through 7 years of a Ph.D. program at the University of Wisconsin (UW), Madison. Turning in her mentor, Ly was certain, meant that “something bad was going to happen to the lab.” Another of the six students felt that their adviser, geneticist Elizabeth Goodwin, deserved a second chance and wasn’t certain the university would provide it. A third was unable for weeks to believe Goodwin had done anything wrong and was so distressed by the possibility that she refused to examine available evidence.

Two days before winter break, as the moral compass of all six swung in the same direction, they shared their concerns with a university administrator. In late May, a UW investigation reported data falsification in Goodwin’s past grant applications and raised questions about some of her papers. The case has since been referred to the federal Office of Research Integrity (ORI) in Washington,

D.C. Goodwin, maintaining her innocence, resigned from the university at the end of February. (Through her attorney, Goodwin declined to comment for this story.)

Although the university handled the case by the book, the graduate students caught in the middle have found that for all the talk about honesty’s place in science, little good

“Here I am, I’ve invested so much time in grad school, and this happens. If we let someone know ...”

—Chantal Ly

has come to them. Three of the students, who had invested a combined 16 years in obtaining their Ph.D.s, have quit school. Two others are starting over, one moving to a lab at the University of Colorado, extending the amount of time it will take them to get their doctorates by years. The five graduate students who spoke with *Science* also described discouraging encounters with other faculty members, whom they say sided with Goodwin before all the facts became available.

Fraud investigators acknowledge that outcomes like these are typical. “My feeling is it’s never a good career move to become a whistleblower,” says Kay Fields, a scientific investigator for ORI, who depends on pre-

cisely this occurrence for misconduct cases to come to light. ORI officials estimate that between a third and half of nonclinical misconduct cases—those involving basic scientific research—are brought by postdoctoral fellows or graduate students like those in Goodwin’s lab. And the ones who come forward, admits ORI’s John Dahlberg, often suffer a “loss of time, loss of prestige, [and a] loss of credibility of your publications.”

Indeed, Goodwin’s graduate students spent long hours debating how a decision to alert administrators might unravel. Sarah LaMartina, 29, who gravitated to biology after its appeal outshone her childhood plan to become a veterinarian, had already spent 6 years in graduate school and worried whether all that time and effort would go to waste. “We kept thinking, ‘Are we just stupid [to turn Goodwin in]?’” says LaMartina, whose midwestern accent reflects her Wisconsin roots. “Sure, it’s the right thing to do, but right for who? ... Who is going to benefit from this? Nobody.”

Shock waves

Goodwin, in her late 40s, had come to the University of Wisconsin in 2000 from Northwestern University in Chicago, Illinois, and was awarded tenure by UW soon after. Landing in Wisconsin was something of a homecoming for her; she had done a postdoc under Judith Kimble, a prominent developmental geneticist in the same department.