# THE CHRONICLE OF HIGHER EDUCATION Graduate Students

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## The Ph.D. Pay Gap

How unequal stipends foster an unequal education By Vimal Patel
Houston

or Ksenia Krylova, the years she has spent earning her Ph.D. have been largely worry free, at least when it comes to money.

As a doctoral student at the University of Houston's C.T. Bauer College of Business, she receives \$33,000 a year in stipend support. The assistance, which also includes a free laptop while she's in the program, has helped her to focus on her coursework and dissertation. She is set to complete her program in the summer after five years and has a job offer for a tenure-track position at a university in Paris.

"We're provided the environment and the equipment necessary to go through our program without any burdens," says Ms. Krylova.

Across campus, Tracy Butler doesn't feel the same.

When she began working toward her Ph.D. in history in 2010, Ms. Butler received a stipend of roughly \$11,000 a year. It forced her to work as a part-time nanny, which distracted her from her Ph.D. studies, she says.

"If I didn't have to work outside," says Ms. Butler, "I would have had more time to focus on my dissertation and my comprehensive exams. I probably would have been finished with my Ph.D. by now."

Disparities in stipends, at Houston and research universities elsewhere, stem from many factors. They include how nationally competitive a department is, and wants to be, in recruiting students; how much federal research money a program gets; how available university fellowships are; and where university donors put their dollars.

The unequal pay leads to an unequal education.

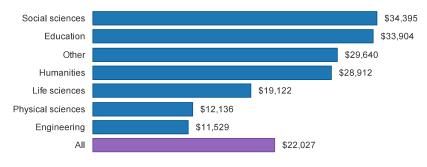
Students with larger stipends or better access to federal grants and other aid, often in the sciences, engineering, and business, are better able to focus on learning and career prospects, while the rest, more often humanities students, spend much of their time preoccupied with making ends meet.

Graduate-student activists say the disparity in stipend levels and its repercussions aren't discussed enough on campuses. Little data exist about how programs compare in offering financial support, limiting graduate students' negotiating power and ability to know just how big disparities are from university to university, across departments within universities, and even sometimes within departments themselves.

#### Debt Varies by Discipline for Graduate Students

Ph.D. recipients tend to accumulate more debt in disciplines that receive less financial support from their universities or external sources. About half of students finish their Ph.D. programs with no education-related debt at all; they are included in the averages below.

#### Average education-related debt by discipline for Ph.D. recipients in 2013



Note: Life sciences include agricultural sciences and natural resources, biological/biomedical sciences, and health sciences. Physical sciences include mathematics and computer and information sciences. Social sciences include psychology. "Other" includes all the nonscience and nonengineering fields that are not shown separately.

Source: Survey of Earned Doctorates by the National Science Foundation and five other federal agencies Get the data

While universities are concerned about how long it takes humanities students to earn a degree, the growing debt levels among graduate students, and how best to prepare Ph.D.'s for a rocky job market, the question of what is fair financial support, which affects all of these problems, is rarely dealt with head on.

In an era of tight budgets, universities have struggled to raise

stipends, and the trade-offs often bring controversy. At the Johns Hopkins University, administrators wanted to increase humanities and social-sciences stipends by accepting fewer students. At the University of Texas at Austin's liberal-arts college, officials reasoned they could pay students more, but only if they paid them for fewer years. Graduate students protested both plans.

At the University of Houston, administrators are sympathetic to the financial concerns of Ph.D. students. The university raised stipends in low-paying disciplines in 2013. Ms. Butler, for example, received about \$16,000 in 2014.

Some graduate students complain that the changes didn't go far enough, and the University of Houston shows just how hard it is to balance the needs of students with an institution's academic goals and financial priorities.

octoral students receive a variety of support from universities. Besides stipends, tuition assistance and health benefits are also common. Stipends are typically intended as financial support for living expenses and are often provided as compensation for teaching courses or conducting research.

Those Ph.D. students whose stipends don't go far enough usually have two options: Find a job outside the university, or take out loans. Both can be a gamble.

To make sure students focus on their studies and to help ensure timely completion, the University of Houston, like many others, prohibits most doctoral students from having outside jobs. (The ban includes those whose tuition is covered by a university fellowship, which is the majority of students.)

But many cash-strapped future Ph.D.'s ignore the rule and quietly work around town waiting tables, flipping burgers, and teaching at community colleges.

"For the university to survive in the 21st century, we have to tend our own garden." Zachary D. Martin, a fifth-year creative-writing student at Houston, says he didn't feel he could go into debt to finance a degree that has bleak job prospects. So to supplement his stipend, which in 2012 was about \$11,000, Mr. Martin taught writing outside the university, graded essays for an SAT-prep company, and did editing and proofreading for a publishing house, among other jobs.

Now on the academic job market, Mr. Martin says he has had one on-campus interview at a teaching-intensive liberal-arts college. He didn't get the job. He worries his résumé looks thin because he didn't publish enough stories.

In today's tight market, he says, even colleges that emphasize teaching are looking to hire "unicorns" — those rare candidates with exceptional teaching experience, a major publication history, and a track record of university service. This, he says, stacks the deck against people like him.

"If I didn't freelance and work as much," he says, "that would have given me more time for writing and publishing."

Giving students that time is partly the goal of the university's rule against outside employment. Students, however, call it unreasonable given some stipend levels. It's unclear to what extent the university enforces its work prohibition. Dmitri Litvinov, the graduate-school dean at Houston, says he's unaware of the university's ever punishing a student for working at another job.

But the rule does have an impact. Several graduate students who spoke with *The Chronicle* about their extra jobs didn't want their names published for fear of upsetting the university or their faculty advisers; one even worried it would look bad to potential future employers.

Critics of the rule say it has another effect: It pushes students into debt.

Not wanting to run afoul of the university's regulation, for example, Becky Smith took out loans to help her pay the bills. Now in her fifth year of a history Ph.D. program at Houston, she has racked up about \$24,000 in debt while in her doctoral program, for about \$70,000 total when counting her undergraduate and master's debt.

That amount will very likely grow. The university, like many others, limits stipend support after a certain number of years, in part to encourage students to finish in a timely fashion. Ms. Smith says she won't receive any stipend support from the university after this academic year; she still has one semester to go before she completes her dissertation on lesbian and feminist activists in Houston in the 1970s and 80s.

While the loans will affect her future finances, Ms. Smith says she doesn't regret her decision.

"I'll deal with the financial consequences of my Ph.D. later because I know from having worked a retail job that I never want to be in that position again," she says. "I'd rather be educated and with a stack of loans than the opposite."

Doctoral recipients are completing their programs with more and more debt. Federal data show the average amount of education-related debt Ph.D. recipients reported completing their programs with in 2013 nearly doubled from a decade earlier to \$22,000. (The average includes Ph.D.'s who reported having no debt — about half of the group in 2013.)

The problem hits certain disciplines harder than others, with some observers saying that low stipend amounts are part of the cause. Eight percent of all Ph.D. recipients in 2013 reported student debt totaling more than \$90,000. In the physical sciences and engineering, that share was less than 3 percent, but in the humanities and social sciences, it was about 10 and 15 percent, respectively.

Houston and other universities should invest more in Ph.D. students, Ms. Smith says. After all, they are the nation's future faculty.

By providing better stipends, she says, "you're not only furthering the education of these students, but also every student who will ever be taught by them at any institution they ever teach at."

or Ms. Krylova, the stipend she makes has helped her focus on her studies, but it doesn't mean an extravagant lifestyle. Yes, she does most of her grocery shopping at Whole Foods or organic farmer's markets, she says, but she has also had to wrestle with rising rents in the Houston area, which have increased in some apartment buildings by almost 30 percent in the last five years.

"I'm single, don't have a family to take care of, and don't have any health issues," Ms. Krylova says. "The money the college and department offer, I'm not sure it would be sufficient in New York or Washington, D.C., but it's enough to sustain a good living in Houston."

The amount Ms. Krylova receives represents the higher end of the stipend spectrum at the university and nationally. Few Ph.D. students have stipends topping \$30,000; even at elite colleges, some disciplines fall short of that. Stipends in humanities and social sciences on the same campuses tend to be lower, often in the \$15,000-to-\$20,000 range. Precise data are scarce. And students in some disciplines have more access to federal money and can improve their finances with grants.



Scott Dalton for The Chronicle

Lindsey Rodriguez (center) says she struggled during the first few years of her graduate studies in social psychology because her low stipend required her to work an outside job. She was better able to focus on her studies, she says, after she got an NIH grant that doubled her financial support.

For the first three years in her social-psychology program at Houston, Lindsey Rodriguez struggled. She supplemented her stipend with an extra job and took out loans. She says she was limited in her ability to do work crucial to landing a tenure-track job — writing papers, conducting research, traveling to conferences, and making presentations.

Then, in 2011, she received a National Institutes of Health grant that, at around \$21,000 for the year, was about double what she was receiving when she started her program. The extra financial support, she says, "allowed me to focus much more on research and doing those graduate-student activities that I should have been doing from the start but couldn't because I was so busy working to pay my bills."

She recently completed her Ph.D. and landed a tenure-track job. She is set to begin as an assistant professor at the University of New Hampshire in the fall. Without the extra money, she's not sure she would have gotten the job.

"Those additional resources," Ms. Rodriguez says, "really were the difference between having a mediocre graduate-student career and having a thriving graduate-student career."

The University of Houston sees itself as a university on the rise. Led by Renu Khator, the president, it's trying to shed its image as a commuter school. In recent years, it reached the top tier of the Carnegie Classification of Institutions of Higher Education, renovated its student center, drastically increased its dorm capacity, and built a \$120-million football stadium. The president recently told legislators she wanted Houston to join the invitation-only Association of American Universities.

"I've seen massive changes to this place since I've been here," says Ms. Smith, the history student, as she stood in the shadow of the football stadium. "President Khator has done a good job of transforming the school. But all those changes didn't really help

our lives as much."

Two years ago, such frustrations boiled over.

Stipends in disciplines like creative writing and history were hovering around \$11,000 a year, near the federal poverty line for an individual in 2013, and in some cases, hadn't been increased in 20 years or more. Demanding a living wage, several dozen graduate students staged a sit-in outside Ms. Khator's office.

Since then, the university has tried to bring more equity to its programs — and make them more competitive — by better financing graduate students. Many creative-writing Ph.D. students saw their stipends rise to roughly \$17,000 from \$11,000. Other disciplines, too, saw increases. In 2014, the university went further and provided additional financial support for graduate students, including paying for mandatory fees like the one for the recreation-and-wellness center, which amounted to an average savings of roughly \$1,400 a year per student, Mr. Litvinov says.

These recent changes have improved the lives of students, several said, though working secret second jobs and taking out loans is still common.

The support the university provided, says Wyman H. Herendeen, chair of the English department, "was impressive and decisive, and has made an enormous difference in the morale of graduate students."



Courtesy of "Gulf Coast: A Journal of Literature and Fine Arts" Teaching fellows in the U. of Houston's English department staged a sit-in in 2013 to demand increases in their stipends. The university has since raised their pay rates.

But to some, the university didn't go far enough. Mr. Martin, the creative-writing student, took part in the protest and says he wants a commitment to tie stipends, in part, to measures like cost-of-living increases. "Without a system in place to determine what is a fair living wage for the city that you live in," Mr. Martin says, "there's nothing that would prevent the need for future sit-ins."

Ms. Butler, the history Ph.D. student, says it's "almost immoral" that there remain large disparities in Ph.D. financial support on the campus.

For Mr. Litvinov, the dean of the graduate school, a position that was created after the protest, disciplinary inequities in stipend support are less a result of university policies than market forces. Colleges and departments set stipend amounts based in part on how competitive they want to be in luring the best students, and certain disciplines like the sciences and engineering have more access to external support because of federal priorities. Moreover, while the university allocates how much each college gets in overall funding, declining state support for higher education means there's less money to go around at public universities.

The heads of colleges and individual departments say stipend levels are a concern.

Dan E. Wells, dean of the College of Natural Sciences and Mathematics, says some departments in his college, like biology and biochemistry with its stipend of about \$21,000, don't offer nationally competitive rates. But if the college doesn't receive more money from the university, Mr. Wells says, the only way to raise stipends is to accept fewer students, which would hamper the college's growth.

"Our faculty is growing, so most departments would like to have more Ph.D. students," Mr. Wells says. "We're between a rock and a hard place."

Even at the business school, setting stipends is a constant challenge, says its dean, Latha Ramchand. The money provided by the university to the college isn't enough to offer the kind of stipends business students get. To fill the gaps, the college uses payouts from endowed funds, like one created from a \$40-million gift that the college received 15 years ago. Ms. Ramchand says she eventually wants a fund exclusively designated for doctoral programs.

While most administrators say market forces should play a role in setting stipend rates, some say more factors need to be considered.

"The free market is not a thing with a soul," says Kevin Prufer, director of graduate studies for the English department. "It's a machine that functions, and in its functioning, some people are going to get more screwed than others."

But the question of what, exactly, is fair compensation for Ph.D. students is complicated, he says. A couple years ago, he would have said the humanities students were getting "really abused." But what they receive now is arguably fair.

"All the professors who are helping you and working with you on your dissertation and teaching your courses," Mr. Prufer says, "that's not free." There is, of course, no stipend-setting playbook. Each institution and program must figure out its own rates based on a complex combination of competition, state and federal money, external sources, local costs of living, and its sense of what is fair.

Decisions about stipends in Ph.D. programs are largely decentralized, with levels set by individual colleges or departments, but the central administration can play a role. Some universities have set minimum stipend levels, like Ohio State University and Cornell University. Some students at Houston wonder if the university should accept fewer Ph.D. students and pay them better, like Johns Hopkins proposed.

In response, Mr. Litvinov, the graduate-school dean, acknowledges a reality universities are often reluctant to recognize: One of many factors in deciding how many students to accept is how many undergraduate courses need to be taught. It's one of many disincentives universities have for reducing the number of Ph.D. students they accept. Doctoral students also help bring status and prestige to the university and to individual faculty members.

Mr. Martin, meanwhile, continues to question the university's priorities. "Build fewer football stadiums and don't pay Matthew McConaughey to be commencement speaker," he says, referring to the celebrity's visit to the campus scheduled for this week, at a cost of \$135,000.

Mr. Martin's job search continues. Although he would like an academic post, he is open to other careers, like magazine writing or working for a nonprofit group.

Like almost every student who spoke with *The Chronicle* for this article, Mr. Martin does not regret his Ph.D., even though it came with financial difficulties. But universities, he says, do need to better appreciate the money challenges facing Ph.D. students, or risk hurting their own futures.

"For the university to survive in the 21st century, we have to tend

our own garden. That means responsible stewardship of the field," he says. "You can't go flooding the market with underprepared, indebted Ph.D.'s and expect the center to hold."

### 3 Approaches to Raising Stipends

The University of Houston isn't alone in its effort to raise stipend levels for graduate students as a matter of equity and to be more competitive in attracting applicants. But at times these changes have been contentious and left students dissatisfied.

Here's what a few universities have done:

- Pay more, but for less time: The University of Texas at Austin's liberal-arts college plans to pay its Ph.D. students more, but over fewer years, with the hope of encouraging doctoral candidates to earn their degrees faster. Some students balked at the idea, writing that the university's plan "articulates a 'one size fits all' model of graduate-student funding and time-to-degree."
- Pay more to fewer students: The Johns Hopkins University's Krieger School of Arts and Sciences decided in 2013 to increase stipend levels for humanities and social-science students to roughly \$30,000 from \$23,000 with the catch of accepting fewer students. Some graduate students protested the plan, saying having fewer students would hurt the overall educational experience. The school ended up setting the floor for stipends lower, at \$28,500, and gave the departments more flexibility in whether to decrease student numbers.
- Pay a minimum and set up an annual review: Following a resolution passed by its graduate-student government in 2011, Ohio State University established an annual process to examine graduate-student stipends to remain competitive. A committee of graduate students, faculty, and staff each year prepares a report that compares stipends within Ohio State and at other universities. Like many universities, Ohio State sets a minimum stipend, which since 2011 has increased to \$13,500 from \$9,000. Cornell University also has a floor for stipends, but its process is different. There the Board of Trustees sets a minimum nine-month stipend rate each year after receiving a recommendation from the provost and graduate school. Increases in the cost of living in Ithaca, N.Y., are part of the calculation.

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