

Graduate Student Funding Policy Committee

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This is an Ad Hoc Committee called by the Faculty Senate President Pro Tempore (Thomas Shuman, Chemistry) with the charge:

“Discern an affordable graduate student funding model that would include tuition and fee support, and other policies to improve our graduate student recruiting and retention”

Current Situation: Recurring Strategic Initiative (SI) Funds

Item	Budgeted	Expended FY 15	Expended FY16-Feb
GRAs ¹	\$450,000	\$0	\$0
GTAs ¹	\$300,000	\$0	\$0
CDFs ²	\$1,758,000	\$658	\$219,844
Completion Fellow. ³	\$0	\$0	\$403,983
Experience S&T ⁴	\$100,000	\$7,213	\$4,667
Graduate awards ⁵	\$60,000	\$0	\$0
Personnel ⁶	\$294,550	\$82,330	\$154,108
Total	\$2,962,550	\$90,201	\$782,602

\$4.3M has been redirected from these SI funds to faculty start up

¹ out-of-state and 3 cr. hr./semester in-state tuition scholarships. 25 GRAs and 25 GTAs were allocated.

² Chancellor's Distinguished Fellowships. 60 were allocated, 8 have been given out.

³ these are Dissertation Completion Fellowships. 11 were given out.

⁴ Doctoral student recruiting

⁵ research and teaching excellence, mentoring undergraduates, entrepreneurship

⁶ manager (business/fiscal operations), graduate specialist (technical communications), student success specialist, recruiting specialist, data analyst. New Budget is \$312,150

Current Impact

The number of PhD students has increased from 555 in 2013 to 593 in 2015 (**6.8% increase**). The increase of 38 students is **short of the 57-114 students needed** over that same period to increase our PhD program by 200-400 students by 2020 (*lever 2.2.2*).

New university CDF program is costing **\$40,851/fellow/year** (in-state) and **\$55,270/fellow/year** (out-of-state).

Completion Fellowship program (**11 students costing \$403,983+**) will decrease the time to graduation from 6.83 to 6.7 years (**1.9%**).[†]

New university fellowship programs are supporting 8 CDFs and 11 Completion Fellows (**3.2% of PhD students in Fall 2015**).

The university is **leveraging \$0** from grants and contracts.

[†] The average time to graduation for engineers according to the Council of Graduate Schools is 6.7 years₃ and the Completion Fellows are assumed to have graduated in 1 additional year without the fellowship.

Breakdown of PhD Students: Fall 2015

Total Number of PhD Students (593)

Breakdown

378 students on appointments \geq 25% FTE (64%)

- 41 Graduate Assistants
- 96 Graduate Teaching Assistants
- 241 Graduate Research Assistants

4 students on appointments $<$ 25% FTE

211 students not on appointment[†]

Of the 378 students on appointments \geq 25% FTE, 214 have a 50% FTE appointment and 164 are between 25% FTE and 50% FTE.

[†] PhD students not on appointment are supported by their country or company, on an external fellowship, or are self-supported.

Graduate Student Funding: Where We Want to Be

Full tuition and fee remission for PhD students on appointment \geq 25% FTE.

Current cost: 378 PhD students at \$9,279¹/student is \$3,507,462

If the Strategic Initiative funds were not encumbered, the university could do this **today** and still have a **surplus** of \$228,650².

A fraction (\$25,000) of this surplus can be used for PhD recruiting where the funds for department recruiting activities, run by knowledgeable investigators, are **leveraged** with a 1:1 match.

A modified Chancellor's Distinguished Plan (next slide) can still be implemented at a **fraction of the current cost**.

The plan would reduce **administrative financial burden**.

¹ tuition and fees, including engineering and science fee and 6/9 waiver, for 9 credit hours in the Fall and Spring semesters and 6 credit hours in the Summer semester (from Office of Finance and Administration)

² current funding includes \$2,962,550 in SI funding plus \$773,562 from old Chancellor's Fellowships (from Office of Finance and Administration)

Modified Chancellor's Distinguished Fellowship

Components

- Tuition and fee remission (\$9279), 50% FTE (\$24,480), and fellowship (\$10K/year) for domestic PhD students for 4 years (5 if they are direct). Increases fellow take home pay to \$34,480/year, which is **on par with NSF Graduate Research Fellowship** and **\$6K higher than current CDF**.
- Department/Faculty commit to pay 50% FTE GTA/GA/GRA appointment (\$24,480) for student's duration, provided they are making sufficient progress towards their degree.
- Annual cost to university is only \$10,000/fellowship. With an additional \$296,350/year, the program can run steady state with **50 CDFs** assuming each CDF is a direct PhD student.
- At least 30% of the CDFs will go to **underrepresented students** in science and engineering. This is at least 3 new students each year.

Benefits

- Provides a mechanism to **attract the best students** (\$43,759 including fellowship, stipend, and tuition and fees).
- **Incentivizes** faculty to bring in research funding for PhD students.
- Efficiently utilizes university resources by **leveraging** faculty resources.

What is the cost?

The number of students on appointments of 25% or greater and the in-state tuition calculation have been held constant intentionally. The first four years are transient, the fifth is steady-state.

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
PhD Students with 25% or greater appointments	378	378	378	378	378
MS CF Students	7	0	0	0	0
PhD CF Students	71	38	26	23	11
Encumbered SI Funds	\$987,631	\$987,631	\$932,362	\$588,733	\$0
Encumbered CF Funds	\$773,562	\$355,669	\$240,516	\$208,879	\$101,182
Available SI Funds	\$1,974,919	\$1,974,919	\$2,030,188	\$2,373,817	\$2,962,550
Available CF Funds	\$0	\$417,893	\$533,046	\$564,683	\$672,380
Modified CDF Funds	\$100,000	\$200,000	\$300,000	\$400,000	\$500,000
Modified Recruit. Funds	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Tuition and Fee Remission	\$2,848,653	\$3,151,793	\$3,266,946	\$3,298,583	\$3,406,280
Cost to University	\$998,734	\$983,981	\$1,028,712	\$785,083	\$296,350

How do we pay for this program going forward?

Transient cost is **\$3,796,511**. The current CF program is undervalued, \$129,767/year would be saved by waiving out-of-state tuition for 9 CDFs, and **\$4.3M** was taken from the SI funds in the first two years.

Every additional PhD student with 25% FTE or greater in the future is \$9279 (FY16 dollars) in lost potential income for the university. However,

- **Tangible:** Every new PhD student will be on a grant or contract. A 50% FTE appointment generates approximately \$12,852 in overhead (**\$9,639 of which goes to General Revenue Allocation funds**)[†].
- **Intangible:** The faculty will be incentivized to grow research, as well as the PhD program, which will **increase national visibility** (the College of Engineering dropped 11 spots in US News and World Report from 81 to 92).

Philosophically, the tuition and fees of this group of PhD students cannot be viewed as a revenue generating source!

[†] \$1,612,459 in overhead (\$1,209,344 in General Revenue Allocation funds) was generated in FY15 from PhD stipends. Note additional overhead is typically generated from the grant to support the student (e.g., materials and supplies, travel).

Future Impact

The proportion of impacted students is **64%**, compared to 3.4% today.

Advertising that no PhD student on a 25% or greater appointment will pay tuition and fees will help to **recruit high quality students**.

The ability to pay more will help to **retain high quality students**.

The university can **leverage \$3,071,350** from grants and contracts, compared to \$0 today.

The cost is **\$9,279/qualified student**, or \$19,279/fellow, compared to \$40,851(in-state) to \$55,270 (out-of-state)/student today.

Tuition and fees paid by grants and contracts can be redirected to student stipends. Today, the \$1,195,621 in PhD tuition and fees from grants could raise **128 students from 37.5% to 50% FTE appointments**, generating \$411,607 in overhead, of which \$308,705 is General Revenue Allocation funds.

Future Impact

Increasing research program and, thus, national visibility, will attract more students that pay tuition and fees (e.g., state and company sponsored, external fellowships), some of which are out-of-state (\$26,019/year). The tuition and fees of these students generate **\$3,039,905 in General Revenue Allocation funds** (FY15).

In FY15 at least 71 PhD students paid \$661,745 in tuition and fees from their own pockets, including \$237,972 in **student loans** ☹️. They will instantly be more positive about their S&T experience 😊.

The ability to fully fund PhD students at only \$37,332 (including overhead) will help to **recruit and retain high quality faculty** by giving them a competitive advantage when seeking funding.

The following levers will be affected:

- 2 Enhance reputation and **raise national visibility**
- 2.3 Develop a culture of excellence in research, scholarship and creative activity among faculty, staff and students.
- 4.5 Engage in transformative **doctoral student recruiting/retention** and placement

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