

NSF \$15M By 2026

ReDAC Discussion

March 1, 2023



VCU

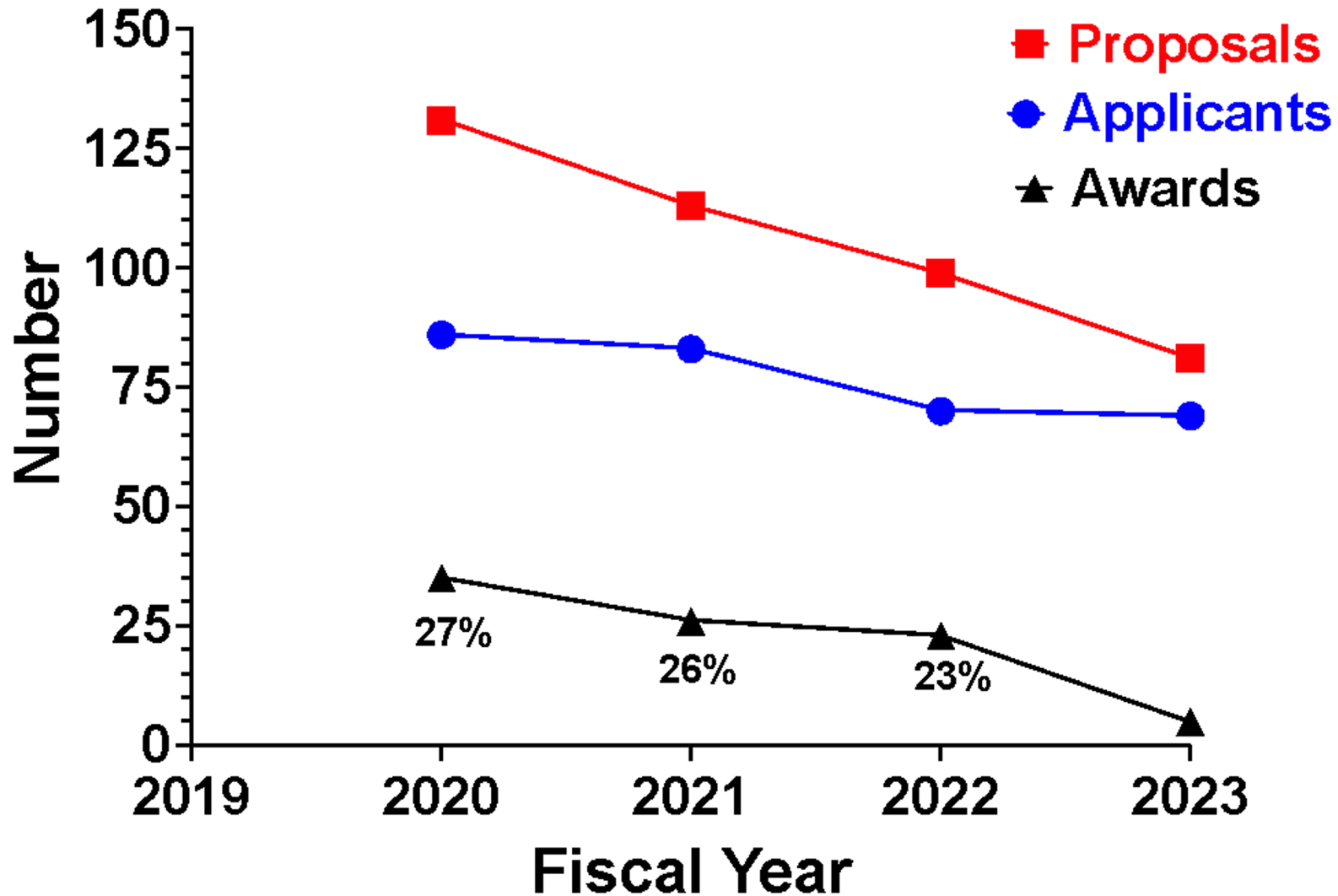
Office of the Vice President
for Research and Innovation

Why Increase NSF Funds?

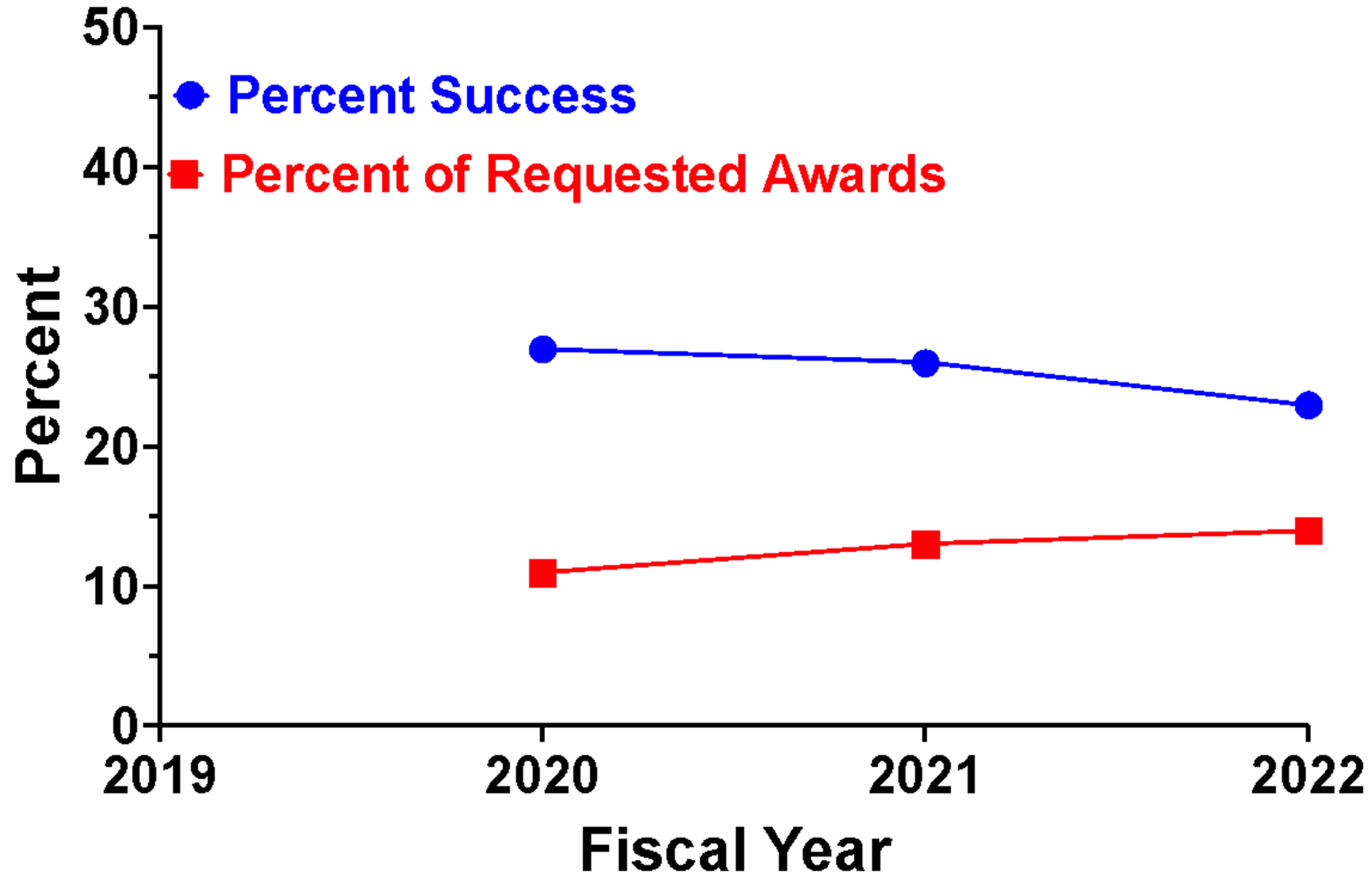
- VCU has 81 active NSF awards
- Others have more (UVA=304, VT=466, GMU=164, ODU=75)
- About 2% of VCU's award dollars vs. about 11% of GMU's
- The total dollar amount of UVA's active awards is 5 times higher than VCU's (GMU's is roughly 2x VCU's)



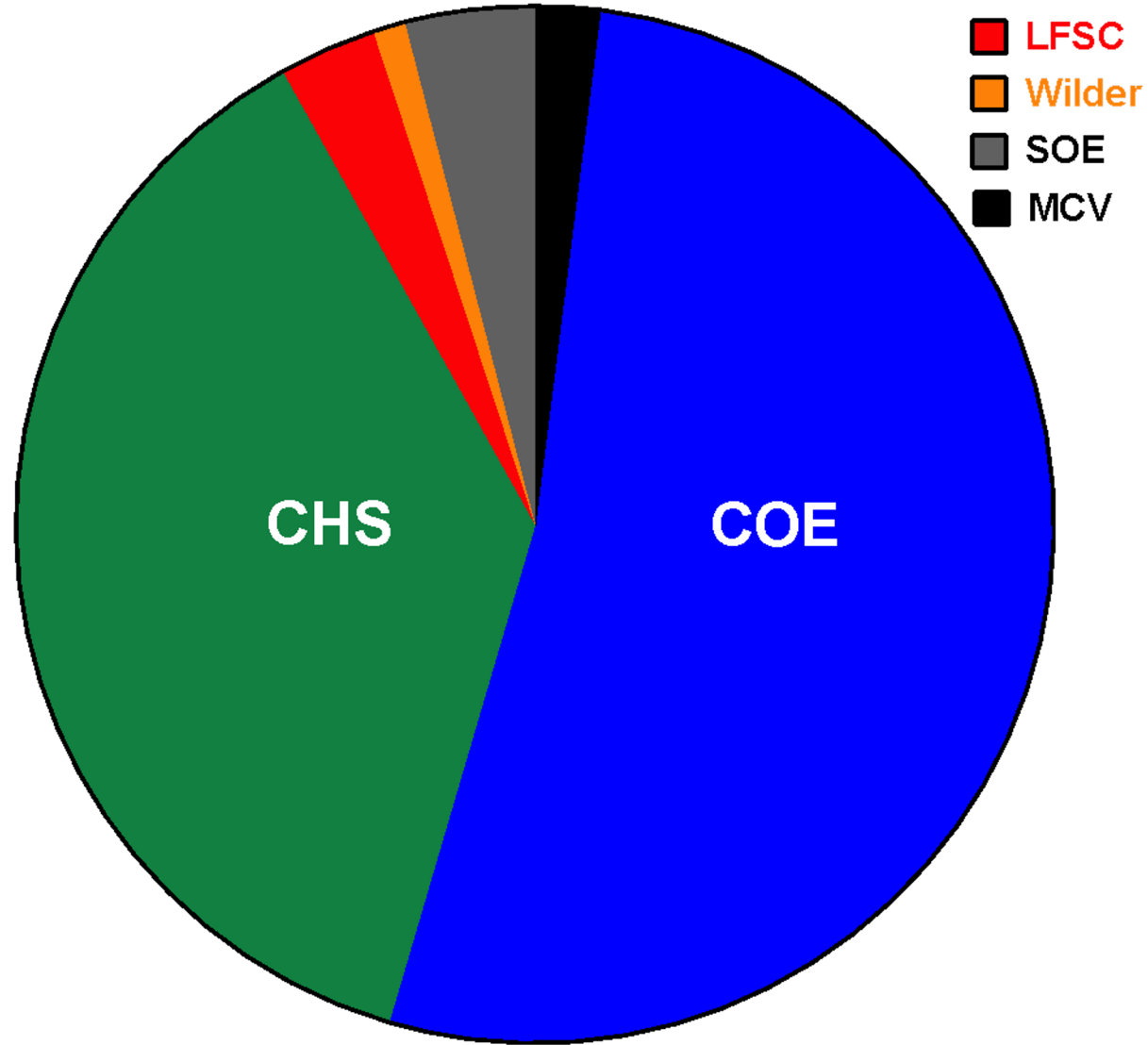
Number of NSF proposals has declined, while number of applicants and awards have been roughly flat



We are capturing less funding than our success rate seems to indicate



Room for Growth: Majority of applications come from COE and CHS



FY22 Proposals by School (N=95)

A Deeper Look at NSF Applicants

- Overall, VCU first-time applicants re-apply 50% of the time
- In FY22, only 30% re-applied
- Only 25% at VCU re-apply after a year lapse
- NSF: “In FY 2017 – 2019, PIs who received an award submitted, on average, 2.3 proposals per award.”



Needs

- Connect us with potential PIs and chairs of PIs
- Set up workshops with us in your units
- Direct PIs to us for support with NSF research proposals
- Help us spread the word



For Discussion With ReDAC

- How can we help PIs re-apply with ease and confidence?
- How can we get new PIs excited about NSF?
- What support does your unit have for NSF applicants?



Who Could Be Applying?

- More than 400 tenure-track faculty in NSF-aligned disciplines
- Only 5% of non-applicants become applicants organically



Proposed Goals

- \$15M yielded from the FY25 Proposals
- \$10M showing in our FY25 annual report (a 35% increase)



New PI-Centered Strategy

- Reach and support faculty at pivotal stages
- Increase the likelihood of applying
- Increase the quality of submissions



Recruit New NSF Applicants

- Work with ADRs and chairs to identify potential applicants
- Host more workshops to specific groups of faculty
- One-on-one follow up after workshops
- Recruit 10% (up from 5%) of the potential applicants



Retain NSF Applicants

- Reach out to first-time submitters and support one on one
- Increase the re-application rate from 50% to 66%



Lapsed Applicants

- Reach out and support
- Increase the rate from 25% to 40%



Faculty with an Award Ending

- Reach out and support
- Goal is to have nearly every PI apply for a new award



OVPRI One-on-One Support for Identified PIs

- Work with about 50 applicants who are in the target stages (recruitment, retention, gap)
- Strategize and assist with navigating the NSF process (130 touchpoints/meetings)
- Review complete grants
- Provide nudges at appropriate times to keep them on track
- Provide boilerplate, templates and proposal examples



Goals for Submissions in FY23

- 95 PIs submitting 143 grants
- Increase the success rate to 19% through one-on-one support



Three-Year Plan

	<i>FY22</i>	FY23	FY24	FY25
Unique PIs	<i>61</i>	95	109	119
Proposals	<i>88</i>	143	163	179
New Awards	<i>\$5.3M Proj.</i>	\$11.8M	\$13.7M	\$15.3M
Annual Report NSF Figure	<i>TBD</i>	Could decrease from FY22	\$7.5M	\$10.3M

Assumptions:

- 10% new PI conversion
- 66%-70% retention of NSF applicants
- 5% faculty turnover
- 40% return from lapse year



<u>Variables</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY23 (Current)</u>	<u>FY23 Goal</u>	<u>FY24 Goal</u>	<u>FY25 Goal</u>	<u>FY26 Goal</u>	<u>FY27 Goal</u>	<u>FY28 Goal</u>	<u>FY29 Goal</u>	<u>FY30 Goal</u>
Proposers					40% Increase per year in proposers MP/Increase by 1 per year for HS up to 2026							
Health Sciences	5	4	2	3	5	6	7	8	8	8	8	8
Monroe Park	81	79	68	66	76	106	148	207	289	404	404	404
Total Proposers	86	83	70	69	81	112	155	215	297	412	412	412
Proposals												
Health Sciences	5	4	2	3	7	9	10	12	12	12	12	12
Monroe Park	126	109	97	78	114	158	221	309	432	604	604	604
Total Proposals	131	113	99	81	121	167	232	321	444	615	615	615
Proposals per Proposer	1.52	1.36	1.41	1.17	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
Total Proposal Dollars												
Total Proposal Dollars Health Sciences	\$4,872,186	\$2,754,498	\$1,156,881	\$2,819,481	\$4,853,345	\$6,038,219	\$7,044,588	\$8,050,958	\$8,050,958	\$8,050,958	\$8,050,958	\$8,050,958
Total Proposal Dollars Monroe Park	\$77,673,109	\$52,890,042	\$48,988,861	\$50,554,030	\$76,662,606	\$106,675,195	\$148,942,725	\$208,318,541	\$290,840,862	\$406,573,385	\$406,573,385	\$406,573,385
Total Proposals Dollars	\$82,545,295	\$55,644,540	\$50,145,742	\$53,373,511	\$81,515,951	\$112,713,414	\$155,987,314	\$216,369,500	\$298,891,820	\$414,624,343	\$414,624,343	\$414,624,343
Average Proposal Size	\$630,117	\$492,430	\$506,523	\$658,932	\$673,686	\$673,686	\$673,686	\$673,686	\$673,686	\$673,686	\$673,686	\$673,686
Awards					25% for MP awards per year/Increase by 2 every other year up for HS							
Health Sciences	3	0	0	0	1	3	3	5	5	7	7	7
Monroe Park	32	26	23	5	29	38	48	60	75	94	117	146
Total Awards	35	26	23	5	30	41	51	65	80	101	124	153
Success Rate	27%	23%	23%	6%	25%	25%	22%	20%	18%	16%	20%	25%
Health Sciences Award Dollars	\$3,598,108	\$0	\$0	\$0	\$276,785	\$830,355	\$830,355	\$1,383,925	\$1,383,925	\$1,937,495	\$1,937,495	\$1,937,495
Monroe Park Award Dollars	\$7,500,121	\$7,336,490	\$7,394,893	\$856,965	\$8,026,765	\$10,517,830	\$13,285,680	\$16,607,100	\$20,758,875	\$26,017,790	\$32,383,845	\$40,410,610
Total Award Dollars	\$11,098,229	\$7,336,490	\$7,394,893	\$856,965	\$8,303,550	\$11,348,185	\$14,116,035	\$17,991,025	\$22,142,800	\$27,955,285	\$34,321,340	\$42,348,105
Average Award Size	\$317,092	\$282,173	\$321,517	\$171,393	\$276,785	\$276,785	\$276,785	\$276,785	\$276,785	\$276,785	\$276,785	\$276,785
Average proposal size FY20-22	\$543,023				2023 Goal calculations							
Average proposal size FY20-22 HS	\$693,335				Avg. # proposers 20-22							
Average proposal size FY20-22 MP	\$672,479				Avg. # proposers 20-22 x proposals per proposer							
Average success rate FY20-22	27%				# proposers x average propossal size HS							
Average award size 20-22	\$276,785				# proposers x average propossal size MP							

