

The Research Grants Program Office

2020-2025 Impact Report

Introduction

California surged to become the world's fourth largest economy in 2025, powered by its educational, research, and innovation ecosystems. These ecosystems have remained resilient despite momentous upheavals over the past five years that have had a significant impact on the



health and well-being of Californians, and on California's environment and economy. Most recently, changes in federal support for research and higher education have created new uncertainties about the future of research and innovation. In this context, the state- and university-sponsored research funded through the Research Grants Program Office (RGPO) at the University of California, Office of the President plays a critical role in preserving California's leadership and creating new opportunities for future generations. This report highlights the contributions of RGPO to this vital work over the past five years.

RGPO supports and advances research activities across the UC system and the entire State. Formed in 2009, RGPO administers many distinct grant-making programs, each targeting different critical research challenges facing California and the nation. These programs fund research spanning climate change, renewable energy, water resources, emerging technologies, social and behavioral sciences, biomedical topics including complex human health issues, pandemics and cancer, and other issues of special importance to Californians. RGPO research has fueled the training of a highly skilled workforce, contributed to inventions and job creation, enabled California to be at the forefront of new and emerging discoveries, improved the health of Californians and benefited the environment. RGPO's grantmaking infrastructure allows us to respond rapidly to emergent priorities while maintaining longstanding research commitments of the University and the State. RGPO programs join forces to ensure that rigorous, world-class standards are maintained in the selection and monitoring of awards. A matrixed organizational structure makes it possible to share the cost of support services, and deploy expertise where needed, to maximize the impact of public research investments. This report highlights these key research contributions over the 5-year period, showcasing RGPO's capacity to meet critical research needs and sustain and enhance California's research leadership.

\$ 540M

In research awards to all UC campuses and California-based institutions (FY 2021-2025)

\$ 2.4B

Total research investments from all Programs since their inceptions

RGPO Programs and Initiatives: FY 2021-2025

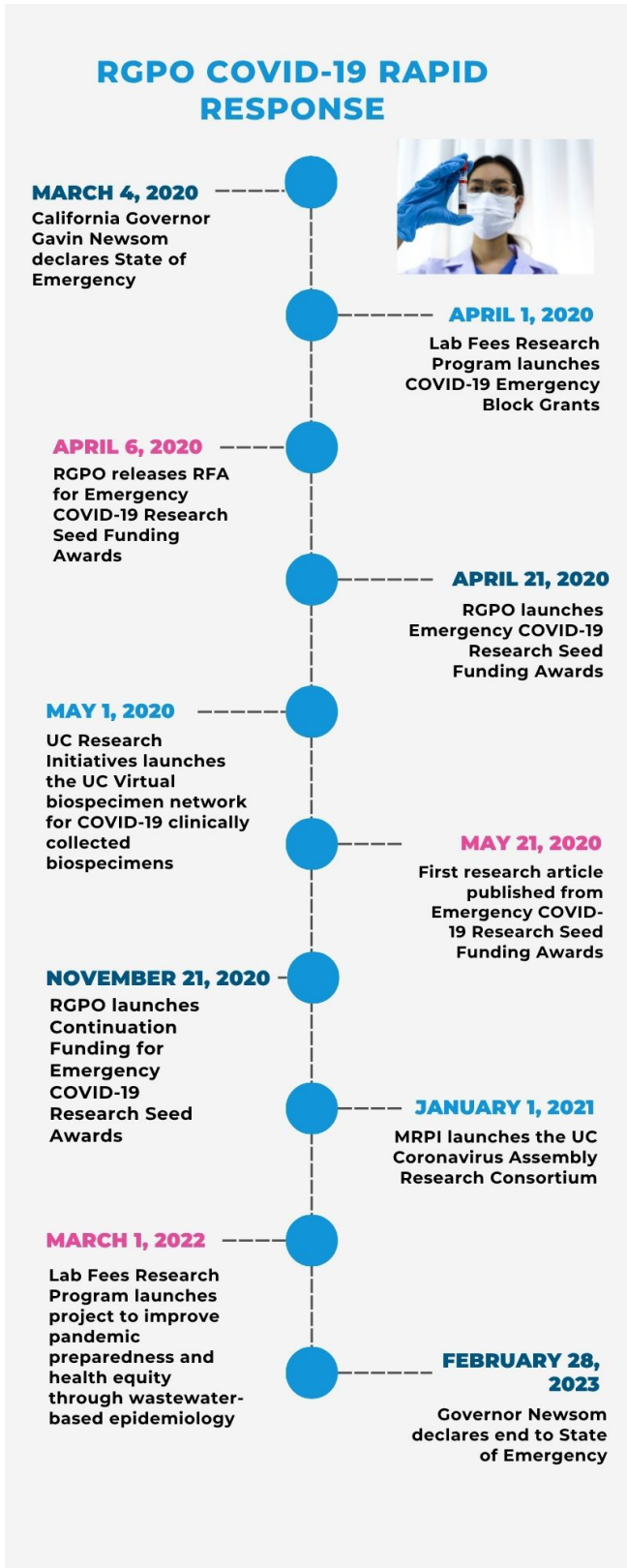
Since 2020, RGPO has continued to administer six established research programs and launched three one-time initiatives. The 5-year investment figure represents net total grant outlays.

Program	Acronym	Established	Funded Research	Key Funding Sources & 5-year Investment
UC Systemwide Research Programs				
UC Cancer Research Coordinating Committee	CRCC	1947	All aspects of cancer, including its origins, detection, prevention, and cure	Bequests and voluntary donations on tax returns <i>\$9.5 M in research</i>
UC Multicampus Research Programs & Initiatives	MRPI	2008	Research collaborations among UC campuses in all fields of scholarship	University of California funds <i>\$37.9 M in research</i>
UC National Laboratory Fees Research Program	LF RP	2008	Strategically targeted topics aligned with the missions of UC and the UC national labs	UC national laboratory management fees <i>\$45.3 M in research</i>
CA Statewide Research Programs				
California Breast Cancer Research Program	CBCRP	1993	The causes, prevention, detection, treatment, and cure of breast cancer	Tobacco taxes, voluntary donations on tax returns <i>\$32.2 M in research</i>
California HIV/AIDS Research Program	CHRP	1983	The prevention, care, treatment, and a cure for HIV/AIDS	State general funds <i>\$37.1 M in research</i>
Tobacco-Related Disease Research Program	TRDRP	1988	The prevention and treatment of tobacco-related diseases in California	Tobacco taxes and CA Dept of Justice settlement funds <i>\$260.4 M in research</i>
One-Time Research Initiatives				
California Climate Action Research Initiative	n/a	2022	California’s climate priorities and research needs	State designated funds <i>\$95 M in research</i>
California Firefighter Cancer Prevention and Research Program	CFCPRP	2024	Research aimed at reducing the incidence of cancer among California firefighters	State designated funds <i>\$5.3 M in research</i>
RGPO Emergency COVID-19 Seed Funding	n/a	2020	Emergency funding to mitigate the negative impacts of the pandemic in California	RGPO program funds <i>\$6.9 M in research¹</i>

¹Grant payments include FY20 and funds from other FY21 RGPO research investments in the table.

2020-2025 RGPO Research Leadership Highlights

\$6.9 Million in Rapid-Response Emergency COVID-19 Research Investments



As the world was gripped by news of the rapid spread of a new coronavirus in early 2020, it became quickly apparent that COVID posed a significant human health risk.

Recognizing that California researchers with expertise in infectious diseases, pandemic response, vaccine development, lung disease, diabetes, and cancer vulnerabilities – all topical areas funded by RGPO programs – could leverage that expertise to help address COVID, RGPO immediately launched the statewide Emergency COVID-19 Seed Funding research opportunity and the UC campus COVID-19 Emergency Block Grants, collectively directing \$2.7 million to research in the first 5 months of 2020.

Promising early outcomes from the seed funding resulted in an additional \$2.4 million in continuation grants, and MRPI funds helped launch a UC Coronavirus Assembly Consortium. By January 2021, [RGPO had funded 109 COVID research projects](#), and helped sustain research across UC and the state. Leveraging both California’s research expertise and RGPO’s ability to respond rapidly to emerging issues supported early discoveries that benefited California and the world during this health emergency.

Early Insights on “COVID Brain Fog”

By May 2020, one COVID-19 Emergency Seed project had already discovered [early evidence of COVID-19’s neurological effects](#) and the potential for an FDA-approved Hepatitis C antiviral treatment to reduce damage to SARS-CoV-2-infected brain organoids.

2020-2025 RGPO Research Leadership Highlights

\$100 Million California Climate Action Initiative

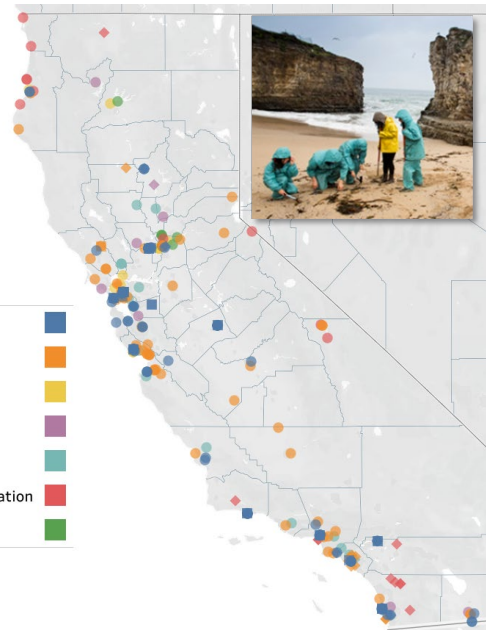


California’s leadership in improving air quality, preserving ecosystems, managing precious water resources, and innovating transportation and energy is rooted in public policy informed by rigorous research. Recognizing the value of research to achieve climate goals, state leaders allocated \$100 million to the University of California in the State Budget Act of 2022–23 to fund action-oriented research that would engage

communities and inform novel solutions to boost climate resilience and disaster preparedness.

Under the leadership of the UC Vice President for Research & Innovation, and in partnership with California state agency leaders, RGPO launched the Climate Action Initiative, funding 15 UC Climate Action [Innovation and Entrepreneurship Awards](#) and 38 California Climate Action [Seed and Matching Grants](#) by July of 2023.

[View the California Climate Action Initiative-funded project locations on the interactive map.](#)



Grantee Snapshot

- 130 community, industry, tribal, and public agencies
- 12 University of California (UC) locations
- 11 California State University (CSU) campuses
- 2 private universities
- 51 of 58 CA counties

To support the broad dissemination and policy linkages of these projects, RGPO hosted 5 statewide convenings and published 11 feature stories and 11 newsletters to support dissemination and policy linkages through December 2025.

2020-2025 RGPO Research Leadership Highlights

\$7 Million Launch of the California Firefighter Cancer Prevention and Research Program

Toxic exposures from both urban and wildland fires contribute to cancer as the leading cause of death among firefighters. In response, in 2023 the California legislature established the California Firefighter Cancer Prevention and Research Program, allocating an initial \$7 million.

Building on RGPO's expertise funding public health, cancer and community participatory research, the program directly involves firefighters in the development and execution of collaborative research to identify effective, scalable approaches to reducing firefighter cancer incidence. Incorporating priority-setting advice from FIRESCOPE California, RGPO funded [eight research partnerships with UC researchers](#) by December 2024.

These UC/firefighter partnerships are already bearing fruit, engaging firefighters in identifying novel carcinogenic residues on the surface of protective gear, informing improved training activities, and developing workplace interventions to prevent cancer in firefighters, among others.

\$14 Million for Tobacco-and Nicotine-Use Cessation for California Youth

A long-trusted steward of state tax revenues for nicotine products, TRDRP was selected in 2024 to receive \$14 Million from the California Department of Justice to launch a multi-year initiative to fund culturally tailored, evidence-based nicotine cessation intervention research for youth and other populations disproportionately impacted by tobacco-related disease.

Leveraging its programmatic expertise and statewide reach, [TRDRP immediately awarded \\$2 million](#) for the first two projects in 2024: (1) a community-partnered project to identify co-use patterns of tobacco and cannabis products among California community college students; and (2) a neuroscience study to investigate a nicotine receptor in adolescent brains that plays a role in addiction.

These investments and the outcomes of this initiative will help protect the health of California's young people.

2020-2025 RGPO Research Leadership Highlights

Leaders in Community Engaged Research

Community partnered research – involving the public or end-users in the research design, implementation, and dissemination – is a cornerstone for achieving research results that can more effectively address local and state needs and transform lives.

RGPO programs have been leaders in community partnered research, from the early days of the [California HIV/AIDS Research Program](#) (CHRP) through the refinement of community-participatory research strategies by the Breast Cancer Research Program’s (CBCRP’s) [“QuickStart” training program](#).

Similar strategies have been incorporated across the RGPO portfolio, resulting in over \$32 million invested in community-based research with over 160 community, tribal, nonprofit and local government organizations from FY 2021-2025, integrating policymakers, workers, students, consumers, educators, patients, or care providers, in research.

RGPO’s leadership in supporting community research engagement spurred the California Strategic Growth Council to sponsor ten [Community-Engaged S/Hero Award Supplements](#) in 2023 as part of the California Climate Initiative. In addition to augmenting the community engagement components of their own research, the ten teams collaborated to identify best practices and develop a web-based toolkit with resources on [Building Trust](#), [Building sustainable partnerships](#), [Indigenous Data Sovereignty](#), and [more](#), applicable to researchers in all fields.



32M

To community partners



167

Community, tribal, non-profit, and local government organizations

2020-2025 RGPO Research Leadership Highlights

Informing Policy and Improving Lives

RGPO-funded research improves lives for all Californians by informing policy that supports health and well-being, as well as the economy and the environment. A brief sampling of the breadth of impact resulting from policy research includes:

The MRPI-funded eight-campus [California Policy Lab](#) has created comprehensive shared datasets that allow in-depth policy analysis on homelessness, criminal justice, education, employment, and home ownership trends. One impactful CPL study found that merely emailing eligible college students resulted in more than 7,000 students applying for the CalFresh food benefit, improving the health and economic security of California's college students.

An **LFRP-funded project** established a more robust approach to [low-intensity prescribed burns for forest management](#) to mitigate wildfire risks. Working closely with CalFire, the team deployed cutting-edge drone and network technology in field experiments of controlled forest fires, resulting in specific recommendations to reduce forest fuel, enhance ecological outcomes, create safer, more controlled burns and measure air quality.

Environmental protections to promote health are a key area of **CBCRP funding for breast cancer prevention research**. CBCRP's effort has been aimed at reducing public and environmental exposure to toxic chemicals statewide. [Resulting recommendations](#) have been used by advocates and lawmakers to push for reform, including those updating California's Green Chemistry Initiative in a new state law, SB-502, which went into effect in 2022.

CHRP-funded research has informed treatment and prevention of HIV with both Pre- and Post-exposure prophylaxis (PrEP and PEP) medications. [A 2022 study looking at pharmacy practices](#) helped identify barriers to pharmacist-initiated PrEP/PEP and informed subsequent legislation, SB 339 passed in 2024, to address barriers to implementation. The bill extended the time limit for pharmacist-initiated PrEP/PEP and expanded the law to include PrEP drugs recommended by the U.S. Centers for Disease Control and Prevention. Separately, CHRP was a key state partner in developing California's *Ending the Epidemics Integrated Statewide Strategic Plan* and subsequent *Ending the Epidemics: Implementation Blueprint*.

TRDRP-funded research has had a significant impact through its ground-breaking Thirdhand Smoke (THS) Consortium, educating policymakers about the prevalence of [THS in homes, vehicles](#) and other property. These efforts contributed most recently to the development and passage of California AB 455, requiring single-family homes to disclose known history of indoor smoking and vaping.

A second area of significant policy impact from **TRDRP-funded research** were findings generated through a study of [e-commerce surveillance of tobacco retailers](#), contributing to the passage of California SB-1230, effective January 1, 2025. The bill clarified language on flavored tobacco sales and gave the state additional authority to seize and destroy products obtained during inspections. It also increased fines associated with violations of the statewide flavor ban.

2020-2025 RGPO Research Leadership Highlights

Leveraging Seed Funding: A Little Goes a Long Way



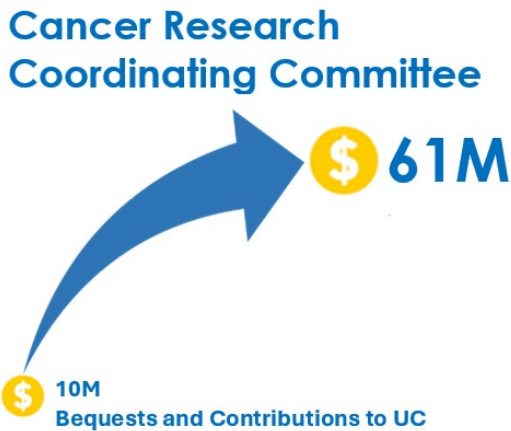
RGPO grants span the spectrum of small \$25,000 seed projects, pre- and post-doctoral research trainee fellowships, and multi-million-dollar, multi-institution collaborative projects. Funding directed towards early career awards for California researchers is particularly valuable for launching new research careers and allowing new investigators to compete more successfully for extramural funding.

At all levels of scale, RGPO investments return benefits far beyond the relatively modest investments from our programs. Among those benefits is their multiplicative impact by attracting additional resources to our state.

From FY 2021-2025, researchers reported that by the end of their research project, they had, on average, garnered 131% more in new research grants as a result of RGPO funding. Collectively, this return on investment totals over \$612 million to fuel California’s national and international research leadership.

Particularly impressive is the >600% leveraging achieved by UC cancer researchers who collectively received \$10 Million in UC CRCC faculty grants of just \$75,000 each and brought in an additional \$61 million as a result of that seed funding.

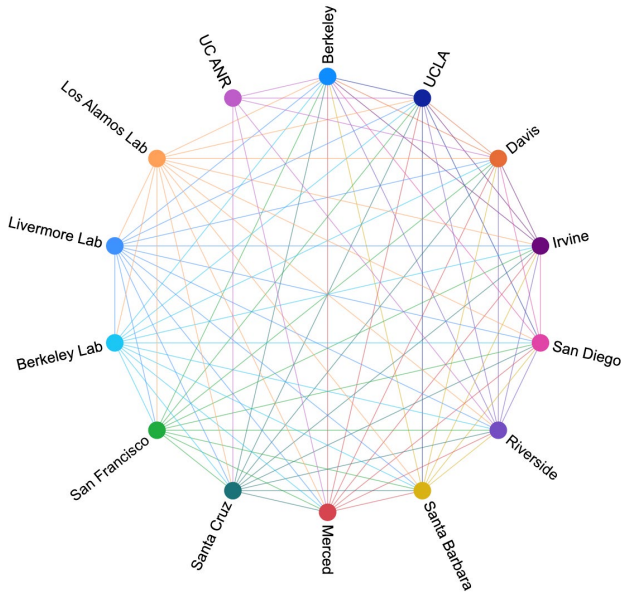
TRDRP grantees reported receiving more than \$152 million in additional research funding as a result of the grants they received from RGPO’s largest active program. CBCRP researchers leveraged their funding by 90%, and CHRP researchers by 127%.



Program	Total Leveraged (\$)	Leveraged Percent
CBCRP	29,446,441	90%
CHRP	70,473,125	127%
TRDRP	152,079,376	59%
UC-CRCC	61,079,764	604%
UC-LFRP	60,417,847	105%
UC-MRPI	126,655,594	320%
All Other RGPO	112,178,841	811%
Total	612,330,988	131%

2020-2025 RGPO Research Leadership Highlights

Amplifying UC's impact through multicampus partnerships



UC systemwide research funding directs resources to topical areas that hold significant promise for advancing discoveries that leverage UC's unique capabilities in areas of critical importance to Californians. From FY 2021-2025, the Multicampus Research Programs and Initiatives and the UC National Laboratory Fees Research Program together invested over \$83 million in UC partnerships in all fields of scholarship, supporting research in fusion energy, artificial intelligence, water, sustainable agriculture, immigration and law, homelessness, economic policy, mathematics, engineering, and the humanities.

The MRPI opportunity is notable for its investments in projects that apply social science methods, advanced technical tools, and statewide expertise to address such topics as [immigration and asylum-seeking in California](#); [digital fact-finding to combat disinformation and human rights violations](#);

and [modeling just transitions in complex socioecological systems of sea level rise and salinity in the Delta](#).

Multicampus projects also tackle research needs to support California's most important industry, agriculture, pursuing improvements to [honeybee and hive health](#) and analyzing the impacts of [labor and automation on California agriculture](#). This latter project garnered an additional \$75 million in extramural funding, including a \$20M grant that was the largest federal grant ever awarded to California's Central Valley as of 2022.



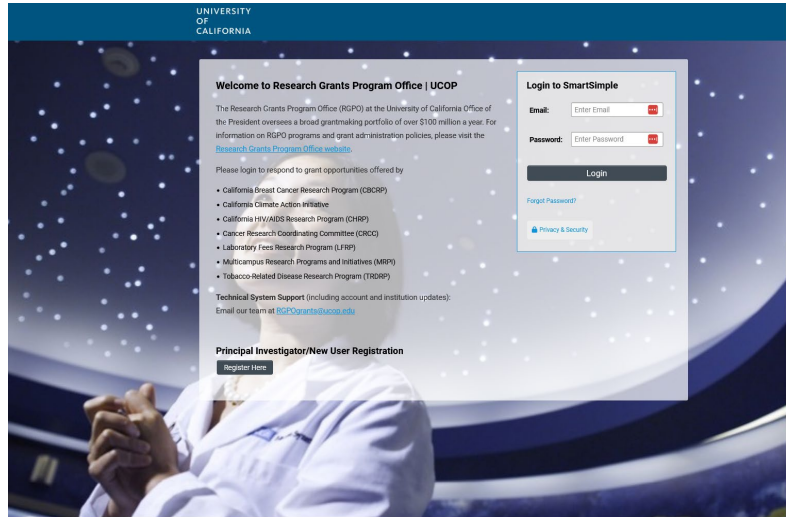
Indeed, MRPI funding has brought in more than 3 times that amount in leveraged funding in five years from FY 2021-2025 alone, further strengthening California's research- and innovation-driven economy.



2020-2025 RGPO Grantmaking Leadership

Integrated Grants Management: RGPO's SmartSimple Database

In January 2020, RGPO formally launched its new online research application and grants management database, [SmartSimple](#). This system currently supports up to 4,500 users annually to access RGPO funding opportunities and submit research proposals. The online interface facilitates the independent, expert review and evaluation of proposals, grantee reporting and research and fiscal monitoring of an active portfolio of over \$500 million in research, allowing for a single point of access for the full grant life cycle of all RGPO programs. Together with the public-facing [RGPO Funded Research Database](#), grantees and the public can now readily access information about RGPO's publicly supported research opportunities and outcomes.



A snapshot of SmartSimple's capabilities includes:

- > standardization of application processes to streamline proposal application and review
- > ability to rapidly deploy emergent, just-in-time opportunities, leveraging existing templates, to get funding to researchers faster
- > creation and curation of expert reviewer pools to support independent, expert proposal evaluation and to inform program approaches to future funding opportunities
- > collection of comprehensive program data and outcomes to inform strategic planning and program evaluation and to inform stakeholders and the public of research results.

SmartSimple by the Numbers FY 2021-2025



2761
Applications Received



770
Grants Awarded



975
Peer Reviewers



102
Advisory Council Members

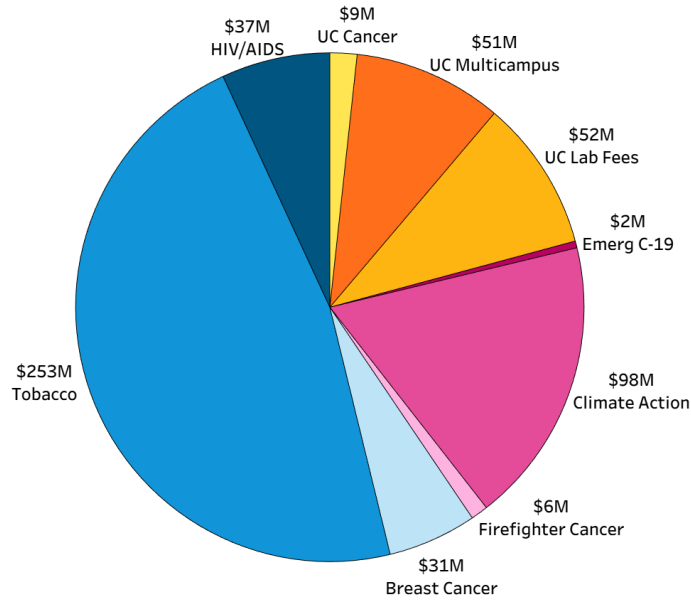
RGPO Grantmaking By the Numbers

By bringing grantmaking expertise and resources from several distinct grant programs into one office, RGPO has consistently made substantial investments for vital research year-over-year since 2009. The following pages highlight our grantmaking productivity from FY 2021-2025.

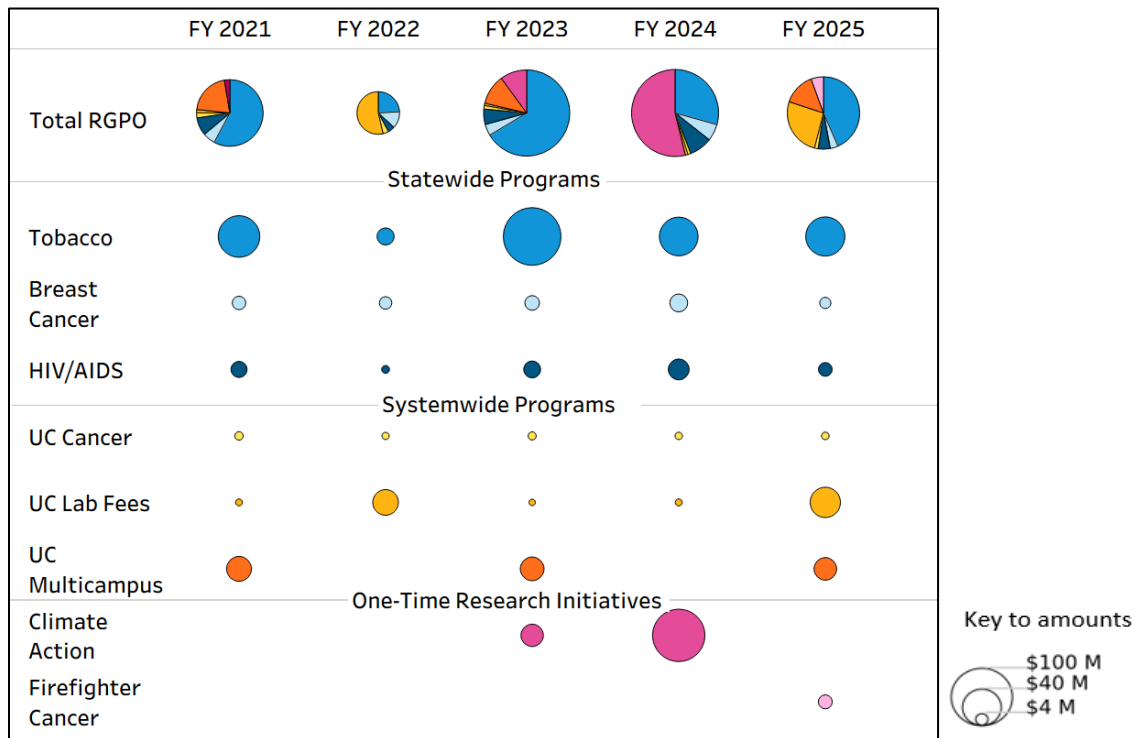
Distribution of RGPO Grants Awarded from FY 2021-2025

RGPO awarded \$540M in new research grants to improve the quality of life for Californians²

1. Total dollars awarded by program



2. Total dollars awarded by grant start year and program

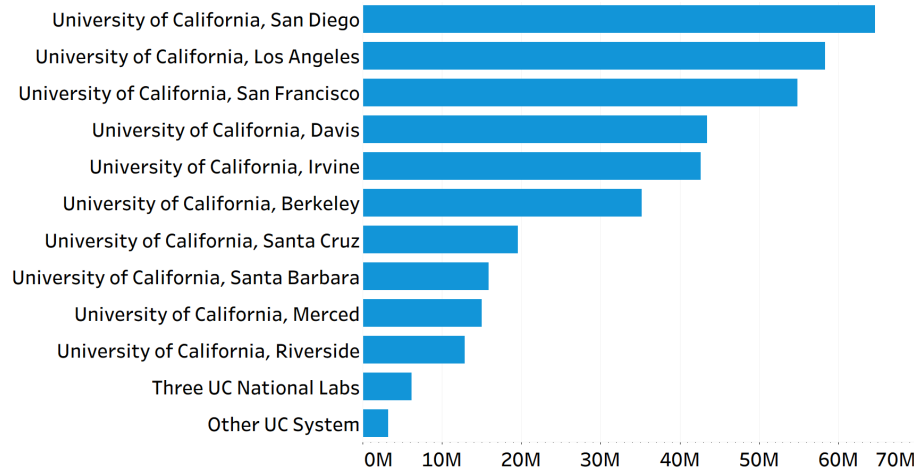


² Grant data is current through June 30, 2025

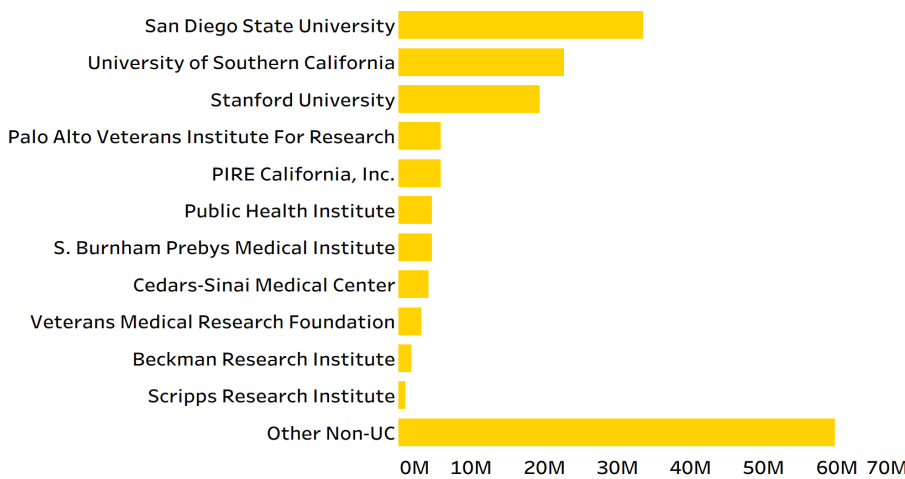
RGPO grants support research statewide, with funds distributed to both UC and non-UC research institutions

From FY 2021-2025, RGPO awarded \$68 million for research hosted at all UC locations, and \$63 million to research hosted by 112 other organizations. Affiliated researchers come from a broad range of institution types and sectors.

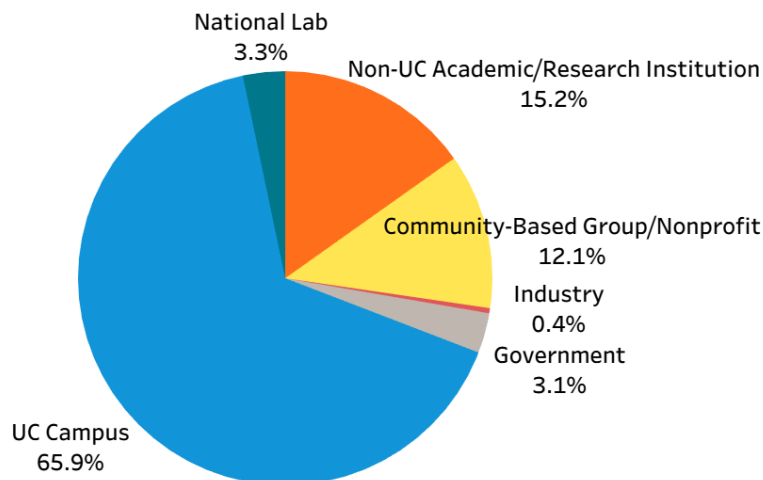
3. Total funds awarded to UC institutions



4. Total funds awarded to non-UC organizations (only top 11 are listed by name)



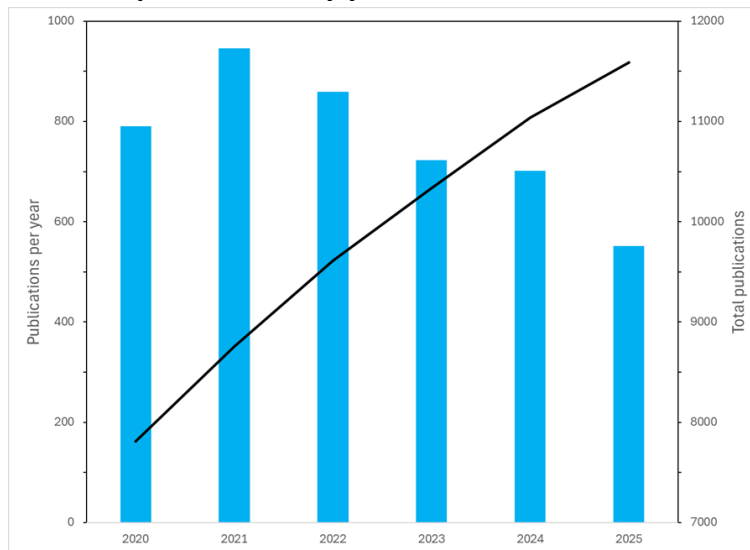
5. Affiliated researchers by institution type from FY 2021-2025



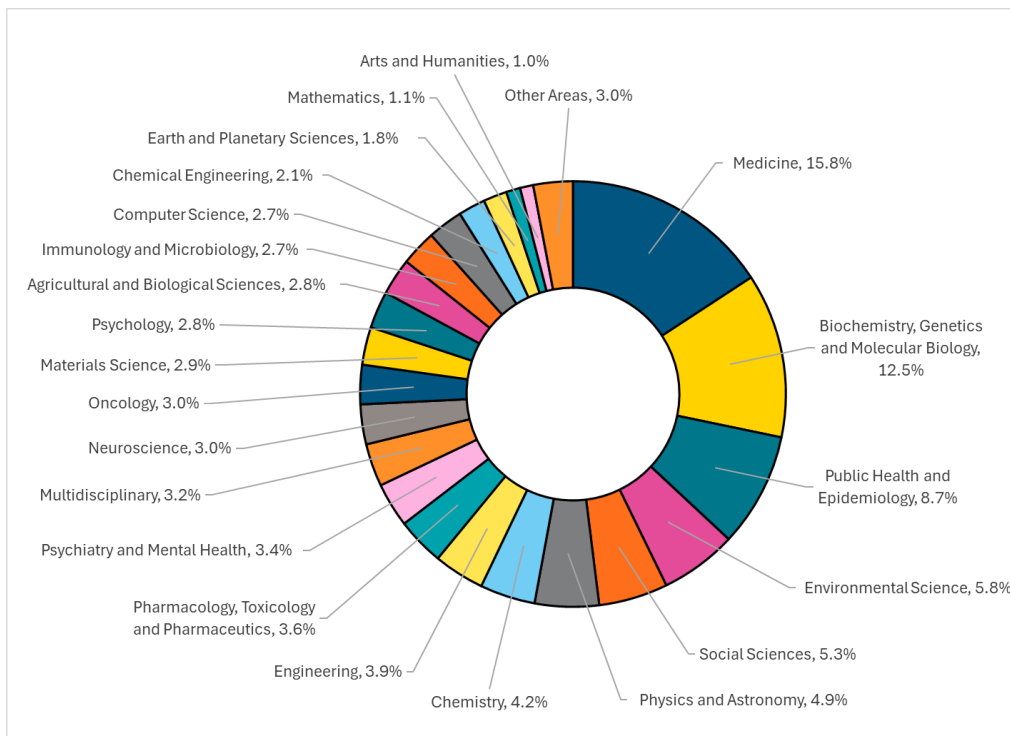
Publications Resulting from RGPO Grants

RGPO funding supports over 700 research publications each year, covering all areas of scholarly investigation. RGPO-funded researchers produced on average more than two academic publications per day for the past ten years. RGPO’s rate of 8.3 publications for every \$1 million in research investment is well above the national average of about 4.5 publications per \$1 million. To ensure that critical research discoveries are broadly available, resulting research publications are required to be available to the public free of charge on open access websites.

6. Number of academic publications by year from 2020, and cumulative total since 2009



7. Distribution of RGPO publications by field, 2020-2025 (Source: SciVal)



Research Dissemination

RGPO encourages comprehensive research dissemination activities as part of both grantee requirements and through RGPO program efforts. Public dissemination strategies include newsletters, legislative briefings, webinars, community fora and other convenings.

From 2020-2025, RGPO programs collectively published 98 e-newsletters, circulated to nearly 15,000 email recipients statewide and beyond. RGPO programs also hosted 38 virtual and in-person convenings for grantees, trainees, legislators in Sacramento or their home districts, and the larger research community statewide.



With an eye to helping sustain and strengthen the next generation of research leaders, RGPO programs have expanded their professional development activities supporting trainees. TRDRP produced a year-long series of webinars to enhance professional development of early

career researchers culminating in a two-day symposium attended by 100 trainees, 50 stakeholders, and community members. LFRP held its first ever symposium of UC-National Lab Fellows, bringing together three cohorts, their national lab mentors, and UC advisors at the University of California Livermore Collaboration Center, building connections to support ongoing UC-national lab collaborations. And CHRP hosted a grant writing and public speaking workshop for research traineeship recipients.



14,701

Subscribers to RGPO mailing list



98

e-Newsletters sent to the RGPO research community and other stakeholders



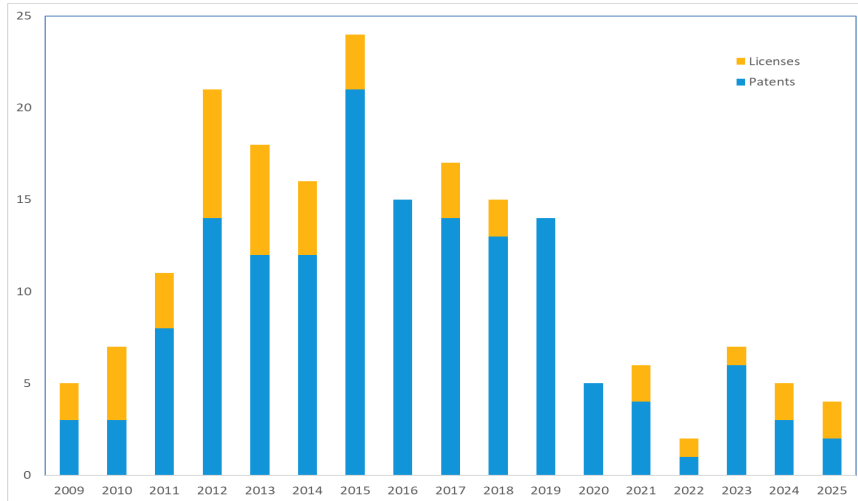
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Symposia for grantees, trainees, and other stakeholders

Patents and Licenses Resulting from RGPO Research

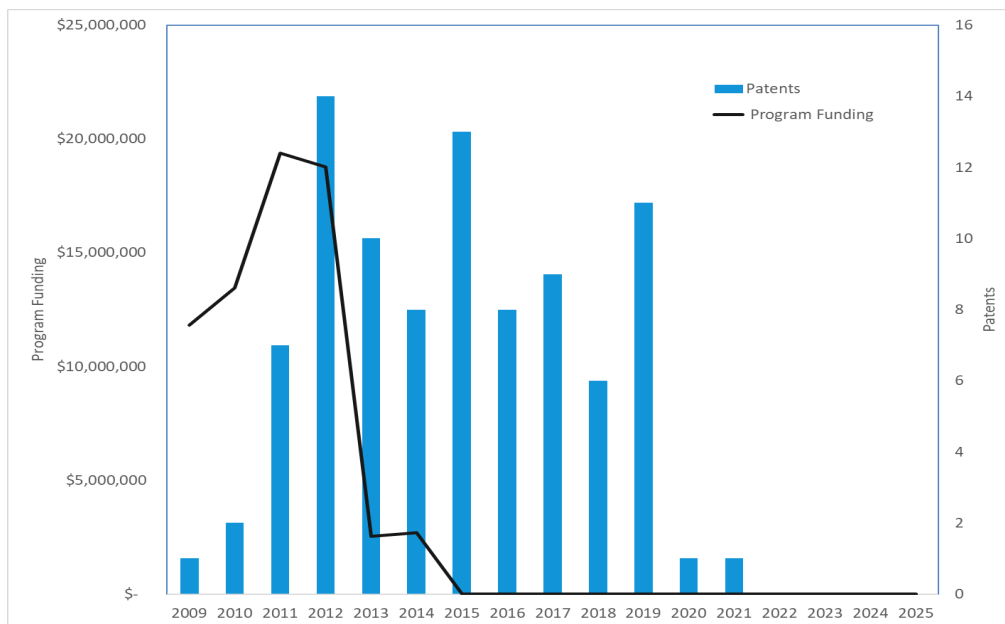
The University of California remains the national leader in innovation, and RGPO seed funding plays a small but critical role in that success. Since 2009, RGPO funding has led to over 150 awarded patents - an average of one patent per \$9 million of research funding - and 42 license agreements. This rate compares favorably to UC's recent overall rate of one patent per \$13 million of research funding. Recent years, however, have seen a reduction in patent and license activity resulting from RGPO grants: 21 awarded patents and 8 new commercial licenses in calendar years 2020-2025.

8. UC-assigned patents and licenses from RGPO-funded grants, 2009-2025



This drop-off since 2020 highlights the critical timeline relationship between when research investments occur and when their outcomes, like patents and licenses for innovations and products, are fully realized. Developing novel solutions and then patenting those discoveries often extends well beyond the typical timeline of a single grant. The [UC Discovery Grant](#) program, which funded UC-industry partnerships for more than 16 years through 2012 (smaller Proof-of-Concept grants continued to 2014) generated new patents for another 9 years through 2021. The drop-off of total RGPO patents and licenses in 2020 highlights both the time needed to produce concrete solutions to complex problems, and the longer-term impact that research investments make in the economy and society. It also demonstrates the importance of sustained investments in research and innovation for ongoing long-term impact.

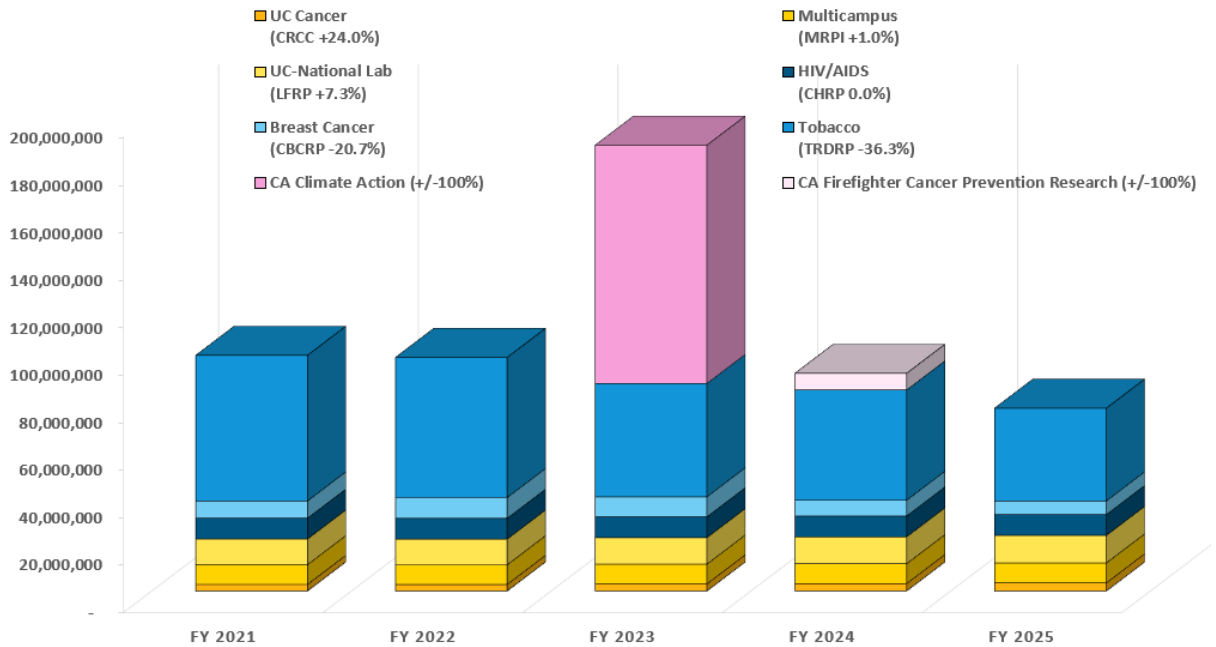
9. Discovery and Proof of Concept Grants: funding and patent award timing



Responsive and Efficient Grantmaking

The consolidation of research grant programs under RGPO ensures a rigorous selection and monitoring of awards and lower operational costs due to cost sharing. Between FY 2021-2025, RGPO leveraged its expertise and infrastructure to rapidly respond to new one-time funding addressing state priorities, doubling revenue and grantmaking in FY 2023:

10. Program funding levels, FY 2021-2025



Over 90% of RGPO funding goes directly to research. Operations costs for RGPO include administration, application evaluation, and research development and dissemination. RGPO takes advantage of economies of scale by sharing infrastructure and support services across multiple programs. RGPO's operations cost of less than 8% on average over the past 5 years is well below the industry average of 15%.

11. Grantmaking and operational costs

Expenditure Type		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	5-Year Total
Statewide Research Programs	Grant Payments	\$63,333,523	\$68,517,920	\$83,770,033	\$62,713,310	\$51,482,300	\$329,817,086
	Administration	\$1,552,101	\$1,410,201	\$1,703,813	\$2,125,589	\$2,390,812	\$9,182,515
	(% of statewide expenditures)	2.3%	1.9%	1.9%	3.1%	4.1%	2.5%
	Application Evaluation	\$2,008,398	\$1,954,021	\$2,337,668	\$2,440,660	\$2,448,780	\$11,189,528
	(% of statewide expenditures)	2.9%	2.7%	2.6%	3.5%	4.2%	3.1%
	Development & Dissemination	\$1,722,211	\$1,597,044	\$2,204,874	\$2,400,008	\$2,398,806	\$10,322,942
(% of statewide expenditures)	2.5%	2.2%	2.4%	3.4%	4.1%	2.9%	
Systemwide Research Programs	Grant Payments	\$14,720,822	\$24,716,978	\$16,626,690	\$15,150,571	\$20,448,610	\$91,663,673
	Operations	\$1,513,750	\$1,808,675	\$1,990,113	\$2,327,719	\$2,794,035	\$10,434,294
	(% of systemwide expenditures)	9.3%	6.8%	10.7%	13.3%	12.0%	10.2%
One-Time Initiatives	Grant Payments	-	-	\$14,996,131	\$79,964,332	\$5,301,390	\$100,261,853
	Operations	-	-	\$467,484	\$1,307,717	\$1,227,387	\$3,002,588
	(% of One-time funds)	-	-	3.0%	1.6%	18.8%	2.9%
RGPO Total Expenditures		\$84,850,806	\$100,004,839	\$124,096,806	\$168,429,906	\$88,492,121	\$565,874,479