# Budget Policies and Guidelines for School of Engineering Funding Proposals

## Rev: September 15, 2024

Preparing budgets is a typical requirement when developing a funding proposal, whether it is for an externally-supported project or an initiative funded internally within the School of Engineering. This document summarizes policies for the preparation of such budgets and includes specific costs and rates for several types of expenses, with these numbers being valid as of the date of this document. Applicants are encouraged to discuss their budgetary needs and questions with Associate Dean of Interdisciplinary Programs and External Partnerships (Dr. Kitts, ckitts@scu.edu), Associate Dean of Research (Dr. Ling, nling@scu.edu), Senior Assistant Dean David Clark (dclark2@scu.edu), and/or Director of Research and Finance (Mei Luu, mluu@scu.edu).

It is noted that <u>there are many other considerations</u> that must be addressed when preparing a proposal for an external partner. This includes topics such as intellectual property, non-disclosure agreements, publication restriction policies, course buyouts, use of human subjects, facility requirements, and so on; the list is long! This document does not cover all other considerations – it focuses on budget preparation. Some of those other policies with financial implications are briefly reviewed at the end of this document given their impact on the budgeting process. Dr. Kitts runs a training program that covers many broader issues, particularly those relating to establishing external partnerships.

**RECENT UPDATES:** Recent updates to this document include a) an update to the tuition rate fo the 2024-25 academic year, b) updated policies on graduate student pay in terms of transitioning (at least for now) away from stipends to hourly pay, c) postdoc hiring information and pay ranges, and d) new descriptions of policies and considerations for topics such as engaging sponsors, faculty pay, research staff, visiting scholars, etc.

**NOTE:** Faculty should *be aware* that how a project is budgeted may not precisely match how the money from a funded project may be spent (in fact, this is rare). This is a critical distinction. For example, one might budget for a student at a specific level and rate. However, if the proposal is funded (which may be many months later) and a student is hired, the actual pay rate for the student depends on the student's status. So, while a PhD student might have been planned and budgeted for, an MS student might actually be hired, and the pay rate for that student will presumably be at a lower rate than what was budgeted (which means excess funds are available within the project to invest in another student, the same student for more hours, or some other option). Similarly, benefits (as explained below) are budgeted at an averaged rate but are expended based on the specific benefit profile of the hired person (which varies and may change over time). Furthermore, a student wage rate may be budgeted but then increase (whether budgeted or not) due to minimum wage requirements or university-approved increases in student pay levels. These are just a few examples; the point is that faculty who are managing funded projects must realize that budgeting for a program and managing expenditures for a

program are related but distinct functions in which the financial numbers will not match perfectly. Faculty should consider being conservative when preparing budgets for this reason (e.g., to the extent that the funding opportunity allows, include margins for various expenditures, percentage increases over time, etc.)

## Guidelines

1. Proposals generally require both a tabulated quantitative budget as well as a narrative "budget justification" which may be several paragraphs long and briefly describes the rationale for the proposed budget line items. Our Sponsored Projects Office (SPO) has a template that we typically use and which represents most cost categories.

2. Funding programs will typically state which budget categories of funding are permitted and which are not. Budget categories typically include personnel costs (faculty salary, staff salary, student wages), benefits for personnel, travel, research supplies, miscellaneous expenses (communications, postage, etc.), tuition & fees, and indirect costs. Details on these categories are provided below. It is important to note that there may or may not be flexibility in moving money from one budget category if an award is actually funded. There are many possible reasons for constraints on this to include the source of money, the objectives of the program, the degree to which the budget and supported research plan were a strong aspect of competitive review and approval, etc. In general, the ability to move money between categories requires approval, and approval may not occur.

3. For most funding proposals, typical spending categories and the School/University guidelines/policies for each include the following:

a) <u>Personnel costs</u>: During the Fall/Winter/Spring academic quarters, student workers are limited to a maximum of 19 hrs/week of employment by Santa Clara University, across all jobs/appointments they may hold; during the summer and academic breaks, students may charge up to 40 hrs/week. The wage/stipend rates listed here are specified by HR and endorsed by the Dean. Other rates are NOT to be used.

    i) <u>Undergraduate student workers</u>: Until 12/31/24, undergraduate student hourly wage rates are $17.75/hour, which is the minimum pay rate as per the Santa Clara County minimum wage law. Although as of the date of this document, no new rate has been specified as of 1/1/25, there may very be one at least on the order of 3-4%.

    ii) <u>Graduate Course Graders & Lab Assistants</u>: Graduate students serving as course graders and lab assistants are paid on an hourly basis at a rate of $20/hr. Graders only receive hourly wages and do not receive tuition support.

    iii) <u>Graduate Teaching Assistants</u>: Teaching Assistants are positions generally funded by the School and administered through Departments or Programs as approved and allocated by the Dean. Graduate student support for a full TA position includes 8 units of tuition, quarterly student fees, and hourly wages of $22.75/hr for 19 hrs/wk for 11 weeks of work (roughly $4,750/quarter). The 11-week term is based on an expectation of 10 weeks of work during the standard academic quarter in addition to partial availability during the week prior to the start of classes (for lab prep, etc.) as well as partial availability during finals week (for grading, lab

cleanup, etc.). Wages are billed on an hourly basis and must be reported by students and approved by supervisors as per standard University deadlines to be paid. Fractional TA appointments are paid on a pro-rated level of tuition support and number of weekly hours of work; typically, 100% of fees are paid even for fractional appointments.

iv) <u>Graduate Research Assistants and Interns</u>: Non-TA graduate research assistants and graduate interns are typically funded directly by faculty based on funds available to that faculty member; this funding may be from start-up grants, internal awards, external grants/contracts, etc. In terms of the vocabulary currently being used, "graduate interns" receive only hourly wages, while graduate "research assistants" (RAs) receive a combination of wages and tuition/fees support. Tuition-only support is permitted but typically used only for fellowship awards. For both types of positions, pay rates are listed below and are based on the academic level of the student. Wages are billed on an hourly basis and must be reported by students and approved by supervisors as per standard University deadlines to be paid.

Graduate interns may be paid up to 19 hrs/wk during the academic quarter and up to 40 hrs/wk during breaks and during the summer.

For RAs, a full appointment includes 8 units of tuition, quarterly student fees, and hourly wages for 19 hrs/wk during the academic quarter and up to 40 hrs/wk during breaks and during the summer. Fractional RA appointments are paid on a pro-rated level of tuition support and number of weekly hours of work; typically, 100% of fees are paid even for fractional appointments.

Hourly pay rates for research assistants and interns are as follows:
- Students who are Master's Degree students receive an hourly rate of $22.75/hr. For a full appointment at 19 hrs/wk for 11 weeks, this is equivalent to roughly $4,750/qtr apart from any additional pay during breaks, etc.
- Post-MS students who have not passed the PhD Preliminary Exam receive an hourly rate of $25.50/hr. For a full appointment at 19 hrs/wk for 11 weeks, this is equivalent to roughly $5,330/qtr apart from any additional pay during breaks, etc.
- Post-MS students who have passed the PhD Preliminary Exam but who have not yet passed the PhD Comprehensive Exam receive an hourly rate of $27.00/hr. For a full appointment at 19 hrs/wk for 11 weeks, this is equivalent to roughly $5,640/qtr apart from any additional pay during breaks, etc.
- Post-MS students who have passed the PhD Comprehensive Exam receive an hourly rate of $30.00/hr. For a full appointment at 19 hrs/wk for 11 weeks, this is equivalent to roughly $6,270/qtr apart from any additional pay during breaks, etc.

v) <u>Post-Doctoral Fellows</u>: Post-doctoral fellows hold academic appointments, and so their appointments are governed by University policies relating to faculty (and not staff). Faculty hiring post-docs have some flexibility in setting the salary level for these appointments. The range is from $0 to $10,000 above the appropriate NIH salary level, which is updated annually and based on the number of years of experience the fellow has. For example, as of 2024, the annual NIH post-doc salary for 0 years of experience was $61,008. Accordingly, a post-doc could be paid in the range of $61,008 to $71,008. The $10,000 range allows faculty some flexibility to balance the availability of funds with the ability to offer an enhanced salary to

address issues relating to cost of living, competitive offers, etc. The salary ranges are specifically based on the NIH Rugh L. Kirschstein National Research Service Award stipend levels. Faculty may fund post-doctoral fellows through their external grant funds. Due to various restrictions on the use of internal SCU funds, post-docs are NOT permitted to be funded through internal funds (e.g., start-up packages, internal research grants, etc.); any deviation from this policy requires Dean and Provost office approval, and such approval may simply not be possible.

vi) Cautions and Considerations Regarding Wages: Please be aware of the following:
- Multiple Jobs: Students may have multiple active positions. Collectively, they may not work more than 19 hrs/wk during the academic quarter or 40 hrs/wk during breaks and/or the summer. However, if their jobs have different supervisors in different parts of the university, faculty may not have insight into the hours they are working/charging to those other jobs. Faculty are advised to check with their employees to see if they have multiple active positions, and if so that they realize that they may not exceed a total of 19 hrs/wk across all jobs. Faculty should also ensure that students are billing hours to the proper positions. Otherwise, administrative mayhem ensues!
- Overtime: Overtime is distinct from working more than 19 hrs/wk. Overtime is generally NOT authorized. Faculty must check with and receive approval from the Dean's Office and/or SPO (for externally funded students; this may require coordination with the sponsor) for guidance on and approval for overtime pay. When personnel work such that they qualify for overtime, they must be paid accordingly whether it was authorized or not (so, supervisors should manage their employees to prevent this if overtime is not authorized for their program). The university has explicit explanations of how overtime is accrued, and it can apply to students even if they work less than or equal to the 19 hrs/wk limitation. As of 2024, as per HR, overtime includes hours worked over 8 on a single day, over 40 in a work week, and/or hours worked on a university holiday; consult with HR on overtime and double time policies.
- Maximizing Graduate Student Financial Support: There is flexibility in how a graduate student's support can be structured. Typically, "full appointments" for a TA are limited to activity and pay during the academic quarter, independent of breaks and the summer. It is possible for these students to work as research interns during breaks and/or the summer, up to 40 hrs/wk if there is a faculty member able to financially support this work.

  For RAs, the degree to which students are funded is based on the faculty advisor/supervisor, and may include support during the academic quarters (up to 19 hrs/wk), and/or academic breaks and the summer (up to 40 hrs/wk).

  Faculty should be aware that there are on the order of 20 holiday days each year given the combination of observed federal holidays as well as university holidays for periods such as Christmas/New Years, etc. Students generally are not approved to work during holidays, and if they do, overtime pay may be required. So, while one may prepare a budget that covers such days, it may be the case that one will not be able to pay students on such days.

  A plausible budgeting strategy to maximize RA pay over an entire year (to include summer work) would be to plan on 33 wks of pay at 19 hrs/wk (given three 11-week academic quarters), and 15 wks of pay at 40 hrs/wk (given the summer and academic year breaks). This

presumes ~4 wks of academic holidays which is typical (10 government holidays and often around 10 days of additional academic holidays declared around holidays, etc.). Faculty may budget for time above this level, but there may simply not be an opportunity to pay out those funds given restrictions on student work (unless overtime and possible double time is planned and paid).

- Cost of Living Support: There may be occasions in which the Dean of Engineering approves and funds a "cost of living" funding allocation for some students. This is not a predictable funding source nor is it an item budgeted at the University or School level. Budgets should not be prepared with any expectation that such funds may be made available.

b) Benefits: Benefit rates are as follows:
   i) Faculty benefit rate: The estimated faculty and post-doctoral fellow benefit rate is 36% during the entire academic year, and 10.5% during the summer.
   ii) Staff benefit rate: The estimated staff benefit rate is 36% during the entire calendar year.
   iii) Student benefit rate: The estimated student benefit rate is 0.85% of wages during the academic year, and 8.5% during the summer.
   iv) Cautions and Considerations Regarding Benefits: Please be aware of the following:
      o Apart from the rates stated above, no other benefit costs may be budgeted or paid given current School of Engineering financial support policies. In particular, health benefits may NOT be paid as a direct cost from university funding sources.
      o The benefit rates stated here are averaged (and typically conservative) estimates, based on the average full-time benefits provided across the university for faculty, staff and students. Actual benefit charges, however, are based on the benefits charges for each individual, which generally vary. This budgeting practice of using average rates is done given that it is impractical to develop a budget based on the benefits for individual personnel, some of which may be unknown or may change during the period of an actual award.
      o Faculty should be aware that the actual charged rate may vary dramatically from the estimates if a faculty or staff member is not full-time but qualifies for full benefits (to include benefits for his/her family); proposal developers should contact the Sponsored Projects Office to discuss this issue if a proposal will be funding a part-time staff member, post-doctoral fellow, or faculty member since these personnel may still draw full benefits depending on their appointment.
      o Summer benefits generally include expenses for Medicare, Social Security and workman's compensation. They do NOT include contributions to 403B retirement accounts.

c) Travel: Travel expenses should generally include a detailed breakout of expected costs for specific travel expense categories such as airfare, hotel, per diem, mileage, conference fees, etc. For international travel:
   - For Sponsored Projects Office proposals, international travel may require separate approval by the sponsor and an itemized budget.
   - International travel must be registered via the Global Engagement Office to ensure that travelers are covered by SCU's insurance. See: https://www.scu.edu/globalengagement/for-faculty-and-staff/individual-facultystaff-international-travel/individual-facultystaff-international-travel/

d) Research supplies: Supply expenses of up to $1,000 can often be justified with a simple statement

regarding the nature of the components to be purchased. Requests for more than $1,000 should generally include a detailed breakout for specific high-cost items; in some cases, vendor quotes may be appropriate for inclusion.

e) <u>Capital equipment</u>: Capital equipment is equipment costing more than $5,000. Such equipment is budgeted separately from research supplies given that, for many sponsors, indirect costs are NOT applied to capital equipment. In many cases, collections of lower-cost components may be declared as capital equipment if they are being assembled into a larger system that, if purchased in a complete form, would be considered as a piece of capital equipment. Note that proposals to acquire capital equipment may require multiple bids or a sole source justification; this should be coordinated with the Purchasing Department.

f) <u>Miscellaneous</u>: Miscellaneous expenses are typically not expected to be more than $500. Otherwise, specific items should be separated into standard budget categories.

g) <u>IRB Costs</u> (for multi-institution awards from federal agencies and which involve human subjects): Some research activities require review by an Institutional Review Board (IRB). Experiments involving human subjects are a typical type of research that requires such review. For SCU programs, investigators have their research plans reviewed by SCU's IRB free of charge. However, for multi-institution proposals to federal agencies involving human subjects, the lead institution may need to pay for a review of the team's plans and then charge a fee to the sub-awardees. This fee may be on the order of several thousands of dollars each year. For proposals such as this, extra time may be required for SPO personnel to learn what these costs may be (so plan ahead!).

h) <u>Tuition and fees</u>: 1 unit of graduate tuition is $1,206/unit for the 2024-25 academic year. Graduate student fees for one quarter are $190. As an example, for the 2024-25 academic year, standard full-time funding for a graduate student would normally include 8 units of tuition ($9,648) and fees ($190). Fractional appointments and tuition support (e.g., for 4 units of tuition in a quarter) still include 100% of the quarterly fees. Funds may not be used for undergraduate tuition or fees. Note that, in general, graduate students are not traditionally compensated solely through tuition support; an equivalent level of wage support is typically provided, or wage-only compensation is provided. The exception to this is tuition-only support made through fellowship and scholarship programs.

As a minor note, but an issue that has caused confusion in the past, students enrolled in graduate certificate programs may receive tuition support from internal funding sources (like start-up packages, etc.) and from external grant/gift funds (like NSF grants, etc.). However, federal-work study funding MAY NOT be used for certificate student tuition.

i) <u>Indirect costs</u>: Indirect costs (IDC) are not included in budgets for internal School of Engineering funds. For external grants, the rates are 37% (on campus) and 14.6% (off campus). Indirect costs are applied to all budget line items except for a) tuition, b) subcontract funding above $25,000 (e.g., the IDC rate is applied only to the first $25,000 of a subcontract), c) participant costs, and d) capital equipment (to include material/component purchases when such components will be assembled/fabricated into a larger scale piece of equipment which qualifies as capital equipment).

4. Budget templates are available from SPO. Budgets normally are prepared as a spreadsheet with budget categories arranged vertically in a specific order and the projected expenses for each category

listed to the right of each category. Multiple columns for expenditures may be required to break the expenses for each cost category into different periods, such as fiscal years, phases of the project, or other categories. Budgets requiring cost share often include columns showing the matched funds for each category. In some cases, such as with federal sub-contracts, a sponsor may require expenses to be grouped into equivalent pay rates (which may include wages, benefits and IDCs for each person as well as tuition/fees for graduate students). SPO's pre-award specialist is available to assist with budget preparation for external awards.

# Related Policies

**Principal Investigator Status:** The title of Principal Investigator (PI) is typically used to designate the person in charge of a grant; this person is often the lead researcher and/or the intellectual lead for the project, although this is not required to be the case. At SCU (and at many universities), the ability to serve as a PI is automatically granted for tenure stream faculty. Non-tenure track (non-TT) faculty and staff, however, do not receive (and often don't seek) such approval.

However, in the spirit of expanding the School's research profile and capacity, there is interest in exploring how we may engage interested non-TT faculty as PIs, particularly since they often have outstanding expertise and capabilities. There are challenges in doing this, to include:
- Non-TT faculty don't often have the same level of resources that can be leveraged for externally-funded research, such as lab space, start-up and discretionary funding, etc.;
- Non-TT faculty may have very broad teaching duties that prohibit the ability to develop an integrated teaching and research profile that can be exploited for external funding;
- Non-TT faculty often do not have the same level of experience or awareness of administrative processes and university policies that are relevant to the conduct of externally supported research, etc.

Given these considerations, the School has initiated a trial program (approved by the Provost's Office) for granting PI status to a limited number of full time non-TT faculty. In its current form, non-TT PIs are required to go through an orientation process to learn about opportunities, challenges and process relating to conducting externally sponsored research. The exact nature of the orientation process may be refined as this initiative evolves. The approval for this designation will be revoked for new applications if a PI does not properly manage grants in terms of reporting, financial affairs, personal management, etc.

**Interactions w/External Companies and Organizations:** There are very specific guidelines for how faculty and staff may interact with external agencies/companies/non-profits when pursuing external support (certainly financial, and perhaps non-financial).

The bottom line is that SoE faculty/staff should **ALWAYS** disclose such activities to the School's Associate Dean for Interdisciplinary Programs and External Partnerships and/or Associate Dean of Research (proposals through the Sponsored Projects Office are automatically routed to the Associate Dean of Research for review and approval). These individuals should be aware of such efforts and will assist you in following the proper policies for engaging partners and soliciting support of various kinds. Note that even if the desired partnership doesn't involve the exchange of funds, it may very well require coordination and review in the form of establishing memoranda of understanding, addressing risk/safety issues, clarifying IP concerns, and definitively identifying any quid pro quo.

Under no circumstances are faculty/staff authorized to negotiate grant/contract terms and conditions with external personnel or organizations. Having a legal document from the Office of the Chief Counsel does not constitute programmatic approval or appropriateness for the contents of such a document unless it has been approved through the University's standard processes.

In general, a major distinction in how externally funded projects are pursued and processed is whether or not resources (financial, in-kind, etc.) provided by the partner to SoE are considered a philanthropic gift or an agreement in which specific expectations of performance are required (a grant, a contract, or a cooperative agreement). In general, gifts are processed through the University's Development / University Relations office, while grants, contracts and cooperative agreements are processed by the Sponsored Projects Office. But, in some cases, both of these offices may be involved (e.g., for a philanthropic gift with complex financial considerations, when a grant-like industry agreement is part of a larger corporate engagement strategy, and so on). Furthermore, sometimes neither office is involved and the relationship, applications and administration are handled directly by the School of Engineering. And to make things worse, some of these criteria for determining how programs are managed are evolving. These subtleties are why all such activities should be disclosed to the SoE Associate Dean of Research and/or the Director of Corporate and External Relations; they are available to guide you in your work and to provide support for doing so as necessary.

**Indirect Costs.** Direct costs are the funds budgeted and expended for specific costs associated with conducting a project. This includes salary/wages, benefits, travel, research and capital equipment, tuition, and so on. However, these projects generally rely on a wide variety of other services and functions that the university provides without levying a "direct cost" that is paid by the project. Such services include providing facilities, utility costs, infrastructure services (IT, library, etc.), etc. Given this, externally funded projects are typically charged "IDCs" (indirect costs) as a contribution to these non-direct expenses. IDC rates are negotiated with the government, and as such the rules regarding IDCs are fairly strict.

- Non-Standard IDC Rates: Changes to the IDC rate (e.g., waiving IDC altogether or using a lower overall rate) may be possible given sponsor requirements or other arrangements; for example, some foundations limit or even prohibit IDC costs. However, submission of a proposal with such consideration requires Provost Office approval via SPO. Note that philanthropic gifts are spent without the application of IDC charges.
- IDC Sharing: The University and School currently have IDC funds "sharing" policies. Currently, the university/provost's office keeps 30% of collected IDC funds and 'returns' 70% of these funds to the School/College of the faculty PI. The School of Engineering currently has a policy to provide a portion of this money (17.5% of the total IDC collected by the university, which is 25% of the funds returned to the School) to the faculty PI, typically as a deposit in that faculty member's professional development account. These sharing percentages may be varied in the case of awards with multiple faculty PIs within the School, awards with multiple PIs across campus units, and awards that involve non-standard IDC charges. Shared IDCs are processed on an annual basis. So, such funds will generally not be available to a PI until several months after the close of the fiscal year in which the IDCs were billed.

**Student Support Rates:** The wage rates listed earlier in this document represent University and School policy on allowable pay rates. The rates are, by all accounts, lower than we would like, and considerable efforts are underway to raise these rates. Until that is done, however, *these are the rates that must be used.*

**Cost-Sharing:** Some sponsors may desire or require cost-sharing by the university in order to apply for a grant (this is not uncommon for foundation grants). <u>It is critical for faculty to understand</u> that, in general, PIs are responsible for identifying their own cost share, and the School and/or University typically does NOT contribute funds for this purpose. There are certainly cases when such contributions may be made (such as when the program will provide broad benefit to the School or University, or if the program is particularly prestigious, etc.), but they must be pre-negotiated, which can take significant time. Cost share contributions should be reviewed carefully with the Associate Dean of Research, as well as with personnel from SPO and/or CFR.

Given this, typical cost-share generation strategies include the following:

- A PI may provide cost-share through his/her own applicable research/lab/start-up funds or those of other members of the proposal team. A typical source of cost share is for the PI and faculty on the proposal team to "contribute" a portion of their time during the academic year, given that a part of a tenure track faculty member's contract includes university support of research. For a typical tenure track faculty member, such a contribution may be on the order of 5-20% of their time (given that roughly 40% of such a faculty member's time is for research). The cost share associated with this may include the contributed salary as well as the benefits and IDC costs associated with this salary.
- The PI may also consider contributing all or a portion of their IDC return generated through the project to the cost-share sum.
- Faculty can commit all or a portion of their School-funded annual professional development funds to the project (e.g., perhaps one trip per year for the program is funded through professional development funds).
- Faculty obtain course equivalent credit for research advising; so, the advising of students on the project can be used to generate an appropriate cost share.
- If the project uses any specialty campus equipment or facilities that have published use rates, that can be used for match as well.
- Industry contributions are often also a viable source of match (yes, the match often does NOT have to come only from the academic institution). So, having one or more industry partners can be beneficial. Perhaps they'd want to provide cash funds to join the effort. But even without that, their in-kind involvement can be used to estimate a match. For example, an industry representative may serve as a project advisor with an established number of hours/year of involvement at a given pay rate. Use of industry facilities or equipment can also result in an estimate for matching support, although this must be grounded in defined rates. Donated equipment may also be a form of cost-share.
- University and/or School approval of cost share may consider the extent to which cost share is provided by the faculty member(s) as well as their department(s). Note that a reasonable question that may be asked is why, for example, the School should provide cost-share out of limited discretionary funds if the faculty member and/or department are not willing to do the same.
- In general, there are MANY ways to generate legitimate cost share contributions BEFORE you might ever need to approach the Dean for a contribution. We have had faculty who have been able to generate over $100,000+, and in one case over $1 million, of cost share without any contribution by a department, the School, or the University. If a PI expects or needs contributions from the School or University, this will certainly require time to orchestrate. As a result, PIs must plan accordingly or will risk not being able to submit their proposal on

time. Contributions from the School or University may be appropriate for the acquisition of major research instrumentation/equipment or other investments with strategic value beyond the specific scope of the funded project. Requests for School matching funds should be coordinated first verbally so that all parties understand the scope of the work being proposed, matching requirements/considerations, constraints, policies, etc. Any cost share that is then to be considered must be requested with a detailed budget and narrative budget justification; follow-on discussions will be based on this document and its iterations over time. This process can easily take a month or more, so PIs should identify such interests early in the proposal process.

**Intellectual Property (IP) Costs:** IP issues include credit for invention, ownership, royalty distribution, etc.

Inventors: Those responsible for conceiving the new IP should be designated as inventors/co-inventors. It is critical to note that the inventors may or may not have any claim to ownership of the IP.

Ownership: For federal grants, foundation grants and philanthropic gifts, the ownership of any IP developed as part of a funded project typically resides with the university.

For corporate awards, the University's desired policy is that IP should reside with the university, like other awards. Such an agreement would typically include a license for the corporate sponsor to use the IP for a period of time, possibly in perpetuity, but most likely in a non-exclusive form. However, this may not be acceptable for the company. Other options may be available, to include:

- SCU maintains the IP but grants the sponsor an exclusive license; this may require consideration of an extra fee for exclusivity, to be negotiated.
- In some cases, the corporate partner may want to own all IP associated with the project. Note that many universities won't consider this, so the fact that SCU does means that we may be able to work with companies that won't work with other universities due to such a policy (many of these universities are R1 institutions). Options for corporate IP ownership include the following:
  - o Traditionally, the right for the company to own all IP requires a negotiation with the university; so, that is possible, but this can take a long period of time and it may be hard to predict the result. This remains an option for any project.
  - o Alternatively, SCU now has an option to allow corporate ownership of IP for a specific cost, known up front. This cost is equivalent to the amount of standard on-campus IDC costs that are embedded in the project budget (e.g., the IDC amount is paid two times, once for traditional indirect costs and a second time as the IP ownership fee).
  - o Note that a PI and/or the university may not want to allow a company to own the IP generated by a project, in which case this option does not need to be exercised (although it might mean that the sponsor may not pursue the agreement). In particular, it is advised that IP associated with the primary research work of a researcher is NOT sold to a sponsor given the likely desire of the PI to continue development of the work being considered.
- A third option may exist, which is joint or fractional ownership of any generated IP. If fractional, the university's position on the appropriate split of ownership will often be based on the university PI's opinion of what this fraction should be. However, since the fraction

may be debated, it is strongly advised that the methodology for determining fractional IP ownership is discussed and agreed upon prior to finalizing any agreement.

- A fourth option, odd as it is, is that a company may pay a fee for an option to purchase the IP at a later date, once research work has begun and presumably shows promise.
- Other arrangements are possible but may require time to define and negotiate.
- It is critical to note (since it is a common misconception on the part of some faculty) that standard IDC costs do NOT include costs for any sponsor ownership of IP.

Royalty Distribution. The distribution of royalties from IP income is governed by the Faculty Handbook. As of August 2023, this policy stated:

> *Where royalties are generated as a consequence of licensing an invention owned by the University, net royalties received by the University will be determined as net of direct and indirect expenses incurred in securing and managing the patent. Of these net royalties, the University will pay **50 percent to the inventors** and the remaining 50 percent will be allocated to a separate University fund to support research and related activities unless otherwise agreed to in writing. An agreement with a sponsor that allocates royalties between the sponsor and the University may be entered into with the approval of the Office of Research Initiatives.*

**Computer Purchases:** The university generally states that all computer-related purchases (workstations, laptops, monitors, printers, etc.) must be selected from a pre-defined list of options that are provided here: https://www.scu.edu/technology/computing-services--support/computer-hardware/. Their rationale for this policy is that it eases their job of providing technical support to thousands of computing products across the university.

However, faculty often require computing equipment other than the options listed for their research, for specific projects, etc. It is possible to purchase such special equipment, and we typically state that these are "research configurations." Given this, requests for quotes for such custom systems should be emailed to quotes@scu.edu. Such requests should state the need for a non-standard configuration due to research needs. It is often best to provide an explicit listing of system requirements, and quite frankly, it is recommended that you obtain an actual quote and submit it. Be aware that they may attempt to obtain additional competitive quotes across multiple vendors. You should feel free to engage in a conversation regarding any deviation from your requirements, preferred vendors, etc.

**Grant Deadlines:** Grants have deadlines. For internal grants, the School has been somewhat lenient in the past on enforcing these deadlines, in part due to the impact of the pandemic. However, as Bob Dylan might say, "the times they are a changing." Barring significant issues such as medical leave, etc., deadlines for start-up accounts (end of 6th year for a typical new faculty hire; it will vary for other positions), the Kuehler undergraduate research program (end of summer deadline), and other programs will be strictly enforced. Deadlines are generally stated in the award announcement.

**Faculty Salary Options:** It is typical and expected for faculty to budget salary for themselves and possibly other faculty (as well as staff and students) for their work on externally funded programs. But there are constraints and recommendations on how this is done given that faculty generally a) work on

a contract that pays them during the academic year, and b) may have other financial support during the summer and/or for other duties throughout the year.

- The first option for faculty salary is to allocate funds for up to three months of summer support. It is noted that the National Science Foundation and other government agencies may limit faculty support to no more than two months of summer support.
- The second option is to budget for a course buyout. In such cases, the faculty member does not teach a course they were otherwise contracted to teach, and the external funding source is billed a standard rate to support this time. Although there is not yet an explicit policy regarding the number of course buyouts a faculty member may have, in practice the School generally tries to accommodate up to two buyouts. Budgeting such buyouts should be coordinated with one's Department Chair in order to discuss implications on timing and other constraints the Department may have in terms of identifying a suitable replacement instructor, etc. It may be possible to buy out more than two courses, but this certainly requires careful coordination and planning, and it may simply not be possible. It is noted that a general driver in some of these decisions is that there is a preference for faculty to be actively teaching and to not have a combination of course buyouts and releases such that they teach no courses during any given year (there are certainly some exceptions to this for faculty in senior administrative roles).
- Another option, particularly when the amount of faculty funding is small, is to not budget for the faculty PI but to instead apply an equivalent amount of funding to other personnel (faculty, staff or students) or to other budget categories such as supplies or travel.

The course buyout computation is made in the following manner (note that the monetary amount is completely different than the "cost" of funding a course release):

1 course buyout = (monthly salary) * 0.9 + (appropriate benefits) + (appropriate IDC)

For example, for a faculty member with a monthly salary of $10,000, with a 36% benefit rate during the academic year, and using the on-campus IDC rate of 37%, the cost of a buyout would be:

$10,000 * 0.9 * 1.36 * 1.37 = $16,768.80

**Research Faculty/Staff:** There are many intertwining challenges regarding the ability to hire and engage non-tenure stream faculty and staff in research activities.

The University currently has a defined position for Research Professor, but this is at the level of a Full Professor. We plan on proposing positions of Assistant Research Professor and Associate Research Professor during the 2024-25 academic year; it will take a while to obtain approval for such positions since it requires modifications to the Faculty Handbook, coordination with the Faculty Senate, etc. Furthermore, it is unclear regarding how such positions will be affected by the new union contract. Almost certainly, initial hiring of research faculty will require that they be funded through external grant funds.

Hiring research staff is also an option, but several challenges exist (I know… you're shocked!). First, there currently is no explicit job category for competitive industry-quality research engineers (this is something we are working to create, but it will take some time). As a result, research staff are often hired under a category such as facilities manager in order to justify a reasonable salary. Second, that

'reasonable salary' is still quite low compared to Silicon Valley salaries, but these salaries can be much more than post-doctoral fellow positions (so, hiring somebody as a research staff member rather than as a post-doc may be advantageous). Third, currently, research staff may only be hired using external grant funds.

Academic year lecturers can be engaged to support research projects. While the process for doing this may evolve given new union policies, for now, efforts to support research should be represented as equivalent courses such that one is effectively "buying out" a course from their contract; in the extreme, this could be up to a full 9 courses so that the position is somewhat consistent with the concept of a research professor.

Quarterly lecturers (QALs) currently may not participate in research projects given the nature of their contracts. There also are restrictions on being able to hire them separately as a consultant. This is unfortunate given that these individuals often have wonderful expertise that could support our research activities. One way that has been used in the past by Kitts is to convert a person who had been a QAL to a research staff member. Doing this required that external funds existed for a 50% appointment for a minimum of six months to justify and obtain approval for the hire. Once hired, that individual continued to do some teaching and their equivalent teaching pay was applied to their salary – this was a sort of "reverse course buy-out" strategy.

For your research staff hiring needs, please feel free to contact Dr. Kitts to explore some creative brainstorming regarding how you can implement your hiring needs given the complexity of SCU hiring policies.


**Visiting Scholars / Associates:** We have a process to appoint Visiting Scholars (VSs). These are UNPAID positions that provide affiliate-level courtesies such as an SCU Access card and e-mail account, etc. Visiting Scholar status also ensures that a person who is not otherwise a member of the SCU community can have access to a limited set of SCU services and facilities. Among other things, VS status allows a person to participate in lab-oriented activities given SCU liability and risk management policies; however, Scholars must complete the level of safety training appropriate for the lab/equipment access they are granted. Visa processing is NOT provided for Visiting Scholars. The Assistant Dean of Faculty Affairs and Strategic Initiatives (Kelly Cox, kgcox@scu.edu) administers VS appointments.


**Facility Costs and Requirements:** Grants (and for that matter, any project) that depend on the possible alteration of facilities should be reviewed to assess what constraints may exist, how long it may take to implement the desired alterations, and what costs may be required. This issue goes well beyond the task of making structural changes to a room or facility. It may include the style of furniture, the task of moving furniture, compliance with ADA requirements, issues with equipment power/heat/filtration/safety, and more.