UCSF Research Resource Program

Proposal to UCSF Chancellor's Executive Committee
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1. EXECUTIVE SUMMARY

The need for coordination and support of centralized cores at UCSF has been the topic of ongoing discussion for years. The 2007 UCSF Strategic Plan states that development of Campus Core Research Facilities (CCRFs) is one of the highest priorities for achieving the goal of translating research discoveries into improvements in human health. The Strategic Plan strongly articulates the critical need for CCRFs that offer "advanced, innovative instrumentation and/or specialized services needed by a broad segment of the research community that are available to all at UCSF." This priority goal was established to address the increasing occurrence of ad hoc core development, overlapping services and competition among under-resourced cores, differential access and recharges, poor administrative practices, and lack of funding for new equipment and technologies needed to keep the cores at the cutting-edge of basic and clinical research.

It has been stated that in 2008 one out of every 10 research dollars go to UCSF cores. It is in this context that this proposal is being put forth for consideration by the Chancellor's Executive Committee. With such a significant portion of our funding being directed through our cores, not taking a more vested interest in these services would be negligent. Several universities have restructured their core services under a central organization and have proven financial and intellectual returns.

In an effort to create a cores program that enables continued excellence in basic and clinical research at UCSF, the faculty and Interim Vice Chancellor for Research propose a plan for building and sustaining a centralized "UCSF Research Resource Program" (RRP) that will manage the day-to-day operations of the campus cores. We propose that the RRP be organized within the Office of the Vice Chancellor for Research (VCR). The proposed RRP will provide administrative functions including finance, human resources, and information technology to cores incorporated in the program. Scientific operations will be left in the hands of the cores' faculty and technical directors. Finally, the cores supported by the central administration will adhere to a set of key principles: have equal access, be non-competitive, and have educational and research components in addition to the service arm.

We propose that a Leadership Council composed of key representatives, including ORU and Center Directors as well as other faculty leaders, would be assembled to oversee the VCR's efforts in development and management of the Research Resource Program. Reporting to the Vice Chancellor for Research would be the Assistant Vice Chancellor of the Research Resource Program. An Advisory Group of representative faculty and core directors would provide advice and guidance to the Assistant Vice Chancellor.

To accomplish this goal, we are requesting a 3 year allocation of $3.3 million dollars to form and implement the initial phases of the UCSF RRF. The VCR Office commits to seeking contributions from Schools and Centers to offset the financial support from the Chancellor's Office. These funds will be used to hire key personnel within the office; develop robust financial and scheduling information technology systems to schedule, track, and report on core activities; and subsidize educational programs and technology-based R&D within the individual participating cores. We are confident that the timing of this endeavor is right, and this effort is mission critical as UCSF attempts to integrate its different campuses to serve all faculty engaged in 21st century basic and translational research programs and to maintain our prominence in the academic community.

2. BACKGROUND

2.1. History of the Development of Core Services at UCSF

Core services are defined as those that are needed by many investigators to conduct their research, but are generally too expensive, complex or specialized for investigators to provide and sustain themselves. Core services including, but not limited to, flow cytometry, genomics, mass spectrometry, microscopy, optical imaging, pathology, tissue banking and study participant recruitment are integral to a university's ability to remain competitive in an era of complex, technically sophisticated medical research across a broad range of researchers needs. Ideally, core services are integrated and effectively managed to provide affordable and high quality services to investigators.

Currently, core services at UCSF are not centrally organized. Thus, existing cores have not been developed strategically to meet the needs of a wide constituency. Instead, they have been "homegrown" by individuals and small groups of investigators who needed these services as part of their research programs, often conflated in an effort to keep investigators' research and labs viable. Consequently, core services have been developed using a wide variety of organizational, administrative and financial structures, making it difficult for the faculty to finance these operations and for their colleagues to identify, use and pay for the services offered. The haphazard ad hoc growth of cores, which is directly attributable to a lack of centralized organization and funding, has also resulted in a total absence of valuable services, a lack of cutting-edge instrumentation, overlapping services that compete with one another, and lack of professional core administration, safety nets, and sunsetting when appropriate.

The 2007 UCSF Strategic Plan states that development of Campus Core Research Facilities (CCRFs) is one of the highest priorities for achieving the goal of translating research discoveries into improvements in human health. The Strategic Plan strongly articulates the critical need for CCRFs that offer "advanced, innovative instrumentation and/or specialized services needed by a broad segment of the research community that are available to all at UCSF."

2.2. Current Status of UCSF Core Services

In 2007, the CTSI Translational Technology Resources (TTR) Program and the School of Medicine attempted to identify all core services available at UCSF and developed a directory of these cores. UCSF cores are geographically dispersed and are administered by departments, centers, and institutes. UCSF cores offer a wide variety of services, some crucial to conducting modern science and used by a large number of investigators, including genomics, proteomics, flow cytometry, microscopy, imaging and specimen banking. In addition, there are a number of cores that offer specialized services that cater to a smaller number of investigators conducting research of particular relevance to UCSF investigators. Examples include drug resistant genotyping of HIV, T cell functional assays, islet isolation, and generation of tumor-bearing animals for preclinical oncology trials.

As a first step toward rationalization of core services, CTSI created an on-line searchable database of existing cores that attempted to list all of the core services available at UCSF (http://ctsi.ucsf.edu/cores/). Approximately 80 core services are currently listed, and it is apparent that many of the listed services are currently offered by multiple laboratories. Appendix A categorizes UCSF cores by resource type (e.g., flow

cytometry, imaging, microscopy), illustrating that similar or identical services are provided by sometimes five or more core laboratories.

In the fall of 2007, the CTSI TTR Program held a retreat for Core Directors and Managers to identify major problems common across Core Services at UCSF. Potential issues had already been identified from an on-line survey of cores conducted earlier that year, and these issues were formulated into a real-time response survey of core leaders attending the retreat. Forty-five cores were represented and took part in the real-time survey (http://ctsi.ucsf.edu/ttr/resources.php, Sinclair and Liegler – Core Problems and Issues). The most common complaints, identified by more than 90% of attendees, were a lack of funding for state-of-the-art instrumentation and problems with data management – including lack of both hardware for storage of data files and sophisticated software for manipulation of the complex data generated by cores. Other problems, identified by more than 50% of core attendees, were: lack of funding for infrastructure (both administrative and laboratory); recharge operations in deficit; inability to hire or retain highly skilled staff needed to operate state-of-the-art technologies; dissatisfaction of core users with the service that the cores are currently providing; and lack of space for core operations.

2.3. Core Services at Other Major Universities

Afflicted by many of the same problems and complaints, other academic medical centers have found a solution through the central organization of cores. Two of these universities, Vanderbilt University Medical Center and the University of Chicago, have been operating successful central core structures for the past 8 to 10 years. Faculty at these two institutions are no longer complaining about the status of cores – one of the best metrics of the success of a centralized structure. The directors of these programs agree that the central core structure promotes discovery, provides broader range of services, removes the typical barriers to use of advanced technologies, and eliminates redundant services. Vanderbilt University and University of Chicago have also seen financial returns through increased revenues, significant reduction of deficits, and cost savings by reducing the need to invest in equipment for new faculty. The organizational models and financial considerations of the central core structures of these two institutions are described in Appendix B.

3. RATIONALE

The University of California at San Francisco needs to position itself to effectively conduct large-scale, highly technical science to remain competitive in the era of 'omics' and translational research. This complex, team-oriented science requires a paradigm shift from the concept of the independent investigator to a multidisciplinary, collaborative approach to research. It is no longer feasible for the independent investigator to have the technical knowledge or the funding required for making full use of the currently available technologies. Accessibility to technological expertise and services is the key to maximizing scientific discovery. Many of the technologies and services necessary to conduct large-scale science already exist within independent core laboratories on our campus. However, because the core laboratories operate independently, the provision of service to faculty to conduct cutting-edge research is not optimal. Inefficiencies in core operations can be attributed to poor integration, lack of stability, and failure of centralized support to meet the needs of our cores. Through the coordination of disjointed core laboratories, UCSF could increase its throughput of scientific discovery by eliminating redundant services and leveraging the funding for acquisition of new advanced technologies and increased breadth of services.

Consolidating business responsibilities to a centralized administration would also facilitate innovation by allowing core faculty directors and technical managers to concentrate on science rather than business.

In addition to facilitating scientific advancement, university coordination of cores simply makes good business sense. In today's economy, it is essential to maximize the use of existing funds. Continuing to pay for redundant, inefficient, or obsolete services would be misuse of our ever-tightening federal, state, and philanthropic dollars. Development of a central core structure would be a sound investment that would lead to increased efficiencies, decreased service costs, and a significant financial return for the university based on increased productivity and scientific discovery. Thus, any efforts to create research opportunities and increase efficiency will save resources and create new knowledge. A more integrated and organized core structure will provide new opportunities for financial support including more competitive NIH center and program project grants, partnerships with industry through new intellectual property and contract efforts, and a better "story" to tell to philanthropists interested in supporting advanced technologies that train students and create cutting-edge discoveries. Besides the anticipated financial return, improving accessibility to technologies and services is critical for our University's ability to recruit and retain faculty and attract the best staff, students, and postdocs.

4.   ROLE OF OFFICE OF THE VICE CHANCELLOR FOR RESEARCH

The realization of integrated cores relies upon a strong commitment from the VCR Office and partnerships with key constituencies (e.g., Cancer Center, School of Medicine, Cardiovascular Research Institute, Clinical and Translational Science Institute, etc.) throughout the institution. The organization of UCSF cores will only be successful with institutional support in the form of oversight, coordination, guidance, and real dollars. Central oversight is needed for assessment of redundant services, obsolete technologies, and lost opportunities within our cores. Advice and oversight is critical for continued evaluation to identify unmet needs to ensure that our faculty has the necessary tools, technologies, and services to conduct competitive research. Through central monitoring of core performance and budgets, cores would be held accountable and be motivated to improve services. A diverse set of services call for institutional support, ranging from the most basic genomics and mass spec cores to more translational flow cytometry, imaging and pathology to the most clinically oriented cores of the CTSI including tissue banking, patient recruitment and clinical trial design and support.

In addition to overseeing cores, the VCR Office would address the needs of the research community by coordinating the cores under a central administration. A central administration would provide support in finance, human resources, and information systems. Provision of administrative support would relieve core managers and directors of business responsibilities outside of their areas of expertise. Placing financial management in the hands of experts has been shown to increase efficiencies in billing and reporting and decrease deficits at universities that operate under a central core administration. In order to compete with industry it has become apparent that UCSF needs to provide core staff with career development opportunities, and a centralized human resources office could begin to develop programs necessary to retain and recruit qualified staff. Finally, the University is past due for development of a central information system to facilitate scheduling, billing, reporting, and advertising of our cores. A central IT system would benefit core staff, users, and funders. Importantly, the day-to-day operations of the cores would NOT be managed by the central administration. Core operations need to be managed at the ground level by core directors and managers in order to serve faculty and students most effectively.

The VCR Office will provide support to the cores by liaising with the internal and external community. The VCR Office has a responsibility to facilitate alliances with philanthropic organizations and industry in a coordinated effort. Interface with these parties benefits the cores in terms of dollars and access to equipment and technologies that may otherwise be unobtainable. Cores also need a voice at the University level to communicate with UCOP on pertinent policies. Within UCSF, cores need representation to ensure campus-level support functions can be leveraged for the benefit of core services. Lastly, the University is accountable for interfacing with federal funding agencies to address rules and regulations of cost accounting.

Beyond oversight and guidance, <u>The VCR Office must contribute financially toward the implementation of a central core structure. Continued and increased funding by departments, centers and individual schools will enhance the program, however, the success of this coordinated effort will not be possible without the financial commitment from the VCR's Office.</u> University funding would support the central administrative staff and functions. Funds would also support the development of new cores, pilots, and innovative ventures. Rather than a one-time investment, however, cores need continued support for education, research and development, and occasional assistance for recharge deficit.

5. DEFINITION AND PRINCIPLES

There is general consensus that cores organized in a central structure must meet certain criteria and principles for eligibility for incorporation into the UCSF Research Resource Program. This program is not designed to be one-size-fits-all, and some cores may opt to not participate in the central administration. Those that do, however, will meet the definition of a Campus Core Research Facility and fulfill fundamental management and operational principles.

5.1. Definition of Campus Core Research Facilities

Campus Core Research Facilities (CCRFs) provide services that are integral to the success of the research programs of many UCSF investigators, but are too expensive, complex, rapidly evolving and/or technically demanding for investigators to provide for themselves or to purchase commercially. Cores must have multiple users across many units on Campus and provide access to all investigators who wish to use the service. In addition to providing core services, CCRFs will have objectives that extend beyond their service missions. For example, they will offer educational experiences as stand-alone opportunities or as part of the existing graduate and professional programs, provide technical training, and conduct research that enables development of the next generation of state-of-the-art technology.

5.2. Principles of Management and Operation

CCRFs must:

- operate under the supervision of the UCSF Research Resource Program organized within the Office of the Vice Chancellor for Research and report to the Assistant Vice Chancellor of the Research Resource Program.

- have a Strategic Plan which includes (1) a Mission Statement incorporating service, training, and research and development, (2) a budget that is approved by the Advisory Committee annually, and

(3) evidence that the core services cannot be provided by outside vendors at equal or better quality or equal or lower cost.

- have dedicated space that is appropriate to the CCRF. For most CCRFs, space will be centrally located, but given the geographic dispersion of UCSF investigators, some CCRFs may operate at multiple Campuses. CCRFs that operate at several locations should have consolidated leadership and administration.

- provide cutting-edge scientific services with timely deliverables, cost-effective services and excellent quality control; education and training for investigators to understand and use services; publishable research related to CCRF activities, and on-going development of new techniques and improved services.

- provide access to services for multiple investigators across Campus and have a stable user base.

- have a transparent and justified funding structure capable of supporting a substantial proportion of the cost of the CCRF, a recharge mechanism and business plan. Costs of CCRFs services may include incentives for defined individuals or groups of investigators, such as those who are more junior, or contribute to the development, infrastructure or equipment necessary to the CCRF.

- have a clear and efficient administrative structure that provides defined career paths for technical and administrative staff.

6. ORGANIZATIONAL STRUCTURE

There is a general consensus in the campus community that CCRFs should be organized within the Office of the Vice Chancellor for Research (VCR). A Leadership Council composed of key representatives would be assembled to oversee the VCR's efforts in development and management of the Research Resource Program. Reporting to the Vice Chancellor for Research would be the Assistant Vice Chancellor of the Research Resource Program. An Advisory Group representative faculty and core directors would provide advice and guidance to the Assistant Vice Chancellor. The Assistant Vice Chancellor and the Advisory Committee would have the joint responsibilities of implementing the strategic plan for the Research Resource Program, overseeing the performance and activities of central administrative team and CCRFs, planning for space and budgets, and developing policy. The responsibilities of the Assistant Vice Chancellor will parallel those of the directors of the Shared Research Operations at the University of Chicago. The job descriptions for the Executive Director and Director of Shared Research Operations at University of Chicago are provided as models in Appendix C. The administrative team, including finance, human resources, and information technology, would provide the necessary administrative functions for all CCRFs. Each CCRF would have a faculty director, a technical director, and an advisory committee composed of faculty representatives and core users. The Core Directors report to the Assistant Vice Chancellor and are responsible for day-to-day core operations and execution of the service, education, and research and development initiatives as defined in the strategic plan for each core. The proposed functional organizational structure is illustrated in Figure 1.
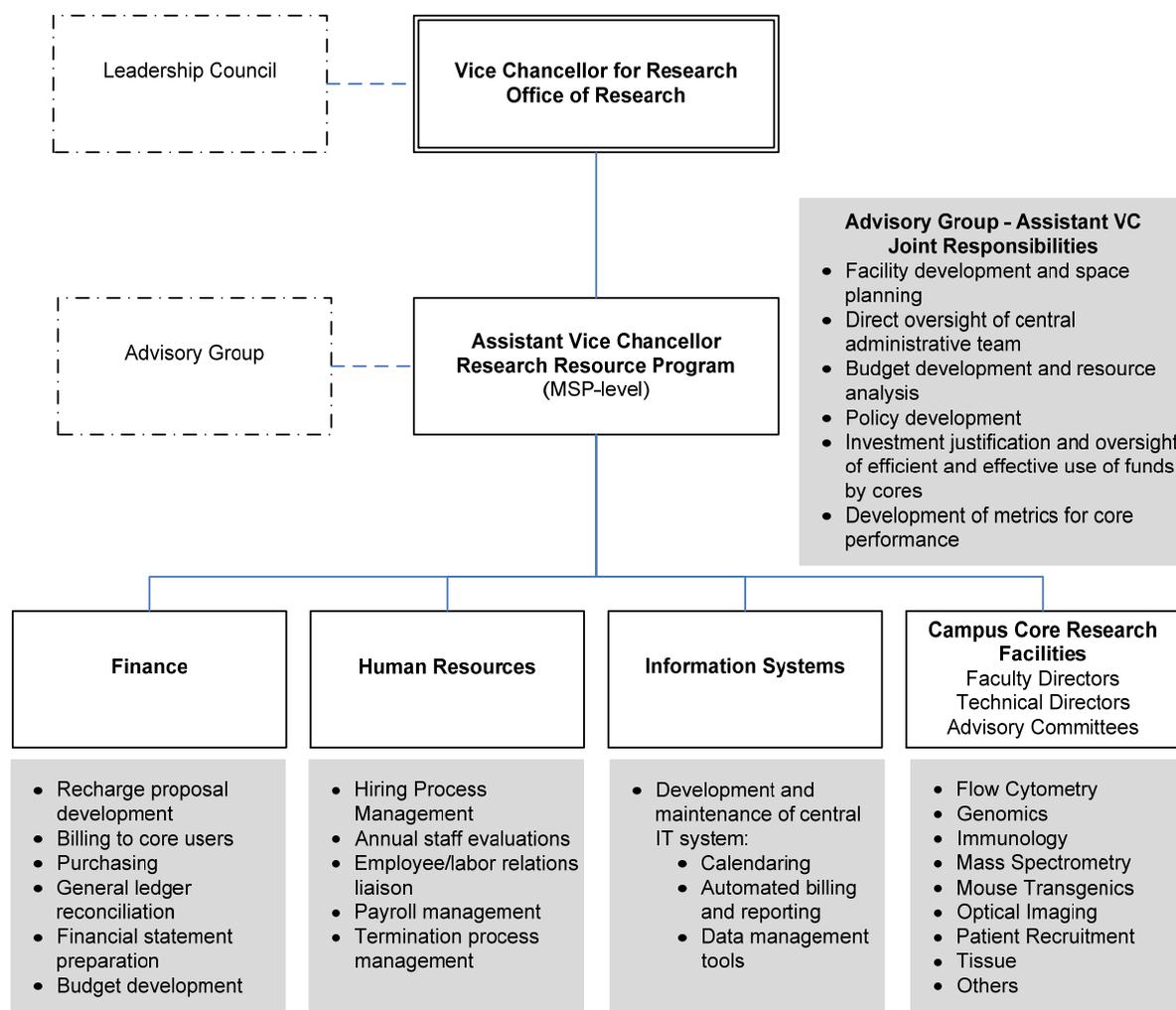
Figure 1. Proposed organizational structure of UCSF Research Resource Program.

7. BUDGET

The centralized core administration budget plan (Appendix D) projects the need for an initial investment of $3.3 million over three years to develop and support a central core structure. It should be emphasized that while this is the requested need from the Chancellor's, contributions from Centers and Schools to offset this request are anticipated or have already been committed. The budget has been modeled after those of Vanderbilt University and University of Chicago, yet at a smaller scale. In 2000, Chicago's initial investment in cores was $9 million over 7 years. This included a $5 million contribution from the University and $4 million from matching resources. The initial administrative budget at University of Chicago was $500,000. The current administrative budget including specialized IT support is $900,000 per year with an additional $1.5 million annual budget for subsidy investments, pilot programs, and technology investments. Vanderbilt's annual budget is $400,000 for administration, $200,000 for IT, and $1 million for subsidizing new cores and equipment.

The budget plan reflects a phased implementation with Phase I costs providing support to 8 cores initially identified as: flow cytometry, optical imaging/microscopy, mass spectrometry, genomics, hybridoma or pathology, tissue banking, mouse transgenics and patient recruitment. (A patient recruitment core does not currently exist but has been identified as a priority. Funding for this core will need to be identified separately and is expected to be significantly supported from current resources across the current user base.) The cores included in the budget are for projection purposes only; the actual Phase I candidates will be selected by the Leadership Council based on predetermined criteria. The total estimated full time equivalent (FTE) staffing in the example cores is >20. This budget was developed using financial and staffing data and equipment usage information from various cores that currently provide access to these types of services or types of equipment.

7.1. Budget Assumptions

A fundamental requirement of the centralized core administration will be the recruitment and appointment of the Assistant Vice Chancellor, Research Resource Program (AVC). The Assistant Vice Chancellor will have a scientific background and will be able to provide professional management and direction to each of the selected cores. The AVC will be tasked with developing and implementing innovative strategies to successfully meet the campus needs for cutting-edge technology and services. Based on the models of the University of Chicago and Vanderbilt with credible central core administration models this position will require a PhD or an equivalent level of experience. The budget reflects the estimated salary for this level of experienced and skilled administrator at the MSP VI level slightly below the mid-range.

The administrative support reflects financial, human resources and payroll analysts and assistants necessary to deliver and support the cores' administration and non-scientific operational needs such as personnel administration, recharge proposal development, billing to users, purchasing, general ledger reconciliation, financial statement preparation and other reporting. For Phase I the centralized staff efforts are budgeted at 25% for the following classifications: Financial Analyst V, Analyst II, AA III, HR Analyst V, and PR Analyst II. Additionally, the implementation will require two full time functional analysts (Analyst VI/MSP 1) to assist the AVC who will function as the project manager.

As the implementation moves into Phase II, the implementation staffing expenses will decrease significantly. However the ongoing administrative support percentages will increase incrementally reflecting the impact of providing services to additional and expanded cores with increased staffing levels and financial complexity.

The Information Technology budget identifies the need for dedicated IT support to the cores during the development of an integrated IT solution as well as for ongoing operations. The IT staff will work with the implementation team and an external IT consultant to perform the necessary technical analysis to plan, evaluate, purchase, configure and implement a centralized IT solution. For Year 1, the internal IT staff effort is: Programmer/Analyst III - 25%; Year 2 Programmer Analyst III - 100% and Programmer Analyst II - 50%. Ongoing annual operational IT support is estimated to be at the level of a Programmer Analyst III - 100%.

The estimated budget for a proposed strategic development and equipment fund is based on the need to purposefully and systematically plan for research and development investments as well as equipment acquisition and replacement for those cores where cutting-edge technology is required and demanded for competitive scientific advantage. In cores where the equipment has been purchased using federal funding equipment depreciation is unallowable and may not be included in the recharge proposal which severely

limits the ability of the core to plan for replacing equipment due to obsolescence and failure. Training resources are also necessary for the best use of state of the art equipment and these costs are also included.

The proposed fund would be used as a matching program where cores would submit proposals for funding accompanied by a needs assessment and usage data. Additionally most requestors would be required to also submit a funding proposal to external sponsors for a portion of the cost. It has been noted that many equipment grant requests are actually strengthened by identifying the use of the equipment as part of a campus core operation. The proposal process would eliminate much of the duplication of equipment acquisition that currently occurs across the campus. The fund could also be used for requests to support emergency replacement of equipment that fails prior to the projected useful life.

The average operational budget for a representative core is $400,000. By consolidating cores, we are consolidating operating budgets of similar services and could realize savings of approximately $81,500.

8.   IMPLEMENTATION PLAN

The proposed implementation plan includes (1) recruitment of the Assistant Vice Chancellor of the Research Resource Program, (2) the organization of the central administrative structures, and (3) phased incorporation of cores. A dedicated implementation team will be integral in execution of the plan and to achieve a seamless transition to a central administration.

8.1. Design and Implementation of Centralized Administration

The first step in implementation will be to recruit the Assistant Vice Chancellor of the Research Resource Program. A committee composed of key constituents from the various Schools, Departments and Centers/ORUs will begin the search for the Assistant Vice Chancellor upon approval from the Chancellor's Executive Committee. The Assistant Vice Chancellor in cooperation with the Advisory Group and Leadership Council will organize the central administration team, establish the financial structure, and lead the development of the central IT system.

8.1.1.   Administrative Structure

A smooth and cost effective transition to a centralized core administration could be accomplished by taking advantage of the existing administrative structures within the Office of Research. Several of the services required for the core administration including human resources, information technology, and finance are already in place. It will be necessary to evaluate which of these structures could be extrapolated to cores and which services will need to be modified or developed. Once the voids are identified, key personnel and leadership will be hired to fill the gaps. This strategy will avoid duplication of administrative services within the Office of Research.

8.1.2.   Financial Structure

The UCSF campus, through the office of the Vice Chancellor for Research, will have operational and financial responsibility for the centralized cores. The financial structure of the centralized cores program will be composed of institutional funds, grant support that currently supports individual cores' operations

such as Center grants, departmental support as applicable, recharge income, cooperative relationships with biotechnology companies, and potentially philanthropy.

Pooling of support from various campus constituencies is currently complicated by conflicting federal policies from the Office of Management & Budget, the National Institutes of Health, the National Cancer Institute, as well as campus recharge policies. Specifically these policies require that there be only "one rate" for all UCSF users of a service from a core, and incompatibly, that some subsidies must specifically benefit research of interest to the provider of the subsidy – e.g. the Cancer Center Support Grant support for Cores is targeted to reduce core rates for cancer research. It is recommended that a small task force be assigned the responsibility to research and identify conflicting policies or regulations and develop an action plan to resolve those conflicts. This issue has been resolved at two Universities identified in the case studies, and these models may guide our approach. The task force membership should include representatives from the Budget Office, Controller's office, Cancer Center Controller's Office, Diabetes Center/ITN, Contracts and Grants and others with specialized knowledge related to the pertinent policies and guidelines. This effort will be coordinated with the CTSI who has already begun discussions with individual Institutes within NIH with the goal of establishing a pilot program at UCSF designed to facilitate cross-institute core activities.

A similar issue arises related to capital equipment. Recharge income cannot fund the acquisition or replacement of the equipment required for many technology-intensive facilities because the required rates would be prohibitive. Similarly, UCSF institutional resources are imagined to be able to only partially meet equipment needs, as described elsewhere. Thus an incentive policy, including targeted rate reductions, may need to be considered to encourage investigators to submit equipment grants and Departments/ORUs to provide financial support.

Transfer/consolidation of existing facilities to form campus cores may require resolution of start-up issues related to current operating deficits, "ownership" of currently allocated space, and geographic distribution of services over the multiple UCSF campuses. Other challenges that will need to be addressed to maximize the financial viability of a central core structure include: procedures for space allocation for new services/equipment and establishing useful metrics for early identification of cores that should be eliminated due to market and/or technology changes. Finally, it should be emphasized that various constituent centers (Cancer Center, CVRI, CTSI, Diabetes Center and SOM) have committed to providing resources and support to this centralized effort and will provide staff, money and in kind support as well as constitute the advisory board to ensure that there is fully integrated and maximum funding for this coordinated effort.

8.1.3. IT structure

Ultimately, the IT structure for CCRFs will include both a central, web-based system and a data storage warehouse. The Research Resource Program intends to leverage campus-level IT to access a secure data environment for data storage. These efforts have not been budgeted as part of this proposal since there are similar initiatives currently underway on campus in this regard. A robust web-based IT system is a critical success factor of the centralization of cores, and the promise of efficiencies necessitates an investment in implementing such an integrated technology. A central IT system will function to request, deliver and bill for core products and services in a seamless fashion. Key activities in the implementation plan include conducting an inventory of systems currently used, identifying administrative and financial systems requirements, and identifying potential solutions.

8.2. Phased Implementation

Two phases will be implemented to achieve the objective of a Research Resource Program in offering advanced, innovative instrumentation and/or specialized services needed by a broad segment of the UCSF research community. In phase I, several core laboratories and services will be selected by the Leadership Council to incorporate under a central administration. In phase II, the central administration will expand to encompass other existing cores/services and establish new ones under its jurisdiction.

8.2.1.   Implementation Phase I

An advisory council including Directors of the Cancer Center, Cardiovascular Research Institute, Diabetes Center, and CTSI as well as representatives from the schools of Medicine, Pharmacy and Dentistry will identify 8-10 core laboratories and services to centralize in Phase I. Candidate cores will be selected based on fulfillment of a predetermined set of criteria. Criteria for consideration include overlap with other existing services, university-wide usage, technical complexity and/or expense beyond the grasp of an individual investigator's laboratory, as well as the potential for research, teaching and training components. Existing cores that will be considered for incorporation include flow cytometry, mass spectrometry, optical imaging, genomics, pathology and core immunology services such as hybridoma production, and mouse transgenics. Incentives to encourage core participation in the CCRF include centralized management of personnel, billing practices, and administrative functions, establishment and maintenance of recharge mechanisms, reduced deficit spending through sound fiscal management, increased revenue recovery, and stable support for research, teaching, and training activities, and career advancement for core staff.

8.2.2.   Implementation Phase II

For phase II, the advisory council will announce a request for proposals to the Campus for application to the Research Resource Program. The advisory council will annually review proposals to incorporate additional existing cores into the program and to establish new cores. Criteria for approval will include the criteria used for selection of Phase I candidates. Predicted usage will be evaluated by estimated demand determined by a campus-wide survey of investigators. Additional considerations based on feasibility include instrumentation needed (existing and to-be-purchased), requirement for facilities renovation, and personnel requests. Proposals must also indicate a faculty director who will have scientific oversight of the services provided within the facility; a faculty advisory committee; an operations plan that incorporates projected revenues and expenses anticipated usage, and personnel requirements; and a communications plan (e.g., website, updates, and newsletters). A sample application is included in Figure 2.

The advisory council will consider ad hoc requests from cores for additional instrumentation, personnel, and facility needs. The council will also conduct annual reviews of cores incorporated into a CCRF. Cores will be evaluated based on the criteria outlined for incorporating cores in Phases I and II. Key features of successful facility performance will include demonstrated campus-wide usage, demonstrated ability to evolve the core's technology, continuing education, contributions to user publications, and if appropriate, publications and grant support generated from within the core. Also important will be budgetary oversight, fee structure, and maintenance of appropriate billing practices. Favorable evaluations will result in a core's continued participation in the Research Resource Program. Cores that receive an unfavorable evaluation will be subjected to a one-year probationary period. Two consecutive negative evaluations will result in a core's dismissal from the Research Resource Program.

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UCSF RESEARCH RESOURCE PROGRAM
Sample Proposal Format

1.  Facilities Services
    1.1.  Specialized service
    1.2.  Justify core service based on faculty needs
    1.3.  Estimated usage
    1.4.  Teaching, innovation, and research components of core

2.  Facilities Implementation
    2.1.  Location/space/renovation
    2.2.  Instrumentation and lab equipment (existing and needed),
          computer and ITS support needed
    2.3.  Administrative plan
    2.4.  Personnel Required
    2.5.  Budget
          2.5.1.  detailed expenses
          2.5.2.  anticipated fees
          2.5.3.  recharge revenue
          2.5.4.  other funding sources

3.  Facilities Management
    3.1.  Faculty Director for scientific oversight of services
    3.2.  Technical Director
    3.3.  Faculty Advisory Committee
    3.4.  Communication to users (webpage etc)
    3.5.  Scheduling mechanism
    3.6.  Continuing Education strategies
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Figure 2. Sample application to the Research Resource Program.

8.3. Implementation Team

A team of dedicated staff must be mobilized to support the new Assistant Vice Chancellor in executing this transition. Adequate resources to handle the numerous implementation tasks that this Research Resource Program requires will help to ensure minimal interruption in core services to our scientific users. The dedicated implementation team will draw upon administrative and academic resources from across the campus where needed to leverage specific subject matter expertise in the different aspects of this transition.

The dedicated team will include a Project Manager, Functional Analysts and IT Analysts and Programmers. Working Groups will be formed comprised of campus experts to address Strategy, Administrative Processes and Organization, and Research and Scientific Processes. Recommendations from these working groups will flow to the new Assistant Vice Chancellor and ultimately to the Leadership Council where appropriate.

4/2009
Start date for new
Assistant Vice Chancellor,
UCSF Research Resource Program

1/2010
Completion of Phase I
Core Incorporation

12/2010
Completion of Phase II
Core Incorporation

12/2008

12/2011

Proposals Due
3/2010

Request for Proposals
Announced

1/2010
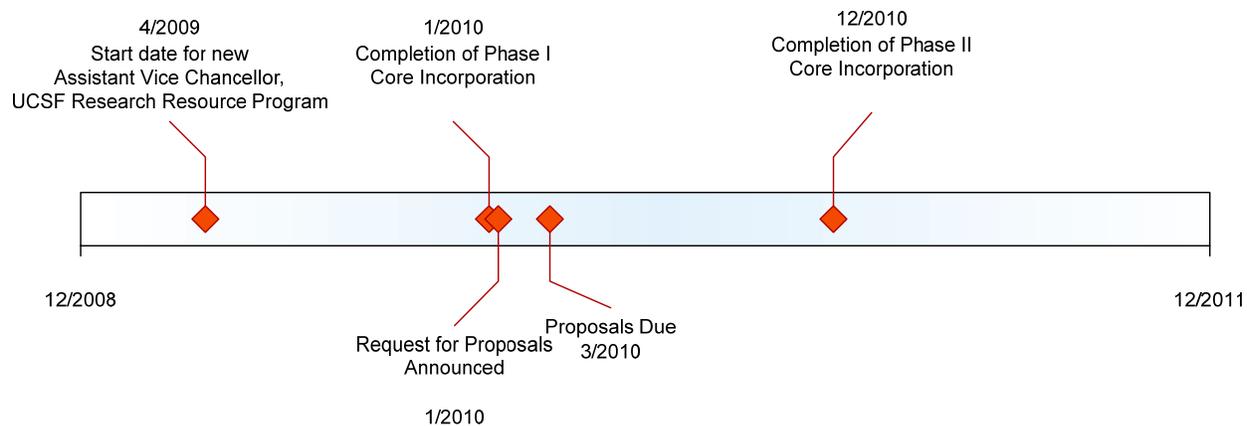
Figure 3. Proposed timeline for implementation. Appendix E outlines a detailed implementation work plan which estimates that the first phase of cores will be incorporated by January 2010 and that Phase II will completed by December 2010.

B. CASE STUDIES

At the UCSF Core Workshop held in September 2008, two external consultants presented successful models of centralized cores at Academic Medical Centers. John Manning, Vice President for Research Operations at Vanderbilt University Medical Center (http://www.vanderbilt.edu/oor/cores/index.php), and Julie Auger, Executive Director of Shared Research Operations at the University of Chicago (http://osrf.uchicago.edu/index.php), shared their respective experiences with core centralization. Each of the consultants described the motivation behind development of centralized cores, the organizational structure of the centralized core system, the role of institutional support, budget and financial structure, central information systems, and the benefits and challenges of implementing a centralized core administration.

B.1.   Vanderbilt University Medical Center

B.1.1.   Motivation

The development of shared resource core facilities was identified as a priority in Vanderbilt's 1998 Strategic Plan. Motivated by recurring core deficits, the directors of the Cancer and Diabetes Centers saw that it would be less expensive to combine funds and support shared facilities than to support individual, competitive cores. The University transitioned from independently operated core facilities to a core structure with centralized oversight with common operations and governance. Today, Vanderbilt operates about 25 basic sciences cores (Table 1) under the central core administration. Several additional CTSA-related cores are currently in development.

B.1.2.   Fundamental principles

The shared resources/core facilities are considered to be at the heart of the science performed at Vanderbilt Medical Center. Vanderbilt has identified several guiding principles that ensure the success of the shared resource network. The fundamentals under which the cores operate include support of high quality scientific investigation, provision of services required by Vanderbilt research programs, high quality and timely deliverables, staff professionalism (career ladders), cost-effective services, and distribution of operational costs and shared instrumentation. The cores at Vanderbilt are required to provide something that faculty are unable to acquire on the outside (e.g., intellectual benefits, active guidance and advice) or provide a service cheaper with higher level quality control. Most of Vanderbilt's cores are multidisciplinary and involve contributions from multiple research centers or sponsored funding.

B.1.3.   Benefits of central core structure

The shared resource system at Vanderbilt provides an environment for faculty success. The network presents an infrastructure for discovery and optimized use of technically challenging equipment. Access to centralized technical support, high quality assurance, and specialized training remove the typical barriers to use of advanced technologies. The central core structure significantly reduces needless duplication of services resulting in the availability of broader range of services to faculty and students.

Table 1. Current VUMC shared resources/core facilities

Animal Resources	Human Tissue Acquisition & Pathology
Biostatistics	Immunohistochemistry
Cell Imaging	Institute of Imaging Science
Center for Human Studies	Lipids/Lipoproteins
Center for Small Animal Imaging	Mass Spectrometry
Center for Structural Biology	Proteomics Lab
Computational Genomics	Microarray
DNA Resources	Molecular Cell Biology
DNA Sequencing	Molecular Genetics
Electron Microscopy	Molecular Recognition & Screening
Energy Balance & Nutrition	Rodent Neurobehavioral
Family Ascertainment	Neural Cell Imaging & Histology
Flow Cytometry & Cell Sorting	Neurochemistry
GCRC	Neurogenomics
Hormone Assay & Analytical Services	Transgenic Mouse/ES

B.1.4.   Organizational structure

All leadership in the medical center reports to the Vice Chancellor for Health Affairs. The Associate Vice Chancellor for Research reports directly to the Vice Chancellor for Health Affairs, allowing for research to have a voice at the highest level. The Office of Research seeds and oversees the shared core facility network. Grants, centralized contracting, human subjects (IRB), animal care (IACUC) are also housed within the Office of Research. The Office of Research provides the computing infrastructure for these arms. Other responsibilities of the Office of Research include the management of research space (both new and existing), development funding for faculty recruitment, strategic oversight of major research initiatives, and external research affairs.

The Office of Vice President of Research oversees core facilities (including space, operating budgets, and capital equipment), research space, budgets for new investigator start-up packages, and operating capital for equipment and renovations. The Assistant Director of Research Core Facilities reports to Vice President of Research Operations. This person is a scientist with experience in running cores and carries out most of the communication with core managers, faculty, and the advisory committee. The Assistant Director promotes development of new core services, oversees financial and administrative operations, and provides regulatory interface and guidance.

Cores have joint reporting roles. Each core reports to a Scientific Center and to the Office of Research. The Scientific Center oversees scientific quality, investigates new techniques, and is directed by a tenured faculty member (5% of time paid for by Office of Research). A non-tenured faculty member serves as operations director. The Office of Research provides core budget and pricing support, oversight and review, centralized management, coordination of advisory committees, and IT support.

Each core has an advisory committee which meets annually. The advisory committee consists of users (usually high volume users) and is limited to 9 faculty or less. The advisory committee will make decisions such as whether or not the core is beneficial or whether the space could be used for something more critical.

B.1.5.   Financial considerations

Vanderbilt has had a laser like focus in decisions on research spending in order to survive in an era of NIH funding downturn.   All federally funded centers now participate in the institutional core system.   The chargeback revenue for cores increased from $5 million in 1999-2000 to nearly $25 million in 2007-2008, approximately 10% of Vanderbilt's NIH funding.

Vanderbilt's annual budget is $400,000 for administration, $200,000 for IT, and a $1 million fund for subsidizing new cores. Vanderbilt is very aggressive about pathways to independence. Cores are required to break even within 3 to 4 years. Any piece of equipment over $100,000 comes out of a central university fund. Some years the cores will dip into this fund for $100,000 to $200,000, and some years they will dip into this fund for $1.5 to $2 million dollars.

Vanderbilt has an Oracle-based Core Facility Usage and Invoicing System in place for billing and usage reports. The system was developed by the Office of Research and VICC/Diabetes Center. The system automatically deducts costs from faculty accounts and credits the cores at the end of the month. The invoicing system is complete with an online approval process for PIs.

B.2.   University of Chicago

B.2.1.   Motivation

Motivated by the lack of funds to support cores, the Dean of the Biological Sciences Division and School of Medicine commissioned a task force to evaluate the research infrastructure in 1998.   Task force recommendations were implemented in 2000. An oversight committee was established to evaluate investments in core facilities and the function of core facilities.   An administrative unit with a dedicated annual operating budget was also established. In the first year, six cores (flow cytometry, monoclonal antibody, immunohistochemistry, microscopy, immune assay, and cGMP) were initially targeted to be "federated" under the centralized administration. By the end of the first year, 15 cores were operating under the central administration

Motivations for establishing a centralized core structure were (1) faculty need for access to state-of-the-art technologies and expertise, (2) faculty retention and recruitment, (3) protection of investments in cores by ensuring technologies are utilized and maintained and that personnel are trained, (4) reduction of investments in redundant technologies, (5) justification of investments through annual scientific and technical reviews, and (6) provision of support through complete financial and human resource management services.

B.2.2.   Benefits of a central core structure

Centralization of cores provides unlimited access to services in the absence of political boundaries, increased awareness of available services, elimination of redundancy, needs assessment for bringing in new services, efficient billing for grant reporting, increased investment in cores by NCRR and NSF, more attention to deferred maintenance, and increased core collaboration. The benefits of centralized cores to the institution are an increased revenue recovery, elimination of undercharging, provision of accurate monthly reports, and reduction of deficit spending which frees up funds for core development and new technologies.

Table 2 Current University of Chicago shared resources/core facilities

Animal Resource Center	Human Immunologic Monitoring Facility
Biomedical Informatics Core Facility	Human Tissue Research Center: Biospecimen Bank
Biomolecular NMR Facility	Human Tissue Research Center: Laser Capture
Biophysics Core Facility	Microdissection
Biostatistics Core Facility	Human Tissue Research Center: Automated Image
Brain Research Imaging Facility	Analysis & Tissue Microarray
Cellular and Tissue Based Processing cGMP	Immunohistochemistry Facility
Facility	Integrated Light Microscopy Core
DNA Sequencing and Genotyping	Nanobiology Facility
Electron Microscopy	Pharmacology Core
Electron Microscopy – Cryopreservation &	Proteomics Core Laboratory
Tomography	Scientific Visualization & Image Analysis
Fitch Monoclonal Antibody Facility	Small Animal Imaging Facility: MRIS Imaging Core
Flow Cytometry Facility	Small Animal Imaging Facility: Optical Imaging
Functional Genomics Facility	Core
General Clinical Research Center	Transgenic Mouse/Embryonic Stem Cell Facility

B.2.3.   Organizational structure

The Executive Director for Shared Research Operations reports to the Associate Dean for Administration within the Office of the Dean of Biological Sciences Division and the School of Medicine. The Dean's Office responsibilities include strategic planning, investment decisions for new initiatives, guidelines and policy development, and audits.

The Shared Research Operations division reports to the Associate Dean for Administration and the Executive Director for Shared Research Operations.   The Shared Research Facilities division includes 25 cores, each of which has a faculty director, a technical director, and a faculty advisory committee. The Shared Research Operations responsibilities include daily operations, strategic technology planning, and program and service development.

The Shared Research Operations division maintains ownership of personnel and space. Ownership of personnel and space was important in the cultural change required to implement a centralized structure since it demonstrated that the University had made a commitment to each entity.

The administrative structure of the centralized cores includes finance, accounting and billing, human resources, pre-award and communications, and information technology. Responsibilities include budget development, financial reporting and projections, purchasing and invoicing, accounts receivable, specialized technical support, data management, web development and maintenance, and electronic tools for scheduling, usage tracking and invoicing. The administrative staff report to the Director of the Office of Shared Research Facilities who in turn reports to the Executive Director.

B.2.4.   Financial considerations

The operating budget for shared facilities comes from recharge (51%), grants (22%), and the institution (26%). The Provost Office and the Biological Sciences Division provided the financial commitment for core technology investment to supply the financial carrots required to implement a cultural change for cores. Each facility has a stand-alone budget, and the money generated by each core goes back to them and is

not used to fund other initiatives. However, the University is ultimately responsible for deficits. Capital is allocated by the Executive Vice Dean and the Research Advisory Council.

Chicago's initial investment in cores was $9 million over 7 years. This included a $5 million contribution from the University and $4 million from other resources. The initial administrative budget was $500,000. The current administrative budget including specialized IT support is $900,000 per year. Chicago has an additional $1.5 million annual budget for subsidy investments, pilot programs, and technology investments.

Via the central invoicing system, faculty are invoiced within 30 days of receiving services, and cores are paid within 30 days of receipt of invoice.

C. MODEL JOB DESCRIPTIONS

THE UNIVERSITY OF CHICAGO

Job Description

Specific Title: Executive Director for Shared Research Operations & Infrastructure

Division/Department: Biological Sciences Division

Reports to: Associate Dean for Administration

THE BIOLOGICAL SCIENCES DIVISION

The University of Chicago Medical Center (UCMC) and the Biological Sciences Division (BSD) are managed by a single CEO/Dean and are the largest unit of the University, accounting for 60% of its annual budget. All physician, hospital and clinic services are managed through the UCMC, which is a $1.3 billion enterprise. Management of the BSD's research and teaching programs is delegated to the Executive Vice-Dean and to the Dean for Medical Education. These programs reflect to the work of 870 faculty, 900 students, $228 million of external research support, $31 million of tuition and $100 million on philanthropy annually.

The BSD's research strategy is articulated through its faculty defined AIMS, which include:
- Improving the quality of research space and other research infrastructure
- Increasing the proportion of total faculty effort devoted to research
- Mining interfaces with other University units including the Physical Sciences, Social Sciences and the two national labs managed by the University, Argonne and Fermi.
- Reexamining the organization of research infrastructure, the funds flows that support them and qualitative measures of performance.

This plan envisions a major expansion of research programs made possible through the distinction and productivity of the faculty, the success of our fundraising, and the increased profitability of the Medical Center. A 25% increase in research faculty FTEs and a doubling of research spending is targeted over the next decade. Targeted areas of growth include neurosciences, genomics, immunology, field sciences, cancer, quantitative biology, molecular engineering and translational research. These areas have strong intersections with the research priorities of other University units. They will require a significant expansion of shared research infrastructure, especially in bioinformatics and imaging.

THE POSITION

The **Executive Director for Shared Research Operations & Infrastructure** is the principal senior manager responsible for the shared infrastructure that supports BSD research efforts. This shared research infrastructure includes operational units that provide access to critical research technologies and unique expertise within a recharge service model with substantial subsidy from the institution and external funding agencies as well as philanthropic sources. The **Executive Director for Shared Research Operations & Infrastructure** reports to the Associate Dean for Administration and works closely with the Executive Vice Dean, department chairmen and center directors in development of goals and

implementation of strategic plans. The **Executive Director for Shared Research Operations & Infrastructure** provides change management leadership in the Dean's effort to improve efficiencies and cooperation between departments in effective use of Divisional resources.

The **Executive Director for Shared Research Operations & Infrastructure** advises the senior leadership on quality of existing research infrastructure and ensures that BSD investment in shared research resources is justified and subsequently is utilized effectively and efficiently. The ED complements faculty efforts in program development and design of new shared research resource enterprises through organizational management and goal-setting activities. Long-range strategic plan development and transformation of strategy into action, facilitation of need assessment, market analysis, identification of redundancies, and development of appropriate operational policies are primary responsibilities of this position.

A coordinated approach to research infrastructure across the Division requires important intersections with the leadership of BSD research institutes (Institute for Genomics and Systems Biology, Institute for Translational Medicine – CTSA program development, the UC Cancer Research Center) As the BSD actively engages in coordinated research approaches across University and national laboratory boundaries, important intersections occur with University units outside of the BSD including faculty and administrators in the Physical Sciences Division, Social Sciences Division and Office of the VP for Research and National Labs as well as with collaborative institutions (Illinois Institute of Technology, Univ of Illinois at Chicago and Northwestern Univ).

The **Executive Director for Shared Research Operations & Infrastructure** supports all research strategy, policy and resource allocation decisions for shared research infrastructure by the Dean and Executive Vice-Dean. Analytic and operational support is provided by the **Shared Research Operations & Infrastructure** line organization as well as critical intersections with other BSD administrative units including Finance, Development, Space Planning, Research Services, Clinical Research, Animal Resources Center, Information Services, and Human Resources. Critical intersections also exist with the University Comptroller, especially as relates to restricted fund accounting, capital asset management and recharge center compliance.

The BSD **Shared Research Operations & Infrastructure** is currently organized into the following discrete units which each have an administrative component as well as an operational component. The **Executive Director for Shared Research Operations & Infrastructure** is directly responsible for the administrative components with a mixed model of responsibility for operational components. This organization currently includes 80 FTEs, annual capital and operating expenditures of $11million and an installed base of equipment of $27 million. These investments are expected to more than double in the next decade as BSD's research strategy is executed.

❖ **Office of Shared Research Facilities (OSRF):** A group of 25 research facilities that provide unique services within a recharge model with annual operating budgets of $6.1 million supported by recharge revenues of $3.6 million, grant support of $1.4 million and institutional support of $1.1 million. OSRF has an administrative structure comparable to BSD departments and provides comprehensive administrative services to constituent Core Facilities including strategic planning, business plan development, post-award grant and contract management, procurement, accounts payable / receivable (billing), financial accounting and budgeting and human resources management. The OSRF structure is outlined on the attached organizational chart.

❖ **Initiative in Biomedical Informatics (IBI):**   The BSD and Medical Center have initiated (in 2007) a significant expansion of the Informatics program at UC. The effort will span the basic, pre-clinical and clinical research informatics activities of the enterprise and will provide support as an institutional core to departments, centers and the hospital. The IBI has an annual operating budget of $2.5 million and staffing within 3 arenas led by senior informatic and information technology managers. Program development includes assessment and prioritization of institutional needs by a Faculty Advisory Committee, integration of existing diverse informatics efforts and assessment, procurement and implementation of hardware and software technologies to meet the research needs. This includes significant programming efforts. The IBI structure is outlined on the attached chart.

❖ **MR Imaging Center (MRIC):** The BSD has initiated a revitalization and expansion of magnetic resonance imaging (MRI) to match the continued advancement of MRI technologies and the growing need of researchers who utilize imaging technologies.   The expansion of the Brain Research Imaging Center, which has served the UC Neurosciences community, to include additional MR imaging capacities facilitates research in other areas of clinical research including cancer and cardiology. The MRIC is a cross-divisional, cross-institutional enterprise that requires coordination of diverse academic and research programs. The MRIC has an annual operating budget of $750,000 and capital investments of $2.3 million. Expansion and maintenance of a resource of this magnitude requires significant space/facility infrastructure planning as well as technology management in addition to operational management. Technology management is contracted to the Department of Radiology with financial and operational management the responsibility of the ED. The MRIC structure is outlined on the attached chart.

The BSD **Executive Director for Shared Research Operations & Infrastructure** plays a significant role in development of new institutional programs by shepherding new initiatives into action. This is done through review of resource needs (financial, space) and overseeing organization and management of work flows to create the necessary program as indicated in the established programs above.

Essential Functions:

➢ Strategic Planning 35%
  • Responsible for an overall plan for shared research infrastructure development, expansion, downsizing, and/or closure in order to ensure a match between core facility capabilities and the strategic scientific mission for the Division. This process will include, but is not limited to
      ▪ Review of the Divisional long-range plan.
      ▪ Presentation of proposed actions to Executive Vice Dean and Research Advisory Committee (RAC)
      ▪ Comparisons to peer institutions through benchmarking studies
      ▪ Analysis of facility operating metrics
      ▪ Identification of external funding opportunities and assistance to faculty in obtaining external support for research infrastructure.
      ▪ Development of space planning process as it relates to the implementation of the overall plan.
      ▪ Review of outsourcing opportunities, presentation of recommendations and implementation of resulting decisions.
      ▪ Assessment of impact of developing technologies on current facility operations and presentation of recommendations.

- Development and implementation of long-range planning for existing facilities, ensuring coordination between individual core plans and the Divisional scientific mission.

➢ Budget Development and Resource Analysis 20%
- Budget recommendation and allocation of funding per priorities established by the Dean, Executive Vice-Dean and RAC.
- Review current operational budgets for units.
- Review recommendations by unit administration for continued use of divisional subsidies and request for new subsidies.
- Assessment of space use and need for expansion of shared resource space to meet the demands of the research community

➢ Operations Oversight 20%
- Mentorship and line supervision of direct reports
- Review operational performance
- Faculty satisfaction

➢ Policy Development 10%
- Develop institutional policies for shared research infrastructure management and operations. Examples of these policies includes limitations on usage of the institutional infrastructure by external users/clients, standardization of a policy for allocation of administrative supplements to Faculty Directors, scientific data retention responsibilities with the cores and financial incentive plans for instrumentation grant activities and donation reimbursements to faculty.

➢ Philanthropic Interface 10%
- Responsible for development of fundraising strategy in collaboration with and education of Medical Center Development on shared research infrastructure needs and definition of philanthropic impact on research at the University
- Projection of and support of fundraising goals in order to close gap between recharge income/grant income and operating expenses.

Candidate Profile:
- Master's degree or bachelor's degree with 4 years relevant experience required.
- 5 years experience as senior-level executive manager with experience in managing scientific laboratory operations including strategic planning processes, policy development, accounting, financial reporting, budget preparation and analysis, and personnel management required.
- Significant expertise in scientific technology with an understanding of the impact of technology on research efforts and previous interactions with scientific operations.
- Management skills include the ability to manage change, to challenge, audit and interpret results with diplomacy, to effectively communicate with a broad range of individuals including executives and faculty, and the ability to manage multiple projects simultaneously.

THE UNIVERSITY OF CHICAGO

Job Description

Specific Title: Director, Office of Shared Research Facilities

Division/Department: Biological Sciences Division

Reports to: Executive Director for Shared Research Operations

Overview:

The Office of Shared Research Facilities (OSRF) is the unit of the Biological Sciences Division that provides technologies and/or services to meet the unique research needs of the scientific community. OSRF is responsible for a group of 25 research facilities that provide unique services within a recharge model with annual operating budgets of $6.1 million supported by recharge revenues of $3.6 million, grant support of $1.4 million and institutional support of $1.1 million. OSRF has an administrative structure comparable to BSD departments and provides comprehensive administrative services to constituent core facilities including strategic planning, business plan development, pre- and post-award grant and contract management, procurement, accounts payable / receivable (billing), financial accounting and budgeting and human resources management.

The OSRF Director reports to the Executive Director for Shared Research Operations and is responsible for providing daily management of the core facilities and advising on institutional investment in shared resources, facility policy development, operational management and strategic planning. The OSRF Director will provide for comprehensive operational oversight of the core facilities and the administrative unit of the OSRF to ensure the successful delivery of services and optimal utilization of these resources. The Director will participate in core facility development and strategic planning, will provide for unit budget development and justification, guide space planning initiatives, contribute to policy development, enforce existing divisional policies, and prepare annual operational reports to the division and the core facilities. The Director will collaborate closely with other directors within the Division including the Directors of the Office of Research Services, Academic Affairs, Animal Resource Center, Medical Center Development, the Executive Director of Information Services, and the University Comptroller's Office.

Essential Functions:

40% Shared Research Facility Development and Operational Management: Responsible for the development of a plan for facility development, expansion, downsizing and/or closure in order to ensure a match between core facility capabilities and the strategic scientific mission for the Division. Work with individual facility faculty and Technical Directors to ensure that the core facilities serve as sources of high quality service comprised of state-of-the-art scientific technology and expertise:
- Work closely with the facility Technical Directors to provide for any/all functions to assist in consist provisions of services/expertise
- Provide oversight and guidance to Facility Directors regarding utilization of financial resources including meeting budgetary targets, identifying funding sources, and complying with fiscal policy implementation

- Provide guidance to facility Technical Directors in design of operational teams, personnel selection and development and general HR management. Responsible for annual Technical Director performance evaluations in collaboration with facility Faculty Directors
- Analysis of current operations including the development of facility operating metrics; facilitate/provide for regular review of facility operations including operation analysis and internal/external benchmarking to insure currency of facility offerings
- Review of outsourcing opportunities—prepare recommendations and implement final decisions
- Interface with center grant Directors (UCCRC, CTSA, etc) to insure appropriate planning for operational impacts on existing cores and implementation of developing cores
- Development and implementation of space planning for existing and developing facilities in coordination with the Executive Director for Research Operations and Divisional Space Planning group
- Attend meetings of the facility Faculty Advisory Committees responsible for strategic development of facilities; interface with facility faculty clientele to address problems/assess developing needs
- Provide for regular communications and educational efforts designed to promote awareness/utilization of the core facilities by the research community
- Attend scientific and management conferences to maintain knowledge of current developments in the field

40% OSRF Administrative Office Management: Direct oversight of the team that provides Financial, Human Resources, Information Technology, and pre- and post award services and communications support to the core facilities:
- Ensure the development and implementation of unit goals are aligned with the OSRF mission
- Oversee process improvement and implementation to ensure the most efficient delivery of services to constituent facilities and faculty clients.
- Provide consultation on all issues critical to the operation of the core facilities
- Communication of relevant issues from Divisional entities and Faculty Advisory Committee meetings
- Responsible for overall budget request and justification
- Preparation of Annual Report on Finance and Operations to be presented to the Executive Director of Research Operations, the Research Advisory Council and the Executive Vice Dean
- Capital equipment planning and implementation

10% Policy Development: Develop and implement local policies for core facility management and operations. These policies will reflect all aspects of facility operations and management from data management to billing to the interface with faculty users.
- Work with the Executive Director of Shared Research Operations to establish best practices for core facility management.
- Implement new institutional policies and oversee the execution of existing policies.

10% Grant Funding Management:
- Projection of and support of funding goals in order to close gap between recharge income, institutional funding and operating expenses
- Responsible for administrative support of core facility grant applications including shared instrumentation grants and inclusion in center grants and program project grants.

- Work with Executive Director for Shared Research Operations to ensure that all avenues of funding for core facilities are pursued.

Candidate Profile:

- Master's degree or bachelor's degree with 4 years relevant experience required.
- 2 years experience as senior-level executive manager with experience in managing scientific laboratory operations including strategic planning processes, policy development, accounting, financial reporting, budget preparation and analysis, and personnel management preferred.
- Significant expertise in scientific technology with an understanding of the impact of technology on research efforts and previous interactions with scientific operations.
- Management skills include the ability to manage change, to challenge, audit and interpret results with diplomacy, to effectively communicate with a broad range of individuals including executives and faculty, and the ability to manage multiple projects simultaneously.

D. BUDGET

VICE CHANCELLOR RESEARCH

REQUEST FOR SUPPORT – CENTRALIZED CORE ADMINISTRATION

Management $155,000
Assistant Vice Chancellor - MSP VI- 100%
Professional management with scientific background-PhD or equivalent experience
Does not include benefits

Admin Support $ 87,950
Financial Statement prep, GI uploads of billing data, GL reconciliations
Purchasing of general supplies, cores' equipment & other specialized
goods and services. Labor & employee relations, recruitments,
performance management, staffing reconciliations, time reporting,
leave accruals, appointments, & terminations.
Does not include benefits

Cores Implementation $220,000
Support to AVC and Leadership Council during Phase 1 – Program Management
Office (PMO) will be contracted to perform the tasks required to implement the
Research Resource Program. Preliminary estimates of the PMO indicate
that implementation will require two FTE. If approved, a detailed budget will be
created by the AVC to ensure the costs are justified.
Does not include benefits

IT Support $150,000
IT project management, needs assessment, IT solutions development,
project execution, coordination & maintenance, and troubleshooting. Acquisition
of identified system/software application, tools and initial configuration.
Does not include benefits

Supplies & Expenses $ 26,774
Communications, networking, desktop support, meetings, supplies,
training & outreach

Total Support Required Year 1 (includes benefits): $ 745,889
Total Support Required Years 1-3: $1,800,000

Total Required FTE - Year 1:   4.35 FTE
Total Required FTE - Year 2:   3.75 FTE
Total Required FTE - Year 3:   4.10 FTE

STRATEGIC DEVELOPMENT AND EQUIPMENT FUND
Annual allocation to fund, education/training, research and development,
and acquisition/replacement of equipment.
Invest in technology upgrades to ensure access to cutting-edge technology,
eliminate obsolete equipment, cover unanticipated equipment failures.
Competitive application process similar to a matching fund and would
require support by external sponsors, industry and/or donors.

Total Support Required Year 1: $ 500,000
Total Support Required Years 1-3: $1,500,000

Total 3 Year Core Facilities Support: $3,300,000

APPENDIX D. UCSF CENTRALIZED CORE ADMINISTRATION PROJECTED BUDGET

Support for 8 Cores - Year 1

Description	Core Administration	Core 1 Flow Cytometry	Core 2 Imaging - Optical	Core 3 Mass Spectrometry	Core 4 Genomics	Core 5 Tissue	Core 6 Immunology	Core 7 Mouse Transgenic	Core 8 Patient Recruitment	Total All Cores- Excl. Core Admin.
FUNDING										
Recharge		218,938	117,889	82,472	208,905	341,049	176,006	330,660		1,475,919
Internal UCSF Support (includes Internal grants from current sponsors)		122,073	65,732	72,990	167,278	357,358	11,892	77,565		874,888
Grants										
Other	745,889							408,629	430,256 [4]	
Total Funding	**745,889**	**341,011**	**183,621**	**155,462**	**376,183**	**698,407**	**187,897**	**816,854**	**430,256**	**3,189,691**
		524,632								
EXPENSES										
FTEs	4.35	1.4	0.7	1.16	2.20	6.8	1.20	4.94	2.15	20.6
Salaries										
Management	155,000	82,055	44,183	66,972	37,320	101,059	3,600	21,624	120,000	476,813
Benefits	37,200	15,116	8,139	13,394	2,204	23,683	864	3,676	28,800	95,877
Subtotal Management Salary & Benefits	**192,200**	**97,171**	**52,323**	**80,366**	**39,524**	**124,741**	**4,464**	**25,300**	**148,800**	**572,690**
Scientific & Spec. Support Staff [1]		109,226	58,814	14,840	145,918	405,442	77,424	281,254	89,750	1,182,668
Benefits	0	29,710	15,998	1,848	39,161	90,024	18,582	70,182	21,540	287,044
Subtotal Other Staff Salary & Benefits	**0**	**138,936**	**74,812**	**16,688**	**185,079**	**495,466**	**96,006**	**351,436**	**111,290**	**1,469,712**
Core Admin. [2]	80,450	847	456	3,096	1,412	1,564	3,110	1,564		12,049
Benefits	19,308	276	149	709	432	503	746	503		3,317
Implementation Staffing -Phase 1	220,000									-
Benefits	52,800	0	0	0	0	0	0	0	0	0.0
Subtotal Core Administration Staff	**372,558**	**1,123**	**605**	**3,805**	**1,844**	**2,066**	**3,856**	**2,066**	**0**	**15,365**
IT - System Main. & Dev.	23,675	2,241	1,207	3,448	3,448	3,448	2,880	3,448	72,000	92,120
Benefits	5,682	536	290	828	828	828	691	828	17,280	22,107
Subtotal IT Staff	**29,357**	**2,777**	**1,496**	**4,276**	**4,276**	**4,276**	**3,571**	**4,276**	**89,280**	**114,227**
Subtotal All Salaries & Benefits	**594,115**	**240,007**	**129,235**	**105,135**	**230,722**	**626,549**	**107,897**	**383,078**	**349,370**	**2,171,994**
Non-Salary Expenditures										-
Communication	2,349	2,352	1,267	2,896	852	2,052	648	2,668	1,161	13,895
Computing/Data Processing	6,525	270	145	1,753	1,499	2,376	1,500	7,410	3,225	18,178
IT Consulting & Development, Website dev. [3]	75,000			-					7,000	7,000
Freight/Postage/Mail	2,400	7	2	-	-	729				738
Interest & Depreciation	0	-	-	-	-	-				-
Leases & Rentals	0	-	-	-	-	-				-
Meetings & Entertainment	1,800	-	-	-	-	-			8,000	8,000
Membership & Subscriptions	0	-	-	-		-				-
Printing, Reproduction	0	69	37		507	762	500		15,000	16,875
Other Services (incl. Service Contracts)	0	80,865	43,543	10,484	12,542	20,393		35,000		202,826
Consulting-Outreach	5,000	-	-	-					22,000	22,000
Other Supplies	870	15,672	8,439	21,700	92,055	33,550	76,152	363,642	7,500	618,709
Travel	0	1,008	543	13,320	-	11,388			15,000	41,259
Utilities	0	-	-	-		-				-
Other Expenses	6,525	763	411	174	38,007	607	1,200	25,056	2,000	68,218
Training	1,305					-				-
Capital New Equipment & Software	50,000									50,000
Subtotal Non-Salary	**151,774**	**101,005**	**54,386**	**50,328**	**145,461**	**71,857**	**80,000**	**433,776**	**80,886**	**1,067,698**
Total All Expenses	**745,889**	**341,011**	**183,621**	**155,462**	**376,183**	**698,407**	**187,897**	**816,854**	**430,256**	**3,189,691**
Total Funding Required	**745,889**	**(0)**	**0**	**(0)**	**(0)**	**0**	**0**	**0**	**0**	**0**

[1] CC Cores provide salary support for some specialized technical & other staff through competitive internal CC grants

[2] Not all subsidized dept. or Center core costs reflected in recharge-Approx 34K in reflected unit core expenses for support could be shifted from Depts./CC/DC to Core Admin

[3] IT infrastructure development plan to assist in determining IT system

[4] · A patient recruitment core does not currently exist but has been identified as a priority however the funding for this core will need to be identified separately and is

UCSF Research Resource Program Proposal

APPENDIX D. UCSF CENTRALIZED CORE ADMINISTRATION PROJECTED BUDGET

Support for 8 Cores - Year 2

Description	Core Administration	Core 1 Flow Cytometry	Core 2 Imaging - Optical	Core 3 Mass Spectrometry	Core 4 Genomics	Core 5 Tissue	Core 6 Immunology	Core 7 Mouse Transgenic	Core 8 Patient Recruitment	Total All Cores- Excl. Core Admin.
FUNDING										
Recharge		218,938	117,889	82,472	208,905	341,049	176,006	330,660		1,475,919
Internal UCSF Support (includes Internal grants from current sponsors)		122,073	65,732	72,990	167,278	357,358	11,892	77,565		874,888
Grants										
Other	510,644							408,629	430,256 [3]	
Total Funding	**510,644**	**341,011**	**183,621**	**155,462**	**376,183**	**698,407**	**187,897**	**816,854**	**430,256**	**3,189,691**
		524,632								
EXPENSES										
FTEs	**3.75**	**1.4**	**0.7**	**1.16**	**2.20**	**6.8**	**1.20**	**4.94**	**2.15**	**20.6**
Salaries										
Management	159,650	82,055	44,183	66,972	37,320	101,059	3,600	21,624	120,000	476,813
Benefits	38,316	15,116	8,139	13,394	2,204	23,683	864	3,676	28,800	95,877
Subtotal Management Salary & Benefits	**197,966**	**97,171**	**52,323**	**80,366**	**39,524**	**124,741**	**4,464**	**25,300**	**148,800**	**572,690**
Scientific & Spec. Support Staff [1]		109,226	58,814	14,840	145,918	405,442	77,424	281,254	89,750	1,182,668
Benefits	0	29,710	15,998	1,848	39,161	90,024	18,582	70,182	21,540	287,044
Subtotal Other Staff Salary & Benefits	**0**	**138,936**	**74,812**	**16,688**	**185,079**	**495,466**	**96,006**	**351,436**	**111,290**	**1,469,712**
Core Admin. [2]	90,589	847	456	3,096	1,412	1,564	3,110	1,564		12,049
Benefits	21,741	276	149	709	432	503	746	503		3,317
Subtotal Core Administration Staff	**112,330**	**1,123**	**605**	**3,805**	**1,844**	**2,066**	**3,856**	**2,066**	**0**	**15,365**
IT - System Main. & Dev.	141,934	2,241	1,207	3,448	3,448	3,448	2,880	3,448	72,000	92,120
Benefits	34,064	536	290	828	828	828	691	828	17,280	22,107
Subtotal IT Staff	**175,998**	**2,777**	**1,496**	**4,276**	**4,276**	**4,276**	**3,571**	**4,276**	**89,280**	**114,227**
Subtotal All Salaries & Benefits	**486,294**	**240,007**	**129,235**	**105,135**	**230,722**	**626,549**	**107,897**	**383,078**	**349,370**	**2,171,994**
Non-Salary Expenditures										-
Communication	2,025	2,352	1,267	2,896	852	2,052	648	2,668	1,161	13,895
Computing/Data Processing	5,625	270	145	1,753	1,499	2,376	1,500	7,410	3,225	18,178
IT Consulting & Development, Website dev.	0			-					7,000	7,000
Freight/Postage/Mail	2,400	7	2	-	-	729				738
Interest & Depreciation	0	-	-	-	-	-				-
Leases & Rentals	0	-	-	-	-	-				-
Meetings & Entertainment	1,800	-	-	-	-	-			8,000	8,000
Membership & Subscriptions	0	-	-	-	-	-				-
Printing, Reproduction	0	69	37		507	762	500		15,000	16,875
Other Services (incl. Service Contracts)	0	80,865	43,543	10,484	12,542	20,393		35,000		202,826
Consulting-Outreach	5,000	-	-	-					22,000	22,000
Other Supplies	750	15,672	8,439	21,700	92,055	33,550	76,152	363,642	7,500	618,709
Travel	0	1,008	543	13,320	-	11,388			15,000	41,259
Utilities	0	-	-	-						-
Other Expenses	5,625	763	411	174	38,007	607	1,200	25,056	2,000	68,218
Training	1,125			-						-
Capital New Equipment & Software	0									-
Subtotal Non-Salary	**24,350**	**101,005**	**54,386**	**50,328**	**145,461**	**71,857**	**80,000**	**433,776**	**80,886**	**1,017,698**
Total All Expenses	**510,644**	**341,011**	**183,621**	**155,462**	**376,183**	**698,407**	**187,897**	**816,854**	**430,256**	**3,189,691**
Total Funding Required	**510,644**	**(0)**	**0**	**(0)**	**(0)**	**0**	**0**	**0**	**0**	**0**

[1] CC Cores provide salary support for some specialized technical & other staff through competitive internal CC grants

[2] Not all subsidized dept. Or Center core costs reflected in recharge-Approx 34K in reflected unit core expenses for support could be shifted from Depts./CC/DC to Core Admin

[3] A patient recruitment core does not currently exist but has been identified as a priority however the funding for this core will need to be identified separately and is

APPENDIX D. UCSF CENTRALIZED CORE ADMINISTRATION PROJECTED BUDGET

Support for 8+ Cores-Phase II - Year 3

Description	Core Administration	Core 1 Flow Cytometry	Core 2 Imaging - Optical	Core 3 Mass Spectrometry	Core 4 Genomics	Core 5 Tissue	Core 6 Immunology	Core 7 Mouse Transgenic	Core 8 Patient Recruitment	Add or Expand Cores FTE 100% Various	Total All Cores-Excl. Core Admin.
FUNDING											
Recharge		218,938	117,889	82,472	208,905	341,049	176,006	330,660		367,487	1,843,406
Internal UCSF Support (includes Internal grants from current sponsors)		122,073	65,732	72,990	167,278	357,358	11,892	77,565		255,643	1,130,531
Grants											
Other	543,467							408,629	430,256 [3]	175,755	1,014,643
Total Funding	**543,467**	**341,011**	**183,621**	**155,462**	**376,183**	**698,407**	**187,897**	**816,854**	**430,256**	**798,885**	**3,988,577**
EXPENSES											
FTEs	4.10	1.4	0.7	1.16	2.20	6.8	1.20	4.94	2.15	21.10	41.7
Salaries											
Management	164,440	82,055	44,183	66,972	37,320	101,059	3,600	21,624	120,000	455,189	932,002
Benefits	39,465	15,116	8,139	13,394	2,204	23,683	864	3,676	28,800	109,245	205,122
Subtotal Management Salary & Benefits	**203,905**	**97,171**	**52,323**	**80,366**	**39,524**	**124,741**	**4,464**	**25,300**	**148,800**	**564,434**	**1,137,124**
Scientific & Spec. Support Staff [1]		109,226	58,814	14,840	145,918	405,442	77,424	281,254	89,750	895,687	2,078,355
Benefits	0	29,710	15,998	1,848	39,161	90,024	18,582	70,182	21,540	214,965	502,009
Subtotal Other Staff Salary & Benefits	**0**	**138,936**	**74,812**	**16,688**	**185,079**	**495,466**	**96,006**	**351,436**	**111,290**	**1,110,652**	**2,580,364**
Core Admin. [2]	155,901	847	456	3,096	1,412	1,564	3,110	1,564			12,049
Benefits	37,416	276	149	709	432	503	746	503			3,317
Subtotal Core Administration Staff	**193,318**	**1,123**	**605**	**3,805**	**1,844**	**2,066**	**3,856**	**2,066**	**0**		**15,365**
IT - System Main. & Dev.	97,541	2,241	1,207	3,448	3,448	3,448	2,880	3,448	72,000		92,120
Benefits	23,410	536	290	828	828	828	691	828	17,280		22,107
Subtotal IT Staff	**120,951**	**2,777**	**1,496**	**4,276**	**4,276**	**4,276**	**3,571**	**4,276**	**89,280**	**0**	**114,227**
Subtotal All Salaries & Benefits	**518,174**	**240,007**	**129,235**	**105,135**	**230,722**	**626,549**	**107,897**	**383,078**	**349,370**	**214,965**	**2,386,959**
Non-Salary Expenditures											
Communication	2,215	2,352	1,267	2,896	852	2,052	648	2,668	1,161	13,895	27,790
Computing/Data Processing	6,153	270	145	1,753	1,499	2,376	1,500	7,410	3,225	18,178	36,356
IT Consulting & Development, Website dev.	0			-					7,000	7,000	14,000
Freight/Postage/Mail	2,400	7	2	-	-	729				738	1,476
Interest & Depreciation	0	-	-	-	-	-					-
Leases & Rentals	0	-	-	-	-	-					-
Meetings & Entertainment	1,800	-	-	-	-	-			8,000	45,000	53,000
Membership & Subscriptions	0	-	-	-		-					-
Printing, Reproduction	0	69	37		507	762	500		15,000	2,000	18,875
Other Services (incl. Service Contracts)	0	80,865	43,543	10,484	12,542	20,393		35,000		202,826	405,652
Consulting-Outreach	5,000	-	-	-	-				22,000	-	22,000
Other Supplies	342	15,672	8,439	21,700	92,055	33,550	76,152	363,642	7,500	409,030	1,027,739
Travel	0	1,008	543	13,320	-	11,388			15,000	32,000	73,259
Utilities	0	-	-	-	-	-					-
Other Expenses	6,153	763	411	174	38,007	607	1,200	25,056	2,000	68,218	136,436
Training	1,231										
Capital New Equipment & Software	0										-
Subtotal Non-Salary	**25,293**	**101,005**	**54,386**	**50,328**	**145,461**	**71,857**	**80,000**	**433,776**	**80,886**	**798,885**	**1,816,583**
Total All Expenses	**543,467**	**341,011**	**183,621**	**155,462**	**376,183**	**698,407**	**187,897**	**816,854**	**430,256**	**798,885**	**3,988,576**
Total Funding Required	**543,467**	**(0)**	**0**	**(0)**	**(0)**	**0**	**0**	**0**	**0**	**0**	**0**

[1] CC Cores provide salary support for some specialized technical & other staff through competitive internal CC grants

[2] Not all subsidized dept. or Center core costs reflected in recharge-Approx 34K in reflected unit core expenses for support could be shifted from Depts./CC/DC to Core Admin

[3] A patient recruitment core does not currently exist but has been identified as a priority however the funding for this core will need to be identified

UCSF CENTRALIZED CORE STRATEGIC DEVELOPMENT & EQUIPMENT FUND			
PROJECTED BUDGET			
	Year 1	Year 2	Year 3
Description			
FUNDING			
Equipment[1]	$250,000	$250,000	$250,000
Research & Development	150,000	150,000	150,000
Training	100,000	100,000	100,000
Total Funding Requested	$500,000	$500,000	$500,000

[1] Equipment funding would be allocated through a competitive process - function similar to a matching fund in most cases and require submittal of grant application to external sponsor to offset % of cost. Could also provide emergency equipment funds for

ID		Task Name	Duration	Start	Finish	2009				2010				2011	
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
1		**KEY MILESTONES**	**545 days**	**Fri 11/28/08**	**Fri 12/31/10**										
2		**RECEIVE APPROVAL ON PROPOSAL**	0 days	Fri 11/28/08	Fri 11/28/08	11/28									
3		**ASSISTANT VICE CHANCELLOR, RESEARCH RESOURCE PROGRAM START DATE**	**0 days**	**Wed 4/1/09**	**Wed 4/1/09**		4/1								
4		**PHASE 1 CORES INCORPORATION**	0 days	Fri 1/1/10	Fri 1/1/10						1/1				
5		**PHASE 2 RFA ISSUED**	0 days	Mon 1/11/10	Mon 1/11/10						1/11				
6		**PHASE 2 CORES INCORPORATION**	0 days	Fri 12/31/10	Fri 12/31/10										12/31
7		**Project Initiation**	**109 days**	**Mon 12/1/08**	**Thu 4/30/09**										
8		Mobilize Advisory Council	87 days	Mon 12/1/08	Tue 3/31/09	EVC Office									
9		Recruit Assistant Vice Chancellor	87 days	Mon 12/1/08	Tue 3/31/09	EVC Office									
10		**Mobilize implementation team**	**22 days**	**Wed 4/1/09**	**Thu 4/30/09**										
11		Identify/appoint Project Manager for Implementation	22 days	Wed 4/1/09	Thu 4/30/09		AVC								
12		Identify/appoint lead functional analyst and Functional Analyst2	22 days	Wed 4/1/09	Thu 4/30/09		AVC,Project manager								
13		Identify working groups needed and form them (e.g. strategy, org, process). Identify group leads	22 days	Wed 4/1/09	Thu 4/30/09		AVC,Project manager								
14		Identify/appoint IT Analyst	22 days	Wed 4/1/09	Thu 4/30/09		Project manager								
15		Finalize Governance Protocols of Advisory Council	22 days	Wed 4/1/09	Thu 4/30/09		AVC								
16		Develop and implement R&R for implementation Team groups	22 days	Wed 4/1/09	Thu 4/30/09		Project manager								
17		Finalize project methods and protocols (status reporting, meetings, etc)	22 days	Wed 4/1/09	Thu 4/30/09		Project manager								
18		**Finalize Centralization Strategy Phase 1**	**63 days**	**Fri 5/1/09**	**Tue 7/28/09**										
19		Create inventory of all cores	43 days	Fri 5/1/09	Tue 6/30/09			Func Analyst2,AVC							
20		Evaluate inventory against "central" definitions and principles	43 days	Fri 5/1/09	Tue 6/30/09			Func Analyst2,AVC							

UCSF Research Resource Program Proposal

ID		Task Name	Duration	Start	Finish	2010			2011				2012
	ℹ					Qtr 2 / Qtr 3 / Qtr 4	Qtr 1 / Qtr 2 / Qtr 3 / Qtr 4		Qtr 1 / Qtr 2 / Qtr 3 / Qtr 4				Qtr 1
21		Finalize the first 6-10 candidates for Phase 1	43 days	Fri 5/1/09	Tue 6/30/09	Advisory Council,AVC							
22		Finalize funding model	63 days	Fri 5/1/09	Tue 7/28/09	Advisory Council,Func Analyst2,AVC							
23		**Finalize Organization**	**66 days**	**Wed 7/1/09**	**Wed 9/30/09**								
24		Identify/recruit Faculty Director and Advisory Committee for each core	66 days	Wed 7/1/09	Wed 9/30/09	AVC							
25		Develop financial & administrative organization once process analysis is complete	20 days	Mon 8/3/09	Fri 8/28/09	Process and Org Group,AVC,Project manager,Lead functional analy							
26		Develop IT support organization once IT analysis is complete	20 days	Mon 8/3/09	Fri 8/28/09	Process and Org Group,New Director							
27		Finalize "core" standard governance practices and reporting relationships	66 days	Wed 7/1/09	Wed 9/30/09	AVC							
28		**Finalize Facilities and Infrastructure requirements**	**66 days**	**Wed 7/1/09**	**Wed 9/30/09**								
29		Identify location and space requirements	66 days	Wed 7/1/09	Wed 9/30/09	Func Analyst2							
30		Identify instrument needs and inventory	66 days	Wed 7/1/09	Wed 9/30/09	Func Analyst2							
31		**Design and Implement Centralized Processes**	**152 days**	**Fri 5/1/09**	**Mon 11/30/09**								
32		**Administrative Processes**	**152 days**	**Fri 5/1/09**	**Mon 11/30/09**								
33		Determine Scope of centralization: HR, finance, purchasing/sourcing, customer management, advertising, general admin, etc	66 days	Fri 5/1/09	Fri 7/31/09	Process and Org Group,Project manager,Lead functional analyst							
34		Map selected "as is"	66 days	Fri 5/1/09	Fri 7/31/09	Process and Org Group,Project manager,Lead functional analyst							
35		Define "to be"	66 days	Fri 5/1/09	Fri 7/31/09	Process and Org Group,Project manager,Lead functional analyst							
36		Final Processes Designed/Approved	0 days	Fri 7/31/09	Fri 7/31/09	7/31							
37		Document new procedures	44 days	Tue 9/1/09	Fri 10/30/09	Project manager,Lead functional analyst							
38		Develop compliance plan and monitoring tools	21 days	Mon 11/2/09	Mon 11/30/09	Project manager,Lead functional analyst							

UCSF Research Resource Program Proposal

ID		Task Name	Duration	Start	Finish	2010				2011			
						Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
39		**Scientific Processes**	**66 days**	**Fri 5/1/09**	**Fri 7/31/09**								
40		Determine scope of centralization: preaward review/approval, QA of execution	66 days	Fri 5/1/09	Fri 7/31/09	AVC,Func Analyst2,Researcher Group							
41		Define and validate "to be"	66 days	Fri 5/1/09	Fri 7/31/09	AVC,Func Analyst2,Researcher Group							
42		Document new processes	66 days	Fri 5/1/09	Fri 7/31/09	AVC,Func Analyst2,Researcher Group							
43		**Design and Implement Policies**	**65 days**	**Tue 9/1/09**	**Mon 11/30/09**								
44		Identify policies to be addressed (recharges, C&G delegated authority, etc)	65 days	Tue 9/1/09	Mon 11/30/09	Lead functional analyst							
45		Conduct analysis and finalize	65 days	Tue 9/1/09	Mon 11/30/09	Lead functional analyst							
46		**Design and Implement Administrative IT**	**175 days**	**Fri 5/1/09**	**Thu 12/31/09**								
47		Conduct current inventory of selected core systems/functionality	66 days	Fri 5/1/09	Fri 7/31/09	IT Analyst,Process and Org Group							
48		Conduct rapid fit gap to process scope for centralization	66 days	Fri 5/1/09	Fri 7/31/09	IT Analyst,Process and Org Group							
49		Identify options and costs (expand current, new software, keep somewhat unintegrated, etc)	66 days	Fri 5/1/09	Fri 7/31/09	IT Analyst,Process and Org Group							
50		Approved final IT option	0 days	Fri 7/31/09	Fri 7/31/09	7/31							
51		Implement IT solution	173 days	Tue 5/5/09	Thu 12/31/09								

UCSF Research Resource Program Proposal

ID		Task Name	Duration	Start	Finish	2010							2011			
						Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
52		**Design and Implement Change Management Strategy**	**198 days**	**Wed 4/1/09**	**Fri 1/1/10**											
53		Brand the Project	22 days	Wed 4/1/09	Thu 4/30/09	Advisory Council,AVC										
54		Stakeholder Meetings and Communications	175 days	Fri 5/1/09	Thu 12/31/09											
55		Selected Cores Transition Management and Suppor for Phase 1	89 days	Tue 9/1/09	Fri 1/1/10											
56		Administrative training, communications, new system access for Phase 1 cores	43 days	Wed 11/4/09	Fri 1/1/10											
57		Develop performance measures and monitoring process for Phase 1 results	43 days	Wed 11/4/09	Fri 1/1/10											
58		**Phase 2**	**254 days**	**Mon 1/11/10**	**Fri 12/31/10**											
59		Draft and Issue call for applications (RFA) for core centralization	36 days	Mon 1/11/10	Mon 3/1/10											
60		Proposals Due	0 days	Wed 3/10/10	Wed 3/10/10				3/10							
61		Finalize Phase 2 Selection	21 days	Mon 5/3/10	Mon 5/31/10											
62		Phase 2 Cores Incorporated	0 days	Fri 12/31/10	Fri 12/31/10							12/31				

AGENDA

UCSF Core Workshop

September 26, 2008, UCSF Mission Bay Campus, San Francisco, CA
Mission Bay Conference Center at the William J. Rutter Center

FRIDAY, SEPTEMBER 26, 2008

8:00 – 8:30 AM   **Continental Breakfast and Registration**
Fisher Banquet Room East

8:30 – 9:00 AM   **Jeffrey Bluestone, PhD,** Interim Vice Chancellor for Research, UCSF
Background and Goals of Workshop

9:00 – 9:20 AM   **John Manning, PhD, MBA,** Vice President for Research Operations, Vanderbilt
Shared Resources/Core Facilities at Vanderbilt University Medical Center - Strategy and Execution

9:20 – 9:40 AM   **Julie Auger, MS,** Executive Director, Shared Research Operations, University of Chicago
A Federated Approach to Core Facility Management – The University of Chicago Experience

9:40 – 10:00 AM   **Mike McCune, MD, PhD,** Professor of Medicine; Chief, Division of Experimental Medicine; Senior Associate Dean of Clinical and Translational Research, UCSF
CTSI: Strategies for providing cores for clinical and translational research at UCSF

10:00 – 10:20 AM   **Dan Pinkel, PhD,** Professor, Laboratory Medicine; Director of Technology, UCSF Helen Diller Family Comprehensive Cancer Center
Overview of Cancer Center Cores and Core Operations

10:20 – 10:40 AM   **Open Discussion & Charge to Breakout Session**

10:40 – 11:00 AM   **Break**

11:00 – 12: 15 PM   **Breakout Session**

12: 15 – 1:15 PM   **Working Lunch - Report from Breakout Groups**

1:15 – 2:00 PM   **Formulate Plan of Action for UCSF Cores**

2:00 PM   **END**

ATTENDEE LIST

UCSF Core Workshop

September 26, 2008, UCSF Mission Bay Campus, San Francisco, CA
Mission Bay Conference Center at the William J. Rutter Center

Attendee Name	Title	Department
Ben Amundson	Programmer/ Analyst	UCSF-Office of Research
Julie Auger, MS	Executive Director	Shared Research Operations (University of Chicago)
Susan Autry, MBA	Executive Director	UCSF- Clinical & Translational Sciences
Diane Barber, PhD	Professor	UCSF- Department of Cell & Tissue Biology
Christopher Barker, PhD	Director- Genomics Core	Gladstone- Institute of Cardiovascular Disease
Jeff Bluestone, PhD	Interim Vice Chancellor for Research	UCSF- Office of Research
Mara Fellouris, MBA	Executive Director	UCSF- Program Management Office
Susan Fisher, PhD	Professor	UCSF- Department of Cell & Tissue Biology
Deborah Grady, MD,MPH	Professor & Director	Department of Medicine – Veterans Affairs Medical Center
Angela Hawkins, MBA	Executive Director	UCSF- Budget & Resource Management
Jim Hine, MBA	Executive Director	UCSF Procurement Business Contracts
Bill Hyun	Manager, Lab for Cell Analysis	UCSF- Cancer Center
Lynda Jacobsen, MPA	Director of Administration	UCSF- Comprehensive Cancer Center
Larry Johnson	Supervisor	UCSF- Cell Culture Facility
Pui-Yan Kwok, MD, PhD	Professor in Residence	UCSF- Cardiovascular Research Institute
John Manning, PhD, MBA	Vice President	Research Operations – Vanderbilt Medical Center

Attendee Name	Title	Department
Lisa Masiello, PhD	Project Manager	UCSF Diabetes Center
Mike McCune, MD, PhD	Professor of Medicine	UCSF Division of Experimental Medicine, Senior Associate Dean of Clinical & Translational Research
Teri Melese, PhD	Associate Adjunct Professor	UCSF Comprehensive Cancer Center
Suzanne Murphy, BA	Director, Administration & Finance	UCSF- Office of Research
Sorena Nadaf, MS M.MI	Director Translational Informatics	UCSF- Comprehensive Cancer Center
Sarah Nelson, PhD	Professor & Director	UCSF- Department of Radiology
Zoanne Nelson	Associate Director	UCSF- Project Management Office
Dan Pinkel, PhD	Professor in Residence	UCSF- Cancer Center
Linda Reilly, PhD	Director	UCSF- Cell Culture Facility
Clifford Roberts, DVM	Assoc Vice Chancellor for Research	UCSF- Office of Research
Mike Rodriguez	Director - Strategic Sourcing	UCSF- Campus Procurement Business Contracts
Fred Schaufele, PhD	Assoc Adjunct Professor	UCSF- Diabetes Center
Jonathan Showstack, PhD	Assistant Vice Chancellor	UCSF- OAAIS Administration
Elizabeth Sinclair, PhD	Assistant Adjunct Professor	UCSF Division of Experimental Medicine
Eric Small, MD	Professor in Residence	UCSF- Hematology/ Oncology
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UCSF Research Resource Program Proposal