

Tuesday, March 28, 2017, 3:00-5:00pm, Goodwin Forum (NHE 102)

Chair Julie Alderson called the meeting to order at 3:03pm on Tuesday, March 28, 2017 Goodwin Forum, Nelson Hall East, Room 102; a quorum was present.

Members Present

Alderson, Avitia, Blake, Camann, Cortez-Regan, Creadon, Dunk, Enyedi, Flynn, Frye, Guillen, Le, Lopes, Maguire, K. Malloy, N. Malloy, Meyer, Oliver, Ortega, Pence, Platt, Rizzardi, Rossbacher, Sadeghzadeh, Virnoche, Wilson

Members Absent

Abell, Gold, Karadjova, Thobaben, Wrenn

Guests

Alex Hwu, Noah Zerbe

Announcement of Proxies

Virnoche for Gold, Alderson for Karadjova, Camann for Thobaben, Wilson for Wrenn

Approval of and Adoption of Agenda

M/S (Avitia/Ortega) to approve the agenda
Motion carried unanimously

Approval of Minutes from the March 7, 2017 Meeting

M/S (Flynn/Dunk) to approve the Minutes of March 7, 2017
Motion carried unanimously

Reports, Announcements and Communications of the Chair

Written Report Attached

Reports of Standing Committees, Statewide Senators, and Ex-officio Members

Academic Policies:

- Written Report Attached

Appointments and Elections:

- Written Report Attached

Associated Students:

- AS is working on internal accountability and looking at the direction of the organization with significant consideration being given to the equitable and community centered organization that they strive to be.

California Faculty Association:

- CFA executives are reviewing the draft IP Policy recommendation issued by the Chancellor's Office. HSU Chapter President expects that CFA will take action.

Constitutions and Bylaws:

- Written Report Attached

Faculty Affairs:

- Written Report Attached

Integrated Curriculum:

- The ICC continues discussions regarding double counting American Institutions courses for General Education; the committee has requested feedback from department chairs.

Labor Council:

- Most bargaining units are currently participating in contract negotiations with the CSU.

Statewide Senate (ASCSU):

- Statewide Senate Representatives attended plenary meetings in Long Beach March 16-17; a summary of the resolutions is attached.

University Policies:

- The Animals on Campus Policy will hopefully be brought forward to the next Senate meeting.
- Decommissioning HSU's Secure Space Physical Access Policy will be coming to Senate for general consent.

University Resources and Planning:

- The URPC will be hosting a Campus Budget Open Forum on Tuesday, April 4 from 10:00am-12:00pm in Goodwin Forum. The forum will feature a two part session – informational with opportunity for questions and answers. Prior to the Open Forum, Senators are encouraged to review the new URPC developed website at: www.humboldt.edu/budget/budgetplanning

Administrative Affairs:

- Written Report Attached
- Vice President Lopes asked for anyone interested in serving on the Sustainability Committee to please contact her.

Student Affairs:

- Vice President Blake reminded Senators that the Outstanding Student Awards ceremony will be held on April 12; she encouraged Senators to attend.

Provost's Report:

- Provost Enyedi thanked Senators for their participation in both the search for a Director of ODEI and for the Dean for CPS; the process will move forward following search committee recommendations.
- A committee on Academic Technology is currently in the process of development.

President's Report:

After considerable consideration the CSU Board of Trustees approved tuition increases beginning Fall 2017. Tuition for resident undergrad students will increase by \$270 per year; the increase in tuition will generate funds that can be spent to increase faculty core sections and for student success services. President Rossbacher noted that tuition increases could be rescinded if the CSU receives full state funding.

Action Item: Approval of the 2017/2018 Senate Meeting Calendar

M/S (Blake/Camann) to approve the attached 2017/2018 Senate Meeting Calendar
Motion carried unanimously

Resolution on Creating a University Policies Committee to Serve as a Standing Committee of the University Senate (21-16/17-EX – March 28, 2017) First Reading

M/S (Meyer/Virnoche) to move the resolution

UPC Chair, Senator Meyer, pointed out that this is the second time the resolution is on the Senate agenda for a First Reading as it was not addressed during the last meeting due to time constraints. Since the resolution last appeared, the UPC made the following amendments to the resolution after receiving feedback from Senators:

- Revision regarding the process of appointing a staff representative to the committee
- Removal of the resolve which would charge the committee with the responsibility of reviewing and giving recommendations to the Senate regarding the existing configuration of campus shared governance committees

The resolution will return to Senate for a Second Reading

Discussion Item - Amending the Constitution of the University Senate to Grant Voting Membership to the CFA Chapter President

Senator Wilson explained that discussions have taken place among the Faculty Affairs Committee members that have led to their decision to support granting HSU's CFA Chapter President voting membership within the Senate. SenEx is seeking feedback from Senate prior to FAC bringing a resolution forward. A handout (attached) showing a breakdown of the current Senate voting membership was provided to Senators for reference. As a point of clarification, it was noted that the CFA Chapter President is an elected position in which the CFA members vote to elect; the seat can be held by anyone represented under the bargaining unit which

includes: coaches, counselors, librarians, lecturers, and tenure-line faculty.

Discussion ensued.

Chair Alderson asked that Senators email her with any additional comments.

Informational Item: The CSU's Intellectual Property Policy Committee Report and Recommendations

Chair Alderson was asked to provide a campus response to the CSU's IP Policy Committee Report and Recommendations; the time limit to respond was extended by two weeks beyond the original 60 day deadline.

Senators discussed the report, and the particulars by which and whom the report and recommendations were drafted. They also discussed the question of what would be the best course of action to take in response; should each campus respond individually or should all of the campuses respond collectively.

It was decided that Chair Alderson would contact the campus Senate Chairs to get a general sense from the group about how to best move forward.

Copies of the CSU memorandum regarding the report, and the committee's report and recommendations are attached.

Meeting adjourned at 4:29pm

HUMBOLDT STATE UNIVERSITY

Senate Chair's Report

Senate Meeting, March 28, 2017

Please do consider attending the URPC Campus Budget Open Forum on Tuesday, April 4th, 10-12:00 in Goodwin Forum.

Re: Senate committees, etc. for next year, we still need a Faculty Senator to sit on the Faculty Affairs Committee. We also need one more faculty member for Constitution and Bylaws, as well as a new Parliamentarian. If you have any interest in these positions, particularly if you aren't already sitting on a Senate standing committee, please let me know.

And finally, here's more IP information from Stephanie Burkhalter:

The link to the AAUP site on intellectual property: <https://www.aaup.org/get-involved/issue-campaigns/intellectual-property-risk/aaup-policy-work-intellectual-property>

Faculty should especially look at *Defending the Freedom to Innovate: Faculty Intellectual Property Rights After Stanford v. Roche*. It might be worth considering at Senate an action formally asking the AAUP intellectual property team to write an analysis of the proposed CSU policy, especially given how broadly the repercussions of enacting such a policy will be felt by faculty not just in the CSU, but across the US. You can see in the attached case letters, based on cases at UC-Santa Cruz and University of Chicago, that the kind of analysis the AAUP provides is helpful at illuminating issues and countering university claims. I also attached the Supreme Court opinion in *Stanford v. Roche*. This makes clear that Bayh-Dole does not automatically vest a property right to a university because a faculty employee received federal funding on a grant administered by that university. The employee retains the *option* to assign a property right to the university but it is not automatically granted (This is made clear in pages 1-5--I'm not suggesting everyone read the entire opinion!)”

[Please see the documents Stephanie has referenced at the end of this report.]

And:

The CSU is interpreting its obligations under the Bayh-Dole Act of 1980.

The Bayh-Dole Act is key here because under universities' interpretation of it prior to a Supreme Court case called *Stanford v. Roche* (decided June 10, 2011), universities claimed that Bayh-Dole gave them, as a government contractor administering a government grant, an automatic property right in any invention a faculty member created when working under that grant. You will see in the Chancellor's Office proposed IP policy that there is a section IV.A "Bayh-Dole Act" in which the CSU outlines its understanding of its obligations under the Act as a Contractor. I presume this understanding is based on the regulations issued to implement Bayh-Dole, [37 CFR 401.14](#).

If you look closely at the language of IV.A.1 in the policy, it seems to suggest that it is the institution's obligation not only to have employees sign agreements that require them to disclose inventions (which I am not disputing is a requirement), but also to "assign them to the institution" (which I argue *is not* a requirement, and in fact, would violate the holding and reasoning of *Stanford v. Roche*). Also, in section

IV.A.11 it states, "except with permission of the funding agency, not assign rights to inventions to third parties (except to patent management firms), including to the inventor;"

This language makes it seem that the inventor is automatically a "third party" and not, in fact, the primary party able to hold on to rights to the invention. The [Stanford v. Roche](#) ruling makes clear that in a university/non-profit setting the inventor holds a right of first refusal in terms of maintaining control over the rights to the invention. This he/she must share with the federal government under certain conditions as noted in 37 CFR 401.14. I have attached a short and clear analysis of *Stanford v. Roche* performed by attorneys at Vinson & Ellis. They conclude that

"After the Supreme Court decision, if university technology transfer offices want to assure that they "retain title" to their federally funded employees' inventions they must obtain these rights in the present, by written agreement, and not rely on a promise to grant rights in the future. To be safe, they should use the language in the Stanford VCA, which has been blessed by the Federal Circuit, stating that the "signor will assign and does hereby assign" his/her inventions."

It's reasonable for a faculty employee to consider assign some rights to the university because the university, to facilitate its interest in research and development that could also be profitable, would then dedicate its resources to development and commercialization of the invention, resources to which the inventor may not have had access to otherwise. That said, the CSU's play here seems to be to assert automatic property rights as if *Stanford v. Roche* was never decided. In case you are thinking, "gee, Stephanie's really paranoid", I attach the AAUP's response to two separate cases, post-*Stanford v. Roche*, in which universities (UC-Santa Cruz and U of Chicago) insisted, without legal basis, that as a condition of employment and/or doing research at the university, the faculty employee must assign patent rights to inventions to the university."

March 21, 2013

VIA ELECTRONIC MAIL AND USPS

Dr. Alison Galloway
Campus Provost and Executive Vice Chancellor
University of California, Santa Cruz
1156 High Street
Santa Cruz, California 95064

Dear Provost Galloway:

We are writing with respect to the case of [], professor of [] at the University of California, Santa Cruz. She has requested the assistance of the American Association of University Professors in addressing her dispute with the UCSC administration over a recent requirement that she assign to the university all patent rights growing out of all her future research. The dispute has led to your March 19 notification that your administration had withdrawn her grant application to the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health because she had declined to sign the Patent Amendment and that the university's Office of Sponsored Projects would "not accept any further proposals" from her until she signed it. Professor [] has forwarded to us copies of her correspondence with you and with the vice chancellor for research, Dr. Bruce Margon. We also have copies of relevant University of California policies and documents.

According to the information in our possession, late in 2011 the UC system began to distribute to faculty the Patent Amendment, a comprehensive waiver of all future patent rights, with instructions that all faculty recipients must sign "as a condition of employment." When Professor [] declined to sign, Vice Chancellor Margon wrote on November 19, 2012, to inform her that "the campus will not submit on your behalf new sponsored research proposals or accept awards for previously submitted proposals, nor execute certain IP-related actions such as patents and licensing."

On February 19, you wrote to Professor [] regarding her [] a proposal pending before the NIGMS. You informed her that "the University does not intend to accept the

award if it is offered” and directed Vice Chancellor Margon “to withdraw the proposal from consideration for funding” if he did not receive a “signed Patent Amendment by 5:00 pm on Friday, March 1, 2013.”

In response to these communications, Professor [] reiterated her commitment to comply with the review and assignment procedure to which she had agreed when she was initially appointed, a procedure that we understand has been in force in the UC system for many years. She has also made several other offers that would seem to us to fulfill any university obligations relevant to her current grant proposal while protecting her academic freedom. The UCSC administration rejected these alternatives, and, as already noted, on March 19 you informed her of the withdrawal of her grant application.

Professor [] regards this action as a violation of her academic freedom to pursue research of her own choosing. The university administration, of course, has the authority to refuse contracts for sponsored research that cannot be feasibly implemented or that fail to meet applicable professional standards, but such concerns hardly apply to her NIGMS proposal. We wish to be on record as objecting to the administration’s actions and as agreeing with Professor [] argument that the comprehensive ban on her research proposals imposed on March 19 is in violation of her present and future academic freedom rights.

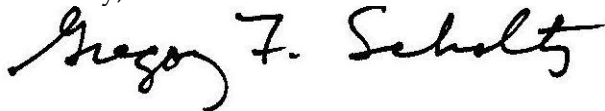
The fundamental principle of a professor’s independent right freely to choose his or her own research agenda has been recognized throughout the history of the modern university. The AAUP asserted that right in its 1915 *Declaration of Principles on Academic Freedom and Academic Tenure*, the first policy document issued by the Association. We have consistently supported the right of faculty members to seek the funding necessary to support the research they choose to do. The actions that the UCSC administration has taken can cause long-term damage to Professor [] career, can make it impossible for her to do sponsored research that not merely contributes to her own professional advancement but also serves the common good, and can have a potentially chilling effect on all UCSC faculty members and on the UC system as a whole.

In addition to the foregoing, we believe that the present assignment of patent rights to the results of research not yet even conducted eliminates a basic distinction between faculty members and corporate employees and is thus at odds with the definition of faculty independence established in the 1915 *Declaration* and reiterated many times since, as pointed out in the AAUP’s recently issued *Recommended Principles and Practices*

to *Guide Academy-Industry Relationships* (see especially Principles 11–24, in Part III, “General Principles to Guide Management of Intellectual Property,” pp. 137–40). There is added support for faculty inventor rights in the US Supreme Court’s 2011 *Stanford v. Roche* decision, which it seems to us the Patent Amendment seeks to evade.

We shall be following this case closely and may well wish to comment on future developments. Meanwhile, we would welcome your response to this letter and will be pleased to review information that you think will enhance our understanding of the administration’s position in the matters of concern. Based on the information currently available to us, we would call on the UCSC administration to allow Professor [] to submit research applications under the previously existing terms and to allow all UCSC faculty who object to the Patent Amendment to submit research applications without being required to sign it.

Sincerely,



Gregory F. Scholtz
Associate Secretary and Director
Department of Academic Freedom, Tenure, and Governance

cc: Dr. George R. Blumenthal, Chancellor
Dr. Bruce Margon, Vice Chancellor for Research
Dr. Sheldon Kamieniecki, Dean, Division of Social Sciences
Professor Heather Bullock, Chair, Department of Psychology
Professor Henry Reichman, Chair, AAUP Committee A on Academic Freedom and Tenure
Professor Cary Nelson, Chair, Committee A Subcommittee on Intellectual Property and Academic Freedom



August 29, 2013

VIA ELECTRONIC MAIL AND USPS

Dr. Thomas F. Rosenbaum
Provost
University of Chicago
5801 South Ellis Avenue, Suite 501
Chicago, Illinois 60637

Dear Provost Rosenbaum:

Dr. Ross M. Stolzenberg, professor of sociology with tenure at the University of Chicago, has requested the assistance of the American Association of University Professors regarding his dispute with the university's administration over the recent promulgation of an intellectual property policy. The Patent Agreement and Assignment policy (PAA) imposes sanctions on faculty members who decline to agree in writing to assign to the university all patent rights arising out of any future research. According to the PAA,

[w]here research or other activities carried out at the University, or with substantial aid of its facilities or funds administered by it result in inventions, discoveries, or device-like software, such intellectual property shall be disclosed to the University from inception. The Patent Policy also provides that the University requires faculty and others covered by the Policy to execute assignments of inventions to the University to effectuate the University's rights.

Faculty members are required to sign a web-based form indicating their agreement with the following provisions:

As a condition of my employment or other involvement in research or other activities at the University of Chicago, or research or other activities carried out with substantial aid of University facilities or funds administered by it, . . . I hereby acknowledge my acceptance of the University of Chicago Patent Policy, and I agree to assign and do hereby assign to the University of Chicago all of my ownership, right, title, and interest in any discovery or invention that is the product of University research, including without limitation any patent and

Dr. Thomas F. Rosenbaum

August 29, 2013

Page 2

other intellectual property rights therein, whether I acquired those rights before signing this Agreement or acquire them in the future. . . .

Although Professor Stolzenberg has stated that he is unlikely to seek any patents as a result of his research, he has informed us that he declined to sign the PAA and that the administration has consequently withheld a university-approved raise in his salary.

As Professor Stolzenberg explained in a July 4 letter to Dr. Roy E. Weiss, the deputy provost for research, he refused to sign the PAA because he believes that the university's effort to coerce compliance with what he regards as a misguided and possibly illegal policy sets a "harmful precedent." In a letter to the AAUP, he wrote that, in *Board of Trustees of Leland Stanford Junior University v. Roche Molecular Systems, Inc.* (a Supreme Court case in which the AAUP filed an amicus curiae brief), the Court "decided that no university could use a defective contract to claim patent rights to inventions and discoveries of its faculty members" and that now the University of Chicago has "devised a policy to trivialize the impact of *Stanford v. Roche* and to make meaningless the amicus arguments of the AAUP" that won Court endorsement. He warned that "if this policy succeeds at the University of Chicago, similar policies seem likely to appear at other universities," thus rendering "inconsequential" the significant achievement of *Stanford v. Roche*.

As you may be aware, in *Stanford v. Roche*, Stanford University argued that faculty members were employees hired to invent and thus not entitled to ownership of their inventive research. The AAUP in its brief argued that academic researchers and inventors are, and have traditionally been, much more than employees of their institutions. They play a key role in the production of knowledge, and their research advances the common good, a position first set forth in the AAUP's foundational 1915 *Declaration of Principles on Academic Freedom and Academic Tenure*. The Court agreed, ruling that US patent law has favored and should continue to favor the rights of individual inventors and that universities seeking to claim rights to inventions must get explicit agreement from the researchers involved. Such agreement is to be voluntary, not coerced, and can be negotiated only after an individual invention actually exists.

We concur in Professor Stolzenberg's appraisal of the PAA, which appears to undermine the academic freedom of faculty members to decide how their inventions will be disseminated. Moreover, it seems to have been imposed without any significant faculty role in its formulation. We share Professor Stolzenberg's concern about the troubling precedent it sets. We are concerned that the threat of financial penalties to

Dr. Thomas F. Rosenbaum

August 29, 2013

Page 3

non-signers adds a considerable element of coercion to the policy and that the administration has effectively altered the employment conditions of faculty members without their consent.

The PAA policy is publicly available on the university's website, and the FAQ that follows it enumerates sanctions that may be imposed on non-signers, including withholding of salary increases. Beyond that, the information in our possession concerning Professor Stolzenberg's particular case comes primarily from him, and we appreciate that you may possess additional information that would contribute to our understanding of what has occurred. We would therefore welcome your comments. Because of its implications for academic freedom, we shall be following the case closely and may well wish to address future developments. Meanwhile, if our understanding of the facts is essentially correct, we would urge the University of Chicago administration to reconsider its current intellectual property policy and to lift the sanction that it has imposed on Professor Stolzenberg.

Sincerely,



Gregory F. Scholtz

Associate Secretary and Director

Department of Academic Freedom, Tenure, and Governance

Cc: Dr. Robert J. Zimmer, President

Dr. Roy E. Weiss, Deputy Provost for Research

Professor Henry Reichman, Chair, Committee A on Academic Freedom and Tenure

Professor Cary Nelson, Chair, Subcommittee on Intellectual Property and Academic Freedom, AAUP Committee A on Academic Freedom and Tenure

Professor Michael J. Harkins, President, Illinois Conference AAUP

Professor Peter Kirstein, Chair, Illinois Conference Committee A on Academic Freedom and Tenure

Ms. Carol Wilinski, Secretary of the Faculties

Professor Ross M. Stolzenberg

Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Timber & Lumber Co.*, 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

**BOARD OF TRUSTEES OF THE LELAND STANFORD
JUNIOR UNIVERSITY *v.* ROCHE MOLECULAR
SYSTEMS, INC., ET AL.****CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR
THE FEDERAL CIRCUIT**

No. 09–1159. Argued February 28, 2011—Decided June 6, 2011

In 1985, a small California research company called Cetus began to develop methods for quantifying blood-borne levels of human immunodeficiency virus (HIV), the virus that causes AIDS. A Nobel Prize winning technique developed at Cetus known as PCR was an integral part of these efforts.

In 1988, Cetus began to collaborate with scientists at Stanford University’s Department of Infectious Diseases to test the efficacy of new AIDS drugs. Dr. Holodniy joined Stanford as a research fellow in the department around that time. When he did so, he signed an agreement stating that he “agree[d] to assign” to Stanford his “right, title and interest in” inventions resulting from his employment there. Holodniy’s supervisor arranged for him to conduct research at Cetus to learn about PCR. As a condition of gaining access to Cetus, Holodniy was required to sign an agreement stating that he “will assign and do[es] hereby assign” to Cetus his “right, title and interest in . . . the ideas, inventions, and improvements” made “as a consequence of [his] access” to Cetus. Working with Cetus employees, Holodniy devised a PCR-based procedure for measuring the amount of HIV in a patient’s blood. Upon returning to Stanford, he and other Stanford employees tested the procedure. Stanford secured three patents to the measurement process.

Roche Molecular Systems acquired Cetus’s PCR-related assets. After conducting clinical trials on the HIV quantification method developed at Cetus, Roche commercialized the procedure. Today, its HIV test kits are used worldwide.

The University and Small Business Patent Procedures Act of 1980

Syllabus

(Bayh-Dole Act or Act) allocates rights in federally funded “subject invention[s]” between the Federal Government and federal contractors. 35 U. S. C. §§201(e), (c), 202(a). The Act defines “subject invention” as “any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement,” §201(e), and provides that contractors may “elect to retain title to any subject invention,” §202(a). Because some of Stanford’s research on the HIV measurement technique was funded by the National Institutes of Health (NIH), the Bayh-Dole Act applied. In accordance with the Act’s requirements, Stanford notified NIH that it was electing to retain title to the invention and conferred on the Government a license to use the patented procedure.

Petitioner, the Board of Trustees of Stanford University, filed suit against respondents (Roche), claiming that their HIV test kits infringed Stanford’s patents. Roche responded that Holodniy’s agreement with Cetus gave it co-ownership of the procedure, and thus Stanford lacked standing to sue it for patent infringement. Stanford countered that Holodniy had no rights to assign because the University had superior rights under the Bayh-Dole Act. The District Court agreed with Stanford and held that under the Bayh-Dole Act, Holodniy had no rights to assign to Cetus. The Court of Appeals for the Federal Circuit disagreed, concluding that Holodniy’s agreement with Cetus assigned his rights to Cetus, and thus to Roche. It also found that the Bayh-Dole Act did not automatically void an inventor’s rights in federally funded inventions. Thus, the Act did not extinguish Roche’s ownership interest in the invention, and Stanford was deprived of standing.

Held: The Bayh-Dole Act does not automatically vest title to federally funded inventions in federal contractors or authorize contractors to unilaterally take title to such inventions. Pp. 6–15.

(a) Since 1790, patent law has operated on the premise that rights in an invention belong to the inventor. See, e.g., *Gayler v. Wilder*, 10 How. 477, 493. In most cases, a patent may be issued only to an applying inventor, or—because an inventor’s interest in his invention is assignable in law by an instrument in writing—an inventor’s assignee. See *United States v. Dubilier Condenser Corp.*, 289 U. S. 178, 187. Absent an agreement to the contrary, an employer does not have rights in an invention “which is the original conception of the employee alone,” *id.*, at 189; an inventor must expressly grant those rights to his employer, see *id.*, at 187. Pp. 6–8.

(b) Stanford and *amicus* United States contend that, when an invention is conceived or first reduced to practice with the support of federal funds, the Bayh-Dole Act vests title to those inventions in the inventor’s employer—the federal contractor. Congress has in the

Syllabus

past divested inventors of their rights in inventions by providing unambiguously that inventions created pursuant to certain specified federal contracts become the Government's property. Such unambiguous language is notably absent from the Bayh-Dole Act. Instead, the Act provides that contractors may "elect to retain title to any subject invention," §202(a), defining a "subject invention" as "any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement," §201(e).

Stanford contends that "invention of the contractor" means all inventions that a contractor's employees make with the aid of federal funds. That reading assumes that Congress subtly set aside two centuries of patent law in a statutory definition. This Court has rejected the idea that mere employment is sufficient to vest title to an employee's invention in the employer. Stanford's reading also renders the phrase "of the contractor" superfluous since the definition already covers inventions made under a funding agreement. Construing the phrase to refer instead to a particular category of inventions conceived or reduced to practice under a funding agreement—inventions "of the contractor," that is, those owned by or belonging to the contractor—makes the phrase meaningful in the statutory definition. And "invention owned by the contractor" or "invention belonging to the contractor" are natural readings of the phrase "invention of the contractor."

Section 202(a), which states that contractors may "elect to retain title," confirms that the Act does not *vest* title. Stanford reaches the opposite conclusion, but only because it reads "retain" to mean "acquire" and "receive." That is certainly not the common meaning of "retain," which is "to hold or continue to hold in possession or use." You cannot retain something unless you already have it. And §210(a)—which provides that the Act "take[s] precedence over any other Act which would require a disposition of rights in subject inventions . . . that is inconsistent with" the Act—does not displace the basic principle that an inventor owns the rights to his invention. Only when an invention belongs to the contractor does the Bayh-Dole Act come into play. The Act's disposition of rights does nothing more than clarify the order of priority of rights between the Federal Government and a federal contractor in a federally funded invention that already belongs to the contractor.

The Act's isolated provisions dealing with inventors' rights in subject inventions are consistent with the Court's construction of the Act. See §202(d). That construction is also bolstered by the Act's limited procedural protections, which expressly give contractors the right to challenge a Government-imposed impediment to retaining title to a subject invention, §202(b)(4), but do not provide similar protection for

Syllabus

inventor and third-party rights.

Stanford’s contrary construction would permit title to an employee’s inventions to vest in the University even if the invention was conceived before the inventor became an employee, so long as the invention’s reduction to practice was supported by federal funding. It also suggests that the school would obtain title were even one dollar of federal funding applied toward an invention’s conception or reduction to practice. It would be noteworthy enough for Congress to supplant one of the fundamental precepts of patent law and deprive inventors of rights in their own inventions. To do so under such unusual terms would be truly surprising. Had Congress intended such a sea change in intellectual property rights it would have said so clearly—not obliquely through an ambiguous definition of “subject invention” and an idiosyncratic use of the word “retain.”

The Court’s construction of the Act is also reflected in the common practice of contractors, who generally obtain assignments from their employees, and of agencies that fund federal contractors, who typically expect those contractors to obtain assignments. With effective assignments, federally funded inventions become “subject inventions” and the Act as a practical matter works pretty much the way Stanford says it should. The only significant difference is that it does so without violence to the basic patent law principle that inventors own their inventions. Pp. 8–15.

583 F. 3d 832, affirmed.

ROBERTS, C. J., delivered the opinion of the Court, in which SCALIA, KENNEDY, THOMAS, ALITO, SOTOMAYOR, and KAGAN, JJ., joined. SOTOMAYOR, J., filed a concurring opinion. BREYER, J., filed a dissenting opinion, in which GINSBURG, J., joined.

Opinion of the Court

NOTICE: This opinion is subject to formal revision before publication in the preliminary print of the United States Reports. Readers are requested to notify the Reporter of Decisions, Supreme Court of the United States, Washington, D. C. 20543, of any typographical or other formal errors, in order that corrections may be made before the preliminary print goes to press.

SUPREME COURT OF THE UNITED STATES

No. 09–1159

**BOARD OF TRUSTEES OF THE LELAND STANFORD
JUNIOR UNIVERSITY, PETITIONER *v.* ROCHE
MOLECULAR SYSTEMS, INC., ET AL.**

**ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF
APPEALS FOR THE FEDERAL CIRCUIT**

[June 6, 2011]

CHIEF JUSTICE ROBERTS delivered the opinion of the Court.

Since 1790, the patent law has operated on the premise that rights in an invention belong to the inventor. The question here is whether the University and Small Business Patent Procedures Act of 1980—commonly referred to as the Bayh-Dole Act—displaces that norm and automatically vests title to federally funded inventions in federal contractors. We hold that it does not.

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In 1985, a small California research company called Cetus began to develop methods for quantifying blood-borne levels of human immunodeficiency virus (HIV), the virus that causes AIDS. A Nobel Prize winning technique developed at Cetus—polymerase chain reaction, or PCR—was an integral part of these efforts. PCR allows billions of copies of DNA sequences to be made from a small initial blood sample.

In 1988, Cetus began to collaborate with scientists at

Opinion of the Court

Stanford University's Department of Infectious Diseases to test the efficacy of new AIDS drugs. Dr. Mark Holodniy joined Stanford as a research fellow in the department around that time. When he did so, he signed a Copyright and Patent Agreement (CPA) stating that he "agree[d] to assign" to Stanford his "right, title and interest in" inventions resulting from his employment at the University. App. to Pet. for Cert. 118a–119a.

At Stanford Holodniy undertook to develop an improved method for quantifying HIV levels in patient blood samples, using PCR. Because Holodniy was largely unfamiliar with PCR, his supervisor arranged for him to conduct research at Cetus. As a condition of gaining access to Cetus, Holodniy signed a Visitor's Confidentiality Agreement (VCA). That agreement stated that Holodniy "will assign and do[es] hereby assign" to Cetus his "right, title and interest in each of the ideas, inventions and improvements" made "as a consequence of [his] access" to Cetus. *Id.*, at 122a–124a.

For the next nine months, Holodniy conducted research at Cetus. Working with Cetus employees, Holodniy devised a PCR-based procedure for calculating the amount of HIV in a patient's blood. That technique allowed doctors to determine whether a patient was benefiting from HIV therapy.

Holodniy then returned to Stanford where he and other University employees tested the HIV measurement technique. Over the next few years, Stanford obtained written assignments of rights from the Stanford employees involved in refinement of the technique, including Holodniy, and filed several patent applications related to the procedure. Stanford secured three patents to the HIV measurement process.

In 1991, Roche Molecular Systems, a company that specializes in diagnostic blood screening, acquired Cetus's PCR-related assets, including all rights Cetus had ob-

Opinion of the Court

tained through agreements like the VCA signed by Holodniy. After conducting clinical trials on the HIV quantification method developed at Cetus, Roche commercialized the procedure. Today, Roche’s HIV test “kits are used in hospitals and AIDS clinics worldwide.” Brief for Respondents 10–11.

B

In 1980, Congress passed the Bayh-Dole Act to “promote the utilization of inventions arising from federally supported research,” “promote collaboration between commercial concerns and nonprofit organizations,” and “ensure that the Government obtains sufficient rights in federally supported inventions.” 35 U. S. C. §200. To achieve these aims, the Act allocates rights in federally funded “subject invention[s]” between the Federal Government and federal contractors (“any person, small business firm, or nonprofit organization that is a party to a funding agreement”). §§201(e), (c), 202(a). The Act defines “subject invention” as “any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement.” §201(e).

The Bayh-Dole Act provides that contractors may “elect to retain title to any subject invention.” §202(a). To be able to retain title, a contractor must fulfill a number of obligations imposed by the statute. The contractor must “disclose each subject invention to the [relevant] Federal agency within a reasonable time”; it must “make a written election within two years after disclosure” stating that the contractor opts to retain title to the invention; and the contractor must “file a patent application prior to any statutory bar date.” §§202(c)(1)–(3). The “Federal Government may receive title” to a subject invention if a contractor fails to comply with any of these obligations. *Ibid.*

The Government has several rights in federally funded

Opinion of the Court

subject inventions under the Bayh-Dole Act. The agency that granted the federal funds receives from the contractor “a nonexclusive, nontransferable, irrevocable, paid-up license to practice . . . [the] subject invention.” §202(c)(4). The agency also possesses “[m]arch-in rights,” which permit the agency to grant a license to a responsible third party under certain circumstances, such as when the contractor fails to take “effective steps to achieve practical application” of the invention. §203. The Act further provides that when the contractor does not elect to retain title to a subject invention, the Government “may consider and after consultation with the contractor grant requests for retention of rights by the inventor.” §202(d).

Some of Stanford’s research related to the HIV measurement technique was funded by the National Institutes of Health (NIH), thereby subjecting the invention to the Bayh-Dole Act. Accordingly, Stanford disclosed the invention, conferred on the Government a nonexclusive, nontransferable, paid-up license to use the patented procedure, and formally notified NIH that it elected to retain title to the invention.

C

In 2005, the Board of Trustees of Stanford University filed suit against Roche Molecular Systems, Inc., Roche Diagnostics Corporation, and Roche Diagnostics Operations, Inc. (collectively Roche), contending that Roche’s HIV test kits infringed Stanford’s patents. As relevant here, Roche responded by asserting that it was a co-owner of the HIV quantification procedure, based on Holodniy’s assignment of his rights in the Visitor’s Confidentiality Agreement. As a result, Roche argued, Stanford lacked standing to sue it for patent infringement. 487 F. Supp. 2d 1099, 1111, 1115 (ND Cal. 2007). Stanford claimed that Holodniy had no rights to assign because the University’s HIV research was federally funded, giving the school

Opinion of the Court

superior rights in the invention under the Bayh-Dole Act. *Ibid.*¹

The District Court held that the “VCA effectively assigned any rights that Holodniy had in the patented invention to Cetus,” and thus to Roche. *Id.*, at 1117. But because of the operation of the Bayh-Dole Act, “Holodniy had no interest to assign.” *Id.*, at 1117, 1119. The court concluded that the Bayh-Dole Act “provides that the individual inventor may obtain title” to a federally funded invention “only after the government and the contracting party have declined to do so.” *Id.*, at 1118.

The Court of Appeals for the Federal Circuit disagreed. First, the court concluded that Holodniy’s initial agreement with Stanford in the Copyright and Patent Agreement constituted a mere promise to assign rights in the future, unlike Holodniy’s agreement with Cetus in the Visitor’s Confidentiality Agreement, which itself assigned Holodniy’s rights in the invention to Cetus. See 583 F. 3d 832, 841–842 (2009). Therefore, as a matter of contract law, Cetus obtained Holodniy’s rights in the HIV quantification technique through the VCA.² Next, the court explained that the Bayh-Dole Act “does not automatically void ab initio the inventors’ rights in government-funded inventions” and that the “statutory scheme did not automatically void the patent rights that Cetus received from Holodniy.” *Id.*, at 844–845. The court held that “Roche possesse[d] an ownership interest in the patents-in-suit”

¹ Roche submitted a host of other claims to the District Court, including that it had “shop rights” to the patents and was entitled to a license to use the patents. See 583 F. 3d 832, 838 (CA Fed. 2009). None of those claims is now before us; we deal only with Roche’s claim to co-ownership to rebut Stanford’s standing to bring an infringement action.

² Because the Federal Circuit’s interpretation of the relevant assignment agreements is not an issue on which we granted certiorari, we have no occasion to pass on the validity of the lower court’s construction of those agreements.

Opinion of the Court

that was not extinguished by the Bayh-Dole Act, “depriv[ing] Stanford of standing.” *Id.*, at 836–837. The Court of Appeals then remanded the case with instructions to dismiss Stanford’s infringement claim. *Id.*, at 849.

We granted certiorari. 562 U. S. ____ (2010).

II

A

Congress has the authority “[t]o promote the Progress of Science and useful Arts, by securing . . . to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U. S. Const. Art. I, §8, cl. 8. The first Congress put that power to use by enacting the Patent Act of 1790. That Act provided “[t]hat upon the petition of any person or persons . . . setting forth, that he, she, or they, hath or have invented or discovered” an invention, a patent could be granted to “such petitioner or petitioners” or “their heirs, administrators or assigns.” Act of Apr. 10, 1790, §1, 1 Stat. 109–110. Under that law, the first patent was granted in 1790 to Samuel Hopkins, who had devised an improved method for making potash, America’s first industrial chemical. U. S. Patent No. 1 (issued July 31, 1790).³

Although much in intellectual property law has changed in the 220 years since the first Patent Act, the basic idea that inventors have the right to patent their inventions has not. Under the law in its current form, “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter . . . may obtain a patent therefor.” 35 U. S. C. §101. The inventor must attest that “he believes himself to be the original and first inventor of the [invention] for which he solicits a patent.”

³The patent was signed by President George Washington, Secretary of State Thomas Jefferson, and Attorney General Edmund Randolph. See Maxey, Samuel Hopkins, The Holder of the First U. S. Patent: A Study of Failure, 122 Pa. Magazine of Hist. and Biography 6 (1998).

Opinion of the Court

§115. In most cases, a patent may be issued only to an applying inventor, or—because an inventor’s interest in his invention is “assignable in law by an instrument in writing”—an inventor’s assignee. §§151, 152, 261.

Our precedents confirm the general rule that rights in an invention belong to the inventor. See, e.g., *Gayler v. Wilder*, 10 How. 477, 493 (1851) (“the discoverer of a new and useful improvement is vested by law with an inchoate right to its exclusive use, which he may perfect and make absolute by proceeding in the manner which the law requires”); *Solomons v. United States*, 137 U. S. 342, 346 (1890) (“whatever invention [an inventor] may thus conceive and perfect is his individual property”); *United States v. Dubilier Condenser Corp.*, 289 U. S. 178, 188 (1933) (an inventor owns “the product of [his] original thought”). The treatises are to the same effect. See, e.g., 8 Chisum on Patents §22.01, p. 22–2 (2011) (“The presumptive owner of the property right in a patentable invention is the single human inventor”).

It is equally well established that an inventor can assign his rights in an invention to a third party. See *Dubilier Condenser Corp.*, *supra*, at 187 (“A patent is property and title to it can pass only by assignment”); 8 Chisum on Patents, *supra*, §22.01, at 22–2 (“The inventor . . . [may] transfer ownership interests by written assignment to anyone”). Thus, although others may acquire an interest in an invention, any such interest—as a general rule—must trace back to the inventor.

In accordance with these principles, we have recognized that unless there is an agreement to the contrary, an employer does not have rights in an invention “which is the original conception of the employee alone.” *Dubilier Condenser Corp.*, 289 U. S., at 189. Such an invention “remains the property of him who conceived it.” *Ibid.* In most circumstances, an inventor must expressly grant his rights in an invention to his employer if the employer is to

obtain those rights. See *id.*, at 187 (“The respective rights and obligations of employer and employee, touching an invention conceived by the latter, spring from the contract of employment”).

B

Stanford and the United States as *amicus curiae* contend that the Bayh-Dole Act reorders the normal priority of rights in an invention when the invention is conceived or first reduced to practice with the support of federal funds. In their view, the Act moves inventors from the front of the line to the back by vesting title to federally funded inventions in the inventor’s employer—the federal contractor. See Brief for Petitioner 26–27; Brief for United States as *Amicus Curiae* 6.

Congress has in the past divested inventors of their rights in inventions by providing unambiguously that inventions created pursuant to specified federal contracts become the property of the United States. For example, with respect to certain contracts dealing with nuclear material and atomic energy, Congress provided that title to such inventions “shall be vested in, and be the property of, the [Atomic Energy] Commission.” 42 U. S. C. §2182. Congress has also enacted laws requiring that title to certain inventions made pursuant to contracts with the National Aeronautics and Space Administration “shall be the exclusive property of the United States,” Pub. L. 111–314, §3, 124 Stat. 3339, 51 U. S. C. §20135(b)(1), and that title to certain inventions under contracts with the Department of Energy “shall vest in the United States.” 42 U. S. C. §5908.

Such language is notably absent from the Bayh-Dole Act. Nowhere in the Act is title expressly vested in contractors or anyone else; nowhere in the Act are inventors expressly deprived of their interest in federally funded inventions. Instead, the Act provides that contractors may

Opinion of the Court

“elect to retain title to any subject invention.” 35 U. S. C. §202(a). A “subject invention” is defined as “any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement.” §201(e).

Stanford asserts that the phrase “invention of the contractor” in this provision “is naturally read to include all inventions made by the contractor’s employees with the aid of federal funding.” Brief for Petitioner 32 (footnote omitted). That reading assumes that Congress subtly set aside two centuries of patent law in a statutory definition. It also renders the phrase “of the contractor” superfluous. If the phrase “of the contractor” were deleted from the definition of “subject invention,” the definition would cover “any invention . . . conceived or first actually reduced to practice in the performance of work under a funding agreement.” Reading “of the contractor” to mean “all inventions made by the contractor’s employees with the aid of federal funding,” as Stanford would, adds nothing that is not already in the definition, since the definition already covers inventions made under the funding agreement. That is contrary to our general “reluctan[ce] to treat statutory terms as surplusage.” *Duncan v. Walker*, 533 U. S. 167, 174 (2001) (internal quotation marks omitted).

Construing the phrase to refer instead to a particular category of inventions conceived or reduced to practice under a funding agreement—inventions “of the contractor,” that is, those owned by or belonging to the contractor—makes the phrase meaningful in the statutory definition. And “invention owned by the contractor” or “invention belonging to the contractor” are natural readings of the phrase “invention of the contractor.” As we have explained, “[t]he use of the word ‘of’ denotes ownership.” *Poe v. Seaborn*, 282 U. S. 101, 109 (1930); see *Flores-Figueroa v. United States*, 556 U. S. ___, ___, ___

Opinion of the Court

(2009) (slip op., at 2, 11) (treating the phrase “identification [papers] of another person” as meaning such items belonging to another person (internal quotation marks omitted)); *Ellis v. United States*, 206 U. S. 246, 259 (1907) (interpreting the phrase “works of the United States” to mean “works belonging to the United States” (internal quotation marks omitted)).

That reading follows from a common definition of the word “of.” See Webster’s Third New International Dictionary 1565 (2002) (“of” can be “used as a function word indicating a possessive relationship”); New Oxford American Dictionary 1180 (2d ed. 2005) (defining “of” as “indicating an association between two entities, typically one of belonging”); Webster’s New Twentieth Century Dictionary 1241 (2d ed. 1979) (defining “of” as “belonging to”).

Stanford’s reading of the phrase “invention of the contractor” to mean “all inventions made by the contractor’s employees” is plausible enough in the abstract; it is often the case that whatever an employee produces in the course of his employment belongs to his employer. No one would claim that an autoworker who builds a car while working in a factory owns that car. But, as noted, patent law has always been different: We have rejected the idea that mere employment is sufficient to vest title to an employee’s invention in the employer. Against this background, a contractor’s invention—an “invention of the contractor”—does not automatically include inventions made by the contractor’s employees.⁴

⁴The dissent suggests that “we could interpret the Bayh-Dole Act as ordinarily assuming, and thereby ordinarily requiring, an assignment of patent rights by the federally funded employee to the federally funded employer.” *Post*, at 8. That suggestion is based in large part on Executive Order 10096, which “governs Federal Government employee-to-employer patent right assignments.” *Post*, at 9. Lest there be any doubt, employees of nonfederal entities that have federal funding contracts—like Holodniy—are *not* federal employees. And there is no

Opinion of the Court

The Bayh-Dole Act’s provision stating that contractors may “elect to *retain* title” confirms that the Act does not *vest* title. 35 U. S. C. §202(a) (emphasis added). Stanford reaches the opposite conclusion, but only because it reads “retain” to mean “acquire” and “receive.” Brief for Petitioner 36 (internal quotation marks omitted). That is certainly not the common meaning of “retain.” “[R]etain” means “to hold or continue to hold in possession or use.” Webster’s Third, *supra*, at 1938; see Webster’s New Collegiate Dictionary 980 (1980) (“to keep in possession or use”); American Heritage Dictionary 1109 (1969) (“[t]o keep or hold in one’s possession”). You cannot retain something unless you already have it. See *Alaska v. United States*, 545 U. S. 75, 104 (2005) (interpreting the phrase “the United States shall retain title to all property” to mean that “[t]he United States . . . retained title to *its* property located within Alaska’s borders”) (emphasis added). The Bayh-Dole Act does not confer title to federally funded inventions on contractors or authorize contractors to unilaterally take title to those inventions; it simply assures contractors that they may keep title to whatever it is they already have. Such a provision makes sense in a statute specifying the respective rights and responsibilities of federal contractors and the Government.

The Bayh-Dole Act states that it “take[s] precedence over any other Act which would require a disposition of rights in subject inventions . . . that is inconsistent with” the Act. 35 U. S. C. §210(a). The United States as *amicus curiae* argues that this provision operates to displace the basic principle, codified in the Patent Act, that an inventor owns the rights to his invention. See Brief for United States 21. But because the Bayh-Dole Act, including

equivalent executive order governing invention rights with respect to federally funded research; that issue is of course addressed by the Bayh-Dole Act.

Opinion of the Court

§210(a), applies only to “subject inventions”—“inventions of the contractor”—it does not displace an inventor’s antecedent title to his invention. Only when an invention belongs to the contractor does the Bayh-Dole Act come into play. The Act’s disposition of rights—like much of the rest of the Bayh-Dole Act—serves to clarify the order of priority of rights between the Federal Government and a federal contractor in a federally funded invention that already belongs to the contractor. Nothing more.⁵

The isolated provisions of the Bayh-Dole Act dealing with inventors’ rights in subject inventions are consistent with our construction of the Act. Under the Act, a federal agency may “grant requests for retention of rights by the inventor . . . [i]f a contractor does not elect to retain title to a subject invention.” §202(d). If an employee inventor never had title to his invention because title vested in the contractor by operation of law—as Stanford submits—it would be odd to allow the Government to grant “requests for retention of rights by the inventor.” By using the word “retention,” §202(d) assumes that the inventor had rights in the subject invention at some point, undermining the notion that the Act automatically vests title to federally funded inventions in federal contractors.⁶

⁵ Far from superseding the Patent Act in such a backhanded way, it is clear that §210(a)’s concern is far narrower. That provision specifies 21 different statutory provisions that the Bayh-Dole Act “take[s] precedence over,” the vast majority of which deal with the division of ownership in certain inventions between a contractor and the Government. 35 U. S. C. §§210(a)(1)–(21); see, *e.g.*, §§210(a)(19)–(20) (the Bayh-Dole Act takes precedence over “section 6(b) of the Solar Photovoltaic Energy Research Development and Demonstration Act” and “section 12 of the Native Latex Commercialization and Economic Development Act”).

⁶ Stanford contends that it cannot be the case “that the contractor can only ‘retain title’ to an invention that it already owns, while an inventor may be considered for ‘retention’ of title only when he has assigned title away.” Reply Brief for Petitioner 8. That argument has some force. But there may be situations where an inventor, by the terms of an

Opinion of the Court

The limited scope of the Act’s procedural protections also bolsters our conclusion. The Bayh-Dole Act expressly confers on contractors the right to challenge a Government-imposed impediment to retaining title to a subject invention. §202(b)(4). As Roche correctly notes, however, “the Act contains not a single procedural protection for third parties that have neither sought nor received federal funds,” such as cooperating private research institutions. Brief for Respondents 29. Nor does the Bayh-Dole Act allow inventors employed by federal contractors to contest their employer’s claim to a subject invention. The Act, for example, does not expressly permit an interested third party or an inventor to challenge a claim that a particular invention was supported by federal funding. In a world in which there is frequent collaboration between private entities, inventors, and federal contractors, see Brief for Pharmaceutical Research and Manufacturers of America as *Amicus Curiae* 22–23, that absence would be deeply troubling. But the lack of procedures protecting inventor and third-party rights makes perfect sense if the Act applies only when a federal contractor has already acquired title to an inventor’s interest. In that case, there is no need to protect inventor or third-party rights, because the only rights at issue are those of the contractor and the Government.

The Bayh-Dole Act applies to subject inventions “conceived *or* first actually reduced to practice in the performance of work” “funded in whole *or in part* by the Federal Government.” 35 U. S. C. §§201(e), 201(b) (emphasis added). Under Stanford’s construction of the Act, title to

assignment, has subsidiary rights in an invention to which a contractor has title, as §202(d) suggests. Compare §202(d) (“retention of *rights*”) with §202(a) (“retain *title*”) (emphasis added). And at the end of the day, it is Stanford’s contention that “retain” must be “read as a synonym for ‘acquire’ or ‘receive’” that dooms its argument on this point. Brief for Petitioner 37.

Opinion of the Court

one of its employee’s inventions could vest in the University even if the invention was conceived before the inventor became a University employee, so long as the invention’s reduction to practice was supported by federal funding. What is more, Stanford’s reading suggests that the school would obtain title to one of its employee’s inventions even if only one dollar of federal funding was applied toward the invention’s conception or reduction to practice.

It would be noteworthy enough for Congress to supplant one of the fundamental precepts of patent law and deprive inventors of rights in their own inventions. To do so under such unusual terms would be truly surprising. We are confident that if Congress had intended such a sea change in intellectual property rights it would have said so clearly—not obliquely through an ambiguous definition of “subject invention” and an idiosyncratic use of the word “retain.” Cf. *Whitman v. American Trucking Assns., Inc.*, 531 U. S. 457, 468 (2001) (“Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions”).

Though unnecessary to our conclusion, it is worth noting that our construction of the Bayh-Dole Act is reflected in the common practice among parties operating under the Act. Contractors generally institute policies to obtain assignments from their employees. See Brief for Respondents 34; Brief for Pharmaceutical Research and Manufacturers of America as *Amicus Curiae* 13–18. Agencies that grant funds to federal contractors typically expect those contractors to obtain assignments. So it is with NIH, the agency that granted the federal funds at issue in this case. In guidance documents made available to contractors, NIH has made clear that “[b]y law, an inventor has initial ownership of an invention” and that contractors should therefore “have in place employee agreements requiring an inventor to ‘assign’ or give ownership of an invention to the organization upon acceptance of Federal funds.” NIH

Opinion of the Court

Policies, Procedures, and Forms, A “20–20” View of Invention Reporting to the National Institutes of Health (Sept. 22, 1995). Such guidance would be unnecessary if Stanford’s reading of the statute were correct.

Stanford contends that reading the Bayh-Dole Act as not vesting title to federally funded inventions in federal contractors “fundamentally undermin[es]” the Act’s framework and severely threatens its continued “successful application.” Brief for Petitioner 45. We do not agree. As just noted, universities typically enter into agreements with their employees requiring the assignment to the university of rights in inventions. With an effective assignment, those inventions—if federally funded—become “subject inventions” under the Act, and the statute as a practical matter works pretty much the way Stanford says it should. The only significant difference is that it does so without violence to the basic principle of patent law that inventors own their inventions.

The judgment of the Court of Appeals for the Federal Circuit is affirmed.

It is so ordered.

SOTOMAYOR, J., concurring

SUPREME COURT OF THE UNITED STATES

No. 09–1159

BOARD OF TRUSTEES OF THE LELAND STANFORD
JUNIOR UNIVERSITY, PETITIONER *v.* ROCHE
MOLECULAR SYSTEMS, INC., ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF
APPEALS FOR THE FEDERAL CIRCUIT

[June 6, 2011]

JUSTICE SOTOMAYOR, concurring.

I agree with the Court’s resolution of this case and with its reasoning. I write separately to note that I share JUSTICE BREYER’s concerns as to the principles adopted by the Court of Appeals for the Federal Circuit in *FilmTec Corp. v. Allied-Signal, Inc.*, 939 F. 2d 1568 (1991), and the application of those principles to agreements that implicate the Bayh-Dole Act. See *post*, at 6–10 (dissenting opinion). Because Stanford failed to challenge the decision below on these grounds, I agree that the appropriate disposition is to affirm. Like the dissent, however, I understand the majority opinion to permit consideration of these arguments in a future case. See *ante*, at 5, n. 2.

BREYER, J., dissenting

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[June 6, 2011]

JUSTICE BREYER, with whom JUSTICE GINSBURG joins,
dissenting.

The question presented in this case is:

“Whether a federal contractor university’s statutory right under the Bayh-Dole Act, 35 U. S. C. §§200–212, in inventions arising from federally funded research can be terminated unilaterally by an individual inventor through a separate agreement purporting to assign the inventor’s rights to a third party.” Brief for Petitioner i.

In my view, the answer to this question is likely no. But because that answer turns on matters that have not been fully briefed (and are not resolved by the opinion of the Court), I would return this case to the Federal Circuit for further argument.

I

The Bayh-Dole Act creates a three-tier system for patent rights ownership applicable to federally funded research conducted by nonprofit organizations, such as universities, and small businesses. It sets forth conditions that mean (1) the funded firm; (2) failing that, the United States Government; and (3) failing that, the employee who made

BREYER, J., dissenting

the invention, will likely obtain (or retain) any resulting patent rights (normally in that just-listed order). 35 U. S. C. §§202–203. The statute applies to “subject invention[s]” defined as “any *invention of the contractor* conceived or first actually reduced to practice in the performance of work under a funding agreement.” §201(e) (emphasis added). Since the “contractor” (*e.g.*, a university or small business) is unlikely to “conceiv[e]” of an idea or “reduc[e]” it “to practice” *other than* through its employees, the term “invention of the contractor” must refer to the work and ideas of those employees. We all agree that the term covers those employee inventions that the employee properly assigns to the contractor, *i.e.*, his or her employer. But does the term “subject invention” also include inventions that the employee fails to assign properly?

II

Congress enacted this statute against a background norm that often, but not always, denies individual inventors patent rights growing out of research for which the public has already paid. This legal norm reflects the fact that patents themselves have both benefits and costs. Patents, for example, help to elicit useful inventions and research and to assure public disclosure of technological advances. See, *e.g.*, *Mazer v. Stein*, 347 U. S. 201, 219 (1954); *Bilski v. Kappos*, 561 U. S. ___, ___ (2010) (slip op., at 4); *id.*, at ___ (slip op., at 10) (Stevens, J., concurring in judgment). But patents sometimes mean unnecessarily high prices or restricted dissemination; and they sometimes discourage further innovation and competition by requiring costly searches for earlier, related patents or by tying up ideas, which, were they free, would more effectively spur research and development. See, *e.g.*, *Laboratory Corp. of America Holdings v. Metabolite Laboratories, Inc.*, 548 U. S. 124, 128 (2006) (BREYER, J., dissenting

BREYER, J., dissenting

from dismissal of certiorari as improvidently granted); Heller & Eisenberg, Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 *Science* 698 (1998).

Thus, Thomas Jefferson wrote of “the difficulty of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not.” Letter to Isaac McPherson (Aug. 13, 1813), in 6 *Writings of Thomas Jefferson* 181 (H. Washington ed. 1854). And James Madison favored the patent monopoly because it amounted to “compensation for” a community “benefit.” *Monopolies. Perpetuities. Corporations. Ecclesiastical Endowments.*, in J. Madison, *Writings* 756 (J. Rakove ed. 1999).

The importance of assuring this community “benefit” is reflected in legal rules that may deny or limit the award of patent rights where the public has already paid to produce an invention, lest the public bear the potential costs of patent protection where there is no offsetting need for such protection to elicit that invention. Why should the public have to pay twice for the same invention?

Legal rules of this kind include an Executive Order that ordinarily gives to the Government “the entire right, title and interest” to inventions made by Government employees who “conduct or perform research, development work, or both.” 37 CFR §501.6 (2010) (codifying, as amended, Exec. Order 10096, 3 CFR 292 (1949–1953 Comp.)). See also *Heinemann v. United States*, 796 F. 2d 451, 455–456 (CA Fed. 1986) (holding Executive Order constitutional and finding “no ‘taking’ because the invention was not the property of Heinemann”). They also include statutes, which, in specific research areas, give the Government title to inventions made pursuant to Government contracts. See Atomic Energy Act of 1954, §152, 68 Stat. 944 (codified as amended at 42 U. S. C. §2182); National Aeronautics and Space Act of 1958, §305, 72 Stat. 435 (codified

BREYER, J., dissenting

at 42 U. S. C. §2457), repealed by §6, 124 Stat. 3444; Federal Nonnuclear Energy Research and Development Act of 1974, §9, 88 Stat. 1887 (codified as amended at 42 U. S. C. §5908(a)). And they have included Government regulations, established prior to the Bayh-Dole Act's enactment, that work in roughly similar ways. See, e.g., 45 CFR §650.4(b) (1977) (National Science Foundation regulations providing that Foundation would "determine the disposition of the invention [made under the grant] and title to and rights under any patent application"); §§8.1(a), 8.2(d) (Department of Health, Education, and Welfare regulations providing that inventions made under department grants "shall be subject to determination" by the agency and that the department may "require that all domestic rights in the invention shall be assigned to the United States").

These legal rules provide the basic background against which Congress passed the Bayh-Dole Act. And the Act's provisions reflect a related effort to assure that rights to inventions arising out of research for which the public has paid are distributed and used in ways that further specific important public interests. I agree with the majority that the Act does not simply take the individual inventors' rights and grant them to the Government. Rather, it assumes that the federal funds' recipient, say a university or small business, will possess those rights. The Act leaves those rights in the hands of that recipient, not because it seeks to make the public pay twice for the same invention, but for a special public policy reason. In doing so, it seeks to encourage those institutions to *commercialize* inventions that otherwise might not realize their potentially beneficial public use. 35 U. S. C. §200. The Act helps assure that commercialization (while "promot[ing] free competition" and "protect[ing] the public," *ibid.*) by imposing a set of conditions upon the federal funds recipient, by providing that sometimes the Government will

BREYER, J., dissenting

take direct control of the patent rights, and by adding that on occasion the Government will permit the individual inventor to retain those rights. §§202–203.

Given this basic statutory objective, I cannot so easily accept the majority’s conclusion—that the individual inventor can lawfully assign an invention (produced by public funds) to a third party, thereby taking that invention out from under the Bayh-Dole Act’s restrictions, conditions, and allocation rules. That conclusion, in my view, is inconsistent with the Act’s basic purposes. It may significantly undercut the Act’s ability to achieve its objectives. It allows individual inventors, for whose invention the public has paid, to avoid the Act’s corresponding restrictions and conditions. And it makes the commercialization and marketing of such an invention more difficult: A potential purchaser of rights from the contractor, say a university, will not know if the university itself possesses the patent right in question or whether, as here, the individual, inadvertently or deliberately, has previously assigned the title to a third party.

Moreover, I do not agree that the language to which the majority points—the words “invention of the contractor” and “retain”—requires its result. As the majority concedes, Stanford’s alternative reading of the phrase “invention of the contractor” is “plausible enough in the abstract.” *Ante*, at 10. Nor do I agree that the Act’s lack of an explicit provision for “an interested third party” to claim that an invention was not the result of federal funding “bolsters” the majority’s interpretation. *Ante*, at 13. In any event, universities and businesses have worked out ways to protect the various participants to research. See Brief for Association of American Universities et al. as *Amici Curiae* 22–24 (hereinafter AAU Brief); App. 118–124 (Materials Transfer Agreement between Cetus and Stanford University).

Ultimately, the majority rejects Stanford’s reading (and

BREYER, J., dissenting

the Government’s reading) of the Act because it believes that it is inconsistent with certain background norms of patent law, norms that ordinarily provide an individual inventor with full patent rights. *Ante*, at 10. But in my view, the competing norms governing rights in inventions for which the public has already paid, along with the Bayh-Dole Act’s objectives, suggest a different result.

III

There are two different legal routes to what I consider an interpretation more consistent with the statute’s objectives. First, we could set aside the Federal Circuit’s interpretation of the licensing agreements and its related licensing doctrine. That doctrine governs interpretation of licensing agreements made *before* an invention is conceived or reduced to practice. Here, there are two such agreements. In the earlier agreement—that between Dr. Holodniy and Stanford University—Dr. Holodniy said, “I *agree to assign* . . . to Stanford . . . that right, title and interest in and to . . . such inventions as required by Contracts and Grants.” App. to Pet. for Cert. 119a (emphasis added). In the later agreement—that between Dr. Holodniy and the private research firm Cetus—Dr. Holodniy said, “I will assign and *do hereby assign* to Cetus, my right, title, and interest in” here relevant “ideas” and “inventions.” *Id.*, at 123a (emphasis added; capitalization omitted).

The Federal Circuit held that the earlier Stanford agreement’s use of the words “agree to assign,” when compared with the later Cetus agreement’s use of the words “do hereby assign,” made all the difference. It concluded that, once the invention came into existence, the latter words meant that the Cetus agreement trumped the earlier, Stanford agreement. 583 F. 3d 832, 841–842 (CA Fed. 2009). That, in the Circuit’s view, is because the latter words operated upon the invention automatically, while

BREYER, J., dissenting

the former did not. Quoting its 1991 opinion in *FilmTec Corp. v. Allied-Signal, Inc.*, 939 F.2d 1568, 1572, the Circuit declared that “[o]nce the invention is made and [the] application for [a] patent is filed, . . . legal title to the rights accruing thereunder would be in the assignee [*i.e.*, Cetus] . . . , and the assignor-inventor would have nothing remaining to assign.” 583 F. 3d, at 842.

Given what seem only slight linguistic differences in the contractual language, this reasoning seems to make too much of too little. Dr. Holodniy executed his agreement with Stanford in 1988. At that time, patent law appears to have long specified that a present assignment of future inventions (as in both contracts here) conveyed equitable, but not legal, title. See, *e.g.*, G. Curtis, *A Treatise on the Law of Patents for Useful Inventions* §170, p. 155 (3d ed. 1867) (“A contract to convey a future invention . . . cannot alone authorize a patent to be taken by the party in whose favor such a contract was intended to operate”); Comment, *Contract Rights as Commercial Security: Present and Future Intangibles*, 67 *Yale L. J.* 847, 854, n. 27 (1958) (“The rule generally applicable grants equitable enforcement to an assignment of an expectancy but demands a further act, either reduction to possession or further assignment of the right when it comes into existence”).

Under this rule, both the initial Stanford and later Cetus agreements would have given rise only to equitable interests in Dr. Holodniy’s invention. And as between these two claims in equity, the facts that Stanford’s contract came first and that Stanford subsequently obtained a postinvention assignment as well should have meant that Stanford, not Cetus, would receive the rights its contract conveyed.

In 1991, however, the Federal Circuit, in *FilmTec*, adopted the new rule quoted above—a rule that distinguishes between these equitable claims and, in effect, says that Cetus must win. The Federal Circuit provided no

BREYER, J., dissenting

explanation for what seems a significant change in the law. See 939 F. 2d, at 1572. Nor did it give any explanation for that change in its opinion in this case. See 583 F. 3d, at 841–842. The Federal Circuit’s *FilmTec* rule undercuts the objectives of the Bayh-Dole Act. While the cognoscenti may be able to meet the *FilmTec* rule in future contracts simply by copying the precise words blessed by the Federal Circuit, the rule nonetheless remains a technical drafting trap for the unwary. See AAU Brief 35–36. But cf. *ante*, at 15 (assuming ease of obtaining effective assignments). It is unclear to me why, where the Bayh-Dole Act is at issue, we should prefer the Federal Circuit’s *FilmTec* rule to the rule, of apparently much longer vintage, that would treat both agreements in this case as creating merely equitable rights.

At the same time, the Federal Circuit’s reasoning brings about an interpretation contrary to the intention of the parties to the earlier, Stanford, contract. See App. to Pet. for Cert. 120a (provision in Stanford contract promising that Dr. Holodniy “will not enter into any agreement creating copyright or patent obligations in conflict with this agreement”). And it runs counter to what may well have been the drafters’ reasonable expectations of how courts would interpret the relevant language.

Second, we could interpret the Bayh-Dole Act as ordinarily assuming, and thereby ordinarily requiring, an assignment of patent rights by the federally funded employee to the federally funded employer. I concede that this interpretation would treat federally funded employees of contractors (subject to the Act) differently than the law ordinarily treats private sector employees. The Court long ago described the latter, private sector principles. In *United States v. Dubilier Condenser Corp.*, 289 U. S. 178 (1933), the Court explained that a “patent is property, and title to it can pass only by assignment.” *Id.*, at 187. It then described two categories of private sector employee-

BREYER, J., dissenting

to-employer assignments as follows: First, a person who is “employed to make an invention, who succeeds, during his term of service, in accomplishing that task, is bound to assign to his employer any patent obtained.” *Ibid.*

But, second,

“if the employment be general, albeit it cover a field of labor and effort in the performance of which the employee conceived the invention for which he obtained a patent, the contract is not so broadly construed as to require an assignment of the patent.” *Ibid.*

The Court added that, because of “the peculiar nature of the act of invention,” courts are “reluctan[t] . . . to imply or infer an agreement by the employee to assign his patent.” *Id.*, at 188. And it applied these same principles governing assignment to inventions made by employees of the United States. *Id.*, at 189–190.

Subsequently, however, the President promulgated Executive Order 10096. Courts have since found that this Executive Order, not *Dubilier*, governs Federal Government employee-to-employer patent right assignments. See, e.g., *Kaplan v. Corcoran*, 545 F. 2d 1073, 1076–1077 (CA7 1976); *Heinemann*, 796 F. 2d, at 455–456; *Wright v. United States*, 164 F. 3d 267, 269 (CA5 1999); *Halas v. United States*, 28 Fed. Cl. 354, 364 (1993). The Bayh-Dole Act seeks objectives roughly analogous to the objectives of the Executive Order. At least one agency has promulgated regulations that require Bayh-Dole contractors to insist upon similar assignments. See NIH Policies, Procedures, and Forms, A “20–20” View of Invention Reporting to the National Institutes of Health (Sept. 22, 1995) (available in the Clerk of Court’s case file) (requiring a Government contractor, such as Stanford University, to “have in place employee agreements requiring an inventor to ‘assign’ or

BREYER, J., dissenting

give ownership of an invention to the organization upon acceptance of Federal funds,” as the Bayh-Dole Act “require[s]”). And an *amicus* brief, filed by major associations of universities, scientists, medical researchers, and others, argues that we should interpret the rules governing assignments of the employees at issue here (and consequently the Act’s reference to “inventions of the contractor”) in a similar way. AAU Brief 5–14.

The District Court in this case adopted roughly this approach. 487 F. Supp. 2d 1099, 1118 (ND Cal. 2007) (“[A]lthough title still vests in the named inventor, the inventor remains under a legal obligation to assign his interest either to the government or the nonprofit contractor unless the inventor acts within the statutory framework to retain title”). And since a university often enters into a grant agreement with the Government for a researcher’s benefit and at his request, see J. Hall, *Grant Management* 205 (2010), implying such a presumption in favor of compliance with the grant agreement, and thus with the Bayh-Dole Act, would ordinarily be equitable.

IV

As I have suggested, these views are tentative. That is because the parties have not fully argued these matters (though one *amicus* brief raises the license interpretation question, see Brief for Alexander M. Shukh as *Amicus Curiae* 18–24, and at least one other can be read as supporting something like the equitable presumption I have described, see AAU Brief 5–14). Cf. *ante*, at 5, n. 2. While I do not understand the majority to have foreclosed a similarly situated party from raising these matters in a future case, see *ibid.*, I believe them relevant to our efforts to answer the question presented here. Consequently, I would vacate the judgment of the Federal Circuit and remand this case to provide the parties with an opportunity to argue these, or related, matters more fully.

BREYER, J., dissenting

Because the Court decides otherwise, with respect, I dissent.

HUMBOLDT STATE UNIVERSITY

University Senate Written Reports, March 28, 2017

Standing Committees, Statewide Senators and Ex-officio Members

Academic Policies Committee:

Submitted by Mary Virnoche, APC Chair

March 7, 2017 Meeting

Members: <http://www2.humboldt.edu/senate/academic-policies-committee>

Present: Joice Chang, Paul Cummings, Brandon Dolfi, Michael Goodman, Zach Kihm, Michael Le, Clint Rebik, Mary Virnoche (chair)

Absent: Mary Glenn, Heather Madar (schedule conflict)

Guests: Dominique Johnson, Acting Store Manager; Gael Duffy-Hill, Textbook Manager; Dave Nakamura, University Center; Mark Russell, Regional Manager, Follett Higher Education Group, Joyce Lopes VP Admin.; Cassandra Tex, SDRC; Steve Martin, Environmental Science; Josh Smith, Chemistry; and Joe Szewczak, Biology

Meeting Background

Faculty indicated problems with the documentation of orders (lost orders and errors in information about the orders) and errors in communication about orders (e.g. text not linked to class schedule, misinformation to faculty about the status of orders, faculty order questions unanswered, no faculty notice about problems with text orders). The bookstore staff remains concerned about the slow adoption rate of HSU faculty compared to other institutions. Timely adoption is also a concern for the SDRC that relies on book order information to prepare texts for universal access: [Section 133 of the Higher Education Opportunity Act. \(effective July 1, 2010\)](#).

Meeting Overview

The bookstore is in the process of hiring a new store manager. The new staff are still learning systems. The Follett Regional Manager and staff were committed to collaborating with the faculty to address concerns and develop practices that increase faculty adoption rates and an overall successful bookstore.

Action Plans Discussed at Meeting

1. Text and Materials Adoption Communication
 - a. Identify and develop key process milestones and related communications
 - b. Notices to faculty via Deans
 - c. Deadline: Week 10 (in time for processing before registration in week 12)
 - d. 1st Message 5 weeks into term; 2nd Message 7 weeks into term
 - e. Communicate “preferred” system of book ordering via Follett Portal to minimize errors.
 - f. Adoption report to Chairs via Deans Week 9 (Chairs work with their faculty to get orders in)

- g. Messaging: Law, Advantage to Students for Buyback -- Save Students Money; Incentives to Departments
 - h. Communicate with Chairs via Deans: Enter "no instructor assigned" for courses that will not have texts ordered due to staffing delays. This is a preferred practice rather than having a chair order the texts and the new instructor change them.
2. System Changes
- a. Confirm/Create "no text required"; "see instructor for readings"; "no instructor assigned" course tags are in the system
 - b. Maintain inventory of materials that are regularly sold each term (e.g. lab goggles) but communicate that orders should also be placed
 - c. Phone number provided for ordering will be staffed
 - d. Bookstore to share with the SDRC the data on "no instructor assigned" and "missing orders." This information will assist them in anticipating workload timing and perhaps mitigate some missing orders.
3. Text Availability Communication
- a. Regularly communicate directly with faculty members about (likely) problems with their orders.
 - b. At least 2 weeks before classes start notify faculty members directly of any book orders that have not yet arrived.
 - c. Communicate with faculty members about the # of copies of texts on the shelf and the numbers that the bookstore is expecting students to buy elsewhere. If there is a formula for ordering and stocking, share that with faculty in the request letter for text orders.
4. New faculty communication
- a. Introduce bookstore staff and processes to new faculty members perhaps at new faculty weekly lunches.

March 21, 2017 Meeting

Members: <http://www2.humboldt.edu/senate/academic-policies-committee>

Present: Joice Chang, Paul Cummings, Michael Goodman, Zach Kihm, Michael Le, Clint Rebik, Mary Virnoche (chair)

Absent: Brandon Dolfi, Heather Madar (schedule conflict)

Guests: Andrew Stubblefield, Chair, indirect committee, Kathy Thornhill, Director, ACAC

Academic Probation Data and Processes

Kathy Thornhill presented the APC with longitudinal data on HSU academic probation, as well as current advising practices for students who go on probation. About 10% of HSU students are on probation at any given time. About 25% or more of our first year students end up on probation. This has been the pattern for the last 25 years regardless of the changing student body. These are higher rates than most other CSUs. Kathy noted that addressing the probation problem needs to be

multifaceted approach that includes addressing issues that could prevent probation, as well as using best practices for success plans after the fact.

For those on probation all receive a probation hold. This hold goes into place after students are already registered for classes, but in order to add/drop classes, all students must complete an online tutorial and submit a learning plan. The hold is lifted outside of any evaluation of their learning plan.

After probation holds are lifted, there are two processes that students on probation may encounter. For students in majors participating in the professional advisor pilot, their professional advisors meet with them one or more times. The students complete best practice worksheets that the professional advisors use to facilitate conversations about how the students might be academically successful. For students with faculty advisors, the faculty member is notified that the student is on probation.

APC faculty members reported confusion about probation advising. Most of us were under the impression that these students developed learning plans that were reviewed and approved by staff at the learning center. Kathy reported that process had been discontinued some years ago because of the overwhelming workload on learning center staff.

APC will return to this issue in an upcoming meeting. In addition, Mary V. suggested that both Senate and Chairs need to hear presentations about probation research that is being conducted by Michael Le in institutional research. In addition, until we fully fund professional advising, we need a better plan for educating and supporting faculty on best practices for advising their students who are on probation.

U.direct Milestones

During the March 7, 2017 University Senate meeting the APC introduced for a first reading a U.direct Student Milestones Policy. At that meeting the APC was asked to consider existing policies that referenced academic milestones in amending and/or withdrawing the u.direct resolution introduced at that meeting. The APC considered two policies noted below, as well as additional feedback collected from the SenEx and CAHSS chairs. Given this information, the APC decided that no further policy was needed to require departments to create milestones; rather, the existing policy just needed to be implemented. The APC directed Mary Virnoche to initiate the implementation of existing policy through the Deans and Vice Provost. She sent an email to that effect on March 21, 2017.

39-11/12 APC *Academic Progress Rules for Undergraduate Programs*

<https://www2.humboldt.edu/senate/resolutions11-12>

18-15/16 APC *Resolution on University Degree Planning Software Policy*

<https://www2.humboldt.edu/senate/2015/2016%20Resolutions>

18 16/17 APC Resolution on uDirect Student Milestones: WITHDRAWN

Appointments and Elections Committee:

Submitted by Jen Corgiat, AEC Chair

Please see the current call for nominations as we still have a few committee positions to fill: [Call for Nominations to Fill Open Committee Vacancies](#). If these positions are not filled, AEC will continue to solicit for nominations for any unfilled positions.

Please let me know should you have any questions.

Constitutions and Bylaws Committee:

Submitted by Jeff Abell, CBC Chair

- I. This semester the CBC will be meeting every other Thursday from 3-4 pm in NHE 120. Our next meeting is Thursday April 6. Agenda for that meeting is in Item IV below.
- II. Report from Thursday February 23, 2017 Meeting
 - A. Meeting called to order at 16:00 in NHE 120 with Abell (Chair), Chang, Guzman, Shellhase and Watson. Quorum was met with 5 out of 5 members present including 3 faculty reps, 1 staff rep and 1 student rep.
 - B. Committee reviewed Resolution 15-16/17-CBC which alters Presidential notification requirements in Bylaws. No formal feedback was received from Senate members after first reading. A faculty member expressed concern that the Senate Office ASC may have to work overtime in order to send emergency items to the President the same day as the Senate meeting. To avoid logistical / overtime issues associated with that scenario, CBC agreed to alter second reading so that the deadline for Presidential notification of emergency items would be noon on the day following the Senate meeting.
 - C. Committee continued discussion of lecturer role in shared governance. In accordance with the Senate motion directing CBC and FAC to jointly gather info on this subject, the CBC added the following question to a lecturer survey being developed by FAC: "Do you know how your input is taken into account in departmental decision making? If so, briefly describe the process."
 - D. Committee continued discussion on agenda notification requirements for standing committees.
 1. The standing committee report is the primary means by which committee meeting times, locations, agenda items and deliberations are communicated to the campus community. This format is sufficient for communicating committee work to Senators, but does not likely reach to the broader campus community.
 2. Our Bylaws require open committee meetings but do not mandate a particular procedure for communicating location, time or agenda. CBC is discussing whether minimum notification requirements should be mandated in all Senate reports. Such requirements could include: next meeting date and time, location of next meeting, contact email for community members who might want to attend, list of agenda items, links to pertinent documents. CBC would like to discuss these ideas with the broader Senate before any formal

recommendations are made. CBC will ask SenEx to place this as a discussion item on our April 11 Senate agenda.

3. In connection with the above discussion, the CBC is also considering other options for advertising the time, location and meeting agenda for standing committees. Some ideas include posting in a publicly available calendar; inclusion in the 25live comprehensive schedule; posting on the portal as an event. CBC would like to discuss this with the broader Senate and will ask SenEx to place this as a discussion item on our April 11 Senate agenda.

E. Meeting adjourned at 3:50 pm.

III. Report from Thursday March 23, 2017 Meeting

- A. Meeting called to order at 16:00 in NHE 120 with Abell (Chair), Chang, Guzman, and Watson. Shellhase was absent. Quorum was met with 4 out of 5 members present including 2 faculty reps, 1 staff rep and 1 student rep.
- B. Committee continued discussion on lecturer role in shared governance. The lecturer survey drafted by FAC is under revision as per SenEx recommendation. CBC will ask FAC to add the following questions related to governance.
 1. Are you interested in participating in shared governance processes? If so, in what way?
 2. Have you reviewed any documents which outline your rights in shared governance at the University, college and department level. If so, which documents have you reviewed?
- C. Committee discussed amendments to Bylaws section 12.61 as it relates to who is eligible to vote for Senate officers.
 1. As it is currently written, 12.61 allows continuing Senators and incoming Senators to vote for next year's Senate officers.
 2. Because the election for next year's officers occurs in the prior Spring semester, there are circumstances where an electorate group will be left without a Senator to give them voice in the selection of Senate officers. Some examples:
 - a. Student Senators are appointed at the start of the academic year, well after the Senate officer election. The currently seated students do not qualify as continuing Senators and would thus be denied a vote.
 - b. An elected Senate seat may not fill with the election or may have no nominees to begin with, thus rendering the seat vacant for the following year. The outgoing Senator occupying that seat does not qualify as a continuing member and would not be allowed to vote even though a temporary appointment for the vacancy may eventually be made.
 - c. An incoming Senator may not be able to make the meeting where Senate officers are elected or they may not be aware that they can provide a proxy to a seated Senator during that meeting. As with the above case, the outgoing Senator occupying that seat would not be able to vote and the electorate group denied a voice in selecting officers.
 3. CBC unanimously agreed that preserving the voice of each electorate group in the selection of Senator Officers is more important than ensuring that

continuing or incoming members are the only ones who vote. As such, CBC agreed to draft a Bylaws amendment that will allow all sitting Senators to vote for Senate officers unless newly elected Senators wish to attend the meeting or give their proxy. Language will be drafted and presented to SenEx with a request to include as a first reading on the Senate's Apr 11 agenda.

4. In the context of this discussion, the committee also broached the idea of a "Chair-elect", who would be selected a year in advance (Fall term?) and serve the following academic year. This could help alleviate some of the voting and scheduling issues that arise with the current procedure for selecting Senate officers. Its advantages include: plenty of lead time for departments to plan workload for the Chair-elect; a substantial period of time for the Chair-elect to familiarize themselves with the position; sitting Senators can choose a Chair-elect without regard for whether the Senator will be vacating the position in the year in which the Chair-elect will serve. CBC recommends looking into this option in the future, but will wait further word from SenEx on how to formally proceed.

- D. Committee discussed the issue of open committee meetings. This topic came up in the context of URPC meetings where sensitive budgeting and financial information was to be discussed. CBC looked at this from the governing docs perspective and provides the following perspective. Note these are informational items for the moment, but the CBC is prepared to draft formal interpretations if requested.

1. Bylaws 10.75 states that all standing committee meetings are open to "members of the University community". Current administrators, staff, faculty and students clearly fall under the definition of "University community" member. Such individuals have the right to access information regarding the location, time and agenda of committee meetings and to attend committee meetings if they so desire.
2. Bylaws 10.75 also gives the committee Chair plenty of power to control committee meetings so that they function efficiently. Chairs may call meetings into executive session without objection or with majority approval of the committee if there is an objection. This is the primary tool by which sensitive subjects can be handled. CBC notes that there are procedural rules when calling a meeting into executive session. These are the same rules that apply to executive session for the broader Senate. These rules include: the meeting must first convene in the open and then move into Executive session; no minutes, no votes and no formal decisions can be taken in executive session (this restriction includes decisions that are made "tacitly" or with general consent); decisions must be made at the conclusion of the executive session in the open meeting.
3. CBC also discussed what constitutes a "member of the University community" beyond the individuals mentioned in item 1 above. There was no clear consensus on this during discussion. Does it include all Emeritus faculty? all alumni? donors? local folks that collaborate with faculty/student clubs/etc? residents of the neighborhoods surrounding campus. CBC plans to continue this discussion at our next meeting and would like approval from Senate or SenEx to draft a formal interpretation on what constitutes a member of the "University community"?

- E. Meeting Adjourned at 4:05 pm.
- IV. Agenda for next meeting on Thursday April 6, 2017 from 3-4 pm in NHE 120
- A. Draft amendments to Bylaws 12.61 which will allow outgoing Senators to vote for future Senate officers if the replacement for the following year is not present in person or by proxy.
 - B. Refine ideas for improved communication of committee meeting times and agenda items. Present ideas as discussion item at future Senate meeting.
 - C. Develop interpretation of “member of the University community” as it relates to Bylaws 10.75 (pending Senate or SenEx approval to proceed.)
-

Faculty Affairs Committee:

Submitted by George Wrenn, FAC Chair

The Committee met on March 22, 2017. The next meetings will occur on March 29, April 12 and April 26. Meetings are open to the campus community. The Committee currently meets in Library 118 at 8 a.m.

The Faculty Affairs Committee addresses matters involving the individual or collective relationship of faculty to the University. The Committee can be reached through the Senate’s Faculty Affairs web page: <https://www2.humboldt.edu/senate/faculty-affairs-committee>.

March 22 Meeting Notes:

Agenda:

1. Update on SenEx discussion of shared governance (voting rights for CFA Chapter President)
 2. Update on SenEx discussion of Faculty Lecturer survey
 3. RTP Standards and Criteria (with guests Claire Know and Yvonne Everett)
 4. Review draft of Lab Evaluation Instrument
 5. Review summary of assigned time data
 6. Additional item: Boosting Teaching Evaluation response rates
-

1. Update on SenEx discussion of shared governance (voting rights for CFA Chapter President)

Senate will discuss voting rights at March 28 meeting. FAC will put forward Resolution following that discussion.

2. Update on SenEx discussion of Faculty Lecturer survey

Faculty Affairs is developing a survey to learn how lecturers engage in service. SenEx reviewed the draft on March 21 and provided comments: obtain a one-year snapshot of service (not three); make clear distinctions between voluntary and compensated service; reconsider how to

specify time commitment; send survey directly to lecturers from faculty president, not through department chairs; make use of the Office of Institutional Effectiveness to design the survey.

ACTION: The Chair will be in touch with OIE regarding survey design and administration.

3. RTP Standards and Criteria (with guests Claire Knox and Yvonne Everett)

Claire Knox and Yvonne Everett shared their rationale for making RTP Standards and Criteria (which sunsets this academic year) a standing committee. The Committee believes there is work to accomplish in several key areas: 14 departmental standards still require approval (nine of which will remain to be addressed in after this academic year, and the next cycle of five-year reviews begins again in fall 2019); comparative analysis of standards is underway and has revealed the need to promote effective models and provide templates to departments in preparation for the next round of review; work with IUPCs is needed to ensure that standards are applied effectively in evaluation. Overall, the current process is working well and the next cycle will benefit from the continuity and institutional memory provided by a standing committee.

ACTION: The Faculty Affairs committee agreed to facilitate this change, which will require a vote of the general faculty.

4. Review draft of Lab Evaluation Instrument

The Committee reviewed the draft provided by Mark Wilson and suggested changes.

ACTION: FAC will develop a Resolution on the instrument and bring to Senate in April.

5. Review summary of Assigned Time data

This item was postponed to March 29.

6. Additional item: Boosting Teaching Evaluation response rates

Colleen Mullery asked the Committee to revisit the issue of teaching evaluation response rates and incentivizing responses through early release of grades, which has been effective at San Diego State. The Chair indicated a willingness to include this in the Committee's work at year's end.

Administrative Affairs:

Submitted by Joyce Lopes, Vice President, Administration and Finance

The Office of Sustainability has created a webpage focused on HSU's Climate Action Plan. The webpage is accessible via the following link:

<http://www2.humboldt.edu/sustainability/node/192>

Additionally, a pdf version of the finalized Climate Action Plan is available via the link below.
<http://www2.humboldt.edu/sustainability/sites/default/files/climateActionPlan.pdf>

**EXECUTIVE SUMMARY OF RESOLUTIONS
ACADEMIC SENATE CSU PLENARY – MARCH 16-17, 2017**

The Academic Senate CSU (ASCSU) met at the Chancellor’s Office in Long Beach on March 16-17, 2017 and approved the following resolutions. All can be accessed at the [ASCSU website](#).

AS-3283-17/FA (Rev) - Employment Security for Contingent Faculty, Librarians, and Coaches and Counselors

Referred Back to Committee (to be Returned at May Plenary)

The Academic Senate CSU (ASCSU) urges the California State University (CSU) system, in conjunction with the ASCSU and the California Faculty Association (CFA), to establish a group tasked to investigate models of employment that would provide greater employment security for contingent faculty, librarians, coaches and counselors.

AS-3284-17/APEP (Rev) - Cessation of Implied Equivalency of General Education (GE) Area B4 for Intermediate Algebra

Approved Unanimously

The Academic Senate CSU (ASCSU) recommends that completion of General Education Area B4 (Mathematics/Quantitative Reasoning) and/or the completion of an Associate’s Degree for Transfer from a California community college, should no longer be used as proxy for determining a student’s competency in intermediate algebra.

AS-3285-17/FA (Rev) – Saving California’s Master Plan Through Tax Reform

Approved

The Academic Senate CSU (ASCSU) endorses the recommendations in “The \$48 Fix: Reclaiming California’s Master Plan for Higher Education,” which lays out a strategy for tuition-free public higher education for California residents through tax reform. The resolution also urges members of California’s three higher education segments to campaign for such a plan.

AS-3286-17/AA (Rev) – Actions to Support Graduate Education in the California State University

Approved Unanimously

The Academic Senate CSU (ASCSU) acknowledges the findings of the CSU Master’s Degree Program Quantitative Characteristics report (April 2016) which highlight the need to address prior ASCSU recommendations on CSU graduate education. The Senate further urges the establishment of an ASCSU/CSU task force or work group on graduate education to focus on several areas which deserve special attention.

AS-3287-17/FA (Rev) – In Support of Students Admitted to the CSU Under Deferred Action Childhood Arrivals (DACA)

Approved Unanimously

The Academic Senate CSU (ASCSU) reaffirms its commitment to the well-being of all its students, including those covered by the Deferred Action for Childhood Arrival Act (DACA), and restates its commitment to working to ensure the preservation of DACA. If DACA is repealed, the Academic Senate commits to advocating for legal resources and other material support to ensure that the rights of such students are preserved.

AS-3288-17/FGA – 2017 Legislative Advocacy Positions of the Academic Senate of the California State University (ASCSU)

Approved Unanimously

The Academic Senate CSU (ASCSU) adopts the positions on bills being considered by the 2017 California Legislature which are identified in the document titled, Academic Senate of the California State University, Positions on Bills in the California State Legislature – 2017, and will use those positions to guide 2017 legislative advocacy activities.

AS-3289-17/AA – Support for AB 422 (Arambula) California State University: Doctorate of Nursing Practice

Approved Unanimously

The Academic Senate CSU (ASCSU) strongly supports continuation of the CSU Doctorate of Nursing Practice degree as authorized in AB 422 (Arambula).

AS-3290-17/FA – Opposition to President Trump’s Executive Orders (13769 and 13780) Restricting Travel from Several Muslim Countries

Approved Without Dissent

The Academic Senate CSU (ASCSU) strongly opposes President Trump’s Executive Order 13769 signed on January 27, 2017, and its revision of March 6, 2017 (13780), which restricts travel from several Muslim countries. The Senate further urges the Chancellor (who has previously condemned Executive Order 13769) to communicate this same condemnation to President Trump and members of California’s congressional delegation, and to call for the rescission of Executive Order 13780.

* * * * *

The following resolutions were introduced for First Reading consideration:

AS-3291-17/APEP - Incorporating the Quantitative Reasoning Task Force (QRTF) Recommendations Concerning Quantitative Reasoning in Revising Executive Order (EO) 1100
First Reading

The Academic Senate CSU (ASCSU) supports the revision of EO 1100 and associated documents (e.g., CSU Guiding Notes) to incorporate recommendations concerning quantitative reasoning / mathematics competency outlined in the Quantitative Reasoning Task Force report.

AS-3292-17/EX - Academic Senate of the CSU Calendar of 2017-2018 Meetings

First Reading

The Academic Senate CSU (ASCSU) calendar of meetings for 2017-2018 was presented for comment.

AS-3293-17/AA - 2017 Support for Active Learning and High Impact Practices in CSU Graduation Initiative 2025

First Reading

The Academic Senate CSU (ASCSU) reaffirms its commitment to “active learning” practices as adopted in the Access to Excellence strategic plan, and urges the CSU to make known its commitment to these practices in explicit ways as part of the Graduation Initiative 2025. The ASCSU emphasizes that in doing so:

- funding and actions be directed to instructional faculty and staff;
- a portion of the Graduation Initiative 2025 funding be use for professional development and implementation of high impact practices;
- the ASCSU and CSU highlight the connection between improved graduation and retention rates, active learning and high impact practices, and the public good.

AS-3295-17/FGA/AA - Campus Accommodation of Military Students’ Service Obligations

First Reading

The Academic Senate CSU (ASCSU) urges campus faculty to make appropriate accommodations for students with military service obligations, and urges campus senates and administrations to consider adopting academic practices to facilitate successful course completion by such students.

* * * * *

The following resolution was approved by acclamation:

AS-3294-17/EX – Commendation of the CSU Academic Conference 2017

Approved by Acclamation

The Academic Senate CSU (ASCSU) commended all parties who contributed to the success of the CSU Academic Conference 2017, and encourages Chancellor White to continue to host the conference on a biennial basis.

The full text of ASCSU resolutions is available at: <http://calstate.edu/AcadSen/Records/Resolutions/>

Humboldt State University
University Senate
Meeting Calendar for AY 2017/2018

2017 Fall Semester

Executive Committee (3-5 pm, NHE 106)	University Senate (3-5pm, NHE 102)
August 29, 2017	September 5, 2017
September 12, 2017	September 19, 2017
September 26, 2017	October 3, 2017
October 10, 2017	October 17, 2017
October 24, 2017	October 31, 2017
November 7, 2017	November 14, 2017
<i>Fall Break, November 20-24</i>	
November 28, 2017	December 5, 2017
December 12, 2017 (<i>if needed</i>)	
<i>Finals, December 11-15</i>	

2018 Spring Semester

Executive Committee (3-5 pm, NHE 106)	University Senate (3-5pm, NHE 102)
January 16, 2018	January 23, 2018
January 30, 2018	February 6, 2018
February 13, 2018	February 20, 2018
February 27, 2018	March 6, 2018
<i>Spring Break, March 12-16</i>	
March 20, 2018	March 27, 2018
April 3, 2018	April 10, 2018
April 17, 2018	April 24, 2018
May 1, 2018 (<i>if needed</i>)	May 8, 2018 (<i>if needed</i>)
<i>Finals, May 7-11</i>	

HUMBOLDT STATE UNIVERSITY

University Senate

Current Senate Membership, Spring 2017

32 Members

29 Voting Members

- 19 Faculty
 - General Faculty President (Senate Chair)
 - 2 ASCSU Reps
 - 1 ICC Chair
 - 3 Lecturers
 - 3 Tenure-line At-Large Reps
 - 2 Tenure-line Non-Instructional
 - 2 CNRS Reps
 - 2 CAHSS Reps
 - 2 CPS Reps
 - 1 ERFA Rep
- 3 Students
- 3 Staff
- 4 Administrators
 - Provost
 - VP Enrollment Management & Student Affairs
 - VP Administrative Affairs & Finance
 - Executive Director ODEI

3 Non-Voting Members

- University President
- Labor Council Delegate
- CFA/HSU Chapter President

MEMORANDUM


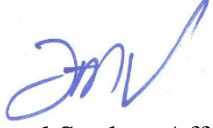
March 14, 2017

Via Electronic Mail

To: Systemwide Academic Senate

From: Fram Virjee, Executive Vice Chancellor and General Counsel
Loren J. Blanchard, Executive Vice Chancellor for Academic and Student Affairs

Re: IP Committee Report and Recommendations



As many of you know, the California State University (CSU) formed a systemwide Intellectual Property Policy Committee (IP Committee) that was tasked with identifying and evaluating the challenges campuses face involving intellectual property. The IP Committee was also asked to provide a series of recommendations on how the CSU can best address these issues and provide the support necessary to encourage research and development of intellectual property among its faculty, staff and students. Members of the IP Committee were drawn from across the CSU's 23 campuses and auxiliaries as well as the Chancellor's Office to ensure that the committee included individuals with substantial background and experience in fields such as advancement, sponsored programs and technology transfer, as well as knowledge about the challenges faculty, staff and students face when participating in research.

To help identify the challenges and concerns our campus communities face when dealing with research and intellectual property, and to better provide suggestions on how to best tackle those challenges, the IP Committee sought additional input from campus Chief Research Officers and others within the CSU community. The result is the attached draft Intellectual Property Policy Committee Report and Recommendations, which makes a series of five recommendations:

- Adopt systemwide copyright and patent policies to replace existing campus policies and provide greater consistency and clarity on intellectual property ownership and development, while also providing the campuses leeway on policy implementation;
- Provide additional support and guidance to campuses from the Office of Research at the Chancellor's Office on intellectual property and technology transfer matters, including general support, training/education, and identification of resources for each campus on intellectual property disclosure, protection and commercialization;
- Provide additional training and guidance on intellectual property and technology transfer;
- Designate a single point-of-contact at each campus on intellectual property issues; and
- Establish a campus IP Committee on each campus to make campus-based decisions on intellectual property assignments, protection and commercialization.

March 13, 2017
Page 2

To date, the draft Report and Recommendations has been reviewed by the Chancellor, Executive Vice Chancellors, Vice Chancellors and campus Presidents, as well as those tasked with its drafting. The draft Report and Recommendations is now ready for review by and consultation with the Academic Senate. We encourage you to read through the draft Report and Recommendations and consult with faculty or others as you deem appropriate, and provide us with your input and feedback no later than 60 days from the date of this transmittal. While the draft Report and Recommendations was crafted in an effort to provide greater support and consistency on intellectual property matters across our campuses and address the challenges our campus communities face on these issues, we recognize the important role the Academic Senate plays in ensuring that the draft policies and other recommendations achieve these goals. We fully intend to take your consultation and comments into account, including as part of the collective bargaining process over the draft systemwide copyright and patent policies.

cc: Timothy P. White, Chancellor
Steve Relyea, Executive Vice Chancellor for Business & Finance and Chief Financial Officer
Garrett P. Ashley, Vice Chancellor University Relations and Advancement
Larry Mandel, Vice Chancellor and Chief Audit Officer

Intellectual Property Policy Committee Report and Recommendations

Part One: Proposed Intellectual Property Policy
Part Two: Recommendations to the Chancellor

March 3, 2017

Status: Out for Review by the University Community

Intellectual Property Committee
CSU OFFICE OF THE CHANCELLOR

Table of Contents

PART ONE: Proposed Intellectual Property Policy

I. Introduction and Executive Summary.....	3
A. Project Concept.....	3
B. Acknowledgements to Contributors and Authors	4
II. BACKGROUND INFORMATION	5
A. History of Intellectual Property Policies and Commercialization	5
B. Benefits to CSU	6
C. Federal Compliance Requirements (Bayh-Dole Act).....	6
D. Challenges and Constraints.....	7
III. RECOMMENDATION	8
A. Recommendation: Adopt Systemwide Intellectual Property Policies	8
1. Purpose of the Systemwide Policies	8
2. Explanation of Changes From Prior System/Policies	8
3. Need For Labor Negotiations	9
IV. CSU INTELLECTUAL PROPERTY POLICY	9
A. Bayh-Dole Act.....	9
B. Proposed Copyright Policy	10
C. Proposed Patent Policy	15

PART TWO: Recommendations to the Chancellor

I. Introduction and Executive Summary.....	20
A. Project Concept.....	20
B. Acknowledgements to Contributors and Authors	22
II. Recommendations	23
A. Recommendation 1: Develop IP Support and Guidance Function in the CO Office of Research ...	23
B. Recommendation 2: Provide Additional Training and Guidance to CSU Community	24
C. Recommendation 3: Identify a Campus Intellectual Property Officer on Each Campus	25
D. Recommendation 5: Establish a Campus IP Committee on Each Campus	26
III. Financials and Resources Needed.....	27
A. Financial Support Recommendation.....	27
B. Prospects for Profitability	27
IV. Appendices	28

PART ONE: Proposed Intellectual Property Policy

I. INTRODUCTION AND EXECUTIVE SUMMARY

A. Project Concept

In adopting *Access to Excellence* as the strategic plan for the California State University (“CSU” or “University”), the CSU Board of Trustees affirmed long-standing goals of the CSU to create and provide top-quality, higher-education opportunities that help students in California to be successful and well-prepared as future citizens, leaders and workers of the state.¹ In addition, the plan focuses on the major role CSU has to play in shaping the economic, political and social environment of the State of California.² The increasing importance of research and development, and the rapid advancement in technology, is likely to shape expectations for excellence in higher education.

As part of its mission, the CSU aims to promote an academic environment where creative works, innovation and entrepreneurship are encouraged and supported. This mission is guided by well-established academic values and practices, including, among others, academic freedom and with it the privilege to generate and disseminate new knowledge. To that end, the CSU supports the development of policies and procedures that express a sincere commitment to help support the production, dissemination and commercialization of intellectual property by its faculty members, students, employees and affiliates in a fair and equitable manner.

Many CSU faculty are actively involved in research, technology development, creative works and other scholarly activities across a wide spectrum of disciplines that have the potential to generate intellectual property. The CSU’s diverse pool of talented faculty have interest and expertise in applied domains such as agriculture, engineering, water systems, biotechnology, coastal and marine sciences, energy efficiency, alternative energy, transportation, human factors in technology design and health and education. Increasingly, the CSU is being engaged in the translation of new knowledge generated by research for commercial purposes through technology transfer. Annually, the CSU has nearly \$0.6 billion in sponsored project expenditures and a survey of the total holding in grant and contract equity in the Science Technology Engineering and Mathematics (STEM) related areas conducted in April 2015 totaled over \$0.5 billion in multi-year funding, involving nearly 4000 faculty researchers and tens of thousands of students.

The CSU has long recognized that engagement of students in research and other scholarly activities is a powerful tool for achieving student success: positively affecting analytic and critical thinking, increasing academic achievement and retention, clarifying choice of academic major, developing important teamwork and soft skills and promoting enrollment in graduate school admissions. Research experiences also provide the necessary skills to translate theoretical information into practical knowledge, allowing students to compete successfully for jobs and opportunities and participate effectively in the workforce after graduation. Student researchers, therefore, have the potential to conceive and generate intellectual property with commercial value and their rights and privileges must also be recognized and considered.

¹ See *Access to Excellence Accountability Plan* available at <http://www.calstate.edu/accesstoexcellence/executive-summary.shtml>.

² *Id.*

CSU's excellence in teaching and learning is achieved in part with the creative production of educational materials by our faculty, staff and students. Recognizing, protecting and sustaining the intellectual property created through our teaching and learning processes requires comprehensive copyright and licensing policies that faculty, staff and students understand and support. The institutional services to enable the consistent and timely application of copyright and licensing policies must be part of CSU's intellectual property strategy and should include easy access to information, professional development and consultation services.

Currently, CSU lacks any centralized policy or system to adequately support research, technology development and other creative endeavors among its faculty, staff and students. Recent efforts to promote student success and to encourage faculty entrepreneurship have highlighted the challenges faced by those interested in developing intellectual property. The legal and interpretive issues surrounding such policies can be very complex. Specifically, the wide disparity of intellectual property policies across those CSU campuses that have policies, and the absence of any policy on others, makes it difficult to provide consistent, accurate and relevant systemwide advice to the campuses when questions on intellectual property matters arise. Further, CSU's decentralized approach to addressing intellectual property issues often fails to provide the necessary structure and support to those engaged in research and development, particularly when issues of protection and technology transfer arise.

The IP Committee has been asked to evaluate the many challenges campuses face involving intellectual property, and to provide a draft IP Policy document. This report attempts to provide an overview of the various intellectual property challenges facing the system along with draft policies and a series of other recommendations for consideration by the CSU community. To date, the draft IP Committee Report and Recommendations has been reviewed by the Chancellor, Executive Vice Chancellors, Vice Chancellors and campus Presidents. The next step in the review process is for the draft report, including its recommendations and draft policies, to be reviewed by Provosts, Vice Provosts, the Academic Senate, and Chief Research Officers at each of the campuses. After their input has been received, the draft policies will be subject to collective bargaining.

B. Acknowledgements to Contributors and Authors

Members of the IP Committee were drawn from the ranks of Chancellor's Office Business and Finance, Human Resources and Academic Affairs administrators, the Office of the General Counsel, campus-based Academic Affairs administrators and Research Auxiliary administrators, systemwide Affinity Group leaders and experts in fields such as advancement and technology transfer. The members of the IP Committee were chosen to ensure that the proposed recommendations receive input from multiple viewpoints, including from individuals with substantial knowledge and expertise in technology transfer and intellectual property matters, as well as those who work directly with faculty, staff and students and could therefore identify many of the problems and concerns these demographics face when participating in research.

This document capitalizes on the expertise of the members of the IP Committee as well as the experiences of those CSU campuses that have well-developed intellectual property and technology transfer capabilities. This plan also builds on the recommendations of the 2008 Joint Task Force on Patents and Technology Transfer and the 2011 report issued by the CSU Technology Transfer Implementation Task Force suggesting a more consistent approach on intellectual property protection and technology transfer.

II. BACKGROUND INFORMATION

Name	Title	Location
Jennifer Glad <i>(Co-Chair)</i>	University Counsel	Chancellor's Office
Zed Mason <i>(Co-Chair)</i>	Interim AVC for Research Initiatives & Partnerships	Chancellor's Office
Bradford Anderson	Interim VP for Research & Economic Development	San Luis Obispo
Susan Baxter	Executive Director, CSU Program for Education & Research in Biotechnology (CSUPERB)	San Diego
Sue DeRosa	Director of Sponsored Programs	Chancellor's Office
David Dowell	Provost	Long Beach
Andrea Gunn-Eaton	University Counsel/Business & Finance Team Leader	Chancellor's Office
Gerry Hanley	AVC for Academic Technology Services	Chancellor's Office
Denice Helwig	Chief of Staff	Humboldt
Grace Liu	Grants & Research Administrator/ Intellectual Property Counsel	Fresno
Tommy Martindale	Director of Technology Transfer	SDSU Research Foundation
Margaret Merryfield	AVC for Academic Human Resources	Chancellor's Office
Alison Sanders	Interim AVP for Research/ Director of Research & Sponsored Programs	San Francisco
John Swarbrick	AVC for Labor Relations	Chancellor's Office
Marie Talnack	Director, Technology Transfer Office and Industry Clinic	Pomona
Shawna Young	Interim Director of Research & Sponsored Programs	Stanislaus

A. History of Intellectual Property Policies and Commercialization

Executive Order 644, issued September 7, 1995, which is the current systemwide policy on intellectual property, merely requires campuses to update their intellectual property policies. Of the 23 CSU campuses, 16 have some form of intellectual property policy, whether they pertain to copyright, patent or both. These policies vary from campus to campus, depending on whether the person who creates the intellectual property is faculty, staff or a student.³ For many campuses, the overarching theme is to grant ownership of any intellectual property rights (copyright and/or patent) to the author or inventor of the intellectual property, rather than the CSU. This is often the case, irrespective of the level of support or resources CSU provides in the development of the intellectual property. For example, some campuses have copyright policies that state the author owns the intellectual property, regardless of the amount of support or resources provided by the CSU that contributed to the creation of the intellectual property. In contrast, other campuses have patent policies that claim CSU ownership of the intellectual

³ In 2003, an Academic Senate Guideline was published entitled "Intellectual Property, Fair Use and the Bundling of Ownership Rights," which many current campus policies borrow from. That report provides guidelines related to copyrights, but not on patent rights.

property, rather than the inventor, depending on the level of support the CSU provides. The wide disparities in intellectual property policies on CSU campuses, as well as the complete absence of a policy in some cases, makes it difficult to provide accurate and relevant systemwide advice to the campuses with questions on intellectual property issues. Further, the policies as they currently exist often fail to provide the necessary support and structure to provide guidance and assistance to those seeking to develop intellectual property, particularly if it might be commercialized.

CSU patents have focused, as have federal research and development expenditures, on the life and physical sciences, information technology and engineering. CSU recorded more than \$260M in STEM research expenditures for fiscal year 2013/14, suggesting significant potential in patenting and licensing. Over the last year, across the CSU approximately 23 patent applications were filed and prosecuted with the United States Patent Office, the majority originating from San Diego State University.⁴

B. Benefits to CSU

CSU can leverage its academic products to transfer its creations and inventions, many of which grow out of the culture of sponsored research, to partners beyond the University. Called technology transfer (“tech transfer”), the enterprise is broader than the name implies. It consists of the sharing and/or commercialization of university-developed skills, inventions, methods, products and knowledge. Tech transfer requires procedures, metrics and outcomes so that institutions can judge whether the appropriate release is informal sharing, provides for protection for eventual commercialization or promotes immediate creation of a new business.

CSU’s growing research agenda complements its educational mission in that, over the last few years, there has been an increased emphasis in engaging students, and in particular minority undergraduate students, in authentic research experiences. Promoted largely through federal funding provided by undergraduate research training grants from the NSF and NIH aimed at increasing student retention and graduation, several campuses lead the nation in placing such students in STEM-related and social science graduate programs. However, the long-term success in institutionalizing undergraduate research programs and promoting the “teacher-scholar model” depends on the CSU’s ability to manage the increasing volume and complexity of research, tech transfer and partnerships in a way that not only promotes undergraduate and graduate student involvement, but also provides solutions for government agencies as well as business and industry partners.

C. Federal Compliance Requirements (Bayh-Dole Act)

In 1980, the Bayh-Dole Act was signed into law, allowing universities to patent federally-funded inventions and to retain the royalties. The Bayh-Dole Act mandates that institutions in receipt of federal grants and contracts provide ways to protect and, if appropriate, commercialize the results. As the CSU’s portfolio of grants and contracts increases, its risk of non-compliance increases. Federal expenditures represent nearly 70% of the CSU’s externally-funded grant and contract expenditures each year. Indeed, the majority of inventions in the CSU are at least partially supported with federal funds. Expanding CSU’s tech transfer capacity is consistent with its obligations under the Bayh-Dole Act to protect and commercialize intellectual property, where appropriate. For this reason, we recommend

⁴ Campuses reported that in 2015, 41 provisional patent applications were filed (essentially place holder applications) and 23 patent applications were prosecuted with the United States Patent and Trademark Office.

the adoption of the obligations required under the Bayh-Dole Act as a reasonable set of objectives for the CSU to apply to all inventions whether or not they are federally funded. (See [Bayh-Dole Act Obligations](#) in Section IV.A).

D. Challenges and Constraints

Adjusting for size and mission, CSU campuses are mid-range performers in research and development. The one exception is San Diego State University, which is regularly ranked by the National Science Foundation (NSF) among the top 150 universities for nonmedical/hospital research and development. With a total R&D yearly expenditure rate of \$92M (5-year average), of which approximately \$75M is STEM related, its research activity far exceeds its closest rivals, San Francisco State University, San Jose State University, and Cal Poly San Luis Obispo, which generate between \$15M and \$35M in STEM R&D expenditures annually.⁵ (See [Appendix 1](#) for CSU External and R&D Expenditure analysis).

In the CSU, development of research space has been limited by a funding model that primarily supports instructional space. However, significant research, development and tech transfer in the sciences and engineering depend on physical facilities, human capacity and technological complexity. Indeed, there appears to be a strong correlation between research space and tech transfer support on a campus and its intellectual property portfolio; suggesting that on many campuses the investment in research infrastructure has been a rate-limiting step in developing intellectual property, particularly in the experimental and laboratory-intensive disciplines.

Moreover, business, social science and education awards—a significant fraction of CSU-sponsored projects—have low indirect cost return to support infrastructure, and in other university systems have had a disappointing impact on tech transfer. However, this extensive portfolio, particularly in the research and development for educational initiatives designed to improve teaching and learning, may prove a CSU strength. For example, San Diego State University’s two top royalty-bearing licenses are both for software and materials protected by copyright only. Neither was developed by faculty in the life sciences or engineering. Some refer to this area as “non-traditional tech transfer” (with traditional tech transfer being licensing of patent rights on STEM-related inventions) and it has been a large area of recent growth. The indirect cost rates on these projects are historically low and the costs associated with copyright and licensing for such projects are not as significant as those for patent prosecution.

III. RECOMMENDATION

A. Recommendation: Adopt Systemwide Intellectual Property Policies

The IP Committee recommends adopting two systemwide policies—a Patent Policy and a Copyright Policy—to replace all existing campus policies. These policies would apply to both campuses and auxiliary organizations. This recommendation has multiple aims: to encourage and recognize research, innovation and creative works by members of the CSU community; to clarify ownership of intellectual property rights; to define the ownership rights, distribution and commercialization associated with the products of research, authorship and invention by the CSU community; to create opportunities for public use of CSU innovations maximizing public benefit to our local communities and the State of

⁵ See NSF HERD (Higher Education Research & Development Survey) <http://www.nsf.gov/statistics/srvyherd/>. CSU data analyzed and presented in [Appendix 1](#) to this report.

California; to provide for the equitable sharing of revenue with the creators of intellectual property; and to define the policies and procedures for managing such products. The IP Committee has developed proposed copyright and patent policies, which are incorporated in this report.

1. Purpose of the Systemwide Policies

As demonstrated in this report, the CSU is in need of systemwide guidance related to intellectual property. The goals of the proposed systemwide policies include:

- Supporting research, innovation and scholarly and creative activities, leading to potential copyrightable works, inventions and patents;
- Supporting and protecting author/inventor rights to their intellectual property, allowing them to use their intellectual property to further their research, scholarly or educational goals and objectives;
- Supporting student participation in research, scholarly and creative activities, contributing to student success and increasing graduation rates; and
- Providing systemwide policies that are compliant with the Bayh-Dole Act and the Collective Bargaining Agreement (CBA) with the California Faculty Association (CFA) – such that all CSU campuses and auxiliaries, irrespective of size and resource availability, will be able to effectively implement the policies (with system-office support when needed).

Updated systemwide policies are essential to the implementation of this report. The recommendation supports the CSU mission, “*Access to Excellence*,” notably Commitment 2 (*Plan for Faculty Turnover and Invest in Faculty Excellence*) and, most importantly, Commitment 6 (*Enhance Student Opportunities for “Active Learning”*). The two commitments call for an increased focus and investment in faculty research and engaging students in faculty-mentored research activities. With an increased focus on student research participation to improve graduation rates, a general increase in externally funded research is likely to follow. As the volume increases, so does the need for enhanced systemwide policies to support research activities across the CSU.

2. Explanation of Changes From Prior System/Policies

The proposed policies provide needed clarification regarding the assignment of ownership of intellectual property. The policies aim to outline when the University (or auxiliary) owns the intellectual property rights or when copyright/patent ownership belongs to the author or inventor (faculty, staff or students). Under the proposed copyright policy, in many instances the author owns the intellectual property. In the case of the proposed patent policy, ownership generally rests with the University or auxiliary when the inventions are created within the course and scope of employment or with CSU resources. Both policies, however, require assignment of the University’s or auxiliary’s rights to the author/inventor when the mission and best interests of the CSU are better served by such action. Where the University’s or auxiliary’s rights are assigned to the author or inventor of the intellectual property, the University or auxiliary would typically retain a royalty-free license to use the intellectual property for research and educational purposes.

The proposed copyright and patent policies also include royalty sharing provisions for cases where the University or auxiliary retains ownership of the intellectual property. In such cases, the policies require an equitable sharing of royalties with the author/inventor and the inventor's campus or associated auxiliary. Additionally, where the royalties received by the campus or auxiliary providing tech transfer services exceed the operating costs of providing such services in any fiscal year, the proposed policies require that the campus or auxiliary pay 5% of net licensing revenues in excess of the operating costs to the CSU to be used in the CSU's systemwide efforts to support research and innovative endeavors, as detailed in this report.

3. Need For Labor Negotiations

The current Collective Bargaining Agreement with CFA, which runs until June 30, 2017, contains an Article on Intellectual Property Rights (Article 39). Article 39 does not contain provisions regarding the ownership of intellectual property rights. Instead, it essentially recognizes that, to the extent faculty have previously used materials created by them for non-CSU purposes, faculty retain that right. It further recognizes that the provision does not apply to materials created by faculty with extraordinary University support.

In the event that CFA does not agree to supersede Article 39 with the proposed systemwide policies outside of successor bargaining, the issue would need to be incorporated into the next round of full contract negotiations. The successor negotiations will commence following service of a written notice that is to be delivered no later than November 30, 2016. Based on the previous history of the parties, we expect the Board of Trustees to authorize the parties to begin successor negotiations at the November, 2016 Board of Trustees meeting. Given the fact that the contract is almost certain to be open within 12 months of the date of this report, the most realistic way of negotiating and implementing the recommendations of this report would be through the successor contract negotiations process.

IV. PROPOSED CSU INTELLECTUAL PROPERTY POLICY

A. Bayh-Dole Act

Obligations of Universities and Other Nonprofit Organizations: By accepting federal funds in support of a research project, institutions assume responsibility for complying with the requirements of the Bayh-Dole Act. In general, the nonprofit institutions are required to:

1. obtain written agreements from all employees (except clerical and non-technical personnel) recognizing their obligations to report inventions developed under federally-funded programs to the appropriate university office and assign them to the institution;
2. disclose an invention to the federal agency supporting the applicable research program within two months after the inventor discloses an invention in writing to the institution;
3. elect title to the invention within two years after disclosing the invention to the federal agency but no later than 60 days before the end of any statutory period in which valid patent protection can be obtained in the U.S.;
4. file a patent application within one year after election of title, but no later than the end of any statutory period in which valid patent protection can be obtained in the U.S.;

5. include at the beginning of the U.S. patent application and patent a statement that the U.S. Government has rights in the invention and identifying the sponsoring agency and the number of the funding award;
6. submit to the funding agency a confirmatory license for each U.S. patent application;
7. notify the funding agency within 10 months after filing the initial patent application whether and in which countries corresponding foreign applications will be filed;
8. submit periodic reports, no more frequently than once a year, regarding the utilization of the invention as requested by the funding agency;
9. notify the funding agency at least 30 days before statutory deadlines if a patent application or patent will be abandoned;
10. give preference to issuing licenses to small business firms if they show they have the resources and capability to bring the invention to practical application;
11. except with permission of the funding agency, not assign rights to inventions to third parties (except to patent management firms), including to the inventor;
12. require any exclusive licensee to substantially manufacture in the U.S. any products that will be sold in the U.S., unless this requirement is waived by the funding agency;
13. share with the inventor(s) of the invention a portion of any income the institution receives from the licensing of the invention;
14. use the balance of income received from the licensing of the invention (after costs associated with patenting and licensing are reimbursed) to support education and scientific research.

B. Proposed Copyright Policy

1. Policy Objective

The creation of copyrighted works is one of the ways the CSU fulfills its academic mission of contributing the body of knowledge of its students, faculty and staff for the public good. Benefits for students, faculty, the CSU and the public derive from the ongoing development and dissemination of intellectual properties in the CSU. The CSU encourages the creation of original works of authorship and the free expression and exchange of ideas for the professional development of its faculty and staff, and most importantly for the persistence, academic and career success of its students.

United States Copyright Office *Circular 09* states:

Section 101 of the [Copyright Act](#) (Title 17 of the U.S. Code) defines a “work made for hire” in two parts: (a) a work prepared by an employee within the scope of his or her employment, or (b) a work specially ordered or commissioned for use. If a work is made for hire, an employer is considered the author even if an employee actually created the work. The employer can be a firm, an organization, or an individual.⁶

⁶ United States Copy Right Office, Circular 09 Work Made For Hire Under the 1976 Copyright Act, <http://copyright.gov/circs/> accessed June 17, 2015

2. Policy Statement

This policy establishes [University](#) and auxiliary ownership rights and release of ownership rights of copyrightable works based on types of work, whether the work was created using [CSU Resources](#) and any obligations of the University, auxiliary or [Author](#) pursuant to grants, contracts or other agreements with third parties. The CSU and campus auxiliaries aim to allocate intellectual property rights so as to optimally support the mutual interests of the CSU, faculty, staff and students. The ownership interest of the University, auxiliary and Author may be limited by sponsorship arrangements under which a third party furnished some or all of the resources that supported the work.

This policy is intended to enhance Article 39, Intellectual Property Rights, of the Unit 3 Collective Bargaining Agreement. Where there are conflicts between this policy and Article 39, Article 39 takes precedence. Copyrightable works that are also patentable shall also be subject to the CSU Patent Policy.

3. Types of Copyrightable [Works](#) and [Assignment](#) of Rights

Scholarly/Aesthetic Work:

A scholarly/aesthetic work is a work originated by a [Designated Academic Appointee](#) resulting from [Independent Academic Effort](#) (e.g., books, articles, photographs, drawings, etc.). Subject to other sections of this policy, ownership of copyrights to scholarly/aesthetic works resides with the Author, unless the Author previously agreed otherwise by separate individual agreement.

Personal Work:

A personal work is a work that is prepared outside the employee's [Scope of Employment](#) and without the use of CSU Resources. Ownership of copyrights in personal works resides with the Author.

Student Work:

A student work is a work produced by a registered student that is produced outside any CSU employment and is not a sponsored, contracted or commissioned work. Ownership of copyrights to student works resides with the Author. For jointly-created works between students or students and faculty refer to Section 2 of this policy.

CSU Course Materials:

CSU course materials include [Course Approval Documents](#) and [Course Instructional Materials](#). CSU Course Approval Documents include syllabi, course numbers, catalog descriptions, student learning outcomes and course outlines for CSU courses. Ownership of Course Approval Documents developed without [CSU Extraordinary Support](#), including copyright, resides with the Author. However, in all cases CSU (and the auxiliary as appropriate) retains a free-of-cost, perpetual and nonexclusive worldwide license to use the Course Approval Documents for research and educational purposes, including without limitation the right to reproduce, prepare derivative works, distribute and display the Course Approval Documents.

CSU Course Instructional Materials include documents, digital products or other materials developed for instruction of CSU courses. Ownership of Course Instructional Materials developed without CSU Extraordinary Support, including copyright, resides with the Author. In all cases, however, CSU (and the

auxiliary as appropriate) retains a free-of-cost, perpetual and nonexclusive worldwide license to use the Course Instructional Materials for research and educational purposes, including without limitation the right to reproduce, prepare derivative works, distribute, perform and display the Course Instructional Materials.

Ownership of CSU course materials (including Course Approval Documents and Course Instructional Materials) created with [CSU Extraordinary Support](#), including copyright, resides with the University. The University may provide a free-of-cost, perpetual and nonexclusive worldwide license to the Author to use the course materials for educational and research purposes.

Externally Sponsored Work:

A sponsored work is a work first produced by or through a CSU campus in the performance of a written agreement between the campus and an external sponsor. Ownership of copyrights to sponsored works resides with the University unless the sponsored agreement states otherwise.

CSU Commissioned Work:

A commissioned work is a work produced for CSU purposes by individuals not employed by CSU or an auxiliary, or by CSU employees either with CSU Extraordinary Support or outside their Scope of Employment. When CSU or an auxiliary commissions a scholarly/aesthetic work or CSU course materials, in the absence of a specific written agreement assigning ownership between the CSU (or auxiliary) and the Author(s), rights are as assigned in those respective sections of this policy. When CSU or an auxiliary commissions the production of another type of work, copyright ownership is specified in a written agreement and title normally resides with the University or auxiliary, as appropriate. Any such agreement that provides for ownership by other than CSU must also provide the CSU with a free-of-cost, perpetual and nonexclusive, worldwide license to use and reproduce the copyrighted work for research and educational purposes, including without limitation the right to reproduce, prepare derivative works, distribute, perform and display the work.

Institutional Work:

Except as otherwise provided in this policy, CSU owns all copyrights to works made by CSU employees in their Scope of Employment and owns all copyrights to works made with the use of CSU Resources.

4. Copyright Ownership of Jointly Originated Works

Campuses (and auxiliaries where appropriate) establish a process for determining Copyright ownership of jointly originated works by separately assessing the category of work and contribution of each author, including faculty, students and staff of that campus. Rights between joint owners of a copyright will be determined pursuant to copyright law.

5. Release of Rights

Campuses (and auxiliaries where appropriate) establish fair processes for determining when release of ownership rights may be appropriate.

Subject to restrictions arising from overriding obligations of the University or auxiliary pursuant to grants, contracts or other agreements with third parties, the University or auxiliary may release its ownership rights in copyrighted works to the Author(s), as determined by the Author's campus or

campus auxiliary, when the best interests and educational mission of the CSU would be better served by such action. Such release of ownership rights are contingent upon the agreement of the Author(s) that no further effort on, or development of, the work will be made using CSU Resources and that CSU (and auxiliary where the auxiliary is the funding party) is granted a free-of-cost, perpetual and nonexclusive, worldwide license to use the work for research and educational purposes, including without limitation the right to reproduce, prepare derivative works, distribute, perform and display the work (the president or designee may make reasonable exceptions to this requirement).

6. Licensing

The CIPO is responsible for the management of copyrights, including assignment and licenses. Refer to Guidelines for more information.

7. Royalties

Campuses and auxiliaries establish a process for sharing of royalties or income from University and auxiliary-owned copyrighted works within the parameters set forth in this policy. Subject to restrictions arising from overriding obligations of the University or auxiliary pursuant to gifts, grants, contracts or other agreements with outside organizations, campuses and/or auxiliaries shall pay annually to the named Author(s), or the Author(s) heirs, successors or assigns, net royalties from the copyrighted work ranging between 25% and 50%, as determined by the Author's campus or campus auxiliary. Revenue sharing should be equitable and take into consideration the proportion of the Author's contribution, CSU costs, any provisions imposed by sponsors or other funding sources and any other applicable agreements concerning the copyright. CSU costs may include campus, auxiliary or Chancellor's Office expenditures (direct or indirect) related to management and licensing of copyrighted works, among others.

In the event that the share of net licensing income (generated by intellectual property covered by this Copyright Policy and the Patent Policy) distributed to any Campus or associated auxiliary providing tech transfer services exceeds the operating costs of such services in any fiscal year, such Campus or auxiliary pay to the CSU for that fiscal year 5% of the net licensing revenues and income received by the Campus or auxiliary in excess of the operating costs of its tech transfer services. All licensing income paid to the CSU is used in CSU's systemwide efforts to support research and innovative endeavors resulting in intellectual property, including without limitation providing assistance with tech transfer and licensing efforts, protection and enforcement of intellectual property rights and providing support and training to CSU faculty, staff and students on intellectual property issues.

8. Definitions

Assign/Assignment: Transfer of copyright ownership rights from one person/entity (the "assignor") to another (the "assignee").

Author(s): One who produces a work by his or her own intellectual labor, including CSU faculty, students and staff. When there is more than one author, the ownership of each author's contribution is considered separately pursuant to this Policy.

Copyright: The intangible property right granted by Federal statute for an original work fixed in a tangible form of expression. Copyright provides the owner with the following exclusive rights in a work:

to reproduce, to prepare derivative works, to distribute by sale or otherwise, to perform publicly and to display publicly.

Course Approval Documents: Include, but may not be limited to syllabi, course numbers, catalog descriptions, course outlines and student learning outcomes.

Course Instructional Materials: Include, but may not be limited to documents, digital products or other materials developed for instruction of CSU courses.

CSU (or University): The Trustees of the California State University or California State University System, which includes all 23 individual campuses within the California State University System. For purposes of this Policy, the term CSU (or University) also includes associated CSU campus auxiliary organizations where the auxiliary organization is the entity responsible for management of copyrights and licensing of intellectual property or is assigned the rights to the copyrighted works for the benefit of the CSU.

CSU Extraordinary Support: Support provided by the CSU, a campus or an auxiliary for work beyond regular CSU assignments may include, but not be limited to, funding for additional employment, assigned time and other forms of payment, additional operating expenses or additional equipment or facilities costs.

CSU Resources: Any combination of the following constitute support in the form of resources by the CSU:

- CSU, campus or auxiliary funds, regardless of source, that are administered under the control, responsibility or authority of the CSU or auxiliary;
- Staff, including student assistants, support staff, administrative support, etc.; or
- Use of facilities, including buildings, equipment or any other facility or asset under the control of the CSU or a campus auxiliary.

Designated Academic Appointee(s): Employees who have a general obligation to produce scholarly/aesthetic works as part of the scope of their employment. Included are all employees with an academic or instructional faculty appointment or employees otherwise designated by the president or president's designee as having the obligation to produce scholarly/aesthetic works.

Independent Academic Effort: Inquiry, investigation or research carried out by designated academic appointees to advance knowledge or the arts where the specific choice, content, course and direction of the effort is determined by the designated academic appointee without direct assignment or supervision by the CSU. The general obligation of designated academic appointees to produce scholarly/aesthetic works as part of the scope of their employment is considered independent academic effort.

Permissible Consulting Activities: Professional or scholarly services provided by CSU employees for outside compensation, which do not interfere with regular CSU duties, do not utilize CSU resources and are not prohibited by terms of the CSU employment contract or other applicable CSU agreements or policies.

Scope of Employment: Any work the employee is expected to perform as part of the employee's assigned duties, including work that contributes to the employee's tenure, promotion or professional development and/or work performed with the use of CSU Resources or under an externally-sponsored

agreement. Excludes work performed outside of the employee's CSU appointment and not performed with the use of CSU Resources (see [Permissible Consulting Activities](#)).

Work(s): Any copyrightable expression including, but not limited to, literary works; musical works including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic and sculptural works; motion pictures and other audiovisual works; sound recordings; architectural works; and computer software.

C. Proposed Patent Policy

1. Policy Objective

The California State University (CSU) fosters innovation and encourages faculty, staff and students to translate results from their research, scholarly and creative activities for public benefit. In addition to the public benefit, these activities directly support the CSU's mission to educate students. Participation in research projects, scholarly work and creative activities has been proven to contribute to student academic and career success and increased graduation rates.

2. Policy Statement

Patents provide a means to encourage the development and utilization of inventions. In administering rights to inventions and patents for the public benefit where the CSU or an auxiliary retains an interest in an invention, the CSU and auxiliaries aim to encourage and assist members of the faculty, students and staff in the use of the patent system. The CSU and auxiliaries determine ownership of patentable inventions in a manner that is equitable to all parties involved. The aim of promoting the progress of research by using the benefits of the patent system is consistent with the purposes for which it was established by Article I, Section 8, of the Constitution of the United States.

This policy is guided by Federal law and ethics, which require the disclosure of inventions achieved with federal grants. For instance, the Bayh-Dole Act requires universities to report inventions resulting from federally funded projects (see [Regulations](#) for complete list). The law also mandates that institutions have procedures for commercialization of disclosed inventions since economic development is a public good.

The president designates a Campus Intellectual Property Officer (CIPO) as the authorized campus representative who is responsible for the management of inventions and patents, including, but not limited to, assignment and licensing as decided or recommended by the Campus IP Committee. It is the responsibility of the designated CIPO, under direction of the president, to establish and maintain procedures that achieve the following objectives:

- Provide appropriate encouragement and education to create a culture for research, creativity, innovation and entrepreneurship by faculty, staff, students and others associated with the CSU;
- Establish and maintain a Campus IP Committee, as needed, to advise on matters related to inventions and patents;
- Establish guidelines, processes and practices for determining the interests of the University, auxiliary, [Inventors](#) and Sponsors in regard to inventions;
- Develop processes to determine and pursue the best use of the invention for the public good and/or to support the mission of the University; and
- Safeguard the interests of the University, auxiliary, Inventor and Sponsor.

3. Invention Disclosure

Campuses and auxiliaries maintain a process for management and review of invention disclosures and make recommendations regarding the best use of disclosed inventions.

Inventors promptly and fully disclose to the Inventor's campus (and auxiliary where appropriate) all inventions conceived of, improved upon or reduced to practice while employed by the CSU. Inventors execute such declarations, assignments or other documents as may be necessary to assure that title to certain inventions are held by the University (or auxiliary where appropriate) or other designated parties in compliance with this policy. If the research/invention is supported by federal funds, the Inventor's campus (or auxiliary where appropriate) disclose the invention to the federal agency supporting the applicable research program within two months after the Inventor discloses the invention in writing to the campus or auxiliary.

4. Multiple Inventors

Invention disclosures list all Inventors – faculty, students and others. Campuses and auxiliaries should establish a process for determining each inventor's contribution to the invention and for ensuring equitable royalty sharing among the inventors prior to filing a patent application, consistent with the parameters for royalty sharing set forth within this policy.

5. Rights to Inventions and Patents

An agreement to [assign](#) inventions and patents to the University (or auxiliary where campus policy requires assignment of such rights to the campus auxiliary), except those resulting from permissible consulting activities without the use of CSU Resources, is mandatory for all employees, for persons not employed by the CSU but who use CSU Resources and for those who receive grant or contract funds through the CSU. Such an agreement may be in the form of an acknowledgment of obligation to assign.

Inventors assign invention and/or patent rights to the University (or auxiliary where campus policy requires assignment of such rights to the campus auxiliary) for inventions first conceived or reduced to practice under any of the following circumstances:

- within their [Scope of Employment](#);
- with the use of [CSU Resources](#);
- under an externally funded agreement awarded to the CSU or auxiliary; or
- under an appropriately authorized 3rd party agreement (for non-funded agreements).

The CSU or auxiliary may return rights to the Inventor when the best interests and mission of the CSU are better served by such action, as long as there is no further use of CSU Resources and no overriding obligations to third parties, including outside sponsors of research.

There is no joint ownership between the University and auxiliary and the Inventor. Rights to inventions or patents resulting from collaborative research of multiple Inventors from different entities are addressed among the parties in a separate written agreement.

Assignment does not apply to any invention that qualifies fully under the provisions of the California Labor Code Section 2870, which states, "*(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either: (1) Relate at the time of conception or reduction to practice of the invention to the*

employer's business, or actual or demonstrably anticipated research or development of the employer; or (2) Result from any work performed by the employee for the employer. (b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable."

6. Patent Protection & Trade Secrets

Patent Protection: The Inventor's campus (or auxiliary where appropriate) is responsible for receiving and managing invention disclosures. Campuses and auxiliaries establish and maintain a process for determining within 90 days of invention disclosure: (1) whether disclosed inventions are rightfully owned by the University or auxiliary; (2) whether the University or auxiliary release or retain rights in disclosed inventions; and (3) when/whether the University or auxiliary seek patent protection.

Trade Secrets: Certain inventions or technologies may be licensable to industry as trade secrets. When kept secret, a trade secret gives its owner a competitive advantage over those who do not have access to the secret. In order to protect a trade secret, it is necessary for those having access to the trade secret to be bound by a contractual agreement preventing them from disclosing it. Use of trade secret protection should be approved by the University but should be used sparingly and cautiously. However, if public disclosure will inhibit a company's willingness to invest the necessary funds for product development and commercialization, the University or auxiliary, in consultation with the disclosing employee, may license the subject invention as a trade secret. Inventions falling within this category are subject to the Royalties section of this policy.

7. Royalties

Campuses and auxiliaries determine equitable distribution of income/royalties resulting from inventions within the parameters set forth in this policy. Subject to restrictions arising from overriding obligations of the University or auxiliary pursuant to gifts, grants, contracts or other agreements with outside organizations, campuses and/or auxiliaries, depending on which entity owns the intellectual property rights, pay annually to the named Inventor(s), or the Inventor(s) heirs, successors or assigns net royalties from the patented invention ranging between 25% and 50%, as determined by the Inventor's campus or auxiliary (where appropriate). Distribution takes into consideration the proportion of the Inventor's contribution, CSU costs, any provisions imposed by sponsors or other funding sources and any other applicable agreements concerning the invention. CSU costs may include campus, auxiliary or Chancellor's Office expenditures (direct or indirect) related to patent management from invention disclosure through licensing, including patent prosecution, maintenance and tech transfer administration, among others. When appropriate, income distribution must be in compliance with the [Bayh-Dole Act](#).

In the event that the share of net licensing income (generated by intellectual property covered by this Patent Policy and the Copyright Policy) received by any Campus or associated auxiliary providing tech transfer services exceeds the operating costs of such services in any fiscal year, such Campus or auxiliary pays to the CSU for that fiscal year 5% of the net licensing revenues and income received by the Campus or auxiliary in excess of the operating costs of its tech transfer services. All licensing income paid to the CSU is used in CSU's systemwide efforts to support research and innovative endeavors resulting in intellectual property, including without limitation providing assistance with tech transfer and licensing efforts, protection and enforcement of intellectual property rights, and providing support and training to CSU faculty, staff and students on intellectual property issues.

8. Student Inventions

Students assign invention and/or patent rights to the University (or auxiliary where campus policy requires assignment of such rights to the campus auxiliary) for inventions first conceived or reduced to practice under any of the following circumstances:

- collaborating on research projects with CSU faculty members (including faculty-supervised graduate thesis or dissertation work);
- as a student or research assistant employed by or commissioned by the CSU or auxiliary; or
- under an externally funded agreement awarded to the CSU or auxiliary.

Except for those situations identified above, any invention conceived or first reduced to practice by a student at the CSU during the normal course of their education (including homework assignments, laboratory experiments, and special and independent study projects) is owned by the student. The University does not claim ownership of such inventions.

Situations may occur where students are presented with the opportunity to participate in projects or activities in which the ownership of any resulting inventions must be assigned either to the University or auxiliary, or to a sponsoring entity (such as a company), as a condition of the student's participation. Students are never required to participate in projects or activities that relinquish the student's rights to the invention to the University, auxiliary or another entity. In situations where participation is required for course completion but the student is not prepared to waive their rights, the University must provide an alternative that allows the student to retain rights to their inventions.

9. Reporting

Campuses will report the following information to the Chancellor's Office annually (by September 30th of each fiscal year):

- number of Invention Disclosures received;
- new patent applications filed;
- new licenses and options executed;
- gross license income received;
- licenses/options yielding income;
- legal fees expended;
- legal fees reimbursed;
- U.S. patents issued;
- total cost of campus or auxiliary provided tech transfer services; and
- net license income supporting campus or auxiliary provided tech transfer services.

Information reported will be used to inform the Chancellor and Board of Trustees and assist the Chancellor's Office in identifying resources necessary to support CSU innovation.

10. Definitions

Assign/Assignment: Transfer of patent ownership rights from one person/entity (the "assignor") to another (the "assignee").

CSU (or University): The Trustees of the California State University or California State University System, which includes all 23 individual campuses within the California State University System. For purposes of this Policy, the term CSU (or University) also includes associated CSU campus auxiliary organizations where the auxiliary organization is the entity responsible for management of intellectual property, compliance with the Bayh-Dole Act or is assigned the rights to the invention for the benefit of the CSU.

CSU Resources: Any combination of the following constitute support in the form of resources by the CSU:

- CSU, auxiliary or campus funds, regardless of source, which are administered under the control, responsibility or authority of the CSU or auxiliary;
- CSU staff, including student assistants, support staff, administrative support, etc.; or
- use of facilities, including buildings, equipment and any other facility or asset under the control of the CSU or campus auxiliary.

Inventor: CSU faculty, staff or students who contribute intellectually to the conception of a claimed invention.

Permissible Consulting Activities: Professional or scholarly services provided by CSU employees for outside compensation, which do not interfere with assigned CSU duties, do not utilize CSU Resources, and are not prohibited by terms of the CSU employment contract or other applicable CSU agreements or policies.

Scope of Employment: Any work the employee is expected to perform as part of the employee's assigned duties, including work that contributes to the employee's tenure, promotion or professional development and/or work performed with the use of CSU Resources or under an externally sponsored agreement. Excludes work performed outside of the employee's CSU appointment and not performed with the use of CSU Resources (see [Permissible Consulting Activities](#)).

Trade Secrets: Information that qualifies under the Uniform Trade Secrets Act, Cal. Civil Code § 3426 et seq., including a formula, pattern, compilation, program, device, method, technique or process, that derives independent economic value from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. Cal. Civil Code § 3426.1(d).

PART TWO: Recommendations to the Chancellor

I. INTRODUCTION AND EXECUTIVE SUMMARY

A. Project Concept

In adopting *Access to Excellence* as the strategic plan for the California State University (“CSU” or “University”), the CSU Board of Trustees affirmed long-standing goals of the CSU to create and provide top-quality, higher-education opportunities that help students in California to be successful and well-prepared as future citizens, leaders and workers of the state.⁷ In addition, the plan focuses on the major role CSU has to play in shaping the economic, political and social environment of the State of California.⁸ The increasing importance of research and development, and the rapid advancement in technology, is likely to shape expectations for excellence in higher education.

As part of its mission, CSU aims to promote an academic environment where creative works, innovation and entrepreneurship are encouraged and supported. This mission is guided by well-established academic values and practices, including, among others, academic freedom and with it the privilege to generate and disseminate new knowledge. To that end, CSU supports the development of policies and procedures that express a sincere commitment to help support the production, dissemination and commercialization of intellectual property by its faculty members, students, employees and affiliates in a fair and equitable manner.

Many CSU faculty are actively involved in research, technology development, creative works and other scholarly activities across a wide spectrum of disciplines that have the potential to generate intellectual property. CSU’s diverse pool of talented faculty have interest and expertise in applied domains such as agriculture, engineering, water systems, biotechnology, coastal and marine sciences, energy efficiency, alternative energy, transportation, human factors in technology design and health and education. Increasingly, CSU is being engaged in the translation of new knowledge generated by research for commercial purposes through technology transfer. Annually, CSU has nearly \$0.6 billion in sponsored project expenditures and a survey of the total holding in grant and contract equity in the Science Technology Engineering and Mathematics (STEM) related areas conducted in April 2015 totaled over \$0.5 billion in multi-year funding, involving nearly 4000 faculty researchers and tens of thousands of students.

CSU has long recognized that engagement of students in research and other scholarly activities is a powerful tool for achieving student success: positively affecting analytic and critical thinking, increasing academic achievement and retention, clarifying choice of academic major, developing important teamwork and soft skills and promoting enrollment in graduate school admissions. Research experiences also provide the necessary skills to translate theoretical information into practical knowledge, allowing students to compete successfully for jobs and opportunities and participate effectively in the workforce after graduation. Student researchers, therefore, have the potential to conceive and generate intellectual property with commercial value and their rights and privileges must also be recognized and considered.

⁷ See *Access to Excellence Accountability Plan* available at <http://www.calstate.edu/accesstoexcellence/executive-summary.shtml>.

⁸ *Id.*

CSU's excellence in teaching and learning is achieved in part with the creative production of educational materials by our faculty, staff and students. Recognizing, protecting and sustaining the intellectual property created through our teaching and learning processes requires comprehensive copyright and licensing policies that faculty, staff and students understand and support. The institutional services to enable the consistent and timely application of copyright and licensing policies must be part of CSU's intellectual property strategy and should include easy access to information, professional development and consultation services.

Currently, CSU lacks any centralized policy or system to adequately support research, technology development and other creative endeavors among its faculty, staff and students. Recent efforts to promote student success and to encourage faculty entrepreneurship have highlighted the challenges faced by those interested in developing intellectual property. The legal and interpretive issues surrounding such policies can be very complex. Specifically, the wide disparity of intellectual property policies across those CSU campuses that have policies, and the absence of any policy on others, makes it difficult to provide consistent, accurate and relevant systemwide advice to the campuses when questions on intellectual property matters arise. Further, CSU's decentralized approach to addressing intellectual property issues often fails to provide the necessary structure and support to those engaged in research and development, particularly when issues of protection and technology transfer arise.

The IP Committee has been asked to evaluate the many challenges campuses face involving intellectual property, and to provide a recommendation on how CSU can best address these issues and provide the support necessary to encourage research and development of intellectual property among its faculty, staff and students. The IP Committee submits the following five recommendations for consideration, which are discussed more fully later in this report:

1. Develop and provide additional systemwide intellectual property support and guidance on technology-transfer and commercialization-related activities at the Chancellor's Office;
2. Develop and provide additional training and guidance to the CSU community on intellectual property matters;
3. Identify a Campus Intellectual Property Officer on each campus; and
4. Establish a Campus IP Committee on each campus to evaluate intellectual property.

By centralizing the CSU approach to intellectual property matters, this document aims to resolve some of the issues identified to better support CSU's historical mission to educate and further the intellectual endeavors of its students, faculty and staff by encouraging research, scholarship and creative activities.

This document should not be viewed in isolation but should be considered together with other relevant policies including those on academic freedom, conflict of interest and those related to intellectual property generated from sponsored research. We recognize that the rules and practices regarding intellectual property are dynamic and changing. While not explicitly discussed, due consideration needs to be given to the shifting academic practices towards an open educational ecosystem and the general movement for institutions of higher learning, as well as some federal funding agencies, to require all copyrightable intellectual property created with grant funding to offer open-source licensing. Indeed, at the time of writing, the Office of Educational Technology in the Department of Education announced a notice of proposed rulemaking advancing new regulation that would require all copyrightable intellectual property created with Department discretionary competitive grant funds to have an open-

source license. Any policies that are ultimately generated from these recommendations must, therefore, be considered living documents that may evolve and change over time.

B. Acknowledgements to Contributors and Authors

Members of the IP Committee were drawn from the ranks of Chancellor’s Office Business and Finance, Human Resources and Academic Affairs administrators, the Office of the General Counsel, campus-based Academic Affairs administrators and Research Auxiliary administrators, systemwide Affinity Group leaders and experts in fields such as advancement and technology transfer. The members of the IP Committee were chosen to ensure that the proposed recommendations receive input from multiple viewpoints, including from individuals with substantial knowledge and expertise in technology transfer and intellectual property matters, as well as those who work directly with faculty, staff and students and could therefore identify many of the problems and concerns these demographics face when participating in research.

This document capitalizes on the expertise of the members of the IP Committee as well as the experiences of those CSU campuses that have well-developed intellectual property and technology transfer capabilities. This plan also builds on the recommendations of the 2008 Joint Task Force on Patents and Technology Transfer and the 2011 report issued by the CSU Technology Transfer Implementation Task Force suggesting a more consistent approach on intellectual property protection and technology transfer.

Name	Title	Location
Jennifer Glad <i>(Co-Chair)</i>	University Counsel	Chancellor’s Office
Zed Mason <i>(Co-Chair)</i>	Interim AVC for Research Initiatives & Partnerships	Chancellor’s Office
Bradford Anderson	Interim VP for Research & Economic Development	San Luis Obispo
Susan Baxter	Executive Director, CSU Program for Education & Research in Biotechnology (CSUPERB)	San Diego
Sue DeRosa	Director of Sponsored Programs	Chancellor’s Office
David Dowell	Provost	Long Beach
Andrea Gunn-Eaton	University Counsel/Business & Finance Team Leader	Chancellor’s Office
Gerry Hanley	AVC for Academic Technology Services	Chancellor’s Office
Denice Helwig	Chief of Staff	Humboldt
Grace Liu	Grants & Research Administrator/ Intellectual Property Counsel	Fresno
Tommy Martindale	Director of Technology Transfer	SDSU Research Foundation
Margaret Merryfield	AVC for Academic Human Resources	Chancellor’s Office
Alison Sanders	Interim AVP for Research/ Director of Research & Sponsored Programs	San Francisco
John Swarbrick	AVC for Labor Relations	Chancellor’s Office

Marie Talnack	Director, Technology Transfer Office and Industry Clinic	Pomona
Shawna Young	Interim Director of Research & Sponsored Programs	Stanislaus

II.RECOMMENDATIONS

A. Recommendation 1: Develop IP Support and Guidance Function in the CO Office of Research

Systemwide support should be developed to provide guidance and resources on intellectual property issues to individual campuses. Specifically, the Research Office within the Chancellor’s Office should provide additional support and guidance to campuses on intellectual property, technology-transfer and commercialization activities, including by supporting, educating and identifying resources for each campus on intellectual property disclosure, protection and commercialization.

The creation of this function and support for the campuses is important to demonstrate that the new recommended policies come with a serious commitment by the CSU to provide the necessary support, especially to the small campuses with limited resources, to effectively implement the policies at each campus. It is envisioned that the Research Office will be available to work or consult with the Campus IP Officer (“CIPO”; see Recommendation 4, below) to support campus intellectual property activities. The IP Committee recommends that the Research Office would provide the following support and guidance to campuses:

1. Design, administer, and manage *IP, You and the CSU*—a CSU website dedicated to intellectual property issues, including policies, tech transfer training, FAQs, templates, etc. (see Recommendation 3 below);
2. Train and/or support the CIPOs where needed, including:
 - Clarifying the CSU systemwide Patent and Copyright Policies;
 - Helping the CSU with regulatory compliance and reporting;
 - Consulting with CIPO’s on issues of intellectual property ownership;
 - Directing CIPO’s to CSU resources for patent, copyright and licensing expertise, including experts to evaluate invention disclosure for patentable subject matter;
 - Working with CIPOs to protect intellectual property where appropriate, including working with experts to determine the estimated cost of protecting inventions; and
 - Working with CIPOs and outside vendors on tech transfer and commercialization matters.
3. Develop best practices documents, guidelines and checklists for campuses on intellectual property issues, including on invention disclosure, licensing and tech transfer;
4. Monitor and stay current on tech transfer-related regulations and intellectual property management best practices;

5. Design and/or support programs (e.g., I-Corps™ or Startup Quest) for faculty and student inventors to learn how to develop inventions for licensing and commercialization;
6. Track and publicize intellectual property activity, costs and revenue on campuses;
7. Assist, as appropriate, in the identification and securing of external resources and funding for entrepreneurship and the development and commercialization of intellectual property; and
8. Work with stakeholders systemwide to fund and design additional programs and support mechanisms to add value and make CSU technologies ready for commercialization.

B. Recommendation 2: Provide Additional Training and Guidance to CSU Community

The IP Committee recommends that the CSU provide additional training and guidance to the CSU community on issues related to intellectual property. Providing adequate training and education to CSU administrators, faculty, staff and students is an essential part of an effective intellectual property program. Indeed, creating programs that successfully encourage innovation and commercialization of intellectual property requires that faculty, staff and students have a better understanding of what intellectual property is and what can be protected. It also requires that CSU administrators and auxiliaries have easy access to a comprehensive and authoritative library of information and resources to help answer questions from faculty, staff and students about intellectual property issues that arise during the course of their programs, scholarship, research and other activities at CSU.

Any training and educational materials must be both accessible and easy to use in order to provide the greatest benefit. To that end, the IP Committee recommends creating a website, managed by the Research Office in conjunction with Academic Technology Services within the Chancellor’s Office, to provide relevant, current and authoritative educational resources to CSU community members on intellectual property issues. This website—*IP, You and the CSU*—will serve as an open library resource for the various training and reference materials related to a wide range of intellectual property topics. The training materials and resources may include a variety of training presentations (e.g., PowerPoint presentations, webinars and Skillport-type training materials), a calendar of upcoming internal and external training opportunities, document templates, a series of FAQs, information on exemplary practices, intellectual property policies and at-a-glance summaries and a list of non-CSU resources and organizations that provide information, training and additional resources related to intellectual property for higher education. These materials will help explain, among other things:

1. What is “intellectual property”?
2. What are my obligations to disclose intellectual property to the CSU?
3. Who owns the intellectual property rights of invented/created ideas, products or materials?
4. What rights are granted under patent, copyright and trademark law?
5. Is an invention or creation protectable under patent, copyright or trademark law?
6. What steps should be taken to protect my intellectual property rights?
7. When should I consider protecting my intellectual property rights?
8. What is technology transfer?

Responding to questions about intellectual property can best be accomplished with an understanding of the context or circumstances within which the issues arise. The design of the website resources will be

guided by this principle and the Frequently Asked Questions (FAQs) will address issues for CSU administrators and auxiliaries, as well as the authors or inventors of intellectual property, by describing typically encountered scenarios, along with analyses that help users understand the intellectual property issues and policies involved and the likely outcome. These scenarios will also be followed by a set of guidelines or checklists for administrators to consider when responding to the particular issue.

To support CSU administrators, auxiliaries and intellectual property creators being more proactive (vs. reactive) in developing their intellectual property strategy for a project, the website will provide easy access to a library of template agreements that can further help address intellectual property issues involving tech transfer, licensing and invention disclosure, among others. Templates, compliant with Federal, State and CSU guidance or regulations, will be created for the most common agreements based on input from the various campus and auxiliary documents. These documents include assignment agreements, non-disclosure agreements, cooperative research and development agreements, inter-institutional agreements on research and development, invention disclosure forms and material transfer agreements. CSU campuses and auxiliaries may refer to these documents to supplement existing agreements, or use them in their entirety if appropriate.

Convenient access to information resources, reference and policy documents and template agreements can be very helpful in supporting and scaling effective intellectual property practices, but more is needed. Systematic professional development of personnel to assure sufficient expert capabilities of CSU and auxiliary staff related to the ever-changing landscape of intellectual property issues, policies, practices and laws is essential for CSU's intellectual property strategy.

In addition to the training website, the IP Committee recommends that intellectual property training courses be developed and provided to campus, auxiliary and Chancellor's Office personnel. The intellectual property training courses can be developed by CSU-based subject matter experts, other CSU staff with intellectual property or tech transfer expertise and/or external professional organizations. The IP Committee recommends the CSU explore the possibility of having CSU Extended Education create additional training materials and courses that can efficiently and effectively address differences in skill and knowledge levels, as well as differences in the focus of the presentation, whether it be understanding the basics of patent law or information related to tech transfer. CSU's Extended Education division has the expertise to develop and deliver fully online, hybrid and face-to-face training. The intellectual property training strategy will need to be designed and offered in ways that are attractive to the different stakeholder groups needing the training and Extended Education has significant experience in doing so.

The library of resources within the *IP, You and the CSU* website and the various training opportunities need to be developed and managed to deliver the intellectual property support services in scalable, sustainable, reliable and authoritative ways. To accomplish these goals, the IP Committee recommends that the Campus IP Officers, in collaboration with the Assistant Vice Chancellor for Research and the Research Office, develop processes for the development, management and assessment of these intellectual property support services on an ongoing basis.

C. Recommendation 3: Identify a Campus Intellectual Property Officer on Each Campus

This report recommends that campus presidents designate a Campus Intellectual Property Officer ("CIPO") on each campus. While each campus already has resources dedicated to research

administration and related intellectual property matters, including issues around creative endeavors and scholarship, most do not have a designated campus point-of-contact on intellectual property issues. As research expenditures grow across the CSU, there is an increasing need for reporting around invention disclosures to comply with Bayh-Dole regulations. Most importantly, faculty, students and administrators need a local resource to provide guidance, answer questions and point to expertise on intellectual property issues. See [Appendix 2](#) for more details on suggested CIPO roles, responsibilities and strategies for implementation and sustainability.

The CIPO will be responsible for:

1. answering intellectual property questions that arise on campus and managing a process to address them;
2. assessing the campus needs for educational training and other intellectual property-related resources;
3. receiving and managing invention disclosures from campus inventors;
4. establishing, under the direction of the president, a committee (the “Campus IP Committee”) and a process for making recommendations or decisions involving intellectual property assignments, protection and commercialization;
5. coordinating the Campus IP Committee process, as needed, to make recommendations or decisions regarding the retention or release of rights to disclosed intellectual property – the CIPO should serve as a convener or chair and committee member and will also be responsible for recording and reporting on the recommendations and decisions made;
6. tracking subsequent development of the technological innovation or creative work where rights are not released to the inventor or author;
7. managing any intellectual property reporting requirements to the Chancellor’s Office, inventors or other regulatory agencies (ensuring compliance with the Bayh-Dole Act);
8. coordinating with the Research Office in relaying any campus-specific concerns/issues and any needed intellectual property support from the Office of the Chancellor or external resources; and
9. attending systemwide intellectual property training events.

D. Recommendation 4: Establish a Campus IP Committee on Each Campus

This report recommends that campus presidents establish or maintain a campus intellectual property committee (“Campus IP Committee”) to make campus-based decisions regarding intellectual property assignments, protection and commercialization. While we propose systemwide patent and copyright policies, we strongly recommend that the implementation of these policies and the operational decisions around intellectual property issues be made at the campus or auxiliary level. Sponsored research often drives development of intellectual property and such contracts generally vest ownership in the University or a campus auxiliary. The Campus IP Committee should include members experienced with tech transfer, faculty inventors and external domain experts in management and/or commercialization of intellectual property.

The Campus IP Committee will be responsible for deciding or making recommendations, on a case-by-case basis, on:

1. ownership of any intellectual property rights (e.g., sponsoring organization, University, auxiliary, author/inventor);
2. whether the University or auxiliary will release or retain rights to disclosed inventions; and
3. whether the University or auxiliary will seek to protect intellectual property rights on disclosed inventions.

III. FINANCIALS AND RESOURCES NEEDED

A. Financial Support Recommendation

The Research Office within the Chancellor's Office will be responsible for providing guidance and support to CSU campuses and auxiliaries to encourage innovation and tech transfer, as well as to assist campuses and auxiliaries with meeting their regulatory obligations (e.g., Bayh-Dole). The IP Committee recommends that each campus pay an annual fee of \$10,000 to help support the support and guidance functions of the Research Office proposed herein, including providing training and guidance on tech transfer and licensing activities, among others. The \$10,000 annual fee recommendation resulted from discussions with CSU campuses of various sizes. Rather than use a tithing methodology based on research expenditure volume, which might normally seem appropriate, the anticipation is that campuses will use this resource in varying degrees depending on the campus infrastructure, capabilities and resources.

B. Prospects for Profitability

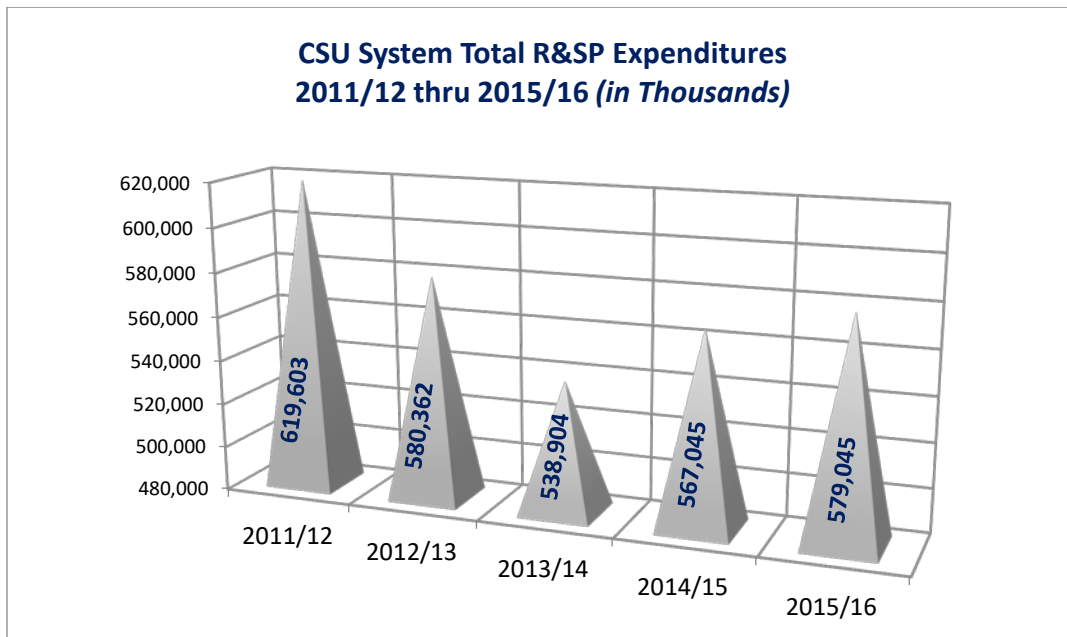
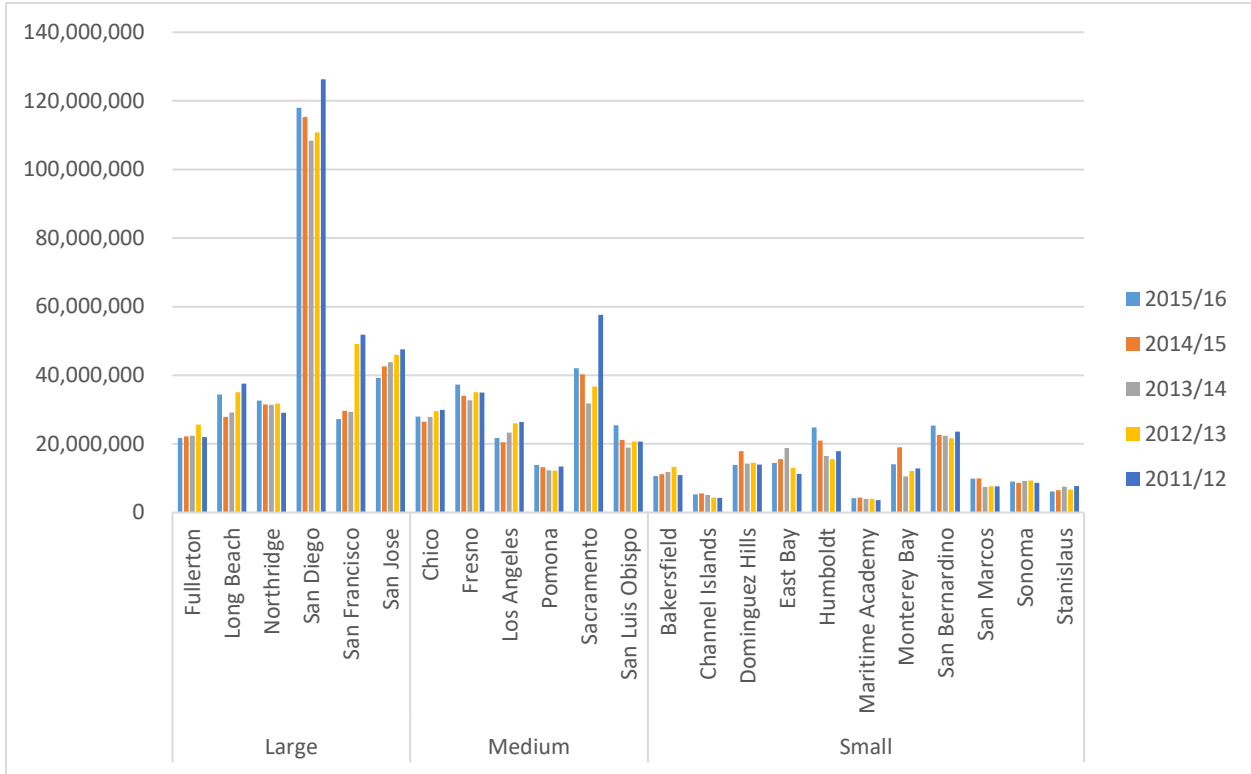
Research shows that tech transfer activities for higher education institutions are generally not profitable enterprises. Indeed, a recent survey by AUTM reported that on average 87% of university tech transfer offices operate at a loss.⁹ While we anticipate that the adoption of a systemwide intellectual property policy and investments in tech transfer will stimulate the development and transfer of intellectual property, the IP Committee's recommendations are not motivated by profit. Instead, the primary goals are to comply with the Bayh-Dole Act, increase student success, invest in and support faculty, staff and students in their professional development and to capture their ideas as intellectual property to be translated for the public good. Increasing our capacity for deriving intellectual property and promoting the tech transfer process will make our campuses more attractive to research partners, thereby generating more sponsored research funding. It is anticipated that the majority of any income from intellectual property will be in the form of license revenue, not realized for several years (e.g., 4-10 years) after invention disclosures are filed on campus. As royalty income and other income are generated, campus and auxiliary procedures will identify how funds will be shared for each invention within the parameters specified in the systemwide patent and copyright policies.

⁹ Walter D. Valdivia, *University Start Ups: Critical for Improving Technology Transfer*, Center for Tech. Innovations at Brookings (Nov. 2013) at 9. See also [Appendix 3](#) for excerpts from the AUTM report.

IV. APPENDICES

Appendix 1: CSU Research & Sponsored Program (RSP) Expenditures

5-Year Analysis of Total EXTERNAL RSP Expenditures: FY2011/12 through FY2015/16*



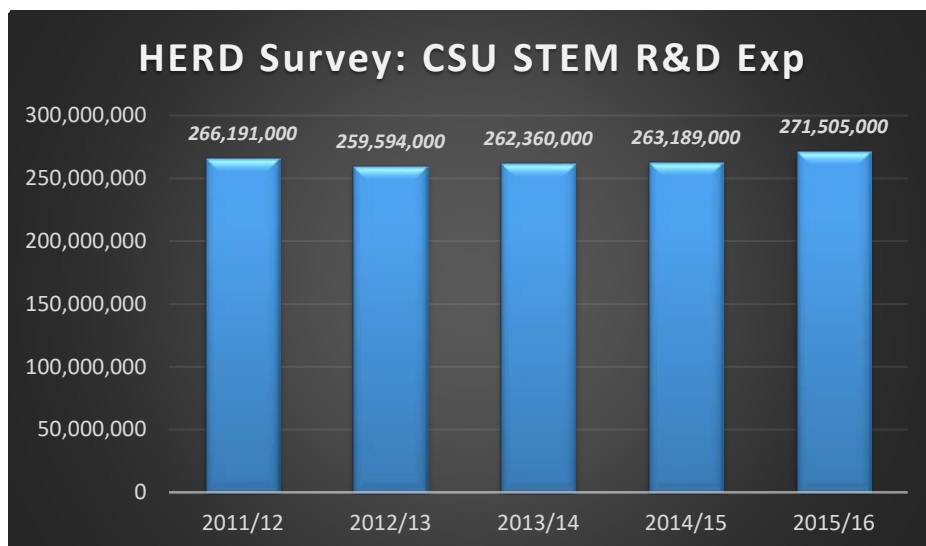
* Decrease in expenditures from 2011/12 related to reduction in federal expenditures due to the end of ARRA (American Recovery and Reinvestment Act) spending.

5-Year Summary of CSU R&D Expenditures – reported to the HERD (Higher Education R&D) Survey

Summary of STEM and Total R&D Expenditures from the HERD Survey
FY2011/12 through FY2015/16

R&D Field	ALL R&D Exp	(All Sources, INCLUDING Institution Funds)					
STEM & Non-STEM							
Sum of Total Exp	FY						
Campus	2011/12	2012/13	2013/14	2014/15	2015/16	Grand Total	5-Year Av
Bakersfield	1,241,000	2,602,000	2,432,000	3,192,000	3,161,000	12,628,000	2,525,600
Channel Islands	524,000	1,236,000	3,862,000	1,949,000	1,383,000	8,954,000	1,790,800
Chico	2,492,000	2,868,000	2,384,000	1,837,000	2,363,000	11,944,000	2,388,800
Dominguez Hills	2,894,000	4,671,000	4,733,000	2,557,000	4,582,000	19,437,000	3,887,400
East Bay	1,039,000	934,000	934,000	530,000	837,000	4,274,000	854,800
Fresno	8,359,000	7,682,000	8,109,000	8,624,000	24,976,000	57,750,000	11,550,000
Fullerton	22,222,000	18,478,000	7,919,000	5,611,000	5,755,000	59,985,000 *	11,997,000
Humboldt	9,510,000	8,025,000	8,306,000	11,218,000	22,777,000	59,836,000	11,967,200
Long Beach	16,446,000	12,796,000	10,097,000	8,830,000	16,390,000	64,559,000	12,911,800
Los Angeles	7,192,000	7,659,000	5,172,000	5,010,000	5,371,000	30,404,000	6,080,800
Maritime Academy	2,793,000	2,480,000	1,011,000	1,542,000	2,205,000	10,031,000	2,006,200
Monterey Bay	6,567,000	6,129,000	4,787,000	5,492,000	5,680,000	28,655,000	5,731,000
Northridge	29,491,000	9,640,000	12,991,000	13,333,000	16,330,000	81,785,000 *	16,357,000
Pomona	6,597,000	6,988,000	5,455,000	4,611,000	5,254,000	28,905,000	5,781,000
Sacramento	14,053,000	15,564,000	13,136,000	17,930,000	20,676,000	81,359,000	16,271,800
San Bernardino	9,303,000	11,942,000	13,582,000	15,317,000	10,771,000	60,915,000	12,183,000
San Diego	92,867,000	86,733,000	95,674,000	93,572,000	90,722,000	459,568,000	91,913,600
San Francisco	30,291,000	33,885,000	29,457,000	26,345,000	28,273,000	148,251,000	29,650,200
San Jose	34,727,000	38,326,000	43,509,000	45,037,000	41,662,000	203,261,000	40,652,200
San Luis Obispo	17,412,000	16,067,000	15,096,000	16,312,000	18,081,000	82,968,000	16,593,600
San Marcos	5,995,000	8,809,000	8,302,000	6,432,000	6,634,000	36,172,000	7,234,400
Sonoma	825,000	1,938,000	1,714,000	1,163,000	693,000	6,333,000	1,266,600
Stanislaus	1,881,000	1,342,000	1,136,000	1,080,000	1,248,000	6,687,000	1,337,400
Grand Total	324,721,000	306,794,000	299,798,000	297,524,000	335,824,000	1,564,661,000	312,932,200

* Corrections made in HERD Survey response in 2012/13, previous years total external funds were repored, not just R&D expenditures



Appendix 2: Recommended Strategies for Implementation and Sustainability

At most CSU campuses, the time commitment of a Campus Intellectual Property Officer (CIPO) is estimated to be only 40-120 hours per year. Other campus resources required would be basic intellectual property tracking software systems (possibly already in use on campus), committee members and ongoing training on the intellectual property decision-making process and reporting decisions required to comply with the Bayh-Dole Act.

At campuses with established technology transfer capacity, campus presidents may wish to appoint a technology transfer professional to serve as the CIPO and/or serve in an advisory capacity to the decision-making process. Campuses lacking adequate expertise to orchestrate this process may also contract with outside vendors or other CSU Campus Tech Transfer Offices for services such as patent search and initial invention triage to support retain or release decisions.

As invention disclosures are filed on campus, determination of intellectual property ownership can usually be made within the framework of the proposed CSU Copyright Policy and Patent Policy, taking into account the research sponsor, if any. The CIPO and Campus IP Committee reviews the submitted invention disclosure form and gathers evidence to determine whether the invention was developed: (1) within the scope of employment; (2) with the use of university human resources, facilities, equipment, supplies, materials and/or other campus-provided resources; or (3) under an externally-funded agreement awarded to the campus.

This report recommends a commercialization-based model in which rights to inventions are released when evidence suggests commercialization or patentability is unlikely and the interests and mission of the CSU are best served by such action. The CIPO and Campus IP Committee should first review disclosed inventions for patentability. Depending on resources, consultations with campus-based or external subject matter experts, with relevant technical expertise and/or a contract intellectual property service provider are advised. If the invention is not likely to be patentable, consideration should be given to whether the disclosed technology/work may be protected with copyright (software, literary works, etc.) or as a trade secret. In the case of non-patentable intellectual property, no filing or registration is necessary. If the invention is determined not to be protectable, the CIPO should notify the disclosing inventor(s) in writing of the institution's decision not to pursue patent protection and return the rights to the invention to the disclosing inventor(s) or funding agency, whichever is appropriate.

If the Inventor's campus decides to protect disclosed inventions, the CIPO and the Campus IP Committee should have a process to continually assess patent applications. Investment decisions to pursue patent applications are made at each juncture in filing and prosecution. The most important and expensive decision is whether to file a non-provisional application one year after filing a provisional patent application. The CIPO and Campus IP Committee should have a process to determine whether to continue investment prior to incurring additional expenses based on the invention's evolving commercialization prospects. In the case that the intellectual property is subject to a license or option agreement obligating a third party to cover patent expenses, the decisions to continue protection would be automatic.

It is difficult to predict the monetary value of an early-stage invention; only the market can determine the value of a patent. However, at an early stage, it may be possible to identify possible licensing targets, identify significant barriers to entry and assess whether the technology can be reasonably be

productized (technical feasibility). Innovation and commercialization programs can help gather market evidence regarding an invention's commercial potential. This kind of evidence can be useful for decisions about retaining or releasing patent rights both before and after patent filing. Assessing whether the technology meets a market need *prior* to patenting is ideal, but the process of gathering evidence to make that judgment may exceed the window in which patent protection is available (before public disclosure). A systemwide program for faculty inventors would serve as an extremely valuable resource to Campus IP Committees not affiliated with a tech transfer office.

As individual CSU campuses grow their number of invention disclosures and face these ownership and commercialization decisions, CIPOs can consult with Office of the Chancellor personnel or other CSU CIPOs that have patent prosecution or commercialization expertise. Over time, the advisory capacity of this systemwide network of CIPOs and Campus IP Committees will grow, providing ongoing professional support to each other and the CSU's faculty, student and staff inventors and innovators.

Appendix 3: Excerpts from National Survey Data from AUTM

AUTM TT Practice Manual Excerpts

AUTM Technology Transfer Practice Manual™  3rd Edition	Volume 2
	Part 1 Chapter 5
Page 13	Strategies for Managing Internal and External Constituencies <i>Patricia Weeks</i>

versity technology licensing, only 31 cases have generated more than \$1 million or more in cumulative royalties. One in 4,850 has been a big winner.³

In fact, experience tells us that, on average, it takes up to ten years for an institution to obtain a positive rate of return. Around the world, the cost of an effective technology transfer system is about 1 percent of research and development. An invention disclosure rate of \$2 million to \$2.3 million of research per invention disclosure is remarkably consistent across the United States and around the world.⁴

AUTM Technology Transfer Practice Manual™  3rd Edition	Volume 2
	Part 1 Chapter 2.3a
Page 7	The University of Virginia Patent Foundation: A Midsized Technology Transfer Foundation Focused on Faculty Service, Operated Using a Deal-Based Business Model <i>Robert S. MacWright, PhD, Esq.</i>

censed patents. The benefits of operating under this deal-based business model are described in the last section of this chapter. Of course, this approach requires that the combined technology transfer budget is adequate. A combined technology transfer budget equal to about 1 percent of a university's research budget should, in most cases, be sufficient for success.