IPIRA
Office of Intellectual Property
& Industry Research Alliances

Socially Responsible Licensing at U.C. Berkeley

An Intellectual Property Management Strategy to Stimulate Research Support & Maximize Societal Impact

What: A program begun in 2003 to:

- Promote widespread availability of technology and healthcare, including in the developing world
- Share revenue and/or other benefits with those who collaborate with U.C. Berkeley researchers
- Give proper attribution to a research source or collaborator
- Maximize the societal benefit of technologies developed at U.C. Berkeley
- Stimulate additional investment by others to achieve these goals

Why: As owners of intellectual property Universities must demonstrate good IP management and use our resources for public benefit to effect lasting societal change

- Most technology transfer occurs in traditional ways (teaching, graduates, consulting, informing).
- Good stewards of IP think of broad implications when making University results proprietary.
- Good stewards don't impede public access to vital technologies for research and for humanitarian purposes, including cures.
- Berkeley's technology transfer is reflective of Berkeley's culture. Berkeley has a strong record of public service and an established reputation for providing public access to tools.
- Help for the economically disadvantaged world is a moral imperative. Countries with resources should help those that are resource-poor.
- The opportunity cost of giving away University-generated therapies, diagnostics, and

other research technologies for free (or at the mere cost of manufacture and distribution) to partners who will diligently develop and distribute products for the developing world is low compared to the societal benefit.

- The University retains IP rights outside the "charitable purpose" for commercialization in developed countries by other parties under standard terms. Giving away rights for a "charitable purpose" in developing countries (where commercial licensees would not secure IP rights or sell products anyway) usually does not affect commercial markets in developed countries.

- Universities can stimulate business & societal change through the creation of new markets for additional nonprofit product development companies.

- In research agreements, a requirement that a (future) licensee under this program must make products available for free (or at cost) in specific non-developed countries leverages our mutual resources many times by attracting collaborations, research funding, donations, support.

- The Socially Responsible Licensing Program engenders new contracting models under which "bench to bedside" translational research is accelerated, transaction costs are reduced, and start up companies are bootstrapped with philanthropic donations.

Sample Contracts:

1) <u>License to the Sustainable Sciences Institute</u> (SSI, a nonprofit company)
Hand-held MEMS immuno-diagnostic (Dengue fever, Nicaragua). Royalty free sales in certain countries for as long as SSI retains nonprofit status. Achieves our mutual goal of providing a low-cost diagnostic to developing world.

2) <u>Research Collaboration and Revenue Sharing Agreement: Commonwealth of Samoa</u>
Antiviral compound from mamala tree bark. Possible HIV drug. Attribution to Samoa (naming plasmids, etc.) Access to native trees, local experts, facilitation of exports. Revenue sharing if a drug is commercialized. Berkeley will exert reasonable efforts in licensing IP for public benefit, keeping in mind UC Berkeley's and Samoa's mutual goals of providing low cost therapies for free, at cost, or with minimal profit in the developing world.

3) <u>License to a Nonprofit Ag-biotech Company</u>
For agricultural solutions to plant disease resistance. Under the license, no-cost sublicenses are available in "least developed" countries.

4) <u>TB Vaccine Research Agreement with For-Profit Biotech Company</u>
If a vaccine is invented from company sponsorship under this agreement, vaccine distribution will be royalty free in certain countries.

5) <u>3-party Collaborative Research Agreement Coupled to Two License Agreements: Malaria Therapy</u>
$42.6M funding from Bill and Melinda Gates Foundation for collaborative research between The Institute for One World Health (IOWH), Amyris Biotechnologies, Inc., and U.C. Berkeley.

Malaria drug from wormwood. $8M basic research funding for Berkeley, $12M for Amyris Biotechnologies, Inc. for translational research, ~$23M for clinical and regulatory approvals at IOWH.

6) <u>Enhanced Sorghum Research Collaboration Agreement</u>

More nutritious and more digestible sorghum for Africa. Funded by a Grand Challenges in Global Health (which is funded by the Bill & Melinda Gates Foundation, the Wellcome Trust, and the Canadian Institutes of Health Research) grant to the Africa Harvest Biotechnology Foundation International. Berkeley's contribution to the partnership with Pioneer Hi-Bred and Africa Harvest involves making sorghum more digestible and therefore more nutritionally available to humans as a food source.

7) <u>Several research agreements from federal and foundation sources</u>

Advance commitment from Berkeley to grant royalty free licenses for humanitarian use.

8) <u>Research Collaboration and Visitor Agreement: Aquaya Institute</u>

Low-cost water treatment products using anti-microbial coatings may be developed from this research collaboration, making clean drinking water accessible in Economically Disadvantaged Countries (“EDCs”). A separate field study is also being conducted to determine influences on end user adoption of several existing products with proven treatment performance.