Conclusion

Answering the Call: The Intellectual Property & Business Formation Legal Clinic at Washington University

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The five articles in this symposium volume have focused on specific aspects of three broad issues: (1) biodiversity loss and what is to be done about it; (2) the national and international debates over the appropriate legal protection and regulation of agricultural biotechnology in view of its potential impact on the problem of biodiversity loss; and (3) the legal protection of traditional knowledge as a means of conserving and promoting sustainable use of biological diversity. As the last of these five articles, by Michael Gollin, points out, one of the principal obstacles in responding effectively to any of these international issues is the lack of access to affordable intellectual property legal counsel in many parts of the developing world where the majority of the earth's biodiversity is located.

Just as the *pro bono* organization, Public Intellectual Property Advisors (PIIPA), that Michael Gollin was instrumental in organizing, is responding to this need by matching prospective clients with existing IP professionals and strengthening IP counseling and management resources in developing countries, so too the Intellectual Property and Technology Law Program¹ at Washington University School of Law is seeking to respond by establishing an Intellectual Property and Business Formation Legal Clinic, a primary objective of

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^{1.} For a description of the Intellectual Property & Technology Law Program, see http://law.wustl.edu/LLMIP/Fall2004/WashU_IPbroch.pdf [hereinafter IPTL Brochure].

which will be to develop expertise in the overlapping fields of biodiversity, agricultural biotechnology, and traditional knowledge protection and to make that expertise available, both to prospective developing-country clients and to local IP professionals who wish to participate in the *pro bono* activities of PIIPA. Funded in part by a generous grant to Washington University by the Ewing Marion Kauffman Foundation,² as a part of its Campus Entrepreneurship Initiative, the Intellectual Property and Business Formation Legal Clinic will begin operations on January 10, 2005.

The Clinic's activities will initially be devoted to four program areas, each of which will involve teams of two students, who will:

- Participate in interdisciplinary innovation and entrepreneurship courses at the University, such as the Senior Design Course in the Department of Biomedical Engineering,³ and the Hatchery course in the Olin School of Business⁴;
- Work with St. Louis-area business incubators, such as the Nidus Center for Scientific Enterprise⁵;
- Work with non-profit organizations, such as the St. Louis Volunteer Lawyers and Accountants for the Arts⁶ and Public Interest Intellectual Property Advisors⁷;
- Work with two St. Louis area research organizations, the Missouri Botanical Garden⁸ and the Donald Danforth Plant Science Center,⁹ on international projects involving genetic

^{2.} See http://www.kauffman.org. For a description of the Kauffman Campus Entrepreneurship Initiative, see http://www.kauffman.org/news.cfm/396. For a description of the Washington University grant, see http://news-info.wustl.edu/news/page/normal/599.html.

^{3.} See http://biomed.wustl.edu/courses/bme_401/ bme_401.asp.

^{4.} For a description of this course and the Skandalaris Entrepreneurship Program at the Olin School of Business, see http://www.olin.wustl.edu/entrepreneurship/PDF/SEP.pdf.

^{5.} See http://www.niduscenter.com.

^{6.} See http://www.vlaa.org.

^{7.} See http://www.piipa.org.

^{8.} For an introduction to the research activities of the Missouri Botanical Garden, see http://www.mobot.org/plantscience/default.asp.

^{9.} See http://www.danforthcenter.org.

resources, biotechnology, and the protection of traditional medicinal and agricultural knowledge.

Each of these four program areas will enable Washington University law students, working under the supervision of an experienced intellectual property attorney who will serve as the Administrative Director of the Clinic and Lecturer in Law,¹⁰ to develop expertise in providing early-stage legal assistance to innovators in a variety of contexts. The four teams of students and their specific activities are as follows:

1. The Interdisciplinary Innovation Team will provide legal expertise in two interdisciplinary innovation courses offered at Washington University. The Biomedical Engineering Design course is a capstone design experience to prepare undergraduate engineering students for engineering practice.¹¹ These engineering students, together with graduate business, law, and graphic design students, will work in small groups to develop an original design or redesign of a component or system of biotechnological significance. The design experience will incorporate engineering standards and realistic constraints, including consideration of economics, the environment, sustainability, manufacturability, as well as ethical, health and safety, social and political requirements. The student teams will prepare written reports and present their designs orally to a panel of faculty members and industrial representatives. Law students will be responsible for conducting patent searches and identifying other legal issues that are relevant to the design and commercialization process. The Hatchery course, which is a part of the Skandalaris Entrepreneurship Program at the Olin School of Business,¹² enables teams of students to support entrepreneurs from the St. Louis community, and will include interdisciplinary teams that will work with the University's Office of Technology Management¹³ to assess

^{10.} The Administrative Director for the Intellectual Property & Business Formation Legal Clinic is Mr. David Deal, formerly a patent attorney with the St. Louis law firm of Thompson Coburn, and a patent examiner with the U.S. Patent and Trademark Office. Mr. Deal is a graduate of the University of Missouri-Columbia School of Law, and a *magna cum laude* graduate of the University of Missouri-Columbia School of Engineering.

^{11.} See supra note 3.

^{12.} See supra note 4.

^{13.} For a description of the operations of the Office of Technology Management, see

the feasibility of commercializing various of the University's scientific discoveries, including those made by the Medical and Engineering Schools. Here, too, law students will be responsible for conducting patent searches and identifying other legal issues that are relevant to the commercialization process.

2. The Business Incubator Team will work primarily at the Nidus Center for Scientific Enterprise, which was established in 2000 to assure the success of start-ups and early stage plant and life science companies.¹⁴ The team will also develop and present training modules for and at the Center for Emerging Technologies,¹⁵ a publicprivate-academic partnership founded in 1995 to develop specialized services and facilities to accelerate the growth of advanced technology companies in the St. Louis region. At the Nidus Center, law students will also work for BioGenerator,¹⁶ an incubator-withinan-incubator, which is designed to fill a gap-sometimes called the valley of death or a no-man's land-in the progression, from academic research to revenue, in the creation of a company. BioGenerator will work closely with the technology transfer offices of Washington University and St. Louis University, to identify company concepts with the most potential, and then provide funding for such things as proof-of-concept tests, market research and management consultants, preparatory to applying for space at one of the St. Louis area business incubators.

3. The *Pro Bono Team* will work with the St. Louis Volunteer Lawyers & Accountants for the Arts (VLAA)¹⁷ and the Public Interest Intellectual Property Advisors (PIIPA)¹⁸ to provide assistance to St. Louis area attorneys who are providing pro bono legal assistance in the fields of copyright, trademark and patent law, as well as associated matters relating to business formation, contracts, and acquisition of non-profit tax exempt status, to qualifying clients. The St. Louis VLAA provides free legal and accounting assistance and sponsors a wide range of educational programs for artists and art

http://roles.wustl.edu/OfficeTechnologyManagement.htm.

^{14.} See supra note 5.

^{15.} See http://www.emergingtech.org.

^{16.} See http://www.biobelt.org/news/pd_110103.html.

^{17.} See supra note 6.

^{18.} See supra note 7.

administrators. PIIPA is an international non-profit organization that makes intellectual property counsel available for developing countries and public interest organizations seeking to promote health, agriculture, biodiversity, science, culture, and the environment. PIIPA will engage in three main activities: (1) expanding a worldwide network of IP professional volunteers (the IP Corps); (2) operating a processing center where assistance seekers can apply to find individual volunteers or teams who can provide advice and representation as a public service; and (3) building a resource center with information for professionals and those seeking assistance. Working under the supervision of the Administrative Director of the Intellectual Property & Business Formation Legal Clinic, the *Pro Bono Team* will develop, provide training modules for, and work with a St. Louis node of IP lawyers participating as PIIPA volunteers.

4. The International Research Team will work with the Missouri Botanical Garden¹⁹ and the Donald Danforth Plant Science Center²⁰ on national and international research projects. For example, the Missouri Botanical Garden partners with a number of other research organizations, including the Donald Danforth Plant Science Center, and is currently partnering with the University of Missouri-Columbia (UMC) and the University of Western Cape (UWC) in South Africa, in The International Center for Indigenous Phytotherapy Studies (TICIPS), directed by Bill Folk (UMC) and Quinton Johnson (UWC), a new and unique project designed to test traditional South African herbal remedies in contexts ranging from in vitro assays to a clinical trial.²¹ During the summer of 2004, a rising third-year Washington University Law School J.D. student, Edward Kim, served as a summer intern at the University of Western Cape, working on the Center's proposed intellectual property policy,²² and will be a member of the Clinic's inaugural International Research Team. Likewise, the Donald Danforth Plant Science Center partners, not only with the Missouri Botanical Garden,²³ but also with a variety of

^{19.} See supra note 8.

^{20.} See supra note 9.

^{21.} See http://www.mobot.org/MOBOT/research/diversity/medicinalPlants.htm.

^{22.} See IPTL Brochure, supra note 1, at 3.

^{23.} See supra note 21.

other organizations, including an organization called Public Sector Intellectual Property Resource (PIPRA),²⁴ an initiative by a variety of universities, foundations and non-profit research institutions to make agricultural technologies more easily available for development and distribution of subsistence crops for humanitarian purposes in the developing world and specialty crops in the developed world.²⁵ The *International Research Team* will work on this and other intellectual property-related projects at the Danforth Center.

The activities of the Intellectual Property and Business Formation Legal Clinic will be supported by an associated Center for Research on Innovation and Entrepreneurship, a university-wide research center, housed at the law school, and likewise initially funded by the Kauffman Campus Entrepreneurship Initiative.²⁶ The Center is committed to becoming a premiere research center for Washington University, the larger St. Louis research community, and other academic, government, and private sector entities interested in bridging the gap between research and development (R & D) in academia. The Center will focus its conceptual and empirical research activities on the research and development process itself to explore how optimally to "move R to D," particularly with respect to university and other early-stage public or non-profit research.

The research activities of the Center will include both directed research, in the form of periodic academic conference and workshops, and administration of a university-wide competitive grant program to support individual and collaborative group research on innovation and entrepreneurship. For its inaugural directed research project, the Center is planning a fall 2005 academic conference on the topic, "Commercializing Innovation," which will bring together leading thinkers in diverse fields to develop modern tools and strategies for improving the complex process of innovation commercialization, with a focus on both domestic and international implications.²⁷ As a part of its competitive grant program, the Center

^{24.} For a description of the Danforth Center's involvement with PIPRA, see http://www.mobot.org/MOBOT/research/diversity/medicinalPlants.htm. For a more detailed description of the activities of PIPRA, see http://www.pipra.org/.

^{25.} See http://www.pipra.org.

^{26.} See supra note 2.

^{27.} See IPTL Brochure, supra note 1, at 7.

recently announced the award of eight entrepreneurial research grants, the first year of funding for which totals over \$140,000, to Washington University faculty members who applied for funding for a variety of individual research projects focusing on some aspect of innovation and entrepreneurship. Included among the research grants funded is a \$21,250 research grant to the author for a project entitled "A Pilot Project to Collect Data and Design an Empirical Study on the Impact of Early-stage Access to Affordable Intellectual Property and Business Formation Legal Services on the Innovative Process," will utilize the experience of the Intellectual Property & Business Formation Legal Clinic to examine how early-stage access to affordable legal services (and the lack thereof) affects the innovative process. This grant will be supplemented by an additional \$18,750 from undesignated directed research funds of the Center. Thus, the Clinic will not only provide valuable professional service; it will also serve as a valuable research tool to determine the effect of early-stage access to affordable legal services on the innovative process.

The Clinic will also seek outside grant funding to support exchange programs that will provide lawyers and law students from the developing world with full-tuition scholarships to enroll in the law school's Intellectual Property LLM Program,²⁸ and will provide Washington University law students with summer internships, similar to the experience of Washington University law student, Edward Kim, in South Africa, in the summer of 2004,²⁹ and Washington University alumna, Susanna E. Clark, who in the summer of 2003 arranged an internship with the Peruvian Environmental Law Society, in Lima, Peru, as a result of having participated in an international academic conference held at Washington University in April 2003,³⁰ which included a number of participants in the International Cooperative Biodiversity Group (ICBG)-Peru Project³¹ (one of a

^{28.} For a description of the law school's IP LLM program, see http://law.wustl.edu/ LLMIP.

^{29.} See supra note 22 and accompanying text.

^{30.} For a summary of the conference agenda, video clips, and conference papers, see http://law.wustl.edu/centeris/pastevents/biodivsp02.html.

^{31.} For a detailed description of the ICBG-Peru Project, and Washington University's leading role in it, see Charles R. McManis, *Intellectual Property, Genetic Resources and Traditional Knowledge Protection: Thinking Globally, Acting Locally*, 11 CARDOZO J. INT'L &

number of ICBG projects funded by the National Institutes of Health,³² including representatives of the Peruvian Environmental Law Society.³³

The goal of the Intellectual Property & Business Formation Legal Clinic in all of its activities will be to highlight, both to law students and to the legal profession as a whole, that the purpose of national and international intellectual property law is a public one—to "Promote the Progress of Science and the useful Arts"³⁴—and that the protection and enforcement of intellectual property rights "should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, to a balance of rights and obligations."³⁵

34. U.S. CONST. art. I, § 1, cl. 8.

35. Agreement on Trade Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, December 15, 1993, 33 I.L.M. 81 (1994), *available at* http://www.wto.int.

COMP. L. 547, 570-76 (2003)

^{32.} For a description of the NIH-funded ICBG projects, see id., at 565-69.

^{33.} For two published products of Ms. Clark's summer internship, see Manuel Ruiz, Isabel Lapeña & Susanna E. Clark, *The Protection of Traditional Knowledge in Peru: A Comparative Perspective*, 3 WASH. U. GLOBAL STUD. L. REV. 755 (2004); and Jorge Caillaux & Susanna E. Clark, Chapter 6, *A Brief Review of Legislation on Access to Genetic Resources and the Protection of Traditional Knowledge in Selected Megadiverse Countries*, INTELLECTUAL PROPERTY AND BIOLOGICAL RESOURCES (Burton Ong, ed.) (2004).