Useful links for Inventors/Creators

General Guides for Inventors

<u>Understanding Technology Transfer</u> <u>Intellectual Property Resources</u> <u>Laboratory Notebooks Guide(s)</u> (see Chapter 8)

Search Databases and Intellectual Property Sites

<u>United States Patent and Trademark Office</u> <u>United State Copyright Office - Library of Congress</u> <u>Patent Cooperation Treaty (PCT) Office</u> <u>European Patent Office</u>

For VCU Entrepreneurs

Virginia Biotech Research Park
VCU Conflict of Interest Policy
VA Small Business Assistance
National Venture Capital Association
The Venture Forum

Technology Transfer Basics

Research and Intellectual Property

The research you do at Virginia Commonwealth University may lead to useful products, processes, or services. In order for your discovery to move towards commercialization it is critical that you seek legal protection of it as intellectual property. Such protection is key to technology transfer: the flow of your research results to the marketplace. Successful commercialization of a discovery or invention can bring benefit to society, for example by the application of a medical advance or a new computer algorithm. It can also be a lucrative proposition for your research laboratory and for you personally, by generating licensing and royalty revenues. You play the determining role in technology transfer by recognizing the commercial potential of your work and by knowing what steps to take to protect it. The VCU Tech Transfer aims to provide the educational, advisory, and financial resources to help you in this regard.

How to Begin

So you've decided your results are of potential commercial value. What next? Immediately contact the VCU Tech Transfer to discuss your discovery or invention. This office is staffed by experienced professionals who can help you evaluate the potential of your work and guide you through the preparation and filing of an <u>Invention Disclosure Form</u>. This is easy to do and it's an important first step towards achieving the needed protection. It is so easy and so important to execute an Invention Disclosure that a good rule of thumb is: "When in doubt, prepare an Invention Disclosure"!

What Not To Do

If you have decided your work has potential commercial value there are certain things you should <u>not</u> do before consultation with VCU Tech Transfer. Do not submit your work for publication anywhere, including writing about it in an abstract to be submitted to a meeting. Don't present it in any venue as a seminar, short talk, or poster presentation. It's probably best not even to write about your discovery in an e-mail to anyone other than your collaborators. Don't discuss it with any industry partners before a patent application is filed and a confidentiality agreement is put in place. A good time to submit an invention disclosure is when you have prepared a first draft of a manuscript for publication.

Laboratory Notebooks and Intellectual Property

A lab notebook is an integral part of a professional research program and provides legal evidence of the conception and development of an invention. VCU owns the notebooks generated by VCU members. A good laboratory notebook may also help a patent attorney determine who is an inventor. You should obtain and use a hardbound notebook that is sequentially page numbered. Entries in notebooks should be in ink and should be dated and signed by you. We recommend having a colleague 'across the hall' to read and sign your notebook whenever you believe that you may have recorded a potentially valuable invention (see http://www.niehs.nih.gov/ofcd/files/hhmi-book.pdf for additional information).

Preparing the Invention Disclosure

You can find an invention disclosure form at http://www.research.vcu.edu/forms/InventionDisclosure.doc. The form has thirteen areas that require input, and provides basic instructions for completing each area. You should be as thorough as

possible when completing the form, and be sure to include all dates requested. The disclosure form requires signatures of all inventors. If a paper or thesis is the basis for submitting an invention disclosure, you should attach the latest draft to the form. If commercialization is the goal, always submit an invention disclosure before submitting a scientific paper or an abstract to a publisher. We will review the disclosure in its entirety and make a preliminary decision about ownership and the invention's potential commercial value and patentability. In some instances, we may ask an outside patent firm to conduct a patentability search.

Technology Assessment

Following receipt of an invention disclosure, and the completion of the formal assignment of the ownership from the inventors to VCU, the invention disclosure is assigned to a technology manager. The technology manager will review the technology and may meet with you to gather more information about the invention. The technology will be reviewed for its patentability and for its commercial potential. The patentability assessment will help determine the probability of getting a patent to issue for the invention and how broad the issues patent claims might be. The commercial assessment helps determine how large the market is for the invention, the market need for new technologies, regulatory hurtles that a potential licensee may face in getting to market and how accepting the market is to new technologies. The development stage of a technology will be considered as well.

Intellectual Property Protection

The two most common forms of intellectual property protection are patents and copyrights. A patent is a set of exclusive rights granted for a fixed period of time (usually 20 years from the filing date) that allow the public disclosure of an invention. When a patent is in force others are forbidden from using or selling your invention. Patents are used to protect devices, materials, processes, and improvements to any of these. Copyrights are exclusive rights granted by a government for a limited time to protect the particular form, way or manner in which an idea or information is expressed. They do not protect the idea itself.

Copyrights are commonly used to protect writings, images, or computer software programs. Some copyright protections given to your work as soon as it is reduced to a tangible form (on paper, computer hard disk, etc.). Additional protection can be obtained by copyright registration with the government.

If selected for commercialization, the technology manager will direct our outside patent counsel to file a *provisional* patent application with the U.S. Patent and Trademark Office (PTO) soon as possible. Briefly, a provisional patent application is a method of reserving a filing date for patentable inventions. The provisional patent application contains all information you include in the disclosure form and may contain additional information. Often, manuscripts being prepared from your work provide all the information needed for our patent counsel to complete the provisional patent application. The legal fees are paid by the VCU Tech Transfer.

Marketing Your Invention

After filing a provisional application, the technology manager begins to market the technology to potential licensees. We have several resources at our disposal to determine the most likely licensees, however input from the inventors is critical for successful commercialization of the invention. A non-confidential summary is sent to companies that are likely to be interested. If a company expresses interest, it will be asked to sign a confidentiality agreement (to protect patent rights) prior to receiving confidential information. If the company continues to be interested, an agreement with the company is negotiated. This can be a letter of intent, an option, or a license. If the VCU Tech Transfer can not find a licensee for the invention, but there is a significant potential market for that intellectual property, a conversion to full patent must be made within one year of the provisional patent application. VCU Tech Transfer directs and pays for the patent prosecution and maintenance until a suitable licensee is found.

Licensing Your Invention

The two major factors determining the licensing decision are: (1) what kind of licensing is most likely to lead to rapid commercialization; and (2) what kind of licensing is in the public interest. It is standard for VCU to transfer intellectual property through royalty-bearing licenses, rather than patent title assignment. By maintaining control of its patents, the university allows commercial use and reserves the rights for educational, research, and other internal purposes.

Commercializing Your Invention

After a license agreement is executed, VCU Tech Transfer will continue to work with the company to ensure that company is diligently commercializing the discovery and is paying all monies due to the University. Any revenues received from licensing are shared according to the VCU Intellectual Property Policy as follows:

- 40% to VCU-IPF
- 10% to inventors' department
- 10% to inventors' school.

Return for Further Development or Return to Inventors

Some inventions disclosed to VCU Tech Transfer are not yet ready for marketing. These types of inventions will be retained by our office and we will ask that the inventors keep us informed of progress in developing the invention. Once further developed, we may then initiate a marketing effort. In case that there is no commercial interest and/or the market size does not justify the expense of marketing and patent protection, VCU Tech Transfer may decide to return the invention to its inventors. If the invention came about using federal funding, a form must be completed and submitted to the funding agency by the inventor(s) in order to have the invention released by the government. Generally, this return is made at such time that the inventors would have enough time to file a patent on their own.

If you have any questions, do not hesitate the contact the office at 828-5188 or e-mail us at: casine@vcu.edu