



**NORTH CAROLINA SCHOOL OF
SCIENCE AND MATHEMATICS**

Title	PATENT AND COPYRIGHT OWNERSHIP POLICIES
Authority	Board of Trustees
History	Effective 7/1/07
Legal Reference	BOG <u>500.2</u> Intellectual Property
Additional References	
Responsible Offices	Chancellor, Vice Chancellor for Academic Programs
Classification	5100

I. POLICY

The North Carolina School of Science and Mathematics is dedicated to instruction, research, and extending knowledge to the public (public service). It is the policy of the School to carry out its scholarly work in an open and free atmosphere and to publish results obtained therefrom freely.

Research done primarily in anticipation of profit is incompatible with the aims of the School. NCSSM recognizes, however, that patentable inventions sometimes arise in the course of research conducted by its employees and students using NCSSM facilities. The Board of Trustees of NCSSM has determined that patenting and licensing of inventions resulting from the work of School personnel, including students, is consistent with the purposes and mission of the School.

The aim of the patent and copyright policies of NCSSM is to promote the progress of science and the useful arts by utilizing the benefits of the patent system consistent with the purposes for which it was established by Article I, Section 8, of the Constitution of the United States:

The Congress shall have power . . . to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

Patents provide a means to encourage the development and utilization of discoveries and inventions. These policies have been established to ensure that those inventions in which the School has an interest will be utilized in a manner consistent with the public good through patents, licenses, or otherwise. The School is also aware of the value of patents in directing attention to individual accomplishment in science and mathematics. Where possible, the School should make inventions resulting from its research available to other schools and the public on a reasonable and effective basis and at the same time provide adequate recognition to inventors. Patents and their exploitation, however, represent only a small part of the benefits accruing to the public from the research program of NCSSM.

A portion of the research conducted by NCSSM may be supported by government and a portion by private industry. Service to the public is an integral part of NCSSM's mission. In agreements with private industry or other private organizations, NCSSM must keep the interests of the general public in view. The rights and privileges set forth in cooperative agreements or contracts, with respect to patents developed as a result of research partly or wholly financed by private parties, must be fair and just to the inventor(s), the School, the sponsor, and the public. Research should be undertaken

by NCSSM under support from private parties only if it is consistent with and complementary to NCSSM goals and responsibilities to the public.

II. OBJECTIVES

The principal objectives of the NCSSM Patent and Copyright Policies set forth herein are:

1. To establish appropriate incentive to creative intellectual effort by faculty, staff, students, and others associated with NCSSM;
2. To establish principles for determining the interests of inventors and the School, and sponsors in regards to inventions and/or discoveries;
3. To enable NCSSM to develop procedures by which the significance of inventions and/or discoveries may be determined and brought to the point of commercial utilization;
4. To provide the means for placing in the public realm the results of research, while safeguarding the interests of NCSSM, inventor, sponsor, and;
5. To recognize the right of the inventor to financial benefits from the invention or discovery.

a. Coverage

The NCSSM Patent and Copyright Policies apply to all School employees both full and part time, including faculty, other professionals exempt from the Personnel Act (EPA), staff subject to the Personnel Act (SPA), and students. Upon prior written agreement between persons and NCSSM, these policies may be applied to persons not associated with NCSSM who make their inventions available to NCSSM under circumstances where the further development and refinement of the inventions are compatible with the research programs of NCSSM.

III. PATENT OWNERSHIP

a. Condition of Employment and Enrollment

The Patent and Copyright Policies of NCSSM, as amended from time to time, shall be deemed to be part of the conditions of employment of every employee and of the conditions of enrollment and attendance by every student.

i. Ownership

With the exception of “inventions made on own time,” hereinafter defined, every invention or discovery or part thereof that results from research or other activities carried out at NCSSM, or that is developed with the aid of the School’s facilities, staff, or through funds administered by NCSSM, shall be the property of NCSSM and, as a condition of employment or enrollment and attendance, shall be assigned by the inventor to NCSSM in a manner determined in accordance with these policies.

IV. PATENT APPLICATION

Patents on inventions made by NCSSM employees or students may be applied for in any country or through an authorized agent(s) or assignee(s). The School shall exercise its rights of ownership of such patent(s), with or without financial gain, with due regard for the public interest, as well as the interests of inventors concerned.

V. INVENTIONS MADE ON OWN TIME

Inventions or discoveries made by School personnel or students entirely on their personal time and not involving the use of NCSSM facilities or materials are the property of the inventor except in case of conflict with any applicable agreement between NCSSM and the federal or state government or agency thereof. For purposes of this provision, an individual's "personal time" shall mean time other than that devoted to normal or assigned functions in teaching, extension, NCSSM service, or direction or conduct of research on School premises or utilizing School facilities. The term "School facilities" shall mean any facility, including equipment and material, available to the inventor as a direct result of the inventor's affiliation with NCSSM, and which would not be available to a non-NCSSM individual on the same basis.

Personnel or students who claim that inventions are made on personal time have a responsibility to demonstrate that inventions so claimed are invented on personal time. All such inventions shall be disclosed in accordance with NCSSM disclosure procedures applicable to inventions made on School time or with the use of School facilities, materials, or equipment, and shall demonstrate the basis of the inventor's claim that only personal time was utilized. In each instance so demonstrated to conform to the definition of personal time, NCSSM shall acknowledge in writing that the invention is the sole property of the inventor in accordance with the "waiver" provision, below.

If the inventor so desires, inventions or discoveries made on personal time and utilizing the inventor's own facilities and materials may be assigned to NCSSM. Under this arrangement, the procedures will be the same as for inventions or discoveries made by the School personnel on NCSSM time and/or with the use of NCSSM facilities and materials.

VI. WAIVER AND RELEASE OF NCSSM RIGHTS

Pursuant to these policies and to its patent procedures, NCSSM, after consultation with the inventor, shall cause its rights to subsequent patents, if any, to be waived to the inventor if the School is convinced that no NCSSM facilities, time, or materials were used in the development of the discovery or invention, that it was made on personal time, and that such waiver would not conflict with any pertinent agreement between the School and a sponsoring agency or agencies.

Pursuant to these policies and to its patent procedures, NCSSM, after consultation with the inventor, may in its discretion and upon such terms as it deems appropriate, cause its rights to the discovery or invention, if any, to be released and waived to the inventor, if the School is convinced that the discovery or invention is clearly one that is non-patentable, that it does not warrant further evaluation as to patentability, or if the discovery or invention has been returned after negative evaluation by the School's agent(s).

VII. SPECIFIC CONDITIONS GOVERNING SPONSORED RESEARCH

a. Government Sponsored Research

Rights in inventions arising from research funded by the United States Government are controlled by the terms of grants and contracts specified by the government agency pursuant to Federal law. Under Federal law, NCSSM may elect title to inventions developed under Federal grants and contracts, subject to a royalty-free, nonexclusive license reserved to the Federal government in any resulting patent and subject to certain other restrictions mandated by Federal law. All inventions developed by government-supported grants or contracts shall be controlled by the Patent and Copyright Policies, subject to the restrictions imposed by the Federal government.

i. Research Sponsored by Non-Government Entities

NCSSM must ensure that its facilities and the results of the work of its employees are applied in a manner which best serves the interests of the public. Likewise, the legitimate interest of a private sponsor who provides financial or other support to research carried out through the School must be considered. NCSSM should normally reserve the right to ownership of patents on inventions arising out of research supported in whole or in part by grants or contracts with non-governmental organizations or firms. Contracts or agreements which are entered into between the School and such organizations or agencies should contain clauses setting forth such a reservation unless deviations therefrom are requested by the sponsor and approved by NCSSM consistent with the public interest.

In the interest of fair treatment to the sponsor, in consideration for the sponsor's investment, and in the interest of discharging the School's obligation to the public in the application of its facilities and its employees' time and talent, special provisions may be negotiated by NCSSM in such non-government sponsored contracts, upon request, provided that the School retains the right to use the invention for its own research, educational, and service purposes without payments of royalty fees, that the School requires the sponsor to use due diligence in the commercial use of the invention, and that the School retains the right freely to publish the results of its research after a reasonable period necessary to protect the rights of the parties and to allow for the filing of a patent application.

VIII. Publication

A major function of NCSSM is the advancement and dissemination of knowledge. Any practice that unnecessarily restricts the publication of results of scientific work is to be avoided. However, it is recognized that the full development of useful inventions or discoveries may be dependent upon the securing of patent protection that will enable the commercial utilization of the discoveries or inventions. Accordingly, under certain circumstances it may be necessary to delay for a minimum period the publication of results of research.

If a sponsor proposes to support a research effort that will involve a limited exclusive license to use of patents resulting therefrom, the agreement with respect to publication shall include the following: first, the sponsor must agree that the results of the research may be published if desired by the investigators or research workers; second, in order that patent application not be jeopardized, the School, the investigators, and research workers may agree that any proposed publication will be submitted to the sponsor with a notice of intent to submit for publication. If within a period of no more than ninety days from the date of such notice the sponsor fails to request a delay, the investigators, research workers and NCSSM shall be free to proceed immediately with the

publication. However, if the sponsor notifies the School that a delay is desired, the submission of the manuscript to the publisher shall be withheld for a period requested, but in no event shall the total period of delay be longer than one year from the date of the notice of intent to submit for publication mentioned above. Such a period will permit the sponsor to have the necessary patent applications prepared and filed but will not unduly restrict the dissemination of scientific knowledge.

IX. AVOIDANCE OF CONFLICTS

Conflicts involving patentable inventions and discoveries may arise when School personnel, including students, enter into personal consulting agreements with outside firms and organizations. The agreements that business firms wish to have executed by those who are to serve as their consultants frequently contain provisions as to the licensing or assignment of the consultant's inventions and patents. Unless such provisions are narrowly worded, they usually will apply to areas in which the individual's School work lies and thus come into conflict with the obligations owed by the individual to NCSSM under these policies, either with respect to the rights of the School itself in an invention or with respect to the rights of a sponsor of research in the same field or subject matter.

Prior to signing any consulting agreement that deals with patent rights, trade secrets, or the like, where any NCSSM's time, facilities, materials, or other resources are involved, School personnel and students must bring the proposed agreement to the attention of the Vice Chancellor for Academic Programs in accordance with the School's patent procedures and either obtain a waiver of NCSSM's rights or otherwise modify the consulting agreement to conform with these policies, as is determined by NCSSM in its discretion.

The foregoing requirements are in addition to, and do not eliminate the necessity for, any approval which may be required by NCSSM policy.

X. DUTY TO DISCLOSE DISCOVERIES AND INVENTIONS

All individuals whose discoveries and inventions are covered by these policies have a duty to disclose their discoveries and inventions promptly in accordance with the patent procedures adopted by NCSSM pursuant to these policies. The duty to disclose arises as soon as the individual has reason to believe, based on his or her own knowledge or upon information supplied by others, that the discovery or invention may be patentable. Certainty about patentability is not required before a disclosure is made. Individuals shall execute such declarations, assignments, or other documents as may be necessary in the course of invention evaluation, patent prosecution, or protection of patent rights, to insure that title in such inventions shall be held by NCSSM, where these policies indicate the School shall hold title, or by such other parties as may be appropriate under the circumstances.

XI. COPYRIGHTS OWNERSHIP

With respect to determining ownership of copyright, School policies address works by category of copyrightable work (including traditional or non-directed works, directed work, and sponsored or externally contracted works) and by category of author (i.e., faculty, EPA and SPA staff, or student). Ownership of copyrighted subject matter, including software, hinges on which category of work and which category of author pertain to the work at issue.

A. Copyrightable Works

1. Works by Faculty and EPA Non-Faculty Employees.

- a. **Traditional Works or Non-Directed Works:** A “traditional work or non-directed work” is a pedagogical, scholarly, literary, or aesthetic (artistic) work originated by a faculty or other EPA employee resulting from non-directed effort. (Such works may include textbooks, manuscripts, scholarly works, fixed lecture notes, distance learning materials not falling into one of the other categories of this policy, works of art or design, musical scores, poems, films, videos, audio recordings, or other works of the kind that have historically been deemed in academic communities to be the property of their creator.)

Ownership: Creator of the works, unless it is a directed work, a sponsored work requiring School ownership, or a work for hire described in a written agreement between the work’s creator and the School. (See section 2., below, for the definition of “work for hire;” under the Copyright Act the School is deemed the “Author” of a work for hire.) If the School is to be involved in commercializing a traditional work or non-directed work, the work’s creator shall assign the work to the School under an Assignment Agreement. The Assignment Agreement shall contain provisions outlining the commercialization responsibilities of the School and a mechanism for the sharing of commercial proceeds with the Author. In cases of ownership by the creator of a traditional work, the School, where practical, shall be granted a non-exclusive, nontransferable, royalty-free license for its own educational or research use (hereinafter referred to as a “Shop Right”).

- b. **Traditional Works or Non-Directed Works Involving Exceptional Use of Institutional Resources:** “Exceptional use of institutional resources” means School support of traditional works with resources of a degree or nature not routinely made available to faculty or other EPA employees in a given area.

Ownership: School. However, upon agreement by the Vice Chancellor for Academic Programs in consultation with the Patent and Copyright Committee, the School may release or transfer its rights to the work’s creator, with the School retaining (a) a Shop Right, and/or (b) the right to require reimbursement and/or income sharing from the creator to the School if the work produces income for the creator. The parties may also negotiate for joint ownership of such works, with the approval of the Vice Chancellor for Academic Programs in consultation with the Patent and Copyright Committee.

- c. **Directed Works:** “Directed works” include works that are specifically funded or created at the direction of the School (including, but not limited to, works for hire by faculty or other EPA employees).

Ownership: School. The work’s creator, where practical, shall be granted a Shop Right. The School may release or transfer its authorship rights to the work’s creator under a written agreement negotiated between the creator and the School, usually with the School retaining (a) a Shop Right, and/or (b) the right to require reimbursement and/or

income sharing from the work's creator to the School if the work produces income for the creator. The parties may also negotiate for joint ownership of such works, with the approval of the Vice Chancellor for Academic Programs in consultation with the Patent and Copyright Committee.

- d. **Sponsored or Externally Contracted Works:** A “sponsored or externally contracted work” is any type of copyrighted work developed using funds supplied under a contract, grant, or other arrangement between the School and third parties, including sponsored research agreements.

Ownership: For a sponsored or externally contracted work created under an agreement that expressly requires copyright ownership by the School, the creator of the work must disclose the work to the School. Provided there is no conflict with a sponsored agreement, the School may release or transfer its rights to the work's creator under an agreement negotiated between the creator and the School, usually with the School retaining (a) a Shop Right, and/or (b) the right to require reimbursement and/or income sharing from the work's creator to the School if the work produces income for the creator; or the parties may also negotiate for joint ownership of such works, with the approval of the Vice Chancellor for Academic Programs in consultation with the Patent and Copyright Committee. For a sponsored or externally contracted work created under an agreement that does not expressly require copyright ownership by the School or a third party, the creator of the work shall own the work, subject to required disclosure to the School where required under institutional policy. In case of ownership by the work's creator, the School, if practical, shall be assigned a Shop Right.

2. **Works by SPA Staff.**

Most works by SPA staff members are considered to be “works for hire.” A “work made for hire” is:

- 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 as a contribution to a collective work, as a part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test, as answer material for a test, or as an atlas, if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire.

Ownership: Works for hire made by SPA staff shall be owned by the School. In special cases, though, the School may enter into an agreement in advance that the SPA employee shall own the copyright. In addition, a designated institutional official may waive institutional ownership.

3. **Works by Independent Contractors.**

Works by independent contractors are works for hire.

Ownership: Works by independent contractors shall be owned in accordance with the contract under which the work was created. The School shall insure that there is a written contract for work by an independent contractor specifying institutional ownership.

4. Works by Students.

“Student works” are papers, computer programs, theses, dissertations, artistic and musical works, and other creative works made by students.

Ownership: Ownership of the copyright to these works belongs to the student unless the work falls within one of the exceptions described below:

- a. **Sponsored or Externally Contracted Works:** Ownership shall be in accordance with the section of this policy on sponsored or externally contracted works made by faculty or other EPA employees.
- b. **Works for Hire:** Student works created by students in the course of their employment with the School shall be considered to fall within the scope of Work for hire in accordance with the section of this policy on works for hire made by SPA staff.
- c. **Classroom, laboratory, and other academic materials generated by students in the instructional process:** Students have a limited right to use these materials for personal, educational purposes. Students may not use these materials for commercial gain. As provided by institutional policy or as agreed to mutually, rights in student works may be transferred between the student and the School. In such cases, a written Assignment Agreement shall specify the respective rights and obligations of the parties. The parties may also negotiate for joint ownership of such works, with the approval of Vice Chancellor for Academic Programs in consultation with the Patent and Copyright Committee.

B. Works Subject to Protection by Both Copyright and Patent Laws

In cases where an invention or creation is subject to protection under both patent law and copyright law, if the School elects to retain title to its patent rights, then the inventor/creator(s) shall assign copyright to the School and the School shall be compensated in accordance with the royalty provisions of the School’s policy and procedures.

C. Administration

The Vice Chancellor for Academic Programs is responsible for implementing this policy and shall address various matters covered by this policy, including developing policies and procedures designed to supplement and interpret the ownership aspects of this policy, providing advice regarding ownership of specific works, releasing institutional rights, and accepting an assignment of rights to the School from an author or creator of a work.

D. Dispute Resolution

The Chancellor shall designate a dispute resolution mechanism for resolving any disputes which may arise among an author, other creator of a work, a third-party sponsor of a work, and an institutional official or office concerning copyright ownership or other rights.

XII. SERVICE MARKS, TRADEMARKS AND TRADE SECRETS

Service marks and trademarks are the property of NCSSM, and without express authorization from the Chancellor or his designee, no steps shall be taken for securing trademarks or service marks by usage or registration with respect to products resulting from or arising out of research or other activities carried out at NCSSM or developed with the aid of its facilities or staff, or produced through funds administered by NCSSM. The School is hereby authorized to register such marks, provided that the income from such licensing shall be used to support the research and educational programs of NCSSM and not accrue to the personal benefit of School personnel.

The use of trade secret agreements to protect discoveries and inventions developed at the School may not be consistent with the aims and purposes of the University. Special provisions may be required to protect the free dissemination of students' diploma-related work.

XIII. INCOME FROM PATENTS AND COPYRIGHTS

A. The Inventor

The inventor shall receive 60 percent of the net royalties derived from licensing or income from assignment or sale of each patent or copyright resulting from his or her invention and owned by NCSSM pursuant to these policies. New royalties are those royalties that remain after all direct expenses to NCSSM have been paid, including, but not limited to, fees paid for: legal services; patent management and development; direct institutional services (e.g., travel, reproduction, postage); special equipment or materials (including software).

B. The School

Income earned by NCSSM from its patent and licensing activity shall be held in a separate trust account in the state budget to support research and development activities. Allocations from such trust accounts shall be made by the Chancellor of NCSSM after receiving recommendations from the School's Patent Committee.

e. Patent and Copyright Committee

The Chancellor of NCSSM shall appoint a Patent and Copyright Committee, consisting of no less than three members, one of whom shall be the Vice Chancellor for Academic Programs. The Committee for NCSSM shall review and recommend to the Chancellor or his delegate the procedures for the implementation of these policies; shall recommend to the Chancellor options to resolve questions of invention ownership that may arise between the School and its faculty, staff, or students or among individuals; shall recommend to the Chancellor the expenditure of funds from the patent and copyright trust account; and shall make such recommendations as are deemed appropriate to encourage disclosure and assure prompt and expeditious handling, evaluation and prosecution of patent opportunities.

The Vice Chancellor for Academic Programs shall serve as the Chair of the NCSSM Patent and Copyright Committee and represent NCSSM on the All-University Patent Committee. The All-University Patent Committee meets at the call of the President of the University, or his delegate.

f. Patent and Copyright Management

The Chancellor or any person designated by him is authorized to negotiate with reputable agencies or firms to secure arrangements for patent management, including competent evaluation of invention disclosures, expeditious filing of applications on patents, and licensing and administration of patents.

The School is authorized to administer its own patent management and licensing program without the use of a patent management agent, if it determines that such arrangement may better serve NCSSM and public interests. Nothing in this section shall be construed to permit the reduction of the minimum share due an inventor as specified in Section XIII of these policies.

g. Procedure and Exceptions

The Chancellor is authorized to issue regulations implementing this Policy, taking into account the nature and scope of the School's programs.

Exceptions to these policies may be authorized by the President following a favorable review and recommendation from the NCSSM Patent and Copyright Committee or the All-University Patent Committee. Available evidence supporting the exception must demonstrate that such exception is in the public interest and is consistent with the University's responsibilities to the public. Requests for exceptions must be transmitted through the Chancellor to the President.