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FISCAL AND POLICY NOTE  
First Reader

House Bill 1357  
Appropriations

(Delegate Waldstreicher)

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Public Senior Higher Education Institutions - Policies Related to Inventions and Patents

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This bill disqualifies the constituent institutions of the University System of Maryland (USM), the University of Maryland Center for Environmental Science (UMCES), Morgan State University (MSU), and St. Mary's College of Maryland (SMCM) from receiving student financial assistance or research funding from the State unless the governing board for each institution adopts a specified policy related to inventions, patents, patent assertion, and technology transfer. Under the required policy, the assignment of a patent by one of these institutions to a "patent assertion entity" must be considered void and unenforceable.

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Fiscal Summary

**State Effect:** Assuming the affected governing boards each adopt a policy or amend an existing policy to meet the bill's requirements, the bill does not affect the amount of State funding for public four-year institutions of higher education and UMCES. Any administrative changes to institutional policies can be made with existing resources. The effects of the policy changes, if any, on individual institutions cannot be quantified, but may include significant operational and fiscal impacts, as discussed below.

**Local Effect:** None. The bill does not apply to community colleges or other local government entities.

**Small Business Effect:** Potential meaningful. Small businesses that specialize in certain types of technology commercialization and research and development are affected by the policy changes, particularly in relation to the prioritization of technology transfers and the assignment of licenses and patents. An individual business may benefit or be harmed by these requirements, depending on the circumstances.

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## Analysis

**Bill Summary:** A public four-year institution of higher education or UMCES does not qualify to receive student financial assistance or research funding from the State unless the governing board of the institution adopts a policy relating to inventions, patents, patent assertion, and technology transfer that demonstrates that the institution is committed to ensuring that patent assets are managed in a manner that serves the public interest. The policy must require that the institution:

- before filing for a patent that covers an invention, determine whether a patent is the most effective way to bring a new invention to a broad user base;
- research the past practices of potential patent buyers or licensees;
- prioritize technology transfer that develops its inventions and scales the potential user base of the invention;
- endeavor to nurture start-up entities that will create new jobs, products, and services;
- endeavor to assign and license patents only to entities that require the license for active commercialization efforts or further research and development;
- foster agreements and relationships that include the sharing of knowledge and practical experience to maximize the value of the assignment or licensing of the corresponding patents; and
- prioritize the public interest in all patent assertions and patent transactions.

An institution may not assign or exclusively license a patent to a “patent assertion entity,” which is an entity whose primary business model is based on patent assertion or otherwise using patents to obtain licensing fees from other entities.

“Patent assertion” means (1) asserting by written or oral demand a claim of patent infringement for the primary purposes of deriving royalties or other monetary compensation under the patent or (2) the commencement of subsequent pursuit of a claim, action, or proceeding in a judicial, administrative, or other governmental body based on a claim of patent infringement.

**Current Law:** “Public senior higher education institution” (the defined term referenced by the bill) means the constituent institutions of USM, UMCES, MSU, and SMCM.

The USM Board of Regents is authorized to make rules and regulations, and prescribe policies and procedures, for the management, maintenance, operation, and control of USM institutions including UMCES. The Board of Regents at MSU and the Board of Trustees at SMCM are likewise authorized to do so for their respective institutions.

The stated objectives of USM's [policy](#) on patents are to encourage and aid research at USM, to provide financial compensation as well as professional recognition to inventors, and to protect and best serve the public interest. The policy encourages disclosure of inventions and discoveries and their evaluation for possible patenting and licensing and establishes principles for determining the rights of the constituent institutions and inventors. MSU's [policy](#) is similar to USM's policy, and it has the same stated objectives. SMCM's policy was not available online, but SMCM advises that, with possibly one exception, research conducted at the college has not resulted in commercially valuable patents.

**Background:** The faculty and staff of USM institutions obtain funding for research, education, and public service activities from many sources. According to a recent [report](#), USM institutions received a total of \$1.3 billion in extramural funding in fiscal 2016 to support specific initiatives in research, education, or service. The federal government was the largest funding source for USM as a whole and for research-intensive institutions. Remaining funding came from State government, corporations and foundations, and other sources. Aggregate information for USM is summarized in **Exhibit 1**.

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**Exhibit 1**  
**University System of Maryland Extramural Funding in Fiscal 2016**  
**(\$ in Millions)**

| <u>Fund Source</u> | <u>Award Amount</u> | <u>Awards</u> |
|--------------------|---------------------|---------------|
| Federal            | \$757.2             | 2,933         |
| State              | 187.8               | 1,415         |
| Corporate          | 85.8                | 1,471         |
| Foundations        | 109.6               | 1,448         |
| Other              | 146.5               | 2,898         |
| <b>Total</b>       | <b>\$1,287.0</b>    | <b>10,165</b> |

Note: Numbers may not sum to total due to rounding.

Source: University System of Maryland

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## *Bayh-Dole Act*

According to the Association of University Technology Managers, the federal Bayh-Dole Act “created a uniform patent policy among the many federal agencies that fund research, enabling small businesses and non-profit organizations, including universities, to retain title to inventions made under federally funded research programs.” Major provisions of the law include:

- Universities are encouraged to collaborate with commercial concerns to promote the utilization of inventions arising from federal funding.
- Universities are expected to file patents on inventions they elect to own.
- Universities are expected to give licensing preference to small businesses.

**State Fiscal Effect:** Assuming the affected governing boards each adopt a policy or amend an existing policy to meet the bill’s requirements so as to avoid losing student financial assistance and research funding, the bill does not affect the amount of State funding for public four-year institutions of higher education and UMCES. Any administrative changes to institutional policies can be made with existing resources.

The effects of the policy changes, if any, on individual institutions cannot be quantified but may include significant operational and fiscal impacts. As noted above, USM already has existing policies on protection, licensing, and assignment of patent rights designed to ensure that inventions made with federal or State funding are used and disseminated for public benefit. However, according to USM, the bill removes options by which an institution can license and enforce its patent rights, which may reduce patent and licensing revenues. The amount cannot be reliably estimated, but it may be significant for individual institutions. Further, the bill includes requirements that may be preempted by or contradict the Bayh-Dole Act. Similar effects are likely for MSU and for SMC to the extent that the institution pursues technology commercialization in the future.

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## **Additional Information**

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Maryland Higher Education Commission; University System of Maryland; Morgan State University; St. Mary’s College of Maryland; Association of University Technology Managers; Department of Legislative Services

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