ASSEMBLY, No. 5123



STATE OF NEW JERSEY

217th LEGISLATURE



INTRODUCED JULY 13, 2017

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District 31 (Hudson)

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District 37 (Bergen)

Assemblyman GARY S. SCHAER

District 36 (Bergen and Passaic)

SYNOPSIS

Establishes Edison Innovation Science and Technology Fund in EDA to provide grants for certain science and technology-based university research; appropriates $5 million.

CURRENT VERSION OF TEXT

As introduced.



An Act establishing the Edison Innovation Science and Technology Fund, supplementing P.L.1974, c.80 (C.34:1B-1 et seq.), and making an appropriation.

Be It Enacted by the Senate and General Assembly of the State of New Jersey:

1. This act shall be known and may be cited as the “Edison Innovation Science and Technology Fund Act.”

2. As used in P.L. , c. (C. ) (pending before the Legislature as this bill):

“Advanced materials,” “life sciences,” “mobile communications technology,” and “renewable energy technology” shall have the same meaning as provided in section 2 of P.L.1997, c.349 (C.54:10A-5.29).

“Artificial intelligence” means the development of computer systems that are able to perform tasks normally requiring human intelligence, including, but not limited to, visual perception, speech recognition, decision-making, and translation between languages.

“Authority” means the New Jersey Economic Development Authority established pursuant to section 4 of P.L.1974, c.80 (C.34:1B-4).

“Commission” means the New Jersey Commission on Higher Education and Business Partnerships established pursuant to section 1 of P.L.2017, c.17 (C.52:9ZZ-1).

“Early stage technology company” means a technology-based company located on a New Jersey campus of an institution of higher education that is at a stage of existence where the company is developing its products or services and business operations and is not yet at the stage where the company is able to sell or market its products or services.

“Fund” means the “Edison Innovation Science and Technology Fund,” established pursuant to section 3 of P.L. , c. (C. ) (pending before the Legislature as this bill).

“Individual investigator” means a faculty member of an institution of higher education engaged in a research project or program seeking to receive from the authority a grant from the fund.

"Institution of higher education" shall include a public institution of higher education and a private institution of higher education.

“Machine learning” means a type of artificial intelligence that provides computers with the ability to learn without being explicitly programmed and includes a focus on the development of computer programs that can change when exposed to new data inputs.

"Private institution of higher education" means an independent college, university, or institute incorporated and located in New Jersey, which by virtue of law, character, or license is a nonprofit educational institution authorized to grant academic degrees and provide a level of education which is equivalent to the education provided by the State's public institutions of higher education as attested by the receipt of and continuation of regional accreditation by the Middle States Association of Colleges and Schools, and which is eligible to receive State aid under the provisions of the Constitution of the United States and the Constitution of the State of New Jersey, but does not include any educational institution dedicated primarily to the education or training of ministers, priests, rabbis, or other professional persons in the field of religion.

"Public institution of higher education" means a “public research university” and a “State college” as those terms are defined in section 3 of P.L.1994, c.48 (C.18A:3B-3).

“Sustainability innovation” means technologies that mitigate negative environmental impacts, promote environmentally-friendly development, and the resiliency of ecosystems, infrastructure, and systems engineering.

“Systems engineering” means an interdisciplinary field of engineering and engineering management that focuses on how to design and manage complex systems over their life cycles.

“Technology transfer” means the process of commercialization of technology or of bringing technology to the marketplace.

3. a. The New Jersey Economic Development Authority, in consultation with the Secretary of Higher Education and the commission, shall establish an “Edison Innovation Science and Technology Fund” within the authority for purpose of awarding grants to investigators at institutions of higher education engaged in research projects or programs in this State that involving science, technology, engineering, or mathematics in fields of strategic importance to the State. Those fields of importance shall include, but not be limited to, advanced materials, artificial intelligence, healthcare, life sciences, machine learning, manufacturing technology, mobile communications technology, nanotechnology, renewable energy technology, and sustainability innovation.

b. Eligible applicants seeking to receive a grant from the “Edison Innovation Science and Technology Fund” shall be:

(1) an individual investigator sponsored by an institution of higher education who is engaged in the field of science, technology, engineering, or mathematics pursuing research having the potential for commercial application that will contribute to the economic vitality of the State; or

(2) an individual investigator who submits an application on behalf of a research team sponsored by two or more institutions of higher education working in partnership with or in the process of forming an early-stage technology company.

c. Grants from the fund shall be made available to eligible applicants for projects or programs that:

(1) promote strong ties between institutions of higher education and industry in order to accelerate the commercialization of new technologies;

(2) financially support the emergence and incubation of science and technology-based businesses of strategic importance to the State located on a New Jersey campus of an institution of higher education;

(3) spur collaboration between institutions of higher education, technology incubators, and other research centers to create economic opportunities and advance job growth;

(4) expand the pipeline of commercially-viable research at institutions of higher education in order to increase the potential for federal funding and private investment in New Jersey;

(5) support technology transfer activities that assist institutions of higher education in developing the commercial potential of their research; and

(6) accelerate the commercialization of technology developed at institutions of higher education in this State.

4. Grants awarded from the “Edison Innovation Science and Technology Fund” shall be in the form of an individual investigator-initiated grant or an institution of higher education-based center grant. The purpose of an individual investigator-initiated grant shall be to advance concepts in order to generate intellectual property that can be formed or licensed to an early stage technology company. An individual investigator-initiated grant shall be funded for one year at $100,000 per grant recipient. The purpose of an institution of higher education-based center grant shall be to fund the work of groups of full-time faculty at institutions of higher education focused on a shared problem or opportunity that has significant commercial potential. An institution of higher education-based center grant recipient shall have formed a partnership with a commercial entity or have launched an early stage technology company. An institution of higher education-based center grant shall be funded at $250,000 to $500,000 per year for a five-year period per grant recipient.

5. a. An applicant seeking to receive a grant from the “Edison Innovation Science and Technology Fund” shall submit an application in a form and manner as the authority shall require. The application shall include information the authority determines is necessary to administer grants from the fund. An applicant seeking to receive a grant from the fund shall submit to the authority documentation that receiving a grant from the fund will be a contributing factor towards the success of the research project or program that is consistent with the purposes of P.L. , c. (C. ) (pending before the Legislature as this bill).

b. The authority shall review and may approve an application for a grant from the fund. The authority shall issue payment of the grant amount pursuant to a grant agreement with a grant recipient as the authority may determine and subject the approval of the agreement to the submission of proof by an approved grant recipient of the expenditures contributing to the success of a research project or program that is consistent with the purposes of P.L. , c. (C. ) (pending before the Legislature as this bill). A grant recipient who fails to comply with a grant agreement made as a condition of a grant award shall repay any grant amount received and, if so determined by the authority, shall pay a penalty not in excess of 10 percent of the grant amount.

6. The authority may adopt rules and regulations, pursuant to the “Administrative Procedure Act,” P.L.1968, c.410 (C.52:14B-1 et seq.), necessary for the implementation of P.L. , c. (C. ) (pending before the Legislature as this bill), including, but not limited to, a procedure for recapturing grants awarded pursuant to P.L. , c. (C. ) (pending before the Legislature as this bill) in cases in which the authority determines that a grant recipient failed to meet any condition or requirement attached by the authority to the receipt of the grant included in rules and regulations adopted by the authority governing the implementation of the “Edison Innovation Science and Technology Fund.”

7. There is appropriated $5,000,000 from the General Fund to the authority for the provision of that amount to the “Edison Innovation Science and Technology Fund” for the purposes of P.L.    , c. (C. ) (pending before the Legislature as this bill). The fund shall also be credited with:

a. any additional monies made available by the authority for the purposes of the fund; and

b. monies received by the authority from any public or private sources for the purpose of the fund.

8. This act shall take effect immediately, but shall remain inoperative for 90 days following the date of enactment.

STATEMENT

This bill, entitled the “Edison Innovation Science and Technology Fund Act,” establishes the Edison Innovation Science and Technology Fund (fund) in the New Jersey Economic Development Authority (EDA) to award grants to investigators at public and private institutions of higher education engaged in research projects or programs in this State that involving science, technology, engineering, or mathematics in fields of strategic importance to the State. Those fields are to include, but not limited to, advanced materials, artificial intelligence, healthcare, life sciences, machine learning, manufacturing technology, mobile communications technology, nanotechnology, renewable energy technology, and sustainability innovation.

The bill requires that eligible applicants seeking to receive a grant from the fund are to be: 1) an individual investigator sponsored by an institution of higher education who is engaged in the field of science, technology, engineering, or mathematics pursuing research having the potential for commercial application that will contribute to the economic vitality of the State; or 2) an individual investigator who submits an application on behalf of a research team sponsored by two or more institutions of higher education working in partnership with or in the process of forming an early-stage technology company.

Grants from the fund are to be made available to eligible applicants for projects or programs that: 1) promote strong ties between institutions of higher education and industry in order to accelerate the commercialization of new technologies; 2) financially support the emergence and incubation of science and technology-based businesses of strategic importance to the State located on a New Jersey campus of an institution of higher education; 3) spur collaboration between institutions of higher education, technology incubators, and other research centers to create economic opportunities and advance job growth; 4) expand the pipeline of commercially-viable research at institutions of higher education in order to increase the potential for federal funding and private investment in New Jersey; 5) support technology transfer activities that assist institutions of higher education in developing the commercial potential of their research; and 6) accelerate the commercialization of technology developed at institutions of higher education in this State.

The bill provides that grants awarded from the fund are to be in the form of an individual investigator-initiated grant or an institution of higher education-based center grant. The purpose of an individual investigator-initiated grant is to advance concepts in order to generate intellectual property that can be formed or licensed to an early stage technology company. An individual investigator-initiated grant is to be funded for one year at $100,000 per grant recipient. The purpose of an institution of higher education-based center grant is to fund the work of groups of full-time faculty at institutions of higher education focused on a shared problem or opportunity that has significant commercial potential. An institution of higher education-based center grant recipient is to have formed a partnership with a commercial entity or have launched an early stage technology company. An institution of higher education-based center grant is to be funded at $250,000 to $500,000 per year for a five-year period per grant recipient.

There is to be appropriated $5,000,000 from the General Fund to the authority for the purposes of this bill.