

# ASSEMBLY, No. 1930

## STATE OF NEW JERSEY 218th LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2018 SESSION

**Sponsored by:**

**Assemblyman RAJ MUKHERJI**

**District 33 (Hudson)**

**Assemblywoman ANNETTE CHAPARRO**

**District 33 (Hudson)**

**Assemblyman NICHOLAS CHIARAVALLOTI**

**District 31 (Hudson)**

**Assemblywoman VALERIE VAINIERI HUTTLE**

**District 37 (Bergen)**

**Assemblyman GARY S. SCHAER**

**District 36 (Bergen and Passaic)**

**Co-Sponsored by:**

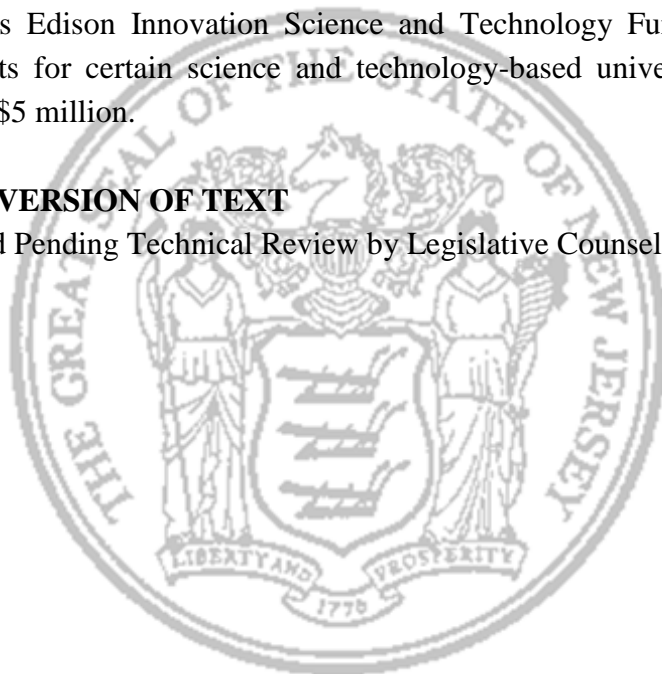
**Assemblyman Karabinchak**

**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**

Introduced Pending Technical Review by Legislative Counsel.



**(Sponsorship Updated As Of: 10/19/2018)**

1 AN ACT establishing the Edison Innovation Science and  
2 Technology Fund, supplementing P.L.1974, c.80 (C.34:1B-1 et  
3 seq.), and making an appropriation.  
4

5 **BE IT ENACTED** by the Senate and General Assembly of the State  
6 of New Jersey:

7  
8 1. This act shall be known and may be cited as the “Edison  
9 Innovation Science and Technology Fund Act.”  
10

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

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

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

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

24 “Commission” means the New Jersey Commission on Higher  
25 Education and Business Partnerships established pursuant to section  
26 1 of P.L.2017, c.17 (C.52:9ZZ-1).

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

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

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

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

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

46 "Private institution of higher education" means an independent  
47 college, university, or institute incorporated and located in New  
48 Jersey, which by virtue of law, character, or license is a nonprofit

1 educational institution authorized to grant academic degrees and  
2 provide a level of education which is equivalent to the education  
3 provided by the State's public institutions of higher education as  
4 attested by the receipt of and continuation of regional accreditation  
5 by the Middle States Association of Colleges and Schools, and  
6 which is eligible to receive State aid under the provisions of the  
7 Constitution of the United States and the Constitution of the State  
8 of New Jersey, but does not include any educational institution  
9 dedicated primarily to the education or training of ministers, priests,  
10 rabbis, or other professional persons in the field of religion.

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

14 "Sustainability innovation" means technologies that mitigate  
15 negative environmental impacts, promote environmentally-friendly  
16 development, and the resiliency of ecosystems, infrastructure, and  
17 systems engineering.

18 "Systems engineering" means an interdisciplinary field of  
19 engineering and engineering management that focuses on how to  
20 design and manage complex systems over their life cycles.

21 "Technology transfer" means the process of commercialization  
22 of technology or of bringing technology to the marketplace.

23

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

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

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

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

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

- 1 (1) promote strong ties between institutions of higher education  
2 and industry in order to accelerate the commercialization of new  
3 technologies;
- 4 (2) financially support the emergence and incubation of science  
5 and technology-based businesses of strategic importance to the  
6 State located on a New Jersey campus of an institution of higher  
7 education;
- 8 (3) spur collaboration between institutions of higher education,  
9 technology incubators, and other research centers to create  
10 economic opportunities and advance job growth;
- 11 (4) expand the pipeline of commercially-viable research at  
12 institutions of higher education in order to increase the potential for  
13 federal funding and private investment in New Jersey;
- 14 (5) support technology transfer activities that assist institutions  
15 of higher education in developing the commercial potential of their  
16 research; and
- 17 (6) accelerate the commercialization of technology developed at  
18 institutions of higher education in this State.

19  
20 4. Grants awarded from the “Edison Innovation Science and  
21 Technology Fund” shall be in the form of an individual  
22 investigator-initiated grant or an institution of higher education-  
23 based center grant. The purpose of an individual investigator-  
24 initiated grant shall be to advance concepts in order to generate  
25 intellectual property that can be formed or licensed to an early stage  
26 technology company. An individual investigator-initiated grant  
27 shall be funded for one year at \$100,000 per grant recipient. The  
28 purpose of an institution of higher education-based center grant  
29 shall be to fund the work of groups of full-time faculty at  
30 institutions of higher education focused on a shared problem or  
31 opportunity that has significant commercial potential. An  
32 institution of higher education-based center grant recipient shall  
33 have formed a partnership with a commercial entity or have  
34 launched an early stage technology company. An institution of  
35 higher education-based center grant shall be funded at \$250,000 to  
36 \$500,000 per year for a five-year period per grant recipient.

37  
38 5. a. An applicant seeking to receive a grant from the “Edison  
39 Innovation Science and Technology Fund” shall submit an  
40 application in a form and manner as the authority shall require. The  
41 application shall include information the authority determines is  
42 necessary to administer grants from the fund. An applicant seeking  
43 to receive a grant from the fund shall submit to the authority  
44 documentation that receiving a grant from the fund will be a  
45 contributing factor towards the success of the research project or  
46 program that is consistent with the purposes of P.L. , c. (C. )  
47 (pending before the Legislature as this bill).

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

13

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

25

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

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

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

35

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

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#### STATEMENT

41

42       This bill, entitled the “Edison Innovation Science and  
43 Technology Fund Act,” establishes the Edison Innovation Science  
44 and Technology Fund (fund) in the New Jersey Economic  
45 Development Authority (EDA) to award grants to investigators at  
46 public and private institutions of higher education engaged in  
47 research projects or programs in this State that involving science,  
48 technology, engineering, or mathematics in fields of strategic

1 importance to the State. Those fields are to include, but not limited  
2 to, advanced materials, artificial intelligence, healthcare, life  
3 sciences, machine learning, manufacturing technology, mobile  
4 communications technology, nanotechnology, renewable energy  
5 technology, and sustainability innovation.

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

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

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

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- 1 launched an early stage technology company. An institution of
- 2 higher education-based center grant is to be funded at \$250,000 to
- 3 \$500,000 per year for a five-year period per grant recipient.
- 4 There is to be appropriated \$5,000,000 from the General Fund to
- 5 the authority for the purposes of this bill.