
SUBSTITUTE SENATE BILL 5443

State of Washington

55th Legislature

1997 Regular Session

By Senate Committee on Higher Education (originally sponsored by Senators Horn, Wood, Jacobsen, Kohl, Prince, Bauer, West, Finkbeiner, Sheldon and Rasmussen)

Read first time 02/24/97.

1 AN ACT Relating to the advanced technology research initiative;
2 adding a new chapter to Title 28B RCW; creating new sections; and
3 making appropriations.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** This chapter shall be known and cited as the
6 advanced technology research initiative.

7 NEW SECTION. **Sec. 2.** The legislature recognizes the economic
8 development value of this state's research universities in creating
9 intellectual property of potential commercial significance and the
10 importance of transferring intellectual property to the private sector
11 in accordance with the federal Bayh-Dole act of 1980, where it provides
12 a foundation for creation of new businesses and new jobs. It is a
13 priority of this state to require universities to expand commercial
14 research activities to serve the vital public purpose of creating
15 future employment opportunities in the state.

16 The legislature finds that high-paying, high-skilled jobs in the
17 twenty-first century will be in advanced technology: Research,
18 development, and manufacturing. Advanced technology research affords

1 educational opportunities for project partnerships for Washington
2 students that results in a skilled work force for Washington
3 businesses. Research will enhance opportunities at the Spokane
4 Research and Technology Institute, at the Washington Technology Center,
5 and at the Washington Research Foundation. The public research
6 universities in this state have tremendous value in creating the future
7 knowledge-based economy.

8 The legislature further finds that there is considerable
9 competition among states for advanced technology research initiatives
10 and federal grant funds and that intellectual property licensing and
11 contracting provides funding for universities. It is the intent of the
12 state to leverage its investment to attract federal research funds and
13 industrial project funds.

14 NEW SECTION. **Sec. 3.** The purpose of this chapter is to enhance
15 the environment for advanced technology and to stimulate greater
16 economic vitality in Washington state. Numerous studies have concluded
17 that greater collaboration between government, research universities,
18 and the private sector will be an essential feature of successful
19 regional economics in the next century. In particular, the role of
20 major research universities in creating, disseminating, and
21 transferring new technologies to various industries will be essential
22 for strong economic growth within the state. Therefore, strategic
23 state investments are required to stimulate advanced technology
24 research initiatives at the University of Washington and Washington
25 State University that create the growth of new industries, provide new
26 applications of advanced technology to existing industries, and foster
27 the creation of high-wage jobs.

28 NEW SECTION. **Sec. 4.** Unless the context clearly requires
29 otherwise, the definitions in this section apply throughout this
30 chapter.

31 (1) "Advanced technology" includes the following:

32 (a) "Advanced computing" means technologies used in the designing
33 and developing of computing hardware and software, including
34 innovations in designing the full spectrum of hardware from hand-held
35 calculators to super computers, and peripheral equipment.

36 (b) "Advanced materials" means materials with engineered properties
37 created through the development of specialized processing and synthesis

1 technology, including ceramics, high value-added metals, electronic
2 materials, composites, polymers, and biomaterials.

3 (c) "Biotechnology" means the application of technologies, such as
4 recombinant DNA techniques, biochemistry, molecular and cellular
5 biology, genetics and genetic engineering, cell fusion techniques, and
6 new bioprocesses, using living organisms, or parts of organisms, to
7 produce or modify products, to improve plants or animals, to develop
8 microorganisms for specific uses, to identify targets for small
9 molecule pharmaceutical development, or to transform biological systems
10 into useful processes and products or to develop microorganisms for
11 specific uses.

12 (d) "Electronic device technology" means technologies involving
13 microelectronics; semiconductors; electronic equipment and
14 instrumentation; radio frequency, microwave, and millimeter
15 electronics; optical and optic-electrical devices; and data and digital
16 communications and imaging devices.

17 (e) "Environmental technology" means assessment and prevention of
18 threats or damage to human health or the environment, environmental
19 cleanup, and the development of alternative energy sources.

20 (2) "Advanced technology research initiative" means an
21 internationally recognized research effort with a high potential to
22 develop intellectual property of commercial significance.

23 (3) "Research university" means the University of Washington and
24 Washington State University.

25 NEW SECTION. **Sec. 5.** (1) The University of Washington and
26 Washington State University shall each recruit new advanced technology
27 research initiatives and provide matching dollars for new federal
28 research grant opportunities.

29 (2) As used in this section, an advanced technology research
30 initiative refers to a research group headed by a senior, full
31 professor who:

32 (a) Has engaged in internationally known advanced technology
33 research;

34 (b) Has the ability to recruit at least two junior faculty members
35 to assist in his or her research;

36 (c) Is well-established at an existing research entity;

37 (d) Places a high priority and emphasis on the development of
38 intellectual property of commercial significance;

- 1 (e) Has strong, established links to private industry;
- 2 (f) Has a proven ability to secure grant funds over time; and
- 3 (g) Has the potential to enhance the development of jobs.

4 (3) Initially, each advanced technology research initiative shall
5 have one full professor and two associate professors who have proven
6 and internationally recognized research credentials in an area of
7 advanced technology. A global search shall be conducted to attract the
8 highest caliber applicants.

9 (4) Funds received under this chapter shall be targeted toward
10 enhancing the development of existing or emerging Washington advanced
11 technology industries, including but not limited to aerospace,
12 agriculture, animal science, biomedical devices, biotechnology,
13 environmental science, forest products, international trade, material
14 science, micro-electronics, pharmaceuticals, plant science, software,
15 telecommunications, and veterinary medicine.

16 (5) Matching state dollars for new federal grant initiatives are
17 increasingly required by federal agencies such as the national science
18 foundation and the national institutes of health. Funds received for
19 the purposes of this chapter shall be used solely to help obtain new
20 grants and contracts that facilitate the development of specific
21 Washington industries. Funds received for the purposes of this chapter
22 shall not replace lost federal dollars for existing university grants
23 or contracts.

24 (6) Each technology research initiative shall include student
25 researchers as assistants in performing advanced technology research.

26 NEW SECTION. **Sec. 6.** (1) Each research university is responsible
27 for providing facilities, infrastructure, and other support necessary
28 for the ongoing success of the advanced technology research
29 initiatives.

30 (2) The research universities are encouraged to seek private sector
31 contributions to assist in the success of advanced technology research
32 initiatives.

33 (3) The research universities, in collaboration with research
34 faculty, shall actively and aggressively solicit federal grant funding
35 for advanced technology research initiatives.

36 NEW SECTION. **Sec. 7.** The University of Washington and Washington
37 State University shall each establish an advanced technology advisory

1 committee. A majority of the members of the committee shall be from
2 private industry. The committee shall advise each institution on
3 implementing this chapter.

4 NEW SECTION. **Sec. 8.** The University of Washington and Washington
5 State University shall each report to the appropriate committees of the
6 legislature by January 1, 1999, on their progress in implementing this
7 chapter and on the accomplishments of the advanced technology research
8 initiatives. Examples of performance measures that should be included
9 are: (1) Background of faculty hired as a result of the advanced
10 technology research initiatives and the areas of expertise of those
11 faculty; (2) progress of the research projects performed by the faculty
12 clusters; (3) number of students assisting with the advanced technology
13 research initiatives; (4) courses taught by faculty recruited for
14 advanced technology research; and (5) federal grants received for
15 advanced technology research and the amount of federal grant funding.

16 NEW SECTION. **Sec. 9.** The University of Washington and Washington
17 State University shall each report to the appropriate committees of the
18 legislature by January 1, 2001, on the number of patents which the
19 universities have applied for as a result of the advanced technology
20 research initiatives and any royalties received by the universities as
21 a result of licensing those patents.

22 NEW SECTION. **Sec. 10.** Sections 1 through 7 of this act constitute
23 a new chapter in Title 28B RCW.

24 NEW SECTION. **Sec. 11.** (1) The sum of one million five hundred
25 thousand dollars, or as much thereof as may be necessary, is
26 appropriated for the fiscal year ending June 30, 1998, from the general
27 fund to the University of Washington for advanced technology research
28 initiatives.

29 (2) The sum of one million five hundred thousand dollars, or as
30 much thereof as may be necessary, is appropriated for the fiscal year
31 ending June 30, 1999, from the general fund to the University of
32 Washington for advanced technology research initiatives.

33 (3) The sum of one million five hundred thousand dollars, or as
34 much thereof as may be necessary, is appropriated for the fiscal year
35 ending June 30, 1998, from the general fund to the University of

1 Washington for matching dollars for federal research grant
2 opportunities described in section 5 of this act.

3 (4) The sum of one million five hundred thousand dollars, or as
4 much thereof as may be necessary, is appropriated for the fiscal year
5 ending June 30, 1999, from the general fund to the University of
6 Washington for matching dollars for federal research grant
7 opportunities described in section 5 of this act.

8 NEW SECTION. **Sec. 12.** (1) The sum of one million dollars, or as
9 much thereof as may be necessary, is appropriated for the fiscal year
10 ending June 30, 1998, from the general fund to Washington State
11 University for advanced technology research initiatives.

12 (2) The sum of one million dollars, or as much thereof as may be
13 necessary, is appropriated for the fiscal year ending June 30, 1999,
14 from the general fund to Washington State University for advanced
15 technology research initiatives.

16 (3) The sum of five hundred thousand dollars, or as much thereof as
17 may be necessary, is appropriated for the fiscal year ending June 30,
18 1998, from the general fund to Washington State University for matching
19 dollars for federal research grant opportunities described in section
20 5 of this act.

21 (4) The sum of five hundred thousand dollars, or as much thereof as
22 may be necessary, is appropriated for the fiscal year ending June 30,
23 1999, from the general fund to Washington State University for matching
24 dollars for federal research grant opportunities described in section
25 5 of this act.

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