



Senate

General Assembly

File No. 758

February Session, 2008

Substitute Senate Bill No. 317

Senate, May 1, 2008

The Committee on Finance, Revenue and Bonding reported through SEN. DAILY of the 33rd Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

AN ACT CONCERNING FUNDING FOR AN EMINENT FACULTY RESEARCH TEAM AND NANOTECHNOLOGY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Subsection (c) of section 4-124hh of the general statutes is
2 repealed and the following is substituted in lieu thereof (*Effective July*
3 *1, 2008*):

4 (c) The Office of Workforce Competitiveness shall, within available
5 appropriations, establish a grant program to provide funding for the
6 promotion of collaborative research applications between industry and
7 institutions of higher education. Grants pursuant to this subsection
8 shall be awarded to institutions of higher education, technology-
9 focused organizations and business entities and may be used:

10 (1) To improve technology infrastructure by advancing the
11 development of shared use between institutions of higher education
12 and business entities of laboratories and equipment, including, but not

13 limited to, technology purchase, lease and installation, operating and
14 necessary support personnel and maintenance;

15 (2) As matching grants for joint projects between an industry, a
16 technology-focused organization or a university. The office shall
17 structure the matching grants to provide two rounds of funding
18 annually and shall do outreach to companies. The matching grant part
19 of the program shall include, but not be limited to, (A) one-to-one
20 matching grants not to exceed one hundred thousand dollars, with in-
21 kind match allowed for small and mid-sized companies, (B)
22 involvement of a competitive process with outside reviewers using as
23 key criteria (i) the demonstration of commercial relevance, and (ii) a
24 clear path to the marketplace for any innovations developed in the
25 course of the research, and (C) an aggressive marketing campaign
26 through business organizations to raise industry awareness of
27 resources from universities or technology-focused organizations; and

28 (3) To develop a Connecticut Center for Nanoscale Sciences and
29 Development to provide a shared-use laboratory in one or more sites
30 in the state to advance university research, industry application
31 development and education involving the synthesis, characterization
32 and fabrication of nanoscale materials, intermediates and devices and
33 related program activities. The Connecticut Center for Nanoscale
34 Sciences and Development shall provide: (A) Access to advanced
35 atomic scale characterization and imaging instrumentation; (B)
36 availability of pilot scale prototyping for nanotechnology components
37 and devices; (C) expert technical operations support, including
38 eminent faculty advancing the application of advanced
39 instrumentation; (D) proactive outreach programs providing a single
40 point of contact and providing technical assistance to the broad base of
41 institutions of higher education and industries to make use of the
42 advanced facilities; (E) significant levels of coinvestment from the
43 participating institutions within the state; and (F) availability of
44 shared-use provisions with industry and other education and research
45 institutions. The Office of Workforce Competitiveness shall conduct a
46 feasibility study and business planning model leading to the

47 establishment of such center, including strategies for securing
 48 investments from the federal government and private entities. On or
 49 before January 1, 2007, said office shall submit the results of such
 50 study, in accordance with the provisions of section 11-4a, to the joint
 51 standing committees of the General Assembly having cognizance of
 52 matters relating to commerce and higher education and employment
 53 advancement.

54 Sec. 2. (*Effective July 1, 2008*) Within available appropriations, The
 55 University of Connecticut shall implement the recommendations of the
 56 Office of Workforce Competitiveness' draft report entitled, "Investing
 57 in Institutionally-Based, Shared-Use Nanotechnology Facilities for
 58 Research, Education and Product Development," and shall recruit an
 59 eminent faculty research team in nanotechnology pursuant to section
 60 10a-104c of the 2008 supplement to the general statutes.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>July 1, 2008</i>	4-124hh(c)
Sec. 2	<i>July 1, 2008</i>	New section

FIN *Joint Favorable Subst.*

The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either chamber thereof for any purpose:

OFA Fiscal Note

State Impact:

Agency Affected	Fund-Effect	FY 09 \$	FY 10 \$
UConn	GF - Cost	2.0 million	2.0 million

Note: GF=General Fund

Municipal Impact: None

Explanation

The bill requires the University of Connecticut (UConn) to (1) implement the recommendations of the Office of Workforce Competitiveness' (OWC) draft report, and (2) recruit, within available appropriations, an eminent faculty research team in nanotechnology¹.

sHB 5021, the budget bill, as favorably reported by the Appropriations Committee does not contain any funding for the recruitment of a new nanotechnology team. The cost of recruiting an eminent faculty team in nanotechnology is estimated to cost UConn approximately \$2.0 million. In order to implement the provisions of the underlying bill, UConn would have to reallocate resources from other purposes dedicated to non-mandated programs.

The Out Years

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation.

¹ By law, UConn must raise a \$2.0 million match from the industry and other sources before it can spend any state dollars for its eminent faculty research team.

OLR Bill Analysis**sSB 317*****AN ACT CONCERNING FUNDING FOR AN EMINENT FACULTY RESEARCH TEAM AND NANOTECHNOLOGY.*****SUMMARY:**

This bill requires UConn to (1) implement the recommendations of the Office of Workforce Competitiveness' (OWC) draft report, "Investing in Institutionally-Based, Shared-Use Nanotechnology Facilities for Research, Education, and Product Development" and (2) recruit an eminent faculty research team in nanotechnology. UConn must do this within available appropriations. By law, UConn must receive written commitments for at least \$2 million in financial support from industry and other sources before it can spend any state dollars for its eminent faculty recruitment program.

By law, OWC may award grants to colleges and universities, businesses, and technology-focused organizations to develop a Connecticut Center for Nanoscale Sciences and Development. The center must provide (1) at least one shared-use laboratory in the state to advance academic research, industry application development, and education involving the synthesis, characterization, and fabrication of nanoscale material, intermediates, and devices and (2) related activities. The bill requires that the center also provide:

1. access to advanced atomic scale characterization and imaging instrumentation;
2. pilot scale prototyping for nanotechnology components and devices;
3. expert technical operations support, including eminent faculty;
4. proactive outreach programs as a single point of contact and

technical assistance to the colleges, universities, and industries using the advanced facilities;

5. significant levels of coinvestment from participating institutions; and
6. shared-use provisions with industry and other education and research institutions.

EFFECTIVE DATE: July 1, 2008

BACKGROUND

Nanotechnology

Nanotechnology is cross-disciplinary science that combines chemistry and engineering to manipulate individual atoms and molecules to produce a desired structure. It can be applied to organic and inorganic matter. Nanotechnology is potentially applicable to material, manufacturing processes, alternate energy production, electronics, and health care products and processes.

UConn Eminent Faculty Recruitment Program

UConn must recruit faculty to accelerate applied research and development in a way that supports the state's economic development and promotes core competence areas. It must do this by supplementing faculty compensation and related costs. Eligible scientists must have demonstrated excellence in their research fields, want to work collaboratively with other UConn scientists, and be interested in commercializing their research.

Legislative History

The Senate referred the bill (File 592) to the Finance, Revenue and Bonding Committee, which eliminated a provision authorizing up to \$16 million in bonds and requiring the Department of Economic and Community Development, in consultation with OWC, to use the bond proceeds to provide grants-in aid to UConn and Yale University for the development of nanoscale sciences centers.

COMMITTEE ACTION

Higher Education and Employment Advancement Committee

Joint Favorable Change of Reference

Yea 15 Nay 0 (03/04/2008)

Appropriations Committee

Joint Favorable Substitute

Yea 54 Nay 0 (03/28/2008)

Finance, Revenue and Bonding Committee

Joint Favorable Substitute

Yea 47 Nay 0 (04/24/2008)