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1	SENATE BILL NO. 1038
2 3	Offered January 14, 2015
3	Prefiled January 12, 2015
4	A BILL to amend and reenact §§ 2.2-225, 2.2-2220.1, 2.2-2221, and 2.2-2233.1 of the Code of Virginia,
5	relating to investment in research and technology in the Commonwealth.
6	Detrong Hanger and Lawie
7	Patrons—Hanger and Lewis
8	Referred to Committee on General Laws and Technology
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10	Be it enacted by the General Assembly of Virginia:
11	1. That §§ 2.2-225, 2.2-2220.1, 2.2-2221, and 2.2-2233.1 of the Code of Virginia are amended and
12	reenacted as follows:
13	§ 2.2-225. Position established; agencies for which responsible; additional powers.
14	The position of Secretary of Technology (the Secretary) is created. The Secretary shall be responsible
15	to the Governor for the following agencies, councils, and boards: Information Technology Advisory
16	Council, Innovation and Entrepreneurship Investment Authority, Virginia Information Technologies
17	Agency, Virginia Geographic Information Network Advisory Board, and the E-911 Services Board. The
18 19	Governor, by executive order, may assign any other state executive agency to the Secretary, or reassign
19 20	any agency listed in this section to another Secretary. Unless the Governor expressly reserves such power to himself, the Secretary may, with regard to
2 0 2 1	strategy development, planning and budgeting for technology programs in the Commonwealth:
22	1. Monitor trends and advances in fundamental technologies of interest and importance to the
23	economy of the Commonwealth and direct and approve a stakeholder-driven technology strategy
24	development process that results in a comprehensive and coordinated view of research and development
25	goals for industry, academia and government in the Commonwealth. This strategy shall be updated
26	biennially and submitted to the Governor, the Speaker of the House of Delegates and the President Pro
27	Tempore of the Senate.
28	2. Work closely with the appropriate federal research and development agencies and program
29 30	managers to maximize the participation of Commonwealth industries and universities in these programs
30 31	consistent with agreed strategy goals.3. Direct the development of plans and programs for strengthening the technology resources of the
32	Commonwealth's high technology industry sectors and for assisting in the strengthening and
33	development of the Commonwealth's Regional Technology Councils.
34	4. Direct the development of plans and programs for improving access to capital for
35	technology-based entrepreneurs.
36	5. Assist the Joint Commission on Technology and Science created pursuant to § 30-85 in its efforts
37	to stimulate, encourage, and promote the development of technology in the Commonwealth.
38	6. Continuously monitor and analyze the technology investments and strategic initiatives of other
39 40	states to ensure the Commonwealth remains competitive.
40 41	7. Strengthen interstate and international partnerships and relationships in the public and private sectors to bolster the Commonwealth's reputation as a global technology center.
42	8. Develop and implement strategies to accelerate and expand the commercialization of intellectual
43	property created within the Commonwealth.
44	9. Ensure the Commonwealth remains competitive in cultivating and expanding growth industries,
45	including life sciences, advanced materials and nanotechnology, biotechnology, and aerospace.
46	10. Monitor the trends in the availability and deployment of and access to broadband
47	communications services, which include, but are not limited to, competitively priced, high-speed data
48	services and Internet access services of general application, throughout the Commonwealth and
49 50	advancements in communications technology for deployment potential. The Secretary shall report
50 51	annually by December 1 to the Governor and General Assembly on those trends. 11. Review and approve or disapprove, according to the recommendations of the Chief Information
52	Officer (CIO) pursuant to § 2.2-2008, the selection or termination of any Commonwealth information
53	technology project that has been defined or designated as a "major information technology project"
54	pursuant to subdivision 13 and any Commonwealth information technology project with high risk and
55	high complexity.
56	12. Review and approve statewide technical and data standards for information technology and
57	related systems, including the utilization of nationally recognized technical and data standards for health
58	information technology systems or software purchased by a state agency of the Commonwealth, as

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59 recommended by the CIO pursuant to § 2.2-2007.

60 13. Develop the criteria, requirements, and process for defining a Commonwealth information technology project as a "major information technology project" for the purposes of § 2.2-2006, including 61 62 the criteria, requirements, and process for designating a Commonwealth information technology project 63 that has a cost below \$1 million as a "major information technology project."

14. Designate Commonwealth information technology projects as major information technology 64 65 projects according to the criteria, requirements, and process developed pursuant to subdivision 13.

15. Review and approve the initiation or termination of any procurement conducted pursuant to 66 § 2.2-2012 with a total estimated cost over \$1 million, and contracts or amendments thereto. 67

68 16. Review and approve statewide information technology project, procurement, and investment management policies and standards, as developed and recommended by the CIO pursuant to § 2.2-2007. 69

17. Designate specific projects as enterprise information technology projects, prioritize the 70 71 implementation of enterprise information technology projects, establish enterprise oversight committees to provide ongoing oversight for enterprise information technology projects. 72

18. Review and approve the Commonwealth Project Management Standard as defined in § 2.2-2006.

74 19. Establish Internal Agency Oversight Committees and Secretariat Oversight Committees as 75 necessary and in accordance with § 2.2-2021.

20. Approve guidelines, at the recommendation of the Innovation and Entrepreneurship Investment 76 77 Authority, for the application, review, and award of funds from the Commonwealth Research 78 Commercialization Fund pursuant to § 2.2-2233.1. 79

§ 2.2-2220.1. Research and Technology Investment Advisory Committee.

80 A. The Authority shall be advised by the Research and Technology Investment Advisory Committee (the Advisory Committee). The Advisory Committee shall be administered by the Authority and consist 81 of 10 members as follows: the four vice-provosts of research at major state institutions of higher 82 83 education from the state institutions of higher education not represented on the Authority, the president and chief executive officer of the Virginia Economic Development Partnership, and five citizen members 84 85 appointed by the Authority Governor. The citizen members shall be appointed as follows: two citizens 86 shall be representatives of venture capital firms or other capital market participants with have experience 87 in financing emerging technology businesses, one citizen shall be a representative of an engineering firm 88 with experience in the development of facilities for emerging technology companies, one citizen shall 89 represent an independent or federal research facility in the Commonwealth, and one citizen shall 90 represent a technology company with significant operations in the Commonwealth. A vice-provost of a state institution shall serve until the president of the institution that he represents is appointed to serve 91 on the Authority, at which time the vice-provost of the state institution no longer represented on the Authority shall become a member of the Advisory Committee. Citizen members shall be appointed for 92 93 terms of four years. A citizen member may be appointed for successive terms. 94

95 B. The Advisory Committee shall assist the Authority in reviewing applications for awards from the Commonwealth Research Commercialization Fund pursuant to § 2.2-2233.1 and make recommendations 96 to the Authority concerning the awards. In reviewing the applications, the Advisory Committee shall 97 98 only recommend for award those applications that, based upon the Commonwealth Research and 99 Technology Strategic Roadmap and in the opinion of the Advisory Committee, (i) are based upon sound scientific principles and present an opportunity for valid research, (ii) relate to a key industry sector 100 101 identified in the Commonwealth Research and Technology Strategic Roadmap as an area of focus for technology investment in the Commonwealth, and (iii) present a significant potential for 102 commercialization in the Commonwealth. In the case of an application for an award from the eminent 103 researcher recruitment program pursuant to subdivision D 6 5 of § 2.2-2233.1, the Advisory Committee 104 shall only consider researchers who conduct viable research with significant potential for commercialization in an area related to a key industry sector identified in the Strategic Roadmap as an 105 106 area of focus for technology investment in the Commonwealth. 107

§ 2.2-2221. Powers of the Authority.

109 The Authority is granted all powers necessary or convenient for the carrying out of its statutory 110 purposes, including, but not limited to, the following rights and powers to:

111 1. Sue and be sued, implead and be impleaded, complain and defend in all courts.

2. Adopt, use, and alter at will a corporate seal.

113 3. Acquire, purchase, hold, use, lease or otherwise dispose of any project and property, real, personal or mixed, tangible or intangible, or any interest therein necessary or desirable for carrying out the 114 115 purposes of the Authority, and, without limitation of the foregoing, to lease as lessee, any project and 116 any property, real, personal or mixed, or any interest therein, at such annual rental and on such terms 117 and conditions as may be determined by the Board and to lease as lessor to any person, any project and any property, real, personal or mixed, tangible or intangible, or any interest therein, at any time acquired 118 119 by the Authority, whether wholly or partially completed, at such annual rental and on such terms and conditions as may be determined by the Board, and to sell, transfer or convey any property, real, 120

personal or mixed, tangible or intangible or any interest therein, at any time acquired or held by theAuthority on such terms and conditions as may be determined by the board of the Authority.

4. Plan, develop, undertake, carry out, construct, improve, rehabilitate, repair, furnish, maintain, andoperate projects.

125 5. Adopt bylaws for the management and regulation of its affairs.

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6. Establish and maintain satellite offices within the Commonwealth.

127 7. Fix, alter, charge, and collect rates, rentals, and other charges for the use of projects of, or for the sale of products of or for the services rendered by, the Authority, at rates to be determined by it for the purpose of providing for the payment of the expenses of the Authority, the planning, development, construction, improvement, rehabilitation, repair, furnishing, maintenance, and operation of its projects and properties, the payment of the costs accomplishing its purposes set forth in § 2.2-2219, the payment of the principal of and interest on its obligations, and to fulfill the terms and provisions of any agreements made with the purchasers or holders of any such obligations.

134 8. Borrow money, make and issue bonds including bonds as the Authority may determine to issue 135 for the purpose of accomplishing the purposes set forth in § 2.2-2219 or of refunding bonds previously 136 issued by the Authority, and to secure the payment of all bonds, or any part thereof, by pledge or deed of trust of all or any of its revenues, rentals, and receipts or of any project or property, real, personal or 137 138 mixed, tangible or intangible, or any interest therein, and to make agreements with the purchasers or 139 holders of such bonds or with others in connection with any such bonds, whether issued or to be issued, 140 as the Authority deems advisable, and in general to provide for the security for the bonds and the rights 141 of holders thereof.

9. Make and enter into all contracts and agreements necessary or incidental to the performance of its duties, the furtherance of its purposes and the execution of its powers under this article, including agreements with any person or federal agency.

10. Employ, in its discretion, consultants, attorneys, architects, engineers, accountants, financial
 experts, investment bankers, superintendents, managers and such other employees and agents as may be
 necessary, and to fix their compensation to be payable from funds made available to the Authority.

148 11. Receive and accept from any federal or private agency, foundation, corporation, association or 149 person grants to be expended in accomplishing the objectives of the Authority, and to receive and accept 150 from the Commonwealth or any state, and any municipality, county or other political subdivision thereof 151 and from any other source, aid or contributions of either money, property, or other things of value, to be 152 held, used and applied only for the purposes for which such grants and contributions may be made.

153 12. Render advice and assistance, and to provide services, to institutions of higher education and to 154 other persons providing services or facilities for scientific and technological research or graduate 155 education, provided that credit towards a degree, certificate or diploma shall be granted only if such 156 education is provided in conjunction with an institution of higher education authorized to operate in 157 Virginia.

158 13. Develop, undertake and provide programs, alone or in conjunction with any person or federal 159 agency, for scientific and technological research, technology management, continuing education and in-service training, provided that credit towards a degree, certificate or diploma shall be granted only if 160 161 such education is provided in conjunction with an institution of higher education authorized to operate in 162 Virginia; to foster the utilization of scientific and technological research information, discoveries and 163 data and to obtain patents, copyrights and trademarks thereon; to coordinate the scientific and 164 technological research efforts of public institutions and private industry and to collect and maintain data 165 on the development and utilization of scientific and technological research capabilities. The universities set forth in § 2.2-2220 shall be the principal leading universities in the research institutes. 166

167 14. Pledge or otherwise encumber all or any of the revenues or receipts of the Authority as security168 for all or any of the obligations of the Authority.

169 15. Receive, administer, and market any interest in patents, copyrights and materials that were 170 potentially patentable or copyrightable developed by or for state agencies, public institutions of higher 171 education and political subdivisions of the Commonwealth. The Authority shall return to the agency, 172 institution or political subdivision any revenue in excess of its administrative and marketing costs. When 173 general funds are used to develop the patent or copyright or material that was potentially patentable or 174 copyrightable, any state agency, except a public institution of higher education in Virginia, shall return 175 any revenues it receives from the Authority to the general fund unless the Governor authorizes a percentage of the net royalties to be shared with the developer of the patented, copyrighted, or 176 177 potentially patentable or copyrightable property.

178 16. Develop the Commonwealth Research and Technology Strategic Roadmap, pursuant to
179 § 2.2-2221.2 for the Commonwealth to use to identify research areas worthy of institutional focus and
180 Commonwealth investment in order to promote commercialization and economic development efforts in
181 the Commonwealth.

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182 17. Foster innovative partnerships and relationships among the Commonwealth, the Commonwealth's state institutions of higher education, the private sector, federal labs, and not-for-profit organizations to 183 184 improve research and development commercialization efforts.

185 18. Receive and review annual reports from state institutions of higher education regarding the progress of projects funded through the Commonwealth Research Initiative or the Commonwealth 186 187 Research and Commercialization Fund. The Authority shall develop guidelines, methodologies, and 188 criteria for the reports. The Authority shall aggregate the reports and submit an annual omnibus report 189 on the status of research and development initiatives in the Commonwealth to the Governor and the 190 chairmen of the Senate Finance Committee, the House Appropriations Committee, the Senate Committee 191 on General Laws and Technology, the House Committee on Science and Technology, and the Joint 192 Commission on Technology and Science.

193 19. Develop Recommend to the Secretary of Technology guidelines for the application, review, and 194 award of funds from the Commonwealth Research Commercialization Fund pursuant to § 2.2-2233.1. 195 These guidelines shall address, at a minimum, the application process and shall give special emphasis to 196 fostering collaboration between institutions of higher education and partnerships between institutions of 197 higher education and business and industry.

198 20. Appoint the citizen members of the Research and Technology Investment Advisory Committee 199 pursuant to <u>§ 2.2-2220.1.</u>

200 21. Do all acts and things necessary or convenient to carry out the powers granted to it by law.

201 § 2.2-2233.1. Commonwealth Research Commercialization Fund; continued; purposes; report. 202 A. For purposes of this section:

"Guidelines" means guidelines developed and published by the Authority, and approved by the Secretary of Technology, regarding the administration of the Commonwealth Research 203 204 205 Commercialization Fund.

206 'Qualified research and technologies" means research programs or technologies identified in the 207 Commonwealth Research and Technology Strategic Roadmap as areas of focus for technology 208 investment in the Commonwealth, which may include but are not limited to the fields of energy, 209 conservation, environment, microelectronics, robotics and unmanned vehicle systems, advanced 210 shipbuilding, or lifespan biology and medicine.

'Qualifying institution" means (i) a public or private institution of higher education in the 211 212 Commonwealth or its associated intellectual property foundation that adopts a policy regarding the 213 ownership, protection, assignment, and use of intellectual property pursuant to § 23-4.3 or (ii) a federal 214 research facility located in the Commonwealth. 215

"SBIR" means the Small Business Innovation Research Program authorized under 15 U.S.C. § 638.

"STTR" means the Small Business Technology Transfer Program authorized under 15 U.S.C. § 638.

217 B. From such funds as may be appropriated by the General Assembly and any gifts, grants, or donations from public or private sources, there is created in the state treasury a special nonreverting, 218 219 permanent fund, to be known as the Commonwealth Research Commercialization Fund (the Fund), to be 220 administered by the Authority pursuant to the guidelines. The Fund shall be established on the books of 221 the Comptroller. Interest earned on moneys in the Fund shall remain in the Fund and be credited to it. 222 Any moneys remaining in the Fund at the end of each fiscal year, including interest thereon, shall not 223 revert to the general fund but shall remain in the Fund. Expenditures and disbursements from the Fund, 224 which may consist of grants or loans, shall be made by the State Treasurer on warrants issued by the 225 Comptroller upon written request bearing the signature of the chairman or the vice-chairman of the 226 Authority, or, if so authorized by the Authority, bearing his facsimile signature, and the official seal of 227 the Authority.

228 C. Awards from the Fund shall be made by the Authority, pursuant to the guidelines and upon the 229 recommendation of the Research and Technology Investment Advisory Committee. Awards from the 230 Fund shall only be made to applications that further the goals set forth in the Commonwealth Research 231 and Technology Strategic Roadmap. 232

D. Awards from the Fund may be granted for the following programs:

233 1. For fiscal years beginning with a Fund balance of less than \$7 million, an SBIR matching funds 234 program for Virginia-based technology businesses. Businesses meeting the following criteria shall be 235 eligible to apply for an award:

236 a. The applicant has received a Phase I SBIR award from the National Institute of Health targeted at 237 the development of qualified research or technologies;

- 238 b. The applicant employs fewer than 12 full-time employees;
- 239 c. At least 51 percent of the applicant's employees reside in Virginia; and
- 240 d. At least 51 percent of the applicant's property is located in Virginia.

The length of time that a business has been incorporated shall have no bearing on an applicant's 241 242 eligibility for an award. Applicants shall be eligible for matching grants of up to \$50,000 of the Phase I 243 award. All applicants shall be required to submit a commercialization plan with their application.

244 2. For fiscal years beginning with a Fund balance of \$7 million or greater, an SBIR and STTR 245 matching funds program for Virginia-based technology businesses. Businesses meeting the following 246 criteria shall be eligible to apply for an award:

247 a. The applicant has received an SBIR or STTR award targeted at the development of qualified 248 research or technologies;

249 b. The applicant employs fewer than 12 full-time employees;

250 c. At least 51 percent of the applicant's employees reside in Virginia; and

251 d. At least 51 percent of the applicant's property is located in Virginia.

252 The length of time that a business has been incorporated shall have no bearing on an applicant's 253 eligibility for an award. Applicants shall be eligible for matching grants of up to \$100,000 for Phase I 254 awards and up to \$500,000 for Phase II awards. All applicants shall be required to submit a 255 commercialization plan with their application.

256 3. A matching funds program to assist qualifying institutions and other research institutions in 257 leveraging federal and private funds designated for the commercialization of qualified research or 258 technologies. The chairman of the Authority is authorized to issue letters of financial commitment to 259 assist applicants in leveraging federal and private funds.

260 4. A facilities enhancement loan program for qualifying institutions and political subdivisions to 261 provide lease or credit guarantees to assist in financing facilities utilized for commercializing qualified 262 research or technologies developed at qualifying institutions. The facilities enhancement loan program 263 shall have the following parameters:

264 a. Qualifying institutions and political subdivisions may apply to the Fund for loans to the extent that 265 such institution's or political subdivision's outstanding principal balance at any one time does not exceed 266 \$500,000. Loan applications shall include business plans that detail and explain the anticipated uses of 267 funds received and the proposed repayment schedule.

268 b. Loans from the Fund shall take the form of a contractual commitment to the recipient qualifying 269 institution or political subdivision for a line of credit for up to five years, along with an approved 270 schedule of repayment. During the contractual period the recipient qualifying institution or political 271 subdivision may draw upon the line of credit for any expense for which the loan was made, not to 272 exceed the stated amount of the loan award. At the end of the contractual period, the line of credit shall 273 terminate and the outstanding balance of the withdrawals on that line of credit shall become the 274 established basis for that loan.

275 e. During the contractual period, deferred interest shall accumulate on the outstanding balance at a 276 rate of three percent compounded annually. Borrowing institutions or political subdivisions may prepay 277 part or all of any loan received from the Fund without penalty, and, if repayment is completed within 278 the contractual period of the line of credit, the accumulated interest obligation shall be forgiven.

279 d. Repayment of the established basis shall consist of a maximum of 84 equal monthly payments of 280 principal and compounded interest at the determined rate beginning on the first day of the month 281 following the end of the contractual period.

282 5. A commercialization program to incentivize the commercialization of a product or service related 283 to a qualifying technology. An eligible applicant shall have operations in the Commonwealth, and the 284 project proposed by the applicant shall:

285 a. Commercialize a product or service related to a qualifying technology; 286

b. Have a demonstrable economic development benefit to the Commonwealth;

287 c. Match the award, on at least a one-to-one basis, from other available funds, including funds from 288 an institution of higher education collaborating on the project; and

289 d. Have a reasonable probability of enhancing the Commonwealth's national and global 290 competiveness.

291 Priority shall be given to those applications that propose projects that (i) are collaborative between 292 private and nonprofit entities, public or private agencies, and qualifying institutions or research 293 institutions; (ii) project a short time to commercialization, although transformative projects with a longer 294 projected time to commercialization shall not be discounted; (iii) have active third-party equity holders; 295 (iv) have technology and management in place that are likely to successfully bring the product or 296 service to the marketplace; or (v) are from applicants who have a history of successful projects funded 297 by the Fund. The length of time that a business has been incorporated shall have no bearing on an 298 applicant's eligibility for an award.

299 6. 5. An eminent researcher recruitment program to acquire and enhance research superiority at 300 public qualifying institutions. For purposes of applications pursuant to this subdivision, the applicant 301 shall be a state institution of higher education. In order to qualify for an award, the applicant shall:

302 a. Demonstrate that the researcher being recruited would create research superiority at the institution; 303 b. Demonstrate that the institution making the application has sufficient technology transfer processes

304 and other research capabilities in place to meet the needs of the researcher being recruited; SB1038

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305 c. Involve a private sector partner with business operations in the Commonwealth;

306 d. Demonstrate that the research conducted by the researcher is in a qualifying technology; and

307 e. Match the award, on at least a one-to-one basis, with 50 percent of the match from the applicant308 and 50 percent of the match from the private sector partner.

E. Any application for an award from the Fund shall include a strategic plan that, at a minimum, identifies (i) how the proposed project fits into the Commonwealth Research and Technology Strategic Roadmap, (ii) other funds that may be reasonably expected from other sources as a result of an award from the Fund, (iii) the potential for commercialization of the research or technology underlying the application, and (iv) opportunities for public and private collaboration.

F. No award shall be made from the Fund until a performance agreement or memorandum of 314 understanding is agreed to by the Authority and the recipient of the award memorializing the terms and 315 conditions of the award. Such agreement or memorandum of understanding shall set forth any conditions 316 317 for receipt of the award, any dates certain for the completion of certain acts by the recipient, and provisions for the repayment of any award, including the rate of interest to be charged if any, if the 318 recipient does not meet the terms of the agreement. In the event that an award is to be made over a 319 multi-year period, the performance agreement or memorandum of understanding shall establish certain 320 benchmarks or performance standards against which to measure the interim success of the project before 321 additional funds are disbursed from the Fund. 322

G. The chairman of the Authority shall provide the Governor and the General Assembly with an
annual report to include a detailed list of awards and loans committed, the amount of each approved award or loan, a description of the approved proposals, and the amount of federal or private matching
funds anticipated where applicable, a statement concerning how the approved proposals further the goals
of the Commonwealth Research and Technology Strategic Roadmap, and an assessment of the
effectiveness of the Fund.

H. Administrative expenses related to implementing the guidelines and review process may bereimbursed from the Fund.