

1 **TOBACCO REGION REVITALIZATION COMMISSION**

2 701 East Franklin Street, Suite 501

3 Richmond, Virginia 23219

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7 **Research and Development Committee Meeting**

8 Tuesday, September 19, 2017

9 4:00 o'clock p.m.

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 The Crossroads Institute

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 Galax, Virginia

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1 APPEARANCES:

2 The Honorable Kathy J. Byron, Chairman
3 The Honorable James W. Morefield, Vice Chairman
4 The Honorable Charles W. Carrico, Sr.
5 Ms. Mary Rae Carter
6 Ms. Rebecca Coleman
7 Ms. Kathy Lowe
8 The Honorable Daniel W. Marshall, III
9 Mr. A. Dale Moore
10 The Honorable Edward Owens
11 The Honorable Frank M. Ruff

12

13 COMMISSION STAFF:

14 Mr. Evan Feinman, Executive Director
15 Mr. Christopher E. Piper, Deputy Executive Director
16 Mr. Timothy S. Pfohl, Grants Director
17 Ms. Stephanie S. Kim, Director of Finance
18 Ms. Sarah K. Capps, Grants Program Administrator,
19 Southside Virginia
20 Ms. Michele Faircloth, Grants Assistant,
21 Southside Virginia
22 Ms. Sara G. Williams, Grants Program Administrator,
23 Southwest Virginia
24 Ms. Jessica Stamper, Grants Assistant
25 Southwest Virginia

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COMMISSION STAFF (Continued):

Ms. Stacey Richardson, Administrative Supervisor

COUNSEL FOR THE COMMISSION:

Ms. Elizabeth B. Myers, Assistant Attorney General
Richmond, Virginia 23219

1 September 19, 2017

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DELEGATE BYRON: Good afternoon, I'm going to call
4 the Research and Development Committee Meeting to order.

5

Evan, would you call the roll.

6

MR. FEINMAN: Yes, Madam Chairman.

7

Delegate Byron.

8

DELEGATE BYRON: Here.

9

MR. FEINMAN: Senator Carrico.

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SENATOR CARRICO: Here.

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MR. FEINMAN: Ms. Coleman.

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MS. COLEMAN: Here.

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MR. FEINMAN: Ms. Carter.

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MS. CARTER: Here.

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MR. FEINMAN: Ms. Lowe.

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MS. LOWE: Here.

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MR. FEINMAN: Delegate Marshall.

18

DELEGATE MARSHALL: Here.

19

MR. FEINMAN: Mr. Moore.

20

MR. MOORE: Here.

21

MR. FEINMAN: Delegate Morefield.

22

DELEGATE MOREFIELD: Here.

23

MR. FEINMAN: Mr. Owens.

24

MR. OWENS: Here.

25

MR. FEINMAN: Senator Ruff.

1 SENATOR RUFF: Here.

2 MR. FEINMAN: You have a quorum.

3 DELEGATE BYRON: I hope everyone has read the
4 minutes of our last meeting. That's 5-17-17. I have a motion.

5 MR. OWENS: Second.

6 DELEGATE BYRON: I have a motion and a second. All
7 those in favor, say aye? (Ayes.) Opposed? (No response.) The
8 minutes are approved.

9 Evan, do you want to start us out?

10 We're not dealing with Broadband, we're going back to
11 four other R&D projects we spoke about previously. SBIR
12 funding.

13 MR. FEINMAN: That's correct, Madam Chairwoman.
14 And, actually, I'll turn this over to Tim to discuss the SBIR
15 funding request before the Committee.

16 MR. PFOHL: The Commission received three new
17 Research and Development grants, and there was an August 3rd
18 due date. There's a request for nearly \$4.5 million out of the
19 available \$12.8 million balance. Stephanie's financial information
20 is in the back of your book, and that shows an R&D Committee
21 balance of \$22.8 million. And you recall in May, you set aside
22 \$10 million of that for Broadband/Last Mile projects, and those
23 we'll be accepting in November and reporting to you in January.
24 That leaves \$12.8 million for R&D projects.

25 One continuation request, and that's something we've

1 been doing over the last couple of years. And projects or
2 companies that received funding in one previous round of
3 support from your Committee, and that's the Danville Project.
4 Our first two requests for SBIR Phase Two projects. The two
5 requests are both from Region 2000, the CAER. We put out a
6 call for projects that had successfully completed SBIR, Phase
7 One, proof of concept and either procured or pursuing Federal
8 SBIR Phase Two funding. And then we would consider a request
9 to provide supplemental matching costs. The SBIR has no match
10 requirement.

11 The first one up is a continuation request, City of
12 Danville, Number 3337, just under \$2 million for an Improved
13 Natural Non-Nutritive Sweetener Research and Development.
14 The private beneficiary company, Engineered Biopharmaceutical,
15 or eBio, and they received one of the earliest Commission R&D
16 grants in May of 2011 and concluded its project to test process
17 for creating dry powdered pharmaceuticals in 2014.

18 The company continues to maintain a presence in the
19 Dan River Business and Development Center, but this is a one-
20 year request for operating expenses to use its patented
21 technology to develop and test commercial-scale processes to
22 improve the flavor profile of Stevia, which is a natural non-
23 nutritive sweetener in wide use as a low-calorie sugar substitute
24 across the food and beverage industry. eBio has used its own
25 resources, proof of concept validated in professional taste tests

1 and provided a very clear description of the research with
2 assistance from two beverage industry senior executives.

3 The proposal provides a very clear description of the
4 research steps to be accomplished, including further product
5 refinement, process development, and commercial viability and
6 scale-up. Commission funds would pay for 100 percent of the
7 salaries, wages, and benefits for 22 chemical engineers,
8 scientists, and technicians to be hired for the project. And that's
9 a \$1.2 million component of their request for a one-year period.

10 They're also requesting from the Commission some
11 \$448,000 for equipment, supplies, and operating costs, and so
12 forth. Private matching funds committed by the company will
13 pay for equipment, and that's about a million dollars; operating
14 costs, \$617,000; consulting and testing services, \$265,000.

15 Staff suggests that a more appropriate approach is to
16 equally share the cost of new Tobacco Region positions with the
17 company and its investors, which would result in a reduction of
18 personnel funding by almost \$629,000.

19 Commercialization in 2019 and beyond is envisioned
20 as 30 additional jobs and private investment of \$5 million in plant
21 and equipment at a site that the company is working with the
22 City of Danville on. A number of factors make this a compelling
23 proposal, included eBio success with its first grant and its
24 ongoing presence in Danville, an advisory team that consists of
25 C-suite level beverage executives, proof of concept validated by

1 professional panels independently. Potentially enormous global
2 market and significant job creation and private capital
3 investment in both the research and commercialization phases.

4 A very thorough business plan notes several
5 substantial hurdles that must be overcome to reach
6 commercialization, including both the technological process,
7 competition, the economics of production costs, and acceptance
8 by both producers and consumers, but this appears to be a
9 technology and team that seems capable of resolving any
10 barriers to market. They're trying to address the bitterness and
11 the after taste when you have the Stevia, and that's the path
12 they're pursuing.

13 The Staff recommendation award of \$1,370,979, with
14 funding for new positions to be shared equally by the
15 Commission and the company. We gave the company and the
16 City of Danville a heads-up on this, the recommendation last
17 week when it was published, and they're here to answer any
18 questions.

19 DELEGATE BYRON: When did we award the first
20 round in 2011?

21 MR. PFOHL: Just shy of \$3 million. We had a higher
22 cap on the earliest R&D grants.

23 DELEGATE BYRON: For full disclosure, I don't notice
24 that at all; however, I was intrigued by what they were
25 attempting to do. Are you working with the maker of Stevia?

1 Can you explain that and what your product is.

2 MR. SAHI: I'm Carl Sahi, CEO of BioPharmaceuticals,
3 or eBio. We are particle people. When we first came to the
4 grant, we were seeking funds to develop a dry powder
5 technology to enhance the delivery of pharmaceuticals and also
6 the veterinary market. We look at individual molecules, and I'm
7 not trying to bore you. We look at the individual molecules and
8 how you present the molecules to the body to accomplish what
9 we need to do. If you orient the molecules in the appropriate
10 fashion and deliver them in the appropriate fashion, you
11 minimize the amount of drug that is required because you are
12 orienting the molecules to perform most accurately.

13 We had an opportunity to look at this market and in
14 the pharmaceutical area because we had the beverage and food
15 industry and particularly the beverage industry, a large beverage
16 company in Atlanta approached us to what we can do with our
17 technology through their portfolio of beverages. Unrelated to
18 Stevia, which is regular sugar products, we started going down
19 that path with what we could do with our technology in the
20 beverage area.

21 So, what we do with Stevia, the Stevia molecule is a
22 sizeable molecule, it has one portion of the molecule very sweet
23 and very similar to glucose, which is part of sucrose, and then it
24 has a very bitter part of the molecule, which will react with the
25 bitter receptors on your tongue, so you get the sweetness and

1 then the bitterness, and depending on your kinetics, some people
2 are sensitive to this and other people, and what we do is we
3 orient the molecule so only the sweet part of the molecule will be
4 exposed to the receptors on the surface on the tongue. So,
5 there's no physical way with their part of the molecule to interact
6 with any of the receptors.

7 The Stevia market is very large, and everyone in the
8 beverage industry wants to have a Stevia product, and there's a
9 number of products on the market today. The big guys have
10 been unsuccessful in really perfecting it, and you're looking at a
11 level of very high precision on having that sweetness, and that's
12 the area we're going after. Instead of having a Stevia-sweetened
13 beverage where you normally had molecules to enhance the
14 sweetness, we're going with a hundred percent Stevia, a natural
15 product, and we're going after the full-bodied beverage. And
16 people like at Pepsi are trying to promote it.

17 As Tim mentioned, our advisors from Coca Cola, and
18 we had one man who was president of Coke Enterprises, and we
19 recently added two new people were executives with Pepsi. Our
20 market is looking at the full body of the beverage market and
21 having that very precise Stevia orientation.

22 DELEGATE BYRON: Any questions?

23 SENATOR RUFF: You're working with the big boys.
24 Are they putting any money in this research?

25 MR. SAHI: That's correct, the individuals, not the

1 corporation. We did not want to partner with a large beverage
2 company at this point, so the individuals that are X-large
3 beverage are the investors.

4 SENATOR RUFF: Just for the sake of argument, is
5 there any possibility that working along the same lines as other
6 companies?

7 MR. SAHI: The individuals that we're working with --

8 SENATOR RUFF: Corporations?

9 MR. SAHI: Yes, the corporations. The basic
10 competitor to this, or Coke is a great example. They came out
11 with about a year ago, first in Europe and then here, half Stevia
12 and half Sucrose, and that has not turned out to be a big
13 successful project, because they haven't been able to eliminate
14 the bitterness that we talked about. They're looking at other
15 solutions, and one of them is making natural Stevia or making
16 the molecule of Stevia instead of harvesting it as a natural
17 product, make it as a synthetic product.

18 The issue is that they can get to the same molecule,
19 and then the problem is it's no longer a natural sweetener. So,
20 that is one of the areas that these large companies are working
21 on. One of these large companies asked us, and they asked us
22 to work on this project.

23 SENATOR RUFF: Thank you.

24 DELGATE BYRON: Any other questions? I have a
25 Stevia in the Raw, Stevia is Stevia.

1 MR. SAHI: It's a leaf extract, and Stevia in the Raw, if
2 you look at the ingredients, you'll see they have other substances
3 in addition to Stevia.

4 DELEGATE BYRON: There is no patent just on Stevia?

5 MR. SAHI: There is no patent on Stevia. Our patent
6 is on how we orient the Stevia molecules. It not only works with
7 beverages, but also works through other products. It's how you
8 modify the Stevia for presentation, but from a natural product,
9 number one, you're not allowed to go to the natural product.
10 Companies like Stevia in the Raw, they'll have a formulation,
11 they'll cut the Stevia with some other sweeteners to get the total
12 package. The reason why they add other substances to the
13 Stevia is because with a hundred percent Stevia, then it would be
14 bitter.

15 DELEGATE BYRON: Thank you.

16 MS. LOWE: Were there two grants already?

17 MR. PFOHL: No, that was a project area. Their one
18 and only grant was 2011, and wrapped it up in a three-year
19 project, 2014.

20 MS. LOWE: The company is located where?

21 MR. PFOHL: Danville.

22 DELEGATE MARSHALL: Thanks for being here, sir.
23 Tell us about is it a product or when you change something, or is
24 a product you will sell?

25 MR. SAHI: Yes, what we hope to do, we want to

1 manufacture the Stevia sweets that are in Danville. We have in
2 the proposal that we want to have the ability to make a product
3 and add various flavors to, but that's not our main business. Our
4 main business is to make the Stevia a product and ship it to
5 other companies that do the final bottling of soda or other soft
6 drinks and even food products. We're looking at a very rapid
7 development project and scaling up very quickly and want to get
8 the Stevia product out into the marketplace.

9 DELEGATE MARSHALL: If you get to the point where
10 you're doing manufacturing, what timeframe are we looking at?
11 And when you say scale up, how big is big?

12 MR. SAHI: When we talk about scale up, we're talking
13 about how many gallons per hour or how many gallons per day
14 can we produce. If you take Coca-Cola, they sell over a billion
15 cans of soda a day. That's just one of their products. To meet
16 the demands of the market, we have the ability to make our
17 Stevia product right now liquid, the issue is how do we ship
18 truckloads of this liquid substance to the bottlers. This is where
19 we're using our dry-powdered technology and convert it into a
20 dry powder so we can ship it to other places.

21 To answer your question, and if you go back to the
22 liquid side, twenty to fifty thousand gallons per day, and that's
23 just the tip of the iceberg and the quantity we would need to
24 satisfy a growing market. We would not be doing it as an
25 incubator.

1 DELEGATE BYRON: The 22 chemical engineers, are
2 they to be hired, are they going to be in Danville?

3 MR. SAHI: The answer is yes and yes. Basically, in
4 our pharmaceutical business are the research and development
5 type of scientists. With our previous project, we hired or brought
6 in a number of engineers on the scale-up. And this project with
7 Stevia is a big chemical engineering development project as
8 opposed to an R&D project. How can you make this consistently
9 in large quantities, so they would be in Danville.

10 DELEGATE BYRON: Thank you.

11 MR. PFHOL: Shifting gears into our first two SBIR
12 projects. Do you recall the Commission had a long relationship
13 with the Virginia Economic Development Partnership the first half
14 dozen years of this program? That was a very expensive and
15 lengthy process. The Committee met a year ago and decided to
16 use the SBIR, the federal agencies, and there are several small
17 business innovation and research programs. If the companies
18 are successful demonstrating proof of concept, the Phase One
19 SBIR and come back to SBIR for Phase Two commercialization
20 funding, and that's something we're looking to piggy-back on, so
21 to speak.

22 Both of these are from Region 2000 Research
23 Institute, which operates the Center for Advanced Engineering
24 and Research in Bedford. The first one is Request Number 3336
25 for \$2 million, maximum grant amount is requested for the per

1 the program guidelines. This is for Advanced Coatings to Enable
2 Next Generation Products. The proposed beneficiary is
3 Charlottesville-based DVTI, which seeks funds to develop a
4 fourth generation directed vapor deposition coater that greatly
5 expands the capacity of the earlier generations in response to
6 international customer demand. DVTI has exclusive worldwide
7 licenses to UVA-developed technologies for coating applications
8 for metallic and non-metallic fibers. They have an extensive
9 suite of intellectual property, and a long and successful track
10 record of translating SBIR Phase One proof of concept into Phase
11 Two funding.

12 The Company has disclosed that the bulk, if not all, of
13 its currently approved SBIR Phase Two research will continue to
14 be conducted in Charlottesville. Those SBIRs were submitted
15 and approved prior to the company's knowledge of our funding
16 availability. That research will provide intellectual foundation for
17 the Tobacco Region based-design and development that will
18 result in the new higher-volume coater being based at a site in
19 one of the five Tobacco Region localities currently under
20 consideration.

21 It further states that more than \$4 million of matching
22 funds will be spent in the Footprint when the coater is completed.
23 Commission funds are requested specifically for the following:
24 \$1 million for contractual equipment design and testing services,
25 technician training, and so forth, with several Tobacco Region

1 entities, including the Institute for Advanced Learning Research
2 in Danville, New College Institute in Martinsville, and the
3 Chemquest Coating Institute in South Boston.

4 The request also involves \$400,000 for salaries,
5 wages, and benefits for a three-year period, \$200,000 for
6 equipment, operations rent, and utilities, \$200,000, and so forth.

7 The request indicates 16 new Tobacco Region jobs in
8 the research phase, averaging more than \$60,000 in salaries and
9 wages and private capital investment of \$3 million. The
10 commercialization phase outcomes indicate 43 production jobs,
11 averaging \$47,000, with an additional \$3 million of private
12 investment.

13 Given that the company's roster of clients for which it
14 has conducted SBIR and corporate-funded research include
15 several federal agencies, military branches, and Fortune 100
16 aerospace and equipment manufacturers, and the confidential
17 attachments indicate strong demand from global customers for a
18 variety of coatings applications. There appears to be a high
19 likelihood of successful commercialization. It should be noted
20 that while this is not necessarily attracting SBIR funds to the
21 Footprint, it has the benefit of potentially attracting significant
22 job creation and investment to the Tobacco Region as a direct
23 result of substantial SBIR-funded research that can be
24 commercialized for an extensive array of large international
25 manufacturing customers.

1 Staff recommends an award of \$2 million.

2 MR. BAILEY: I'm Bob Bailey, Executive Director of the
3 CAER. We have the folks here.

4 DELEGATE MARSHALL: Tell us about this.

5 UNIDENTIFIED: Would you imagine a very thin piece
6 of plastic and thin piece of wire that gets coated with something.
7 One of our customers is asking us to coat steel fiber with
8 aluminum. And another customer is asking us to coat plastic
9 copper and it has electromagnetic interference. These two
10 particular examples got my interest. The volume has become
11 stagnant. The product here of coating fibers and selling them to
12 some other entity, that's the short answer.

13 DELEGATE MARSHALL: The product line could be
14 anything.

15 UNIDENTIFIED: Yes, you sit in your car and your seat
16 gets warm, that's an application for the steel. You've got cable
17 running through an airplane, and there's 338 miles of cable in
18 one airplane. We can take that polymer-based new wire that's
19 now conductive and reduce the weight by 60 percent. It's the
20 aerospace interest or there's a lot of application.

21 DELEGATE MARSHALL: After research, do you think
22 the commercialization would be in the coating?

23 UNIDENTIFIED: Yes. Our intention is to take these
24 funds and what I call DVD, fourth-generation coating, and
25 designed to produce thousands of feet per minute of various

1 products. The research coating we have in Charlottesville today
2 on its best day is about a hundred feet a minute, and we're going
3 to use that as a testing platform in designing a new piece of
4 equipment that is rather substantial in size and built inside the
5 building that we choose. And if you all are kind enough to make
6 the award, this will be in the Footprint.

7 DELEGATE MARSHALL: So, Michael, are you going to
8 build a new piece of equipment?

9 UNIDENTIFIED: We'll actually contract out the design
10 work with these funds, and then we will arrange and finance the
11 building with the piece of equipment. That'll more than likely be
12 done with a program manager on our side but somewhere else.
13 Symptomatic builds very interesting pieces of equipment, and
14 we're talking with them. And we're looking at all our options at
15 this point. Yes, someone else will have to build the machine.

16 DELEGATE BYRON: Any other questions?

17 MS. LOWE: This company is currently located in
18 Charlottesville?

19 UNIDENTIFIED: Yes, DVTI, Vapor Technologies has
20 been in Charlottesville since 2000, and it's been a research
21 company the whole time, an SBIR powerhouse. Over 30 million
22 in SBIR funds. This technology is an outgrowth of an earlier
23 version.

24 MS. LOWE: When do you expect the jobs to be
25 created?

1 UNIDENTIFIED: We haven't set on a site location yet,
2 and we're looking at several different sites. Relatively quickly,
3 some folks will come on board. Most will be contractors in the
4 beginning. We're going to locate the design in the Footprint, and
5 we haven't really settled on that yet. And we're meeting with the
6 Dan River Development Center folks, and that's real close. That
7 team will bring people from North Carolina and Central Virginia.

8 The jobs themselves will all be housed in the
9 Footprint. We'll go from 16 up pretty quickly. I know you want a
10 number, but I can't give you one exactly. Right now, the
11 schedule is 20 months R&D phase.

12 DELEGATE BYRON: Thank you very much.

13 MR. PFOHL: The third and final SBIR project, also
14 from Region 2000 Research Institute, Number 3338, Screening
15 System for Age-Related Macular Degeneration. The proposed
16 private beneficiary company is also Charlottesville-based
17 iHealthScreen, Incorporated. The company reports it has
18 successfully completed an SBIR Phase One from National
19 Institute of Health, proving the concept for three software
20 products to use retinal image analysis to more accurately detect
21 the progression of early-stage indicators for eventual onset of
22 age-related macular degeneration. iHealthScreen will apply in
23 January of 2018 for a \$1.3 million SBIR Phase Two to further
24 develop two screening and analysis software products. SBIR
25 funds would pay for the salaries of the company's Charlottesville-

1 based principal, a contracted New York faculty collaborator, and
2 to hire three programmers, their workbase location would be in
3 the Tobacco Region. Commission funds would be used to further
4 develop a telemedicine application that is currently offered
5 through an Amazon platform. The telemed platform for secure
6 patent-data transfer, would be further refined with Tobacco
7 Commission support into a platform independent, highly-scalable,
8 and fully functional AMD screening system capable of serving
9 clinics in rural areas.

10 Commission funds are requested for a hundred
11 percent of the costs to hire two additional programmers for three
12 years, \$440,000 total salaries and benefits, as well as \$25,000 of
13 computer equipment and \$10,000 for project management. The
14 request indicates a site in Bedford, Campbell, or Appomattox will
15 be selected, and will eventually be staffed with ten high-skilled
16 jobs.

17 The outcomes stated for the research phase are five
18 jobs, and that'll be the three SBIR-funded, and two Commission-
19 funded positions, and \$120,000 of private capital investment.
20 While commercialization phase outcomes state ten jobs and
21 \$120,000 investment. There was a statement in the proposal
22 that caught our eye, and that said, "Following this we aim to
23 establish a grading center at Denver to analyze retinal images,"
24 and that reference of Denver was meant to be Danville.

25 The request further states a goal that within five years

1 the site will be staffed by at least 20 scientists, programmers,
2 image graders, and additional justification was provided for those
3 numbers during commercialization. The attached business plan
4 identifies a number of competing technologies currently being
5 offered, and purports to have a lower cost solution using less
6 expensive cameras that rural clinics could afford.

7 Commercialization is not described in full detail, stating only that
8 partners and licensees, including Venture Capital, are being
9 sought, which creates some concern about the likelihood of
10 commercialization occurring to any extent in the Tobacco Region.

11 The company has submitted several provisional and
12 non-provisional patents for their technologies. This is a relatively
13 modest R&D request, and Staff is not in any way questioning the
14 validity of these technologies, there are concerns about the
15 mobility and portability of software programming jobs in the
16 research phase, and these jobs could be performed from
17 anywhere and conducted over the internet in the likelihood of
18 commercialization and long-term commitment and job creation
19 and significant private capital investment in the region.

20 Matching funds are dependent on SBIR approval, so
21 should SBIR Phase Two be approved and a more tangible
22 commitment to long-term job creation and investment in the
23 region occur, Staff believes this could be a candidate for
24 reconsideration in the Spring of 2018. Staff recommends this
25 request be tabled.

1 MR. BAILEY: We certainly understand Staff's
2 recommendation, and I'd like to explain the reason in waiting
3 until January to submit it, was based on advice and guidance
4 they were getting from the NIA and had to do with the decision
5 on this grant.

6 In explaining what the Tobacco Commission funds will
7 do, it will allow this telemedicine platform and a broader picture
8 of what they're developing. NIH, if there's no grant here, the
9 decision of this group derives how he writes that January
10 proposal. I'd like to ask that you at least consider let him
11 respond to that today and understand where the
12 recommendation comes from and the basis. The January
13 submittal date was driven by this process and how they write the
14 proposal.

15 MR. BHUIYAN: I've been in the area for 12 years. We
16 need this for the system and we've spent millions of dollars and
17 with the commercialization, this would be a good product. The
18 macular degeneration of the retina, when you read and write,
19 you have to focus in that area. The problem is that you have to
20 have capital, of course, to move forward, but with the proper
21 funding, we can really do wonderful things and this affects
22 everyone. And the funding idea behind all of this, and we want
23 to take all this information and we have to, of course, do the
24 research, and, of course, we are always concerned about the
25 individual patient.

1 When I first approached NIH, there's too much here,
2 we can only do so much, and, of course, telemedicine was
3 discussed, and we had at least \$50,000 to invest in telemedicine.
4 We have this telemedicine, this system, and we concentrate on
5 macular degeneration, and we can repair it, six months to three
6 years, macular degeneration. And based on the information, this
7 is much needed. We're very excited about the telemedicine
8 aspect, and we can offer the appropriate care. So, I thank you
9 for your consideration.

10 MR. BAILEY: While they will be putting in their Phase
11 Two in January, they have received three supplemental awards
12 for Phase One as a sign in NIH, providing additional funding for
13 Phase One.

14 The last comment I will make, and I certainly
15 understand the Staff's operation and concern, but that
16 affordability also makes it easy for them to locate in the
17 Footprint, as well. We would prefer and request some kind of
18 action so they have some guidance about Phase Two, and we're
19 glad to answer any questions.

20 DELEGATE BYRON: Thank you. Do you want a
21 motion on the first one?

22 DELEGATE MARSHALL: Then, Madam Chair, I'll make
23 a motion of Project 3337, City of Danville, \$1,370,979; then, the
24 second one, Project 3336, Region 2000, advanced coatings, for
25 \$2 million.

1 MR. OWENS: Second.

2 DELEGATE BYRON: Thank you. All in favor of those
3 two motions, say aye. (Ayes). Opposed? (No response). The
4 motion is carried.

5 MR. PFOHL: We have a number of other business
6 proposals. We have a grantee who has asked if their project
7 funding be reduced, and this is under Other Business, and this is
8 Grant 3209, which was approved a year ago for \$1 million. The
9 VTT and the LLC, Virginia Tech Transportation Economic
10 Development, Incorporated. The VTT, LLC is a private company
11 operating the GCAPS Tire and Research Center at VIR, and is
12 solely owned by Virginia Tech Transportation and Economic
13 Development, Incorporated, which is a 501C3, that serves as the
14 eligible applicant entity for this project that you approved a year
15 ago.

16 The Research Center is located at VIR. This began in
17 2010, with a \$5 million award, which was to purchase tire testing
18 equipment that still forms the core of its research offerings to
19 car, truck, and tire manufacturers. A significant new market
20 opportunity and added research capability would be testing for
21 manufacturers of motorcycle tires and motorcycle race teams, as
22 well as adding surface replication, modeling, and wet testing for
23 GCAPS' existing car and truck manufacturing clients.

24 The original approval for this grant was to purchase
25 the multimillion dollar piece of equipment described in the

1 Executive Summary. The public private funding partnership for
2 that expense did not materialize and GCAPS has worked on
3 designing and testing its own enhancements to the piece of
4 equipment that we funded the initial \$5 million grant and using
5 local businesses to machine parts and equipment for the LTRe
6 machine. They have not drawn down any of their grant money
7 to date, and their testing concepts for adding components to the
8 electronics with the equipment that we funded with our original
9 grant.

10 So, the revised use of Commission funds, \$500,000 in
11 total, so they're requesting the grant be reduced half, for a total
12 of \$500,000. There's a total expense of \$800,000 that would be
13 shared with a private tire manufacturer. VTT provided a very
14 thorough research plan and list of needed equipment, and this is
15 expected to result in six new jobs. The estimated additional
16 revenue figures, but the request is leveraged at a two-to-one
17 match, once funds are committed by the partner tire
18 manufacturer for equipment and site improvements.

19 GCAPS is committing \$500,000 toward the cost of
20 employing five to seven new research engineers and technicians.
21 Ultimately, the request is likely to produce several well-paying
22 new jobs and significant economic impact in the region for the
23 foreseeable future.

24 Staff recommends approval of the reduced award of
25 \$500,000, down from the original \$1 million, and the revised use

1 of funds to develop equipment and electronics that will
2 accomplish the previously approved objective of motorcycle
3 testing, while adding significant new testing capabilities for
4 existing customers. Grant Number 3209.

5 DELEGATE BYRON: Any questions? All right.

6 MR. PFOHL: We have three others that are simply
7 asking for a fifth-year extension, Bland County Economic
8 Development Authority for the Underground Mine Wireless
9 Communication, Tracking and Atmospheric Monitoring System.
10 Staff recommends approval of a fifth-year extension until
11 December 31, 2017 to allow time for AMR to process final
12 payments and to complete grant close-out activities.

13 The next one is Southwest Virginia Higher Education
14 Center Foundation, Excavation Damage Prevention Devices,
15 Grant Number 2698. In the Phase One B and 1-A funding,
16 they're winding down the 1-A portion, and the Staff recommends
17 approval of a fifth-year extension until September 30, 2018 and
18 affirmation that the remaining \$750,000 for Phase 1-B is
19 available for the project.

20 The last extension is Southwest Virginia Higher
21 Education Center Foundation, LiteSheet: Energy-efficient and
22 Lower-Cost LED Lights, Number 2699. And Staff recommends
23 approval of a fifth-year extension through March 1st, 2018.
24 That's all we have.

25 DELEGATE BYRON: Any questions.

1 DELEGATE MARSHALL: Number 3209, I move to take
2 that out of the block.

3 DELEGATE BYRON: Yes.

4 DELEGATE MARSHALL: I move that we --

5 DELEGATE BYRON: We have a motion. Do we have a
6 second? All right, we've got a second.

7 DELEGATE BYRON: I move we accept the Staff's
8 recommendations.

9 MR. OWEN: I'll second.

10 DELEGATE MARSHALL: I move that we accept 2698
11 and 2699.

12 MR. OWENS: Second.

13 DELEGATE BYRON: All in favor, say aye. (Ayes).
14 Opposed? (No response).

15 Do you have a motion for 2697?

16 SENATOR RUFF: I move that we agree with Staff's
17 recommendation.

18 MR. OWENS: Second.

19 DELEGATE BYRON: What about 2697?

20 DELEGATE MARSHALL: 3209.

21 DELEGATE BYRON: The motion is to accept Staff's
22 recommendation for 3209. All those in favor, say aye. (Ayes).
23 Opposed? (No response). And there's one abstention.

24 SENATOR RUFF: Can we return to 3338, which the
25 Staff recommended tabling it, and I move we table that and

1 instruct Staff to work with the applicant so there's no question in
2 January.

3 DELEGATE BYRON: All in favor, say aye. (Ayes).
4 Opposed? (No response). All right.

5 That completes our work. Is there any public
6 comment? Seeing no one, we are concluded. Thank you.

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PROCEEDINGS CONCLUDED.

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CERTIFICATE OF THE COURT REPORTER

I, Medford W. Howard, Registered Professional Reporter and Notary Public for the State of Virginia at Large, do hereby certify that I was the Court Reporter who took down and transcribed the proceedings of the **Virginia Region Revitalization Commission, Research and Development Committee Meeting**, when held on Tuesday, September 19, 2017, at 4:00 o'clock p.m., at The Crossroads Institute, Galax, Virginia.

I further certify this is a true and accurate transcript, to the best of my ability to hear and understand the proceedings.

Given under my hand this _____ of October, 2017.

Medford W. Howard

Registered Professional Reporter

Notary Public for the State of Virginia at Large

MY COMMISSION EXPIRES: October 31, 2018.