November 1, 2017

Dixie State University Curriculum Committee:

I want to express my sincere support and excitement for the new Bachelor of Science Degree in Cellular and Molecular Biology and Biochemistry that Dixie State is considering adding to its roster of science degree offerings.

Dixie State and Intermountain have been successful partners for many years. We believe that offering this degree will allow both institutions to continue strengthening this relationship. As many of you know, Intermountain has set out to be a world leading organization in the area of precision genomics. With our precision genomics and new destination cancer center, we are bringing ground breaking research as well as new and innovative ways to treat patients in Southern Utah. This type of pioneering research requires in-depth knowledge and application of modern biochemistry and molecular biology, conceptually in practical skills.

We anticipate that the biotechnology sector will contribute significant economic and job growth in the St. George area and surrounding regions. As such, demand for qualified and talented employees will increase, as will opportunities to engage with organizations in this field. Additionally, as Intermountain continues to grow in our pursuits in the biotechnology area, we can see opportunities for our two institutions to further collaborate in this growing field.

I have had an opportunity to review the degree requirements with the Chairs of the Physical Sciences and Biology Departments, Rico Del Sesto and Erin O’Brien. I can attest that the proposed degree meets the standards I’ve seen in other similar degree programs, and will appropriately prepare students for future careers at the interface of chemistry and biology.

Once again I am excited for this new degree, the overall direction Dixie State is headed and our continued relationship. Please do not hesitate to contact me with any additional questions.

Sincerely,

Gary R. Stone, RN, FACHE
VP – Operations Officer, Precision Genomics
November 1, 2017

DSU Curriculum Committee:

As Executive Director of St. George Area Economic Development, I work with various entities to develop a viable and vibrant local economy. My organization enthusiastically supports the proposed Bachelor’s degree in Molecular Biology and Biochemistry.

As Dixie State University continues to grow and expand its academic offerings, we anticipate numerous opportunities to build partnerships with the growing private sector involving established and incoming companies.

There currently exists a robust biotechnology sector in the Washington County region, and molecular biology and biochemistry tend to be a significant component of the needs of those companies. This includes Intermountain Healthcare, with their new translational medicine research in partnership with Stanford University and their Precision Genomics division. The Economic Development agency is actively recruiting companies in the biotechnology and chemistry areas to the St. George region, including established and start-up companies. This important initiative will help promote a highly skilled workforce, enhance job diversification, and strengthen our economic resiliency.

In summary, we are excited for this new degree, as it strategically aligns with the goals and anticipated economic growth of the region. Please do not hesitate to contact me with any additional questions.

Sincerely,

[Signature]

Jeriah Threlfall
Executive Director
Soft Cell Biological Research (SCBR) has developed multiple patent pending liquid biopsy tests that will lead to the development of new antibiotics, better diagnosis of infections and disease, and insight into many autoimmune disorders. Until now, no scientist has been able to culture cell wall deficient bacteria (CWDB) that circulate in mammalian blood.

Currently SCBR is comprised of more than a dozen lab technicians, a microbiologist, a molecular biologist, a pathologist and an epidemiologist. Together, we have processed over 900 samples of blood from which we have cultured over 4000 CWDB, including 621 novel bacteria.

The importance of this process cannot be overstated. These bacteria thrive within the bloodstream without detection by the immune system or by any other means of current medical testing. We have the unique opportunity to lead the scientific world right here in Washington County with the help of our partner Dixie State University. The proposed Biochemistry and Molecular Biology program would strengthen our partnership, and provide opportunities for students to gain valuable, high-impact research experience at the forefront of this technology. Additionally, we anticipate that the skills and knowledge provided by this new Biochemistry program will allow Dixie State students to outcompete their peers from outside of this region.

Through extensive research over the last two years, SCBR has perfected our growth protocol and is ready for expansion into a CLIA certified lab space. Detection and treatment of recurrent infections will be our first line of specialty and the primary focus of our business model in the coming year. The new Biochemistry program at DSU could not have come at a more opportune time for our continued success and expansion in Washington County. The very scientific training as outlined by this program would prepare a readymade workforce that could support SCBR Molecular Biology processes.

Currently we hold over 144 bacteria that produce antimicrobial compounds. Last week, the University of Utah began evaluating biochemically twelve of our top antimicrobial compound producing bacteria, work we would prefer to complete in St. George. SCBR has the capability to create hundreds of new jobs in the community. In order for this work to be performed locally with at Dixie State, some equipment is needed for characterization of these new antimicrobial compounds, such as mass spectrometry and chromatography. Initial estimates for SCBR include fifty additional jobs, thirty-seven of which will require special certifications and/or Ph.D. level education, within the first year of expansion. Projected increased revenue is expected to drive a full capacity lab with estimates of a tenfold increase in square footage and employees.

Sincerely,

John Brent Hunt
Founder/CEO
Soft Cell Biological Research