

Students as Researchers Initiative – Al Ghadban, et al. Appendix A. Supplementary Tables

Supplementary Table 1. List of research projects for each SRI cycle.

Cycle	Project Number	Number of Students	Project Title
2016	1	2	Bladder cancer and NAT2 genetic polymorphisms.
	2	2	MicroRNA as a biomarker in tissues taken from Lebanese breast cancer patients.
	3	2	Testing drug efficiency for chronic myeloid leukemia.
2017	1	2	Nutrigenomics of obesity.
	2	2	Targeted therapies in acute myelogenous leukemia.
	3	2	The role of glucose metabolism in diabetes and cancer.
	4	2	The effect of bad diet on vascular function.
	5	2	Myeloperoxidase expressed in skin neutrophils extracellular traps of Behcet disease patients.
	6	2	Evaluation of hCG secretion by trophoblast cells using real time PCR.
	7	2	The fruit fly as a model for chronic myeloid leukemia.
	8	2	Management of imatinib-resistant chronic myeloid leukemia.
2018	1	2	Effect of BPA treatment on breast cancer cell line.
	2	2	Cardiac autonomic dysfunction in diabetes.
	3	2	Nucleolar organization and acute myeloid leukemia.
	4	2	Does TGFbeta signaling blocks epithelial to mesenchymal transition (EMT) in HTR8-SVneo placental cell line?
	5	2	Impact of vitamin B3 on the heart.
	6	2	Antibiotic discovery.
	7	2	Immortal bacteria? Why?
	8	2	LXR/mTOR/Nox4 signaling axes: novel therapeutic targets in diabetic nephropathy.
	9	2	The role of microbiota in diabetes induced colorectal cancer.
	10	2	Discovery of noninvasive biomarker for breast cancer diagnosis.
2019	1	3	Neutrophil extracellular traps in skin diseases.
	2	3	The role of ITPA genetic polymorphisms in 6-MP toxicity in the treatment of childhood ALL.
	3	2	Novel polyfunctional anti-inflammatory drugs.
	4	3	Perivascular adipocytes mediate vascular dysfunction in metabolic disease.
	5	2	Role of netosis in diabetic kidney diseases.
	6	3	Role of microbiota in diabetes-induced cancer.
	7	3	Using drosophila melanogaster as a model to study the effects of TET2 mutations in glioblastoma.
	8	3	MicroRNA as noninvasive biomarkers for breast cancer diagnosis.

Supplementary Table 2. *Select students' written comments on the SRI evaluation form.***QUOTE (Cycle)****Introduction to research fields and the scientific research methodology**

I've learned from this research experience the scientific way to do a research in addition to writing a report, I'm now well informed about CML. I learned how to work with some of the laboratory equipment and learned about them. (2016)

I learned how to assess posed problems, solve it in a cohesive manner and how to build up a good argument. And how research requires full commitment, dedication and hard work. (2016)

This research experience was a good opportunity to explore the appropriate and methodic approach to handle a medical research topic that is well organized and equipped to cover all the subsequent steps that would allow us to reach the desired results. (2016)

SRI provided us with an extraordinary experience through different aspects; some of which are the guidance we received from our mentors and the hands-on work at the labs which fortified our skills and added to our knowledge. (2017)

SRI introduces students to laboratory experience and helps them grow skills. It introduces student to research career and obstacles that researcher may face. In addition SRI gives students an opportunity to work as researchers and helps them understand the true meaning of research by simple words. SRI helps students to gain knowledge and live a great experience. (2017)

I learned the fundamentals of scientific research and experimental laboratory projects. Aside to that, it was nice to engage in such an informative type of project whereby we gained so much information that I can apply at school. (2017)

This program taught me a new set of skills such as new ways of critical thinking, learning how to adapt to the conditions, and how to improvise tactics that can help me in solving problems that pop up along the way. These traits will definitely help me in the future and in any field I chose to join. (2017)

Very important skills were learned from this experience, such as research skills, info, and most importantly the effect of prediabetes and bad diet on someone's life. (2017)

From this learning experience I have learned many things about cancer including how to do a scientific research, how to formulate an adequate hypothesis, how to base our study on the hypothesis, how to think scientifically and formulate another hypothesis when the main one is false, how to collect and analyze data, and many other beneficial skills. (2017)

From this experience, I'm grateful to have learned about the extensive work that goes into research and to have met some professional researchers. (2017)

The SRI provides students with an educational and interesting experience and introduces them to the field of research. Therefore, it gave us the chance to discover education outside the classroom in a friendly environment with highly informative and patient instructors that provided us with step by step instructions and explained to us everything in detail thus expanding our knowledge and experience. (2019)

Allowing students to make experiments and exposing them to various discoveries and techniques. (2019)

Not only did I gain knowledge and information about my project, but also the experience strengthened my teamwork and collaboration skills and taught me important lab skills in safety and handling various lab equipment and machines. (2019)

Self-discovery and career choice

This experience allowed me to better understand the true meaning of being a researcher. In addition, it allowed me to know that I truly am interested in Biology and Chemistry in general. (2016)

The SRI was of high level scholarly. It introduced us to new aspects never been discussed during school preparing us for a new phase. (2016)

The SRI program is very beneficial in enlightening distinctive aspects of research, and indulging in lab work, especially for students who intend to specialize in the medical field. (2016)

This experience was immensely fascinating with copious amounts of information that enable us to discover and explore the abilities that lie within us, as well as the ability to extract the needed information. As well as supplying us with the professional methods of working in a lab that'll benefit me on my road to become a doctor. Finally, this experience increases my pride in the scientific community and their immensely crucial work, and increases my desire in the scientific field. (2017)

This experience helped me in so many different ways: it taught me how to be responsible while working with very critical information, it enhanced my lab skills and most importantly it helped me in deciding the path I would like to take towards my career. (2017)

Cooperation with AUB which can open many doors for us in the near future and the experience that is granted to us learners that help us in deciding on our career choices. (2017)

The hands-on work at the lab has helped me a lot in deciding what I want to major in, and writing the report showed me that there is more to it than just conducting research. (2017)

Giving the student the ability to have research as one of his majors in the university. (2017)

The strengths of the SRI are that it gives students a glimpse into the world of research and provides them with an opportunity to see if they want to become researchers themselves. (2017)

Through SRI, I was able to further explore the field of research, expanding my knowledge and understanding of a field outside of the classroom. In addition to fostering my critical thinking and analytical skills. SRI mentors are successfully being able to educate and inspire their volunteers all about research. (2018)

SRI is a very important project. It has positive effects on the student like working hard and it developed in our minds a lot of questions so we will love doing research, and finally the student will know the importance of research. (2018)

SRI improves one's skills in research and might help them consider it career wise. (2018)

It was a great research experience and working in the labs was insightful, especially at our age. It was a great opportunity to deal with real life research and to check if it could be a future career. (2018)

SRI really helped me in experiencing what it's like to do research in a professional laboratory. I got introduced to an amazing community who inspired me and gained many helpful information about cancer. (2018)

The SRI experience gave me the opportunity to better understand the field of research, and it stimulated my interest in learning about cancer. (2019)

While this program successfully managed to attract a wide scale of students from different backgrounds, and has opened the door to the development of unprivileged students' research skills, it has offered as well both theoretical knowledge and practical experience in the field of science, and has helped us strengthen our work ethics, along with stimulating our capacities and expanding our horizons. (2019)

SRI gave me thorough insight into the world of research enough for me to start considering it as a career option. (2019)

Supplementary Table 2. (Cont.)**Self-discovery and career choice (cont.)**

SRI was very helpful to better understand the challenges associated with research, as it gave us exposure to this field. It also gave us a chance to meet researchers and learn more about their work experience. (2019)

SRI was an overall very successful and beneficial experience as it provided me with further insight and experience in the field of research thus helping me discover my interest in the field. (2019)

Thanks to SRI I now know that I'm actually interested in research, and it helped me realize that I should choose a career related to the laboratory because I enjoyed every second and I'm so grateful for this opportunity.(2019)

I was able to exchange interesting perspectives with students of various backgrounds. This wonderful experience helped me learn many techniques, and encouraged me to pursue a future career in biological research. (2019)

The opportunity given to me by this program encouraged me to pursue my dream in medicine in the upcoming years, and intrigued me to discover more about the aspects of science and biology in particular. (2019)