End of Year Report
2018-2019
Our best performing post on Facebook, the WolfieTank pitch submission post, has reached 1784 people

iCREATE has collaborated with 14 clubs this past year reaching more than 550 students through these clubs

The Grand Opening of the iCREATE Toolbox was held on October 3rd, 2018

The bridge between Physics and Harriman Hall was redesigned to be a collaborative study space known as HICS through a partnership between the Philosophy department, College of Business, and iCREATE

iCREATE did a Stony Brook University Instagram takeover to showcase WolfieTank and InnovateIT

iCREATE is proud to have been a deciding factor in Matthew Mullin’s decision to come to Stony Brook. Check out the success story on page 8
Welcome to the 5th anniversary of the Innovation Lab. I can distinctly remember that day 5 years ago when we first opened our doors. I was nervous and excited, wondering about how this type of hands-on-learning space would impact the campus. I remember having expectations regarding usage and the facilities, and I thought I was dreaming big. Today, we have exceeded our expectations and we continue to grow. This past year our facilities and programs had over 8,000 attendees. There has been a surge in projects created and entrepreneurial ideas generated as well as a sense of contagious excitement that can be felt every day at iCREATE.

The mindset that we embraced that first day of was one that said “it is OK to Fail”, and that mindset has been the cornerstone of the culture that drives us on our path each day on this exciting campus. We have continued to grow this year through our partnerships with WISE, CommUniversity day, and through collaborations with various departments, clubs and classes. One faculty member that has utilized our resources is BME Professor Yi-Xian Qin. He charged his class with designing stents for the heart, and at iCREATE, we were able to help his students 3D print their designs in different variations so they could test the flexibility and durability of their models. He mentioned that this aspect made the class relatable to real life and integrated many other skills from the major which had a profound effect on the students.

This past year our showcase events, WolfieTank and InnovateIT, have had a tremendous impact on students at Stony Brook. Edward Buckley, the 2nd place winner of WolfieTank 2017, started his company Outland Analytics and has gone on to win a Drekel Prize of $12K and secured space at an incubator. They are now testing their product in collaboration with the US Forest Service. Shrish Patel, the 2nd place winner of WolfieTank 2018, started her company African Grow n’ Glow and has gone on to win additional entrepreneurial prizes, and has made a website with her product and is selling them in the NY Metro area while enriching the lives of female business owners in West Africa. This is just a small sampling of the exciting innovations that are developing and succeeding directly in collaboration with our events and services.

iCREATE is truly a place where multi-discipline students can come to learn new technology through hands-on training.

We would be remiss if we did not stop to thank the many supporters, donors, alumni, friends, and mentors who have given of their time and resources to help ensure our success. A special thanks goes to Dipita Chakraborty; her generous endowment has made an impact beyond measure.

It’s with sincere admiration that I thank Melissa Woo, Senior Vice President for Information Technology (IT) and Enterprise Chief Information Officer, and Patricia Aceves, Assistant Vice President, Center for Excellence in Learning & Teaching (CELT) for their support which has been instrumental in expanding our offerings and ensuring that students and faculty can utilize our services.

This year the dedicated student staff put in exemplary effort to ensure that their fellow students succeed. I am honored by their enthusiasm and energy that makes every day a pleasure at iCREATE. Thank you all.

David Ecker
Director of iCREATE
One of the brand new spaces, the Toolbox, offers new machinery never before seen in any of the other iCREATE spaces. With proper training, members are able to cut and drill into materials with the new drill bit and band saw. The space also houses different versions of the already popular CNC Carvey and Laser Cutter to keep up with the growing demand for use.

Otherwise known as Harriman Innovation Collaboration Space, HICS was created in collaboration with Philosophy, College of Business, and iCREATE with the support of Physics. A 24-hour study space, HICs allows students a space to do work at all hours of the day. With installation of power cubes and whiteboards, the space is now able to comfortably house more individuals.

Known as the creation space, the Innovation Lab offers a variety of tools and machinery to help members bring their ideas to life. The 3D Printers and Laser Cutters have grown extremely popular and are highly trafficked each day. Other machines in the space such as the CNC Carvey and Sewing/Embroidery machines have also seen a steady flow of traffic throughout the semester.

Known as the collaborative space, the Greenhouse encourages members to work in groups and discuss new ideas. The space offers two share screen televisions and a numerous number of tabletop whiteboards for members to display and discover new ideas. With a green screen and digital media center students are able to perfect their presentations for classes.
EVENTS

Aug
- Communiversity Day
- Pop Up Station: DIY Bookmarks

Sep
- Entrepreneurial Panel

Oct
- Pop Up Station: Halloween Pumpkin Favors & Ghost
- iCREATE Open House

Nov
- WolfieTank

Dec
- Pop Up Station: Thankfulness

Jan
- Pop Up Station: Button Maker

Feb
- SEA Engineering Craft Night

Mar
- iCREATE’s 5th Birthday

Apr
- HICS Grand Opening
- InnovateIT
- Admitted Students Day
- East Side Pop Up

May
- Earthstock
SHOWCASE EVENTS

WOLFIE TANK

WolfieTank, inspired by the well known TV show Shark Tank, is a multidisciplinary event that iCREATE hosts on campus for aspiring entrepreneurs. Students have a chance to pitch their business idea to a panel of judges for a chance to win a grand prize of $1,000 to use with the intention of helping the business start up. The pitch competition opens with an introduction from the MCs, who are also members of the iCREATE team. Shortly after, the presentations commence and judges are given a chance to provide meaningful feedback from a professional standpoint, broadening the perspective of the entrepreneurs. After the showcase, everyone is invited to network with professionals and interviews begin. iCREATE values and understands the importance of networking, so we intentionally dedicate a separate time and area just for making meaningful connections, mentoring, and professional conversations. Refreshments are provided to balance out the professionalism with a friendly ambiance. As the room clears out we at iCREATE know people have left this event with something, whether it be a new friend, a new mentor, or a new idea.

Do you have what it takes to lead the pack?

INNOVATE IT

InnovateIT is a 24 hour multidisciplinary hackathon that challenges students to innovate a creative solution to a pressing problem. InnovateIT 2019 was directed towards the issue of climate change. Students then compete by combining their skills and creative efforts to fulfill one of three major categories: Best Business Idea, Best Grassroots Activism/Public Policy, and Best Science and Technology Idea. This year’s winners for the Best Business Idea: ComPlastic, Best Grassroots Activism/Public Policy: The RSP Initiative, and last but not least the Best Science and Technology Idea: Parabolic Solar Heater. In addition to these awards we also recognized three other teams for the in-house awards of Honorable Mention, First Time Hacker, and one outside award from our sponsor, Google Cloud, Best use of Google Cloud Platform.

This event welcomes a new age of innovators to create ideas for a better tomorrow.

We’ve graciously received sponsorships from various organizations such as Softheon, Island Federal Credit Union, Balsamiq, Stony Brook Alumni Foundation, Wolfram Alpha, Buffalo Wild Wings, Luigi’s Pizzeria, Poppyseed Bagels and more.
This year’s WolfieTank first place winner was Yark Beyan; her start-up African Grow n Glow started as an initiative to bring light to the lack of attention people of color receive from mainstream beauty industries. Using all natural ingredients for her products while designating a percentage to assist West Africa in their economic development, Beyan is inspiring women everywhere by becoming the change she wanted to see.

Best Science/Technology Idea:

PARABOLIC SOLAR HEAT COLLECTOR
Their invention tracks the sun and points a parabolic solar collector to focus sunlight onto a focal point, producing heat.

Best Grassroots/Public Policy Idea:

THE RSP INITIATIVE
Created a policy plan that would allow Stony Brook University to be more sustainable and optimize university resources.

Best Business Idea:

COMPLASTIC
The team created a product that utilizes plastic-eating bacteria to deplete plastic waste in a small, controlled environment without allowing the bacteria to harm other plastic products.
iCREATE partnered with WISE for the Fall 2018 and Spring 2019 semester in order to introduce high school WISE students to everything iCREATE has to offer! The students participated in five sessions throughout the semester, each time learning a different technology. These technologies included 3D printing, using the laser cutter, and learning how to use the sewing and embroidery machines!
Matthew Mullin is a sophomore majoring in mechanical engineering. He learned about iCREATE during his Stony Brook Admitted Students Day tour and participated in this year’s second annual InnovateIT. Having access to a makerspace and all that comes with it was one of the deciding factors for Matt to come to Stony Brook. For InnovateIT, Matt, along with fellow Stony Brook students, decided to create a parabolic solar heater to desalinate water. Matt used an Arduino kit provided by iCREATE to create a program where one can input a GPS location and time to calculate an angle of elevation and an angle of longitude. This in turn maximizes the amount of sunlight exposure for optimal heat generation. Additionally, his team used the self-service 3D printers to make a parabolic dish, the laser cutter to make brackets and the base, and hot glue guns provided by iCREATE.

Eugene Zaverukha, Timothy Tan, Prejashe Dheri, Anurekha Ravikumar
Class of 2019
Biomedical Engineering
Mechanical Engineering

For Eugene, Timothy, Prejashe, and Anurekha’s senior design project, they wanted to improve current devices used for teeth alignment to expedite the process via vibration. The problem they found was that these only operate on particular settings, and there is no scientific backing as to which frequency is best. They decided to create and market a device that allows for an adjustable vibration frequency, as well as added measurement sensors to evaluate the efficacy of each vibration on a case by case basis. They frequent iCREATE’s Innovation Greenhouse for collaboration on their progress and planning for future work. They utilized iCREATE’s 3D Print Queue to create their first prototype and they are now planning on using iCREATE’s digital media center to create a logo. One of the draws to working and collaborating in the Greenhouse and Innovation Lab for the group was the intellectual property rights available to them in the iCREATE spaces compared to the university at large. For this team, innovation means using their time efficiently, and utilizing the things and people around them -- whether this be each other or through iCREATE.

Mathew Mullin
Class of 2021
Mechanical Engineering
Senior Design Projects have been a major reason for students to come to iCREATE. As the number of student visits have increased, Juniors and Sophomores have begun to hold a larger share of the students visiting our spaces. This is partially due to the earlier age that high school students become involved in project and idea creation, that iCREATE is able to offer that space for them to continue those ideas throughout college.

iCREATE Members Reason for Visit

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Self Service 3D Printer Utilization During Workdays

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<td>Spring 2019</td>
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Just over this school year, we have experienced a jump in traffic for self service from our 3D machines during the work week. It’s been a consistent driving force of drawing students into our spaces.

But also this school year, we witnessed the number of students who come to iCREATE to do some type of group project or collaborative work double. Our initiatives to involve students from across campus have shown growth and evolvement that project a future of continuous growth as well.

*All data collected for Spring 2019 is until May 6th, unless stated otherwise*
Thank you!

Our achievements this year would not have been possible without your help!

InnovateIT Judges
Ekta Rana
Gary VanSise
Danielle Tedesco
Diana Voss

WolfieTank Judges
Derek Peterson
Bob Williams
Youn Jung Chung
James Keane

WolfieTank Mentors
Ed Fabian
Frank Gasparo
Chris Kane
Joseph Scaduto
Deepi Sharma
Danielle Tedesco

InnovateIT Judges
Joan Dickinson
Christine Murphy-Sassano
Connell Friel
Michael Kelly
Raymond Casiano
Erica Hackley
Fotis Sotiropoulos
Heidi Campani
Sherri Lever
Jeffrey Mackey
Andrew Kirsch
James Quinn
John Berwick
John Torres
Tony Colon

Partners
Joseph Barry
Kathryn Larsen
Kelly Dowling
Vincent Accardi
Lori Scarlatos
Manuel London
Mauro Nicoletto
Michael Mooney
Michael Ospital
Monica Bugiallo
Owen Evans
Philosophy
Department
College of
Business
Pan Yamniyom

College of Business
Robert Kukta
Susan Scheckel
Victor Poon
WISE
3Diatrics
RC Flying Club
Rich Holiday
Adam Schwartz
Theresa O’Connell
Melissa Woo
Pam Michaels
Rosemarie Alessi
Yumi
Yoshno-Hempel
Yi-Xian Qin

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Think. Create. Innovate.