



THE GEORGE
WASHINGTON UNIVERSITY
INNOVATION
CENTER
Est. 2016

GWIC Overview

The GWIC is an open, interdisciplinary, collaborative space in education where we support innovation through direct learning experiences and real-world social engagements.

Established in 2016 as a student-centered entity, the GWIC operates as a passion-driven startup representing a radical new direction for experiential learning in higher education. We offer a broad range of scenarios and partnerships to create novel and valuable learning experiences for students from across the university. To do this, we engage in an open, free-flowing ideation process among students, faculty, staff, and our external partners.

The Innovation Center focuses on utilizing disruptive technology to make advances in education, healthcare and the environment. The cornerstone of our work is social engagement, a value closely linked to the practical nature of the problems we seek to address. The educational opportunities created by our projects take learners outside the confines of the classroom through immersive design and business planning processes that integrate science and art in new, creative ways.

OUR COMMUNITY



10

LANGUAGES
SPOKEN

Human-Centered

At the local and global levels, we work with users and stakeholders to co-create positive social impact.

Interdisciplinary

Combining disciplines from all ten GW schools, we approach solving complex issues by pairing many unique skillsets and minds.



25

DISCIPLINES
INVOLVED



5

OPEN
SPACES

Student Driven

Student initiated and led projects that turn textbook study into real-world experiences sit at the heart of our organization.

Our Space | DubWorks

M06

Our Main Space in Tompkins Hall Mezzanine 06, just off the Kitchen, is an area to work collaboratively or attend an event. We hold workshops, host speakers, and house ideation. It is the heart of the Innovation Center, and on a bright day.



Diner

To the right is our Kitchen. Here, we catch up, laugh, snack and advise each other. It is the place where the Innovation Center family comes to decompress and refuel – there is always someone to welcome you.



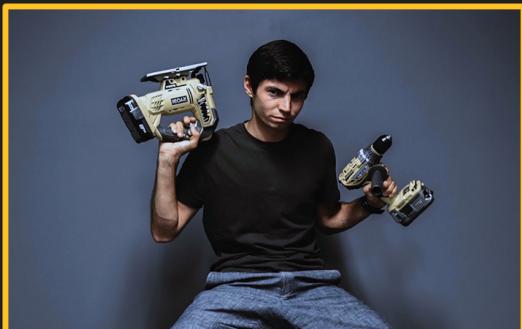
Unconference

The Unconference Room, across the hall from M06, is multi-purpose: a virtual reality and photo studio, library, and small-group meeting room. It is the place to take a phone call, sit crisscross on the floor, read a book or schedule time with collaborators. While you are there, remember to play around with the green screen.



Proto-Lab

As you walk through our double glass doors, look to your left into the makerspace in the high bay below. We (will soon) have woodworking tools, laser cutters, 3D printers, sewing machines, and more. Makers come from across campus to build prototypes, make mistakes and discover designs or attend an event.



"Great ideas need a great space. A former machine shop that inspired engineering students in the 1950s is now our humble home in Tompkins Hall. It's has come a long way: from a shop, to storage unit and now an innovation center – here, individuals of all intellectual and cultural backgrounds gather to research and invent solutions for social change. The physical culmination of our 'Mindspace' is the makerspace."
-Steven Brunetto



GEORGE HACKS

George Hacks is a student org designed to aid students in planning social impact competitions.

Our first ever innovation challenge took place on March 24, 2018 and drew in over 40 student participants. This event was based on medical devices and collected a total of 15 pitches, presented by organizations such as HelpAge, NCR-SHE, AdvaMed, and the GW Cancer Center. With HelpAge's assistance, our first-placing team is taking their project further to develop crutches for Tanzanian refugees.

Currently, George Hacks has a permanent presence at George Washington and George Mason. Our student organization has grown to over one hundred students since our first event; however, we're looking to expand even more. The DC innovation ecosystem welcomes student involvement, and George Hacks offers students access to social innovation, barrier free.

"George Hacks represents a divergence from traditional 'hackathon' organizations. Rather than relying on technical experience for success, we put an emphasis on innovating in interdisciplinary teams, where input is based more on the validity of ideas rather than technical know-how. We provide students with the ability to innovate and, as a student organization, our student members are given the responsibility to plan and execute their own innovation challenge - something that makes George Hacks completely unique."

-Michael Ready





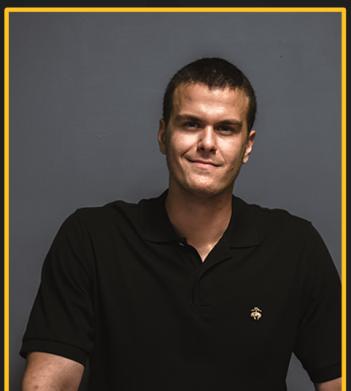
MAKER CLINIC

The Maker Clinic provides inexpensive, widely available assistive devices to children in need nationally.

The Maker Clinic is a group of students operating through the GWIC to harness their passion for assistive devices and social impact innovation. Through their network of makers, healthcare professionals, and engineers, the “Maker Clinic” tackles the issue of safety standards in the open source medical device community. Utilizing experience gained through establishing the GW E-Nable Project Branch, The Maker Clinic Team aims to make an impact in the growing open source medical device industry to set the precedent for safe, open source medical devices.

As a community, we are looking to bring together students from all backgrounds and challenge them to think of ways to create an improved supply chain so that people in need are connected to the prosthetic printing community and to think creatively about how to overcome some of the bureaucratic obstacles associated with FDA regulations and assistive devices in general.

“In my home country of Serbia, healthcare is free but medical devices are far too expensive and scarce. I envision a global source for accessible assistive devices from a socially innovative standpoint. Recent developments in 3D printing technologies have allowed us to affordably create and produce assistive devices to meet this need.”
- Konstantin Mitic



FAST FASHION, TEXTILE TECH

Fast Fashion Textile Technology is an interdisciplinary project with the Corcoran School of Art and Design and The Office of Sustainability to support sustainable practices and to develop wearable devices.

The GWIC works on an initiative in Fast Fashion and Textile Technology with a sustainable and socially responsible foundation. Though the fashion and textile industry is interdisciplinary, spanning business, design, engineering, international affairs and policy, it is also known to be the second most polluting industry in the world. As such, recent years have seen a growing global movement towards responsible textile production and consumption. Our focus is to provide the grounds for the exploration of these key issues in today's fashion industry. With course development, makertools, community-oriented resources, and external partnerships, we hope to join the conversation and reduce our own footprint both in our local community and on the global, fashion industry stage.

Putting our ideas into practice, we've partnered with GW's Textile Museum. We will contribute to their upcoming Fall 2019 exhibit, *Fast Fashion, Slow Art*. The exhibition introduces and invites the community to a broad scope conversation about textile production and distribution in today's industrialized and globally interconnected world. We're looking to address the often construed intricacies of global fashion and textile consumer culture. The combined works by the artists and filmmakers in this show ask us to slow down and consider the complexity of these and other questions.

"I fell in love with the industry at a young age - completely in awe of the creativity, strategy and cultural meaning behind clothing. At this age, I'm concerned by the effects of fast fashion on our people and planet, but also committed to the opportunity at hand."

-Sarah Shavin





In collaboration with leading innovators in Skandinavia, we are exploring new partnerships and initiatives to globalize our socially innovative paradigm.

Innovation and technology have always been intertwined. According to the 2018 Bloomberg Innovation Index, the U.S. is no longer listed in the top 10 most innovative countries. South Korea has become the most innovative country in recent years. Three of the five Nordic countries are in the top ten list for several years running. The Global Innovation Initiative at SEAS focuses on creating opportunities for collaboration by providing additional exposure and skills to the GWU community to co-create, innovate and apply knowledge to socially responsible, technology driven projects. The Innovation Group actively seeks partnerships with innovative nations, their private sectors and academia, and has developed a rare opportunity to establish such relationships with the Nordic countries.

Nordic Edge is a not-for-profit organization established by private companies from the five Nordic countries: Norway, Sweden, Finland, Denmark and Iceland. The Nordic countries have become world leaders in education, health, the environment, social policies, innovation and creativity. Nordic Edge puts the Nordics on the global map as a vital region advancing a smarter, safer, greener and better world. Nordic Edge initiates smart city projects by bringing together municipalities, city administrators, companies, research institutions, living labs and universities through its annual conference held in Stavanger, Norway. (Amb. Andras Simonyi, right)





WOMEN IN STEM

Women in STEM will expose high school girls to the myriad of opportunities that are available to them in STEM.

Within this project, girls will engage in workshops from problem solving to 3D printing. They will learn from students, faculty as well women currently in Industry. As of November 2017, according to the Economics and Statistics Administration Women filled 47% of all U.S. jobs but held only 24% of STEM positions. STEM, particularly engineering, has historically always been male-dominated discipline and although strides are being made, it is still primarily male.

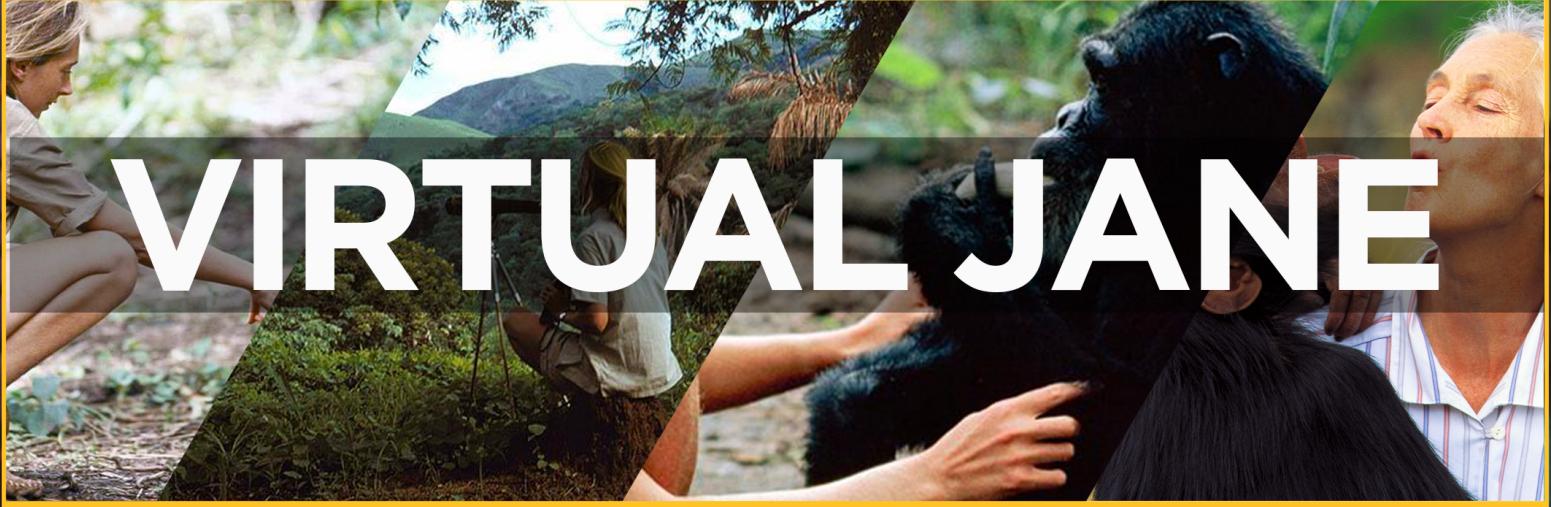
The goal of Women in STEM is to create a program in which once a week a group of high school girls from different local high schools will come in to work on projects and learn new skills. In addition, we will create a network of Women in STEM from different corporations to both run workshops and act as mentors to girls in the program.

“ ‘Mechanical Engineering? Are you sure that’s what you really want to do? That’s so hard and are you sure that you want to always be surrounded by guys all the time?’ That’s the most common response I receive when telling anyone my major. My goal is to change that.”

-Erin Flynn



VIRTUAL JANE



Virtual Jane invites Jane Goodall's expansive audience to partake in a highly immersive and interactive educational and recreational experience.

The Virtual Jane initiative is a front-end focused, immersive, educational VR/AR platform intended to showcase Jane Goodall's life and work to raise conservation science awareness and empower youth science and civil engagement.

GWIC is prototyping Virtual Jane, an experience that will immerse visitors into her story, and invite them to play a role in preserving and promoting her legacy. Through interactive storytelling and cutting edge visual, virtual and augmented reality technology, diverse audiences can learn directly from Dr. Goodall's impact-driven, civic and scientific life's work. Virtual Jane will catalyze the next generation of compassionate decision-makers and global activists.

"The Virtual Jane project combines two of my favorite things: youth education and innovative product design. We have the chance to turn the legacy of Jane Goodall, a conservationist icon, into a groundbreaking platform that inspires the next generation of ambitious, creative minds to advance conservation. Not too long ago, I was a high schooler hoping to use STEM to make a difference; I can't wait to empower others to do the same."

-Kaitlin Santiago, Ryan Steed





INNOVATE PUERTO RICO



Working to strengthen Puerto Rico's innovation ecosystem.

Following the 2018 GW SEAS Innovation Challenge iViva Puerto Rico!, the GWIC is partnering with Friends of Puerto Rico, a DC-based nonprofit, and the University of Puerto Rico, Mayaguez to create a community hub for making ideation and entrepreneurship.

Engaging local artisans and entrepreneurs, we hope to create an environment where ideas and innovation can be shared freely and developed with the technology and materials needed to produce marketable skills or products.

"Innovate Puerto Rico will work to facilitate and develop a community hub to foster innovation, making, and teach human centered and sustainable design. By involving local craftspeople and nearby universities, we hope to harness the power of the Puerto Rican culture and create an innovative community hub on the western side of the island."
-Connor West



EXPERTS



Annamaria Konya Tannon

Annamaria Konya Tannon is the chief evangelist for innovation, entrepreneurship, and invention for the School of Engineering and Applied Science. She is also the executive director of the GW Innovation Center. Annamaria is a technology entrepreneur and angel investor who has been involved in technology enterprise creation for more than 15 years, primarily in Silicon Valley. She also is the founder and CEO of Equita Accelerator, a non-profit corporation dedicated to advancing women-led technology companies. Prior to starting Equita, Annamaria served as a global data strategist for IBM with a focus on machine learning and data integration techniques for social media, and she served as national and global judging chair for Cleantech Open, the world's largest startup competition for emerging clean technology companies. She remains a CTO global ambassador. Annamaria mentors and judges in many startup competitions, including the Astia, Springboard, Startup Chile, and NYC Hackathons. She previously was a guest lecturer on innovation and entrepreneurship at Stanford University and served as an entrepreneur in residence at Stanford University's Technology Venture Lab. She has served on the boards of several companies and non-profit organizations, and she worked for the United Nations International Telecom Union, which focuses on sustainable green technology advances in telecom. Annamaria completed her undergraduate work at the University of Szeged, received her masters from Middlebury College Monterey Institute of International Studies, and continued her postgraduate studies at Stanford University.

Randy Graves, Ph. D.

Extensive base of experience in executive management of technology research, development, validation, and commercialization. Has been responsible for all phases of technology development from performing individual research tasks to research management at the chief executive and board level. As a senior technology officer, has been directly responsible for successful technology identification, evaluation, acquisition, and production. From his long-term work at NASA and other companies, he has extensive experience in corporate governance, including Chairman of the Board, Lead Director, Chairman of Audit Committee, Chairman of Compensation Committee, and Chairman of Executive Committee. Has an earned Doctorate degree in engineering, a Masters in management, and has published over 60 scientific, technical, and management publications.

Erica Wortham, Ph. D.

Inspired by decades of work alongside Indigenous artists and activists, Dr. Wortham brings a concern for diverse and complex cultural and social contexts to her work at GWIC. As a cultural anthropologist she is co-creating the intellectual infrastructure for social innovation at GWIC and experimenting with innovative strategies for teaching critical cultural inquiry that supports non-linear thought processes, experiential learning and applied research. Working with the interdisciplinary leadership of GWIC Erica is also developing a unique metric for assessing the educational trends the organization is pioneering.



FELLOW OF DISTINCTION

Amb. Andras Simonyi, Ph. D.

Ambassador András Simonyi, PhD is the Nordic Ways Project Leader at The George Washington University - School of Engineering & Applied Science. The former Managing Director of the Center for Transatlantic Relations at the School of Advanced International Studies at. Johns Hopkins University in Washington D.C. (2012-2018) has had a successful career in multilateral and bilateral diplomacy, international non-governmental and governmental organizations, and in the private sector.

He has held some of the highest positions in the Hungarian diplomatic service including Hungarian Ambassador to NATO and to the United States. He is a proponent of radical innovation in international affairs and the role of popular culture for social and political change, innovation in diplomacy, combining tradition with creative ideas and means. He is an advocate of strong Europe-U.S. relationship, cooperation between the U.S. and the European Union. He considers the transatlantic relationship the backbone of liberal-democratic societies in Europe. His Nordic Ways Project aims at exploring the Nordic Model, social innovation in the age of the internet and AI.



FELLOWS

Konstantin Mitic

Konstantin Mitic is a creative engineer by training entrepreneur by passion. He recently graduated with a BS in Biomedical Engineering and is in the process of starting his own company. At the Innovation Center he is leading the Accessible and Affordable Medical Devices initiative as well as the Accessible Technical Education for children in underprivileged neighborhoods.



Sarah Shavin

Sarah studies Business and Fine Arts with concentrations in Entrepreneurship and Digital Design. At the Innovation Center, she leads the Fast Fashion and Textile Tech program, and supports Virtual Jane. She's passionate about the intersection of art and technology and hopes to foster that collaboration on campus.



Michael Ready

Michael is a student-innovation fellow double majoring in Economics and International affairs. Under the Innovation Center, he directs the George Hacks Group and is the lead on the Nordic Ways project. He aspires to help grow the Innovation Center to global recognition and to promote the GWIC mission in the DC university ecosystem.



FELLOWS

Isabella Sardegna

Isabella recently graduated with a BA in Economics and double minor in Communications and Business Administration. She is one of the founding members of the GW Hacks Organization and the team that hosted their Inaugural event, George Hacks. She provides support for any public relations and marketing needs within the Innovation Center. Outside of the Innovation Center, she is a Project Assistant for APCO Worldwide, an international, woman-owned communications firm headquartered in Washington D.C.

Kaitlin Santiago

Kaitlin is a junior studying Philosophy and Product Design. Within the Innovation Center, she leads the product design of Virtual Jane and supports the Fast Fashion and Textile Tech program. Her passion lies in designing innovative virtual, augmented, and mixed reality educational programs; as well as, designing cost-efficient wearable technology. Her goal is to create virtual social-emotional learning environments which are easily accessible in communities across the globe.

Connor West

Connor is a mechanical engineer with a concentration in biomechanics. He is involved in the Innovation Center's work in creating accessible assistive devices and hopes to continue to pursue his passion and build prosthetic devices. In addition, Connor works on global outreach by working with organizations to move disaster relief products to Puerto Rico in the wake of the recent Hurricanes. Outside of the Innovation center, Connor works in a GW SEAS Lab 3D and 4D printing biomaterials.



FELLOWS

Steven Brunetto

Steven is a mechanical engineer with a concentration in Aerospace. He leads the development of the Innovation Center's makerspace and space improvement efforts. He is also a part of a team developing adaptive assistive devices to refugees in Tanzania. His goal is to support the innovation center by helping to adapt the space as the needs and projects of the student innovators.



Erin Flynn

Erin is a junior Mechanical Engineer with a concentration in Biomechanics. She is working on write-ups of projects that have been done through the Innovation Center and is working with the George Hacks Group. She is also working on a team to develop an adaptive crutch that will be utilized in Tanzanian Refugee Camps and potentially Refugee camps in other places as well. Her goal is to create an environment in which students of all ages are exposed to innovation.



Logan Bartholomew

Logan is a junior studying Biochemistry and researching Medicinal Chemistry. On board, he synthesizes for various projects undertaken by the Innovation Center, develops marketing content and communication, and works on the renovation secondarily. He is also part of a team working on adapting assistive devices for use in Tanzanian refugee camps and GeorgeHacks. His goal is to grow the interdisciplinary skills of the group to showcase what is achievable through social and practical innovation. Otherwise, Logan manages the GW Undergraduate Review journal and works in the Chemistry department.



FELLOWS

Mimosa Giamanco

Mimosa is working with Ambassador Simonyi on the Nordic Ways Project, while finalizing her master's thesis in Political Science. Prior to joining The Innovation Center, Mimosa has been a visiting fellow at Johns Hopkins SAIS, worked on research and policy planning at the Finnish Ministry for Foreign Affairs, and with political affairs at the EU Commission. Further, Mimosa has NGO experience from being an activities coordinator for asylum seekers at the Finnish Refugee Council.

