Summary Notes Vermont Global Exchange meeting of Fall 2023 Focus on Global Security

A welcome from UVM

Tricia Coats is the new director of UVM's Office of Engagement which aims to provide a presence for UVM across the state of Vermont and be a point of contact for people who want to connect with the university. She is also the director of the new Institute for Rural Partnerships, which will work to accelerate partnerships between UVM and Vermont organizations/businesses to collaborate on community solutions and leverage UVM resources like research and student engagement. She emphasized that the work of partnerships is about creating value for UVM's faculty, students and research enterprise and also for their external partners. She is very supportive of The Vermont Global Exchange and hopes VGE will help UVM think globally and to solve problems more inclusively.

Jamie McGowan serves as the Senior International Officer at the University of Vermont, overseeing the Office of International Education, including study abroad programs and services for international students and scholars. She emphasized partnerships that advance education, research, and service. McGowan appreciates the commitment of UVM's student body to common ground values and highlights the significance of students pledging to uphold these values. Despite being relatively new to the role, McGowan aims to contribute to the university's excellence in internationalization. UVM boasts over 540 students studying abroad and hosts over 340 international students and scholars, with plans to increase those numbers. McGowan emphasizes the importance of quality programs and experiences, focusing on concrete learning outcomes, wellness support, and inclusive practices for all students involved in international exchange programs. The University of Vermont emphasizes the classroom experience as a significant way for students to engage with the world, especially for those who haven't had the opportunity to study abroad. The university offers a strong program in world languages and cultures, including language, literature, and culture courses, as well as area studies programs that provide insights into global social and political contexts. Jamie McGowan noted the importance of international partnerships, with at least 134 partnerships identified among faculty members and plans to expand and strengthen these connections further.

Guest Speakers

Nina Meyerhof, founder of Children of the Earth and the One Humanity Institute

Nina Meyerhof is the founder of Children of the Earth, which emphasizes youth leadership and in empowering young leaders globally. She is also the co-founder of the One Humanity Institute, located near Auschwitz in Poland. Nina's personal connection to Auschwitz, where her grandmother was murdered, inspired her to work towards creating a better world and fostering peace.

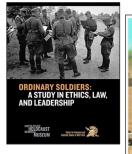
In response to the conflict in Ukraine, Nina traveled to the border to assist refugees and witness the challenges they faced. She initiated projects like creating a House of Hope to house refugees and also delivered aid to orphanages in Ukraine. Nina highlighted the immense logistical challenges and trauma faced by those affected by conflict, emphasizing the need for sustainable solutions and global cooperation.



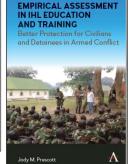
She reflected on the broader implications of conflicts worldwide, stressing the importance of creating new systems and fostering mutual recognition among nations. Nina sees the current global turmoil as an opportunity to rethink and reshape international relations, advocating for empathy and understanding as essential components of peacebuilding efforts.

Jody Prescott, JD, LLM, UVM Rubenstein School of Environment and Natural Resources

Jody Prescott, an attorney and lecturer at UVM's Rubenstein School of Environment and Natural Resources and Computer Sciences, is a retired army colonel with 25 years of experience as an Army Judge Advocate. He has worked extensively in Europe and Afghanistan with NATO, focusing on International Security issues, including climate change, armed conflict, military ethics, and global security, especially concerning women. He has authored books and articles







on these topics.

Prescott discussed a project he collaborated on with Manhattan College and UVM students, focusing on conflict and climate change. He also shared a lesson plan based on a case study from occupied Belarus in 1941, highlighting a war crimes trial involving a German army battalion commander and his subordinates.

Prescott emphasized the lack of empirical assessment in military training regarding conflict resolution, particularly in measuring the effectiveness of training methods across different ethnicities. He stressed the importance of this issue, drawing from his experiences as the chief legal advisor to military forces in Afghanistan in 2008-2009. He discussed the distinction between international humanitarian law (the Law of Armed Conflict) and international human rights law.

In Afghanistan in 2009, Prescott was tasked with assessing the impact of constructing a large military base near a rural district close to the Pakistani border. This development led to environmental damage and disputes among villagers over water rights. The area received little rain and was primarily reliant on water from snowmelt, which was crucial for farming. While the men argued over water rights, Prescott noted that the women were doing all the work, caring for children, gardens, and livestock and they had no representation. Despite seeing some in Kabul, the speaker noted the absence of women in public life in the rural villages he visited.

Armed Conflict and Climate Change could have a Compounding Negative Effect on Women and Girls

- Parts of Developing Countries appear to be at Most at Risk of Both
- In Many Areas, Women already at Risk due to Inferior Socio-Economic Status
- Our Standard Approaches to Assessing Operational Threats don't Recognize This...
- How Do We Measure This?



Drawing from experiences in Africa, Prescott observed that women were the primary caregivers and users of water in the villages, especially during times of water scarcity. He realized that in conflict-affected regions with underlying gender inequality, women and girls would bear a disproportionate burden from the impacts of climate change and environmental degradation. This compounded effect on women and girls is often overlooked and not adequately measured. He emphasized the need to understand and address these gender disparities in conflict and climate change contexts. Here are measurements he looked at:

Gender Inequality

- 1. Aggregate Education Deficit
 - □ Average years of schooling for women measured at 25 years of age (300 months)
- 2. Labor Force Participation
 - Ratio of percent (%) of male and female labor force participants between ages 14-65 (168-780 months)
- 3. Maternal Mortality Rate
 - I Maternal Mortality ratio (# of maternal deaths for every 100,000 live births)
- 4. Gender-Differentiated Literacy Rate
 - Percent difference of literacy between males and females age 15 or older:
- 5. Cultural Violence Against Women
 - Percentage of the female infant population surviving to age 5 (40 months):
 - Percent (%) of women charged with assault using self-defense plea

Prescott highlighted the need to consider the security needs of women and girls, emphasizing that ignoring their needs undermines efforts to build stability effectively.

Gender inequality, armed conflict and climate change: why militaries can and should map compounded risk



Ignoring Potential Compounding Effects of Armed Conflict & Climate Change on Gender Inequality Operationally Unsound; Legally & Ethically Unsustainable

Commanders do not Need Scientific Certainty before Acting; Let's Work in the Currency of Risk and Move Forward

To address these issues, Prescott collaborated with others to develop a socio-ecological systems approach. They utilized GIS technology to create a layered map of risk factors, including gender inequality and environmental challenges. This approach aimed to identify areas where women and girls were most vulnerable to the impacts of conflict and climate change.

Prescott praised the quality of work produced by undergraduate students involved in the project, noting their engagement with military and humanitarian organizations. Potential collaboration with organizations like the Population Media Center to further address gender inequality and security issues was discussed.

Prescott emphasized the importance of hearing diverse perspectives, including those from countries like Senegal, a partner nation for Vermont's National Guard, in discussions about gender and security. They highlighted the need to empower women as agents of change and the importance of understanding their knowledge of environmental systems in addressing global challenges.

Major Patrick "Gene" Enrique, Vermont National Guard Director of the State Partnership Program (SPP).

Major Enrique expressed gratitude for the opportunity to speak and highlighted his journey to find like-minded partners.

The SPP, established in 1993 by the Department of Defense, aims to foster partnerships with foreign nations. Initially called the Partnership for Peace, it has expanded to include 100 partner nations, with all US states participating. Priorities of the SPP include integrated deterrence against Russia and China, building resilient readiness forces, and cooperation.



Interactions facilitated by the SPP include soldier exchanges, training exercises, and medical assistance missions. Major Enriquez emphasizes the importance of tailoring approaches to each partner nation's culture and politics. The Vermont National Guard SPP partnerships are with North Macedonia, Senegal, and Austria. Other states have other countries as partners. Activities are collaborative efforts in military training, enhancing readiness, peacekeeping, medical support, and fostering relationships.



Major Enriquez also noted Vermont's participation in the State Partnership Program has challenges of competing against states with larger budgets. In recent visits to Austria and Senegal, he recognized the vulnerability to misinformation in modern democratic nations. Major Enriquez discussed efforts to leverage expertise and resources through multilateral partnerships, including cyber security engagements and agricultural collaborations.

Scott Tighe, Technical Director UVM Genomics Core, Center for Biomedical Research

Scott Tighe offered his thoughts on Global Security and International bioresearch. He discussed the Extreme Microbiome Project, an international endeavor focused on discovering microbes, viruses, and fungi in extreme environments. These environments include deep ocean, volcanoes, caves, polar regions, and hypersaline hyper acidic environments. The project aims to uncover new bio-compounds such as antibiotics, pharmaceuticals, and other microbial secondary metabolites, along with tracking climate change and developing procedures involved with planetary protection and planetary health. Tighe emphasized the importance of international collaborations in scientific research and highlighted the potential benefits for global security, health, defense, economics, climate monitoring, as well as, fair trade and equitable gain for each countries' resources and intellectual property through the Nagoya protocol. Initially begun in 2015, Tighe was part of the creation of 5 consortia involving 30+ countries. Here are some of the sites they have collected samples- Greenland to Antarctica...





Lake Hillier Australia

- Climate and Economic
- New compounds in medicine and bioremediation microbes

Danakil Depression-Ethiopia Toxic Saline Hot Springs

• Health, Climate, and Economic

 New compounds in medicine and bioremediation microbes. New secondary metabolites



Deep Ocean Brine Lakes

• Health, Climate and Economic

• New compounds in medicine, Anti-tumor compounds, antibiotics,

Doors to Hell Gas Crater

• Defense and Economic

• Discovery of organisms and pathways that can break down combustible fuels

Greenland Microbiome

• Defense, Climate, and Economic

• Employ microorganisms as aerial surveillance reporters for satellite monitoring. Discover new genes capable of degrading plastics at cold temperatures. Climate change monitoring



Space Microbes

• International Space Station works involved all aspects of space including health, and climate.

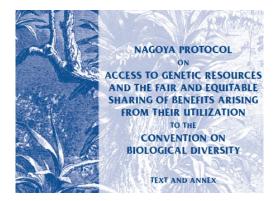
 A true international collaboration

Characterizing DNA in zero gravity

Members of the consortium are all scientists doing environmental microbiology, microbiology, general mix, and just general Environmental Conservation. Through DNA sequencing and sampling techniques, projects explore diverse sites worldwide, seeking valuable microbial discoveries. Cooperation and standards among scientists conducting research internationally are essential to avoid pandemic outbreaks among other hazards. The Nagoya Protocol as standard practice for shared learning and security is particularly important.

Protection Rights-Economics and Resources

Nagoya Protocol



A group discussion around the connections between these diverse international enterprises followed. The greatest security concern that rose to the top that evening was misinformation which was suggested as the topic for the next meeting.

As ever, we welcome suggestions for future meetings and topics, aiming to continue exploring and advancing these important issues together.