



ENVS NEWS



Environmental Science
Undergraduate Program

SPRING 2024

Happy spring !

Welcome to our newsletter covering recent news from the Environmental Sciences (ENVS) program at Georgia Tech.

This spring, we are celebrating many things:

- 32 GT current ENVS majors + 15 (& counting) new majors joining us in the fall!
- New and improved ENVS webpage
- Weekly newsletter of jobs, internships, summer programs, & campus activities
- Atlanta Science Festival and GT Science & Engineering Day
- Alumni presentation on corporate sustainability by Chloe Stanton
- ENVS sponsored "Ecologies of Sound" event
- Spring popsicle social event on April 11
- Our first two ENVS graduates: Helen Tran and Baylee MacBeth
- Our faculty spotlight: Dr. Jairo Garcia!
- Our devoted faculty, students, and staff for help with special events

Thank you for your role in ENVS' success !

Your ENVS co-directors,

Jennifer Glass (right)
Samantha Wilson (left)
Linda Green (middle)



eas.gatech.edu/envs

ENVS SPRING SOCIAL

Students, faculty,
& staff welcome!

Thursday
April 11, 2024
11am - 12pm

BioQuad
(in front of ES&T) *

Join us
for King
of Pops
popsicles!

**in case
of rain,
ES&T
atrium*



UPCOMING COURSES

Make sure to check for any pre-requisite requirements or cohort restrictions on classes.

Check Oscar for lab times. Reach out for advising to discuss your course options/plan.

Email Dr. Samantha Wilson for approval on any courses that you are interested in that might not be listed.

Summer 2024

	Course (check for pre-requisites)	Day(Time)
Required**	BIOS 1107	MWF (930-1045am)
	CHEM 1212K	TR (930-1140am)
	CP 4510	R (5-915pm)
	EAS 1600	TR (930-1140am)
	EAS 2600	TR (930-1140am)

Fall 2024

This does not include all possible courses.

Please reach out or check Oscar for other options.

	Course (check for pre-requisites)	Day(Time)
Required**	BIOS 1107	MWF (825-915am) or MWF (11-1150am)
	BIOS 1108 (majors section)	MWF (825-915)
	BIOS 2300	MWF (11-1150am)
	BIOS 3380	MW (8-915am)
	CHEM 1212K	TR (8-915am)
	CP 4510	TR (1230-145pm) or TR (930-1045am)
	EAS 1600	TR (1230-145pm)
	EAS 2600 (lg lecture)	TR (930-1045am)
	EAS 2600 (majors section)	TR (930-1045am)
	EAS 4220*	TR (1230-145pm)
	EAS 4221*	W (330-615pm) or R (330-615pm)
	EAS 4410	TR (930-1045am)
Some potential electives	BIOS 4803 (Urban Ecology)	MW (2-315pm)
	CP 4545	MW (2-315pm)
	EAS 4801 (Deep Ocean Minimester)	WF (2-315pm)
	EAS 4803 (Carbon Geoengineering)	TR (1230-145pm)
	PUBP 4620	WF (11am-1215pm)

**Does not include core, background math, and background science requirements

FACULTY SPOTLIGHT

What course(s) on the ENVS curriculum do you teach?

I teach EAS 3110 "Energy, the Environment, and Society". This interdisciplinary seminar-style course relies on guest speakers from across the Tech campus and beyond, to encourage lively discussions relevant to our nation's energy and climate future. The main student activity is a semester-long "Carbon Reduction Challenge", in which student teams compete to reduce carbon footprint of organizations while creating economic savings and providing additional environmental and social benefits.

What is your favorite part of being a faculty member at Tech?

I enjoy interacting with GT students, faculty, and administrators in proposing and even implementing solutions to very important human challenges. GT students are an inspiration and they are my biggest hope that the future will be bright.

What inspired you to choose a career in sustainability?

As an expert in computer networks back in the 1990s, I travelled all of the world and observed with horror the atrocious impacts of human activities on this beautiful planet. I resigned from my well-paid job to dedicate all my efforts to the construction of a better future. My resignation was not the most economically-wise decision, but undoubtedly it was the best decision I've taken in my life. During these decades working on sustainability and combating climate change, I've had the opportunity to meet the most extraordinary people who share the same passion for this planet. Based on this experience, I can say with certainty that a good decision cannot be based exclusively on economic terms. The road has been bumpy but it has been rewarding professionally, intellectually, and emotionally. In my opinion, a noble purpose in life is what makes it meaningful and fulfilling.

What are your research interests and do you ever involve undergraduates in your research?

My area of research is focused on solutions to climate change mitigation and adaptation, specifically in urban areas and frontline communities. I've been very fortunate to work with both, graduate and undergraduate students, but mostly with undergraduates. It produces me a great satisfaction to observe them get involved in practical research and providing sustainable solutions to communities in need. Many of my students have ended up obtaining internships, and even jobs, based on the experiences acquired while working on these projects in school. For more information about some of my projects at GT, check these links:
<https://urbanclimatenexus.com/gt-sustainable-cities-studio>
<https://urbanclimatenexus.com/crc-class-2023>

What else should we know about you?

I love teaching to the ENVS community because of my passion about science and the profound interest of the ENVS community in building a better planet. It gives me so much hope and joy. The ENVS community is extraordinarily inspiring.

DR. JAIRO GARCIA
LECTURER & ADJUNCT FACULTY
SCHOOL OF CITY &
REGIONAL PLANNING



STUDENTS SPOTLIGHT

Congrats to our first ENVS grads,
graduating in Spring 2024!



HELEN
TRAN

Helen Tran's academic interests include biogeochemical cycles and geomicrobiology. She has been conducting geomicrobiology research in Dr. Glass's lab, staining and imaging cells from the Orca Basin and Eastern Tropical North Pacific oxygen deficient zones under the guidance of OSE PhD candidate Claire Elbon. She enjoys teaching, which ranges from introducing elementary students to science with Georgia Tech's Junior STEM club to being a TA for EAS 3110: Energy, Environment, and Society. Helen plans to graduate in Spring 2024 and pursue graduate education. In her free time, she likes to bake, hang out with friends, and play video games.

Baylee MacBeth is a third-year undergraduate finishing his degree in Environmental Science. His academic interests include, but are not limited to, geology, geophysics, and sustainability. He has been working under both Dr. Andy Newman and Dr. Zhigang Peng on a multi-semester research project. This has involved applying machine learning tools to data from low-cost Raspberry Shake seismometers in hopes of providing motivation for an expanded network of these machines in the Eastern United States. Baylee presented his work at the American Geophysical Union 2023 meeting in San Francisco. He also currently holds the vice president position for the Sigma Gamma Epsilon EAS honor society. His favorite hobbies include thrifting, fashion, hanging out with friends, and planning his next travel destinations. After graduation, he plans to continue pursuing all of his interests.



BAYLEE
MACBETH

EAS Professor Annalisa Bracco highlights the unique attributes of the ENVS degree in the podcast Grass Roots Health.

Listen here:

<https://podcasts.apple.com/us/podcast/grass-roots-health/id1645159903>



ECOLOGIES OF SOUND

On February 8th, Georgia Tech welcomed visiting artists to campus for a day of reflection on the intersection of music, ecology, and sustainability. A panel discussion featured guest composer Annea Lockwood, a member of the American Academy of Arts and Letters who has dedicated her career to exploring biological ecosystems in her artistic work. ENVS sponsored Lockwood's visit.

Jason Freeman, chair of the School of Music, moderated the panel discussion, which included School of Music faculty Jeremy Muller and School of Biological Sciences faculty Emily Weigel. The conversation among the panelists was illuminating, with Annea Lockwood drawing parallels between the discovery of new species in the biosphere and the uncovering of novel sounds in our environment, and student attendees asking how the panelists can remain so optimistic in the face of the incredible challenges posed by climate change.

Following the panel, the audience joined the panelists in a sound walk through Georgia Tech's EcoCommons. Dr. Weigel shared insights into the EcoCommons' creation and its role in revitalizing local biodiversity on campus. The day ended with a captivating performance by award-winning New York-based chamber music ensemble Yarn/Wire and the Georgia Tech Laptop Orchestra. Yarn/Wire performed "Into the Vanishing Point", a piece by Annea Lockwood that was inspired by her readings about the collapse of insect populations. The two ensembles collaboratively performed the world premiere of a composition by Lauren McCall, a Music Technology PhD student at Georgia Tech, and the laptop orchestra closed the program with Matthew Burtner's work CloudPrints, which creates its graphical music score from cloud formations.



URBAN WILDLIFE SYMPOSIUM



On March 10, Georgia Tech hosted the following groups, among others: Birds Georgia, EcoAddendum, Wild Nest Bird Rehab, Georgia Native Plant Society, UGA Coyote Research Project, Fernbank Science Center, Zoo Atlanta, DNR Urban Wildlife Program, and Georgia Wildlife Federation.

The groups spent the day learning about the wildlife that call Atlanta home. Organizations and programs from across Georgia came together to help the public get involved and build a more wildlife friendly city.

A series of talks and table displays were fantastic networking opportunities with Atlanta-area scientists, and the group had fun taking a guided walk through the grounds of The Kendeda Building and adjacent EcoCommons, a Birds Georgia-certified Wildlife Sanctuary and Gold-certified Native Plant Habitat.

EcoLiteracy for Atlanta

Everyone should know the special character of our urban forest - from parks to backyards! We show more than just how to ID native species — we show how to "read" the story of any landscape through just a few key species and observations anyone can learn. We give the context, as well as facts, and share tips on field identification and scientific details in a format that's easy to understand and remember.



Eco-Literacy Atlanta
Orientation Program



Go to:
Thinkific.com/
EcoAddendum



WEEKLY OPPORTUNITIES FOR ENVVS!



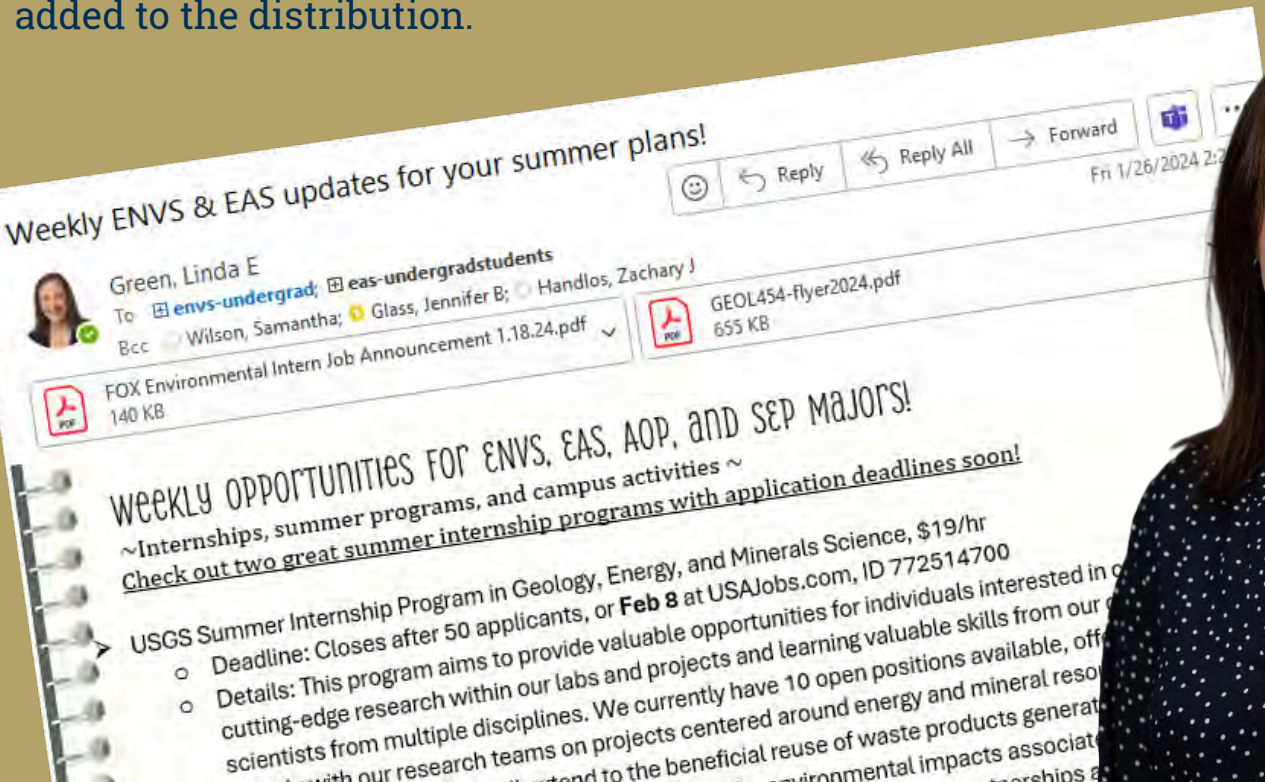
Beginning January 2024, Dr. Linda Green has been sharing a weekly email to ENVVS (and EAS, SEP, and AOP) majors with recent job postings, internship details, summer programs, and campus events.

“We hope to help highlight exciting opportunities while making it easier for students to keep track of what might interest them,” shared Dr. Green.

The newsletter has also been a place to help connect students interested in uniting around sustainability efforts on campus. Several ENVVS majors are working with sustainability campus orgs to build awareness and broaden impact.

February and March have been busy with REU applications, scholarship info sessions, SDG week events, and summer leadership positions. April will bring a few more summer field research positions, Earth Day activities, and graduation events!

Alumni with internship or job possibilities can share to linda.green@gatech.edu to be added to the distribution.



OUTREACH EVENTS



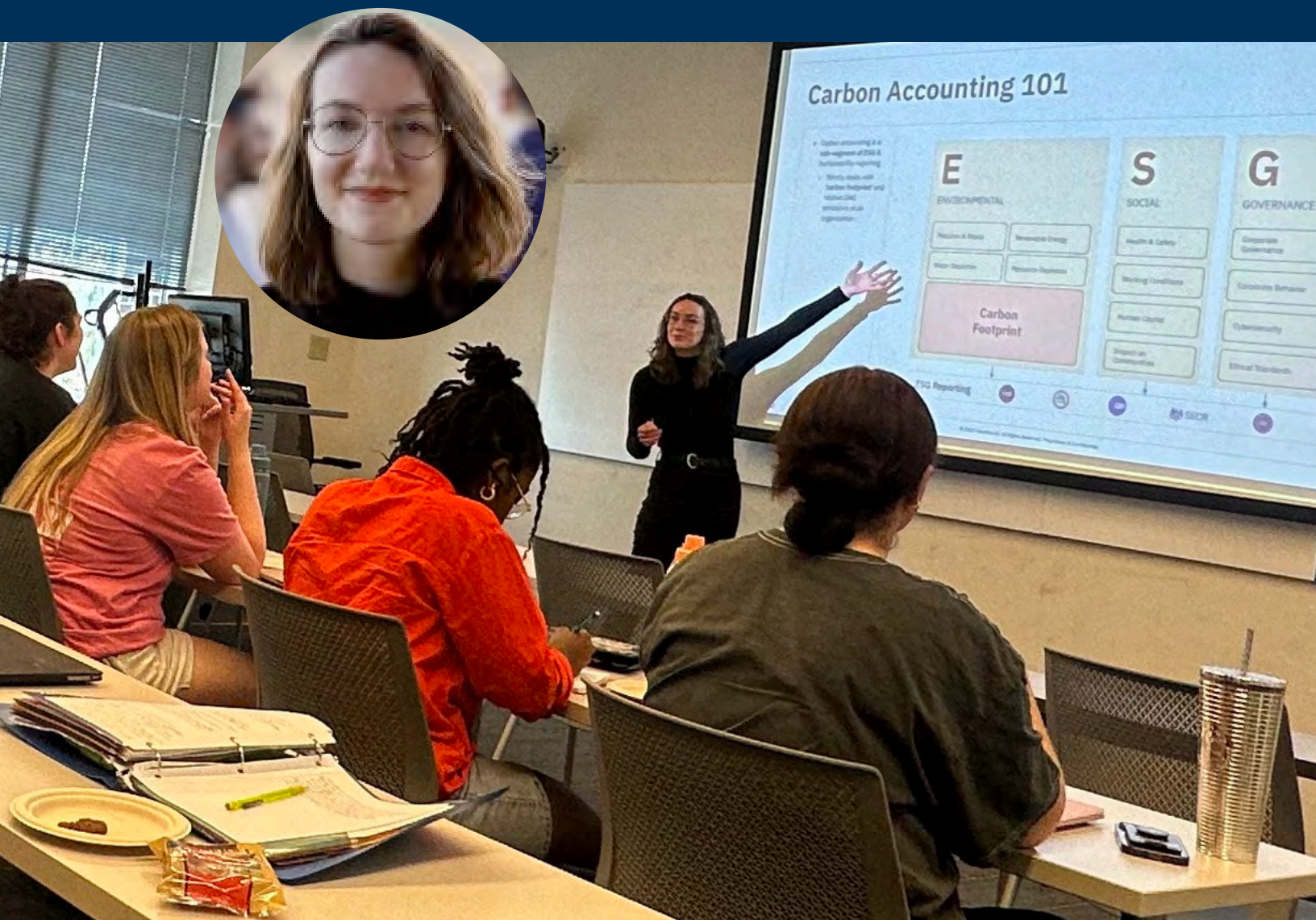
GT SCIENCE & ENGINEERING DAY



ATLANTA SCIENCE FESTIVAL EXPO

ALUMNI VISITS

On March 7, EAS alum Chloe Stanton (GT EAS '17, Penn State MS '19) presented to Dr. Samantha Wilson's class. She described her journey from undergraduate to graduate studies, followed by a career in corporate sustainability, including her current position in carbon footprinting for Persefoni. Stanton had lunch with students and answered questions about her education and career experience.



ENVS major Annika Trout is featured on Wikipedia Education for her work on groundwater contamination

The logo for Wiki Education, featuring the words "Wiki" and "Edu" stacked vertically in a dark blue, serif font on a white background.

"I learned a lot about my capabilities as a student/researcher/writer.... It's vitally important with a problem like climate change to be able to communicate reliable information, especially within a digital space."

For her course project in EAS 1600 Introduction to Environmental Sciences, Annika was assigned the Wikipedia article "Non-Aqueous Phase Liquid." She discusses her experience with the assignment, her research process, the challenges she faced, the lessons she learned, and her future as a scientist and researcher.

<https://wikiedu.org/blog/2024/02/21/communicating-the-science-of-groundwater-contamination-by-improving-wikipedia/>



Get your free ENVVS canvas tote and sticker!



For swag, contact
samantha.wilson@eas.gatech.edu



CHECK OUT OUR "LITTLE FREE LIBRARY"

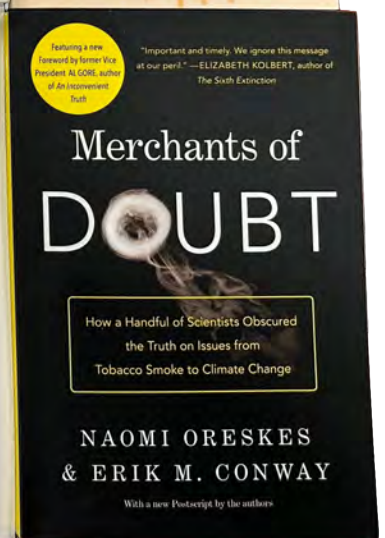
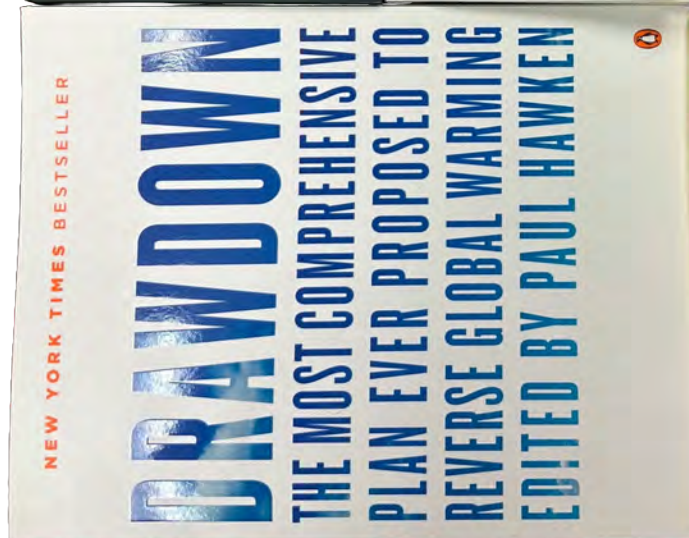
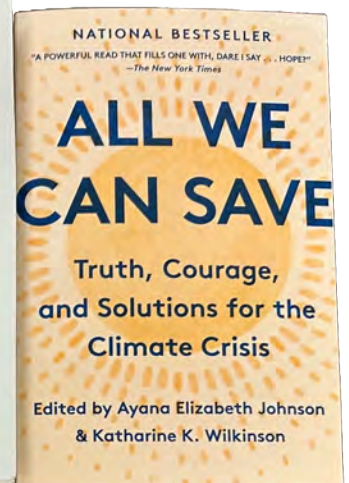
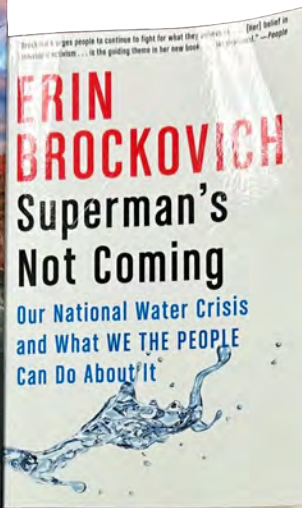
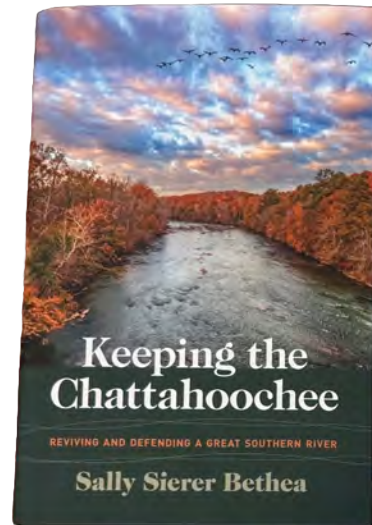


Ford ES&T 1250
EAS mail room

Books for
undergraduates

A range of
books on
environmental
topics ... take a
book or leave a
book

Funded by
Georgia Tech
Honors
Program



**QUESTIONS?
COMMENTS?
SUGGESTIONS?**



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Looking for internships?

**Check weekly email from Dr Green & LinkedIn:
<https://www.linkedin.com/groups/8537487/>**

Giving to ENVS:

<https://eas.gatech.edu/alumni/giving>