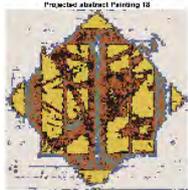




Welcome to the new, longer and more inclusive ASE newsletter with updates from the JEDI committee, MSOs, graduate and undergraduate students, research fellows and alumni. Don't miss the interview with ASE alumni Grace Ng on page 6!

Decorating ASE section C – call for contributions



Art piece created in ASE computing class.

Section C of ASE has empty pin boards waiting to be filled and framed pictures that are due to be replaced. With an aspiration to find suitable decorations to reflect ASE work and activities on the section C walls, we call for suggestions for wall decorations. It could be student work, photographs, or anything else you think would be worth displaying in one form or other, for a longer or shorter time period. Send your ideas to alagerstroem@ntu.edu.sg. Looking forward to your suggestions 😊

Staff turnover



Heryani Binte Ahmad

- Welcome to Heryani Binte Ahmad, ASE's new Laboratory Manager overseeing all labs (replacing Samia). See more about Heryani in the MSO section below.

- Welcome to Clement Ng, who recently joined ASE as Research Assistant on Joyce Ong's team.

- After many years with EOS/ASE, IT manager Lim Sueping is leaving us for a new job in LKC Medicine. Thank you for your valuable service and all the best for the future, Sueping!



Clement Ng



ASE/EOS JEDI



The ASE/EOS JEDI committee. Check out their chats and material on [Slack](#) (JEDI@ASE/EOS).

JEDI is a newly formed ASE/EOS committee, seeking to cultivate a diverse, equitable and inclusive community at ASE and EOS, where everyone feels welcome, valued and able to thrive as their authentic selves. They work for and guide transformational change where it is needed in the ASE/EOS community. You are invited to participate in chats and access material on different topics including #unconscious bias, #imposter syndrome, #mental health, #lgbtq, #women in science, and more on [Slack](#) (JEDI@ASE/EOS). They are also hosting JEDI seminars as part of the Friday 4pm seminar series. So far, seminar topics have included '[parachute science](#)' and 'inclusive colours in science communication'. They welcome suggestions of future speakers.

Justice Dismantling barriers to resources and opportunities so that all individuals and communities can participate fully. If injustices occur, we aim for restorative justice that strengthens the community and prevents similar harms from occurring in future.

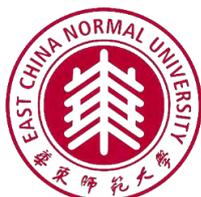
Equity Allocating resources to ensure everyone has access to the same opportunities and recognising that advantages and barriers — the 'isms' — exist.

Diversity All the differences between us based on which we experience advantages or encounter barriers to opportunities. We believe our differences should be celebrated and contribute to the rich fabric of our community.

Inclusion Fostering a sense of belonging by centering, valuing, and amplifying the voices, perspectives and styles of those who experience more barriers based on their identities.

Faculty news

David Wardle has been awarded an Honorary Professorship from East China Normal University (ECNU) in Shanghai. He is looking forward to travelling to Shanghai to formally receive the professorship once borders reopen. In the meantime, he is grateful to be doing fieldwork with Colton Collins and Alex Cobb (and a million biting insects) in a Brunei peat swamp this month.



David is an honorary professor with East China Normal University

MSO news

Over the next few months we will get to know some of the MSOs better through a series of mini interviews. First is the new laboratory manager, **Heryani Binte Ahmad**.

Welcome to ASE! You are not new to NTU, where have you worked before?

Yes, I have been working in laboratory environment for more than 18 years as Lab Executive and Lab Manager at different institutes. I was in NTU back in 2001 as a



Heryani used to work at CREATE before she joined ASE.



Heryani enjoys nature walks, just like these ASE students (Photo: Elinor Meredith).

Lab Executive assisting for the administrative and technical support of the lab. In 2011, I left NTU for SUTD as a Laboratory Technologist where I was part of the Undergraduate Physics Lab. Moving forward, I took the challenge as a Laboratory Manager in a Research Institute in CREATE, where I oversaw all technical, administrative, and safety issues of the lab.

What is your impression of ASE so far?

ASE seems to present positive vibes where it showcases a friendly working environment. Since day 1, I have seen the excellent camaraderie amongst staffs and the willingness to render help when required. These have helped me to acclimatise in a new working environment!

You oversee all the labs at ASE. What will be your main tasks, and how is your job different from being lab manager for one specific lab?

My main task involves managing and coordinating technical, administrative, and safety issues for the laboratories. One of them is to create committees to ensure that the lab is operating smoothly and monitor the use of resources at an optimal level. In contrast, being the lab manager for one specific research lab requires involvement in daily lab operations such as monitoring the equipment, maintain cleanliness and safety, and proactively resolve any issues that arise.

Finally, what do you like to do in your spare time?

I enjoy being out in nature going on foot trails. The places that I have explored are MacRitchie Reservoir, Coney Island, Thomson Nature Park, and Bukit Timah Nature Reserve. I cannot wait to explore more nature parks in Singapore!



WFAR: Carrying a wounded on a stretcher

Wilderness First Aid Responder course

ASE held a Wilderness First Aid Responder (WFAR) for our staff and PhD students who are involved in field programs, especially those who are involved in undergraduate field courses. The course was conducted by HMI Institute and topics covered include CPR/AED, wound management in the field and field evacuation procedures. We hope that the course will equip our staff and PhD students with important tools which will enable them to not only intervene and apply first aid early but also to make critical medical and evacuation decisions should an emergency situation occur in the field.



WFAR: Managing fractures



WFAR: Stabilizing a person with suspected spine injury.



WFAR Group photo

Undergraduate students



Zhang Meilun did her FYP studying climate through isotopes in speleothems.

First, congratulations to all the FYP students who presented their interesting work so well! Great job everyone!

Here is what our undergraduates have been up to (before the examination period started):

ASE Agar Art Workshop



Agar Art Workshop.

This workshop aimed to provide a platform for NTU students to learn more about the importance of microbial life in conservation biology through the fun and engaging act of creating agar art. Agar art is the creation of artwork by culturing safe and non-pathogenic microorganisms in certain patterns on an agar medium.

Fifteen engaged participants (including 3 facilitators from ASE Y1: Wee Su Fen, Kelly Ong, and Akash Shah from various faculties including ASE, SBS, and EEE) enjoyed both practical work (inoculation etc.) and a presentation by ASE undergraduate Roy Tan Zi Hao about **the importance of microbes in conservation biology**.

The material and agar plates were prepared beforehand by the facilitators and the 1hr workshop had our participants designing and streaking their design on it. I then incubated the cultures at SCELSE and obtained the final “artwork” the day after! The participants were super excited to get their end products and they were amazed at the different colours produced by the microbes

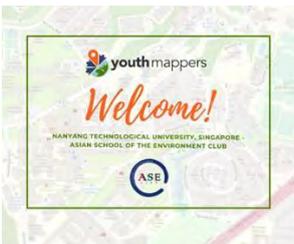
ASE booth for Wildlife Conservation and Animal Welfare Day (29 Mar – 30 Mar)



ASE booth, Wildlife Conservation and Animal Welfare Day.

A collaboration with the various conservation groups (ASEC, CMN, ALS, DiveTeam, Earthlink) of NTU to showcase their clubs and raise awareness for conservation. For ASE's booth, the students decided to display the works our undergrads and professors have done, as well as provide information and contacts for students to reach out to learn more about conservation, or even contribute by volunteering.

Establishment of Singapore's First Youth Mapping Chapter



Singapore youth mappers

Along with the ASEC Outreach committee, we are happy to establish SG's First mapping chapter with the youth mapper network which aims to contribute to open street maps and citizen science. We will be planning a mapathon for the ASE community in the coming months.

PhD students – 3 Minutes Thesis Heat and writing up of theses



Congratulations to all PhD students who recently passed their QE exam! Well done!

At the moment several of our PhD students are busy finishing up; as many as 9 – 11 students are expected to submit their thesis by July, and an additional two have already done so (in January) and are waiting for examiners review of their theses.



Hu Wan-Lin at the CoS 3 Minute Theses Heat. Photo credit: Christina Tee Siew Khiaw.

CoS 3 Minute Thesis Heat

CoS hosted the annual 3 Minutes Thesis Heat finals on Friday, 23 April 2021. These were three finalists from ASE and the titles of their talks:

- Andika Bayu Aji – Forecasting Merapi Volcano Eruption Time in 2021 using Shallow VT Earthquakes
- Hui Cheng Yee Tabitha – Wildlife crossings: facilitators or barriers to movement?
- Hu Wan-Lin – How we assess seismic potentials?

Hu Wan-Lin was selected as the winner for ASE, and will be representing our School to compete at 3MT competition at NTU level! Congratulations, and good luck at the next level! When a video of Hu Wan-Lin's talk is available, we will provide it in the newsletter. Last year, Tan Fang Yi placed second in NTU with her [talk on rising sea level](#).

ASE/EOS Research fellows – Work-Life Balance



Work-life balance was the theme the [monthly post doc professional development series](#) in April. Supported by faculty members Kim Hie Lim and Benoit Taisne, the post docs discussed expectations, culture, parenthood, and strategies for a sustainable work-life balance. The past year has been a tough one with work-life boundaries blurring as we work more from home, but for some it has also been positive with more family time and better awareness of the need to prioritise work-life balance. A general problem is work pushing its way into evenings, weekends, and generally time outside of work hours.

Some major points that came up included:

- The timing of emails and whether or not replies are expected immediately or at a time of post-docs convenience. Many feel the pressure to reply faster than they would like to. Different generations may have different perceptions of what is official communication and the availability of many channels of communication - like whatsapp, email, slack, teams, twitter etc. can be overwhelming sometimes.
- Kids are a major part of the work-life equation for those who have them, and parents have different strategies, such as sticking to certain work hours strongly, or work staggered hours throughout the day.
- The importance of 'me-time' was raised. The post docs enjoy skating, biking, playing board games and cook outs.



It was concluded that some keys to a reasonable work-life balance (and happiness in general) are good relationship with advisors, supportive partners/friends, and an accepting culture in the workplace.

The ASE Alumni Association (AA) – micro-networks and interview with alumni

Micro-networks in AA
Environment & Environmental Consulting
Academic Research & Education
Geoscience Consultancy
Corporate Sustainability & Governance
Business, Entrepreneurship & Technology
Public Service

A wide range of career options lie before the ASE graduates. The ASE Alumni Association split their members into industry-based micro-networks to (1) maximise the quality of networking and (2) streamline communication. Undergraduates and Postgraduates join the relevant micro-networks upon graduation, and will be transferred across micro-networks whenever relevant (e.g. after a career switch). Moving forward, the AA intend to gather interviews from various alumni to be featured in the monthly newsletters. For this month, the interviewee is Grace Ng from the Academic Research & Education micro-network.

Hello Grace, where have you been since your graduation?

After my graduation in 2018, I worked at Mott Macdonald Singapore as an Engineering Geologist. I was mainly involved in transport infrastructure projects where I developed geological models and soil profiles using borehole information to understand the potential geotechnical risks for underground works. I mainly worked with geotechnical engineers to communicate the observations and aid in their design of the structures. At the start of this year, I have returned back to ASE to continue my studies as a PhD student, specializing in geodesy and sea-level research.



Grace Ng, ASE Alumni from the Academic Research & Education micro-network.

Who was/were your inspiration in ASE?

Haha this is a question I have never thought about....but if I were to pick someone, it would be the cleaner aunties that were always so bright, cheerful, positive and caring! I think they have a great mindset towards life & interpersonal relationships that is good to emulate. I think sometimes we can so caught-up with school/work that we forget things which are also important to us.

What do you miss about ASE, if at all?

I definitely missed the inclusive culture at ASE. It is difficult to find another place like ASE where people are always so welcoming and friendly. Apart from that, I do miss the time spent with my fellow classmates on the field as well. At that point in time, it may seem stressful or even painful as we had sleepless nights when we try to finish our assignments, but I truly enjoyed the times when we spent days and nights together. It's hard to have these experiences again when most of us become really busy with work!

Tell us some lifestyle changes you have experienced since graduating and starting work!

At the start, it was really hard to adapt to a "9-5" lifestyle since we had so much flexibility with our time all our lives (until that point). But after working for some time, it has trained me to be more disciplined and appreciative of my free time.



Grace misses spending time with her fellow classmates in the field. Photo of ASE students in Kranji Marshes by Elinor Meredith.



“Be open to changes after graduation” says Grace Ng. Photo of ASE students in Kranji Marshes by Elinor Meredith.

My mindset about work has slowly changed over time too. While it is hard to make time when there are a lot of work, I realized work is just a subset of life and so it is important to find the balance between work and life. This includes making decisions on whether there is an urgent need to work overtime or not (many times, a lot of things can wait and there’s always more work after you finish one). Thus, I find it really nice to try to find some meaningful activities to do outside of work as well. This may even help you to enjoy work more as you’re not burnt out from it.

All these experiences will definitely help me to appreciate and enjoy my studies now. Firstly, the working experiences has helped to direct me to know what I want to do with my life (at least in the next decade). Secondly, the discipline and soft skills I gained from working will also be valuable for the whole PhD journey.

Famous last words for this interview?

To all the ASE graduates, be open and courageous to changes! Don’t be discouraged and settle for less when a job isn’t working out for you. Continue to explore new opportunities! That is how we develop and grow!

Some recent outreach and publications from ASE

ASE/EOS authors in bold. The list is not in alphabetical order and does not aim to include all published papers from ASE/EOS, but to give a taste of the incredible diversity of topics we publish on with some recent examples.

Have a recent publication or outreach we could include? Let Anna know: alagerstroem@ntu.edu.sg



Janelle Thompson’s work measuring Covid-19 in Singapore waste water was featured on [NTU research hub](#).

Janneli Lea A. Soria, Adam D., Switzer, Jeremy Pilec, Fernando P.Siringan, Dominik Brille, Arturo Daag (2021) [Geomorphological and sedimentological records of recent storms on a volcanoclastic coast in Bicol, Philippines](#). *Geomorphology*.

Eric O. Lindsay, Rishav Mallick, Judith A. Hubbard, Kyle E. Bradley, Rafael V. Almeida, James D. P. Moore, Roland Burgmann, **Emma M. Hill** (2021) [Slip rate deficit and earthquake potential on shallow megathrusts](#). *Nature Geoscience*.

Rishav Mallick, Aron J. Meltzner, Louisa L.H. Tsang, **Eric O. Lindsey, Lujia Feng, Emma M. Hill** (2021) [Long-lived shallow slow-slip events on the Sunda Megathrust](#). *Nature Geoscience*.

Massicotte, P., Amon, R. M. W., Antoine, D., Archambault, P., Balzano, S., Bélanger, S., Benner, R., Boeuf, D., Bricaud, A., Bruyant, F.,... **Vaulot, D.** ... Babin, M. (2021). [The MALINA oceanographic expedition: How do changes in ice cover, permafrost and UV radiation impact biodiversity and biogeochemical fluxes in the Arctic Ocean?](#) *Earth System Science Data*, 13(4), 1561–1592.

Hunter Doughty, E. J. Milner-Gulland, **Janice Ser Huay Lee**, Kathryn Oliver, L. Roman Carrasco, Diogo Verissimo (2021) [Evaluating a large-scale online behaviour change intervention aimed at wildlife product consumers in Singapore](#). *PLOS ONE*.

Nikita Kaushal, Nivedita Sanwlani, Jani T. I. Tanzil, Nagur Cherukuru, Syamil Sahar, Moritz Müller, Aazani Mujahid, Jen N. Lee, **Nathalie F. Goodkin, Patrick Martin** (2021) [Coral Skeletal Luminescence Records Changes in Terrestrial Chromophoric Dissolved Organic Matter in Tropical Coastal Waters](#). *Geophysical Research Letters*.



Rishav Mallick and Eric Lindsay each published in *Nature Geoscience* this week. See also <https://earthobservatory.org/blog>



Anushka Rege's research was featured on Mongabay.



Nikita Kaushal has written about the importance of [Improving Access to Paleoclimate Data](#). The [Speleothem Isotope Synthesis and Analysis Working Group](#) brings together speleothem scientists, speleothem-process and climate modelers in a paleoclimate database.



Daniel Valuot is trying to solve the mystery of [how phytoplankton survive the polar night](#).



EOS researchers Aron Meltzner and Benjamin Horton explain in *Straits Times* what [nature teaches us about protecting the coast from sea level rise](#).

Wild Boar Research on CNA

Kenny Png and Ngo Kang Min from ASE's forest ecology group were [interviewed on CNA's SG Pulse](#) about their studies on wild boar. Singapore's wild boar population is unchecked due to lack of natural predators (and poaching is not allowed).



The increasing number of wild boar change the structure of both soil and plant communities. Together with NParks, the ASE researchers study the effect of wild boar on Singapore forests by comparing soil and plant parameters with those inside large wild boar enclosures placed out

Educational paper on dung beetles and ecosystems



Eleanor Slade and Ong Xin Rui explain how ecosystems work through the example of dung beetle ecology in [Frontiers for Young Minds](#). Highly recommended (for both young and slightly less young minds).

Selamat Hari Raya!

Have some news to share? Flick Anna an e-mail at alagerstroem@ntu.edu.sg