

NTU 30



# ASE Newsletter

November 2021

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ASIAN SCHOOL OF THE  
**ENVIRONMENT**

Welcome to the November newsletter! Highlights this month include turtle hatchlings, NTU Bioblitz, interviews with Alistair Ting and Dr Sri Budhi Utami and a Halloween event. A very happy Deepavali to you all!

## Staff Turnover

### Welcome to ASE new staff



**Dr Kyle Morgan** joined ASE as a Nanyang Assistant Professor in October.

**What is your area of expertise/interest?** I am a tropical marine scientist with broad interests in coastal geomorphology and marine ecology. My research is mainly focused on coral reefs and trying to understand the impacts of both localised human stressors and climate change on these ecosystems and the structures they form. I have previously conducted research in the central Indian Ocean, Great Barrier Reef, and the Caribbean, but now I am focused on the coral reefs here in Singapore and Southeast Asia (when travel resumes!).

**You are not new to ASE, how long and in what roles have you been here?** I joined the Asian School of the Environment in 2017 as a Research Fellow under NRF's Marine Science Research and Development Programme, and then continued in 2019 as the AXA and Presidential Research Fellow. So, I've been in the department for some time, but I'm excited about my new role and the opportunity to expand coral reef science at ASE.

**What do you like about living/working in Singapore?** There is a lot I like about living in Singapore – which is fortunate, because we haven't been able to leave! I like the accessibility to study sites which you can visit in a single day. This gives opportunity to collect long-term datasets that are otherwise very difficult when your field site is far away. Singapore is also very good at championing young researchers. Aside from work, I love the variety of food you can find in Singapore and the tropical weather – for the most part – although I do sometimes miss being able to wear thick jumper!



**Junki Komori** joins as Research Fellow and will be working with Asst Prof Aron Meltzner's team.



**Way Lin** joins us (EOS) as Research Assistant. She will be working with Assoc Prof Sang-Ho Yun



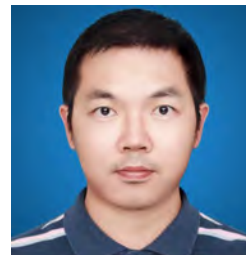
**Indraneel (Neel) Kasmalkar** joins as a Research Fellow working with Asst Prof David Lallemand's team.



**Victoria Stevens** joins us as Senior Research Fellow and will be working with Assoc Prof Emma Hill's team.



**Jennifer Quye-Sawyer** joins as a Research Fellow and will be working with Asst Prof Aron Meltzner's team.



**Wang Kai** joins as Research Fellow and will be working Asst Prof Tong Ping's team.



We say goodbye and thanks to **Asst Prof Caroline Bouvet De La Maisonneuve** and **Dr Sylvain Rigaud**, who have moved back to France with their daughters. All the best to you for the future!

## Awards and Recognition

### Nanyang Awards



**Assoc Prof Benoit Taisne** has been selected for the **Nanyang Education Award (College)**.



**Professor David Wardle** has been selected for the **Nanyang Research Award (NTU overall)**.



**Mr Lee Wei Kit** has been selected for the **Nanyang Service Award**.



**Dr Kyle Bradley** has been selected for the **Nanyang Education Award (School)**.

All recipients of the prestigious Nanyang Awards will be presented with their awards at a formal ceremony in Nanyang Auditorium held on 2 December. Congratulations to your achievements!

### URECA Research Awards



**Alexis Goh** has been awarded the **URECA Undergraduate Research Excellence Award** for her project "*Are Nature Ways in the Way of Nature?*".

**Tay Li Si** has been conferred the **Certificate of Recognition for Commendable Research Accomplishments with Merit** for his URECA

Alexis and Li Si are both 4th year ecology specialisation students and NTU President Research Scholars. They conducted their research through the Tropical Ecology and Entomology (TEE) Lab, supervised by **Asst Prof Eleanor Slade**. Read more on their research and achievements [here](#).





## The JEDI Committee

The ASE/EOS JEDI committee has an active Slack group with materials and chats. Please contact any of the JEDI committee members if you want to know more! Contact info can be found on the: [JEDI web page](#)

- Thanks to everyone for filling out the Doodle poll for the workshops on Unconscious Bias! We are aiming to hold JEDI workshops in person, but of course it depends on SMM.
- A final reminder to fill in the survey about workshops: <https://forms.gle/9Pz3thmKbkSC8abb6>
- We thank **Dr Liesbeth Frias** for the excellent (and well attended) talk on 'Decolonizing science (and our minds)' on Friday 29 October.

## Faculty

**Dr Natasha Bhatia** participated on behalf of ASE in the **Raffles Institute Research Café 2021** titled "Sustainability- Our Common Future", where she gave a talk to 800 secondary school students. She gave an introduction to sustainability- the what, why and how, and spoke about some of the ways students can get involved more locally. The other speaker was **Dr Adrian Loo** from NParks, who spoke about the SG Green Plan and 1 million trees movement. There was an open Q&A session with students from Raffles Institution, Hwa Chong and National Junior College among others.

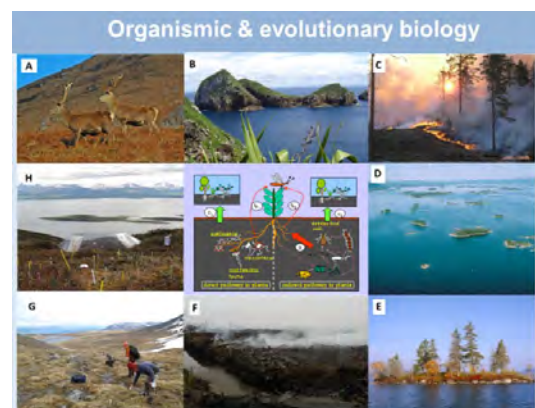


*Dr Adrian Loo and Dr Natasha Bhatia during the Raffles Institute Research Café 2021.*



EOS Director **Prof Benjamin Horton** spoke at the **Singapore-Norway Innovation Conference 2021**, Business Opportunities in the Green Transition. The conference gathered top industry leaders at the forefront of the green, smart shift from Norway and Southeast Asia.

**Professor David Wardle** was formally inducted as an elected member of **Academia Europaea**, the European Academy of the humanities, medicine, law and sciences, in a hybrid (zoom and in-person) ceremony in Barcelona on 18 October. David is one of four faculty based in Singapore who are current elected members of the academy.



## MSOs

### Reminders from our MSO staff to everyone:

- Please submit your ART test results weekly via [this form](#).
- To update your safety courses in Workday, [log in](#), and then click on 'learning'.
- The admin team will have a new colleague joining in early December (more on this in next month's newsletter).



### Appreciate the IT Team

What would ASE be without the **ASE IT Team**?! Now you have the opportunity to “**appreciate**” them after they have given you support, and you can also nominate them (team or individual) for the **Extra Mile award** at this link <https://ts.ntu.edu.sg/sites/ae/2017/AdminExcellenceAwards/Pages/index.aspx>

## Monthly MSO Interview



Every month we get to know one of the MSOs better through a series of mini interviews. This month we catch up with **Ting Aik Leong Alistair**, Safety Officer of ASE.

### As the Safety Officer of EOS-ASE, what are your main responsibilities?

*Alistair Ting* My main responsibility is to ensure that all of us have a safe environment to work in and that we are in compliance with all legislations and guidelines. Some of my duties include, doing walkabouts/ inspections, liaising with Lab Managers to address safety concerns, working with other stakeholders (e.g. OHSE, govt agencies) to ensure compliance and also to handle any safety issues such as hazards in the workplace. Other duties include updating the School on new safety regulations, maintaining the Safety and Health Management System and working with OHSE to address and rectify any safety issues during their audit of ASE-EOS.



*Alistair (front row, middle left) with ASE staff during a Wilderness First Aid Responder course.*

### How long have you worked at ASE and where were you before?

I have been here since 2014 (time flies!!!). I remember back then ASE was still called DES and we were very new. So a lot of the safety systems were set up then and I have the pleasure of working with all the nice colleagues here in setting them up. =)

My most recent role before here was actually at another local university. I was the Lab Executive of the an undergraduates' lab where I was in charge of procuring supplies, preparing reagents, setting up equipment

etc. so that undergraduates could run their experiments safely. My other previous roles includes working as a researcher in a research institute and also as a Development Trainee in a biologics company.

### **Thankfully there are not many safety emergencies at ASE, but what is the worst safety issue you had to deal with?**

Thanks to the hard work of everyone here, our incidents are quite few. There are always a couple of small incidents every year but I would think the worst one I have currently dealt with was when an ex-colleague of us had an unfortunate accident when doing fieldwork. Due to the dynamic environmental conditions (waves and unseen submerged rocks), he fell down while getting off the boat and landed on his hips. Thinking it was just another 'normal' impact fall, he ignored his pain and



continued with his fieldwork, hoping the pain will stop eventually. Unfortunately, it did not and he actually endured the pain for more than month before he decided to see a doctor. The doctor then realized he actually had a hip-fracture and recommend surgery to correct it. It was only then we found out about the incident. We tried our best to help the colleague by liaising with various offices so that he can have the surgery in peace without worrying about insurance or his medical leave. Luckily in the end he got the surgery and eventually recovered.

However, as the incident was reported late according to MOM rules, we have to explain to them what happened and why there was a delay in reporting. Thus, I would urge everyone to report to me immediately if they encountered any incident (big or small!!!) while working.

### **How has the pandemic affected your job as safety officer?**

The pandemic has no doubt increased some of my responsibilities. As I am also the SMM Officer for ASE, I need to ensure that everyone know and follow all SMM so that all of us can have a safe environment to work in. These include putting up various hand sanitizers or wipes and to distribute ART kits. As the situation and guidelines are constantly updating, I also need to keep myself updated so to answer people enquires on what to do should they receive a QO, HRW etc. or if they have a positive ART test.

### **What so you like best about your job?**

I think the most fun part of my job is that I get to get acquainted with everyone here in ASE and EOS within their first few weeks as everyone needs to attend safety induction conducted by me. This not allows me to get to know everyone a little better but also allows me to understand their work. All these helps me to appreciate how each and everyone of us work together to achieve our goals of making Earth a more sustainable place for everyone.

### **What are some safety matters that we could improve on at ASE?**

Some of the safety matters that we could improve on is to not treat safety documentation as a paper exercise and additional paperwork (e.g. doing risk assessments properly). The reason for this is although many people have safety in their mind, they do not see the need to do the necessary documentations. But these documentations become important if an accident happened (and they can even when you least expected it) as they can help to show people that due diligence has been done and the accident was just really unfortunate.



Another improvement is I hope people can be more participative in various safety events (e.g. Safety Days, Safety Talks) or contributing to Safety Moments!

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

Haha, I enjoyed playing video games as I think they are a great way for me to destress though sometimes I get stressed if I cannot complete them. I also enjoy travelling (missing it badly!!) and eating good food!

*What better thing to do in your spare time in Singapore than enjoy good food?*

Everyone please stay safe and healthy always!



## ASE Club — Undergraduate Students

### Halloween Event



To bring the spirit of halloween to ASE, ASEC did a mini photoshoot dressed up as ghosts around NTU. We hope that these pictures brought in the festive mood and set a spooky mood and helped to in the take off some stress for the students amidst their busy schedules!

We also organised a halloween theme week competition, whereby students were encouraged to dress up in different costumes and post them on Instagram. Many posts were sent in and we had a hard time picking the winners! In the end, we decided on these 3 posts! Congratulations to all the winners!

All Covid restrictions were adhered to throughout the event.





## ASE Students awarded the Mr & Mrs Kwok Chin Yan Award for Student Initiative 2021, for organising the first-ever NTU BioBlitz

By Alexis Goh

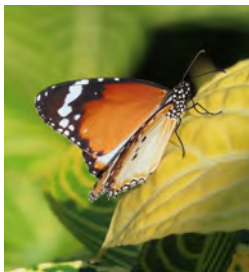


Photo: Alexis Goh

Last year (AY20/21), Year 4 EESS Ecology students **Alexis Goh** and **Tay Li Si** led **Earthlink NTU's Nature Guiding committee** as the Co-Directors. They planned and executed several events to engage the NTU community to discover our rich local biodiversity, pick up nature-watching and identification skills, and to inspire action for conservation and human-wildlife coexistence movements. In February 2021, they organised the first-ever **NTU BioBlitz – a campus-wide wildlife monitoring effort**. It involved mobilising volunteer survey teams to record the biodiversity that can be found along transects in NTU, and the EcoClick Nature Photography Competition which challenged photographers to capture the beauty of biodiversity on campus.

They were first inspired to organise the event when they took **Dr Shawn Lum's ES4301 Conservation Biology & Biodiversity module** in AY20/21 Semester 1. NTU's location at the boundary between urban and the wilder Western Catchment meant the occasional wandering of wild animals into our campus spaces; including rare and even endangered species. Yet no formal campus-wide monitoring efforts have been organised to document the amazing wildlife we share our campus grounds with. Thus, Alexis and Li Si took it upon themselves to launch the NTU BioBlitz!

In just two weeks (22 Feb –7 Mar 2021), our volunteers counted 400+ individuals and 153+ unique species! Highlights include the nationally critically-endangered Sunda pangolin, the migratory (not-so-common!) common kingfisher, and buffy fish owl. Many exciting finds were made at Yunnan Garden and Nanyang Lake, but more elusive forest species were also spotted along Nanyang Crescent. Excitingly, the team has continued to update a campus wildlife species list since the event, and over 320 species have now been documented visiting or residing on campus.

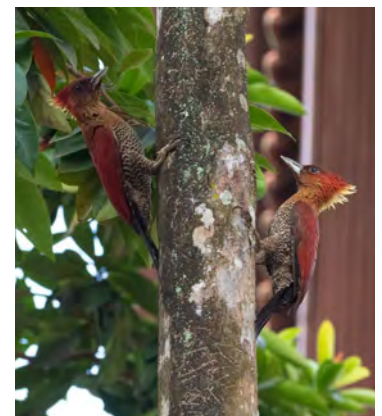


Photo: Tan Pek Yeu



Photo: Alexis Goh

The EcoClick Nature Photography competition received more than 60 entries. The finalists were screened and selected by a stellar judging panel of conservationists and nature photographers: Dr Shawn Lum (NSS President; ASE lecturer), Jayaprakash Bojan (NatGeo 2017 Photographer of the Year), Zestin Soh (A Guide to the Bees of Singapore co-author), Kathleen Yap (Sony Journey to Greatness 2019 winner), and Karl Png (SG Youth Biodiversity Network leader). The EcoClick winners were finally decided after judge scoring and public voting.



Photo: Phoebe Zhou  
Hui Xin

At the end of the successful event, a new NTU Nature Watch Telegram chat was also opened for like-minded NTU biodiversity lovers to share sightings and discuss conservation topics. The community has grown to more than 300 members today – you can join the group too via this link: <https://t.me/joinchat/VQaP0xBVLuCXl4PV>

For organising the NTU BioBlitz 2021, the Nature Guiding team was extremely honoured to receive **the Mr & Mrs Kwok Chin Yan award for Student Initiative** at the Student Leaders' Night (4 Oct 2021) (video), for its contributions to creating a vibrant student life and improvement of our campus environment. With campus biodiversity survey data, and now NTU management's recognition of our rich campus wildlife, the team will continue to advocate for greater human-wildlife coexistence on campus, ensuring the unique biodiversity of NTU will be well-protected and conserved.



## PhD Students

### Two new doctors in October

Big congratulations to ASE's two newest PhDs:



**Dr Rishav Mallick**

You can find a feature on **Dr Mallick's** research from earlier this year [here](#).



**Dr Sri Budhi Utami**

See interview with **Dr Utami** below.

CoS comms have caught up with **Dr Utami** to find out about her PhD experience. This interview will soon be published on the CoS and ASE news blogs.

#### Could you give us a short summary of yourself and who you are?

My name is Sri Budhi Utami, or Sri for short. I am originally from Indonesia, but grew up in the Netherlands and Scotland. I studied in Canada before coming to Singapore, where I completed my previous degrees at the University of British Columbia and McGill University, respectively. I have long been fascinated by active volcanoes ever since I visited my first one called Ijen volcano in Indonesia. Ijen's crater hosts the world's largest acidic volcanic lake, and is renowned for a phenomenon called the "Blue Fire"!

Outside of science, I am keen on learning foreign languages (I speak Dutch and French), honing my science communication skills, and am a certified Advanced Open Water Diver since 2013. I have a sweet tooth and am quite partial to chocolate after a long day.





*It was Ijen volcano in Indonesia that woke Sri's interest in volcanoes (shutterstock\_656585989)*

### **Could you elaborate more about the applications in your research field?**

I studied an active volcano called Kelud volcano in Indonesia, which has a record of producing "pressure-cooker"-style short-lived, highly explosive eruptions as well as lava domes. This wide-ranging spectrum of eruption styles is commonly observed at many active volcanoes as well, but Kelud presents a particularly intriguing example.

Unfortunately, these active volcanoes still pose a high risk to communities living around them. My research aims to improve our understanding of the role that different parameters (magmatic processes, magma storage conditions, and ascent rate) play in producing different eruption styles.

My research connects the magmatic processes that occurred before an eruption underneath the volcano with the unrest signals captured at the surface. This has many implications, ranging from recommendation of new monitoring techniques to improving how we can better anticipate eruptions from volcanoes like Kelud in the future.

### **Was it an obvious choice for you to go for a career in science?**

At first glance, it may seem like an obvious choice for me to go into science because both my parents both have very similar scientific backgrounds - before they retired, my mother was an experimental physicist, and my father fostered a career in the oil and gas industry as a geophysicist. Yet growing up, my parents did not pressure me to pursue a career in science, and even encouraged me and my siblings to explore a wide range of interests, including arts and music.

However, it was not until I was in secondary school in Scotland that I discovered how interesting science can be. I also liked geography and it helped that my family lived within an hour's drive of the Cairngorms National Park, which included Ben Nevis, the highest mountain in the UK. At school, I gravitated more and more towards chemistry, and took part in an annual



*Kelud volcano in Indonesia is the volcano that Sri studied for her PhD. It's a "pressure cooker" volcano.*

chemical analysis competition, where students had to analyze how much salicylic acid was in an aspirin tablet. My group won that competition in my 6th year (Scottish equivalent to 2nd year of Junior College).

By then I knew I wanted to continue with science, but wanted more breadth out of my degree, so I chose to pursue my degree at UBC in Canada, with the aid of various scholarships and grants. At UBC, I worked as a part-time research assistant in the Department of Geography helping to build a database of global coral bleaching events. These experiences slowly consolidated my interest in pursuing a career in scientific research over time.

### **How was your PhD defence? And what does it feel like to have to go through your PhD during this pandemic?**

To be honest, I was very nervous before my PhD defence, especially the Q&A section. My PhD supervisor Professor **Fidel Costa** and I discussed my concerns beforehand, and one thing he said that helped was to treat the Q&A as a discussion between colleagues. In the actual defence itself, my talk went smoothly, and afterwards people commented on how nice and clear it was. This was a huge achievement, as oral presentations have been my Achilles' heel. In fact, during the Q&A, I was stunned that my examiners had such a positive response about the results of my PhD work!

Doing a PhD is already challenging enough, and the global pandemic introduced a high level of unpredictability no one could have anticipated. I had to extend my PhD by six months as a direct result of the pandemic, and there were times when I was not motivated and struggled. However, I admit I am lucky in that I have something to focus on during the pandemic, which kept me going until the finish line. I was also fortunate enough that I had completed the field and experimental components of my projects well before the pandemic. Thus, I only needed to change one project entirely, but was able to quickly adapt and finish the new project in time because of assistance and previous work done by Drs. Li Weiran (Alex), Jason Herrin, and Jeff Oalman, to whom I am thankful.

### **What are the most important things you have learnt in your PhD days?**

My PhD was quite ambitious, and have led me to suffer from burnout, among others. I learned from this experience by prioritizing my physical and mental well-being over research output. This included something as simple as taking time off from

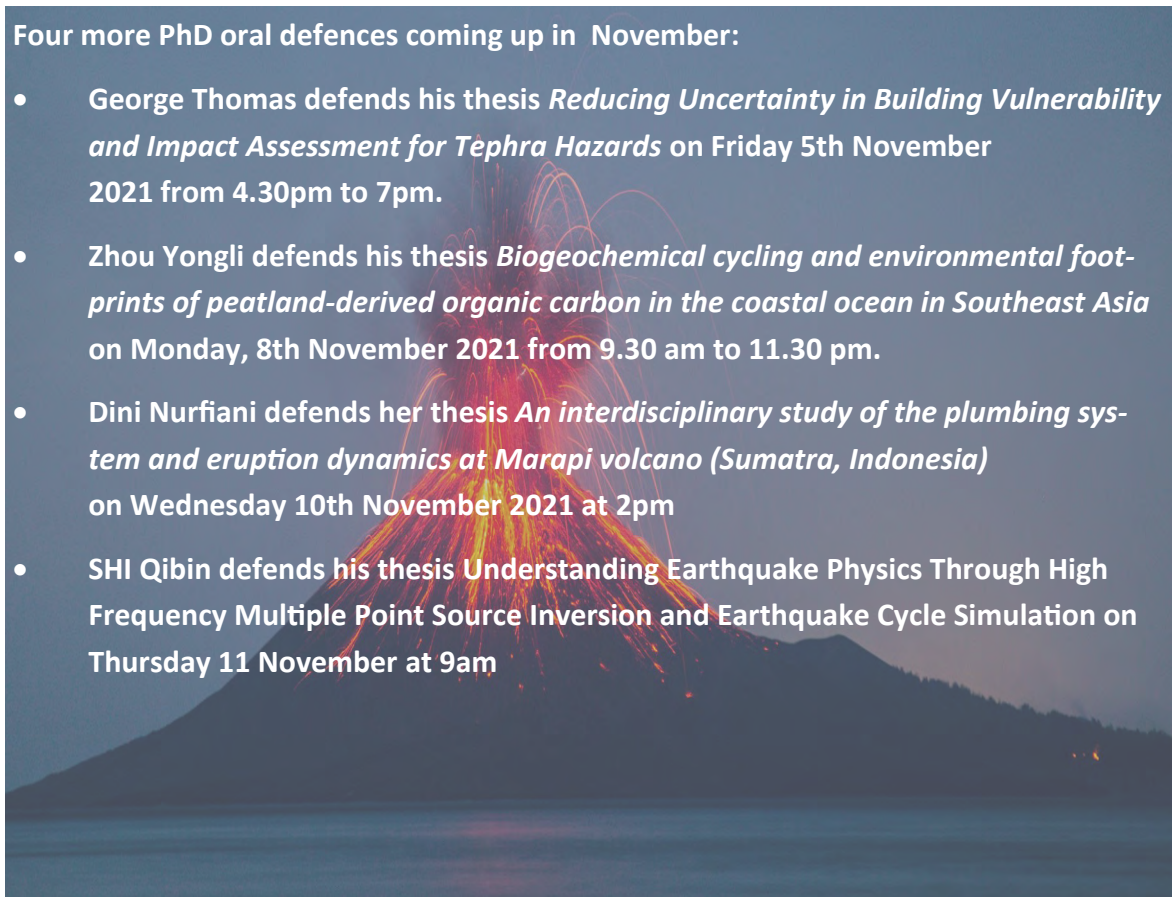
work when I recognized I was at my mental saturation point, checking in with friends and family, and to set boundaries for myself. I also learned that having a faculty mentor with whom you can talk about issues other than research is important for personal growth. Special thanks to **Asst. Prof. Janice Lee** for our chats on Diversity & Inclusion, her experience as a woman in STEM, and her support.

#### **Do you have any advice for current or prospective PhD students?**

For prospective PhD students, doing a PhD in a pandemic is tough. Being kind with yourself can make a lot of difference. For current PhD students, my advice is to build up a support system of people (friends, family, advisor, mentor, etc) to whom you can ask for help in times of need, and cherish them throughout your stay here. On long days, pace yourself and know when to take a break or stop your task - there is always tomorrow.

#### **Four more PhD oral defences coming up in November:**

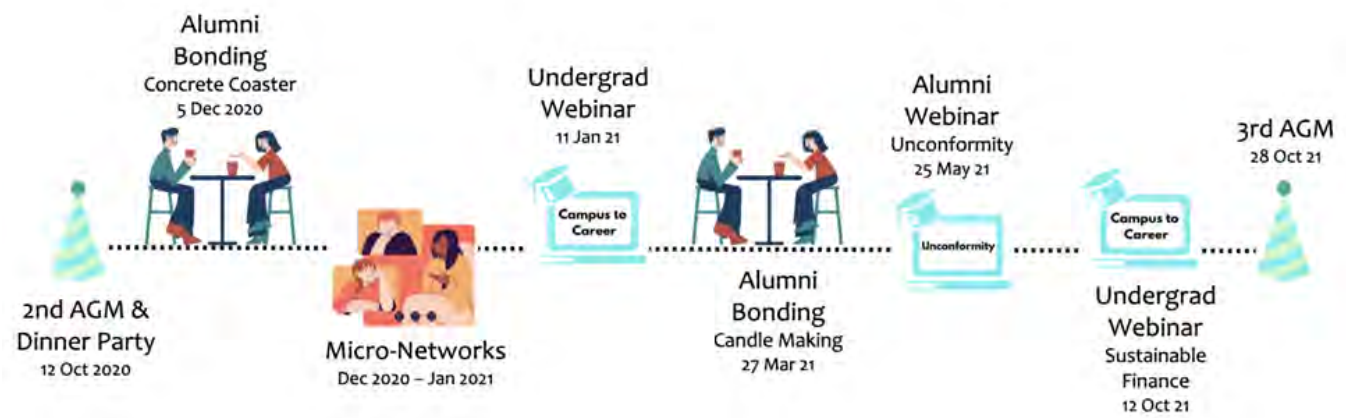
- George Thomas defends his thesis *Reducing Uncertainty in Building Vulnerability and Impact Assessment for Tephra Hazards* on Friday 5th November 2021 from 4.30pm to 7pm.
- Zhou Yongli defends his thesis *Biogeochemical cycling and environmental footprints of peatland-derived organic carbon in the coastal ocean in Southeast Asia* on Monday, 8th November 2021 from 9.30 am to 11.30 pm.
- Dini Nurfiani defends her thesis *An interdisciplinary study of the plumbing system and eruption dynamics at Marapi volcano (Sumatra, Indonesia)* on Wednesday 10th November 2021 at 2pm
- SHI Qibin defends his thesis *Understanding Earthquake Physics Through High Frequency Multiple Point Source Inversion and Earthquake Cycle Simulation* on Thursday 11 November at 9am





# ASE Alumni Association

We draw close to the end of the term for the ASE Alumni Association Executive Committee 2020/2021. Let's take a quick look back at the events that the ASE Alumni Association did together in a year of uncertainty and virtual activities!



In the midst of this all, we managed to squeeze in one physical event! Bringing the alumni together to network while creating scented candles and learning about stress relieving techniques at the end of March, nearly a year after we went into the circuit breaker.



At the start of October, we also collaborated with an external organisation, Sustainable Finance Institute Asia, where one of our alumna Stephanie Ng works, to host a Sustainable Finance Campus to Career Seminar. The seminar featured Jeong Yoon Mee from OCBC and Mock Yuan Ning, another alumna, from UBS who shared about their experience in the fast-growing field.

The baton will officially be passed during the 3rd Annual General Meeting which will be held on 28th October 2021. We welcome the new ASE Alumni Association Executive Committee of 2021/2022 who are excited to bring forward new events and



**Danielle**  
President



**Victoria**  
Internal VP



**Pei Shan**  
External VP



**Shu Hui**  
Treasurer



**Ghaya**  
Outreach  
Director



**Way Lin**  
Outreach  
Director

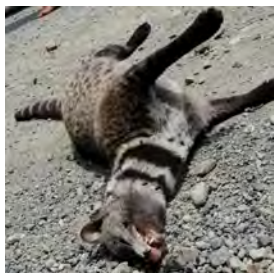
## Recent Publications

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.

Please know that there is no automatic recording of published papers from ASE for this newsletter. This list depends on authors notifying Anna. Have a recent publication or outreach item we could include? Please send it to: [alagerstroem@ntu.edu.sg](mailto:alagerstroem@ntu.edu.sg)



Judith Hubbard and Rishav Mallick published on earthquake hazard in in [Temblor](#).



How to reduce roadkill on Malaysia's ever expanding road network? asked Tabitha Hui. Photo: Malay Civet roadkill, Shutterstock ID: 1374792806



Janice Lee and Shailendra Mishra co-authored the *Nature-based Solutions for Climate Change Mitigation: Challenges and Opportunities for the ASEAN Region*. COP26 Universities Network (UK-Singapore) Policy Report.



Dung beetles feature in 3 publications this month, all with Eleanor Slade on the author list. Read more about how they are hydrological engineers [here](#). Image: shutterstock\_53277487

Hubbard, J. and Mallick, R., 2021, [An overlooked hazard can cause damage weeks after an earthquake strikes](#), *Temblor*.

Tabitha C. Y. Hui, Eleanor M. Slade & Ju Lian Chong (2021) [Roadkills in Northern Peninsular Malaysia](#). *Frontiers in Environmental Science*. <https://doi.org/10.3389/fenvs.2021.637462>

Xin Rui Ong, David Hemprich-Bennett, Claudia L. Gray, Victoria Kemp, Arthur Y. C. Chung, Eleanor M. Slade (2021) [Trap type affects dung beetle taxonomic and functional diversity in Bornean tropical forests](#). *Austral Ecology*.

Keller N, Meerveld IV, Ghazoul J, Chiew LY, Philipson CD, Godoong E, Slade EM (2021). [Dung beetles as hydrological engineers: effects of tunnelling on soil infiltration](#). *Ecological Entomology*. <https://doi.org/10.1111/een.13094>

Gray REJ, Rodriguez LF, Lewis OT, Chung AYC, Ovaskainen O, Slade EM (2021). [Movement of forest-dependent dung beetles through riparian buffers in Bornean oil palm plantations](#). *Journal of Applied Ecology*. <https://doi.org/10.1111/1365-2664.14049>

Dongju Peng, Lujia Feng, Kristine M. Larson & Emma M. Hill (2021) [Measuring Coastal Absolute Sea-Level Changes Using GNSS Interferometric Reflectometry](#). *Remote Sensing*

Kelly Siman, Daniel A. Friess, Mark Huxham, Suzanne McGowan, Julia Drewer, Lian Pin Koh, Yiwen Zeng, Alex M. Lechner, Janice Ser Huay Lee, Chris D. Evans, Stephanie Evers, A. Jonay Jovani-Sancho, Helena Varkkey, Gusti Anshari, Adi Jaya, Kwek Yan Chong, Susan Page, Shailendra Mishra, and Sofie Sjögersten (2021) [Nature-based Solutions for Climate Change Mitigation: Challenges and Opportunities for the ASEAN Region](#). COP26 Universities Network (UK-Singapore) Policy Reports on Nature-based Climate Solutions

Ibáñez, T., Wardle, D. A., Gundale, M. and Nilsson, M.-C. (2021) [Effects of soil abiotic and biotic factors on tree seedling regeneration following a boreal forest wildfire](#). *Ecosystems*.

Pauliina Rajala, Dong-Qiang Cheng, Scott Rice, Federico Lauro (2021) [Sulfate-dependant microbially induced corrosion of mild steel in the deep-sea: a 10-year microbiome study](#). *Microbiome*.

Elianne Egge, Stephanie Elferink, Daniel Vaalot, Uwe John, Gunnar Bratbak, Aud Larsen, and Bente Edvardsen (2021) [An 18S V4 rRNA metabarcoding dataset of protist diversity in the Atlantic inflow to the Arctic Ocean, through the year and down to 1000 m depth](#). *Earth Syst. Sci. Data*. Twieet: [https://twitter.com/daniel\\_vaalot/status/1453239706808893443](https://twitter.com/daniel_vaalot/status/1453239706808893443)

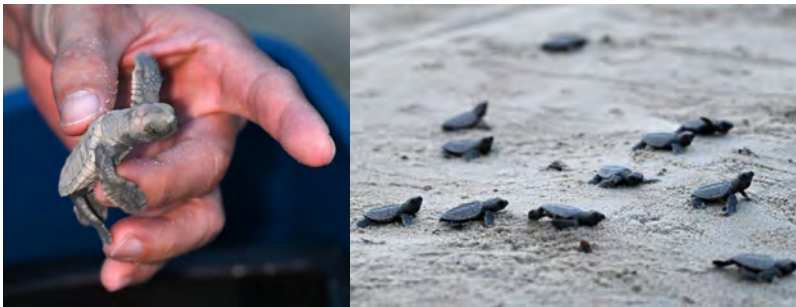
F Chandra, WL Lee, F Armas, M Leifels, X Gu, H Chen, S Wuertz, EJ Alm, JR Thompson (2021) [Persistence of Dengue \(Serotypes 2 and 3\), Zika, Yellow Fever, and Murine Hepatitis Virus RNA in Untreated Wastewater](#). *Environmental Science & Technology Letters* 8 (9), 785-791.

The goal of the paper by Chandra et al, with Janelle Thompson as corresponding author, is to demonstrate proof of concept for detecting Dengue and other arboviruses in wastewater. It was presented in a talk (and 4 posters) at the International Water Association's (IWA) Microbial Ecology and Water Engineering Specialist Conference in October.



Dengue virus. Image: Wikipedia

## Recent Outreach from ASE



### Studying turtle hatchlings in Sentosa

Asst Prof Kim Hie Lim and SCELSE PhD student Regine Tiong Hui Yi study the history and genetic background of Singapore Hawksbill turtles, and their study objects just hatched on a beach in Sentosa :-). The Straits Times covered it: [85 hawksbill turtle hatchlings released from Siloso Beach in Sentosa](#)

### The ARIA-SG team featured on NTU Research Hub

The ARIA-SG team at the Earth Observatory of Singapore featured on NTU Research Hub

Read the story [here](#)



### Why dung beetle trap type matters

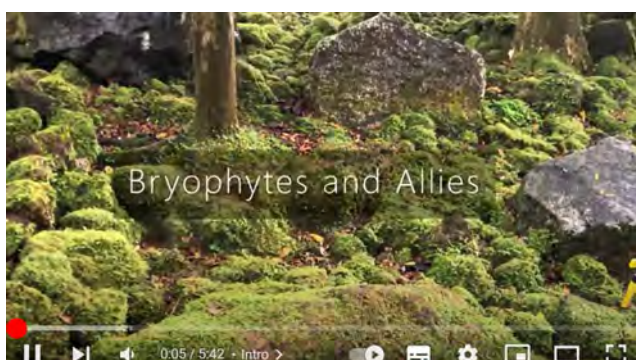
It has been a productive month for the Tropical Ecology and Entomology Lab. On their web page, PhD student **Ong Xin Rui** explains her latest publication: [Why dung beetle trap type matters](#)

The article on [Dung Beetles as Hydrological Engineers](#) explained by **Marx Yim**.

### First island wide geophysical survey covered by Straits Times

Assistant Professor Wei Shengji and Dr Karen Lythgoe led the survey, aiming to help understand underground structures and uncover the risk of earthquakes in Singapore. Read the article here:

[First islandwide survey to uncover what lies beneath Singapore and its earthquake risk](#)



### Third video in Tropical Plants Explained series out

Dr Kang Min Ngo and a production team consisting of Han Xue Yi, Glendon Kee, Marx Yim, Goh Xuan, and Xuan Lam Shushan have produced a video on mosses, filmed in the Botanic Gardens. The video is the third in a series initiated by Dr Ngo called *Tropical Plants Explained*.

You can find all three videos [here](#)