

### Double good news for ASE Class of 2020



*Graduates of the ASE class of 2020 after their convocation.*

Congratulations to the ASE class of 2020, who had their convocation, at long last, on March 1 (eight months after graduating). A cheerful group of 17 graduates (about half of the class) attended the socially distanced ceremony in the Nanyang Auditorium. The valedictorian Lee Ming Yang gave a well-received speech themed around the fitting quote *“If life were predictable it would cease to be life, and be without flavour”* by Eleanor Roosevelt.

More good news for the class of 2020 arrived last week with the annual graduate student survey, revealing a record high employment rate of 95.5% for the ASE graduates of 2020. More statistics on ASE graduate employment from the survey can be found [here](#).

### Staff Turnover and Promotions



*Dennis Wagenaar recently joined DASL.*

We welcome two new hires who joined the ASE in the last month, Dennis Wagenaar (Research Fellow) and Celine Liu (Research Assistant). They both work with Asst Prof David Lallemand’s team in the Disaster Analytics for Society Lab (DASL).

Meanwhile, Research Fellow Francesca Forni has secured a position as a researcher in geochemistry and volcanology at the University of Milan in Italy. Best of luck to her!

### Awards, Recognition, and Grants



*Grace Tay will be exploring the diatoms of Singapore’s waters.*

Two of our undergraduate students, **Grace Tay** and **Roy Tan**, have been awarded the EXPLORE! grant to do research at St John’s Island National Marine Laboratory. The grant is sponsored by the MSRDP (Marine Science Research & Development Programme) under the Singapore NRF (National Research Foundation). Grace Tay’s project is on diatoms, titled *“Building a Visual Database of Singapore’s Marine Diatoms using the FlowCam and looking at Diatom Diversity in relation*



Roy Tan's research project is on marine microplastics.

with *Tidal Patterns*", and Roy Tan's project is on microplastics: *"Investigating Microplastic distribution in Singapore's Marine Environment using FlowCam"*.

Utami Sri Budhi is the recipient of the 2021 Women in Engineering, Science, and Technology (WiEST) Conference Grant of S\$3,000. She is one of four recipients from the CoS, and the only one from ASE this year.

**CONGRATULATIONS ALL!** 😊

## Meetings and Events



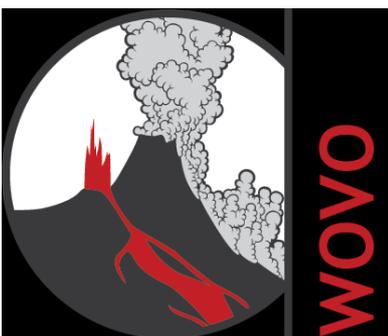
Hear about ASE from Dr Natasha Bhatia, Associate Chair (Academics), on [Youtube](#).

- ASE held a **Virtual Open House** for prospective students on 27 February. Associate Chair (Academics) Natasha Bhatia has recorded video introducing ASE to prospective students ([Learn more about ASE](#)), and we also have three new ASE corporate videos (**1: General**, **2: Faculty and research**, **3: Students and alumni**). Applications are open, so do help us share these videos as physical recruiting events are currently not possible.



EOS and CVGHM Collaborators

- EOS has celebrated the 10th anniversary of its collaboration with the Centre for Volcanology and Geological Hazard Mitigation (CVGHM), Indonesia. Over the past decade CVGHM and EOS have shared observation stations, knowledge, laboratory facilities and expertise, and developed databases for historical eruptions and current day monitoring. Graduate students from CVGHM have also been admitted through ASE. More on this topic in this [EOS blog post](#).



World Organisation of Volcano Observatories (WOVO).

- The **World Organisation of Volcano Observatories (WOVO)**, which is hosted by EOS, organized an international **Workshop on Volcano Monitoring Infrastructure on the Ground and in Space**. The participants contributed to the development of a [Global Volcano Monitoring Infrastructure Database \(GVMID\)](#), hosted at WOVOdat. They also learned about satellite tools for volcano monitoring, and contributed to improving the utility of satellite data for volcanoes. Recorded talks from the workshop are available [here](#). Read more about WOVOdat in this Inverse article: [How volcano scientist are teaming up to stop the next big disaster](#).



Perrine Hamel gave a talk at IWP.

- Perrine Hamel was invited to speak at the Institute of Water Policy, Lee Kuan Yew School of Public Policy, NUS, on 22 March. She gave a talk on "The role of natural infrastructure in integrated urban water management: A Southeast Asian Perspective".

## Some recent publications and outreach from ASE



Judith Hubbard published on the Himalayas.



Plant roots featured in two recent ASE publications, by Kelly Andersen and by David Wardle.



Christaline George and Federico Lauro published on harmful algal blooms.



Eleanor Slade and Janice Lee put the environmental impacts of palm oil in context.



Karen Lythgoe's photo of an alligator gar in MacRitchie Reservoir.

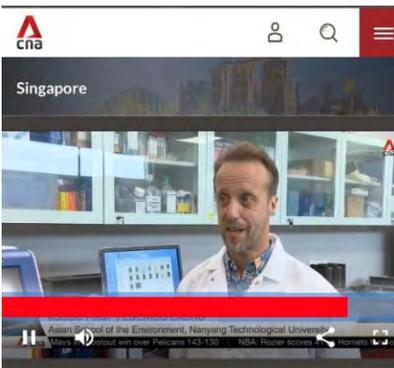
- Luca Dal Zilio, György Hetényi, **Judith Hubbard** & Laurent Bollinger (2021). [Building the Himalaya from tectonic to earthquake scales](#). Nature Reviews Earth & Environment.
- Lugli, L.F., Rosa, J.S., **Andersen, K.M.** et al. (2021). [Rapid responses of root traits and productivity to phosphorus and cation additions in a tropical lowland forest in Amazonia](#). New Phytologist.
- Trottet, A., **George, C.**, Drillet, G., **Lauro, F.M.** (2021). Aquaculture in coastal urbanized areas: a comparative review of the challenges posed by Harmful Algal Blooms. Critical Reviews in Environmental Science and Technology. In Press.
- Hellauer, K., Michel, P., Holland, S.I., Hübner, U., Drewes, J.E., **Lauro, F.M.**, Michael J. Manefield (2021). [Inferring trophic conditions in managed aquifer recharge systems from metagenomic data](#). Science of the Total Environment.
- Arumugam, K., Bessarab, I. ... Wuertz, S., **Lauro, F.M.**, Huson, D.H., and Williams, R.B.H. (2021) Recovery of complete genomes and non-chromosomal replicons from activated sludge enrichment microbial communities using Nanopore long read metagenome sequencing. NPJ Biofilms and Microbiomes, in press.
- Milne S, Martin JGA, Reynolds G, Vairappan CS, **Slade EM**, Brodie J,F ..... Burslem DFRP (2021). [Drivers of Bornean orangutan distribution across a multiple-use tropical landscape](#). Remote Sensing.
- Meijaard E, Brooks TM, Carlson KM, **Slade EM**, Garcia-Ulloa J, .....**Lee, J.**..... Sheil D (2020). [The environmental impacts of palm oil in context](#). Nature Plants 6: 1418-1426.
- Spitzer, C. M., Lindahl, B., **Wardle, D. A.**, Sundqvist, M. K., Gundale, M. J., Fanin, N. and Kardol, P. (2021) [Root trait-microbial relationships across tundra plant species](#). New Phytologist.
- Asplund, J., van Zuijlen, K., Roos, R., Birkemoe, T., Klanderud, K., Lang, S., **Wardle, D. A.** and Nybakken, L. (2021) [Contrasting responses of plant and lichen secondary metabolites across an elevational gradient](#). Functional Ecology.
- Ricciardi, A., Iacarella, J. C., Aldridge, D. C., ..... Simberloff, D., Vilà, M. and **Wardle, D. A.** (2021) [Four priority areas to advance invasion science in the face of rapid environmental change](#). Environmental Reviews.
- **Yolanda C. Lin**, Feroz Khan, **Susanna F. Jenkins** & **David Lallemand** (2021). [Filling the Disaster Data Gap: Lessons from Cataloging Singapore's Past Disasters](#). International Journal of Disaster Risk Science.
- Margaret A. Christie, Christopher E. Bernhardt, Andrew C. Parnell, **Timothy A. Shaw**, Nicole S. Khan, Reide Corbett, Ane García-Artola, Jennifer Clear, Jennifer S. Walker, Jeffrey P. Donnelly, Tobias R. Hasse and **Benjamin P. Horton**. 2021. [Pollen Geochronology from the Atlantic Coast of the United States during the Last 500 Years](#). Water.

## Outreach

- Karen Lythgoe's photo of a huge monstrous fish later identified as a non-native alligator gar gained a lot of attention and was shared widely from Nature Societies Facebook page, where she first posted it. Straits Times was among the many media that picked up the story: [Monstrous' fish at MacRitchie identified as non-native alligator gar](#).



*Climate Conversations with Shawn Lum is on Wednesday 10 March.*



*Federico Lauro talks about his research on microplastics on CNA.*



*ASE undergrad Cheryl (left) visiting Ulu Pandan/Dover Forest with Minister for National Development, Desmond Lee. (Photo from Desmond Lee's [Facebook page](#)).*

- Next up in the ArtScience Museum talk series 'Climate Conversations' brings together climate scientists and ecologists from the region in a programme of talks that spotlights some of the most profound stories from the frontlines of conservation and climate innovations. Next week it features ASE's [Dr Shawn Lum](#), who will share about Nature Society's efforts for marine conservation and coastal clean-up, and how we can play a role in protecting our marine environments and biodiversity.
- Federico Lauro was interviewed about his research on Microplastic pollution in Singapore in this CNA video: [New study to track microplastic pollution in Singapore](#)
- Perrine Hamel has provided her expert opinion about the [ecological significance of golf courses](#) on CNA, and about urban design and sustainability in a [CNN feature on the new Singapore's new "eco town" Tengah](#).
- ASE undergraduate student Cheryl was recently invited by NParks and its parent Ministry (the Ministry for National Development) to visit the Ulu Pandan/Dover Forest with Minister Lee. An HDB estate is planned for the area, and Cheryl and colleagues in the group [Singapore Youth Voices for Biodiversity](#) spoke up in favour of retaining the forest and seeking alternative, less biodiverse, sites for the HDB project.

After the walk there was a discussion with the Minister over the decision making that will take place over the fate of the forest and the planned HDB estate, and Cheryl made a convincing case for the kinds of ecological factors that can and should be considered in any urban planning exercise, about how nature can be integrated into planning and how society would be better off for it (source: Dr Shawn Lum).

Keep up the good work, Grace!