

WELCOME

Welcome to the NUS Geography Graduate Research Workshop 2017 – the 5th since the series of annual workshops commenced in 2012!

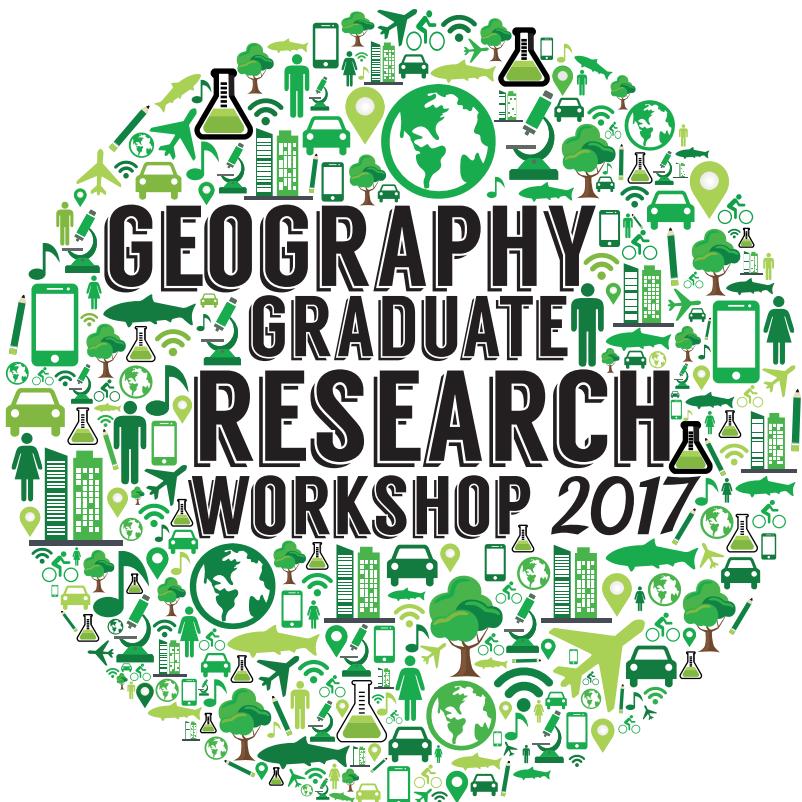
The annual workshop is the culmination of the Graduate Research Seminar (GRS) module, which all Graduate research students in the Department of Geography are required to complete. The class includes both Masters and PhD students, some of whom only commenced their studies in January this year. As with previous years, a range of nationalities and a diversity of topics are represented among the students and the presentations, respectively. The range of topics included in the programme reflects the breadth of research interests in the Department. According to its Graduate Strategy, the Department aims to “build and maintain a graduate school commensurate with the Department’s high-standing internationally”; this Workshop – and these Graduate research students – are an important part of achieving that aim.

The Workshop showcases students’ individual projects. They will be presenting the ‘what?’, ‘why?’ and ‘how?’ of their research, describing their respective projects, placing each in its academic context, outlining the significance of their planned work, and detailing how they aim to tackle the underpinning puzzles and problems. Some of the students may even be in a position to present preliminary findings of their research. Most, however, will focus on research that they propose to carry out during the remainder of their time in the Department.

For many of the students involved, this has been their first experience of organizing and hosting an academic event such as this. The fact that they have managed to put on the Workshop while also developing their own presentations is commendable. I am sure that the students will have gained much from the experience. I am equally certain that the students will also have benefited from presenting their own research ideas so soon after embarking on their graduate research; it is not easy to expose ideas to scrutiny when, often, much is unsure and unclear.

I hope you will enjoy the presentations, as well as providing constructive input and friendly advice to the students presenting their work.

David Taylor
Graduate Coordinator,
Department of Geography



PROGRAMME BOOKLET



TIMO SYSIOE



PROFILE

Timo, a native of Helsinki, Finland, holds a BSS in political science and MPhil in geography from the University of Hong Kong. In 2013, he joined the Embassy of Finland in Beijing, working first as the junior adviser to the ambassador and subsequently as a consular officer. Timo has also worked as a teaching and research assistant in geography and architecture in Hong Kong and as an academic mentor in Hong Kong, China, and South Korea. Timo is currently pursuing his PhD in geography at NUS.

SUPERVISORS

ASSOC PROF. POW CHOON-PIEW
ASST PROF. WOON CHIH YUAN

‘AN EVERYDAY GEOGRAPHY OF THE DIPLOMATIC MISSION’

Diplomacy plays a key role in international relations. The corps diplomatique, the collective body of diplomats, represents the entire world in a single city. Nevertheless, the spaces, lives, and work of embassy personnel remain largely concealed and understudied. Therefore, this study employs geospatial analysis, participant-observation, in-depth interviews, and archival research to examine the spatial manifestations of the everyday lives of diplomats and their locally employed colleagues; the role of embassy personnel in the production and reproduction of city spaces; and the role of these spaces in diplomatic work. Overall, this study does not only seek to contribute to the growing body of research on the geographies of everyday life, but also challenge foreign ministry professionals to rethink their housing and recruitment policies as well as the role of locally employed personnel in diplomatic work.

BESIDES MY RESEARCH,
I ALSO LIKE...
MODELS
(airplanes and ships!)



ANDY TAN



PROFILE

Andy is a first year Master's student, he has previously received his Bachelor degree in Social Science (Geography) (First Class Honours) from the National University of Singapore. He is currently looking into the intersection of street music/performance and urban space for his Master's research, focusing on the city of Taipei, Taiwan. He is also interested in the broad field of urban and cultural geography, specifically topics like the cultural economy of cities, creative cities, nature and animal geographies and tourism.

SUPERVISOR
ASSOC PROF. TIM BUNNELL

‘MUSIC AND THE CITY – STREET PERFORMERS IN TAIPEI’

I seek to explore the relationship between music and urban space, particularly that of street music and performance in public street space. Drawing on urban and cultural theories in Human Geography and related disciplines, I hope to further illuminate this relationship and contribute to existing works in the geography of music and urban studies by doing an ethnographic study of street musicians (performers) in Taipei, Taiwan. As a preliminary intellectual framework, I wish to think of this relationship as one that is a three-way mutually constitutive relationship between the city, street performer and the music/performance by the performer on the street. I will structure my research using this three-way relationships and study the three different dimensions of (street) music – its spatiality (the city), materiality (music as it is performed on the street) and sociality (the street performer) and how these three dimensions interact and shape one another to produce a geography of street music.

BESIDES MY RESEARCH,
I ALSO LIKE...
Awesome dessert,
movies and
SHIBA INUS!



TAN QIAN HUI



PROFILE

I am a socio-cultural geographer attending to the intersections between sexual/gender subjectivities and social spaces. I derive my intellectual inspirations from the seminal work of critical queer theorists who have shed light on non-normative spatialities and temporalities of be(com)ing that are profoundly experimental and emergent in nature. I have published (material extracted from my Honours and Masters thesis) in feminist journals such as *Gender Place and Culture*, as well as more general ones like *Urban Studies* and *Social & Cultural Geography*.

SUPERVISOR
ASSOC PROF.
SHIRLENA HUANG

‘PLAYING SOLITAIRE: THE SPATIO-TEMPORALITIES OF SINGLEHOOD AMONG YOUNG ADULTS IN SINGAPORE’

My research seeks to examine the everyday geographies of young ‘unpartnered’ adults through the optic of poststructuralist feminist and queer theories. I am interested in how individuals who are single position themselves within broader socio-cultural maps encouraging some form of monogamous coupling that would eventually culminate in a long term relationship. Simultaneously, I wish to explore the extent to which solitary spaces can be buoyed up by alternative family formations, living arrangements and complex networks of care.

In so doing, I hope to extend the existing scholarship on queer futurities, geographies of love and singlehood by foregrounding new ways of understanding fraught subjectivities that remain caught between a postfeminist rhetoric of liberation on the one hand, and conservative family values on the other.

BESIDES MY RESEARCH,
I ALSO LIKE...
*Traversing space
and twisting time*



GAURAV MITTAL



PROFILE

Gaurav is a PhD student at the department of geography in NUS. He holds a master's degree in Habitat Policy & Practice from Tata Institute of Social Sciences, Mumbai (India) and a bachelor's degree in Architecture from Sathyabama University, Chennai (India).

Prior to joining NUS, he worked with World Resources Institute and Hyderabad Urban Lab for two years in the capacity of an urban researcher. He also has three years' work experience with an architecture consultancy in New Delhi (India). His research interests lie in urban governance, public transport, and spatial planning in Global South.

SUPERVISORS
PROF. JAMES SIDAWAY
PROF. JONATHAN RIGG

‘POWER, TERRITORIES AND GOVERNANCE: TRANSPORT GEOGRAPHIES OF URBAN INDIA’

In the wake of the neoliberal turn in India, the urban centres are going through a rescaling process. Urban and regional transport networks are establishing an important geographic context around which rescaled spatial imaginaries of cities are emerging. These transport networks are products of power struggles between different actors in the cities. By tracing the histories of these socio-political power struggles, my research provides a comparative narrative of production of complex transport systems, peculiar spatial imaginaries, and fragmented local governments in Shillong and Dehradun, two hill-towns in India. Through comparison of small cities, the research attempts to displace eurocentric assumptions, which arise from the inevitable locatedness, in urban theories. It also contributes to new ways of bringing the urban connections and spatialities in methodological imaginations.

BESIDES MY RESEARCH,
I ALSO LIKE...
Mountaineering!



PRERONA DAS



PROFILE

I am from Northeast India and doing PhD in urban geography in NUS. I did my masters in Ecology, Environment and Sustainable Development from Tata Institute of Social Sciences in India. My research interests include politics of space, transformation of Indian cities and neoliberal urbanization. For my doctoral research I am looking into the conflicts, contestations and security politics in the city of Guwahati in Northeast India.

SUPERVISOR
PROF. JAMES SIDAWAY

‘ CONTESTED SPACES: CONFLICTS, CONTESTATIONS AND SECURITY POLITICS IN THE CITY OF GUWAHATI ’

My study would look at the issue of insecurity and violence in urban spaces taking the city of Guwahati in Northeast India as the field site. The city used to be a hotspot for various violent conflicts such as insurgency movements and protests against immigration issues. In response to that measures of counterinsurgency were adopted by the state which eventually made Guwahati more contested and polarized than ever. In the name of providing security the marginalized sections were displaced and slowly exclusive localities and consumer spaces replaced them. With urban space becoming ever scarcer, the urban poor are forced to live in the most marginalized lands in the city with no security whatsoever. Again in the recent times there is an emergent politics of exclusion of women from certain spaces in the city leading to violence against them. In this research such contestations and violence over space will be studied using securitization concepts and different kinds of parties involved in such conflicts will be identified and their roles in the process will be analyzed. The relationships between security politics of the state, urban development and growing socio-spatial inequalities will be also be explored through this research.

BESIDES MY RESEARCH,
I ALSO LOVE...
playing keys



VICTORIA MARSHALL



‘ MEGA DELTA ,

This study seeks to understand social and ecological transformation in peri-urban Kolkata, and particularly in an area best described as settled forest. The research is situated in three relevant literatures. First, is the scholarship on peri-urban conditions in monsoon Asia, seeded by the work of Terry McGee under the category of desakota. Second, is an urban political ecology framework, a field of geographical scholarship that links environmental politics and urban theory. Third, is the scholarship that is gathered under the label of landscape ecology, which offers alternate ways to think about urban areas, including the peri-urban areas which are the focus of this study. Desakota is a settlement type that is neither strictly urban nor rural in character, but a mixture of both. Although nearly three decades old, McGee's concept remains pertinent as urbanization and its effects proceed apace in Asia. Villages in the countryside around Kolkata are also wooded environments and as such they are a dense mixture of forest and village. This research on settled forest areas accepts these hybrid conditions and is a study of the nature of the mix. It is based on the understanding that there is limited ecology in desakota scholarship, that urban political ecology has a narrow view of ecology, and that landscape ecology has valuable things to say about urban-rural systems.

PROFILE

Victoria Marshall is a Presidents Fellow at the National University of Singapore, where she is pursuing a PhD in Geography. She is also an Urban-Rural Systems researcher at the ETH Future Cities Laboratory in Singapore. Marshall is currently teaching at Yale-NUS and has previously taught at many universities in the Northeast United States.

Marshall is the founder of Till Design and is a licensed landscape architect. She is a member of the American Association of Geographers and the American Institute of Landscape Architects. In 2010 she was awarded an India China Institute Fellowship and she has been a participant of the Urban Design Working Group at the Baltimore Ecosystem Study since 2006. She received a Masters of Landscape Architecture and Certificate in Urban Design from the University of Pennsylvania, and a Bachelor of Landscape Architecture from the University of New South Wales, Australia

SUPERVISOR
PROF. JANE JACOBS

BESIDES MY RESEARCH,
I ALSO LIKE...
Swimming!



DIANE BOULEAU



PROFILE

Diane joined NUS as a PhD student in January 2017. She holds a Master of Business (University of Queensland, Australia), a Master of Geography (University Versailles, France), and a Bachelor of Honors in Geography (Sorbonne University, France). She was working as Advisor Foreign direct investment in Canada for six years. where she was also manager of the international entrepreneur program and served as representative for the City of Nantes in Quebec City. She lived in Martinique, France, Australia, Canada, New Zealand and, nowadays, Singapore. No question why she is interested by entrepreneurial migration!

SUPERVISOR

**PROF. HENRY
WAI-CHUNG YEUNG**

BESIDES MY RESEARCH,
I ALSO LIKE...
Dancing!

‘ ENTREPRENEURS ACROSS BORDERS ’

Since the late 2000s, state governance has shifted from managerialism to entrepreneurialism, consequently prioritising entrepreneurship in policies designed to combat unemployment and stimulate economic growth. Alongside programs to support domestic entrepreneurship, more and more countries devise visas to recruit entrepreneurs from abroad. Problematically, the imperative to acquire foreign entrepreneurs coincides with growing nationalist pressure to tighten border control. This tension between economic and political forces is reflected in the stipulation of eligibility criteria for entrepreneurial visas and their conditions of stay. It raises the question of how these visa-grounded entrepreneurs should be considered. As migrants, firms or hybrid actors? The theoretical and practical implications can significantly differ according to the definition chosen. However, the literature about the visa-grounded entrepreneurs is almost nonexistent and is dispersed across entrepreneurship, migration, international business and economic geography studies. Little is known about how these entrepreneurs define themselves, their needs, the obstacles they face, the advantages they have, the interplay between the entrepreneurial project and the migration journey and how they select their destination. It is therefore difficult for countries to identify, attract, and select entrepreneurs without this knowledge. Examining visas for entrepreneurs in different countries I consider how a new immigration category (the visa-bounded entrepreneur) may help to understand how multinational entrepreneurship generates macro-economic consequences, in particular, how the institutionalisation of entrepreneurial migrations impacts inter-country competition for wealth.



HIROMI INAGAKI



PROFILE

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Hiromi was born in Kyoto, Japan. She holds B.A. in English Literature from Waseda University in Tokyo and M.A. in Development Studies from the Institute of Social Studies in Den Haag. Prior to joining the PhD research at NUS this January, she was based in Bangkok for over 8 years, primarily working on issues of climate change and e-waste in Southeast Asian countries. Hiromi loves exploring the nature and different cultures, and she has backpacked over 20 countries around the world (especially when she was young....).

‘ GEOGRAPHY OF TRANSMISSIONS: THAILAND’S ENERGY GRIDS AND UNEVEN LANDSCAPES OF POWER ’

Energy demand is growing at both national and regional levels in Southeast Asia. Among the strategies adopted by most of the states in the region is an increase in the installed energy capacity. This would necessitate not only the exploitation of energy resources but also the development of transmission lines that carry power from distance sources to demand centers. Energy transmission systems, however, have huge impacts on human and physical spatial landscapes across time and space. The objective of my research is, hence, to investigate how uneven landscapes are shaped by and shape energy transmission systems, focusing on Thailand. The unit of analysis is networked assemblages of non-human and human actors, including machinery, wires, investment banks, and state regulatory frameworks.

BESIDES MY RESEARCH,
I ALSO LOVE...
My family

SUPERVISORS
DR CARL GRUNDY-WARR
PROF. JAMES SIDAWAY



CARLOS MORALES



PROFILE

My name is Carlos. I was born and raised in San Sebastian, Puerto Rico. I completed a Bachelor's in Arts in geography with minor in Spanish and physical and environmental geography at the University of Puerto Rico, Rio Piedras Campus. In 2010 I moved to the Pennsylvania in the United States. I completed a Master's in Science in geography education at the University of Oregon in 2015 and a master's in arts in biogeography at West Chester University in Pennsylvania in 2016. I'm currently a PhD student in geography at the National University of Singapore.

SUPERVISORS

ASST PROF. YI-CHEN WANG
ASSOC PROF. CHEN-CHIEH FENG

“ EVALUATION OF SPATIAL THINKING SKILLS ON ECOSYSTEM CHANGE USING OPEN SOURCE GIS ,”

This research will explore if open source GIS helps improve spatial thinking skills in geography education. A set of assessments with topics in biogeography will be provided to college students in geography courses. Prior to these assessments, a pre assessment will test the student's initial spatial skills. A similar assessment will be provided after completion of the assessments in biogeography. The students will be divided into two groups. One group will have the biogeography assessments using an open source GIS. The same assessments will be provided to a second group without the use of any GIS. The results will be calculated individually and correlated between the two groups.

BESIDES BEING A GRAD STUDENT,
I AM ALSO A...
Vexillologist!



HUIYING NG



PROFILE

Huiying explores links between urban agriculture, open/welcoming spaces for new imaginations of urban life, and community resilience. She has worked in non-profit and research work, and is currently developing her MA research on collective governance. She is also co-founder of Foodscape Collective, a Singapore-based citizen-science initiative to learn about the role of communities and gardens in sustaining the life of cities, and TANAH, a green place-making multidisciplinary collective. Her praxis is guided by ideas of ecological and activist citizenship and the crucial role of autonomy and human motivation. She works towards creating the social environments necessary to support these. More on her work [here](#).

SUPERVISOR
ASSOC PROF. TIM BUNNELL

‘ RE-EARTHING: A SOCIAL SEMIOTICS OF AGROECOLOGICAL FUTURES ,’

As the urban and rural converges physically and mentally, this research seeks a way of understanding how “green space” acts as a universalism and interface for new knowledge mobilities and global-local linkages. The presentation considers preliminary methodologies being developed for a larger study of collective, transnational green space governance, as urban individuals begin projects oriented around food sovereignty, sustainability and food justice in urban and urbanising Southeast Asia.

This presentation looks at how interacting with and in gardens introduces new features on a person's mental map of social life, enabling a different way of navigating diverse societies and cities. It comments on two initiatives to consider how place-making and place-keeping programmes—where people can be and walk with others—may forge new connections structurally, creating opportunities for overlapping horizons and imaginations, and psychologically, by fulfilling needs for autonomy, competence and relatedness. It concludes by offering a view on green spaces as interfaces for growing resilience: through their support for psychological flourishing, knowledge mobilities and implicated participation.

BESIDES MY RESEARCH INTERESTS,
I ALSO LOVE...

Long walks & cloud gathering



JARED MOORE



PROFILE

Jared hails from Seattle, USA where he completed a BA in International Studies at the University of Washington in 2012. He has since worked at forest conservation NGOs in Vietnam and Indonesia as research and communications assistant. He hopes to continue study and practice of equitable community forest management in SE Asia while the trees still stand.

SUPERVISOR ASST PROF. DAN FRIESS

‘ ASSESSING RESILIENCE OF COMMUNITY MANGROVE MANAGEMENT ON TANAKEKE ISLAND, INDONESIA ’

Tanakeke is a 3,800 ha coral atoll off the coast of South Sulawesi in central Indonesia. In the 1990s, residents converted most of the island's mangroves to aquaculture ponds which failed within a decade of use. A local NGO now known as Blue Forests intervened in the early 2000s to improve livelihoods and conserve remaining forests. A major restoration project restored mangroves to nearly 500 ha of abandoned aquaculture ponds and implemented participatory management. However, much of the island remains in legal limbo between private, community, and state ownership. This will soon be addressed by application to the state community-based forest management (CBFM) scheme. Indonesia has announced distribution of 12.7 million hectares of state forest to communities by 2020, a policy likely to benefit Tanakeke's mangrove-dependent communities. However, CBFM does not always achieve its goals and concerns remain regarding community resilience due to low capacity, exogenous pressures, and recent resurgence of charcoal production as a livelihood. This study seeks to determine the resilience of the current social-ecological system and the challenges and opportunities entailed by evolving state CBFM policy. A resilience framework developed by the Resilience Alliance will be used to assess community progress vis-à-vis sustainable, equitable mangrove management.

BESIDES DOING RESEARCH,
I AM ALSO A...
CHEF!



RACHEL KOH



PROFILE

Rachel joined the NUS Department of Geography as a Masters student in January 2017. She completed her undergraduate degree at the same department and spent two years as a teaching assistant before becoming a student again.

Her research interests revolve around the impacts of anthropogenic activities on the environment, specifically how such activities introduce heavy metals and acidic substances into terrestrial and aquatic systems.

SUPERVISOR PROF. ALAN ZIEGLER

‘ NATURALLY ACIDIC OR ANTHROPOGENICALLY ACIDIFIED? UNCOVERING THE SOURCES AND EXTENT OF ACIDITY IN STREAMS IN SINGAPORE ’

Anthropogenic acidification is among the most harmful human disturbances to freshwater ecosystems especially because it is usually associated with additional stressors such as the increased concentration of bioavailable forms of toxic metals on top of reduced pH. In Singapore, the acidification of streams in the Bukit Timah Nature Reserve (BTNR) is thought to be the primary reason for the decline of critically-endangered species like the Johora singaporenensis, an endemic freshwater crab. I aim to distinguish between natural and anthropogenic sources of acidity in streams and elucidate their susceptibility to further acidity. I also seek to understand if stream acidification is chronic or episodic in nature and how this may vary across space and time. Chemical analyses of stream samples will be done to assess their acid-neutralizing capacity. The linkages between the terrestrial and aquatic parts of the catchment will also be studied to understand the mechanisms under which sources of acidity are introduced into surface waters. Finally, leaf-decomposition rates will be used as a secondary indicator to assess the degree to which streams are naturally acidic or have been affected by anthropogenic inputs of acidity. Knowledge in this field would be of practical benefit to remediation and/or conservation efforts.

BESIDES MY RESEARCH,
I ALSO LIKE...
long-distance running!



LETISHA FONG



PROFILE

Letisha graduated with a Bachelor of Environmental Studies (Hons) degree from the National University of Singapore and is currently pursuing her Master's in the Geography Department. Her interest lies in adopting a palaeo-perspective to infer environmental changes associated with the 'Anthropocene'. Having previously worked with spheroidal carbonaceous particles (SCPs) in lake sediments, she hopes to expand her skillset to include more biological, physical and geochemical analyses during the course of her research.

SUPERVISOR

PROF. DAVID TAYLOR

‘INFERRING ENVIRONMENTAL CHANGES AND ECOLOGICAL IMPACTS ASSOCIATED WITH URBANISATION AND INDUSTRIALISATION IN TROPICAL ASIA: SEDIMENTARY EVIDENCE FROM SINGAPORE’S CENTRAL CATCHMENT’

The concept of the ‘Anthropocene’ was first coined in 2000 to mark a new geological epoch reflecting profound and pervasive human modification of the environment. While the term has been widely used by the scientific and broader community, there has been considerable debate over the point at which it began; growing sedimentary evidence suggests the ‘Great Acceleration’ of the mid-twentieth century becoming a more widely accepted onset point. This is, however, predominantly based on contributions from study sites in Europe and North America. Little to none is known of how and when anthropogenic activities have altered environmental conditions in tropical Asian ecosystems and how these ecosystems have responded in terms of sensitivity and resilience. This is despite the region having one of the highest rates of urbanisation in the world.

My research aims to adopt a palaeolimnological perspective in accounting for the environmental impacts of a rapid transition from a predominantly agrarian economy to that of a bustling, global metropolis in lowland tropical Asia. It will focus on sedimentary evidence from Singapore’s oldest reservoir, MacRitchie Reservoir, and selected physical, geochemical, and biological proxies will be used to document these impacts. The quantification of these proxies of environmental quality and their drivers will be evaluated in combination with historical records of past land cover and land use change, economic and urban development, as well as contemporary environmental quality data.

BESIDES MY RESEARCH,
I ALSO LIKE...
PUGS!



HASAN AKHTAR



PROFILE

Hasan joined NUS in August 2016 as a PhD student in Physical Geography. He holds a master degree in Environmental Science & Engineering, where he worked on carbon sequestration study in reclaimed coal mines for his dissertation. His research interests lie in carbon sequestration, greenhouse gases flux measurement, and land-use change in tropical peat swamp forests in Southeast Asia.

SUPERVISORS

ASST PROF. MASSIMO LUPASCU
ASSOC PROF. SANJAY SWARUP

‘CARBON DYNAMICS IN TROPICAL PEAT SWAMP FOREST UNDER LAND-USE CHANGE’

Tropical peat swamp forest (TPSF) in Southeast Asia acts as one of the largest near-surface reserves of terrestrial organic carbon in tropics. These are also the important source of ecosystem services, including water regulation, and biodiversity conservation. However, recent land use changes in the region have significantly affected the carbon balance of these ecosystems. Nearly 50% of the TPSF in Southeast Asia have been cleared and drained for agriculture, while remaining is degraded through timber extraction, drainage, drought, and fire. Moreover, with varying level of degradation in TPSFs under different land-use, the subsequent fire events (single or multiple) increases the susceptibility of releasing decadal to millennial old locked up carbon in form of gaseous effluxes and fluvial exports. In addition, the use of fire in clearing vegetation has far more severe environmental and health consequences. Furthermore, the degradation of TPSFs will result in converting them into a carbon source instead of a sink. This research aims to identify the underlying environmental stresses and effects of fire events in driving the carbon dynamics of TPSF. Firstly, the gaseous (CO_2 & CH_4) efflux anomalies as a function of environmental stress (soil moisture and soil temperature) will be measured. Secondly, the lateral carbon fluxes (Dissolved & Particulate organic carbon) in fluvial exports will be estimated. Thirdly, the radiocarbon analysis of gaseous efflux and lateral carbon fluxes will provide an assessment of the impacts of environmental stress, fire, and land-use change on releasing old carbon from TPSF. The proposed research will be carried out in TPSF sites at Brunei.

BESIDES MY RESEARCH,
I ALSO LIKE...
Playing snooker!