NEWSLETTER SUMMER SEMESTER

1 September 2022

DEAR RTG COLLABORATORS

In the name of the Doctoral Forum, we would like to thank you for these thrilling first months and the enthusiasm for the launch of the research training group.

This newsletter will help to **keep track** of what is going on in other clusters and help **foster new collaboration** opportunities.

Warm Regards,

Your Doctoral Forum representatives Elizaveta Fakirova & Julia Micklewright

SUMMARY

- Coordinator
- Doctoral Forum General
- Cluster RC1
- Cluster RC2
- Cluster RC3
- Post-Doc
- Diversity Circle



COORDINATOR

Astrid Reichl

"First of all a big thank you for these first months, you have already formed a great team with many collaborations, initiated many activities and meetings.

Keep up the good work, it's fantastic!

I would like to highlight our next activities, such as **proposal presentation** and of course our **post summer party**. I look forward to meeting you all again! As for the second workshop, more information will be coming soon. Your input is greatly appreciated, please let me know if you have any ideas, requests, etc.!

Also, I would like to once again highlight the <u>RISE activity of</u>

<u>DAAD</u> for internships of foreign students.

There is also some exciting news to report: **Maha Deeb**, **Mercator fellow** from France, will be visiting us soon from October 24th to November 5th! She is working closely with Prof. Kögel-Knabner and Prof. Egerer, but everyone is welcome to meet her.

She and Chao Ren will also give talks about their work during the Ecological Colloquium in the upcoming winter semester 2022/23, led by Prof. Kollmann (more information will follow).

Stay healthy and keep up the good work!





DOCTORAL FORUM GENERAL

UPCOMING EVENTS

22 Sept	23 Sept	26 Sept	05-06 Dec	Thursdays
09:00-17:00 Course Scientific good Practice	09:00-13:00 Course Scientific good Practice	09:00-17:00 Proposal presentations	RTG Training Workshop	10:00-12:00 Time slot for activities related to the doctoral Forum
	14:00 Doctoral Forum meeting	Submission Competition Logo RTG		
		17:00 Post-Sommer Fest		

SOFTWARE / PLATFORMS

(By Andrew Fairbairn)

Wiki	It only has some basic information on it now, but we can continue to fill it out. Here is the <u>link</u>	
Website	We have a new TUM website for the project. This is still in the works and can be found here	
Blog	"News" function of website that could work. Zbigniew also suggested using other platforms for a blog, and we could link to it on our "news" page or so. A team is working on a plan/schedule for posts. The blog's status regarding the RTG must still be clarified. Either a voice for the group or an independent parallel initiative.	
Data server	Put datasets. Once that is clarified we will create a Wiki page or similar that will link to these data and have some metadata to help describe it.	
Twitter	We are good to start Twitter and LinkedIn pages. Zbigniew will be sending something around soon regarding Twitter.	
Zotero	Shared library created with files for each publication.	
Researchgate	Project created	





CLUSTER RC1

Andrew Fairbairn Mahtab Baghaiepoor Julia Micklewright Ishika Alim Elizaveta Fakirova Hadi Yazdi

Sub-projects advancement

Meetings within the research clusters, agreements, future steps

Urban Lab

Updates on selection and agreements on Urban Lab

Conferences

Conferences that were visited as a listener

Presentations

Conferences and other events where the PhD Candidate gave a presentation

Papers under work

Start date, estimated date of submission, in collaboration with, for what journal

Needs & Possible solutions

What kind of support is needed to overcome eventual challenges

Additional ideas

Suggestions for improving collaboration

Sharing the proposals to find the potential points for the collaboration **Mahtab & Andrew** shared project idea - feedback from the supervisors. Submitting a paper summer fall next year

Discussion of using bicycle network to identify 20-40 sites for biodiversity monitoring.

Use of Arch GIS mapping for an open collaborative map - see with Zbigniew

Liza: <u>TalentOn</u>, September 2022, Leiden, Netherlands <u>ISOCARP Congress</u>, October 2022, Brussel, Belgium

Hadi: Sept 2022. SB22 TU Berlin. Methods of using deep learning in data gathering.

Andrew: Conference November 2022. SFE GfÖ EEF. Effect of design features on biodiversity in urban squares.

Mahtab & Andrew: Biodiversity & perception for mobility, end of next year. **Andrew:** Biodiversity conservation & UGI governance, Special issue journal Biodiversity & conservation, October 2022.

Hadi: With the colleague - target driven tree panning and maintenance - conceptual paper. This year October 2022.

Deep Learning in Historical Architecture Remote Sensing: Automated Historical Houses Recognition in the Yazd, Iran. Heritage MDPI. ~In 2 weeks

Liza: Institutional UGI governance in Munich, Simone Linke, Martina van Lierop, Sabrina Erlwein.

Abstract submitted for ISOCARP Congress with Martina van Lierop,.

Julia & Liza & Ishika: Cadaster plan Munich Ishika: organizing the data → Notion, Obsidian

Hadi: Need GPS device, CityGML

Synonym dictionary: www.thesaurus.com
Paraphrasing tool: www.quillbot.com

Data visualization course using R (Sendrik): www.cedricscherer.com





CLUSTER RC2

Farzan Banihashemi Roland Reitberger Nayanesh Pattnaik Martin Honold Emmanuel Adeleke

Sub-projects advancement

Meetings within the research clusters, agreements, future steps

External collaboration advancement

With researchers outside the RTG program - other TUM / international researches. In case if someone is going to write the collaborative paper

Urban Lab

Updates on selection and agreements on Urban Lab

Conferences

Conferences that were visited as a listener

Presentations

Conferences and other events where the PhD Candidate gave a presentation

Papers under work

Start date, estimated date of submission, in collaboration with, for what journal

Last Cluster meeting took place on 20.07 which involved a short presentation round of each SP along with further discussion on Urban labs.

Farzan Banihashemi: Metamodel for building energy simulation through machine and deep learning methods

Roland Reitberger: Parametric modeling of generic neighbourhood, development of building system and interdependencies for the model

Nayanesh Pattnaik: Field data collection

Martin Honold: Presentation of proposed research questions and

methodology

Emmanuel Adeleke: Conceptualization and Methodology

Farzan Banihashemi: Collaboration with the chair of Geoinformatics (Prof. Kolbe) for gathering CityGML data

Roland Reitberger: Collaboration with ENPB colleagues on a conference paper "Emission free buildings" for SBE23

Nayanesh Pattnaik: Field data collection for CUT project with Chair for Forest Growth and Yield Science:

https://www.waldwachstum.wzw.tum.de/en/research/projects/cut/Martin Honold: Contact to german GartenAmtsLeiterKonferenz (GALK) and request of official tree cadasters from member cities within the working group City Trees of the GALK (Dr. Dieter Fuchs).

Emmanuel Adeleke: Collaboration with the TUM ZAUM.

To be discussed after RTG workshop in September and Cluster meeting in October.

Roland Reitberger: Climate Day (StmB)

Martin Honold: Presentation of our RTG to members of the GALK working group City Trees in Leipzig

Roland Reitberger: CAADRIA 2022, Sensitivity Analysis in LCA

Martin Honold: SP-7 and SP-8 attended a workshop with other young PhDs in urban ecology (especially from *CUT* project and the new project *StOasenWandel* organized by Prof. Egerer.

(StOasenWandel: https://www3.ls.tum.de/fafsys/projekte/stoasenwandel/ https://en.stoasen.de/projekt)

Farzan Banihashemi: planning a Paper for whole city simulation **Roland Reitberger:** SBE Conference 23: Density & Vegetations impact on outdoor comfort and energy consumptions – Synergies / Trade-Offs in collaboration with colleagues from ENPB





Current Challenges

Current challenges during writing the PhD

Needs & Possible solutions

What kind of support is needed to overcome eventual challenges

Farzan Banihashemi: Data preparation

Roland Reitberger: Second supervisor in the field of systems engineering

to determine

Nayanesh Pattnaik: One of instruments used for field work is not

functioning anymore

Martin Honold: Data collection and tidying data

Emmanuel Adeleke: Data collection has to wait until next year as urban

labs is not decided yet.

Roland Reitberger: Some possible supervisors found but not contacted yet; networks to people from Systems Engineering would still be welcome

Nayanesh Pattnaik: Monetary assistance for replacing the faulty

instrument for next summer's field campaign

Martin Honold: Staying in contact with the other SPs

Ps: SP-8 so far "just" has these requirements for installation of urban labs: They should include an area with:

1) old trees and 2) new, introduced, foreign tree species.

Proposals: Maybe the yard in front of Giesing Bahnhof, the area around crossroad: Blutenburgstraße/ Maillingerstraße, or in front of the newly built beautiful open place between Siegestor and LMU, or on the area of the Messestadt Ost...

Emmanuel Adeleke: Fast decision on urban labs.





CLUSTER RC3

Natalie Páez-Curtidor Lauren Porter Swanandee Nulkar Nadja Berger

Sub-projects advancement

Meetings within the research clusters, agreements, future steps

Urban Lab

Updates on selection and agreements on Urban Lab

Conferences

Conferences that were visited as a listener

Needs & Possible solutions

What kind of support is needed to overcome eventual challenges

Additional ideas

Suggestions for improving collaboration

Development and execution of greenhouse experiment – testing responses of 5 grass species to flooding/drying conditions and road-side pollutant levels – soil microbiology is also being analyzed Designed for data extraction by Swanandee (microbiome) and Nadja (plants), with support from Natalie and Lauren.

Design and acquistion phase for laboratory experiment to be shared between Lauren and Natalie. Testing combinations of biochar and compost on soil functions and pollutant processing capability.

No selections yet, still planning small scale experiments

Natalie: World Water Congress and Exhibition from the International Water Association in Copenhagen, 11-15th of September

Lauren: Would like support in finding readily available co-composted biochar in Germany- any leads would be welcome:)

Post Sommerfest?:) - maybe once Zbigniew is back?

Flash talks?

>> During the next three months each give 20-30mins talks - either grouped by cluster or just 4 or 5 people each time
Request for presentations - Breakdown on an informal level first and relevance/connection to urban green infrastructure/green city (being careful of jargon = give definitions) - and then maybe go into more detail Including main ideas and general types of methods/statistics for evaluation

POST-DOC

Zbigniew Grabowski

"It's been a busy summer for the integrative postdoc for the UGI RTG!"

"It was a wonderful experience to meet many members of the RTG in June and July, and I am looking forward to meeting more folks in September and October.

We have had <u>two abstracts accepted for conference</u>

<u>presentations</u> – one at URBIO 2022 November 28-30th in

Leipzig and another at the annual GFO meeting in Metz,

France from November 21-25th.

We've also been <u>preparing a related paper</u> for a Biodiversity and Conservation special issue on "Transformative change."

<u>We have two other papers</u> in the works that describe our approach and some of the challenges we are trying to address by using a Social-Ecological-Technological Systems framework to integrate Urban Green Infrastructure research for improving planning and policy, design, and public education.

I am excited to attend the <u>PhD Thesis Proposal workshop</u> on September 26th and a workshop on Urban Labs shortly thereafter (exact date and time TBD). Otherwise I've been busy collating data from pre-existing research to inform our field work and modeling in the city of Munich. I'm also in the final stages of organizing a journal club on topics relevant to urban green infrastructure, governance, and urban labs,

and a syllabus will be available on our website for those interested!"

2 abstracts accepted for conference presentations

1 related paper for special issue in the process of preparation

2 other papers In the process Addressing SETs

DIVERSITY CIRCLE

Monika Nayanesh Zbigniew Johannes Natalie Ishika Astrid

First meeting

First DC meeting took place on <u>07.07.2022</u>. It was decided that DC will meet regularly once a month. Tentative date for next meeting after summer holidays - <u>29.09.22</u>

Notes from the meeting

- DC will create a handbook which consists of the mission statements, goals and needs that cover the entire RTG (PhDs, Postdocs, PIs) around DEI (Diversity, Equity, Inclusion)
- Brainstorming about ideas and activities
 - o Making a list of current resources available at TUM
 - Making a spreadsheet of skills
 - using skills of the RTG that could be exchanged and shared among members by creating a spreadsheet for skill exchange / facilitation
 - Workshop ideas:
 - Gender neutral language on scientific writing
 - Publishing bias
- Should DEI be expanded to include Justice too? (JEDI)
 - We think justice is important. Still exploring how we incorporate this within our mission statement and codes of conducts

Next Steps

- A survey to solicit team wide input about DEI to provide a reading of the RTG's perception of the social climate within the group regarding personal values, commitment, level of discomfort
 - o This would act as an input for the handbook
 - o Current status: Questions being finalized