Dear members of the panel,

I would like to apply for the “Entrepreneurship Research Boot Camp 2022”. I am passionate about entrepreneurship economics and in particular the interventions that help to foster entrepreneurial and innovative mindsets among young people and boost opportunity-driven entrepreneurship among them.

I have completed my bachelor degree in marketing in the Lviv National University. While this program has given me a good command of economic theory and numerous courses regarding economics of entrepreneurship, I soon realised that I want to concentrate on the academic career. Therefore, I have moved to Germany and completed an MSc in “Economic Behaviour and Governance” at the University of Kassel where I took a number of courses on research methods.

Meanwhile I have also participated in the “Innovation in the Digitalized World” summer academy provided by the Graduate School “The Economics of Innovative Change” in Friedrich Schiller University Jena. At this summer academy I have deepened my knowledge of econometrics, economics of entrepreneurship and economics of innovation.

During my master study I have worked as a research assistant for a randomized controlled trial in the entrepreneurship education in Ecuador under the supervision of Igor Asanov and David McKenzie. This project aims at assessing effectiveness of online entrepreneurial training for high school students. I have started working for this project as a university research assistant in 2019 and periodically supported it as a data analyst until recently. My duties were connected to processing, cleaning and reporting the data about students participation in the entrepreneurial courses. Later I was involved in analysing the outcomes of the intervention.

In November 2020 I became a PhD student in the University of Kassel. My PhD builds around two projects: randomized controlled trial that delivers a social-emotional training program to the high-school students in Vietnam and a project that analyses the quality of scientific output produced by the German universities.

I am eager to participate in the “Entrepreneurship Research Boot Camp 2022” and broaden my knowledge of economics of entrepreneurship in order to improve my

further research in this area. I was impressed by the level of specialists presenting and would love to see the top experts presenting their research and learn from them.

Best regards,

Anastasiya-Mariya Noha

(+49) 17620105854

noha@incher.uni-kassel.de

Mönchebergstraße 17, 2110, 34125, Kassel, Germany

20.01.2022

Note: David McKenzie has provided a letter of recommendation for me as I have worked under his supervision in the randomized controlled trial in testing entrepreneurial soft skill trainings in Ecuador.

Anastasiya-Mariya Noha

☎ +49 176 2010 5854 • ✉ noha@incher.uni-kassel.de

RESEARCH EXPERIENCE

University of Kassel **Kassel, Germany**
Evidence-Based Science and Innovation Policy Group
PhD Student *November 2020 - Present*

Quality assurance institutions and quality developments in economic and social science dissertations in Germany project (Q2D2) under the supervision of Guido Bünstorf:
- Assessing policies which can improve academic research output by studying a sample of German dissertations and evaluating their quality.

World Bank **remotely**
Short-Term Consultant as a Data Analyst *August 2021 - September 2021*

Data analyst for "Showing Life Opportunities" project, which is a large scale randomised control trial in Ecuador that aims to boost high/growth entrepreneurial careers (under the supervision of Igor Asanov and David McKenzie):
- Finalizing datasets from an online platform and phone surveys: cleaning, ordering, standardization.

World Bank **remotely**
Short-Term Consultant as a Data Analyst *July 2020 - November 2020*

Data analyst for "Showing Life Opportunities" project, which is a large scale randomised control trial in Ecuador that aims to boost high/growth entrepreneurial careers - a field experiment in Ecuador (under the supervision of Igor Asanov and David McKenzie):
- Processing raw data from an educational online platform - cleaning, standardizing, creating codebooks for the surveys and panel datasets for take-up data;
- Generating balance reports, weekly take-up reports for the field team, attrition reports.
- Providing first path intervention analyses.

University of Kassel **Kassel, Germany**
Economic Policy, Innovation and Entrepreneurship group
Research Assistant *September 2019 - September 2020*

Research Assistant for "Showing Life Opportunities" project, which is a large scale randomised control trial in Ecuador that aims to boost high/growth entrepreneurial careers - a field experiment in Ecuador (under the supervision of Igor Asanov):
- Preparing data for take-up reports for the field team in order to ensure even take up;
- Preparing and sending performance reports for teachers from the educational online platform data;

EDUCATION BACKGROUND

University of Kassel **Kassel, Germany**
MSc "Economic Behavior and Governance" *October 2018 – October 2020*

Lviv National University **Lviv, Ukraine**
Bachelor in Marketing *September 2014 – June 2018*

PHD COURSES COMPLETED, ATTENDED AND ENROLLED

Friedrich-Schiller University of Jena **Jena, Germany**
Graduate College 'The Economics of Innovative Change' *21.07.2019 - 02.08.2019*
13th Jena Summer Academy on 'Innovation in a Digitalized World
Syllabus and Certificate Attached

Graduate School "Economic Behavior and Governace" **Kassel, Germany**
Machine Learning in Economics - Attended *15.06.2020 - 01.07.2020*

Graduate School "Economic Behavior and Governace" **Kassel, Germany**
Social Network Analysis in R - Attended *01.02.2021 - 05.02.2021*

University of Göttingen **Göttingen, Germany**
Advanced Development Economics - Applied *28.02.2022 - 08.04.2022*

Skills in Programming Languages and Software for Statistical Analysis

- Strong command in R - data transformation, analysis, producing final results;
- Strong command in STATA - data analysis and producing final results;
- Basic command in Python - data analysis, basic ML;
- Basic command in SQL - managing databases;
- Basic command in SPARK - data transformation.

LANGUAGE SKILLS

- Ukrainian - C2
- Russian - C2
- English - C1
- German - B2

An Essay for the 15th annual NBER Entrepreneurship Research Boot Camp

My research is connected to the provision of soft skill courses to high school students and in particular towards studying delivery methods of these courses and improving them.

As I was really impressed and inspired by the first project I worked for – the randomized controlled trial providing high-school students with entrepreneurial soft skill online courses in Ecuador in order to increase the number of high-growth entrepreneurial careers, I was motivated to continue my research in this field. Therefore, one of the projects I currently work for as a part of my PhD is a randomized controlled trial in Vietnam led by the team of experts from the World Bank, University of Kassel and other institutions. This project involves providing a social-emotional learning course to the high school students.

In this experiment we are going to deliver a program that has been tested numerous times, however we are going to use different delivery methods in order to find the most cost-efficient one. We are going to investigate the effectiveness of the programs in improving grades, intentions to continue education and\or become an entrepreneur as well as other life outcomes. I am developing the course materials, questionnaires, am involved in the development of experimental design, obtaining IRB and will be responsible for analysing the data generated from this project.

I am hopeful that the results from this study will help in making social-emotional courses more scalable and accessible to the students and potentially unemployed people worldwide and consequently will improve their learning experience, academic achievements and potentially their life outcomes after graduation.

In the part of my PhD connected to the innovations I work for a project which intends to analyse the quality of scientific output of German universities by collecting and analysing German dissertations in economics, sociology and political science. We are going to look at the association between different initiatives by the German government and individual universities and the quality of the dissertations.

In another project I am analysing the data from three consecutive field experiments in Ecuador looking for instruments to increase the take-up of entrepreneurial online courses among high-school students. I am investigating the effectiveness of providing benchmarking information, reminders and encouragements to the teachers as well as providing incentives, encouragements and suggestions to the students individually and, finally, including or excluding administrative personnel from the study process.

I believe the results from this study are going to be helpful in making online education a more effective tool for providing entrepreneurial soft-skill trainings and other social-emotional courses, especially in the situations where in-presence education is either unaffordable or should be avoided due to health concerns.

I would love to attend the 15th annual Entrepreneurship Research Boot Camp in order to expand my knowledge of the economics of entrepreneurship, entrepreneurial mindsets and challenges. I would like to see the examples of research done directly with the firms as I have not yet worked with the companies, only with the students who would become entrepreneurs later. It would help me to see ways to improve the policies I will be designing in the future. I am especially interested in interventions that foster innovation, opportunity-driven entrepreneurship and improve management practices.

FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA

CERTIFICATE

Anastasiya Noha

successfully participated in the 13th Summer School on

"Innovation in a digitalized world"

(July 21 - August 2, 2019)

offered by the Friedrich Schiller University of Jena
(Graduate College 'The Economics of Innovative Change')

Prof. Dr. Uwe Cantner

(Speaker of the Graduate College 'The Economics of Innovative Change')

(1st week) 13th Jena Summer Academy on "Innovation in a digitalized world"

1st week	Sun July 21		Mon July 22		Tue July 23		Wed July 24		Thu July 25		Fri July 26		Sat July 27
NOTE													
		8:45	**Welcome adress**										
		9:00	**M. Spindler Machine Learning**	9:00	**H. Hottenrott Applied Econometrics**	9:00	**Nedelkoska Skill mismatch and Automation**	9:00	**Nedelkoska Skill mismatch and Automation**	9:00	**Nedelkoska Skill mismatch and Automation**		
		10:30	coffee	10:30	coffee	10:30	coffee	10:30	coffee	10:30	coffee		
		11:00	**M. Spindler Machine Learning**	11:00	**H. Hottenrott Applied Econometrics**	11:00	**1 Student Presentations**	11:00	**1 Student Presentations**	11:00	**1 Student Presentations**		
							1 Student Presentations		**1 Student Presentations**		**1 Student Presentations**		
		12:30	Lunch	12:30	Lunch	12:30	Lunch	12:30	Lunch	12:30	Lunch		
		13:30	**M. Spindler Machine Learning**	13:30	**H. Hottenrott Applied Econometrics**	13:30	**Neffke Economic Complexit**	13:30	**Neffke Economic Complexit**	13:30	**Neffke Economic Complexit**	14:00	**Visiting Weimar or Hiking**
		15:00	coffee	15:00	coffee	15:00	coffee	15:00	coffee	15:00	coffee		
		15:30	**M. Spindler Machine Learning**	15:30	**H. Hottenrott Applied Econometrics**	15:30	**1 Student Presentations**	15:30	**J. Günther Innovation in Transition Economies**	15:30	**J. Günther Innovation in Transition Economies**		
16:00	Registration Mainbuilding , University of Jena						**1 Student Presentations**						
17:00	*Opening Lecture* **Irene Bertschek** (UHG Senatsaal)	17:00	Break		Break	17:00	Break	17:00	Break	17:00	Break	17:00	
		17:30	**H. Hottenrott Applied Econometrics**		**1 Student Presentations**		**1 Student Presentations**		**J. Günther Innovation in Transition Economies**		**J. Günther Innovation in Transition Economies**		
18:00													
18:30	**Welcome BBQ** (Cafeteria "Zur Rosen")				**1 Student Presentations**		**1 Student Presentations**						
		18:45		18:45		18:45		18:45					

(2nd) 13th Jena Summer Academy on "Innovation in a digitalized world"

2st week	Sun July 21		Mon July 29		Tue July30		Wed July31		Thu August 1		Fri August 2		Sat August 3	
		9:00	**S. Vannuccini Economics of Digitalization**	9:00	**J. Cunningham Entrepreneurial Universities and Academic Entrepreneurship**	9:00	**S. Vannuccini Economics of Digitalization**	9:00	**S. Vannuccini Economics of Digitalization**	9:00	**S. Vannuccini Economics of Digitalization**			
		10:30	coffee	10:30	coffee	10:30	coffee	10:30	coffee	10:30	coffee			
		11:00	**R. Jung Microeconometrics**	11:00	**R. Jung Microeconometrics**	11:00	**R. Jung Microeconometrics**	11:00	**R. Jung Microeconometrics**	11:00	**1 Student Presentations**			
											1 TT Presentations			
		12:30	Lunch	12:30	Lunch	12:30	Lunch	12:30	Lunch	12:30	Lunch			
	Weekend Trip??	13:30	**Exercise Jung**	13:30	**Exercise Jung**	13:30	**Exercise Jung**	13:30	**Exercise Jung**	13:30	**M. Menter Entrepreneurship**			
			JERW Ekaterina		**1 TT Presentations**		**1 TT Presentations**		**1 TT Presentations**					
		15:00	coffee	15:00	coffee	15:00	coffee	15:00	coffee	15:00	coffee			
		15:30	**J. Cunningham Entrepreneurial Universities and Academic Entrepreneurship**	15:30	**J. Cunningham Entrepreneurial Universities and Academic Entrepreneurship**	15:30	**S. Vannuccini Economics of Digitalization**	15:30	**M. Menter Entrepreneurship**	15:30	**M. Menter Entrepreneurship**			
		17:00	Break		Break	17:00	Break	17:00	Break	17:00	Break	17:00		
		17:30	**J. Cunningham Entrepreneurial Universities and Academic Entrepreneurship**		**J. Cunningham Entrepreneurial Universities and Academic Entrepreneurship**		**M. Menter Entrepreneurship**		**M. Menter Entrepreneurship**		**Reserve**			
		18:45		18:45		18:45		18:45						
											Party Botanical Garden			

The World Bank
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INTERNATIONAL DEVELOPMENT ASSOCIATION

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January 18, 2022

Recommendation Letter for NBER Entrepreneurship Boot Camp
Candidate: Anastasiya-Mariya Noha

Dear Bootcamp selection panel,

I am writing to strongly recommend **Anastasiya-Mariya Noha** for the NBER Entrepreneurship Boot Camp this summer.

Anastasiya has worked with me over the past two years as a research assistant and consultant on a large-scale entrepreneurship RCT in Ecuador. This project began in the fall of 2019 with the aim of teaching 16-18 year old students personal initiative and negotiations skills via a series of computerized lessons, undertaken by students using school equipment during entrepreneurship classes in high school. When the COVID-19 pandemic hit, the government requested that we continue offering this program remotely to students, and scale it up to additional regions of the country. This involved working with more than 50,000 students, and we tested a variety of nudges and small interventions aimed at maximizing take-up and learning from online education, as well as aiming to measure the impacts of the interventions themselves. This project involves several collaborators from the University of Kassel (where she studies), as well as Tom Astebro at HEC, Bruno Crepon at PSE, and two psychologists.

This project was highly data intensive, since we received a large amount of data from students' activity on the online learning platform, conducted multiple rounds of surveys, and also worked with the Ministry of Education to link students to university entrance information. Anastasiya has been an extremely important contributor to multiple aspects of this work, and through it has demonstrated excellent technical and analytical skills and a strong interest in entrepreneurship research. Among the different activities she performed as part of this project were:

- She assisted in writing the pre-analysis plans for a role models intervention that we incorporated in this work, and she led the preliminary analysis of the impact of this

role models intervention on students attitudes and intentions towards entrepreneurship, as well as on academic outcomes. The role models intervention involved showing students videos from successful entrepreneurs and scientists, varying the fraction of each and the gender balance. She was able to carefully think through the empirical specifications, and specify the appropriate way to analyze these data.

- Developing monitoring reports of student take-up and program that could be delivered to teachers as part of a nudge/accountability intervention, as well as communicating these results to partners in the government.
- Preparing a sampling frame that we used for a rapid phone survey at the onset of the pandemic, and conducting daily quality control.
- Full cleaning, and labelling of all data sets to prepare them for public access, as well as conducting preliminary analysis of treatment effects.

Throughout this work she has demonstrated high levels of technical skill, and has been a vital member of the program team. She expanded on her analysis of the role models intervention for her Master's thesis, and is now currently working with us on a paper on the success of different take-up interventions for online learning.

Anastasiya will have finished the first year of her PhD (after already completing a masters) by the time of the Bootcamp. She has strong research interests on Science, Innovation and Entrepreneurship, and is conducting additional RCT work on online entrepreneurship courses. The ability to scale up entrepreneurship training programs to reach tens of thousands of firms is an open policy challenge, and her PhD work will provide valuable new evidence here.

She is someone I think would benefit enormously from the summer bootcamp. She is intelligent and hard-working, but in a smaller PhD program. Exposure to a wider variety of entrepreneurship topics and the ability to learn from excellent scholars and network with others in this area are likely to have extremely high value-added at this formative stage of her research career, likely much more so than PhD students in larger programs. I therefore strongly recommend her for the program.

Please do not hesitate to contact me if you have further questions,

Sincerely,



Lead Economist, Development Research Group, World Bank
E-mail: dmckenzie@worldbank.org