"Year's end is neither an end nor a beginning but a going on, with all the wisdom that experience can instill in us."
— Hal Borland

yearly cycle is common in many spheres, and academics are not an exception. Our year usually starts in September and end (if ever) in June, to be renewed again, but end of December is nevertheless a good time to review what we’ve achieved and where we want to go. In this issue The HSE Look continues to present the scholars it recruited in 2015, focusing on post-doctoral fellows.

The HSE Look wrote about the University’s Post-Doc recruitment in several issues over the two years (Issue 10, March 2014; Issue 7, September 2014), yet we never before had the opportunity to introduce all of the current year’s colleagues at once. In this issue we present all 15 laboratories and centers (as well as one school and one faculty) which recruited post-docs as well as the researchers themselves. Post-doc recruitment is a relatively recent endeavor for HSE which started in 2012, and since 2014 the University has around 20-25 post-docs per year. Many of them shared with The HSE Look their research interests and plans for the upcoming year at HSE, and we will present these interviews to the readers in this pre-holiday issue and in the upcoming months of 2016. HSE also has several success stories of scholars joining the university as post-docs and becoming tenure-track faculty members, and hope that the readers (especially post-docs themselves) will find this experience interesting.

We hope that the festive mood of the winter holidays will inspire you to pursue new ideas and collaborations!

Yulia Grinkevich
Director of Internationalization

From Post-Doc to Tenure-Track: First-Hand Experience

MICHAEL ROCHLITZ

joined HSE in 2013 as a post-doc Research Fellow at the International Center for the Study of Institutions and Development (ICSID) of the Institute for Industrial and Market Studies. In 2014 Michael became an Assistant Professor at the School of Political Science of the Faculty of Social Sciences, and continues his research at ICSID as well. The HSE Look interviewed him about the experience of getting from a post-doc to tenure-track position, integration into HSE life and research plans.

How did you join HSE and what influenced your decision?

From September 2012 to April 2013 I was teaching at Ural State University in Yekaterinburg, at the same time as I was finishing my PhD. During this period I several times met Andrei Yakovlev, Director of HSE’s ICSID at various conferences in Russia, and at the Russian Economic Congress in Suzdal in February 2013 he told me they had a post-doc position open. As a lot of the research I was citing was from people who worked at ICSID, I was more than happy to apply. For example, one of the papers in my PhD was on governors in Russian regions, and one of the leading papers on the topic is by John Reuter who is also affiliated with the Center.
Did you get to know a lot of colleagues in your area of research at HSE?

Before I started working at HSE in September 2013, ICSID invited me to a conference in June of the same year, so I was already then able to meet a lot of people. The Center has assembled a strong group of people that all more or less work in the areas of research I am interested in, so it’s always a pleasure to meet and talk.

What I also very much appreciate at HSE is the support you get to travel to different conferences to present ideas and communicate with colleagues. This was really very useful and helped me a lot to build a good academic network during the last three years.

As I enjoyed very much my year as a post-doc at ICSID, I was interested in staying for a tenure-track position, and applied for one in Political Science. I have not yet had the chance to collaborate with colleagues from the School of Political Science, though I am of course familiar with their work – for example both Rostislav Turovsky and Nikolay Petrov are leading experts on Russia’s regions, and I’m also always following Sergei Medvedev’s interesting commentary and writings on current Russian politics. This spring I participated in the winter school “Escapes from Modernity” that is organized every year by Sergei Medvedev in Estonia, and it was a great experience. We also have a couple of research projects together with my political science students from last year. To combine teaching and research in such a way is something I consider very important, as it distinguishes a research university from a place where students only listen to lectures and pass exams.

What else do you do at HSE besides research?

I’m teaching a class in institutional economics for the third year students in political science, as well as a joint class with other colleagues at the School of Public Administration, and a couple of seminars for our PhD students. Especially the institutional economics class is quite demanding, with about 8 hours of teaching per week from September to Christmas – there are about 80 students, and they all come to you with questions, ask for feedback or need a supervisor. I very much enjoy the teaching and adore my students, but sometimes it’s true that it would be good to have a bit more time for research.

What are your research plans?

At ICSID, we started a project on foreign business associations in late 2014. During the first half of this year we interviewed representatives of 17 foreign business associations in Russia, and also made an online survey of their member firms, what they think about the business climate in Russia’s regions, the sanctions, investing in Russia in general. We now have the idea to expand the project to China and potentially to Vietnam, to see how foreign investors organize in these contexts, and then to compare the results to Russia. I plan to spend my new year holidays this year in Vietnam to get in touch with a couple of people, and also hope to do a visiting next year in a partner university in Shanghai.

Another project is a book we are writing with a number of colleagues about how different groups influence the process of political decision-making in contemporary Russia. The project is coordinated by Dan Treisman at UCLA (http://www.russiapoliticalinsight.com/) and together with a colleague we are writing the chapter on the security services.

With a friend of mine from my doctoral studies in Italy, we are currently working on a theoretical paper where we look how people that have never lived in a working democracy perceive the usefulness of democratic institutions, and how their perceptions can be influenced by different signals.

Then there is the project I do with a couple of students; we monitored a number of Russian, Ukrainian and Western European TV stations for the period from December 2013 to January 2014. We want to quantitatively show if, and to what extent there is indeed an “information war” ongoing between Russia and Ukraine, and between Russia and the West, and what it looks like.

Finally, there are also a number of smaller projects I’m involved in, on violence and informality in Russian regions, global value chains and economic development, Putin’s schedule and what it tells us about the changes in Russian politics over time, semi-legal markets in North Korea, and a more sociological research project on the situation of undocumented African migrants in Moscow.

Any advice for others?

HSE is a young and dynamic place, and there are lots of activities one can participate in. This is of course a big advantage, but it also can become a bit of a problem. At a certain point, you have to be careful not to overcommit yourself, otherwise together with your teaching load there will be no time for research. But then the multiple activities available make HSE such a dynamic place, and give the chance to meet many people.

One thing I definitely recommend is going to the social and cultural events organized by the International Faculty Support Unit: last year we had tours of museums and the Kremlin, and this year it was a boat trip and guided tours through Moscow. It’s an opportunity to explore the city and Russia’s cultural heritage, while having a happy time with your colleagues and getting to know them better.
New Voices: Research Projects and Ideas

In 2015 HSE laboratories and centers chose 24 scholars as post-doctoral fellows, with the majority of them starting their one year of work in early autumn. We would like to introduce these researchers as well as the teams with which they are working, and present several interviews with colleagues from a variety of research areas as well as tell briefly about the centers, laboratories and schools which recruited them: philosophy, history, data analysis, finance, and cognitive studies. We will continue to publish interviews with post-docs in the upcoming issues of 2016, and would like to thank the colleagues for taking the time to tell The HSE Look’s readers about their research interests.

Laboratory for Philosophical Studies

The Laboratory for Philosophical Studies, led by Prof. Elena Dragalina-Chernaya, is part of HSE Centre for Fundamental Studies and works closely with the School of Philosophy at the Faculty of Humanities. Its research areas include logic, rationality and reasoning, the role of observer in epistemology, ontology of negation, pragmatics, interdisciplinary and transdisciplinary research approaches.

In 2015/16 Laboratory for Philosophical Studies has recruited one post-doctoral fellow: Fabien (Georges Jacques) Schang, who holds PhD of University Nancy 2 (University of Lorraine, France) and who shared with The HSE Look his research plans and ideas.

Fabien Schang

Research

The project I’m working on at the Laboratory for Philosophical Studies, entitled “A Formal Theory of Information through Information”, is supervised by Elena Dragalina-Chernaya, and it also resorts to the laboratory project “Rationality in Action: Intentions, Interpretations and Interactions”.

The question is how rationality works in specific circumstances from various epistemological perspectives. My personal project is related to formal philosophy, especially formal semantics, and I use formal tools in order to explain philosophical concepts (e.g. truth-values, agreement and disagreement, contradiction) and solve philosophical problems (e.g. how may disagreement emerge and be managed between speakers assuming different justification criteria). This mainly concerns formal epistemology, the way in which agents can justify their beliefs or have access to truth. In the process they need to use reasoning, and using formal tools to explain this reasoning is what I do in the Laboratory’s project. Now this method can also be applied to other domains, such as political philosophy. In one of my forthcoming papers, “A Formal Semantics of International Relations”, I strive to explain to what extent the famous maxim “enemies of enemies are friends” may fail. We plan to hold an international conference for the next year with one of our French colleagues, focusing on the bounds of philosophical reason.

Only one other person at the department also work on closely related topic – formal pragmatics, so mostly I work on my own towards the achievement of publications through international conferences.

Apart from research, I will also teach two seminars in the upcoming semester; they are aimed primarily at PhD students and at giving them the tools to do research and to write the thesis, to bring closer the different traditions of writing PhDs which exist in Russia and in Western countries. The other two teaching proposals concern social epistemology (seminar “What is to be believed?”) and philosophical logic (seminar “Truth, Truth-values, and the Like”).

Ideas

One thing which is lacking in curriculum, in my opinion, is a course on critical thinking. It’s a way to be able to scrutinize any information you receive, and it’s a vital skill in the time of information overload. Such discipline can be introduced into Philosophy by explaining the means through which people try to convince others through television, newspapers, or the Internet. It’s very easy to see general fallacies used by various information agents. Such courses are quite widespread in USA and other Western countries. It’s a good way to show to students that logical thinking is not something abstract from reality, that it concerns their daily life. It helps to structure the overwhelming flow of information. Such a course could be useful for any disciplines which deals with discourse – history, philosophy, social sciences, etc.
The International Center for the History and Sociology of World War II and Its Consequences

The Center was established in 2010 and does fundamental research in history and sociology of World War II and Holocaust, with a special focus on historical sources related to Jewish life in the occupied territories of the Soviet Union. The Centre is led by Prof. Oleg Budnitsky and is a partner of the United States Holocaust Memorial Museum. Its research covers a wide range of topics: commemoration of war memory in contemporary Russia, prison camp system and forced labour, experience of revolution in the Russian regions, history of Russian Jews in the Civil War period, Soviet Visual Arts, food production policy in USSR, etc.

In 2015 the Center has recruited four post-docs as Research Fellows: Seth Bernstein, who holds PhD of University of Toronto (Canada) in History of social movements and political parties, Aaron Hale-Dorrell, who obtained PhD in Russian and East European History at the University of North Carolina at Chapel Hill (USA), Natalie Belsky, who holds PhD of University of Chicago (USA) in History, and Angelina Buckley Lucento with PhD of Northwestern University (USA) in Art History, who told The HSE Look about her research at the Center.

Angelina Lucento

Research

I’m writing a book called “Touched Surfaces: The Politics and Aesthetics of Figuration in Soviet Art, 1919-1941”, and it is about the general return to realism in Russian art and the intellectual and political history of the return to Figuration. Other authors have suggested that this return happened because of totalitarian state of the Soviet Union, but I show, relying on previously unstudied archival sources, that it’s not quite the case. There was a general consensus among Russian artists, including avant-garde artists, that in order to communicate in the new mechanical modern age, especially in the context of socialism, there needed to be some kind of figurative representation. There was a need for painting for the masses.

I work a lot in the archives; mostly in Moscow, though I found one of the archives I need in Budapest last year. When I travel outside Moscow for research, I am mostly interested in museums in the regions because often they have extensive collections of things which are rarely seen and great archives. You can find out about the history of the institution, not only the objects. I am planning to visit Kazan in April because there was a substantial avant-guard movement, group TAT-LEF, and I hope to study their archives.

Teaching

Seth Bernstein and I are teaching a course together called “Culture, War and Society”; it is about Europe and Russia from 1914 until 1953. So basically we are covering both World Wars and the interwar period. There are about 20 students in the class, and it’s a challenging course, but they are on quite an advanced level.

Center for the History and Sociology of World War II and Its Consequences

It’s a world-renown Center, and Oleg Budnitskiy is an internationally acclaimed scholar. If you are someone who works on WWII, in any capacity, especially on the war in Russia, you would want to come here. I knew about the Center, and when I saw that they had an opening for Research Fellows, I definitely wanted to apply. There are so many materials available here, so many primary sources – not only about the specific topic you research, but also about the broader context.

Laboratory of Methods for Big Data Analysis

The Laboratory for Methods of Big Data Analysis (LAMBDA), headed by Andrey Ustyuzhanin, focuses on developing methods for building models for different application areas which help solve the data processing tasks. The Laboratory is interested in research collaborations which involve development of algorithms and models for large volumes of data. Currently LAMBDA cooperates with the European Organization for Nuclear Research (CERN), and in 2015/16 it recruited a Senior Research Fellow, Denis Derkach, who holds PhD of Université Paris-Sud XI (France) in Physics of elementary particles. Denis told The HSE Look about his research and Laboratory’s collaborations.

Derkach Denis

Research interests

I am a Physicist; I graduated from St. Petersburg State University Physical Faculty, and went on to University of Paris 11 for my PhD in analysis of elementary particles. Now I am focusing more on data analysis but also with the application to particle physics. I work on analyzing the data from Large Hadron Collider at CERN (the European
Organization for Nuclear Research). It’s a really grand facility, it is 27 kilometers in circumference and produces a huge amount of data which needs analyzing. My project at HSE is about that.

My colleagues at the laboratory are mostly mathematicians and, naturally, they have a very different perspective on the analysis methods, and often a deeper understanding of the most cutting-edge methods. I formulate the tasks from the standpoint of physics, and they help me find the best approaches and methods for analysis. I must admit that my colleagues’ understanding of data analysis techniques exceeds mine thus creating a big exchange of knowledge in our lab.

Preliminary results look very promising; they are still being reviewed by CERN before we can announce them. I can tell that in some cases we’ve improved the analysis quality by at least 30%.

**LAMBDA**

We work together since April 2015 (lab was created in February 2015). It’s a very interesting experience for me, and there are many data analysis problems we can address further in the sphere of elementary particles. But LAMBDA is not limited to this area of research only. They work on many topics close to the particle physics, such as astrophysics – and I’d be interested in working on that, too.

We are working not only on application of machine learning methods to particle physics but we also develop better methods of working in large collaborations. The articles which CERN publishes are prepared by at least 800 researchers at once (in the smallest collaboration); the other three collaborations comprise over 2000 or even 3000 people each. Consequently, we need to find the best way not only to analyze data but also to organize the work, especially the work on the code of analysis algorithms. So at LAMBDA we look for solutions for both data analysis problems and for collaborative working.

CERN works with many top universities, and there are, of course, ways in which collaborative work is organized. The ideas we develop at LAMBDA on how to organize the code, how to work with it and how to analyze the data help CERN to do it in a more effective way.

**Collaborations**

We work a lot with Yandex School of data analysis and their department at HSE. LAMBDA’s research is not limited by particle physics, of course, so we gladly look for people who are interested in developing data analysis and machine learning methods in their specific research subject.

We have some ongoing discussions about such collaboration within HSE (we already started a project with the Centre for Cognition & Decision Making on analysis of bioelectrical activity of the human brain). We also work with other universities. LAMBDA is also very interested in involving students, in particular, now we are looking for those who know how to work with encephalograms – it’s also for one of our projects with colleagues outside HSE.

**Laboratory of Financial Engineering and Risk Management**

The Laboratory of Financial Engineering and Risk Management, headed by Prof. Sergey Smirnov, was founded in 2007 and focuses on developing mathematical models and business procedures for risk management and financial engineering. The Laboratory works with leading professional and financial institutions, such as the Professional Risk Managers’ International Association (PRMIA), European Bond Commission (EFFAS-EBC), China Government Securities Depository Trust and Clearing Company (CGSDTC). The Laboratory has renewed the post-doc contract for another year with Alexander Chigodaev who holds PhD of York University (Toronto, Canada) and shared with The HSE Look his research interests and the specifics of Laboratory’s work.

**Alexander Chigodaev**

**Research**

It is my second year working in the research Laboratory of Financial Engineering and Risk Management. The project I am mostly involved in is on the guaranteed pricing of financial derivative instruments. As the world has experienced several financial crises, even in the recent decade, this project, and other projects in our lab, are very much in demand.

To succeed in this trade requires a strong background in mathematics and programming. Thus, my skills as a theoretical physicist come in handy. Our approach to tackle problems stems from the fundamental principles and is based on rigorous mathematics. Guaranteed pricing of derivatives implies that we ensure that derivatives remain financially secure. It has direct applications for the purposes of financial institutions known as central-counter parties (CCPs) whose job is to monitor deals between market players. Our goal is to produce not just a better methodology, but one which is scientifically sound and complete, for CCPs to calculate marginal requirements.

Other venues of research in the laboratory concern the yield curve, credit ratings and models for different financial instruments and risk analysis.
Laboratory

There are many people in the laboratory with different academic backgrounds and seniorities. Everybody helps each other which facilitates a very productive atmosphere. We often exchange ideas in long discussions and enrich each other's work; and it is quite often the case that the junior members are the ones to propose new ideas.

We have many undergraduate and graduate students working on their term and final projects. Even with students, we encourage them to produce a high level research which would be publishable in international journals. This year I also have a student, possibly more to come. It's always a challenge to find somebody equipped with strong skills, so we strive to choose the best of the best, and are on the lookout for new candidates.

Laboratory of Interdisciplinary Empirical Studies (HSE Perm)
The Laboratory for Interdisciplinary Empirical Studies (LINES), headed by Vice-Director of HSE Perm Dmitriy Potapov, is a research hub at which carries out interdisciplinary projects. The main research areas of the Laboratory are the study of applied markets and enterprises, the study of public-private interactions and historical studies. This year LINES has recruited two post-doc Research Fellows: Aleksey Buzmakov, who holds PhD of Université de Lorraine (France) in Computer Science, and Sofya Kulikova, who has PhD of Paris Descartes University (France). Sofya shared her research interests and plans with The HSE Look.

Sofya Kulikova
Research
I specialize in neuroscience, and this area of research is mostly new for the Perm campus of HSE. My current project is conducted together with the Center for Cognition and Decision Making at the Department of Psychology in Moscow and it is focused on analyzing MRI (Magnetic Resonance Imaging) and DTI (Diffusion Tensor Imaging) data from patients with ischemic stroke. The goal is to develop the methods for predicting the rehabilitation success based on the acquired data. The problem is that rehabilitation is a costly process which depends greatly on the remaining inner reserves of the patient: if the brain is capable of restoring motor functions, or speech functions, it makes sense to invest in the rehabilitation. If, otherwise, there are little physical reserves left, the standard rehabilitation will not likely lead to significant improvement. Thus, to make rehabilitation efficient we need a better algorithm for selecting the most appropriate rehabilitation strategy for each individual patient.

We are trying to develop an algorithm to make more reliable predictions about the rehabilitation's success. The existing algorithms are not very effective, and we want to improve the situation.

Plans
I am not working with students this semester but I am planning to give an elective course on Applied Mathematics in the next semester for Bachelor students. Laboratory of Interdisciplinary Empirical Studies is mostly focused on economics and on history, but I hope that a research group on cognitive studies will also emerge.

Center of Education Quality Monitoring
The Center is a part of the Institute of Education and focuses on designing and carrying out research aimed at measuring education quality, both in Russia and internationally. It also puts a special emphasis on the development and audit of tools used for measuring the quality of education. Currently the Center has three active venues of monitoring: iPIPS (The International Performance Indicators in Primary Schools), NorBa (Nordic-Baltic comparative research in mathematics education: Research on Mathematics Teachers’ Beliefs), and ISHEL (International Study of higher education quality in mathematics and physics in BRIC countries). In 2015/16 the Center has one post-doc Research Fellow, Tatjana Kanonire who holds PhD of University of Latvia in Psychology.

Center for Historical Research (HSE Saint-Petersburg)
The Center aims at bridging research and education in History at HSE Saint-Petersburg, and is headed by Prof. Adrian A. Selin. The research areas cover historical studies of technology,
environmental history, comparative studies of empire, nationalism and colonialism, political and intellectual history, construction of cultural and political boundaries. The Center’s research draws upon the cultural and historical legacy of Saint-Petersburg, as well as focuses on Early Modern, Modern and Contemporary History of the North-Western region.

In 2015 the Center recruited one post-doctoral fellow, Anton Kotenko, who holds PhD of Central European University (Hungary).

**International Laboratory of Decision Choice and Analysis**

The International Laboratory of Decision Choice and Analysis (DeCAm), headed by Prof. Fuad T. Aleskerov, focuses on analysis of economic and political decision-making, methods of mathematical modeling for social and economic research, game theory, models of group preferences, and theory of individual and collective choice. This year the Laboratory has one post-doc Research Fellow, Emre Dogan, who holds PhD of Rice University (USA) in Economics.

**Centre for Cognition and Decision Making**

The Center is a part of the Department of Psychology of the Faculty of Social Sciences at HSE and is headed by Director Anna Shestakova and by Leading Research Fellow Vasily Klucharev. Its research focuses on neuroeconomics, neurodynamics, neurobiology of communication, theoretical neuroscience, and other applications of neuroimaging technologies for better understanding of cognitive processes and human behavior.

This year the Center has recruited three Research Fellows for post-doc positions: Johann Antoine Lussange who holds PhD of University Pierre and Marie Curie Paris VI (France), Beatriz Martin-Luengo who holds PhD of University of Basque Country (Spain), and Sergey Parsegov who is a Candidate of Physics and Mathematical Sciences of Institute of Control Sciences of Russian Academy of Sciences.

**Faculty of Mathematics**

The Faculty of Mathematics was established at HSE in 2007, and is currently headed by Prof. Vladlen Timorin as the Dean. It builds upon the strong traditions of education and research in mathematics which exist in Russia as well as attracts leading world researchers.
The Faculty also houses two laboratories: the Laboratory of Algebraic Geometry and its Applications, which is headed by Prof. Fedor Bogomolov, and International Laboratory of Representation Theory and Mathematical Physics, headed by Prof. Boris Feigin. In 2015 the Faculty and its laboratories recruited four post-docs as research fellows: Yury Savateev, Candidate of Physics and Mathematical Sciences of the Moscow State University (Russia), works at the Faculty of Mathematics. Laboratory of Algebraic Geometry and its Applications attracted Anton Ayzenberg, Candidate of Physics and Mathematical Sciences of the Moscow State University (Russia), and International Laboratory of Representation Theory and Mathematical Physics has two post-docs this year: Covolo Tiffany Serena, PhD of University of Luxembourg and the Université Claude Bernard - Lyon 1 (Luxembourg – France), and Andrey Dymov, PhD of University of Cergy-Pontoise (France).

School of Philology

The School of Philology, headed by Prof. Elena Penskaya, unites specialists in many areas of language and literary studies. Its special points of research focus are concentrated in the Laboratory of Linguo-Semiotic Studies, the Laboratory of Cross-Cultural History of Literature, the Laboratory of Linguistic Conflictology and Modern Communication, the Neurolinguistics Laboratory, and Osip Mandelstam Center. Key research areas cover philology, language and thinking, non-linguistic methods of communication, the specifics of the poetic language, narratology, semiotics and symbolic language of power, analysis of Medieval literary sources, and studies of specific authors. In 2015 the School of Philology recruited two post-docs as research fellows: Natalia Ivlieva and Alexander Podobryaev, who both hold PhDs of Massachusetts Institute of Technology (USA) in Linguistics.

A Time to Make Friends
(at Higher School of Economics)

On 10th of December The HSE Look held a celebration of two occasions: its own 2,5 years anniversary and the opening of the photo exhibition by Michael Rochlitz, a member of The HSE Look Editorial Board. The HSE Look has much to be grateful for in these years: for the initial and continuing support from Vice Rector Maria M. Yudkevich and the university bulletin “Okna Rosta” which helps us grow, as well as change the format this year. Since October 2015 The HSE Look is published once per two months as 8-page issues, but more importantly, it is supervised by an Editorial Board international and Russian colleagues who help chose the most important topics to cover.

We are very grateful to all the readers and friends of the bulletin who joined us at the event and passed on their greetings – and we hope you had a chance to make new friends as well! This is the idea of the exhibition, to show that the world is full of possibilities to make friends, be it on the city streets or inside the university.

We cordially invite you to have a look at the exhibition which is displayed in the left hall of Myasnitskaya 11, 4th floor. The pictures have been taken during the last 5 years on travels through the Middle East, Eastern Europe, Russia, and East Asia.