RASA - AMERICA

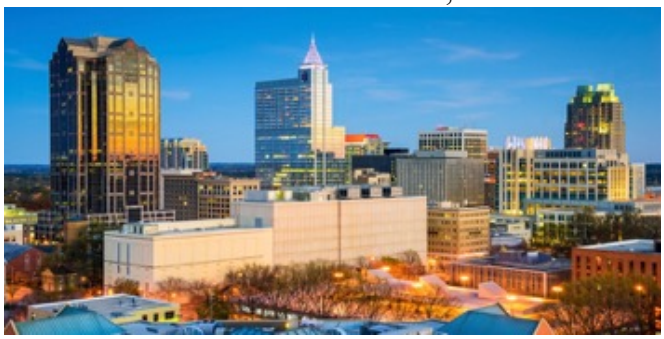
RASA
ДУМАЕМ
ПО-РУССКИ

2019 RASA-America annual conference
November 8-10, Chapel Hill, NC

University of North Carolina

Marisco Hall, UNC

Chapel Hill, NC City Hall



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NOTES

RASA-America

Russian-American Science Association

Esteemed colleagues, and dear friends!

On November 8-10, 2019, we will hold our 10th Annual Conference of the Russian-American Science Association (RASA-America). The conference will be at the University of North Carolina in Chapel Hill. This year the Conference is organized in collaboration with Pleiades Publishing group and dedicated to the 150th anniversary of the Periodic Table of the Elements by Dmitry Ivanovich Mendeleev.

In keeping with our tradition, this Conference will be a platform for meetings and exchanges of views for scientists, scientific administrators, innovators and entrepreneurs. The conference aims to provide scientific reports in various scientific fields of leading scientists - representatives of scientific diaspora from Russia and other former Soviet Union countries. This year we are going to discuss many important issues of scientific life, including participation of the diaspora in strengthening the ecosystem of scientific publications in Russia and other former Soviet Union countries, as well as the mechanisms of world-wide dissemination of information about the scientific achievements of scientists of these countries.

The purpose of our Association is to preserve, strengthen and develop a single intellectual and cultural space of the Russian-speaking scientific community. The Association brings together researchers, teachers, graduate students, students and other scientific and technical fields at universities and companies, as well as innovators and entrepreneurs in the fields of high technology from Russia and other former Soviet Union countries, working or studying abroad, regardless of their nationality, religion, political views and economic interests.

With kind regards

Prof. Alexander Kabanov
President RASA-America
skabanov@me.com

RASA-America

Russian-American Science Association

Уважаемые коллеги, дорогие друзья!

8-10 ноября 2019 года состоится X Ежегодная Конференция *Russian American Science Association (RASA-America)*. Конференция будет проходить в *University of North Carolina* в Чапел Хилл. В этом году Конференция организована в сотрудничестве с издательством *Pleiades Publishing* и посвящена 150-й годовщине Периодической системы элементов Дмитрия Ивановича Менделеева.

По традиции Конференция станет площадкой для встреч и обмена мнениями ученых, администраторов науки, новаторов и предпринимателей. На Конференции запланированы научные доклады ведущих ученых – представителей научной диаспоры России и других стран бывшего Советского Союза в самых разных областях науки. В этом году нам предстоит обсуждение многих важных вопросов научной жизни, включая участие диаспоры в укреплении экосистемы научных публикации в России и других странах бывшего Советского Союза и распространении информации о научныых достижениях ученых этих стран в мире.

Целью нашей ассоциации является сохранение, укрепление и развитие единого интеллектуального и культурного пространства русскоговорящего научного сообщества. Ассоциация объединяет исследователей, преподавателей, аспирантов, студентов и других научных и научно-технических работников в университетах и компаниях, а также новаторов и предпринимателей в области высоких технологий из стран бывшего Советского Союза, работающих или обучающихся за пределами Российской Федерации, вне зависимости от их национальности, вероисповедания, политических взглядов и экономических интересов.

С уважением,

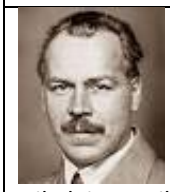
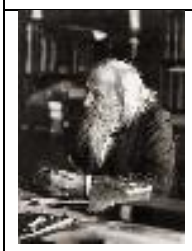
Проф. Александр Кабанов
Президент RASA-America
skabanov@me.com

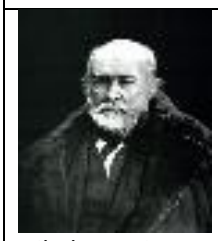
10th RASA-America Conference Program

November 8-10, 2019

University of North Carolina, Chapel Hill, NC, USA

Working language Russian (most lectures) and English, Saturday and Sunday Live Streaming (see instructions)

Friday, November 8, 2019 – Marsico Hall #6004, 125 Mason Farm Road, Chapel Hill, NC 27599 **RSVP REQUIRED BY THURSDAY, NOVEMBER 4th to:** elena@velil.net or inforasausa@gmail.com	
12:00 – 16:00	***RASA Membership and meeting registrations***
13:00 – 14:00	***Russian History and Sociology* (Chair – Sergey Chasovskikh** (Georgetown University) **Marina Litavrina** (Professor, Moscow State U), *"Rendezvous with Russian emigrant. Reflecting on personal experience."* ***(Video Recorded)*** **Sergey Chasovskikh** (Georgetown University) *"Eight minutes with Academician Roald Sagdeev" (fragment of interview recorded)."*
14:00 – 16:00	**RASA – Pleiades Meeting and Group Discussion on Science Publications (Chairs - Alexander Shustorovich,** Chairman, Pleiades Publishing Group, and **Alexander Kabanov**, President RASA-America) **Alexander Kabanov** (Professor, U of North Carolina), **Nikolai Avanesov** (Pleiades Publishing Group) *"International journal «Review Journal of Chemistry» / "Chemistry and Materials"* **Alexander Shustorovich / Nikolai Avanesov** (Pleiades Publishing Group) *"Science publishing ecosystem: path forward"* **Alexandra Borissova** (AKSON) *"How to make journals more appealing and papers more visible"*
16:00 – 17:00	***RASA Coordinating committee meeting***
Saturday, November 9, 2019 – Marsico Hall #4004, 125 Mason Farm Road, Chapel Hill, NC 27599 **REGISTER BY THURSDAY, NOVEMBER 4th at:** elena@velil.net **or** inforasausa@gmail.com	
09:00 – 12:00	***RASA Membership and meeting registrations***
08:50 - 09:00	**Opening session (Chair – Alexander Kabanov, President RASA-America,** Professor and Director, Center for Nanotechnology in Drug Delivery, U of North Carolina) **Igor Efimov, President RASA International Coordinating Committee,** Professor and Chair, Department of Biomedical Engineering, George Washington University) **Alexey Klimov, Former President of the Russian Academic Group (welcome, recorded)**
9:00 – 10:30	**Vavilov session – Life Sciences and Cognitive Sciences (Chair – Tatiana Tatarinova,** Professor, University of La Verne, **Vadim Gladyshev**, Harvard University)
 Nikolai I. Vavilov 1887-1943	9:00 – 9:30 **Ancha Baranova** (Professor, School of System Biology, George Mason University) *"Step away of the edge of an illness: Longitudinal monitoring and abatement of stress"* 9:30 – 10:00 **Maria Polinsky** (Professor, University of Maryland) *"Cognitive sciences and language diversity"* 10:00 – 10:30 **Dmitry Gordenin** (National Institute of Environmental Health Sciences, NIH) *"Mutation load and signatures in yeast and in cancer genomes"*
10:30 – 11:00 Coffee break	
11:00 – 12:00	**Mendeleev session - Chemistry (Co-Chairs – Valery Fokin**, Professor, University of Southern California, and **Alex Tropsha**, Professor, U of North Carolina)
 Dmitri I. Mendeleev 1897-1907	11:00 – 11:30 **Sergey Sheiko** (Professor, U of North Carolina) *"Programmable Design of Tissue-mimetic Materials"* 11:30 – 12:00 **Anatoliy Popov** (Associate Professor of Radiology, U of Pennsylvania) *"Smart NIR fluoroprobes for imaging, therapy and fluorescence-guided surgery"*
	12:00 – 13:00 Lunch break
	13:00 – 13:30 **Alex Spokoyny** (Assistant Professor, Department of Chemistry, U of California Los Angeles) *"Bonding with Boron"* 13:30 – 14:00 **Vladimir Shiltsev** (Distinguished Scientist, FermiLab) *"Mendeleev - Genius: Table and beyond (vodka, ether, coffee and economy)"*

14:00 – 15:30	**Abrikosov session – Physics and Astronomy** (**Chair – Vladimir Shiltsev,** FermiLab)
 Alexei I. Abrikosov 1928-2017	14:00 – 14:30 **Michael Rubinstein** (Professor, Pratt Scholl of Engineering, Duke U) *"Unsolved Problems in Polymer and Soft Matter Physics"* 14:30 – 15:00 **Pavel Groisman** (NEFI-NEESPI Project Scientist, NC State University Research Scholar at NOAA National Centers for Environment Information) *"Northern Eurasia Earth Science Partnership Initiative: Science Plan, Achievements, and its successor, Northern Eurasia Future Initiative (2002-2019)."* 15:00 – 15:30 **Alexander Kiselev** (Professor of Mathematics, Duke U) *"Singularities and Partial Differential Equations"*
15:30 – 16:00 **Group Photo and *Coffee break***	
16:00 – 17:00	***Science and International Collaboration: Past, Present, Future*** 16:00 – 16:30 **Ambassador Jack Matlock** (Duke University) *"Science and education in US-Russia relations"* 16:30 – 17:00 **Vitaly Pronskikh** (Applications Physicist II, Fermi National Accelerator Laboratory), *"US-USSR collaboration in high-energy physics during the Cold war"*
17:00 – 18:00  George A. Gamow 1904-1968	**Gamow Awards Session** **(Chair – Konstantin Sonin**, Professor, U of Chicago, **Tatiana Bronich**, Professor, U Nebraska) **Laureates presentations** 17:00 – 17:30 **Vera Serganova** (Professor of Mathematics, U of California, Berkeley) *"Symmetries and supersymmetries"* 17:30 – 18:00 **Valery Fokin** (Professor of Chemistry, U of Southern California) *"Chemical Insights into Biological Complexity"*
19:00 – 21:00	***Dinner (on your own):*** *There are many restaurants nearby on Franklin street* *Advanced reservations for Saturday night are advised*
21:00 – 24:00	**After Dinner Networking and Discussions** *Top of the Hill Restaurant & Brewery, 100 East Franklin Street, Chapel Hill, NC 27514*
Sunday, Nov. 10, 2018 – Marsico Hall #4004, 125 Mason Farm Road, Chapel Hill, NC 27599	
09:00 - 10:30	**Pirogov session - Medicine (Chair – Igor Efimov**)
 Nikolay I. Pirogov 1810-1881	9:00 – 9:30 **Vadim Arshavsky** (Professor of Ophthalmology, Duke U) *"How to build a light-sensitive organelle"* 9:30 – 10:00 **Igor Efimov** (Professor of Biomedical Engineering, George Washington University) *"New generation of bioelectronics"* 10:00 – 10:30 **Mikhail Lebedev** (Senior Research Scientist, Center for Neuroengineering, Duke U) *"Brain-computer interfaces for functional restoration, neurorehabilitation, fundamental science, and for fun"*
10:30 – 11:00 Coffee break	
11:00 – 11:30	**Ekaterina Shishatskaya** (Professor, Siberian Federal University, Krasnoyarsk, Russia) "*Biodegradable polymers of natural origin – chemical compounds for environmental technologies and agriculture"*
11:30 – 12:30	**Business and Innovation (Chair – Alexander Polinsky**) **Alexander Polinsky** (CEO, OncoTartis, Inc.) *"I developed a great technology, now what?"* **Alexander Kislukhin** (Data Scientist - Clinical Strategy, CommonSpirit Health) **"***Wallet or Life? – Medicine in USA"*
12:30 – 13:00	**Closing/Adjourn/Networking**

G.A. Gamov Award is founded in 2015 by the Russian-American Association of Scientists (RASA-America) in memory of the outstanding Russian-American physicist, Professor Georgy Antonovich Gamov (1904-1968) to recognize members of the Russian-speaking scientific diaspora for their outstanding achievements recognized by the wide scientific community and for contributing to the international recognition of Russian science and cultural heritage.

Laureates of 2019 George Gamow Award

Vera Vladimirovna Serganova

Vera Serganova is a Professor in the Department of Mathematics at the University of California, Berkeley. She graduated from the Faculty of Mechanics and Mathematics at M.V. Lomonosov Moscow State University in 1983 and defended her thesis at the Leningrad State University in 1988 under the leadership of D.A. Leites and A.L. Onishchik. She works in USA since 1990, initially at Yale U and starting 1992 at the University of California, Berkeley. Serganova works in the field of representation theory, in particular, representations of super and infinite-dimensional Lie algebras. Her best-known work is in finite-dimensional representations of Lie superalgebras. She is also the author of algebraic geometry and combinatorics, in particular, she co-authored the theory of Coxeter matroids in collaboration with mathematician Israel Moiseevich Gelfand. In 1998, she was an invited speaker at the International Mathematical Congress and a plenary speaker at IMC in 2014. In 2017, she was elected to the American Academy of Arts and Sciences.

Valery Valerievich Fokin

Valery Fokin is a Professor at the University of Southern California, USA. He was born and educated in Nizhny Novgorod. After graduating from N.I. Lobachevsky Nizhny Novgorod State University and Calvin College in Grand Rapids, Michigan, Valery moved to Los Angeles, where in 1998 he obtained PhD degree in organic chemistry at the University of Southern California. Fokin made fundamental contributions to the discovery and development of practical methods for the synthesis of biologically active compounds and complex molecular structures used in almost all areas of biomedical research. He is best known for discovering in 2002 a copper-catalyzed azide-alkine cycloaddition reaction, a classic example of the so-called "click chemistry." In 2011, Thompson-Reuters ranked Fokin among the top 10 chemists of the decade. In addition to his work in the United States, Fokin founded a laboratory at the Moscow Institute of Physics and Technology.

Премия имени Г.А. Гамова, учреждена Российско-американской ассоциацией ученых (RASA) в память о выдающемся русско-американским физике, профессоре Георгии Антоновиче Гамова (1904-1968), в целях поощрения членов русскоязычной научной диаспоры за выдающиеся достижения, признанные широким научным сообществом и содействующие международному признанию российской науки и культурного наследия.

Лауреаты Премии Г.А. Гамова за 2019 год

Вера Владимировна Серганова

Вера Серганова является профессором факультета математики университета Калифорнии в Беркли. Она закончила механико-математический факультет МГУ им. М.В. Ломоносова в 1983 году и защитила кандидатскую диссертацию в Ленинградском государственном университете в 1988 году под руководством Д.А. Лейтеса и А.Л. Онищика. Серганова работает в США с 1990 года. Сначала она работала в Йельском университете, а затем переехала в Беркли в 1992 году. Серганова работает в области теории представлений, в частности, представлений супер и бесконечномерных алгебр Ли. Её наиболее известные результаты относятся к конечномерным представлениям супералгебр Ли. Она также автор нескольких работ по алгебраической геометрии и комбинаторике, в частности она развила теорию матроидов Коксетера в соавторстве с Израилем Моисеевичем Гельфандом. Серганова была приглашенным докладчиком на Международном математическом конгрессе в 1998 году и пленарным докладчиком в 2014 году. В 2017 году она была избрана в Американскую академию искусств и наук.

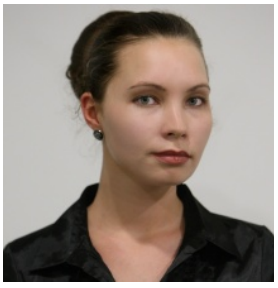
Валерий Валерьевич Фокин

Валерий Фокин является профессором Университета Южной Калифорнии, США. Он родился и получил образование в Нижнем Новгороде. После окончания Нижегородского Государственного университета им. Н.И. Лобачевского и Колледжа Кальвина в Гранд Рапидсе, шт. Мичиган, Валерий переехал в Лос Анжелес, где в 1998 году закончилУниверситет Южной Калифорнии со степенью доктора философии (Ph.D.) в области органической химии. Фокин внес основополагающий вклад в открытие и развитие практических методов синтеза биологически-активных соединений и сложных молекулярных конструкций, используемых практически во всех областях биомедицинских исследований. Он наиболее известен за открытие в 2002 г. катализируемой медью реакции азид-алкинного циклоприсоединения, являющейся классическим примером так называемой «клик химии». В 2011 году агенство Томпсон-Рейтер включило Фокина в числе 10 ведущих химиков десятилетия. Помимо своей работы в США, Фокин основал лабораторию в Московском Физико-Техническом институте.

Speakers/Session Chairs

Vadim Arshavsky is Helena Rubinstein Professor of Ophthalmology and Pharmacology at Duke. He received his undergraduate and graduate degrees from Moscow State University and, after completing a postdoc at the University of Wisconsin-Madison, has kept faculty appointments at Harvard from 1995 to 2005 moved to Duke. Arshavsky's research is on understanding the molecular and cellular mechanisms of vision. His work is centered on the vertebrate photoreceptor, a sensory neuron responsible for the light detection in the eye. His major contributions include the discovery of regulation of activated heterotrimeric G proteins by interacting partners, and mechanisms of adaptation to ever-changing conditions of ambient illumination by photoreceptor cells. Current projects address biology of building the light-sensitive organelle of photoreceptor cells and pathobiological mechanisms leading to the loss of these cells in inherited blinding diseases.

Ancha Baranova is Professor in the School of Systems Biology, College of Science, George Mason University in Fairfax, Virginia, and an Assistant Director of the Center for Study of the Genomics of Liver Disease in George Mason University. Dr. Baranova's major academic contributions are in the field of functional genomics, with emphasis on cancer. A significant part of her efforts is dedicated to in silico analysis of the publicly available genomics and proteomics databases. Dr. Baranova directs a team of postgraduate and graduate associates that employs a multidisciplinary approach in the development of new biomarkers. She has published over 100 peer-reviewed scientific papers.



Alexandra Borissova has a PhD degree in physical chemistry. She is the president of the Russian Association for Science Communication (AKSON) and a senior lecturer at the Center for Science Communication at the ITMO University in St. Petersburg. As a science reporter and editor, she collaborated with leading Russian news outlets (TASS, Gazeta.Ru, RBC, Forbes). As a science communicator, she was the first head of communication office at the Moscow Institute of Physics and Technology. She teaches science communication in Russia, Germany, Netherlands and Switzerland. She is a former German Chancellor Fellow (Alexander von Humboldt Foundation).

Sergey Chasovskikh is Professor at Georgetown University Medical Center. He is an expert on the Atomic Force Microscopy (AFM) applications in Medicine and Biology, and conduct research of direct visualization on molecular level of radiation damaged DNA, interactions of transcription factors with specific genes, and protein-DNA complexes for transcription factor-targeted drug discovery. He participates in interdisciplinary collaborative projects with NIH, NASA, NIST and others. At AFM Core Resource at Lombardi Comprehensive Cancer Center, he works on innovative analysis of "liquid biopsy" which may provide an important tool for cancer diagnosis and early interventions. Sergey is member of the Board of Directors, Coordinating Committee and head of Historic-scientific Committee of RASA-America, and he has been a member of Association of Russian-American Scholars in USA for the last 20 years.

Igor Efimov is Alisann and Terry Collins Professor and Chairman of the George Washington Biomedical Engineering Department since 2015. Efimov is also the Director of Cardiovascular Engineering Laboratory that focuses on physiological mechanisms of cardiovascular disease with emphasis on heart rhythm disorders. He obtained PhD in Biophysics/BME at Moscow Institute of Physics and Technology and completed postdoctoral training at U. of Pittsburgh. In 2008, Efimov founded Cardialen to develop low energy electrotherapy with a primary focus on atrial fibrillation. Efimov served on the faculty of the Cleveland Clinic Foundation (1994-2000), Case Western Reserve University (2000-2004), and Washington U in St. Louis, MO (2004-2015). His research involves the development of new generation of bioelectronics in flexible and stretchable electronics platform.

Vadim Gladyshev is Professor at Harvard Medical School, Brigham and Women's Hospital in Boston and a pioneer in antioxidant/redox biology. Vadim obtained BS/MS at Moscow State University, and postdoctoral training at the National Heart, Lung, and Blood Institute, and the National Cancer Institute, NIH. He is known for characterization of the human selenoprotein encoded by 25 genes and studies on aging. His studies involve how organisms acquire cellular damage from their food and the role selenium plays as a micro-nutrient in human health. He was elected to AAAS and is the recipient of EUREKA (grant from the National Institute on Aging, NIH), Method to Extend Research in Time (MERIT), and PIONEER awards from NIH, and has approximately 350 publications.

Dmitry Gordenin is Head of Mechanisms of Genome Dynamics Group at the National Institute of Environmental Health Sciences (NIEHS) since 2014. He received PhD in genetics from St. Petersburg State University and continued there as research group leader in the Department of Genetics until 1995. A collaboration with Dr. Resnick at NIEHS led to his relocation to USA. He became Senior Associate Scientist at NIEHS in 2010. Several of Gordenin's papers have been awarded the NIEHS Papers of the Year (2003, 2004, 2007, and 2009). Gordenin's group established several principles in mutagenesis including damage-induced localized hypermutation generating mutation clusters in yeast and in human malignancies. They developed new model for data analysis of cancer mutations and identified APOBEC cytidine deaminases as an important participant of endogenous mutagenesis ubiquitous in several types of human cancers.

Pavel Ya. Groisman is Vice president, Hydrology Science and Services Corporation. He is also a UCAR Project Scientist at the NOAA/NESDIS National Climatic Data Center. During the past three years he has been a Northern Eurasia Earth Science Partnership Initiative (NEESPI) Project Scientist and editor of the NEESPI Science Plan. During the past two decades, Groisman has been prominent in the Intergovernmental Panel on Climate Change (IPCC) Scientific Assessment activities. He has been a contributing author to all four IPCC Assessment Reports and to the recently completed Arctic Climate Impact Assessment focusing on climatic changes during the period of instrumental observations. His research interests include studying changes in extreme events frequency and intensity over North America and Eurasia. In 2010 he received AGU Fellowship, and in 2016 Edward A. Flinn III Award.

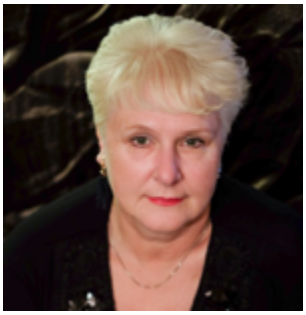
Alexander Kabanov is Distinguished Professor at the Eshelman School of Pharmacy, UNC-Chapel Hill, director of Center for Nanotechnology in Drug Delivery and Carolina Institute for Nanomedicine. He pioneered the use of polymeric micelles, DNA/polycation complexes, nanogels, macrophage carriers and exosomes for delivery of drugs, nucleic acids and polypeptides and invented the first polymeric micelle technology for cancer drug delivery to enter the clinical trials. Published over 300 scientific papers, holds 35 US patents and co-founded pharmaceutical companies to develop products based on polymeric micelles. Elected to *Academia Europaea*, and US National Academy of Inventors, fellow and director-at-large of Controlled Release Society, fellow of American Institute for Medical and Biological Engineering, President of Russian American Science Association.

Alexander Kiselev is William T. Laprade Professor of Mathematics at Duke University. His expertise is in partial differential equations and applications to fluid mechanics, spectral theory of Schrodinger operators, reaction-diffusion equations, and mathematical biology. He graduated with Master's degree in mathematics and physics from St. Petersburgh State University, and obtained his PhD degree in mathematics at Caltech. Kiselev has received Guggenheim fellowship in 2012, was an invited speaker at the International Congress of Mathematicians in 2018 and gave the 12th Brooke Benjamin lecture on fluid mechanics at U of Oxford in 2019. He serves as a coordinating editor of Transactions and Memoirs of the American Mathematical Society, and on editorial boards of Nonlinearity, Communications in Mathematical Sciences, and Dynamics of PDE.

Alexander Kislukhin trained as a chemist at Higher Chemical College of Russian Academy of Sciences. He holds a PhD in Chemical Biology from the Scripps Research Institute in La Jolla, CA. As a National Cancer Institute Fellow at the University of California San Diego. Kislukhin trained with late Nobel laureate chemist and neuroscientist Roger Tsien, and invented new materials for non-invasive imaging of specific cell populations by MRI. Kislukhin consults in materials science, vaccine development, diabetes, oncology, and medical diagnostics. He is currently a data scientist at CommonSpirit Health, the largest non-profit hospital network in the US.

Ambassador Jack Matlock is a career diplomat who served on the front lines of American diplomacy during the Cold War and was U.S. ambassador to the Soviet Union when the Cold War ended. Since retiring from the Foreign Service, he has focused on understanding how the Cold War ended and how the lessons from that experience might be applied to public policy today. Matlock became interested in Russia as a Duke University undergraduate, and after studies at Columbia U, entered the Foreign Service in 1956. His 35-year career encompassed much of the Cold War period. His first assignment to Moscow was in 1961, where during 1962 Cuban Missile Crisis he helped to translate the messages. Matlock returned to US embassy in Moscow in 1974 for four years and was assigned to Moscow again by Reagan in 1981 and then to Czechoslovakia. Reagan later asked him to return to Washington in 1983 to work at the National Security Council, with the assignment to develop a negotiating strategy to end the arms race. Matlock was appointed to the Soviet Union in 1987 until its last years. He retired from the Foreign Service in 1991. Later he wrote an account of the end of the Soviet Union titled *Autopsy on an Empire*, followed by the end of the Cold War titled *Reagan and Gorbachev: How the Cold War Ended*, establishing his reputation as a historian. He joined the faculty of the Institute for Advanced Study and he went on to teach diplomacy at several New England colleges.

Mikhail Lebedev is Chief Scientist and Scientific Head at the Center for Bioelectrical Interfaces, National Research University Higher School of Economics in Moscow, Professor at Sechenov First Moscow State Medical U, and Senior Research Scientist at Duke Center for Neuroengineering. He was trained as a physicist at Moscow Institute of Physics and Technology from 1980 to 1986 and received a PhD in Neurobiology from University of Tennessee, Memphis. His research interest include motor control, neurophysiology of sensory, motor and cognitive systems and brain-machine interfaces. He participated in the pioneering research on brain-machine interfaces that enable direct cortical control of assistive devices that reproduce limb movements. Lebedev won Frontiers Spotlight Award for his research "Augmentation of Brain Function: Facts, Fiction and Controversy" and he is a recipient of megagrant from the government of Russian Federation; this grant supports research on bidirectional brain-machine interfaces based on electrocorticographic recordings in humans.



Marina Litavrina is Doctor of Arts and Professor of art history at Moscow State University. Litavrina graduated from A.V. Lunacharsky State Institute of Theater Arts and began her work in the history department in 2004. She had additional training in Germany and France and subsequently was teaching at the UCLA and Paris. The focus of her research is in the history of the Russian theater at the end of the 19th - century, the theater in the cultural life of the Russians abroad in the first half of the 20th century, theater theory and cultural dialog. She authored 8 educational film lectures "Faces of Russian culture" and in 2010 became Laureate of the International Competition of Culturological, Philological and Cinema Studies at 150th anniversary of A.P. Chekhov.

Maria Polinsky is a specialist in theoretical linguistics. Her interests include variation in syntactic structures, and her research program includes heritage languages. She has served on the editorial boards of multiple journals, on the National Science Foundation's Expert Panel on Linguistics, and on advisory boards of several international centers, including the Centre for Literacy and Multilingualism at the University of Reading, the Child Bilingualism Center at the Chinese University of Hong Kong, and the Center for Multilingual and Intercultural Communication at Stony Brook. She is the author of over a hundred scholarly articles and several books including *Deconstructing Ergativity* (2016) and *Heritage Languages and Their Speakers* (2018).

Alexander Polinsky is a co-founder of OncoTartis, Inc. and Everon Biosciences, Inc. and currently serves as a CEO of OncoTartis, Inc. Polinsky received his PhD in 1982 in Physical Chemistry from Moscow University. He was on the Faculty of Chemistry at Moscow University for 6 years. After moving to the US in 1988, he became a Visiting Scientist at UCSD developing novel methods for computer-aided drug design. In 1991, he co-founded the Alanex Corporation using novel computational and combinatorial chemistry. Polinsky became Vice President, Head of Discovery Technologies, at Pfizer La Jolla Labs and established Pfizer's global chemistry outsourcing network. In 2006, he moved into Global Research Technology where he led the development of Pfizer External Research Network and Pharma Incubator concepts. In 2007, he established The Pfizer Incubator and became its CEO, starting three biotechnology companies.

Anatoliy Popov is Associate Professor of Radiology at the Perelman School of Medicine, U of Pennsylvania, Philadelphia. He received MS degree in Chemistry from the Moscow State University, and PhD degree in Organic Chemistry from the USSR Academy of Sciences. He discovered Arbuzov-like rearrangement of prim-alkyl difluorophosphites to tert-alkyl difluorophosphonates; broadened the chemistry of perfluoroisobutene and Discovered Single Electron Transfer – Degenerative Transfer Living Radical Polymerization and active chlorine species in gamma-irradiated physiological solutions. He synthesized telechelic PVC and poly(alkyl acrylates), as well as block-copolymers, obtaining structural defect-free, thermostable PVC. He developed nanoprobes for diagnostics and therapy: smart self-quenched phospholipase-cleavable NIR fluorogenes; choline-mimetic fluorophores for inhibition and imaging of choline kinase. Popov published over 90 scientific papers and holds 7 US patents.

Vitaly Pronskikh is a physicist and a philosopher of science. He holds a PhD in Physics and PhD in Philosophy of Science at Moscow Institute of Physics and Technology. Until 2010, he worked as a Senior Scientist at Joint Institute for Nuclear Research, Dubna, Russia. Since then, he became Application Physicist of Modeling/Energy Deposition/Theory Department (Accelerator Physics Center) at Fermi National Accelerator Laboratory, Batavia, USA. In physics, his research is centered on particle physics (rare decays), computer modeling and simulations for the instrumentation design, nuclear physics, and nuclear energy. His area of specialization in philosophy is scientific experimentation: epistemology of modeling and simulations, history and philosophy of large research projects in big science, and epistemology of large collaborations. He is a member of Philosophy of Science Association and American Physical Society. At Fermilab, Vitaly is a member of Fermi Society of Philosophy.

Michael Rubinstein is Professor in Departments of Mechanical Engineering and Materials Science, Biomedical Engineering, Physics, and Chemistry at UNC. He received BS from Caltech in 1979 and PhD in physics from Harvard in 1983. After two years at AT&T Bell Laboratories, he joined Research Laboratories of Eastman Kodak Company for 10 years. In 1995 he moved to U of North Carolina and in 2018 he moved to Duke U. In 2003 he co-authored a textbook "*Polymer Physics*" with R. H. Colby. In 2010 he received the *Polymer Physics Prize* of the American Physical Society. In 2016 he became Distinguished Professor at Hokkaido U, in 2018 he received Bingham Medal of the Society of Rheology, and in 2019 the Soft Matter and Biophysical Chemistry Award of the Royal Society of Chemistry. Rubinstein is currently the Chair of the IUPAP Working Group on Soft Matter. His current research is in soft condensed matter physics with an emphasis on polymer physics. His scientific contributions include theories of polymer entanglements, dynamics of reversible networks, and models of charged polymers, applications of polymer physics to biological systems.

Sergei Sheiko is George A. Bush, Jr. Distinguished Professor of Chemistry at UNC and a Fellow of the American Physical Society. He obteined PhD degree in Polymer Physics at the Russian Academy of Sciences in 1991 and BS in Molecular and Chemical Physics from the Moscow Institute of Physics and Technology in 1986. He was a postdoctoral fellow at the U of Twente in The Netherlands and worked on Polymer Chemistry Habilitation at the U of Ulm in Germany. His work is in the design of novel polymeric materials with unique properties for biomedical implants, soft robotics, and enhanced oil recovery. He is currently focused on time-programmable materials with architecturally encoded physical properties.

Ekaterina Shishatskaya is Professor and Head of the Division of Medical Biology, Siberian Federal U, Krasnoyarsk and Chief Researcher of Laboratory of Chemo-Autotrophic Biosynthesis, Institute of Biophysics, SB RAS. Shishatskaya is a candidate of Medical Sciences with a degree in Transplantology and Artificial Organs from 2003; Doctor of Biological Sciences "Biotechnology, including bionanotechnology" in 2009, and Professor of the Russian Academy of Sciences since 2016. She received numerous awards and is a Laureate of the Prize of the President of Russia in 2009; State Prize of the Krasnoyarsk in education and science in 2008; UNESCO L'Oreal-UNESCO Scholarships for Young Women in Science in 2008. Her laboratory investigates basic mechanisms of interaction of biodegradable materials and products with biological structures, biocompatibility, bionanotoxicology. She is interested in guided tissue regeneration, tissue engineering, and polymeric controlled drug delivery systems.

Vladimir Shiltsev received his PhD in 1994 in accelerator and beam physics from Budker Institute of Nuclear Physics in Novosibirsk, Russia, and worked in Novosibirsk Superconducting Super Collider and DESY before joining Fermilab as a Wilson Fellow in 1996. There he led the project of beam-beam compensation with the Tevatron Electron Lenses. In 2001 he became the Head of the Tevatron Departmen and in 2007 he was appointed the inaugural Director of the Fermilab Accelerator Physics Center. His research include beam-beam effects and their compensation; beam dynamics, instabilities, space-charge effects and emittance control; beam cooling, noises and ground motion in large hadron colliders, linear e+e- colliders and muon colliders; particle collimation with electron lenses; high-power ultra fast high voltage devices and coherent synchrotron radiation effects. He authored two books and more than 350 publications. Vladimir is a recipient of numerous awards, including European Accelerator Prize in 2004 from the European Physical Society, Robert Siemann award in 2015, APS Outstanding Referee award in 2018, and George Gamow award from RASA-America in 2016. Vladimir is actively involved in science outreach and history of physics though publications, interviews, physics olympiads and lectures in the US and abroad.

Alexander Shustorovich is the owner of Pleiades Publishing a key company in the group that provides the world scientific community with access to Russia's scientific research in more than 200 titles of English-language journals on physics, mathematics, computer sciences, chemistry, biology, and earth sciences. Many of the authors published are renowned scientists in Russia and abroad.

In 2019, Pleiades Publishing and RASA-America signed a cooperation agreement to disseminate articles by Russian-speaking authors published within the Russian Library of Science program. The parties agreed to establish a Joint Editorial Council, which will invite representatives of the program's journals and the publisher, as well as members of the association. The council's objectives is the identification of cutting-edge research areas and promising scientific trends requiring instant reflection in the program; assistance in attracting specialists from among the Russian-speaking scientific diaspora or foreign scientists to work with the journals (as reviewers, science editors, and members of the editorial boards); promotion of the journals among the global scientific community (including the use of state-of-the-art publishing technologies, Open Access, SharedIt, etc.); and popularization of journals at scientific conferences, seminars, and other forms of scientific activity in which the RASA-America association members participate.

Alex Spokoyny is Assistant Professor in Chemistry and Biochemistry at UCLA and faculty member of the California NanoSystems Institute (CNSI). He received a Ph.D. degree in 2011 from Northwestern University in inorganic and materials chemistry and post-doctoral training at MIT in chemical biology until 2014. His group's research encompasses an interdisciplinary approach focusing on pressing problems in chemistry, biology, medicine and materials science with emphasis on developing new molecular cluster chemistry. Alex is a recipient of several awards including NSF career Award in 2019. Spokoyny received American Chemical Society Inorganic Young Investigator Award in 2011, International Union of Pure and Applied Chemistry (IUPAC) prize for Young Chemists in 2012, Chemical and Engineering News (C&EN) Talented 12 in 2016, Maximizing Investigator's Research Award from the NIH and Alfred P. Sloan Research Fellowship in 2017. He became a Cottrell Scholar from Research Corporation for Science Advancement in 2018.

Tatiana Tatarinova is Fletcher Jones Endowed Chair in Computational Biology and Associate Professor of Biology, University of La Verne, California. Tatiana obtained her diploma in Theoretical Physics at Moscow Engineering Physics Institute, and then received MSc in Physics at University of Utah. After working for international project lead by WHO, CDS and World Bank, she returned to academia and obtained PhD in Applied Mathematics at the University of Southern California, Los Angeles in 2006. Tatiana works on one of major challenges for contemporary bioinformatics in accurate annotation of genomic datasets and in developing algorithms for analysis of biological data; her research interests include ancient DNA analysis and museomics, plant and animal genomics, epigenetics and genome regulation. Tatiana is also 4th degree black belt in Shotokan karate, and a frontwoman for a rock band Banda TT.

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115.114.131.7 (India)
213.19.144.110 (EMEA)
103.122.166.55 (Australia)
209.9.211.110 (Hong Kong)
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