

CURRICULUM VITAE

NAME: Alexander Victorovich Kabanov
DATE OF BIRTH: March 27, 1962 (Moscow, USSR)
CITIZENSHIP: Naturalized US citizen, Russian citizen
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WEB SITES:

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<https://pharmacy.unc.edu/directory/kabanov/>
<http://kabanovlab.web.unc.edu>
<http://www.nanodds.org>



PERSONAL INFORMATION:

- Married: Marina Sokolsky-Papkov
- Children: Maria (b. 1984), Dariya (b. 1993), Natalia (b. 2002), Eitan (b. 2005), Eden (b. 2009)

EDUCATION:

Institution	Years	Degree	Field	Thesis and advisor(s)
Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, USSR	1979 – 1984	Diploma with distinction (M.S. equivalent)	Chemistry	"Modification of proteins (enzymes) with water-insoluble reagents. Study of interaction of partially hydrophobized proteins with lipid membranes", Dr. A.V. Levashov
Department of Chemical Enzymology, M.V. Lomonosov Moscow State University, Moscow, USSR	1984 - 1987	"Candidate of Chemical Sciences" (Ph.D. equivalent)	Chemical Kinetics and Catalysis	"Chemical modification of water-soluble proteins (enzymes) for imparting them the membrane-active properties" Prof. K. Martinek and Prof. A.V. Levashov

SPECIAL DEGREE (D.Sc.)¹

Specialized Scientific Council at Moscow State University recommended granting the Doctor of Chemical Sciences (D.Sc.) degree following the defense of the dissertation entitled "*Micellar systems for engineering of conjugates and complexes of biologically active polymers*" on December 4, 1990. The Highest Attestation Commission of the USSR Counsel of Ministers granted the degree on April 19, 1991.

SUMMARY:

Contribution to science. Made broad impact to nanomedicine by introducing polymeric micelles, polyelectrolyte complexes, nanogels, macrophages and exosomes for therapeutic delivery of small drugs, nucleic acids, and proteins. This work led to the first in class polymeric micelle drug to enter clinical trials.

¹ This is the highest academic qualification for a scholar in Russia/former USSR, which is usually granted after "Candidate of Chemical Sciences" (Ph.D. equivalent) and qualifies individual for a rank of a Full Professor. At the time of being granted this degree Dr. Kabanov (28) was its youngest recipient in chemistry in Soviet Union.

Mentorship. Trained 80 graduate students and postdocs half of whom are women and underrepresented minorities. 19 trainees became faculty. Was a founding PI of the NIH Center of Biomedical Research Excellence (CoBRE) "Nebraska Center for Nanomedicine" and is PI of NCI's T32 Carolina Cancer Nanotechnology Training Program (C-CNTP).

Selected Technology Transfer and Entrepreneurial Activities:

DeLAQUA Pharmaceuticals Inc.	Co-founder in 2018 with R. Jordan and R. Luxenhofer, first president, director, drug nanoparticle formulations based on poly(2-oxazolines)
BendaRx Pharma Corp.	Director since 2017, a subsidiary of SoftKemo, develops blood cancer drug
SoftKemo Pharma Corp.	Co-founder in 2016, shareholder and director, drug delivery technologies
InnovaForm Technologies, LLC	Scientific founder and partner from 2005 to 2012 with FMC Corporation and UneMed/UNMC, CSO, director, pesticide delivery technologies
Supratek Pharma, Inc.	Co-founder in 1994 with V. Alakhov & O. Romar, Licensed technology, VP for technology development, director, first polymeric micelle drug delivery company

Patents 38 issued US Patents and >100 PCT applications and issued international patents.

Publications Has 354 refereed scientific publications with over 50,000 citations to his work as measured by *Google Scholar* in January 2024; Kabanov's Hirsch Index "*h-Index*" = 115, that is he has 115 publications with 115 or more citations; see Hirsch, J. E. *Proc. Nat. Acad. Sci.* 2005, 46, 16569. Kabanov is a highly cited researcher in pharmacology & toxicology and cross-field (Clarivate Analytics). He is ranked #27 in pharmacology & pharmacy among scientists representing 2% of all scientists publishing in this subfield (>131,900) based on career-long citation impact; see Ioannidis, J.P.A. DOI: 10.17632/btchxktzyw.4.

Lectures Has given >200 plenary and invited lectures including 10 lectures at Gordon Research Conferences, and >170 invited seminars at academic institutions and companies.

Research Support Cumulative research support is >\$120 M in grants and >\$60 M in private investment and industry-sponsored R&D funding. He has been funded by the National Institutes of Health, the National Science Foundation, US Department of Defense among other foundations and agencies.

Diversity training statement: Kabanov has trained 80 graduate students and postdoctoral scientists half of whom are women and underrepresented minorities. Many of doctoral students after obtaining their degrees continued postdoctoral training in supplementary fields in Stanford, MIT, Yale, UNC, Institute Pasteur (France), Moscow State University, and other academic institutions. Nineteen past members of Kabanov laboratory hold faculty appointments ranging from assistant professors to department heads and deans. Kabanov is currently the PI of T32 Carolina Cancer Nanotechnology Training Program (C-CNTP). Under this program, he mentored three minority postdoctoral scientists, namely Dr. Elisabeth Wayne, Dr. Juan Beltran-Huarac, and Dr. Edikan Archibong Ogunnaike, all of whom are either faculty members now or in transition. He also mentored Dr. Edward Moreira Bahnsen for the NIH NHLBI K01 award. During his tenure at the University of Nebraska Medical Center, he founded the NIH CoBRE grant (P20) "Nebraska Center of Nanomedicine", a multidisciplinary center enhancing institutional biomedical research by developing faculty research capability, mentoring early career faculty, and enhancing research infrastructure. Kabanov has extensive experience in leading complex, cross-disciplinary projects and creating an inclusive, supportive ecosystem for all trainees and early career scientists.

Leadership: Widely recognized as a visionary leader in nanomedicine and drug delivery and an advocate for science and education. Has track record of major successes in gaining support for scientists on the national and international arenas. Has unique perspective in global science through ties with academic institutions and communities in United States, Europe, and Japan that is amplified by being an elected member and fellow of academies and learned societies across the world. Has held leadership roles in the academic institutions in the United States and demonstrated commitment to training and institutional support of junior faculty, and postdoctoral scientists. Successfully mentored URM students, postdocs and faculty and has advocated diversity and gender equality in science and training. Since 2008 has led organizations with multimillion dollar annual

budgets and worked closely with university's leadership, deans, directors, and department heads toward multiple faculty recruitments. He has served in leadership roles for international scientific societies, as well as board member for multiple start-up companies. He has initiated the first nanomedicine symposium series in the United States that attracted thousands of participants since 2003. Has taken public stands against the use of chemical weapons, police brutality, in support of international collaboration, and against the war. Co-authored a petition to end political persecution (Nature 2021, 591, 202 doi: <https://doi.org/10.1038/d41586-021-00594-y>) joined by hundreds of academics across the globe and declarations against the war and in support of scholars affected by the Russian aggression in Ukraine.

ELECTION AS MEMBER OF ACADEMIES / FELLOW OF LEARNED SOCIETIES

- **Fellow**, American Association for the Advancement of Science, elected 2021
- **Corresponding member**, Russian Academy of Sciences, elected 2019
- **Fellow**, Controlled Release Society, elected 2018
- **Fellow**, National Academy of Inventors, elected 2017
- **Fellow**, American Institute for Medical and Biological Engineering, elected 2015
- **Member**, *Academia Europaea* (The Academy of Europe), elected 2013

OTHER AWARDS AND HONORS:

- Founders Award, The Controlled Release Society, 2022
- Acknowledgement "for considerable contributions to science and perennial conscientious work", Ministry of Science and Highest Education of the Russian Federation (order No. 3 of January 29, 2020).
- Life Sciences award (Outstanding research from a university), Triangle Business Journal 2018
- George Gamow award for "cycle of works that initiated the use of polymeric nanomaterials for the delivery of drugs and nucleic acids to the cell", Russian-American Science Association, 2017
- Highly Cited (Clarivate Analytics)
 - Cross-field - 2023
 - Pharmacology & Toxicology – 2014 (Thompson Reuters), 2018, 2021
- Thompson Reuters Russian Highly Cited Researcher Award (Life Sciences), Clarivate Analytics, 2016
- RUSNANOPRIZE short list for being first to implement polymeric micelle technology into mass production (with Kazunori Kataoka, Min-Hsyo Seo and Samyang Biopharmaceutical Corporation), 2016
- Dresden Senior Fellow Award, 2015
- John G. Wagner Memorial Lectureship Award in Pharmaceutical Sciences, University of Michigan, Ann Arbor, 2014
- Winner of the first open public competition for the grants of the Government of Russian Federation to conduct research under direction of leading scientists in institutions of highest education ("MegaGrant")², 2010
- Professor of Changhai Hospital, Second Military Medical University, Shanghai, China, 2010
- Scientist Laureate³, University of Nebraska Medical Center, 2009
- Visiting Professor of Tongji Medical School, HUST, China, 2008
- Outstanding Research and Creative Activity Award (ORCA)⁴, University of Nebraska 2007
- University of Nebraska Medical Center Distinguished Scientist, 2006

² Also known as Russian "Megagrant".

³ The highest honor to a researcher in the UNMC.

⁴ The highest University-wide award honoring excellence and distinction in research.

- University of Nebraska Pioneer, 2004
- NSF Special Creativity Award, 2002
- NSF CAREER Award, 1995
- USSR Medal "For Valiant Labor", signed by President Mikhail Gorbachev, 1991
- Lenin Komsomol Prize⁵ for the cycle of work entitled "Physicochemical studies of regulation of membrane biocatalysts and receptors", 1988
- Lenin scholar (graduate), M.V. Lomonosov Moscow State University, 1984-1987
- Lenin scholar (undergraduate), M.V. Lomonosov Moscow State University, 1983-1984
- Morozov scholar (undergraduate), M.V. Lomonosov Moscow State University, 1982-1983

ACADEMIC APPOINTMENTS:

- Professor (adjunct), the UNC/NCSU Joint Department of Biomedical Engineering, University of North Carolina at Chapel Hill, NC, 2014-present
- Mescal Swaim Ferguson Distinguished Professor, Division of Pharmacoengineering and Molecular Therapeutics, UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, NC, 2012-present.
- Director, Center for Nanotechnology in Drug Delivery, UNC Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, NC, 2012-present
- Co-Director, Carolina Institute for Nanomedicine, University of North Carolina at Chapel Hill, NC, 2012 - present.
- Professor (adjunct), College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, 2012 - present.
- Professor and Director (secondary appointment), Laboratory of Chemical Design of Bionanomaterials, Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, Russia, 2010 – 2023.
 - 2022 – 2023 suspended appointment in response to Russian aggression in Ukraine, and then resigned.
- Professor (adjunct), Russian State Medical University, Moscow, Russia, 2009-2022.
- Professor (adjunct), Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, Russia, 2002-2010.
- Director, National Institutes of Health Center for Biomedical Research Excellence (CoBRE) Nebraska Center for Nanomedicine, 2008-2012.
- Co-Director, Center for Clinical and Translational Research, University of Nebraska Medical Center, Omaha, NE, 2008-2012.
- Professor (courtesy), Department of Genetics, Cell Biology and Anatomy, University of Nebraska Medical Center, Omaha, NE, 2005-2012.
- Director, Center for Drug Delivery and Nanomedicine, University of Nebraska Medical Center, Omaha, NE, 2004-2012.
- Parke-Davis Endowed Chair in Pharmaceuticals, Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, 2004-2012.
- Professor (courtesy), Eppley Institute for Cancer Research, University of Nebraska Medical Center, Omaha, NE, 2001-2012.
- Professor, Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, 2001-.

⁵ The highest award for young scientists in the former USSR.

- Member, UNMC/Eppley Institute Cancer Center, Omaha, NE, 1995-.
- Graduate College Faculty Fellow, University of Nebraska, Omaha, NE, 1995-.
- Associate Professor, Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, 1994-2001, tenured 1998.
- Leading Research Fellow, Department of Chemical Enzymology, Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, Russia, 1991-1998.
- Head (half-time), Department of Biopolymer Chemistry, All-Russia Research Center of Molecular Diagnostics and Therapy, Moscow, Russia, 1992-1994.
- Head (half-time), Department of Bioregulation, Institute of Applied Molecular Biology, All-Union Research Center of Molecular Diagnostics and Therapy, USSR Ministry of Health, Moscow, USSR, 1991.
- Senior Research Fellow, Department of Chemical Enzymology, Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, USSR, 1990-1991.
- Head (half-time), Laboratory of Biopolymer Chemistry, Institute of Applied Molecular Biology, USSR Ministry of Health, Moscow, USSR, 1988-1991.
- Research Fellow, Department of Chemical Enzymology, Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, USSR, 1988-1990.
- Junior Research Fellow, Department of Chemical Enzymology, Faculty of Chemistry, M.V. Lomonosov Moscow State University, Moscow, USSR, 1987-1988.

ENTREPRENEURIAL EXPERIENCE:

- DelAQUA Pharmaceuticals Inc., Chapel Hill, NC
 - chairman BOD (2022-present)
 - director and interim president (2018-2022)
 - co-founder and co-inventor of the core technology (2018)
- BendaRx Pharma Corp., Montreal, Canada, director (2017-present)
- SoftKemo Pharma Corp., Montreal, Canada, shareholder and director (2016-present)
- Ostrea Bio., Chapel Hill, NC, co-founder, director (2017-2019)
- NeuroNano Pharma Inc., Chapel Hill, NC, scientific founder, chairman BOD (2011-2019)
- InnovaForm Technologies, LLC, Philadelphia, PA (2005-2012)
 - director and CSO
 - scientific founder & partner (other partners UneMed/UNMC and FMC corporation)
- Supratek Pharma Inc., Montreal, Canada
 - director (1994, 1996-1997, 2008-2016)
 - chairman of the SAB (1995-2008)
 - vice president, technology (1994), intellectual property (1995-1998)
 - scientific co-founder and co-inventor of the core technology (1994)
- Moscow Institute of Biotechnology Inc., Moscow, Russia and Montreal, Canada
 - director, vice president for technology transfer (1992-1994)
 - co-founder, director of research (1992-1993)

LEARNED SOCIETIES AND PROFESSIONAL ASSOCIATIONS:

- Sigma Xi, 2021 – member
- Russian Academy of Sciences (RAS), 2019 – corresponding member (elected)

- National Academy of Inventors (NAI), 2017 – fellow (elected)
- American Association for the Advancement of Science (AAAS), 2017-present, 2021 – fellow (elected)
- American Association of Pharmaceutical Sciences (AAPS), 1996-1999, 2016-present
- American Institute for Medical and Biological Engineering (AIMBE), 2014 – fellow (elected)
- Russian American Science Association (RASA), Boston, MA, 2014 – present, member, honorary member (2021)
- *Academia Europaea* (The Academy of Europe), 2013 – member (elected)
- American Chemical Society (ACS), 1994-present (Polymer Division, 1996-; Division of Polymer Materials Science and Engineering, 1997-)
- American Society for Nanomedicine (ASNM), 2009-2011
- Controlled Release Society (CRS), 2001-present, honorary member (2022), 2018 – fellow (elected), 2019-2022 director-at-large (elected), 2022-2023 chair of the College of Fellows (appointed).
- American Society of Gene Therapy (ASGT), 2001
- American Association of Colleges of Pharmacy (AACP), 1994-1995
- The New York Academy of Sciences, 1994-1995
- Russian Immunology Society, 1989-1993
- Russian Biochemical Society (Moscow section), 1986-1993
- D. I. Mendeleev Chemical Society, 1980-1993

SERVICE - CONSULTING, SCIENCE ADVOCACY, EDITORIAL AND REVIEW:

a. National/International

- Member, T-ivariant (<https://www.t-invariant.org/en/>) Coordinating Council, 2023–present
- Jury member, Blavatnik National Awards, 2022
- Member, Grants Council of the Government of Russian Federation, 2018–2022. Resigned in response to Russian aggression in Ukraine, March 2022.
- Member, Scientific-technological Council at the Presidium of the Board of Trustees of the Educational foundation “Talent and Success”, 2018-2019.
- Scientific Advisor & Workshop participant on Convergence: The Future of Health report, Cambridge, MA, 2016 and the letter to the new United States Administration (Science 10 Feb 2017: 355, 6325, pp. 589 DOI: 10.1126/science.aam8563).
- Conceptualized and spearheaded a proposal for Presidential Program of Support of Research to enhance research infrastructure in Russia through support of postdoctoral scientists and junior investigators; the Program has been implemented by the Russian Science Foundation (> 60 Bln. Rub. in 2017-2023).
- Member, RAS working group of on Convergent technologies, 2016.
- Member, Science Council of the Ministry of Education and Science of Russian Federation, 2015-2017, reappointed 2017-2018.

b. Scientific Societies

- Controlled Release Society
 - Chair of the College of Fellows sub-committee (appointed) 2022-2023
 - Director-at-large (elected) 2019-2022
 - Member, Board of Scientific Advisors (elected), 2003-2006
- Russian American Science Association, Boston, MA (501(c)3)
 - Director (elected), CEO and Treasurer (2022-).

- Director (elected), Secretary and Treasurer (2021)
- President (elected), 2018-2020 (President-elect, 2017)
- Member, Coordinating Committee, 2014-present
- American Society of Gene Therapy, Non-Viral Gene Transfer Vectors Committee, 2003-2006.

c. Industry consulting (partial)

- Has served as an expert and consultant in various IP matters.
- Mersana Therapeutics, Inc., Boston, MA, USA, consultant, 2009.
- FMC Corporation, Philadelphia, PA, USA, consultant, 2005-2011.
- Infoscitex Corp., Waltham, MA, USA, consultant, 2005-2009.
- EIC Laboratories, Inc., Norwood, MA, USA, consultant, 2001-2005, 2009.
- Hunton & Williams, LLP, New York, NY, USA, consultant, 2006
- Supratek Pharma, Inc., Montreal, Canada, consultant, 1994-2003.

d. Academia advising⁶

- Member, Advisory Committee for Slavic, Eurasian and East European Studies, 2021-2023.
- Chair, External Advisory Board, NIH Center for Biomedical Research Excellence (CoBRE) "Center for Targeted Therapeutics (CTT)", 2014-present.
- Member, International Academic Council, Novosibirsk State University (providing strategic advice on the University scientific and educational development to the Rector), 2019 - 2021.
- Chair, External Advisory Board, NIH (CoBRE) "Nebraska Center of Nanomedicine", 2012-present.
- Site visits of the World Premier International Research Center initiative (WPI Program) for Kyoto University Institute for Integrated Cell-Material Sciences (iCeMS), Japan Society for Promotion of Science, July 14-15, 2011; July 25-26, 2012, September 2013, September 2014, September 2016.
- Academic Program Review, USC School of Pharmacy, April 29 – May 2, 2014
- Science Foundation Ireland site visit for the Irish Drug Delivery Network (IDDN) Strategic Research Cluster (SRC), Sep. 6-8, 2010.
- Member, Scientific Advisory Board, Center for Drug Delivery Research (CDDR) at Polytechnic University-SUNY/Downstate, New York, 2006
- Member, Scientific Council and Board of Directors, Russian Research Center of Molecular Diagnostics and Therapy, Moscow, Russia, 1992-1994.

e. Grants review (partial)

- NIH ad-hoc panels: 2017/05 ZCA1 TCRB-D (M3) S NCI R21 and R03 SEP-8; 2016/10 ZGM1 RCB-A (CI) COBRE Phase 1; 2016/10 ZCA1 TCRB-6 (O1) S IRCN; 2016/05 ZCA1 TCRB-D (M1) S IRCN; 2015/10 ZCA1 RPRB-C (O2) S; 2015/10 ZCA1 TCRB-9 (O1) R; 2015/05 ZCA1 SRB-C (M3) S; 2015/05 ZCA1 SRB-2 (M1) S; 2010/2 ZCA1 GRB-S (M1), NCI Centers of Cancer Nanotechnology Excellence I; 2004 ZAI1-LR-A-S1 (50) U192004; 2003 ZRG1 SSS2 (50), R01/R21 (Chair); 2002, ZRG1 SSS-5 (01) P41; 1998/1999 ZRG1 CVB Hematology-1 SBIR/STTR.
- NIH Biomaterials and Biointerfaces Study Section, Chair (2006-2008), Chartered Member (2004-2006), ad-hoc (2003-2004).
- NSF ad-hoc panels: 2003 Biotechnology and Biochemical Engineering CAREER; 2001 Division of Material Research/Polymers CAREER; 1998 Biochemical Engineering and Biotechnology panel for CAREER awards.

⁶ See also administrative service below.

- Grant reviewer to Russian Science Foundation (2016); Canada Foundation for Innovation (2006); Australian Research Council (2005); French Association Against Myopathies (2003); European Science Foundation (2002); Israel Science Foundation (2002); USA NSF (Division of Material Research, Division of Bioengineering and Environmental Systems) (1995-2015); Petroleum Research Fund (1998, 2000, 2002); UNMC Seed Grants (1996, 1997).

f. Editorial boards and journal peer-review:

- Editor-in-Chief, Reviews and Advances in Chemistry (ReACh), formerly Review Journal of Chemistry, Pleiades (USA), 2019-present.
- Member, Editorial Board, "Priroda" (popular natural science journal of the Russian Academy of Sciences)
- Member, Editorial Council, Polymer Science, series A,B,C (Высокомолекулярные Соединения, Серии А, Б, С), 2019-.
- Associate Editor/Expert Review Panel, Nanomedicine, Future Medicine, 2009-.
- Member, Editorial Board, Journal of Controlled Release, 1997-.
- Member, Editorial Board, Advanced Drug Delivery Reviews, 2000-.
- Member, Editorial Board, Section Editor in Drug Delivery and Developmental Therapeutics, Journal Neuroimmune Pharmacology, 2006-2012. Member, Honorary Editorial Board, Nanomedicine: Nanotechnology Biology and Medicine, Elsevier, 2009; Member, Editorial Advisory Board, Bioconjugate Chemistry, 2002-2012; Member, Editorial Board, PharmSci, 1999-2004; Journal of Bioactive and Compatible Polymers, 1998-2010; International Journal of Nanomedicine, 2005-2010; Journal of Pharmaceutical Sciences, 2004-2009.
- Reviewer for Angewandte Chemie, Antisense and Nucleic Acid Drug Development, Biochemical Pharmacology, Biochimica et Biophysica Acta, Bioconjug. Chem., Biomacromolecules, Biopolymers, BioTechniques, British Journal of Pharmacology, Critical Reviews in Therapeutic Drug Carrier Systems, Gene Therapy, Human Gene Therapy, Industrial and Engineering Chemistry Research, Langmuir, Macromolecules, Molecular Pharmacology, Molecular Therapy and Genomics, Nature Biotechnology, Pharmaceutical Research, Pharmaceutical Science and Technology Today, Proceedings of National Academy of Sciences USA, Science Advances, Journal of American Chemical Society, Journal of Bioactive and Compatible Polymers, Journal of Biomaterials Science, Journal of Biomedical Materials Research, Journal of Colloid and Interface Science, Journal of Controlled Release, Journal of Drug Targeting and Journal of Pharmaceutical Sciences.

g. Conferences organized

- Vice-chair (elected, upcoming) Gordon Research Conference (GRC) Biotherapeutics and Vaccines Development, 2024.
- Chair, Program committee, 4th International Scientific Conference "Science of the Future", Sochi, Russia, May 14-17, 2019.
- Chair, GRC "Cancer Nanotechnology", Mt. Snow Resort, VT, Aug. 2017.
- Founder and Director, Carolina Nanoformulation Workshop, Chapel Hill, NC, 2016, 2017, 2018, 2020
- Co-Chair, Program committee, 2nd International Scientific Conference "Science of the Future", Kazan, Russia, Sep 20-23, 2016
- Vice-chair, GRC "Cancer Nanotechnology", Mt. Snow Resort, VT, Aug. 2015.
- Co-chair (with Kam Leong), 12th International Nanomedicine and Drug Delivery Symposium (NanoDDS'14), Chapel Hill, NE, Oct. 6-8, 2014.
- Chair, Program committee, 1st International Scientific Conference "Science of the Future", Sept. 17-20, 2014, St. Petersburg, Russia,

- Program committee, XII International Conference on Nanostructured Materials (NANO 2014), July 13-18, 2014 Moscow, Russia
- Co-chair (with Ray Ottenbrite), 10th International Symposium on Frontiers in Biomedical Polymers, Vancouver, Canada, June 3-6, 2013.
- Organizing committee, 9th International Nanomedicine and Drug Delivery Symposium (NanoDDS'11), Salt Lake City, UT, Oct. 14-16, 2011.
- Co-chair (with Tatiana Bronich), 8th International Nanomedicine and Drug Delivery Symposium (NanoDDS'10), Omaha, NE, Oct. 5-6, 2010.
- Organizing committee, 7th International Nanomedicine and Drug Delivery Symposium (NanoDDS'09), Indianapolis, IN, Oct. 5-6, 2009.
- Organizing committee: 1st International Summer School - Nano2009. Nanomaterials and Nanotechnologies in Living Systems. Moscow Region, Russia, June 29 – July 4, 2009.
- International Advisory Board: 2nd European Summer School in Nanomedicine, Quinta Da Marinha Hotel, Lisbon, Portugal, June 12-16, 2009.
- Co-chair (with Christine Allen and Kazunori Kataoka), 6th International Nanomedicine and Drug Delivery Symposium (NanoDDS'08), Toronto, Canada, 2008.
- Organizer, Special Course in Nanopharmacology and Nanomedicine, University of Nebraska Medical Center, Omaha, NE, June 4-5, 2008.
- Organizer, USA - Japan Mini-Symposium on Materials Medicine and Nanopharmacology, University of Nebraska Medical Center, Omaha, NE, March 25, 2008.
- Scientific Advisory Board, 7th International Symposium on Frontiers in Biomedical Polymers, Ghent, Belgium, 2007.
- Bioactive Materials Program Chair for the 34th Controlled Release Society Annual Meeting, 2007.
- Chair, 4th International Nanomedicine and Drug Delivery Symposium (NanoDDS'06), Omaha, NE, 2006.
- Co-chair (with Thomas Kissel), GRC "Drug Carriers in Medicine and Biology", Big Sky, MT, August 20-25, 2006.
- Co-chair (with Hamid Ghandehari), 3rd International Nanomedicine and Drug Delivery Symposium, Baltimore, MD, 2005.
- Co-chair (with Kalle Levon), 2^d Annual Symposium on Nanomedicine and Drug Delivery, Brooklyn, NY, 2004.
- Chair, US-Japan Minisymposium on Nanomedicine and Drug Delivery, Omaha, NE, 2003.⁷
- Organizational Committee, 5th International Symposium on Polymer Therapeutics: from Laboratory to Clinical Practice, Cardiff, UK, 2002.
- Scientific Advisory Board, International Symposium on Polymer Therapeutics, Nara, Japan, 2001.
- Scientific Advisory Committee, 4th International Symposium on Polymer Therapeutics, From Laboratory to Clinical Practice, London, UK, 2000.
- Co-organizer, Symposium on "Materials Design and Formulation for Drug and Gene Delivery" at the ACS 219th National Meeting, San Francisco, CA, 2000.
- Co-organizer, 4th International Biorelated Polymers Symposium, at the ACS 220th National Meeting, Washington, D.C, 2000.
- International Scientific Advisory Board 3rd International Symposium on Frontiers in Biomedical Polymers Including Polymer Therapeutics, Lake Biwa, Shiga, Japan, 1999.

⁷ Initiated the International Nanomedicine and Drug Delivery Symposium series (NanoDDS): nanodds.org.

ADMINISTRATIVE SERVICE (other than administrative appointments):**UNC Eshelman School of Pharmacy:**

- Member, Full Professors Committee, 2012-.
- Member, Division Chair Search Committee, 2015.
- Member, Faculty Search Committee, 2013.
- Member, Scholarship Committee, 2013.
- HELPRx Committee and Global Research Subcommittee, 2013.

UNC-Chapel Hill:

- Member, Task Force on the Commercialization of Technology, 2012.

UNMC College of Pharmacy:

- Chair, Nanomedicine Faculty Search Committee, 2008-2009.
- Chair, Search Committee for Genomics Senior Faculty Recruitment, 2003-2004.
- Member, Educational Technology Committee, 1999-2002.
- Member, Pharmaceutical Sciences Graduate Program Committee, 1999-2003 (reelected 2000).
- Member, Search Committee for Pharmaceutical Sciences Department Chair, 1999-2002.
- Member, Search Committee for faculty position in Membrane Protein Biophysics, 1999.
- Chair, Search Committee for faculty position in Drug Delivery, 1997-1998.
- Member, Search Committee for faculty position in Pharmaceuticals, 1996-1997.
- Member, Search Committee for faculty position in Drug Delivery, 1996-1997.
- Member, Grade Appeals, 1995-1999.
- Member, Equipment Committee, 1995-1996.
- Member, Student Discipline Committee, 1995-1996.

UNMC:

- Member, Search Committee for UNMC Vice Chancellor for Research, 2010-2011.
- Member, Search Committee for College of Pharmacy Dean, 2007.
- Member, Internal Advisory Board for Center of Neurovirology and Neurodegenerative Disorders, 2004.
- Member, Internal Advisory Board for UNMC-Eppley Cancer Center, 2003-2012.
- Member, UNMC Faculty Senate Intellectual Property Committee, 2003-2006.
- Member, UNMC Core Facility Advisory Council, 2002 - 2006.
- Member, UNMC Research Development Board, 1999 - 2003.
- Member, UNMC Technology Evaluation and Protection Committee, 1999 - 2003.
- Member, UNMC Faculty Senate, August 1997 - 2003 (reelected 2000).
- Member, UNMC Senate Membership & Elections Committee, 1998-1999.
- Member, UNMC Senate Faculty Recruitment and Retention Committee, 1999.
- Ad-hoc, UNMC Faculty Senate Committee for Conflict-of-Interest Policy Review, 2002.

Other:

- Member, SkolTech Biomedical Centers for Research Education and Innovation (CREI) Director's search, 2012.
- Member, University of Nebraska Outstanding Research and Creative Activity (ORCA) Award Committee, 2009-2011.

PUBLICATIONS:⁸Original articles:

1. Attia MF, Ogunnaike EA, Pitz M, Elbaz NM, Panda DK, Alexander-Bryant A, Saha S, Whitehead DC, Kabanov A (2024) Enhancing drug delivery with supramolecular amphiphilic macrocycle nanoparticles: selective targeting of CDK4/6 inhibitor palbociclib to melanoma. *Biomater Sci.* 12(3):725-737. doi: 10.1039/d3bm01888a. PMID: 38099834.
2. Yamaleyeva DN, Makita N, Hwang D, Haney MJ, Jordan R, Kabanov AV (2023) Poly(2-oxazoline)-based polyplexes as a PEG-Free plasmid DNA delivery platform. *Macromol. Biosci.* e2300177. doi: 10.1002/mabi.202300177. <https://onlinelibrary.wiley.com/doi/10.1002/mabi.202300177> PMID: 37466165.
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59. Improvements in polymer compositions for chemotherapy and methods of treatment using the same, International Application No.: PCT/US1997/014218 (Pub. No. [WO/1998/007434](#)); National patents: [AU3978497](#); [EP939640](#).
60. Fluorinated copolymeric pharmaceutical adjuncts, International Application No.: PCT/US1997/016785 (Pub. No. [WO/1998/0130690](#)); National patents: [AU6358898](#).
61. Compositions for delivery of biological agents and methods for the preparation thereof, International Application No.: PCT/US1998/012139 (Pub. No. [WO/1998/056334](#)); National patents: [EP1005324](#).
62. Compositions for delivery of biological agents and methods for the preparation thereof, International Application No.: PCT/US1998/012138 (Pub. No. [WO/1998/056348](#)).
63. Methods of identifying biological agents compositions, International Application No.: PCT/US1998/016300 (Pub. No. [WO/1999/008112](#)); National patents: [EP1005651](#).
64. Copolymer compositions for oral delivery, International Application No.: PCT/US1999/002538 (Pub. No. [WO/1999/039731](#)); National patents: [AU2496199](#), [EP1053010](#).
65. Novel peptide copolymer compositions, International Application No.: PCT/US1999/004218 (Pub. No. [WO/1999/043343](#)); National patents: [AU2792799](#), [EP1056469](#).
66. Polynucleotide compositions, International Application No.: PCT/US1999/004218 (Pub. No. [WO/1999/00605500](#)); National patents: [AU8680698](#), [EP1003527](#).
67. Nanogel networks and biological compositions thereof, International Application No.: PCT/US1999/019690 (Pub. No. [WO/2000/013677](#)); National patents: [AU5789699](#).
68. Copolymer compositions for treating viral infections, International Application No.: PCT/US1999/027299 (Pub. No. [WO/2000/028994](#)); National patents: [AU017333](#)
69. Polynucleotide compositions for intramuscular and intradermal administration, International Application No.: PCT/US2000/000309 (Pub. No. [WO/2000/047186](#)); National patents: [AU029608](#).
70. Compositions and methods for inducing activation of dendritic cells, International Application No.: PCT/US2001/013921 (Pub. No. [WO/2001/083698](#)).
71. Treatment of autoimmune, proliferative and inflammatory diseases with compositions of nonionic copolymers, International Application No.: PCT/US2001/015265 (Pub. No. [WO/2001/087234](#)).
72. Nanogel networks including polyion polymer fragments and biological agent compositions thereof, International Application No.: PCT/US2002/036988 (Pub. No. [WO/2003/082348](#))

73. Pesticide delivery system, International Application No.: PCT/US2007/000552 (Pub. No. WO/2007/081961).
74. Pesticide delivery system, International Application No.: PCT/US2007/000559 (Pub. No. WO/2007/081965).
75. Pesticidal aggregates, International Application No.: PCT/US2007/087398 (Pub. No. WO/2008/076807).
76. Compositions for protein delivery and methods of use thereof, International Application No.: PCT/US2008/063213 (Pub. No. WO/2008/141155).
77. Polymeric delivery systems for active agents, International Application No.: PCT/EP2009/004655 (Pub. No. WO/2009/156180).
78. Protein-poly(2-oxazoline) conjugates for enhanced cellular delivery and transport across biological barriers, International Application No.: PCT/US2011/031542 (Pub. No. WO/2011/127256).
79. Compositions and methods for the treatment of cancer, International Application No. PCT/US2011/050518 (Pub. No. WO2012/031293).
80. Compositions and methods for the delivery of therapeutics, International Application No.: PCT/US2011/058929 (Pub. No. WO/2012/061480).
81. Water-soluble fullerene formulations and methods of use thereof, International Application No.: PCT/US2012/021234 (Pub. No. WO/2012/097245).
82. Drug delivery compositions and methods, International Application No.: PCT/US2012/032128 (Pub. No. WO/2012/138730).
83. Nanozyme compositions and methods of synthesis and use thereof, International Application No.: PCT/US2012/039325 (Pub. No. WO/2012/162490). Granted in Europe, Russia and Australia.
84. Method of decreasing intra-ocular pressure. Russian Patent Application 2011147704. Patent approved 07.08.2012.
85. Nanosized enzyme biocatalyst for detoxification of phosphororganic compounds *in vivo*. Russian Patent Application 2012139201.
86. Pharmaceutical composition for local administration during inflammatory diseases of the eye and methods of its use. Russian Patent Application 2012130852.
87. A hydrolase of peptidoglycane, expression vector containing DNA fragment encoding a hydrolase of peptidoglycane, producing bacteria and method of microbiological synthesis of hydrolase of peptidoglycane, Russian Patent Application 2012152156.
88. A method for imaging of gliomas using magnetic nanoparticles of iron oxide conjugated to the antibodies to the vascular endothelium growth factor using MRI in SWI mode. Russian Patent Application 2012153952.
89. A method of control of biochemical reactions. Russian Patent Application 2012155425.
90. Polymeric delivery systems for active agents, Russian Patent # 2523714; Japan Patent # 5671457; China Patent # ZL 2009 80123536.X (Kabanov A.V., Jordan; R. Luxenhofer; R.)

LECTURES & ORAL PRESENTATIONS:**Lectures at Gordon Research Conferences (GRC)**

1. Nanoformulations for Immuno-Chemotherapy of Cancer, GRC Biotherapeutics and Vaccines Development, Ventura, CA, March 31, 2022.
2. Super-high-capacity polymeric micelles, GRC Cancer Nanotechnology, West Dover, VT, June 25, 2019. Chair R. Satchi-Fainaro.
3. Nanozymes for protein delivery to the brain, GRC Barriers of the CNS. Bridging Barriers to Treat CNS Disease, Colby-Sawyer College, New London, NH, June 20, 2012. Chair Q. Smith.
4. Polymer micelles from bench to bedside, GRC Drug Carriers in Biology and Medicine, Waterville Valley Resort, Waterville Valley, NH, Aug. 16, 2010. Chairs Patrick S. Stayton & Philip S. Low.
5. Polyion complexation and delivery, GRC Macromolecular Materials, Ventura, CA, Jan. 12, 2009. Chair Darrin J. Pochan.
6. Charge-driven self-assembly of nanoformulations, GRC Drug Carriers in Biology and Medicine, Big Sky Resort, Big Sky, MT, Aug. 21, 2006. Chairs Thomas Kissel & Alexander V. Kabanov.
7. Polymer genomics, GRC Drug Carriers in Biology and Medicine, Big Sky Resort, Big Sky, MT, Sep. 6, 2004. Chairs Peter D. Senter & Jindrich Kopecek.
8. Pluronics as CNS drug delivery systems, GRC Barriers of the CNS, Tilton School, Tilton, NH, June 27, 2002. Chair David J. Begley.
9. Block ionomer complexes for controlled drug delivery, GRC Ion Containing Polymers, Salve Regina University, Newport, RA, June 23, 1999. Chairs Robert K. Prud'Homme & William M. Risen.
10. Nucleotide-polymer complexes, GRC Drug Carriers in Biology and Medicine, Ventura, CA, Feb. 26, 1996. Chairs Randall J. Mersny & Theresa M. Allen

Plenary and Invited Lectures at other National and International Meetings:

11. Towards Translation of Superhigh-Capacity Polymeric Micelles for Chemo/immunotherapy of Cancer, ACS Fall Meeting 2023, August 13-17, 2023.
12. High-capacity polymeric micelles for chemo/immunotherapy of cancer (plenary), 2022 Annual Meeting & International Conference of the KSPST, Seoul, South Korea, Dec. 1, 2022.
13. Convergence of polymers and bioactive molecules in the context of nanomedicine (CRS Founders award), Controlled Release Society 2022 Meeting and Exposition, Montreal, Canada, Jul. 12, 2022
14. Morphology, partitioning and pharmacological performance in polymeric micelles, ACS 2022 Spring Meeting: Synthetic Amphiphiles and Formulations for the Delivery of Drugs, Nucleic Acids and Proteins, San Diego, CA, March 23, 2022.
15. Morphology, partitioning and pharmacological performance in polymeric micelles, 18th International Symposium on Recent Advances in Drug Delivery Systems, Salt Lake City, UT, February 23-24, 2022
16. Morphology, partitioning and pharmacological performance in polymeric micelles, 1st Advances in Polymeric Micelles, University of Coimbra, remote, Jan. 24, 2022
17. Nanomedicine today and tomorrow, Congress of Young Scientists, Sochi, Russia, Dec. 10, 2021.
18. Toward translation of nanoformulated paclitaxel-platinum combination, 2021 Annual Principal Investigators Meeting, NCI Alliance for Nanotechnology in Cancer, remote, Oct. 18, 2021.
19. Hyperloaded polymeric micelles for chemo and immunotherapy, 12TH PBP World Meeting (World Meeting on Pharmaceuticals, Biopharmaceutics and Pharmaceutical Technology), remote, May 12, 2021
20. On the role of macrophages in gene transfer, 2020 RASA Global Meeting, remote, Dec. 6, 2020.

21. Super-high-capacity polymeric micelles for cancer therapeutics ...and Few words about Covid-19 therapeutics, Virtual European Polymer Conference, remote, Sep 18, 2020.
22. Ultra-high capacity nanoformulations of injectable and aerosolized Remdesivir, PharmAlliance, remote, Sep. 17, 2020.
23. Super-high-capacity polymeric micelles for cancer therapeutics ...and Few words about Covid-19 therapeutics, 11th International Congress "Biomaterials and Nano-biomaterials: Recent Advances Safety – Toxicology, remote, Jul 22, 2020.
24. Unmet drug delivery needs in antiviral therapy of COVID-19, 2020 CRS Virtual Annual Meeting, remote, Jun 29 - Jul 2, 2020.
25. The problem of drug delivery in the therapy of coronavirus infection COVID-19, "Coronavirus - a Global Health Challenge", Assembly of the medical and biological sciences section of the Russian Academy of Sciences May 6, 2020.
26. Super-high-capacity polymeric micelles for cancer therapeutics, International Symposium on Biomedical Materials for Drug/Gene Delivery, In honor of 80th Birthday of Prof. Jindřich Kopeček, Salt Lake City, Feb. 7, 2020.
27. Super-high-capacity polymeric micelles for cancer therapeutics, 2019 Annual Principal Investigators Meeting, NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, Sep 26, 2019.
28. Super-high-capacity polymeric micelles for cancer therapeutics, the 17th Nanomedicine and Drug Delivery Symposium (NanoDDS), Boston, MA, Sep 22, 2019.
29. Super-high-capacity polymeric micelles for cancer therapeutics, the International Conference "Catalysis and Organic Synthesis" (ICCOS-2019), Moscow, Russia, Sep 19, 2019.
30. Super-high-capacity polymeric micelles for cancer therapeutics, 258th ACS National Meeting, San Diego, CA, Aug 28, 2019.
31. Exosomes for CNS therapeutics, 2019 Controlled Release Society Annual Meeting, Valencia, Spain, July 23, 2019.
32. Why there is no "Pill for Cancer" and what shall we do about it? Science of the Future, Sochi, Russia, May 16, 2019.
33. Hyperloaded poly(2-oxazoline) micelles as drug carriers for cancer therapy, Riyadh, Saudi Arabia. Nov 08, 2018.
34. Ultra-high-capacity polymeric micelles as drug carriers for cancer therapy, 2018 Annual Principal Investigators Meeting, NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, Oct 09, 2018.
35. Ultra-high-capacity polymeric micelles as drug carriers for cancer therapy, ChemTrends 2018, Moscow, Russia, Sep 27, 2018.
36. Polymeric micelles, polyion complexes, cells and exosomes for drug delivery, International Conference on Advanced Structural and Functional Materials, Krakow, Poland, Aug 22, 2018.
37. Biomedical applications of polymeric micelles and polyion complexes, 253rd National Meeting of the American Chemical Society, New Orleans, LA Mar 18, 2018
38. Polymeric micelles at clinical stage, 2019 Controlled Release Society Annual Meeting, New York, NY, Jul 27, 2018
39. Polymeric micelles and polyion complexes as foundation of current nanomedicine, 2nd All-Armenian Scientific Conference, Yerevan, Armenia, Nov 11, 2017
40. Polymeric micelles - A clinical nanomedicine technology, 2nd International conference, "Biotechnology of New Materials – Environment – Quality of Life", Krasnoyarsk, Russia, Sep 28, 2017

41. Polymeric micelles and polyion complexes as foundation of current nanomedicine, 8th International Conference "Biomaterials and Nanobiomaterials: Recent Advances, Safety-Toxicology and Ecology Issues" Including Russian-Hellenic Workshop and School of Young Scientists, Crete, Greece, May 08, 2017.
42. Polymeric micelles and polyion complexes as foundation of current nanomedicine, 3rd International Conference of Biomaterials Science, Tokyo, Japan, Nov 28, 2016.
43. Nanomedicine and targeted drug delivery, Modern Problems of Polymer Science, Tashkent, Uzbekistan, Nov 14, 2016.
44. Nanomedicine and targeted drug delivery, 5th Congress of Biochemists of Russia, Sochi, Russia, Oct 8, 2016.
45. Nanomedicines for CNS Delivery of Polypeptides, 13th Nanomedicine and Drug delivery Symposium (NanoDDS), Baltimore, MD, Sep 17, 2016.
46. Very High-Capacity Polymeric Micelles for Drug Delivery, Israel Chapter of Controlled Release Society, Maalot Tarsicha, Western Galilee, Israel, Sep 15, 2016.
47. Biomedical applications of nano-sized polyion complexes, 80th Prague Meeting on Macromolecules – Self-assembly in the world of polymers, Prague, Czech Republic, Jul 12, 2016.
48. Block Ionomer Complexes for Delivery of Therapeutic Peptides and More, 11th International Symposium on Polyelectrolytes (ISP), Moscow, Russia, June 28, 2016.
49. High-Capacity Polymeric Micelles for Drug Delivery, 7th International Conference "Nanoparticles, Nanostructured Coatings and Microcontainers: Technology, Properties, Applications", Keynote Speaker, Tomsk, Russia, May 12, 2016.
50. Polymeric Micelles for Drug Delivery, 2nd International Young Scientists School, Tomsk, Russia, May 9, 2016.
51. Nanomedicines for CNS Delivery of Polypeptides, NGF 2016 Meeting, Society for Neuroscience, Monterey, CA, April 19, 2016.
52. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, Nanotechnology for healthcare, A Winthrop Rockefeller Conference, Dec. 2-4, 2015.
53. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, 10th East Asian Symposium on Polymers for Advanced Technology, Awaji, Japan, July 28, 2015.
54. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, The ASME 2015 4th Global Congress on NanoEngineering for Medicine and Biology, Minneapolis, MN, April 20, 2015.
55. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, Society for Thermal Medicine Annual Meeting, Orlando, FL, April 17, 2015.
56. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, 2015 Materials Research Society Spring Meeting, San Francisco, CA, April 8, 2015.
57. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, 2nd Nanomedicine for Imaging and Treatment Conference, Los Angeles, CA, March 13, 2015.
58. Polymeric Micelles for Drug Delivery, The 1st International Symposium on Translational Nanomedicine, Guangzhou, China, Jan. 8, 2015.
59. Polymeric Micelles – A transformative technology at the clinical stage, Annual Conference of the Russian-American Scientists Association (RASA), Boston, MA, Nov. 7, 2014.
60. Polymeric Micelles – A transformative technology at the clinical stage, Nanomedicine Workshop, Celebrating the 10th Anniversary of Center for Drug Delivery and Nanomedicine, UNMC, Omaha, NE, Nov. 7, 2014.

61. Polymeric micelles for drug delivery, First International Scientific Conference "Science of the Future", St. Petersburg, Russia, Sep. 18 2014
62. Polymeric micelles for drug delivery, **Plenary Lecture**, XII International Conference on Nanostructured Materials (NANO 2014), Moscow, Russia, Jun. 18, 2014
63. Polymeric micelles for drug delivery, Molecular Order and Mobility in Polymeric Systems, St. Petersburg, Russia, Jun. 03, 2104.
64. Polymeric micelles for drug delivery, International Biomedical Conference Towards of the Future, Skolkovo Innovation Center, Moscow, Russia, May 27, 2014.
65. Agile delivery of protein therapeutics to CNS, 10th International Symposium on Polymer Therapeutics: From Laboratory to Clinical Practice, Valencia, Spain, May 19, 2014
66. Block copolymers in drug delivery and nanomedicine. **Plenary Lecture**, 9th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology, Lisbon, Portugal Apr. 1, 2014
67. A very high-capacity polymeric micelle drug delivery system. 4th Annual Scientific Conference, American Society for Nanomedicine (ASNM) Shady Grove Conference Center, Rockville, MD, Mar. 28, 2014.
68. Very high-capacity polymeric micelles for drug delivery, Polymers in Medicine and Biology 2013, Sonoma Valley, CA, Oct. 11, 2013.
69. A very high-capacity polymeric micelles for drug delivery, 2013 Annual Principal Investigators Meeting, NCI Alliance for Nanotechnology in Cancer, Bethesda, MD, Sep. 19, 2013.
70. Polymeric micelles for drug delivery: From idea to clinics, Nanotechnologies in Cancer Diagnosis, Therapy, and Prevention. The New York Academy of Sciences, New York, NY, June. 12, 2013.
71. Polymeric Micelles for Drug Delivery – From Idea to Clinics, 10th International Symposium on Frontiers in Biomedical Polymers, Vancouver, Canada, June. 3, 2013.
72. Nanomedicine – Time to Collect Stones. From science fiction to clinical practice, 2nd International Conference on Biomaterials Science (ICBS2013), Tsukuba, Japan, Mar. 20, 2013.
73. Nanomedicine – time to collect stones. From science fiction to clinical practice, Mendeleev – 2013, Sankt-Petersburg, Russia, Feb. 2013.
74. Polymer micelles and polyion complexes: state of the art and future of drug delivery, Tenth International Nanomedicine and Drug Delivery Symposium (NanoDDS'12), Atlantic City, NJ, Dec. 6, 2012.
75. The potential of doubly amphiphilic poly(2-oxazolines) to solubilize extremely hydrophobic drugs, NCI Alliance for Nanotechnology in Cancer, Annual Principal's Investigators Meeting, Houston, TX, Nov. 15, 2012.
76. Polymeric micelles and polyion complexes for drug delivery: When colloids become nanomedicines, Colloids and Nanomedicines 2012, Amsterdam, Netherlands, July 16, 2012.
77. Nanomedicine and drug delivery, 2012 IDeA Symposium, Washington, DC, June 27, 2012.
78. Nanozymes as potential bioscavengers for prevention and reparation of damage caused by OP agents, 11th International Meeting on Cholinesterases, Kazan, Russia, June 7, 2012.
79. Polymeric micelles and polyion complexes for drug delivery, 13th Dresden Polymer Discussion and 8th Max Bergmann Symposium "Molecular bioengineering meets polymer science", Meissen, Germany, April 2, 2012.
80. Nanomedicines for polymer delivery to the brain, The 18th Annual Blood-Brain Barrier Consortium Meeting "Novel Approaches for Translational Blood-Brain Barrier Research", Skamania Lodge, Stevenson, WA, March 23, 2012.
81. Polymeric materials for Nanomedicine, 9th International Conference and Workshop on Biological Barriers – *in vitro* and *in silico* Tools for Drug Delivery and Nanosafety Research, Saarland University, Saarbrücken, Germany, March 7, 2012.

82. Nanomedicines for polymer delivery to the brain, Global COE Satellite Symposium on Nanobioscience, Nanobiotechnology and Nanomedicine, Ito Campus, Kyushu University, Fukuoka, Japan, Nov. 28, 2011.
83. Latest advances in block copolymers for therapeutic use, **Plenary Lecture**, The 2011 Global COE International Symposium on Future Molecular Systems, Fukuoka, Japan, Nov. 26.
84. Polymer materials for medicine, Scientific session of the Division of Chemistry and Materials Science, Russian Academy of Sciences, Moscow, Russia, Nov. 7, 2011.
85. Polymeric micelles from bench to the bedside, NanoUtah 2011, Salt-Lake City, UT, Oct. 14, 2011.
86. Polymeric micelles for nanomedicine: From laboratory to clinics, **Plenary Lecture**, XIX Mendeleev Congress on General and Applied Chemistry, Volgograd, Russia, Sept. 28, 2011.
87. Nanomedicine: Crossing biological barriers for drug delivery, 2nd International School - Nano2011: Nanomaterials and Nanotechnologies in Living Systems. Safety and Nanomedicine, Moscow Region, Russia, Sept. 19, 2011.
88. Polymeric micelles from bench to the bedside, 1st All-Russian symposium on surfactants "From Colloidal Systems to Nanochemistry", Kazan, Russia, June 29, 2011.
89. Polymeric micelles from bench to the bedside, 3rd European Science Foundation Summer School Nanomedicine 2011, Lutherstadt Wittenberg, Germany, June 23, 2011.
90. Polymeric micelles from bench to the bedside, Triggered Nanoparticles: 6th Annual Cancer Nanobiology Think Tank, CCR Nanobiology Program. NCI-Frederick Center for Cancer Research Nanobiology, Frederick, MD, May 17, 2011.
91. Biomedical polymers for delivery of polypeptides to the brain, 9th International Symposium on Frontiers in Biomedical Polymers (FBPS 2011), Madeira, Portugal, May 9, 2011.
92. Polymeric nanomedicines for therapeutic applications, XVIII Regional Kargin readings, Tver, Russia, March 25, 2011.
93. Novel nanomedicine approaches for protein delivery to the brain, 2011 Nanomedicine and Drug Delivery Research Conference For Scientific and Healthcare Professionals, Cedars-Sinai Medical Center, Los Angeles, CA, March 5, 2011.
94. Polymeric micelles: From bench to the bedside, Pacifichem 2010. The International chemical Congress of the Pacific Basin Societies, Honolulu, Hawaii, USA, Dec. 18, 2010
95. Polymer Genomics... 10 years on, Pacifichem 2010. The International chemical Congress of the Pacific Basin Societies, Honolulu, Hawaii, USA, Dec. 16, 2010.
96. Polymer nanomaterials for therapeutic drug delivery, Targeted Drug Delivery, Food and Drug Administration, Washington, DC, Dec. 6, 2010.
97. New nanoconstructs for delivery of polypeptides to the brain, III Nanotechnology International Forum, Rusnanotech 2010, Nov. 1, 2010.
98. Polymer complexes for drug delivery, XiangShan Science Conference on Functional Supramolecular Systems, Beijing, China, Oct. 27, 2010.
99. Polymer nanomaterials for therapeutic drug delivery, 6th International Conference on the Thin Film and Ocular Surface: Basic Science and Clinical Relevance, Florence, Sep. 25, 2010.
100. Polymeric micelles from bench to bedside, **Plenary Lecture**, 24th Conference of the European Colloid and Interface Society, Prague, Czech Republic, Sep. 6, 2010.
101. Polymeric micelles from bench to bedside, 1st International Workshop on Nanomedicine, European Medicines Agency, London, Sep. 3, 2010.
102. Beyond PEGylation – protein modification with block copolymers for CNS delivery, 37th Annual Meeting of the Controlled Release Society, Portland, OR, July 13, 2010.

103. Pluronic block copolymers – beyond polymeric micelles, Nanomedicines Roundtable, 37th Annual Meeting of the Controlled Release Society, Portland, OR, July 11, 2010.
104. Polymer nanomaterials for drug delivery, Nanomedicine: from Materials Design to Clinical Applications, Workshop 37th Annual Meeting of the Controlled Release Society, Portland, OR, July 10, 2010.
105. Polymeric micelles from bench to bedside, Spanish-Portuguese Local Chapter of the Controlled Release Society, Valencia, Spain, May 28, 2010.
106. Polymer genomics – 10 years on..., **Plenary Lecture**, 8th International Symposium on Polymer Therapeutics: From Laboratory to Clinical Practice, Valencia, Spain, May 25, 2010.
107. Nanomedicines for polypeptide delivery to CNS, Society on Neuroimmune Pharmacology (SNIP) Symposia, Manhattan Beach, CA, Apr. 15, 2010.
108. Polymeric micelles from bench to bedside, Symposium on Biomedical Polymers for Drug Delivery, In honor of 70th Birthday of Jindřich Kopeček, Salt Lake City, UT,
109. Polymers: From plastics to innovative drug delivery systems, ChinaNANO 2009: International Conference on Nanoscience & Technology, Beijing, China, Sep. 2, 2009.
110. Polymer based drug and gene delivery, XXIV Meeting of the Groupe Thematique de Recherche sur la Vectorisation, Paris, France, Dec. 8, 2009.
111. Polymer micelles: from bench to bedside, 2009 American Society for Nanomedicine (ASNM) Conference, Bolger Center, MD, Oct. 23, 2009.
112. Polymer micelles: from bench to bedside, 6th International Key Symposium Nanomedicine, The Journal of Internal Medicine and The Royal Swedish Academy of Sciences, Grand Hôtel Saltsjöbaden, Stockholm, Sweden, Sep. 10, 2009.
113. Polymer nanomaterials for CNS drug delivery, 34th FEBS Congress, Prague, Czech Republic, July 7, 2009.
114. Polymer micelles: from bench to bedside, 1st International Summer School - Nano2009. Nanomaterials and Nanotechnologies in Living Systems. Moscow Region, Russia, June 30, 2009.
115. Polymers: from plastics to innovative drug delivery systems, Nanomedicine 2009 – 2nd European Summer School in Nanomedicine, Quinta Da Marinha Hotel, Lisbon, Portugal, June 13, 2009.
116. Polymer micelles: from bench to bedside, 8th International Symposium on Frontiers in Biomedical Polymers, Mishima, Japan, May 22, 2009.
117. Polymer micelles: from bench to bedside, RUSNANOTECH Nanotechnology International Forum, Moscow, Russia, Dec. 4, 2008.
118. Polymer micelles: from bench to bedside, 1st Joint US-China Symposium on Nanobiology and Nanomedicine, The 331st Xiangshan Science Conference, Fragrant Hill, Beijing, China, Oct. 23, 2008.
119. Polymer micelles for drug delivery - from bench to bedside, Materials Medicine Mini-symposium, Virginia Tech, Blacksburg, VA, Nov. 21, 2008.
120. Structure and dynamics of block ionomer complexes, 4th Kargin Conference “Polymer science 21-st century”, Moscow, Russia, Jan. 30, 2007.
121. Black Swan and Nanomedicine, ESF-UB Conference in Biomedicine “Nanomedicine 2008”, Hotel Eden Rock, Saint Feuilu de Guixols, Spain, Sep. 22, 2008.
122. Block ionomer complexes for nanomedicine and drug delivery, The 42nd World Polymer Congress, MACRO 2008, Taipei, Taiwan, July 2, 2008.
123. Translational and clinical nanomedicine, USA - Japan Mini-Symposium on “Materials Medicine and Nanopharmacology”, University of Nebraska Medical Center, Omaha, NE, March 25, 2008.
124. Polymer materials for nanomedicine, Nanomedicine symposium, Industry of Health Forum, Russian Academy of Medical Sciences, Moscow, Russia, Feb. 14, 2008.

125. Block ionomer complexes for nanomedicine and drug delivery, "Self-assembled structures of amphiphilic copolymers and biopolymers" Joint workshop of the Marie Curie Research and Training Networks POLYAMPHI and BIOPOLYSURF and the ESF EUROCORES project BIOSONS, Biarritz, France, Feb. 12, 2008.
126. Nanomaterials for drug delivery to the brain, US-Russian Workshop "Towards health in 21st century: nanomedicine and self-organization of biological systems", Moscow, Moscow State University, Russia, Dec. 10, 2007.
127. Nanomaterials for CNS drug delivery, Fifth International Nanomedicine and Drug Delivery Symposium (NanoDDS'07), Boston, MA, Nov. 3, 2007.
128. Polymer nanomaterials for drug delivery, 2nd International Symposium on Atomic Technology, Awaji, Japan, Oct. 1, 2007.
129. Polymer genomics: pharmacology and toxicology of nanomaterials for drug delivery, 16th International Symposium on Microencapsulation, Lexington, KY, Sep. 10, 2007.
130. SP1049C: Clinical product development, 34th Annual Meeting of the Controlled Release Society, Long Beach, CA, July 11, 2007 (with V.Y. Alakhov).
131. Polymer nanomaterials for CNS drug delivery, 7th International Symposium on Frontiers in Biomedical Polymers, Ghent, Belgium, June 26, 2007.
132. Polymer genomics, Polymers in medicine and biology, Sonoma Valley, CA, June 18, 2007.
133. CNS drug delivery. International Symposium on Drug Research and Development "From Chemistry to Medicine" (DRD 2007). Antalya, Turkey, May 20, 2007.
134. Therapy of MDR cancers using pluronic: molecular targets and future prospects, International Symposium on Polymer Therapeutics, Berlin, Germany, Feb. 19, 2007.
135. CNS drug delivery, Symposium on "Drug Delivery and Translational Research", Brooklyn, NY, Dec. 4, 2006.
136. Charge-driven self-assembly of nanomedicines, 2006 AAPS Annual Meeting, San Antonio, TX, Oct. 31, 2006.
137. Nanomedicine: New frontiers in pharmacology and therapeutics, North American Congress of Clinical Toxicology 2006, San Francisco, CA, Oct. 6, 2006.
138. Structure and dynamics of block ionomer complexes, International Symposium on Polyelectrolytes, Dresden, Germany, Sep. 6, 2006.
139. Pharmacology and genomics of polymers and nanomaterials, 33rd Annual Meeting of the Controlled Release Society, Vienna, Austria, July 26, 2006.
140. Get Up; Get Educated - Nanogel Networks and Their Application in Drug Delivery, 33rd Annual Meeting of the Controlled Release Society, Vienna, Austria, July 24, 2006.
141. Polymer nanomaterials for diagnostics and therapeutics, 33rd Annual Meeting of the Controlled Release Society, Young Scientists Workshop, Vienna, Austria, July 22, 2006.
142. Sensitization of MDR cancers by Pluronic, 2005 AAPS Annual Meeting, Nashville, TN, Nov. 9, 2005.
143. Nanomedicine: The United States Perspective, Third International Nanomedicine and Drug Delivery Symposium, Baltimore, MD, Sep. 27, 2005.
144. Polymer nanomaterials for drug delivery, 1st Annual Meeting of American Academy of Nanomedicine, Baltimore, MD, Aug. 14, 2005.
145. Polymer genomics: a shift in gene and drug delivery paradigms, Advances in Science for Drug Discovery, Moscow-Kiji-Valaam-St. Petersburg, July 13, 2005.
146. Charge driven self-assembly of nanomaterials, European Polymer Congress, Moscow, June 27, 2005.

147. Polymer science to life science, **Plenary Lecture** (with Prof. V.A Kabanov), European Polymer Congress, Moscow, Russia, June 26, 2005.
148. Drug delivery and nanomedicine, AAPS National Biotechnology Conference, San Francisco, CA, June 8, 2005.
149. Transcriptional activation of gene expression by pluronic, 8th Annual Meeting of American Society for Gene Therapy, Saint-Louis, MO, June 3, 2005.
150. Polymer genomics: a shift in gene and drug delivery paradigms, The 5th Anniversary International Symposium for Gene Design and Delivery, Tokyo, Japan, May 20, 2005.
151. Polymer genomics, Nebraska Research Expo, MINI TRACt Session on Bioinformatics, Omaha, NE, Apr. 20, 2005.
152. Polymer genomics: shifting the drug and gene delivery paradigm, 7th New Jersey Symposium on Biomaterials Science, New Brunswick NJ, Oct. 22, 2004.
153. Charge driven self-assembly of nanoparticles, Biomedical Application of Nanostructures, Lincoln, NE, Oct. 8, 2004.
154. Effect of pluronic block copolymers on gene expression, 228th ACS Meeting, Philadelphia, PA, Aug. 25, 2004.
155. Polymer genomics: A paradigm shift in drug delivery, 228th ACS Meeting, Philadelphia, PA, Aug. 25, 2004.
156. Soluble nanoparticles from block ionomer micelles and oppositely charged polyions, 228th ACS Meeting, Philadelphia, PA, Aug. 24, 2004.
157. Polymer genomics: shifting the drug and gene delivery paradigm, Second Meeting on Nanomedicine and Drug Delivery, Brooklyn, NY Aug. 19, 2004.
158. Polymer genomics: shifting the drug and gene delivery paradigm, 2004 FASEB Summer Research Conferences, Molecular Biophysics of Cellular Membranes, Tucson, AZ, June 24, 2004
159. Polymer genomics: shifting the drug and gene delivery paradigm, "Pharmaceutical Perspectives of Nucleic Acid Based Therapeutics", Controlled Release Society, 31st Annual Meeting, Honolulu, HI, June 12, 2004.
160. Charge driven nanoparticle self-assembly, A William I. Fine Theoretical Physics Institute Workshop Electrostatic Interactions and Biophysics. Minneapolis, MN, May 1, 2004.
161. Polymer genomics: shifting the drug and gene delivery paradigm, 8th European Symposium on Controlled Drug Delivery, Noordwijk aan Zee, Netherlands, Apr. 9th, 2004.
162. Polymer Genomics, 3rd Russian Kargin Conference "Polymers - 2004", Moscow, Russia, Jan. 28th, 2004.
163. Polymer genomics for polymer therapeutics, 6th International Symposium on polymer therapeutics, Cardiff, UK, Jan. 8th, 2004.
164. Novel strategies for delivery of small molecules and macromolecules to the brain, 2003 AAPS Annual Meeting, Salt Lake City, UT, Oct. 29, 2003.
165. Novel strategies for drug and macromolecule delivery to the brain, 5th International Symposium on Frontiers in Biomedical Polymers, Ischia, Italy, Sep. 10th, 2003.
166. Pluronic block copolymers enhance local transgene expression in skeletal muscle and solid tumor, 30th Annual Meeting of the Controlled Release Society, Glasgow, UK, July 20, 2003.
167. Polymers for gene delivery – Where we stand? Where we go? 36th Annual Higuchi Research Seminar, Lawrence, KS, May 6, 2003.
168. Nanogels: novel materials for drug delivery of macromolecules to the brain, US-Japan Minisymposium on Nanomedicine and Drug Delivery, Omaha, NE, Jan. 6, 2003.
169. Pluronic block copolymers as novel polymer therapeutics in drug and gene delivery: fundamentals and clinical applications, 2002 AAPS Annual Meeting, Toronto, Ontario, Canada, Nov. 11, 2002.

170. Pluronic block copolymers for overcoming drug resistance in cancer, 2nd International Symposium on Tumor Targeted Delivery Systems, National Cancer institute, Rockville, MD, Sep. 23, 2002.
171. Polycations for gene delivery: Problems and solutions, 5th International Biorelated Polymers Symposium, 224th ACS National Meeting, Boston, MA, Aug. 21, 2002.
172. Nanogels: novel materials for drug delivery of macromolecules to the brain, 29th Annual Meeting of the Controlled Release Society, Seoul, Korea, July 25, 2002.
173. Nanogel networks for macromolecular delivery across BBB, 35th Annual Higuchi Research Seminar, Lawrence, KS, May 7, 2002.
174. Polycations for systemic gene delivery, FASEB Meeting 2002, New Orleans, LA, Apr. 23, 2002.
175. Pluronic block copolymers as novel polymer therapeutics for drug and gene delivery, 223rd ACS National Meeting, Orlando, FL, Apr. 9, 2002.
176. Current challenges in polymer therapeutics (general discussion), International Symposium on Polymer Therapeutics, Nara, Japan, July 14, 2001.
177. What hinders and how to achieve effective gene therapy with polycations? 4th Annual Meeting, American Society of Gene Therapy, Seattle, WA, June 1, 2001.
178. What hinders and how to achieve effective gene therapy with polycations? 4th International Symposium on Frontiers in biomedical Polymers, Williamsburg, VA, May 18, 2001.
179. Pluronic block copolymers for drug delivery, 2001 AAPS Annual Meeting, Denver, CO, Oct. 25, 2001.
180. Latest in Pluronic block copolymers for drug delivery to the brain, 34rd Annual Higuchi Research Seminar, Lake of the Ozarks, MO, March 13, 2001.
181. Self-assembly of block ionomers and surfactants of opposite charge, International Conference on Amphiphilic Polymers and Gels, Sintra, Portugal, Jan. 10, 2001.
182. Selective energy depletion and sensitization of MDR cells by Pluronic block copolymers, 4th International Biorelated Polymers Symposium, 220th ACS National Meeting, Washington, DC, Aug. 21, 2000.
183. Selective energy depletion and sensitization of multiple drug resistant cells by Pluronic block copolymers, 40th IUPAC Microsymposium Polymers in Medicine, in honor of 60th birthday of Prof. Jindřich Kopeček, Prague, Czech Republic, July 18, 2000.
184. Block ionomer complexes, 2nd All-Russian Kargin Symposium, Chernogolovka, Russia, May 29, 2000.
185. Novel nanocomposite materials based on block ionomer complexes, 219th ACS National Meeting, San Francisco, CA, March 30, 2000.
186. Novel polymers for drug delivery, 219th ACS National Meeting, San Francisco, CA, March 30, 2000.
187. Recognition of DNA topology in reactions between plasmid DNA and cationic copolymers, 219th ACS National Meeting, San Francisco, CA, March 29, 2000.
188. Selective energy depletion and sensitization of MDR cells by Pluronic block copolymers, 33rd Annual Higuchi Research Seminar, Lake of the Ozarks, MO, March 13, 2000.
189. Novel polymers for drug delivery, International Symposium "Biomedical Polymers for 21st Century – Molecular Design and dynamics", on the occasion of Prof. V.A. Kabanov's 65th birthday, Sapporo, Japan, Nov. 4, 1999.
190. Block ionomer complexes, 3rd International Conference "Advanced Polymers via Macromolecular Engineering" Colonial Williamsburg, VA, Aug. 2, 1999.
191. DNA/Polycation complexes for gene delivery, 3rd International Symposium on Frontiers in Biomedical Polymers Including Polymer Therapeutics, Lake Biwa, Shiga, Japan, May 25, 1999.
192. Self-assembly and activity of polyplexes, Conference "Structure & Design of Synthetic Gene Carriers", UCSF, San Francisco, CA, Feb. 5, 1999.

193. Taking polycation gene delivery systems from in vitro to in vivo, 1998 AAPS Annual Meeting, San Francisco, CA, Nov. 18, 1998.
194. Block ionomer complexes, 216th ACS National Meeting, Boston, NV, Aug. 23, 1998.
195. Effects of Pluronic block copolymers on drug transport at the blood-brain barrier, 1998 Conference on Block ionomer complexes, XVI Mendeleev Congress on General and Applied Chemistry, Sankt-Petersburg, Russia, May 26, 1998.
196. Pharmaceutical Sciences and Technology, Dallas, TX, Apr. 4, 1998.
197. Polyelectrolyte complexes for DNA delivery, 3rd International Symposium on Polymer Therapeutics, London, Jan. 9, 1998.
198. Vesicles from block ionomer complexes. 214th ACS National Meeting, Las Vegas, NV, Sep. 11, 1997.
199. Amphiphilic block copolymers in drug delivery, 214th ACS National Meeting, Las Vegas, NV, Sep. 10, 1997.
200. Polyelectrolyte complexes for DNA delivery, Workshop on Polymeric Recognition of Biological Molecules at Polytechnic University, Brooklyn, NY, June 17, 1997.
201. Polycations and cationic block copolymers as DNA delivery vectors, Scanning Microscopy 1997 Meeting, Chicago, IL, May 14, 1997.
202. Novel lyophilic colloids and soluble complexes in drug delivery: an overview, 213th ACS National Meeting, San Francisco, CA, Apr. 1997.
203. Block ionomer complexes from poly(ethylene oxide)-block-polymethacrylate anions and cetylpyridinium cations, 213th ACS National Meeting, San Francisco, CA, Apr. 1997.
204. New approaches to targeting of bioactive compounds, Sixth International symposium on recent advances in drug delivery systems, Salt Lake City, UT, Feb. 1993.
205. Site specific drug targeting, International Exhibition and Conference on Pharmaceutical Ingredients and Intermediates, Wiesbaden, FRG, Nov. 1992.
206. Engineering of protein functional complexes in reversed micelles, Modern enzymology: problems and trends (in Commemoration of the 90th Anniversary of Prof. AE Braunstein (1902-1986), St. Petersburg, Russia, June 1992.
207. Drug transport through cell membrane and hematoencephalitic barrier, 2nd Conference "Biomedical Research Strategy on AIDS", Crans-Montana, Switzerland, Oct. 1991.
208. A new approach for creation of antiviral compounds: antibodies and oligonucleotides, modified with hydrophobic substituents, UNESCO Conference "Immunology, Virology and Society", Kiev, Ukraine, Sept. 1991.
209. Reversed micelles as matrix microreactors for chemical processing of macromolecules, 4th German-Soviet Symposium "Modern developments of physics and chemistry of polymers", Bishofgrun, FRG, Sept.-Oct. 1990.
210. Modification of biomacromolecules for their translocation across biological membranes, 1st German-Soviet Symposium "Mechanisms of regulation of the cell activity", Tashkent, Uzbekistan, Sept. 1989.
211. Attachment to biomacromolecules the ability for transmembrane transport, XIV Mendeleev Congress on Pure and Applied Chemistry, Tashkent, Uzbekistan, Sept. 1989.
212. Enhancement of biomacromolecule translocation across biomembranes, **Plenary Lecture**, 6th Conference of young scientists on Organic and Bioorganic Chemistry, Bechyne, Czechoslovakia, 1989.
213. Chemical engineering of biopolymers, 14-th IUB Congress, Prague, 1988.

Special Lectures:

214. Unity of scientists in the divisive world: For truth, peace & human rights, American Physical Society March 2022 Meeting (Session 29 Speaking Up for Human Rights of Scientists, Just as Important as Andrei Sakharov's Times), Chicago, IL <https://youtu.be/16DeqMGk7j8?t=9377>

215. Stand united to combat global assault on truth, peace & human rights, International Workshop Sakharov-100: Physics, Peace, Human Rights, American Physical Society and RASA, May 21, 2021. <https://youtu.be/pcMmwNRFmZs>

216. Work of V.A. Kabanov as precursor of polymer therapeutics and nanomedicine. 6th All Russian Kargin Conference "Polymers 2014", Jan. 28, 2014

217. Polymer science to life science. Memorial conference dedicated to Prof. V.A Kabanov 75th birthday. Moscow State University, Moscow, Jan. 15, 2009.

218. Polymer science to life science. A phenomenal contribution of Prof. V.A Kabanov (1934-2006), European Polymer Congress, Portoroz, Slovenia, July 2, 2007.

Regional and state meetings and seminars:

219. A very high-capacity polymeric micelles for drug delivery, 2013 Annual Principal Investigators Meeting, Specialized Program of Research Excellence (SPORE) in Breast Cancer, Chapel Hill, NC, Oct. 11, 2013.

220. Polymeric Micelles and Drug Delivery, Triangle Center for Excellence for Materials Research and Innovation: Programmable Assembly of Soft Matter Duke, NC, May 13, 2013.

221. High Capacity Nanocarriers for Cancer Chemotherapeutics, CCNE - NCI Site Visit, Chapel Hill, NC, May 7, 2013.

Industrial Meetings:

222. Pluronic block copolymers for overcoming Pgp, Oral Drug Delivery Summit 2003 in Philadelphia, PA, Sept. 29, 2003.

223. CombiForm™: A new approach to increase efficacy in drug development, 6th International Drug Delivery Technologies & Deal Making Summit, Princeton, NJ, July 26, 2001.

Oral Posters and Panels (partial):

224. Nanopharmacology and molecular simulation (panel), IASTED International Conference on "Nanotechnology and Applications: NANA 2008, Crete, Greece, Sep. 29, 2008.

225. Recognition of DNA topology in reactions between plasmid DNA and cationic copolymers, 4th International Symposium on Polymer Therapeutics, London, England, Jan. 2000.

226. Pluronic block copolymers for drug delivery to the brain, 4th International Symposium on Polymer Therapeutics, London, England, Jan. 2000.

227. Effects of Pluronic block copolymers on drug transport in blood brain barrier, GRC on Drug Carriers in Biology and Medicine, Ventura, CA, Feb. 1998.

228. Block polycations for DNA delivery, 1st International Symposium on Polymer Therapeutics, London, England, Jan. 1996.

Lectures and seminars in academic institutions:¹¹

229. High-capacity polymeric micelles as transformative and translational technology for drug delivery, College of Pharmacy, Yeung-Nam University, Dec. 8, 2022 (JO Kim)

230. High-capacity polymeric micelles as transformative and translational technology for drug delivery, College of Pharmacy, Chung Ang University, Seoul, South Korea, Dec. 6, 2022 (KT Oh)

231. Convergent science of nano-delivery: A journey of a chemist, the University of Pennsylvania, Philadelphia, PA, Aug 4, 2021 (Vladimir Muzykantov).

¹¹ The name of inviting scientist is given in brackets.

232. Why chemists go to the uncharted expanses of biology? N.D. Zelinsky Institute of Organic Chemistry, Moscow, Russia, remote, Jun 6, 2021 (V Ananikov).
233. Why chemists go to the uncharted expanses of biology? "At the forefront of science" Lecture series, The National University of Science and Technology (MISIS), Moscow, Russia, remote, Jun 2, 2021 (Sergei Salikhov) <https://youtu.be/TPKvBvGPkzc>
234. Why is biology research so challenging for a chemist and what it could lead to, Siberian Federal University, Krasnoyarsk, Russia, remote, Apr 15, 2021 <https://youtu.be/8NcRZjGmqhU>.
235. A New Year eve's story on how challenging biology research is for a chemist and what it could lead to, Christmas Lectures, The National University of Science and Technology (MISIS), Moscow, Russia, remote, Dec. 23, 2020 (Sergei Salikhov). <https://youtu.be/AnbtFP7MLfE>
236. Super-high-capacity polymeric micelles for cancer therapeutics, Academy to Universities – Chemistry and Material Sciences in the Era of Pandemics, RAS Division of Chemistry and Material Sciences and MSU Chemical Faculty (online) (Evgeny Goodilin), Apr. 29, 2020. <https://youtu.be/lsgCUV8otMc>
237. Hyperloaded poly(2-oxazoline) micelles as drug carriers for cancer therapy, MD Anderson Department of Experimental Therapeutics, Houston, TX, April 17, 2019 (Gabriel Lopez-Berestein).
238. Nanoparticles, cells and exosomes for CNS therapeutics, Monash University School of Pharmacy, Melbourne, Australia, Feb. 7, 2019.
239. Hyperloaded poly(2-oxazoline) micelles as drug carriers for cancer therapy, D. Mendeleev University of Chemical Technology, Moscow, Russia, Dec 26, 2018 (Anna Sherbina).
240. Polymeric micelles, polyion complexes, cells and exosomes for drug delivery, Houston Methodist Research Institute, Houston, TX, Apr 20, 2018 (B Godin)
241. Polymeric micelles and polyion complexes as foundation of current nanomedicine, University of Southern Carolina, Columbia, SC, Dec 4, 2017 (Igor Roninson).
242. Polymeric micelles - A clinical nanomedicine technology, Virginia Tech, Blacksburg, VA, Nov 29, 2017 (Judy Rifle).
243. Very High-Capacity Polymeric Micelles for Drug Delivery, Fox Chase Cancer Center, May 25, 2017 (Vladimir Studitsky).
244. Polymeric micelles and polyion complexes as foundation of current nanomedicine, University of Utah, UT, April 6, 2017 (Hamid Ghandehari).
245. High-Capacity Polymeric Micelles for Drug Delivery, OSU/OHSU College of Pharmacy, Portland, OR, May 26, 2016 (Gaurav Sahay).
246. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, Georgia Tech, Atlanta, GA, April 28, 2015 (John McDonald).
247. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, 2nd Nanomedicine for Imaging and Treatment Conference, the University of Pennsylvania, Philadelphia, PA, April 1, 2015 (Vladimir Muzykantov).
248. Polymer Systems for Non-Viral Gene Delivery, Julius-Maximilians-Universität Würzburg, Würzburg, Germany, July 30, 2015 (Robert Luxenhofer).
249. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, IQS, Universidad Ramon Llull, Barcelona, Spain, July 22, 2015 (Salvador Borrós Gómez).
250. Polymer Systems for Non-Viral Gene Delivery, IQS, Universidad Ramon Llull, Barcelona, Spain, July 21, 2015 (Salvador Borrós Gómez).
251. Nanomedicine and Drug Delivery Polymer Systems for Drug Delivery to the Brain, IQS, Universidad Ramon Llull, Barcelona, Spain, July 20, 2015 (Salvador Borrós Gómez).

252. Polymeric micelles from idea to clinics, 19th John G. Wagner Memorial Lecture, Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, May 9, 2014 (S.P. Schwendeman).
253. Nanomedicine – time to collect stones. From science fiction to clinical practice, Southern Federal University, Rostov at the Don, Russia, Jun. 19, 2013 (A.I. Minkin).
254. Polymeric Micelles for Drug Delivery – From Idea to Clinics, Massachusetts Institute of Technology, Boston, MA, May 21, 2013 (R. Langer).
255. Polymeric Micelles and Polyion Complexes for drug delivery: State of the art of a future drug delivery, Winship Cancer Institute of Emory University, Atlanta, GA, Jan. 25, 2013 (Dong M. Shin).
256. Polymeric micelles and polyion complexes for drug delivery: state-of-art and future directions, Nanotechnology seminar series, Stanford University, Stanford, CA, Dec. 13, 2012 (S.S. Gambhir).
257. Polymeric micelles and polyion complexes for drug delivery. When colloids become nanomedicines, Department of Pharmaceutical and Biomedical Sciences South, Carolina College of Pharmacy University of South Carolina, Columbia, SC, Nov. 5, 2012 (Igor Roninson).
258. Polymeric micelles: From bench to the bedside, Department of Pharmaceutical Sciences, Wayne State University, Detroit, MI, Oct. 18, 2011 (O. Merkel).
259. Recent developments in polymeric micelles for drug therapies, University Paris-South, Chatenay Malabry, France, Sep. 13, 2011 (K. Bouchemal).
260. Polymeric micelles: From bench to the bedside, A.E. Arbusov Institute of Organic and physical Chemistry, Kazan Science Center of Russian Academy of Sciences, Kazan, Russia, March 23, 2011 (Oleg G. Sinyashin).
261. How to translate innovative ideas to products without compromising ingenuity, Kazan State Medical University, Kazan, Russia, March 22, 2011 (A.P. Kiassov).
262. Polymeric micelles: From bench to the bedside, Kazan State Medical University, Kazan, Russia, March 22, 2011 (A.P. Kiassov).
263. Polymeric micelles: From bench to the bedside, School of Pharmacy, University of Southern California, Los Angeles, CA, March 3, 2011 (Sarah Hamm-Alvarez).
264. Polymeric micelles: From bench to the bedside, School of Pharmacy, University of California san Diego, Los Angeles, CA, March 2, 2011 (Adah Almutairi),
265. Polymeric micelles: From bench to the bedside, Division of Molecular Pharmaceutics, Center for Nanotechnology in Drug Delivery, University of North Carolina Eshelman School of Pharmacy, North Carolina, Chapel Hill, Feb. 21, 2011 (L. Huang).
266. Polymer nanomaterials for therapeutic drug delivery, Department of Chemical Enzymology, Faculty of Chemistry, Moscow State University, Moscow, Russia, Nov. 11, 2010 (Natalia L. Klyachko).
267. Polymer nanomaterials for therapeutic drug delivery, Department of Pharmacy, Changhai Hospital, Second Military Medical University, Shanghai, China, Oct. 25, 2010 (S. Gao).
268. Block Copolymers: from self-assembly to nanomedicine, All India Institute of Medical Sciences, New Delhi, India, Feb. 12, 2010 (S. Singha).
269. Block Copolymers: from self-assembly to nanomedicine, Center for Biomedical Engineering, Indian Institute of Technology, New Delhi, India, Feb. 12, 2010 (A.R. Ray).
270. Block Copolymers: from self-assembly to nanomedicine, Department of Biochemistry, Delhi University South Campus, New Delhi, India, Feb. 11, 2010 (A. Nag).
271. Polymer based drug and gene delivery, Faculté de Pharmacie, University Paris V, Paris, France, Dec. 9, 2009 (N. Mignet).
272. Block Copolymers: from self-assembly to nanomedicine, College of Pharmacy, Chung-Ang University, Seoul, South Korea, Dec. 1, 2009.

273. Block Copolymers: from self-assembly to nanomedicine, College of Pharmacy, Pusan University, Pusan, South Korea, Nov. 27, 2009.
274. Block Copolymers: from self-assembly to nanomedicine, College of Pharmacy, Youngnam University, Daegu, South Korea, Nov. 26, 2009.
275. Block Copolymers: from self-assembly to nanomedicine, Department of Medicine, Yonsei University, Seoul, South Korea, Nov. 25, 2009.
276. Block Copolymers: from self-assembly to nanomedicine, Department of Pharmacology, Institute for Translational Medicine and Therapeutics, University of Pennsylvania School of Medicine, Philadelphia, PA, Nov. 18, 2009 (Vladimir Muzykantov).
277. Block Copolymers: from self-assembly to nanomedicine, 33rd Annual Symposium "Polymers and Biomedical Applications", Department of Macromolecular Science and Engineering, University of Michigan, MI, Oct. 29, 2009.
278. Polymers: From plastics to innovative drug delivery systems, Department of Chemistry, Tsinghua University, Beijing, China, Aug. 31, 2009 (Xi Zhang).
279. Polymer micelles for drug delivery: from bench to bedside, Roswell Park Cancer Institute, Buffalo, NY, MA, Aug. 12, 2009 (Andrei Gudkov).
280. Polymer micelles for drug delivery: from bench to bedside, RedoxBiology Center Annual Retreat, UNL, Nebraska City, NE, Apr. 4, 2009 (Vadim Gladyshev).
281. Polymer micelles for drug delivery: from bench to bedside, Department Pathology and Microbiology Grand Rounds, UNMC, Omaha, NE, March 3, 2009.
282. Polymer Nanomaterials for Drug Delivery, Kurchatov Institute, Moscow, Russia, Dec. 2, 2008 (Yuri M. Kagan).
283. Polymer micelles for drug delivery: from bench to bedside, Virginia Tech, Nov. 21, 2008.
284. Polymer Nanomaterials for Drug Delivery, Department of Chemistry, Tsinghua University, Beijing, China, Oct. 30, 2008 (Xi Zhang).
285. Polymer Nanomaterials for Drug Delivery, Department of Chemistry, SHJTU, Shanghai, China, Oct. 29, 2008 (C.-M. Dong).
286. Polymer Nanomaterials for Drug Delivery, School of Pharmacy, HUST, Wuhan, China, Oct. 27, 2008 (Gao Li).
287. Nanomaterials for CNS drug delivery, Cedars-Sinai Medical Center, Los Angeles, CA, March 1, 2008 (Julia Ljubimova).
288. Nanomedicine: from bench to bedside, Emory-Georgia Tech Frontiers of Cancer Nanotechnology Seminar Series, Emory University, Atlanta, GA, Feb. 25, 2008 (S. Nie).
289. Nanomedicine: from bench to bedside, University Paris-South, Chatenay Malabry, France, Feb. 19, 2008 (Ruxandra Gref).
290. Nanopharmacology, Moscow State University Department of Chemical Enzymology, Moscow, Russia, Dec. 8, 2007 (N. Klyachko).
291. Nanomedicine: from bench to the bedside, UNMC Center for Clinical and Translational Research, University of Nebraska Medical Center, Omaha, NE, Sep. 24, 2007 (Jennifer Larsen).
292. Drug delivery and nanomedicine research, UNMC Eppley Cancer Center, University of Nebraska Medical Center, Omaha, NE, 2007.
293. Polymeric nanomaterials for drug delivery, Department of Pharmaceutical Sciences, College of Pharmacy, Nursing and Allied Science, North Dakota State University, Fargo, ND, Apr. 19, 2007 (J. Singh).

294. Polymeric nanomaterials for drug delivery, Cedars-Sinai Medical Center Grand Rounds, Los Angeles, CA, March 8, 2007.
295. Polymeric nanomaterials for drug delivery, Department of Biomedical Engineering & Chemistry, Duke University, Durham, NC, March 1, 2007 (W.M. Reichert).
296. Polymeric nanomaterials for drug delivery, Department of Pharmaceutical Sciences, University of Nebraska Medical Center, Omaha, NE, Feb. 9, 2007.
297. Polymeric nanomaterials for drug delivery, Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI, Dec. 6, 2006 (D. Smith).
298. Advances in polymer therapeutics and nanomedicine, Department of Pharmaceutical Sciences, University of Tennessee Health Science Center, Memphis, TN, Nov. 14, 2005 (Ram Mahato).
299. Advances in polymer therapeutics, Department of Materials Science and Engineering, Whiting School of Engineering Johns Hopkins University, Baltimore, MD, Sep. 28, 2005 (H-Q. Mao).
300. Advances in polymer therapeutics, Department of Chemical Engineering, Princeton University, Princeton, NJ, Sep. 21, 2005 (R.K. Prud'homme).
301. Polymer genomics: Shifting the gene and drug delivery paradigms, University of Tokyo, Tokyo, Japan, May 19, 2005 (Kazunori Kataoka).
302. Polymer genomics: Shifting the gene and drug delivery paradigms, Tokyo Institute of Technology, Yokohama, Japan, May 18, 2005 (T. Akaike).
303. Polymer genomics: Shifting the gene and drug delivery paradigms, Tokyo Women's Medical University, Tokyo, Japan, May 17, 2005 (Teruo Okano).
304. Polymer genomics: Shifting the gene and drug delivery paradigms, Tsukuba University, Tsukuba, Japan, May 16, 2005 (Yukio Nagasaki).
305. Polymer genomics: Shifting the gene and drug delivery paradigms, Macromolecules and Interfaces Institute, Virginia Tech, Blacksburg, VA, Apr. 27, 2005 (Judy Riffle).
306. Polymer genomics, Department of Pharmacology Seminar, UNMC, Omaha NE, Jan. 28, 2005 (Howard Gendelman).
307. Polymer genomics, Macromolecular Therapeutics Seminar, University of North Carolina Chapel Hill, Chapel Hill NC, Nov. 17, 2004 (R. Juliano).
308. Polymers for gene delivery: Where do we stand? Where do we go? Department of Biomedical Engineering Rutgers University, New Brunswick, NJ, Oct. 27, 2003 (M.L. Yarmush).
309. Polymers for gene delivery: Where do we stand? Where do we go? Department of Chemical Engineering, Iowa State University, Ames, IA, Oct. 2, 2003 (Suria K. Mallapragada)
310. Pluronic block copolymers for drug and gene delivery, Leslie-Dan School of Pharmacy, University of Toronto, Toronto, Canada, June 19, 2003 (K.W. Hindsmarsh).
311. Polymers for gene delivery, University of Illinois at Chicago, Chicago, IL, March 26, 2003 (H. Onyksel).
312. Pluronic block copolymers for overcoming drug resistance in cancer, University of Wisconsin-Madison, Madison, WI, Feb. 27, 2003 (Joe Robinson).
313. Polymers for gene delivery, Polytechnic University, Brooklyn, NY, Nov. 15, 2002 (C. Georgakis).
314. Polymers for gene delivery, University of Pennsylvania, Department of Bioengineering, Philadelphia, PA, Nov. 12, 2002 (D. Hammer).
315. Pluronic block copolymers for drug delivery in cancer, Roswell Park Cancer Center, Buffalo, NY, Nov. 7, 2002 (C.W. Porter).
316. Pluronic block copolymers for drug and gene delivery, Department of Pharmaceutical Sciences, University of Southern California, Los Angeles, CA, Nov. 1, 2002 (Vincent Lee).

317. Polymers for gene delivery, University of Minnesota, Department of Biomedical Engineering, Minneapolis, MN, Oct. 28, 2002 (R.T. Tranquillo).
318. Polymers for gene delivery, University of Wisconsin-Madison, Madison, WI, Sep. 13, 2002 (Glen Kwon).
319. Pluronic block copolymers for drug delivery in cancer, Eppley Cancer Center Grand Rounds, University of Nebraska Medical Center Omaha, NE, Sep. 11, 2002.
320. Polymers for gene delivery, Korea Institute of Science and Technology, Seoul, Korea, July 26, 2002 (S. Y. Jeong).
321. Pluronic block copolymers for drug and gene delivery, Department of Pharmaceutical Sciences, SUNY Buffalo, Buffalo, NY June 21, 2002 (W. Jusko).
322. Polycations for DNA delivery into a cell, Department of Chemistry and Chemical Biology, Stevens Institute of Technology, Hoboken, NJ, Apr. 3, 2002 (Svetlana Sukhishvili).
323. Complexes of block ionomers with oppositely charged surfactants, Department of Applied Chemistry, Kansai University, Osaka, Japan, July 16, 2001 (T. Ouchi).
324. What hinders and how to achieve effective gene therapy with polycations? Department of Physics, Kyoto University, Kyoto, Japan, July 12, 2001 (K. Yoshikawa).
325. What hinders and how to achieve effective gene therapy with polycations? Osaka University, Osaka, Japan, July 10, 2001 (Y. Suda).
326. What hinders and how to achieve effective gene therapy with polycations? Department of Material Science, University of Tokyo, Tokyo, Japan, July 9, 2001 (Kazunori Kataoka).
327. Block ionomer complexes: self-assembly and applications in drug delivery, Polytechnic University, Brooklyn, NY, Nov. 6, 2000 (Richard Gross).
328. Pluronic block copolymers: novel sensitizers of cells expressing efflux proteins, University of Minnesota, Drug Delivery Center Open House/Advanced Therapies Seminar Series Speaker, Minneapolis, MN, Oct. 5, 2000 (David Grant).
329. Novel polymers for drug delivery, Dow Lecture in Polymer Science, University of Detroit Mercy, Nov. 30, Detroit, MI, 1999 (S. Schlick).
330. Novel polymers for drug delivery, Tokyo Institute of Technology, Yokohama, Japan, Nov. 12, 1999 (T. Akaike).
331. Novel polymers for drug delivery, Science University of Tokyo, Noda, Japan, Nov. 11, 1999 (Yukio Nagasaki).
332. Polycations for gene delivery, Institute of Biomedical Engineering, Tokyo Women's Medical University, Tokyo, Japan, Nov. 10, 1999 (T. Okano).
333. Interactions of amphiphilic block copolymers with drug efflux systems in blood brain and intestinal barriers: implications in drug delivery, Kyoto Pharmaceutical University, Kyoto, Japan, Nov. 8, 1999 (Akira Yamamoto).
334. Non-viral gene delivery: taking polyplexes from in vitro to in vivo, Kyoto University, Graduate School of Pharmaceutical Sciences, Kyoto, Japan, May 28, 1999 (Y. Takakura).
335. Amphiphilic block copolymers in drug delivery: from micellar microcontainers to combinatorial formulation, KYshu University, Graduate School of Engineering, Department of Chemistry and Biochemistry, Fukuoka, Japan, May 21, 1999 (N. Kimizuka).
336. Self-assembly of block ionomers and surfactants of opposite charge, KYshu University, Division of Supramolecular Chemistry, Institute for Fundamental Research of Organic Chemistry, Fukuoka, Japan, May 20, 1999 (A. Takahara).
337. Non-viral gene delivery: taking polyplexes from in vitro to in vivo, Tokyo Institute of Technology, Yokohama, Japan, May 19, 1999 (T. Akaike).

338. Amphiphilic block copolymers in drug delivery: from micellar microcontainers to combinatorial formulation, Institute of Biomedical Engineering, Tokyo Women's Medical University, Tokyo, Japan, May 18, 1999 (T. Okano, M. Yokoyama).
339. Non-viral gene delivery: taking polyplexes from in vitro to in vivo, Department of Material Science, University of Tokyo, Tokyo, Japan, May 17, 1999 (Kazunori Kataoka).
340. Polycations as carriers for gene delivery, Bioengineering, University of Washington, Seattle, WA, Nov. 13, 1998 (A. Hoffman).
341. Amphiphilic block copolymers in drug delivery, Division of Pharmaceutics, College of Pharmacy, Ohio State University, Columbus, OH, Oct. 16, 1998 (W. Hayton).
342. Block ionomer complexes, Department of Chemistry, Purdue University, Lafayette, IN, March 5, 1998 (I. Szleifer).
343. Block ionomer complexes, Department of Polymer Science, Moscow State University, Moscow, Russia, Jan. 16, 1998 (Victor A. Kabanov).
344. Block ionomer complexes, Material Research Program and Department of Chemistry, University of Nebraska at Lincoln, Lincoln, NE, Dec. 19, 1997 (David Selmeier).
345. Self-assembling polymer complexes for drug delivery, Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, Omaha, NE. Feb. 16, 1995 (Barry Gold).
346. Self-assembling polymer complexes for drug delivery, School of Pharmacy, Wayne State University, Detroit, MI, June 15, 1994.
347. Self-assembling polymer complexes for drug delivery, School of Pharmacy, University of Wisconsin-Madison, Madison, WI, May 19, 1994.
348. Self-assembling polymer complexes for drug delivery, School of Pharmacy, The University of North Carolina at Chapel Hill, Chapel Hill, NC, Apr. 25, 1994 (Garry M. Pollack).
349. Self-assembling polymer complexes for drug delivery, College of Pharmacy, University of Illinois at Chicago, Chicago, IL, Apr. 18, 1994.
350. Self-assembling polymer complexes for drug delivery, College of Pharmacy, University of Nebraska Medical Center, Omaha, NE, Apr. 13, 1994.
351. Structure and function of biopolymers in reversed micelles, Polymer, McGill University, Montreal, PQ, Canada, March 4, 1993 (Adi Eisenberg).
352. Site-specific drug targeting, Wuppertal University, Wuppertal, Germany, Nov. 10, 1992 (M. Schneider).
353. New polymeric systems for targeting of bioactive compounds, Laboratory of Biophysics, National Museum of Natural History, Paris, France, Feb. 28, 1992 (Claude Helene).
354. New polymeric systems for targeting of bioactive compounds, Medical Faculty, Rene Descartes University, Paris, France, Feb. 21, 1992 (Marcel Waks).
355. New polymeric systems for targeting of bioactive compounds, Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA, Dec. 5, 1991 (David Tirrel).
356. New macromolecular systems for targeting of bioactive compounds, School of Medicine, University of Connecticut Health Center, Farmington, CT, Dec. 4, 1991 (George Y. Wu).
357. New macromolecular systems for targeting of bioactive compounds, Department of Chemical Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA, Dec. 2, 1991 (Rick Davis).
358. New macromolecular systems for targeting of bioactive compounds, Department of Chemistry, Northwestern University, Evanston, IL, Nov. 23, 1991 (R. Letsinger).
359. New approaches for drug targeting across cell membranes and blood/brain barrier, Department of Microbiology and Immunology, University of Miami, Miami, FL, Nov. 21, 1991 (J. Peacock).

360. Potential antivirals based on hydrophobized antibodies and oligonucleotides, ACS Georgia Section, Atlanta, GA, Nov. 19, 1991.
361. Reversed micelles as matrix microreactors for chemical processing of biomacromolecules, Department of Chemistry, Emory University, Atlanta, GA, Nov. 18, 1991 (Fred M. Menger).
362. Micelles of polymeric surfactants as microcontainers for drug targeting, Department of Pharmaceutics, University of Utah, Salt Lake City, UT, Nov. 11, 1991 (Sund-Wan Kim).
363. Membrane active biopolymers as a tool for regulation of cell activity and drug delivery, The Center for Controlled Chemical Delivery and Department of Pharmaceutics, University of Utah, Salt Lake City, UT, Nov. 8, 1991 (Sung-Wan Kim).
364. Micelles of polymeric surfactants as microcontainers for drug targeting, Polymer Institute, ETH, Zurich, Sep. 30, 1991 (P. Luisi).
365. Enzymatic catalysis in reversed micelles, Institute of Organic Chemistry, Johannes Gutenberg University, Mainz, Oct. 9, 1990 (Helmut Ringsdorf).
366. Enhancement of biopolymer penetration into a cell and nontraditional drug delivery systems, Institute for Physiological Chemistry, Physical Biochemistry and Cell Biology, Munchen University, Munchen, Oct. 8, 1990 (W. Neupert).
367. Enhancement of biopolymer penetration into a cell, Research Institute for Biosciences, Science University of Tokyo, Yamazaki, Aug. 10, 1990 (T. Tsuruta).
368. Enhancement of biopolymer penetration into a cell, Ibaraki University, Mito, Japan, Aug. 9, 1990 (Y. Osada).
369. Enhancement of biopolymer penetration into a cell, Tokyo Women's Medical College, Tokyo, Aug. 8, 1990 (Teruo Okano).
370. Enhancement of biopolymer penetration into a cell, Department of Polymer Chemistry, Waseda University, Tokyo, Aug. 7, 1990 (E. Tsuchida).
371. Structure and function of biopolymers in reversed micelles, Ibaraki University, Mito, Japan, Aug. 6, 1990 (Y. Osada).
372. Chemical engineering of biopolymers: Drug targeting and mimetic studies, Immunology Department, Institute Pasteur, Paris, Jan. 22, 1990 (Gerard Buttin).
373. Chemical engineering of biopolymers, Institute of Chemistry, Louis Pasteur University, Strasbourg, Jan. 19, 1990 (Jean-Marie Lehn).
374. Membrane active biopolymers in model systems and cells, Medical Faculty, Renes Descartes University, Paris, Jan. 18, 1990 (Marcel Waks).
375. Structure and function of biopolymers in reversed micelles, Physico-Chemical Faculty, Pierre and Marie Curie University, Paris, Jan. 16, 1990 (M. Pileni).

Lectures at companies (partial):

376. Super-High-Capacity Polymeric Micelles for Cancer Therapeutics ...and Few Words about Covid-19 Therapeutics, Syngenta, (remote), Jun 6, 2020.
377. Very High-Capacity Polymeric Micelles for Drug Delivery, NOF Corporation, Tsukuba, Japan, Dec. 2, 2016.
378. Nanomedicines for CNS Delivery of Polypeptides, Teva, Tel Aviv, Israel, Sep. 13, 2016.
379. SP1049C: Drug discovery through formulation, Taiho, Tokyo, Japan, Dec. 21, 2010.
380. Polymer Micelles: From bench to bedside, Mersana Therapeutics, Inc., Boston, MA, Nov. 9, 2009.
381. Polymer Micelles: From bench to bedside, 2Y-Chem, Shanghai, China, Oct. 29, 2008.

382. Polymer genomics: pharmacology and toxicology of nanomaterials for drug delivery, Lilly Nanotechnology Symposium, Lilly Corporate Center, Indianapolis, IN, Oct. 12, 2007.
383. Charge driven self-assembly at the nanoscale, FMC Corporation, Princeton, NJ, May 31, 2005.
384. Nanomedicines for delivery of biologically active compounds, Keynote Lecture, National Starch Company, Bridgewater, NJ, Apr. 23, 2004.
385. Polymers for delivery of nucleic acids, Sirna Therapeutics, Boulder, CO, May 26, 2004.
386. Pluronic block copolymers for improved drug delivery, NaPro Biopharmaceuticals, Inc., Denver, CO, March 6, 2002.
387. Block copolymer-based drug delivery systems, Mitsubishi-Tokyo Pharmaceuticals, Inc., Yokohama, Japan, July 10, 2001.
388. Delivery of oligonucleotides using polycations, ISIS Pharmaceuticals, Carlsbad, CA, Apr. 19, 2002.
389. Amphiphilic block copolymers in drug delivery, Eli Lilly, Indianapolis, IN, Nov. 1997.
390. Polyelectrolyte and block ionomer complexes for gene delivery, Johnson & Johnson, New Brunswick, NJ, Oct. 8, 1997.
391. Amphiphilic block copolymers in drug delivery, Emisphere Technologies, Inc., Hawthorne, NY, Sep. 22, 1997.
392. Block copolymers in gene delivery, Bristol Myers Squibb, Princeton, NJ, Feb. 1997.
393. Block copolymers in gene delivery, Nextar Pharmaceuticals Inc., Boulder, CO, Dec. 1996
394. Block copolymers in gene delivery, Hybridon Inc., Worcester, MA, Nov. 1996.
395. Interpolyelectrolyte gene delivery systems, Ribozyme Pharmaceuticals Inc., Boulder, CO, March 11, 1996.
396. New drug delivery systems, Hercules Inc., Wilmington, DE, March 1, 1993.
397. New polymeric systems for targeting of bioactive compounds, Rhone-Poulenc Rorer, Paris, France, Feb. 24, 1992.
398. Membrane active biopolymers and their supramolecular complexes as tools for regulation of cell activity and drug delivery, Tanox Biosystem, Inc., Houston, TX, Nov. 13, 1991.

Public lectures, podcasts and videos (partial):

399. Pandemics: from “Spanish flu” to COVID-19 (In Russian), Lectures at Radio Zvezda, June 2021
https://radiozvezda.ru/podcast/oblast-znaniy/pandemiya-ot-ispanki-do-covid-19/?sort_by=date
<https://youtu.be/GhJ4SLSQuQY>
400. I am not Afraid of the Vaccine! (In Russian), Lectures at Radio Zvezda, June 2021
https://radiozvezda.ru/podcast/oblast-znaniy/ya-privivki-ne-boyus/?sort_by=date <https://youtu.be/8ctsHQ3koTw>
401. Nanomedicine – What is It? (In Russian), Lectures at Radio Zvezda, June 2021
https://radiozvezda.ru/podcast/oblast-znaniy/chto-takoe-nanomeditsina/?sort_by=date
<https://youtu.be/NywiTftxdHQ>
402. Modern Medicine Against Cancer (In Russian), Lectures at Radio Zvezda, June 2021
https://radiozvezda.ru/podcast/oblast-znaniy/sovremennaya-medsina-protiv-raka/?sort_by=date
<https://youtu.be/njpKYD3eHw4>
403. Scientists in Search of Truth (In Russian), Lectures at Radio Zvezda, June 2021
https://radiozvezda.ru/podcast/oblast-znaniy/uchenye-v-poiskah-pravdy/?sort_by=date
<https://youtu.be/YjMDDuljRQ>
404. Nanomedicine – time to collect stones. From science fiction to clinical practice (In Russian), Festival of Science (Festival Nauki), Moscow, Oct. 14, 2012 <http://www.festivalnauki.ru/video/13494>

405. New drug developments: Nanotechnology for cancer therapy, Mini-Medical School “Cancer: Discovery, Development and Delivery: From the Laboratory to the Community” Omaha, NE, Apr. 5, 2005
406. Drug delivery and nanomedicine, KIWANIS, Omaha, NE, March 31, 2003
407. College of Pharmacy: Drug Delivery Research Program, University of Nebraska Board of Regents, Omaha, NE, Jan. 18, 2002
408. Drug delivery to targeted sites, Mini-Medical School “Genes and Chips”, Omaha, NE April 19, 2001
409. College of Pharmacy Research Initiative: Drug Delivery to Targeted Sites, Chancellor’s Board of Counselors, Lincoln, NE, Oct. 11, 2000

Authored media articles / columns (partial):

410. Kabanov A. Condemning the Hamas Attack on Israel and Rejecting Hate Speech: A Public Response to a Colleague – <https://www.t-invariant.org/en/> / November 26, 2023 <https://www.t-invariant.org/2023/11/condemning-the-hamas-attack-on-israel-and-rejecting-hate-speech-a-public-response-to-a-colleague/>
411. Kabanov A. War devastates science in Russia, and even more so in Ukraine. What can be done to counter this? Alexander Kabanov, a professor at the University of North Carolina, discusses the international solidarity among scientists. (In Russian) – <https://meduza.io> / April 7, 2023 <https://meduza.io/feature/2023/04/07/voyna-razrushaet-nauku-i-v-rossii-i-esche-kuda-silnee-v-ukraine-cto-mozhno-etomu-protivopostavit>
412. Kabanov A. Megagrants for Russian Science (In Russian) – www.vedomosti.ru / July 02, 2020 <https://www.vedomosti.ru/opinion/columns/2020/07/01/833781-megagranti-nauki>
413. Kabanov A. Megagrants for Russian Science (In Russian) – p220.ru / 08.07.2020 <https://p220.ru/media/news/megagranty-dlya-rossiyskoy-nauki/>
414. Kabanov A. The Russian Health Foundation (In Russian) – www.vedomosti.ru / May 08, 2020 <https://vedomosti.ru/opinion/articles/2020/05/07/829794-fond-zdorovya>
415. Kabanov A. Virus for the system: How does USA combat the pandemic (In Russian) – rbc.ru / Apr. 17, 2020 <https://www.rbc.ru/opinions/society/17/04/2020/5e983e4a9a7947d66a96ab86?from=center>
416. Kabanov A. Life of North Carolina scientists in the beginning of the pandemic (In Russian) – trv-science.ru / 07.04.2020 / № 301 p. 8 <https://trv-science.ru/2020/04/07/zhizn-uchenyx-v-severnoj-karoline-v-nachale-epidemii/>
417. Kabanov A. The feeling of freedom regained (in Russian) – trv-science.ru / 24.03.2020 / № 300 p. 2 <https://trv-science.ru/2020/03/24/chuvstvo-vnov-obretennoj-svobody/>
418. Kabanov A. Big challenges: How to stop preparing for the previous war? (in Russian) – trv-science.ru / 06.06.2017 / № 230 p. 1 <http://trv-science.ru/2017/06/06/bolshiye-vyzovy/>
419. Kabanov A., Sagdeev R. Science convergence: Do we need to put all scientists under the same roof? (in Russian) – trv-science.ru / 26.01.2016 № 196 p. 2–3 <http://trv-science.ru/2016/01/26/konvergenciya-nauk/>
420. Kabanov A., Sagdeev R. Why does the Kremlin need convergence technologies (in Russian) – www.vedomosti.ru / Jan. 25 2016 <http://www.vedomosti.ru/opinion/articles/2016/01/26/625453-kremlyu-konvergentnie-tehnologii>

Media interviews and broadcasted programs (partial):

421. Professor at the University of North Carolina, Alexander Kabanov: “Isolation is the death of Russian science” – <https://www.rfi.fr/ru/> / April 10, 2023 <https://www.rfi.fr/ru/россия/20230410-профессор-университета-северной-каролины-александр-кабанов-изоляция-это-гибель-для-российской-науки>

422. "What is happening in Russia is a civilizational catastrophe." What will the isolation of Russian science turn out to be? (In Russian) – <https://www.sibreal.org> / July 18, 2022 <https://www.sibreal.org/a/chem-obnertsya-izolyatsiya-rossiyskoy-nauki-/31941698.html>
423. The fight against human aging: slow down and rejuvenate (In Russian) – OTR Public TV of Russia / Jan 26, 2022 <https://youtu.be/RloLmeShnEc> <https://otr-online.ru/programmy/gamburgskii-schet/kak-sovremennaya-nauka-mozhet-protivostoyat-stareniyu-56529.html>
424. The legacy of Andrei Sakharov and the state of Russian science today – On The Science Show with Robyn Williams, ABC Radio National / June 12, 2021 <https://www.abc.net.au/radionational/programs/scienceshow/the-legacy-of-andrei-sakharov-and-the-state-of-russian-science/13384068>
425. Sakharov's phenomenon (In Russian) – OTR Public TV of Russia / May 22, 2021 <https://youtu.be/W5geVnFwMFw>.
426. Scientists petition to end political persecution in Russia – On The Science Show with Robyn Williams, ABC Radio National / May 1 2021 <https://www.abc.net.au/radionational/programs/scienceshow/scientists-petition-to-end-political-persecution-in-russia/13322224>
427. Markina N. Chemists and nanomedicine. Chemistry and life, 2020, № 12, 2-15 www.hij.ru
428. In isolation science in Russia will die (In Russian) – s-t-o-l.com / Dec. 05, 2020 <https://s-t-o-l.com/gosudarstvo-i-chelovek/v-izolyatsii-nauka-v-rossii-umryot/>
429. Why would the scientists living and working in English-speaking environment deliver lectures in Russian? (in Russian) – OTR Public TV of Russia / Dec. 19, 2020 <https://youtu.be/aS96qzvGMWg>.
430. Inefficient vaccine is a failure, unsafe vaccine is a catastrophe (In Russian) – OTR Public TV of Russia / Oct. 24, 2020 <https://youtu.be/MpXxVAUCqtQ>
431. System of scientific publications in our country is undergoing existential crisis (In Russian) – Indicator.Ru / Oct. 13, 2020 <https://indicator.ru/chemistry-and-materials/sistema-nauchnykh-publikacii-v-nashei-strane-perezhivaet-ekzistencialnyi-krizis.htm>
432. Return to restrictions: will there be a second wave of coronavirus (In Russian) – Russia-24 / Sep. 25, 2020 <https://youtu.be/JjinUWG331M>
433. Expert on the development of the coronavirus pandemic (In Russian) – Russia-24 / May 25, 2020 <https://youtu.be/JTV9IkeVJI4>
434. Medicine runs out of time. Chemist on the coronavirus drugs (In Russian) – Anews.com / April 30, 2020 <https://anews.com/novosti/128547211-u-mediciny-net-vremeni-himik-o-lekarstvah-ot-koronavirusa.html>
435. Expert on the spread of coronavirus in USA and countermeasures (In Russian) – Russia-24 / April 6, 2020 <https://www.vesti.ru/videos/show/vid/833661/cid/1/> https://youtu.be/_vtt2ecd4i4 via vesti.ru
436. Opinion – RAS corresponding member Alexander Kabanov on COVID-19 in USA and World (In Russian) – Russia-24 / April 1, 2020 https://www.youtube.com/watch?v=rEIOFI_LQGY via vesti.ru
437. Who and how searches medicines against cancer (In Russian) – Harvard Business Review Russia / August 23, 2019 <https://amp.hbr-russia.ru/biznes-i-obshchestvo/nauka/807920>
438. Alexander Kabanov - Will modern science diplomacy bear fruit? (In Russian) – OTR Public TV of Russia <https://youtu.be/h1R9edQmEuY> March 28, 2019 <https://otr-online.ru/programmy/gamburgskii-schet/anons-aleksandr-kabanov-prineset-li-plody-sovremennaya-nauchnaya-diplomatiya-36131.html>
439. Exactly the reputational aspects will define the future of scientific journals (In Russian) – Indicator.Ru / April 15, 2019 <https://indicator.ru/humanitarian-science/budushee-nauchnyh-zhurnalov.htm>
440. Why there is none and can't be one "pill against cancer (In Russian) – IF Инвест-Форсайт / June 16, 2019 <https://www.if24.ru/tabletki-ot-raka/>

441. Building bridges (In Russian) – trv-science.ru / 20.11.2018 / № 267 p.4 <https://trv-science.ru/2018/11/20/stroit-mosty/>
442. Laboratory at the junction of sciences and generations (In Russian) – Indicator.Ru / March 7, 2018 <https://indicator.ru/chemistry-and-materials/intervyu-aleksandr-kabanov.htm>
443. There are many steps up and it is important to walk them all (In Russian) – Siberian Forum / Nov. 2017 <http://sibforum.sfu-kras.ru/node/1001>
444. Is Russia in need of science diaspora? (In Russian) trv-science.ru / 04.07.2017 / № 232 p.4 <http://trv-science.ru/2017/07/04/nauchnaya-diaspora-rossii-nuzhna/>
445. Overcoming barriers (in Russian) – TASS Science <https://chrdk.ru/other/kabanov-interview> / 16.11.2017
446. More postdocs for Russian science: Interview with Alexander Kabanov (in Russian) – Indicator.Ru / November 16, 2016 <https://indicator.ru/chemistry-and-materials/intervyu-kabanova.htm>
447. Tumor hunters (In Russian) – Rossiyskaya Gazeta <https://rg.ru> / 03.02.2015 <https://rg.ru/2015/02/04/lekarstva.html>
448. Treatment by address (In Russian) – TASS Science / 10.03.2015 <https://nauka.tass.ru/sci/6823048>
449. Conflict of interest: How is it counteracted in the West? (In Russian) – trv-science.ru / 29.07.2014 / № 159 p. 2-3 <https://trv-science.ru/2014/07/konflikt-interesov-kak-s-ehitim-boryutsya-na-zapade/>
450. Young people choose nano? (In Russian) – polit.ru / Jul. 20, 2014 https://polit.ru/article/2014/07/20/nano2014_msu/
451. From fantasy to real science (In Russian) – erazvitie.org / 2014-04-02 <http://erazvitie.org/article/ot-fantazii-k-nauke>
452. Russian enzyme turned out to be orders of magnitude more active (In Russian) – gazeta.ru / 18.11.2012 https://www.gazeta.ru/science/2012/10/18_a_4816185.shtml
453. Megagrants: critical opinion of the winner (In Russian) – NanoNewsNet / March 17, 2011 <https://www.nanonewsnet.ru/articles/2011/megagranty-kriticheskoe-mnenie-pobeditelya>
454. Nanomedicine against cancer (In Russian) – gazeta.ru / 26.11.2010 https://www.gazeta.ru/science/2010/11/25_a_3446833.shtml

TEACHING AND MENTORING ACTIVITIES:**a. Lectures in team-taught courses:**Undergraduate/ProfessionalUNMC

- PHSC 570 "Pharmaceutical Sciences 1", required, 5 cr., 1999-2006 (S)
- PHSC 550 "Introduction to Pharmacy", required, 4 cr., 1999-2001 (F)
- PHSC 570/870 "Pharmaceutics", required, 4 cr., 1996-1998 (S)

UNC

- PHCY 411 Basic Pharmaceutics II, 3 cr., 2014 (S)

MSU

- Modern problems of enzymology and medical biotechnology (specialty), 2021 (F)
- Selected chapters in biochemistry and biotechnology (specialty, in English), 2020 (S), 2021 (S)

GraduateUNMC

- PHSC 830 "Advanced Medicinal Chemistry", graduate, 3 cr., 1998 (F)
- PHSC 845 "Quantitative Pharmaceutical Analysis", graduate, 4 cr., 2000 (S, F)
- PHSC 851 "Innovative Drug Delivery Systems", 1997, 1999, 2001, 2004 (S).
- PHSC 852 "Pharmaceutical Chemistry", 2008 (S).
- PHSC 885 "Advanced Pharmaceutics I", 1996, 1998, 2000, 2002 (F).
- PHSC 885 "Physical Pharmacy", 2008 (F), 2011 (S).
- PHSC 886 "Advanced Pharmaceutics II", 3 cr., 1997, 1999 (F).
- PHSC 960 "Current Topics in the Pharmaceutical Sciences", 1 cr, 1998 (F,S), 2001 (S), 2006 (S)
- PHAR 905 "Molecular Pharmacology", 2 cr. 1997, 1999, 2000 (S)

UNC-Chapel Hill

- DPMP 738 "Nanomedicine", 3 cr., 2019 (S).
- MOPH 868 "Advances in Drug Delivery and Nanomedicine", 6 cr., 2016 (F), 2017 (F)
- MOPH 864 "Advances in Drug Delivery", 3 cr., 2013 (F), 2015 (S).
- MOPH 738 "Nanomedicine", 3 cr., 2012 (F), 2014 (F).

MSU

- Selected chapters of enzymology and medical biotechnology, 2020 (F), 2021 (F)
- Modern problems of nanomedicine and drug delivery, 2020 (S), 2021 (S), 2022 (S)

b. Coordinated/supervised courses:UNMC

- PHSC 890 "Polymer Therapeutics", graduate, 3 cr. 2003, 2005, 2007, 2010 (S).
- PHSC 970 "Seminar in Pharmaceutical Sciences", graduate, 1 cr, 1999-2001 (F,S).
- PHSC 886 "Advanced Pharmaceutics II", graduate, 3 cr., 1997, 1999 (F).

UNC-Chapel Hill

- DPMP 862/863 “Special Topics in Advanced Pharmaceutics” 3 cr., 2018 (S), 2018 (F)/ 2019 (S), 2019 (F)/ 2020(S), 2020 (F)/ 2021 (S), 2021 (F)/ 2022 (S), 2022 (F)/ 2023 (S), 2023 (F)/ 2024 (S)
- MOPH 862 “Advanced Pharmaceutics/Advanced Physical Pharmacy”, 3 cr., 2015 (S), 2016 (S), 2017 (S), (course director, designed and recorded new flipped class, provide the major share of pre-recorded classes and in class lessons taught).

c. Educational technology and methods:

- 1997-2000 Internet Course on Physicochemical Principles of Pharmaceutics (undergraduate and graduate versions) - one of the early web located power point courses in Pharmaceutics that that was used in the end of 90’s early 2000s by many instructors in the Unites States in their teaching
- 2010-pres **Reverse Conceptual Project Engineering (RECOPE):** Gaymalov Z, Kabanov A (2017) RECOPE: How to succeed in bringing ideas from academia to market without compromising ingenuity. *Nanomedicine: Nanotechnology, Biology and Medicine* 13(3):795-800. doi: 10.1016/j.nano.2016.10.007. An educational and experiential approach applied in academic setting to facilitate biomedical research translation from bench to bedside. By using expertise of diverse set of biomedical professionals and trainees to solve a problem early in the course of the research, RECOPE helps to make research goals more relevant to the society needs and translatable in a long-term perspective.

d. Short Courses and other Educational Lectures (continued from the list of lectures):

456. T32 C-CNTP Workshop "Polymer-Based Nanomedicines" UNC, Chapel Hill, April 10 – 13, 2023
- Workshop 1: "Principles of Polymer-Based Drug Carriers"
 - Workshop 2: "Block Copolymers and Polymeric Micelles for Drug Delivery"
 - Workshop 3: "Polyion Complexes for Design of Delivery Systems for Biomacromolecules"
457. Short Course in “Polymer-Based Nanomedicines”, 3 lectures (6 h) College of Pharmacy, Chung-Ang University, Seoul, South Korea, Dec. 5-7, 2022:
- Lecture 1: “Principles of Polymer-Based Drug Carriers”
 - Lecture 2: “Block Copolymers and Polymeric Micelles for Drug Delivery”
 - Lecture 3: “Polyion Complexes for Design of Delivery Systems for Biomacromolecules”
458. Special Course “Nanomedicine and Drug Delivery”, 2 lectures (4 h), M. V. Lomonosov Moscow State University, Moscow, Russia, 2018
459. Special Course “Nanomedicine and Drug Delivery”, 2 lectures (3 h), M. V. Lomonosov Moscow State University, Moscow, Russia, Feb. 15 – Nov. 22, 2017
460. Special Course “Nanomedicine and Drug Delivery” (continued), 5 lectures (7.5 h), M. V. Lomonosov Moscow State University, Moscow, Russia, Feb. 19 – Feb. 19, 2016
461. Special Course “Nanomedicine and Drug Delivery”, 7 lectures (10.5 h), M. V. Lomonosov Moscow State University, Moscow, Russia, Oct. 30 – Nov. 5, 2015
462. Polymeric Micelles for Drug Delivery – A Transformative Technology at Clinical Stage, Würzburg Summer School 2015 on Supramolecular Nanosystems, Wurzburg, Germany, July 31, 2015.
463. Special Course “Nanomedicine and Drug Delivery”, 13 lectures (20 h), Technical University of Dresden, Dresden, Germany, June 8 – June 18, 2015
464. Nanomedicine from bench to bedside, Special Course in Nanopharmacology and Nanomedicine, Omaha, NE, June 4, 2008.
465. Nanomedicine from bench to bedside, ACS Omaha Chapter, Omaha, NE, Apr. 8, 2008.

466. Polymer Nanomaterials for Drug Delivery, AAPS Webinar, Funded by a grant from AstraZeneca. Feb. 29, 2008.
467. Novel polymer materials for drug and gene delivery (5-lectures), Short Course at Moscow State University Faculty of Chemistry, Moscow, Russia, Feb. 17-21, 2003.
468. Self-assembling systems for drug delivery, ACS Short Course on "Chemistry, Biology and Applications of Bioconjugates" (Peter Senter, org.), San Diego, CA, March 30-31, 2001.

e. Workshops:

- 2016-pres. Founder and Director, **Carolina Nanoformulation Workshop (CNW)**, Chapel Hill, NC, 2016, 2017, 2018, 2020: CNW is a unique training mechanism focusing on nanotechnology-based approaches to address pharma and biopharma needs for delivery of clinically relevant molecules. This workshop consists of a three-day lecture/seminar block and two days of hands-on, practical training and discussion. The workshop attendees include scientists from industry and academia, graduate students, postdocs and faculty from UNC and elsewhere.

f. Training program(s):

- 2015-pres. Founder and Director, **T32 Carolina Cancer Nanotechnology Training Program (C-CNTP)**, NIH/NCI (1T32CA196589). C-CNTP is a 24 to 36 mo. National Cancer Institute-sponsored T32 postdoctoral training program offered at the UNC Eshelman School of Pharmacy at the University of North Carolina at Chapel Hill. The overarching goal of the CCNTP is to equip a cohort of outstanding young scientists with the multidisciplinary concepts and skills needed to improve cancer diagnosis and therapy based on concepts, tools and discoveries made in nanoscience and nanotechnology.

g. Graduate supervisory/advisory committees (other than advised students):

- 1996-2000 Sriramakamal Jonnalagadda, Ph.D.
 1998-1999 Aimee Beth Schreiner (Kratina), M.S.
 1998-2003 Bandi Nagesh, Ph.D.
 1998-2000 Sinjan De
 1998-2002 Ana Maria Soto, Ph.D., Zhang Yan, Ph.D.
 1998-2004 Haiqing Dai, Ph.D., Tim Spitzinberger, Ph.D.
 2000-2004 Surya P. Ayalasomayajula, Ph.D.
 2000-2005 Corbin Bachmeier, William J. Trickler, Ronald Shinkyia
 2002- Manjori Ganguly
 2003-2004 Jian Zhang, M.S.

h. Other:

- UNMC College of Pharmacy class 2005 student advisor, 2002-2005.
 UNMC College of Pharmacy class 2002 student advisor, 1998-2002.
 UNMC Mini-Medical School, 2001.
 UNMC Mini-Medical School, 2005.

LABORATORY:**Graduate students:**

- 1986 – 1989 Sergey N. Nametkin, Candidate of Chemical Sciences¹², MSU¹³ 1989 “Modulation of catalytic activity of enzymes by altering their supramolecular organization in reverse micelle systems”; A.V. Levashov, A.V. Kabanov, co-advisors.
- 1987 – 1990 Maria M. Khrutskaya, Candidate of Chemical Sciences, MSU November 1990 “Design of conjugates of synthetic and natural macromolecules using reverse micelles as template-microreactors”; V.A. Kabanov, A.V. Kabanov, co-advisors.
- 1989 – 1992 Vladimir I. Slepnev, Candidate of Chemical Sciences, RCMDT¹⁴ April 1992 “Modification of proteins for transport of biologically-active compounds into a cell” (*currently CSA & Founder, Curative Labs/ COVID-19 Detection, Cincinnati, OH*) <https://www.linkedin.com/in/vlad-slepnev-05b4b213/>
- 1989 – 1993 Yulia G. Suzdaltseva, Candidate of Biological Sciences¹⁵, RCMDT April 1993 “Effect of artificially hydrophobized antiviral antibodies on reproduction of influenza virus in cell culture”; A.V. Kabanov, O. P. Zhirnov, co-advisors.
- 1990 – 1994 Irina R. Nazarova, Candidate of Chemical Sciences, MSU 1994 “Physico-chemical properties of micelles of block copolymer of polyoxyethylene and polyoxypropylene and their interactions with model membranes”; A.V. Kabanov, A.A. Yaroslavov, co-advisors.
- 1990 – 1996 Tatiana Dorodnykh, Candidate of Chemical Sciences, RCMDT 1994
- 1997 – 2002 Andrew Nehls, M.S., UNMC¹⁶ (*currently Senior Director of Business Development, Early Phase Clinical Services at QPS, LLC, Omaha, NE*) <https://www.linkedin.com/in/andrew-nehls-2b4508a/>
- 1999 – 2005 Sergey Viacheslavovich Solomatin, Ph.D., UNMC February 2005 “Study of self-assembly and environmental response properties of block ionomer complexes” (*currently VP of Research at Impossible Foods Inc., Sand Hill Foods, Menlo Park, CA*) <https://www.linkedin.com/in/sergey-solomatin-9aa36830/>
- 2001 – 2006 Kyung Taek ("Kevin") Oh, Ph.D., UNMC May 2006 “Environmentally responsive materials based on block-, graft-, and cross-linked copolymers for pharmaceutical applications” (*currently Professor at Chung-Ang University, Seoul, South Korea*)
- 2001 – 2007 Srikanth ("Sri") Sriadibhatla, Ph.D., UNMC February 2007 “Effects of pluronic block copolymers on gene delivery and expression” (*currently Director, Healthcare Investment Group, Ben Franklin Technology Partners of Southeastern Pennsylvania, Philadelphia, PA*) <https://www.linkedin.com/in/srisriadibhatla/>
- 2003 – 2004 Jian Zhu, M.S., UNMC August 2004 “Effect of Pluronic P85 on transgene expression in skeletal muscle and potential use of this agent for antitumor DNA vaccination” (*currently Associate Professor, Department of Pathology, Ohio State University Wexner Medical Center, Columbus, OH*) <https://www.linkedin.com/in/jian-zhu-7740b1a/>
- 2003 – 2007 Pavel Sergeevich Chelushkin, Candidate of Chemical Sciences, MSU May 2007 “Interpolyelectrolyte complexes of amphiphilic ionogenic block copolymers and oppositely

¹² Ph.D. equivalent¹³ M.V. Lomonosov Moscow State University¹⁴ All-Russian Research Center of Molecular Diagnostics and Therapy¹⁵ Ph.D. equivalent¹⁶ University of Nebraska Medical Center

- charged polyelectrolytes”; A.V. Kabanov, T.A. Lysenko, co-advisors (*currently at Institute of Macromolecular Compounds, Russian Academy Sciences, St. Petersburg, Russia*).
<https://www.linkedin.com/in/pavel-chelushkin-351ab58/>
- 2004 – 2008 Amit Sharma (not completed)¹⁷ (*Employed as Executive Director, Merck Co., Somerville, NJ*)
<https://www.linkedin.com/in/dr-amit-kumar-sharma/>
- 2004 – 2009 Zagit Z. Gaymalov, Ph.D., UNMC November 2009 “Pluronic block copolymers for non-viral gene delivery” (*S&T Commercialization, Houston, TX*) <https://www.linkedin.com/in/zagit/>
- 2005 – 2009 Gaurav Sahay, Ph.D., UNMC October 2009 “Mechanism(s) of endocytosis for cellular entry of nanomaterials” (*currently Associate Professor at Oregon State University, Portland, OR*)
<https://www.linkedin.com/in/gaurav-sahay-09454b8/>
- 2005 – 2010 Xiang Yi, Ph.D., UNMC November 2010 “Protein modification by Pluronic block copolymer for brain delivery” (*currently Senior Scientist at Amgen, San Francisco, CA*)
<https://www.linkedin.com/in/xiang-yi-1279568/>
- 2006 – 2010 Natalia Nukolova, Candidate of Chemical Sciences, MSU November 2010 “Modified polymer nanogels: Synthesis, properties and application” (*currently Director, Formulation, Selecta Biosciences, Greater Boston, MA*) <https://www.linkedin.com/in/natalia-nukolova-96771b9/>
- 2006 – 2012 Daria (Dasha) Y. Alakhova (Filonov), Ph.D., UNMC July 2012 “Mechanistic study of interaction of pluronic block copolymers in drug resistant and cancer initiating cells” (*currently Creative Scientist, Inc., RTP, NC*) <https://www.linkedin.com/in/daria-filonov-702a8557/>
- 2007 – 2008 Michele Gasko (not completed)
- 2007 Dasha Kovaleva (not completed)
- 2007 – 2013 Anna Brynskikh, Ph.D., UNMC February 2013 “Block ionomer complexes of antioxidant enzymes (Nanozymes) as therapeutics for neurologic disorders” (*currently medical publications expert, Omaha, NE*) <https://www.linkedin.com/in/annabrynskikh/>
- 2008 – 2013 Yi Zhao, Ph.D., UNMC September 2013 “Amphiphilic block copolymers for enhancing Doxorubicin and Doxil based chemotherapy by sensitizing cancer stem cells and promoting drug release within tumors” (*currently Senior Scientist, Takara Bio USA, Inc., Palo Alto, CA*)
<https://www.linkedin.com/in/yizhao1028/>
- 2009 – 2013 Jing Tong, Ph.D., UNMC January 2013 “Poly(2-oxazoline) as a polymer carrier for cellular and brain delivery of therapeutic proteins and fullerene” (*currently Senior Director, Shanghai Junshi Biosciences Co., Ltd., Suzhou City, Jiangsu, China*) <https://www.linkedin.com/in/jing-tong-7b3a448/>
- 2009 – 2014 Philise Williams, Ph.D. UNMC November 2014 “Remote actuation of magnetic nanoparticles in breast cancer cells” (*currently Radiology Resident, UMass Chan Medical School, Enfield, CT*)
<https://www.linkedin.com/in/philise-williams-a69893158/>
- 2009 – 2010 Marc Ueda (not completed)
- 2010 – 2012 Maxim Abakumov, Candidate of Chemical Sciences, MSU May 2012 “Systems for targeted visualization of gliomas based on iron nanoparticles”, V.P. Chekhonin, A.V. Kabanov, co-advisors (*currently Associate Professor at Russian State Medical University, Moscow, Russia*)

¹⁷ Switched to 2009 MBA candidate, Owen Graduate School of Management, Vanderbilt University.

- 2010 – 2013 Poornima Suresh, M.S., UNMC ““Nanozymes” for the delivery of Superoxide dismutase 1 to the brain” (*currently Freelance editor & writer, Pune, India*)
<https://www.linkedin.com/in/poornimasuresh/>
- 2010 – 2015 Zhijian (Jimmy) He, PhD., UNC January 2015, “Poly(2-oxazoline)s as new drug delivery systems” (*currently Associate Director, Clinical and Quantitative Pharmacology, AstraZeneca, Gaithersburg, MD*) <https://www.linkedin.com/in/jimmy-he-phd-38ab0138/>
- 2010 – 2015 Vivek Mahajan, Ph.D., UNMC May 2015, “Role of macrophages in muscle transfection with pDNA/Pluronic formulation” (*currently Associate Director, In Vivo Pharmacology, Oncology, GSK, Collegeville, PA*) <https://www.linkedin.com/in/vivekoncology/>
- 2010 – 2016 Hemant M. Vishwasrao, Ph.D., UNMC January 2016 “Block copolymer based magnetic nanoclusters for cancer-theranostics: synthesis, characterization and *in vitro* evaluation” (*currently Principal Scientist, Product Development, Vistagen, Morrisville, NC*)
<https://www.linkedin.com/in/nanoformulator/>
- 2011 – 2016 Yuhang Jiang, PhD., UNC October 2016 “Block ionomer complex formulations for *in vivo* protein delivery” (*currently Associate Director, Suzhou Abogen Biosciences, Jiangsu, China*)
<https://www.linkedin.com/in/jiangyuhang/>
- 2011 – 2017 Dongfen Yuan, PhD., UNC April 2017 “Delivery of therapeutic proteins to the brain” (*currently Associate Director, Clinical pharmacology and pharmacometrics, Johnson & Johnson, Durham, NC*) <https://www.linkedin.com/in/dongfenyuan/>
- 2011 – 2018 Xiaomeng Wan, UNC Jan 2018 “Poly(2-oxazoline) micellar formulation for cancer therapy”
<https://www.linkedin.com/in/xiaomeng-wan-unc/>
- 2011 – 2019 Youngee Seo, Ph.D., UNC October 2019 “Development of Poly (2-Oxazoline)s-Based Nanoferragels” (*currently postdoctoral ORISE fellow at Center for Drug Evaluation and Research (CDER), Food and Drug Administration (FDA)*) <https://www.linkedin.com/in/youngee-seo-8637b077/>
- 2013 – 2019 Ksenia Vlasova, Candidate of Chemical Sciences, MSU October 29, 2019 “Magnetic Nanosystems for Controlled Release of Drugs Under Low Frequency Alternating Magnetic Field: Development and Study of Properties”, A.V. Kabanov, N.L. Klyachko, co-advisors (*currently postdoc at Oregon State University, Portland, OR*)
<https://www.linkedin.com/in/kseniia-vlasova-65678782/>
- 2015 – 2020 Duhyeong Hwang Ph.D., UNC March 2020 “Poly(2-Oxazoline)-Based Polymeric Micelle Platform for Drug Delivery” (*currently Assistant Professor in Department of Pharmaceutical Engineering at Dankook University, Cheonan, South Chungcheong, South Korea*)
<https://www.linkedin.com/in/duhyeong-hwang-66a4a3a9/>
- 2015 – 2022 Jimmy Fay, Ph.D., UNC July 2022 ““The Nanoformulation of Brain Derived Neurotrophic Factor and Reformulation with PEG-free Polymers” (*Field Application Scientist, NanoFCM, Cambridge, MA*) <https://www.linkedin.com/in/jfay/>
- 2016 – 2021 Natasha Vinod, Ph.D., UNC September 2021 “High-Capacity Poly(2-Oxazoline) Nanofomulations for Reprogramming Tumor Microenvironment” (*currently Visiting Fellow, National Cancer Institute, Bethesda, MD*) <https://www.linkedin.com/in/natashavinod9392/>
- 2016 – 2022 Dina Yamaleyeva, Ph.D., UNC April 2022 “Poly(2-Oxazoline)-Based (POx) Platform for Gene Delivery” (*currently Application Scientist, Miltenyi Biotec, San Diego, CA*)
<https://www.linkedin.com/in/dinayamaleyeva/>
- 2018 Ali Altitnchi (changed lab and direction), UNC

- 2019 – Jacob Ramsey, UNC, NCI F99/K00 Fellow (2022-) <https://www.linkedin.com/in/jacob-ramsey-b6532ba3/>
- 2019 – Maxim Veselov, MSU
- 2019 – 2022 Anton Lopukhov, Candidate of Chemical Sciences, MSU June 28, 2022 “Development of Lectin-Receptor Targeted System for Delivery of Biologically Active Molecules” (*currently y Scientist, MSU*) <https://www.linkedin.com/in/anton-lopukhov-337272121/>
- 2022 – Alyssa Holden, UNC <https://www.linkedin.com/in/alyssa-holden-463293191/>
- 2023 – Liubov Palchak, UNC <https://www.linkedin.com/in/liubov-palchak-a2080424a/>
- 2023 – Hallie Hutsell, UNC <https://www.linkedin.com/in/hallie-hutsell-3a86ba220/>

Total 46 36 defended, 4 in-training, 5 not completed, 19 women and URM defended or in training

Undergraduate visiting/summer students:

- 1997 Timothy Cherry, Cornell University, U.S.A.
- 1998 Alexei Popov, Moscow State University, Russia
- 1998 Sergey Solomatin, Moscow State University, Russia
- 1998-1999 Mikhail Kozlov, Moscow State University, Russia
- 1999 Patrick Halpin, University of Sherbrooke, Canada
- 1999-2000 Milena Otdelnova, Moscow State University, Russia
- 2000 Steve Stroeger, UNMC College of Pharmacy, U.S.A.
- 2001 Kimi Ueda, UNMC College of Pharmacy, U.S.A.
- 2001 Brent J. Night, Creighton University, U.S.A.
- 2004, 2005 Daria (Dasha) Y. Alakhova, Moscow State University, Russia

Visiting graduate students:

- 2008 Matteo Gazzarri, Ph.D. candidate, University of Pisa, Italy
- 2008, 2009 Anita Schulz, Ph.D. candidate, Technical University of Munich, Germany
- 2009 Morten Østergaard Andersen, Ph.D. candidate Aarhus University, Denmark
- 2010, 2012 Anita Shulz, Ph.D. candidate, Technical University Dresden, Germany
- 2012 Herdis Bludau, M.S. candidate, Technical University Dresden, Germany
- 2012 Corinna Fetsch, M.S. candidate, Technical University Dresden, Germany
- 2016 Sarah Naumann, M.S. candidate, Technical University Dresden, Germany
- 2017 Dan Gieseler, Ph.D. candidate, Technical University Dresden, Germany
- 2021 Yuseon Shin, Ph.D. candidate, Chung-Ang University, S. Korea
- 2022 Nikola Mannova, Ph.D. candidate, University of Pardubice, Czech Republic

Postdoctoral trainees, research fellows/associates and visiting scientists:#**RCMDT**

- 1988 – 1991 Irina Astafieva, Ph.D., Junior Scientist (*Currently Analytical CMC Quality Leader at Genentech, Palo Alto, CA*) <https://www.linkedin.com/in/irina-astafieva-phd-7321385/>
- 1988 – 1993 Nikolai Melik Nubarov, Ph.D., Senior Scientist (currently at MSU, Moscow, Russia)
- 1988 – 1993 Elena Batrakova, Ph.D., Senior Scientist
- 1988-1993 Sergey Vinogradov, Ph.D., Leading Scientist

UNMC

- 1994 – 1997 Sergey Vinogradov, Ph.D., Visiting scientist
- 1995 – 2003 Elena Batrakova, Ph.D., Research Associate
- 1995 – 1997 Tatiana Bronich, Ph.D., Postdoctoral Research Assistant
- 1997 – 1998 Hong Khanh Nguyen, Ph.D. Postdoctoral Research Assistant (*currently Industrial Property Manager at Horiba Medical, Montpellier, France*) <https://www.linkedin.com/in/hong-khanh-nguyen-615347a/>
- 1997 – 2009 Eugenie Lysenko, Ph.D., Visiting Scientist (currently at MSU, Moscow, Russia)
- 1998 – 2000 Catherine Gebhart, Ph.D., Postdoctoral Research Assistant, Research Associate (*currently Immunology Laboratory Director, LifeLink Foundation. Tampa, FL*) <https://www.linkedin.com/in/catherine-gebhart-8626827/>
- 2004 – 2005 Li Zhang, Ph.D., Postdoctoral Research Assistant
- 2004 – 2007 Zhihui Yang, M.D., Research Associate
- 2004 – 2008 Xiaobin Zhang, Ph.D., Postdoctoral Research Assistant (*Employed as Principal Scientist, Takeda, Lexington, MA*) <https://www.linkedin.com/in/xiaobin-zhang-b1424914/>
- 2005 – 2008 Yuan Li, Ph.D., Postdoctoral Research Assistant
- 2008 Tatiana Panova, Ph.D., Visiting Scientist
- 2007 – 2008 Robert Luxenhofer, Ph.D., Visiting Scientist, Postdoctoral Research Assistant (*currently Professor for Soft Matter Chemistry, Department of Chemistry, University of Helsinki, Bestätigte, Finland*) <https://www.linkedin.com/in/robert-luxenhofer-9bb5b521a/>
- 2008 – 2010 Carlyne Roques, Ph.D., Postdoctoral Research Assistant, Research Associate (*currently Associate Professor, Faculty of Pharmacy, Paris Descartes University: Paris, France*).
- 2008 – 2010 Zigang Yang, Ph.D., Postdoctoral Research Assistant (*Employed as Principal Scientist, Axalta Coating Systems, Yangpu District, Shanghai, China*) <https://www.linkedin.com/in/zigang-yang-75068096/>
- 2008 – 2012 Devika Manickam, Ph.D., Postdoctoral Research Assistant, Research Instructor, Leader, Biopolymer Nanoformulations Group (*Employed as Assistant Professor, Duquesne University School of Pharmacy*) <https://www.linkedin.com/in/devika-s-manickam-97275516/>
- 2008 – 2009 Wenguang Zhang, M.D., Research Instructor
- 2009 – 2012 Svetlana Romanova, Ph.D., Postdoctoral Research Assistant <https://www.linkedin.com/in/svetlana-romanova-592baa32/>

- 2009 – 2012 Marina Sokolsky, Ph.D., Postdoctoral Research Assistant, Research Associate, Leader, Magnetic Nanomaterials Group
- 2010 – 2012 Zaguit Gaimalov, Ph.D., Research Manager and Deputy Director of CDDN for Translational Research
- 2009– 2012 Shaheen Ahmed, Ph.D., Postdoctoral Research Assistant (*Employed as Scientist II at ReCode Therapeutics, Inc., Santa Clara, CA*) <https://www.linkedin.com/in/shaheen-ahmed-6365a3105/>
- 2010 – 2012 Yingchao Han, Ph.D., Postdoctoral Research Assistant
- 2010 – 2012 Xiang Yi, Ph.D., Postdoctoral Research Assistant, Leader, Protein Therapeutics Group

UNC-Chapel Hill

- 2012 – 2014 Alexander Piroyan, Postdoctoral Research Assistant (currently industry)
- 2013 – 2014 Jing Gao, Postdoctoral Research Assistant (currently industry)
- 2014 – 2016 Alyssa Master, Postdoctoral Research Assistant (*Employed as Senior Vice President of Operations at Nucleus Biologics, San Diego County, CA*)
<https://www.linkedin.com/in/alyssamaster/>
- 2015 – 2019 Elizabeth Wayne, T32 Postdoctoral Research Assistant (*Employed as Assistant Professor, Biomedical Engineering and Chemical Engineering, Carnegie Mellon University*)
<https://www.linkedin.com/in/lizwayne/>
- 2016 – 2017 Si Qin, Research Associate
- 2016 – 2018 Mingzhen Zhang, Research Associate
- 2016 – 2021 Lida Ghazanfari, T32 Postdoctoral Research Assistant (currently Associate Director- in vitro services (Immunology), Charles River Laboratories, NC)
<https://www.linkedin.com/in/lghazanfari/>
- 2017 Yusuf Kemal Demir, Research Associate
- 2017 – 2022 Chaemin Lim, Postdoctoral Research Associate (currently Research Assistant Professor, College of Pharmacy, Chung-Ang University, Seoul, Korea)
<https://www.linkedin.com/in/chaemin-lim-12072313b/>
- 2018 – 2019 Juan Beltran Huarac, T32 Postdoctoral Research Assistant (currently Assistant Professor in the Department of Physics, East Carolina University) <https://www.linkedin.com/in/juan-beltran-huarac-4ab69046/>
- 2017 – 2019 Naoki Makita, Visiting Scientist (currently industry)
- 2018 – 2019 Ryo Kojima, Visiting Scientist (currently industry)
- 2020 – Mohamed Fathy Attia, NCI T32 Postdoctoral Research Assistant
- 2021 – Edikan Archibong Ogunnaike, NINDS K99 Fellow
- 2022 – Kyoungtea Kim, Research Associate
- 2023 – Son Long Ho, NCI T32 Postdoctoral Research Assistant
- 2023 – Colin Basham, NCI T32 Postdoctoral Research Assistant

Total 39 36 completed, 3 in-training, 21 women and URM

Not including scientists supervised at MSU (2010-)

Senior group members and visiting scientists:

UNMC

- 2003 – 2012 Elena Batrakova, Ph.D., Research Assistant Professor (*currently Associate Professor, UNC-Chapel Hill*) <https://www.linkedin.com/in/elena-batrakova-64058254/>
- 1997 – 2012 Tatiana Bronich, Ph.D., Research Assistant/Associate Professor (*currently Associate Dean, Bouvé College of Health Sciences; Dean, School of Pharmacy and Pharmaceutical Sciences; Professor, Department of Pharmaceutical Science, Northeastern University, Boston, MA*). <https://www.linkedin.com/in/tatiana-bronich-b790999/>
- 1997 – 2012 Sergey Vinogradov, Ph.D., Research Assistant Professor (*Retired as Research Professor, UNMC*).
- 2004 – 2008 Joseph A. Vetro, Ph.D., Research Assistant Professor, Assistant Professor (*currently Associate Professor at UNMC*) <https://www.linkedin.com/in/josephvetro/>
- 2007 – 2008 Motoi Oishi, Ph.D., Visiting Assistant Professor
- 2008 – 2012 Natalia Klyachko, Ph.D., Professor, MSU, Visiting Professor, UNMC

Moscow State University

- 2010 – 2014 Alexander Majouga, Ph.D., DSc. Senior research associate (*currently Deputy of the State Duma of the Russian Federation and First Deputy Chairman of the Duma Committee on Science and Higher Education, immediate former position - Rector of the Mendeleev University of Chemical Technology, Moscow, Russia*)

UNC-Chapel Hill

- 2012 – 2015 Devika Manickam, Ph.D., Research Assistant Professor (*currently Associate Professor at Duquesne University*) <https://www.linkedin.com/in/devika-s-manickam-97275516/>
- 2012 – Marina Sokolsky-Papkov, Ph.D., Research Assistant Professor, Research Associate Professor, <https://www.linkedin.com/in/marina-sokolsky-papkov-462ab416/>
- 2012 – 2015 Xiang Yi, Ph.D., Research Assistant Professor
- 2012 – Natalia Klyachko, Ph.D., Professor, MSU, Visiting Professor, UNC, Professor and Chair, Department of Chemical Enzymology, Faculty of Chemistry, MSU
- 2017 – 2019 Elena Batrakova, Research Associate Professor
- 2018 – 2020 Ayelet David, Visiting Professor, UNC, Associate Professor, Ben Gurion University, Visiting Scientist, UNC
- 2023 – Kinstantin Lukyanov, Visiting Professor, UNC

Other mentored faculty¹⁸:

- 2008 – 2012* Joseph A. Vetro, Ph.D., Assistant Professor, College of Pharmacy, UNMC
- 2005 – 2007* Dong Wang, Ph.D., Assistant Professor, College of Pharmacy, UNMC

¹⁸ Position of mentees is shown as of time of training.

- 2018 – 2020 Yevgeny Brudno, Ph.D., Assistant Professor, Joint Department of Biomedical Engineering, UNC and North Carolina State University
- 2018 – Edward Moreira Bahnson, Ph.D., Assistant Professor, Department of Cell Biology & Physiology, Center for Nanotechnology in Drug Delivery, UNC

* Indicates obtaining major research funding (e.g., NIH RO1) as independent principal investigator for mentored.

Research Technologists/specialists:

- 1998 – 2014 Shu Li, Research Technician, Research Technologist
- 2002 – 2004 Yi Li Li, Research Technician
- 2008 Stacey Tatman, Research Technician
- 2008 – 2010 Yudong Li, Research Technician
- 2008 – 2010 Sheila M Higginbotham, Research Technician
- 2012 – Matt Haney, Research Specialist
- 2016 – Yuling Zhao, Research Specialist
- 2016 – 2017 Kevin Day, Research Specialist
- 2017 – 2020 Camille Mayanga Kapita
- 2017 – 2019 Jacob Ramsey
- 2017 – 2020 Olesia Gololobova
- 2022 – Olha Shaban, Research Specialist
- 2023 – Ruby Zhao, Research Specialist

RESEARCH SUPPORT:**A. Combined past and current support (since October 1994)***

Role	Direct Cost US \$						Total Direct & Indirect Costs US \$
	NIH	NSF	Other Federal	Industry [#]	Other sources ^{&}	Total	
PI	27,322,672	1,354,612	5,783,245	1,367,533	13,074,960	48,903,022	61,312,889
Co-PI	9,716,763	-0-	7,668,613	-0-	37,051,701	47,959,377	60,502,519
Total	37,039,435	1,354,612	13,451,858	1,367,533	42,129,920	95,473,639	121,815,408

* Not including grants consulted or support received in the Soviet Union/Russia before 1994.

& Including grants received from foreign sources, not including university start-up and other seed funds.

Not including funding raised and/or spent outside of academic institutions by private entities.

B. Listing of grants**Current/Active:**

- Safe and Effective Circular RNA Vaccines for Emergence of Viral Infection, Coalition for Epidemic Preparedness Innovations (CEPI) and Emervax Partnership for vaccine development, A24-0634-R23-5143, 10/31/2023 – 04/30/2025, UNC subcontract \$567,366 A. Kabanov (UNC PI)
- Naturally Targeted Exosomal TLR7/8 Agonist for Immunotherapy of Medulloblastoma, NIH/NINDS 1R21NS135362-01, 09/20/2023 – 08/31/2025, \$427,625, A. Kabanov (PI)
- Naturally Targeted Exosomal TLR7/8 Agonist for Immunotherapy of Medulloblastoma, St. Baldricks Foundation, 5129491, 07/01/2023 – 06/30/2025, \$200,000, A. Kabanov (PI)
- mRNA Immunoadjuvants for mRNA vaccines, Bill and Melinda Gates Foundation, subcontract with FlagBio, 11/01/22 - 06/30/24, \$100,000, A. Kabanov (PI), A. Kabanov (PI)
- UNC KickStart Commercialization Grant, 05/08/2023 – 05/08/2024
- Drug Retention and Tumor Distribution of Polymeric Micelles for Cancer Therapy, NIH/NCI F99CA274702, 08/01/2022 – 07/31/2024, \$78,044, J. Ramsey (PI), A. Kabanov (Mentor)
- Fibrin-CAR-T cells therapies to enhance efficacy in glioblastoma treatments, NIH/NINDS K99NS128716, 09/01/2022 – 08/31/2024, \$231,006, Edikan Ogunnaike (PI), A. Kabanov (Mentor)
- Towards Translation of Nanoformulated Paclitaxel-Platinum Combination, NIH/NCI R01 CA264488, 08/01/21 – 06/31/25, \$2,452,236, A. Kabanov (PI)
 - Diversity Supplement - Towards translation of Nanoformulated Paclitaxel-Platinum Combination, \$411,093, 03/01/22 - 07/31/25 (Relinquished 08/31/2022 as a result of MOSAIC K99 Funding to Edikan Ogunnaike)
- Carolina Cancer Nanotechnology Training Program (C-CNTP), NIH/NCI, 1T32CA196589-06, 07/01/15 - 6/30/25, \$2,391,996 (current), \$4,224,766 (cumulative), A. Kabanov (PI)
- UNC - Sumitomo Collaboration, Sumitomo Dainippon Pharma, 06/01/20 – 05/31/22, A. Kabanov (PI)

Completed:¹⁹

- Extracellular Vesicles for CNS Delivery of Therapeutic Enzymes to Treat Lysosomal Storage Disorders NIH, R01NS112019, 09/01/19 - 06/30/24, E. Batrakova, (PI) A. Kabanov (Co-I)
- Cell-based Platform for Gene Delivery to the Brain. NIH 1R01NS102412, 03/1/18 – 11/30/23 (NCE), E. Batrakova, (PI) A. Kabanov (Co-I)
- Tunable synthetic polymeric scavengers for toxic xenobiotics, Russian Science Foundation, \$300,000 20-63-46034, 09/01/20 – 12/31/22, A. Kabanov (PI – **resigned as PI and participant on Dec. 31, 2021**).
- Liposomal Doxorubicin and Pluronic Combination for Cancer Therapy, NIH NCI, R01CA184088, 01/01/15 – 12/31/21 (NCE); \$1,561,245 (\$1,037,500), A. Kabanov (PI), W. Zamboni (CPI).
- Innovative Research in Cancer Nanotechnology (IRCN): Targeted Core Shell Nanogels for Triple Negative Breast Cancer, NIH/NCI, U01CA198910-01, 8/14/15-7/31/2021 (NCE), \$2,877,710, A. Kabanov (PI) T. Bronich & R. Liu (CPIs)
- Carolina Center for Cancer Nanotechnology Excellence (C-CCNE): Nano Approaches to Modulate Host Cell Response for Cancer Therapy; Project 4: High-Capacity Polymeric Micelle Therapeutics for Lung Cancer, NIH NCI, 1U54CA198999-01, 09/15/15-07/31/21 (NCE), \$11,309,680 (total CCNE) {\$2,261,936 (\$1,494,991)²⁰ Project 4}, L. Huang (PI) J. Tepper (CPI), A. Kabanov (PI, Project 4).
- Nanoparticle Delivery of Cas9 and Therapeutic gRNAs to the Brain, Tier 2, 06/01/18 – 5/31/20, \$200,000, A.V. Kabanov (PI), M. Zylka (CPI).
- Targeted Magneto-Mechanic Nanotherapeutics for Cancer, NIH NCI, 1R21CA220148, 08/01/17 - 07/31/20, \$352,401 A.V. Kabanov (PI)
- Brain Drug Delivery: Optimizing miR-29 Nanoformulation for Neuroprotection, Tier 1, 06/01/18 – 5/31/19, \$49,999, A.V. Kabanov (PI), M.P. Deshmukh (CPI).
- Systemic Targeting of Mononuclear Phagocytes for Parkinson's Disease Gene Therapy, Eshelman Institute for Innovation, Tier 3, 06/01/17 – 5/31/20, \$375,000, A.V. Kabanov (PI), E.V. Batrakova (CPI).
- Magneto-Mechanical Cancer Nanotherapeutics, Eshelman Institute for Innovation, Tier 2, 06/01/16 – 5/31/18, \$199,877, A.V. Kabanov (PI).
- Nasal Leptin - Polymer Conjugate for Treatment of Obesity, NIH NIDDK, STTR, 1R41DK108466, 8/01/16-7/31/17, \$215,843, A.V. Kabanov (PI), S. Farr (CI).
- Center for RNA Therapeutics and Biology, SkolTech Center for Research Education and Innovation (CREI), Skolkovo Foundation, 01/01/14 – 12/31/18, \$39,983,701, D. Anderson (PI non-Russian Institution/Center Co-Director), A.V. Kabanov (PI Russian Institution/Center Co-Director), V. Kotelianski (SkolTech Center Director), P. Sharp, R. Langer, O. Dontsova, N. Klyachko, V. Chekhonin, M. Gelfand, T. Jacks, J. Horton, J. Goldstein, M. Brown, (CIs).
- PRINT Butyrylcholinesterase (BuChE) Delivery, DTRA/DoD HDTRA1-09-14-FRCWMD-BAA, Thrust Area 3, Topic C: Nanostructured Active Therapeutic Vehicles (NATV), 07/01/2013-02/02/2018 \$4,900,000 (\$3,300,000) [\$304,000 (\$200,000)], J. DeSimone (PI), A. Kabanov (CPI).
- Nanoformulated Brain Derived Neurotrophic Factor (BDNF) for the Treatment of Rett Syndrome, Rettsyndrome.org, HeART Award #3112; 01/01/15 -12/31/16 \$149,384.00, A. Kabanov (PI), J. Neul (CI).

¹⁹ Dr. Kabanov had obtained successfully funds necessary to conduct his research in Russia before October 1994 through grants and contracts. This section presents only the research projects funded since his appointment in the United States.

²⁰ Unless it is stated different the total cost and direct cost (in brackets) are presented.

- Carolina Nanoformulation Workshop, Eshelman Institute for Innovation, Tier 1, 07/01/15 – 3/31/16, \$50,000.
- RECOPE: Reverse Conceptual Product Engineering, Eshelman Institute for Innovation, Tier 1, 07/01/15 – 3/31/16, \$50,000.
- Use of Autologous Macrophages for Sustained Delivery of GDNF as Treatment of Parkinson's Disease, NC Biotechnology Center; 07/01/15 – 3/31/16, \$50,000, M. Law (PI), E. Batrakova, A. Kabanov (Co-Is).
- Nanoformulation of the BDNF for the Treatment of Stroke, NIH/NINDS, 1R21NS088152-01A1, \$ 783,363, 07/01/15 - 6/30/17, A. Kabanov (PI)
- High Capacity Nanocarriers for Cancer Chemotherapeutics, NIH NCI, UO1 CA151806, 9/02/10-7/31/15, \$ 2,208,752 (\$ 1,685,918), A.V. Kabanov (PI), H. Band, T.K. Bronich, R. Jordan, R. Luxenhofer, S. Raja (CI).
- Polypeptide Modification for Enhanced Brain Delivery, NIH NINDS, R01 NS051334, 5/05/10-3/31/16 (no cost extension), \$ 1,870,852 (\$ 1,586,782), A.V. Kabanov (PI), W. Banks (CPI), E.V. Batrakova, S.V. Vinogradov (CIs).
- deIAQUA - Computer-assisted Drug Solubilization Platform, NC TraCS 4DR11404; 12/01/14 – 11/30/15; \$50,000 (direct); A. Kabanov (PI), A. Tropsha (CPI).
- Pegylated Liposomal Doxorubicin (PLD) in Combination with Pluronic for Treatment of Cancers 1, NIH/NCI – Alliance Challenge Project U54 CA151652, 07/01/13-06/30/14, J. DeSimone, Challenge project CPIs: W. Zamboni, A. Kabanov
- Evaluation of Antitumor Efficacy and Toxicity of Liposomal Doxorubicin (Doxil) in Combination with Pluronic Compositions in Vivo Tumor models of Breast and Ovarian Cancers, NIH/NCI – Alliance Challenge Project, Texas Center for Cancer Nanomedicine, 07/01/13-06/30/14, Challenge project CPI: G. Lopez-Berestein, A. Kabanov, W. Zamboni, B. Ozpolat.
- Triangle Center for Excellence for Materials Research and Innovation: Programmable Assembly of Soft Matter, Seed Project: "Ferrogels for remote diagnostics and therapy", 9/1/2013-8/31/2014, \$59,653 (\$42,999), G. Lopez (PI MSERC), A. Kabanov (PI Seed).
- INNS: Integrated Neuroprotective and Neuroregenerative Strategies, DoD, W81XWH-11-1-0700, 08/29/11- 08/28/14, \$4,195,000 (\$2,800,000) {\$1,700,000 (\$1,144,782)}²¹, S. Mallapragada (PI), A.V. Kabanov (CPI, consultant after reallocation to UNC on 08.12), T.K. Bronich (CPI after 08.12), H. Gendelman (CPI).
- NanoART Manufacture, Delivery and Pharmacokinetics for Optimizing Drug Adherence, Project 1, NIH/NIDA, 1P01 DA028555-01A1, 07/15/10-04/30/15, \$4,905,704 (\$3,314,665) [Project 1 \$546,000 (\$368,500)], H. Gendelman (PO1 PI), A.V. Kabanov (Project 1 PI, consultant, EAC member, after reallocation to UNC on 08.12).
- Chemical Design of Bionanomaterials for Medical Applications, Government of Russian Federation, Ministry of Education and Science of Russian Federation, 11.G34.31.0004, 11/01/10-12/31/12, Rub 135,000,000 {= approx. \$ 4,500,000 to Moscow State University}, A.V. Kabanov (PI). Competitively renewed, 01/01/12-12/31/14 Rub 57,000,000 {approx. \$ 1,893,000, Moscow State University}.
- Targeted Nanovaccines Against Respiratory Pathogens (TANARP), DoD Award No. W81XWH-10-1-0806, 9/01/10 - 8/31/13, \$3,502,000 (\$ 2,913,395) [\$850,000 (\$572,391)]²², S. Mallapragada (PI), A.V.

²¹ UNMC subcontract.

²² UNMC subcontract.

Kabanov (CPI, consultant after reallocation to UNC on 08.12), T.K. Bronich (CPI after 08.12), S. Hinrichs, B. Narasimhan, and M.J. Wannemuehler (CIs).

- Synthetic Nanovaccines Against Respiratory Pathogens (SYNARP), DoD Award No. W81XWH-09-1-0386; Log No. 08141006, 7/01/09 - 6/30/13, \$3,394,000 (\$ 2,913,395), A.V. Kabanov (PI, CI after reallocation to UNC on 08.12), T.K. Bronich (PI after 08.12), S. Hinrichs, S. Mallapragada, B. Narasimhan, and M.J. Wannemuehler (CIs).
- Nebraska Center for Nanomedicine, NIH COBRE P20GM103480 (originally 1P20RR021937) 09/26/08-06/30/13, \$ 10,660,000 (\$ 7,500,000), A.V. Kabanov (PI, consultant after reallocation to UNC on 08.12), T.K. Bronich (PI after 08.12).
- Polymer Micelles and Polycomplexes of Biomacromolecules as Functional Bionanomaterials, Ministry of Education and Science of Russian Federation, 02.740.11.5231, 7/01/10-6/31/12, Rub. 2,800,000 {approx. \$ 93,300, to Moscow State University}, A.V. Kabanov (PI).
- Interactions of Pluronic Block Copolymers in Drug Resistant Cancer, NIH NCI, 2RO1 CA89225, 5/01/07-4/30/12, \$ 1,223,277 (\$ 860,343), A.V. Kabanov (PI), J. Riffle (CI).
- Non-invasive Nanodiagnostics of Cancer (NINOC), 4/01/07-03/31/10, DoD USAMRMC 06108004, \$ 1,760,000 (\$ 1,525,068). A.V. Kabanov (PI), S. Batra, M. Boska, T.K. Bronich (CIs).
- Polymer Based Gene Delivery, NIH NCI 1 R01 CA116591, 5/01/06 – 4/30/11, \$ 1,365,258 (\$ 1,006,513), A.V. Kabanov (PI), Jedd Wolchok (CI).
- Polypeptide Modification for Enhanced Brain Delivery, NIH NINDS, RO1 NS051334, 2/15/06 - 1/31/10, \$ 933,955 (\$ 761,524), A.V. Kabanov (PI), W. Banks, S.V. Vinogradov (CIs).
- InnovaForm Technologies, LLC, Philadelphia, PA, Nebraska research component, Nov. 2005 to Dec. 2009, \$700,000 (UNMC Lab. only), A.V. Kabanov (Chief Science Officer).
- Interactions of Block Copolymers in Blood Brain Barrier, NIH NINDS, RO1 NS36229-09, 9/01/02 - 7/30/09, \$ 1,745,625 (\$ 1,187,500), A.V. Kabanov (PI), W.F. Elmquist, D.W. Miller, Y. Persidsky (CIs).
- Structure and Dynamics of Block Ionomer Complexes, NSF DMR 0513699, 6/01/05-5/31/08, \$ 345,000 (\$ 233,900) A.V. Kabanov (PI), T.K. Bronich (CI).
- Sixth International Nanomedicine and Drug Delivery Symposium, NIH 1R13EB009301-01, November 18-19, 2008, \$ 10,000, A.V. Kabanov (PI).
- Seed Program in Nanotechnology for Pancreatic Cancer, UNMC-ISU, July 2006 to June 2008, \$ 100,000, A.V. Kabanov (PI-UNMC), S. Mallapragada (PI-ISU).
- Retention fund, UNMC/State of Nebraska Tobacco settlement funds, July 2004 to June 2008, \$ 600,000, A.V. Kabanov (PI).
- Interactions of Pluronic Block Copolymers in Drug Resistant Cancer, NIH NCI, RO1 CA89225-05, July 2001 to June 2006, \$ 887,091 (\$ 664,000), A.V. Kabanov (PI), B. Leyland-Jones (CI).
- Interactions of Pluronic Block Copolymers in Drug Resistant Cancer, UNMC Eppley Cancer Center bridge support, Nov. 2005 to Feb. 2007, \$ 50,000, A.V. Kabanov (PI).
- Fourth International Nanomedicine and Drug Delivery Symposium, NIH 1R13EB006720-01, October 8-10, 2006, \$ 13,000, A.V. Kabanov (PI).
- Third International Nanomedicine and Drug Delivery Symposium, NIH 1R13EB005534-01, October 8-10, 2005, \$ 10,000, H. Ghandehari (PI), A.V. Kabanov (CI).

- Synthesis and Characterization of Carriers for Gene and Drug Delivery, Supratek Pharma Inc., July 1997 to June 2006, \$ 600,000 (\$ 492,000), A.V. Kabanov (PI).
- Complexes of Block Ionomers with Oppositely Charged Surfactants, NSF DMR-0071682, Special Creativity Extension, June 2003 to May 2005, \$ 196,000 (\$ 133,333), A.V. Kabanov (PI).
- Enhancement of T Cell Responses Against Survivin, NIH RO1 CA84106 (supplement), Aug. 2002 to July 2004, \$ 350,400 (\$ 240,000), S. Sherman (PI), A.V. Kabanov and D. Gabrilovich (CI).
- Gene Therapy Program, Nebraska Research Initiative, July 1988 to July 2004, Direct cost award amount \$ 1,418,000 [Kabanov's group portion \$ 350,000], P.-W. Cheng (PI), J. Talmadge, A.V. Kabanov, V. Labhasetwar (CIs).
- Soluble Complexes of DNA with Cationic Polymers for Gene Delivery, NSF BES-9907281, June 2000 to May 2004, \$ 349,524 (\$ 239,400), A.V. Kabanov (PI).
- Complexes of Block Ionomers with Oppositely Charged Surfactants, NSF DMR-0071682, June 2000 to May 2003, \$ 262,800 (\$ 180,000), A.V. Kabanov (PI).
- International Collaboration: Complexes of Block Ionomers with Oppositely Charged Homopolymers and Surfactants, NSF DMR-9617837, Feb. 1997 to Jan. 2002, \$ 40,780 (\$ 38,250), A.V. Kabanov (PI).
- Dispersed Cationic Networks (Nanogels) as Carriers for Drug Delivery, NSF BES-9986393, Jan. 2000 to Dec. 2001, \$ 100,000 (\$ 68,494), A.V. Kabanov (PI), T.K. Bronich (CPI).
- Interactions of Block Copolymers in Blood Brain Barrier, NIH RO1 NS36229, Sep. 1997 to July 2001, \$ 516,605 (\$ 353,839), A.V. Kabanov (PI), W.F. Elmquist, D.W. Miller (CIs).
- Star Polymer Unimolecular Micelles for Drug Delivery (Phase I), NIH R43 GM62054, July 2000 to Dec. 2000, \$ 99,961 (\$ 52,898), [UNMC subcontract \$ 21,500 (\$17,622)], F. Wang (PI), A.V. Kabanov (CI).
- Water-soluble Block Ionomer Complexes, NSF DMR-9502807 (CAREER Award), June 1995 to May 2000, \$ 312,500 (\$ 281,250), A.V. Kabanov (PI).
- Soluble Complexes of DNA with Cationic Block Copolymers, NSF BES-9712657, Sep. 1997 to Aug. 1999, \$ 200,000 (\$ 136,986), A.V. Kabanov (PI).
- Self-assembly of ETANA Compounds, Emisphere Technologies Inc., June to October 1998, \$ 20,000 (\$ 16,400), A.V. Kabanov (PI)
- Synthesis and Characterization of Block-copolymeric Carriers for Nucleic Acids and Antineoplastic Agents, Supratek Pharma Inc., Apr. 1997 to June 1997, \$ 25,400 (\$ 20,820), A.V. Kabanov (PI)
- Synthesis and Characterization of Block-Copolymeric Carriers for Nucleic Acids and Antineoplastic Agents, Supratek Pharma Inc., Feb. 1996 to Jan. 1997, \$ 55,000 (\$ 45,082), A.V. Kabanov (PI).
- Synthesis and Characterization of Fluoroorganic Block Copolymers, Supratek Pharma Inc., May 1996 to Nov. 1997, \$ 4,950 (\$ 4,090), A.V. Kabanov (PI).
- Synthesis of Polymeric Carrier for Oligonucleotides, Supratek Pharma Inc., Nov. 1994 to Dec. 1994, \$ 4,990 (\$ 4,090), A.V. Kabanov (PI).