

CURRICULUM VITAE
MIKHAIL M. DIKOV, Ph.D.

Updated January, 2016

Place of Birth: Moscow, Russia

Home Address:

4330 Yellow Wood Dr.
Dublin, OH 43016, USA
Telephone (615) 481-7278

Business Address:

The Ohio State University Medical Center
460 W 12th Ave., 484 BRT
Columbus, OH 43210, USA
Telephone (614) 688-93433 (office)
(615) 481-7278 (cell)
E-mail Mikhail.Dikov@OSUMC.Edu

EDUCATION:

1976, M.S. in Chemistry, Moscow State University

1982, Ph.D. in Chemistry/Biochemistry, Moscow State University

TRAINING:

1986, Germany, Berlin, Central Institute for Heart and Blood Circulation Research. Head C. Norden. Project "Biotechnology: enzyme immunodiagnosis".

1987, Germany, Berlin, Humboldt University. Head B. Portsman. Project "Biotechnology: enzyme immunodiagnosis".

1986, Finland, Helsinki, Turku, Companies: Pharmacia, LKB Wallac, Farmos Int.LTD, Labsystems OY, Kabi Vitrum, Alko. Technology of production of medicines, diagnostics, and equipment for biochemical analysis.

1987, Hungary, Budapest, National Institute of Hematology and Blood Transfusion. Head G.Fust. Project "Enzyme immunoassay of fibronectine. Medicinal form of fibronectine".

1992, 1989, Germany, Berlin, Central Institute for Heart and Blood Circulation Research. Head C.Norden. Project "Biotechnology: enzyme immunodiagnosis".

ACADEMIC APPOINTMENTS:

1971-1976, Student, Chemical Faculty, Moscow State University

1976-1982, Researcher, Chemical Faculty, Moscow State University

1982-1992, Senior Researcher, Cardiology Center, Moscow, Russia

1988-1992, Project Manager, Joint Venture of Cardiology Center, Moscow, Russia and Amersham, UK

1992-1996, Postdoctoral Fellow and Research Assistant Professor of Medicine, Allergy, Vanderbilt University, Nashville, TN

1996-2000, Research Assistant Professor of Medicine, Infectious Diseases, Vanderbilt University, Nashville, TN

2000-2004, Research Assistant Professor of Medicine, Hematology/Oncology, Vanderbilt University, Nashville, TN

2004-2009, Assistant Professor of Medicine, Hematology/Oncology, Vanderbilt University, Nashville, TN

2009-2013, Associate Professor of Cancer Biology, Vanderbilt University, Nashville, TN

2013-present, Associate Professor of Internal Medicine, The Ohio State University, Columbus, OH

HONORS AND AWARDS:

1st and two 2nd Awards of the Russian Exhibition of People's Achievements for the development of immunodiagnosis, 1982, 1988, 1992

Lomonosov Award of Excellence in Research (Russian), 1982

Member of the Grant Review Panels for Russian Ministry of Health and Academy of Sciences, 1988-1992

Member of Examining and Evaluation Committee for graduate students at the Lomonosov Moscow State University, 1979-1982

PROFESSIONAL ORGANIZATIONS:

International Society for Heart Research

International Society of Differentiation

American Association for Cancer Research

Russian Biochemical Society

REVIEWER:

Blood

Journal of Clinical Investigations

Cancer Research

Current Stem Cell Research and Therapy

Cancer Immunology and Immunotherapy

Journal of Leukocyte Biology

EDITOR:

Frontiers in Science

Bentham Science Publishers

Open Journal of Hematology

GRANT AWARDS:

Active

R01 CA76321, NIH/NCI (Dikov MM, Carbone DP) 10/01/13 – 09/30/18
Notch ligands in regulation of anti-tumor immunity
Role: PI

RO1 CA138923, NIH/NCI (Dikov MM) 07/01/11 – 06/30/16
Adenosine in tumor-host interaction
Role: PI

Dallapezze Donor Fund (Dikov MM) 02/01/15 – 12/31/17
Multivalent Notch ligands
Role: PI

Drug Development Institute (Dikov MM) 02/01/14 – 12/31/16
The Ohio State University Comprehensive Cancer Center
Drug for Notch modulation
Role: PI

Pending

R01 GRANT11417258 NIH/NIA/NIDDK (Tchekneva EE, Dikov MM)
Aquaporin 11 and diabetic chronic kidney disease in aging
Role: Co-Investigator

R21 CA191906 NIH/NCI (Dikov MM, Khramtsov V)
Multifunctional tumor tissue imaging
Role: PI

Completed

5R01 CA100562 NIH/NCI, (Dikov MM) 04/01/04 - 08/30/09
The role of VEGF in hematopoiesis in cancer

Role: PI

5P30 CA068485

Vanderbilt-Ingram Cancer Center Support Grant, (Dikov MM) 11/01/06 - 10/31/08

Cytokine-loaded nanoparticles as a lung cancer vaccine

Role: PI

Histiocytosis Association of America (Dikov MM)

01/01/07 - 12/31/09

The mechanism of regulation of dendritic cell differentiation by adenosine

Role: PI

5P50 CA90949 NIH (Carbone DP, PI), Co-Investigator

01/01/03 - 12/31/06

Chromosome translocations in the Notch 3 signaling pathway
in lung cancer biology

NIH/NCI, SPORE in Lung Cancer

Pilot Project 5P50 CA90949-03

01/01/03 - 12/31/04

(Vanderbilt-Ingram Cancer Center, Dikov MM)

Retinoids in tumor-derived immunosuppression

Histiocytosis Association of America, (Dikov MM)

01/01/99 - 12/31/01

RNA array analysis for normal development of dendritic cells

RO1-CA76321 NIH (Carbone DP, PI), Co-Investigator

12/01/97 - 11/30/02

VEGF mediated signaling in tumor-host interaction

VUMC Pilot and Feasibility Study (Dang T, PI) Co-Investigator

01/01/01 - 12/31/02

The role of Notch3 and NFKappa- β activation in lung cancer

RO1-HL53771 NIH/NHLBI, (Miller G, PI), Co-Investigator

02/01/96 - 03/31/99

Vascular diseases in human heart transplantation

TEACHING:

Courses in Graduate Student Program "Immunochemical methods in clinical analysis", "Immune responses in cancer", Vanderbilt University, 2005 – 2008; 2010-2012

TRAINEES:

Lidia Dvorsky, Undergraduate Student, 1998 – 1999

Drew Moghanaki, Medical Fellow, 2002-2004

Ravi Patel, Undergraduate Student, 2005 – 2006

Neelenjan Ray, Medical Fellow, 2001 – 2004

Rut Porta, Postdoctoral Fellow, 2003 – 2006

Jared Burlison, Graduate Student, 2002 – 2007

Yongfen Min, Postdoctoral Fellow, 2004 – 2007

Sergey V. Novitskiy, Postdoctoral Fellow, 2004 – 2008

Oleg Y. Tikhomirov, Postdoctoral Fellow, 2005 – 2010

Roman Uzhachenko, Postdoctoral Fellow, 2010 – present

Asel K. Biktasova, Postdoctoral Fellow, 2010 – 2013

Fred Dudimah, Postdoctoral Fellow, 2011 – 2014

Jason V. Evans, Postdoctoral Fellow, 2014 – present

Anneliese Antonucci, Graduate Student, 2015 – present

INVITED LECTURES/PRESENTATIONS:

1. International Symposium IUPAC "Polymeric Amines and Ammonium Salts", Ghent, Belgium, 1979.

2. 5th US/USSR Conference on Microbial Enzymes Reactions, Riga, Latvia, 1979.

3. 2nd International Symposium on Isotachophoresis. Endhoven, The Netherlands, 1980.
4. 3rd USSR/Sweden Symposium on Physico-Chemical Biology, Tbilisi, Georgia, 1981.
5. 16th FEBS Conference, Moscow, USSR, 1983.
6. International Congress "Immunobiologicals and Their Applications. Budapest, Hungary, 1985.
7. International Conference on Preventive Cardiology, Moscow, USSR, 1985.
8. 3rd Symposium of Soviet Section of International Society for Heart Research, Baku, Azerbaijan, 1987.
9. 5th International Meeting of Danubian League against Thrombosis and Haemorhagic Diseases, Erfurt, Germany, 1987.
10. 19th Latin America Congress on Cardiovascular Surgery, Havana, Cuba, 1988.
11. 2nd European Meeting on Complement in Human Disease, Bari, Italy, 1988.
12. 10th European Section Meeting of International Society for Heart Research, Rotterdam, The Netherlands, 1989.
13. Symposium of American Lung Association of Tennessee, Nashville, TN, 1994.
14. Keystone Symposia on Molecular and Cellular Biology, Silverthorne, CO, 1995.
15. American Lung Association and American Thoracic Society Meeting, San Francisco, CA, 1998.
16. American Association for Cancer Research Meeting, New Orleans, LA, 2000.
17. American Association for Cancer Research Meeting, San Francisco, CA, 2002.
18. Wake Forest University, Winston-Salem, NC, 2003.
19. International Symposium on Biotechnology, Moscow, Russia, 2004.
20. Medical College of Wisconsin, Milwaukee, WI, 2005.
21. International Society of Differentiation, Honolulu, HI, 2005
22. International Conference on Advances in Science for Drug Discovery, Moscow, Russia, 2005.
23. Conference, Mechanisms of immune suppression in cancer, Clear Water, FL, 2007.
24. American Association for Cancer Research Meeting, Los Angeles, CA, 2007.
25. International Meeting on Allogeneic Transplantation for Solid Tumor, Siena, Italy, 2008.
26. Emory University, Atlanta, GA, 2009, 2010.
27. American Association for Cancer Research Meeting, Washington, DC, 2010.
28. World Conference on Lung Cancer, Amsterdam, The Netherlands, 2011.
29. National Institute of Standards and Technology, Gaithersburg, MD, 2013.
30. American Association for Cancer Research Meeting, San Diego, CA, 2014.
31. Molecular Diagnostics, Genomics and Epigenetics in Clinical Oncology, Rome, Italy, 2015.

PUBLICATIONS:

I. Articles

1. Avaeva S.M., Dikov M.M., Kuznetsov A.V., Sklyankina V.A.(RS) Specific modification of yeast inorganic pyrophosphatase active site by n-chloroacetylphosphoethanolamine. Bioorgan.Khim 1977, 3(7):943-949.
2. Asadchikov V.E., Dembo A.T., Dikov M.M., Egorov A.M., Osipov A.P., Berezin I.V. (RS) Study of the structure of formate dehydrogenase by the method of small-angle x-ray scattering. Dokl.Acad Sci.USSR 1979, 246(1):130-133.
3. Dikov M.M., Karulin A.Y., Osipov A.P., Egorov A.M. (RS) Analytical isotachophoresis study of structural changes in formate dehydrogenase during inactivation. Bioorgan.Khim. 1979, 5(8):1217-1221.
4. Yavarkovskaya L.L., Dikov M.M., Osipov A.P., Egorov A.M. (RS) Synthesis of NAD derivatives and its functioning as cofactor of bacterial dehydrogenase. Prikl.Biokhim.Microbiol. 1979, 15(6):852-859.
5. Dikov M.M., Osipov A.P., Egorov A.M., Berezin I.V., Kirsh Y.E., LebedevaT.S., Kabanov V.A.(RS)

Increase in formate dehydrogenase stability on covalent binding to water-soluble copolymer of 4-vinylpyridine and acroleine. Bioorg.Khim. 1979, 5(1):126-134.

6. Egorov A.M., Avilova T.V., Dikov M.M., Popov V.O., Rodionov Y.V., Berezin I.V. NAD-dependent formate dehydrogenase from methylotrophic bacterium strain 1. Purification and characterization. Eur.J.Biochem. 1979, 99(3):569-576.

7. Dikov M.M., Osipov A.P., Berezin I.V., Mustafaev M.I., Kirsh Y.E., Kabanov V.A. (RS) Stabilization of formate dehydrogenase labile to SH-group oxidation by polycation. Dokl.Acad.Sci.USSR 1979, 248(5):1260-1263.

8. Egorov A.M., Osipov A.P., Dikov M.M. Problems of cofactor regeneration. Proc. 5th US/USSR Conf. on Microbial Enzymes Reactions. Riga, 1979, p.121-137.

9. Dikov M.M., Osipov A.P., Egorov A.M., Mustafaev M.I., Kabanov V.A. General principles of stabilization of enzymes containing sulphhydryl groups labile to oxidation. ibid., p.137-163.

10. Asadchikov V.E., Dikov M.M., Egorov A.M., Lvov Y.M., Mogilevsky L.Y., Malashkevich V.N., Osipov A.P., Feigin L.A. X-ray small-angle scattering of formate dehydrogenase as a function of saturation with NAD. Stud.Biophys. 1980, 79:157-159.

11. Dikov M.M., Osipov A.P., Egorov A.M. Study of the role of sulphhydryl groups in mechanism of inactivation of bacterial formate dehydrogenase. Biochemistry USSR 1980, 45(9):1175-1179.

12. Dikov M.M., Karulin A.Y., Osipov A.P., Egorov A.M., Berezin I.V., Mustafaev M.I., Kabanov V.A. Method of stabilization of SH-enzymes: stabilization of formate dehydrogenase and alcohol dehydrogenase by polycations. J.Solid-Phase Biochem. 1980, 5(1):1-4.

13. Asadchikov V.E., Malashkevich V.N., Mogilevsky L.Y., Dikov M.M., Egorov A.M., Osipov A.P. (RS) Small-angle x-ray scattering data for a change in formate dehydrogenase shape upon coenzyme binding. Bioorgan.Khim. 1980, 6(11):1703-1706.

14. Dikov M.M., Osipov A.P., Egorov A.M., Berezin I.V., Mustafaev M.I., Kabanov V.A. Structure and composition of complexes of synthetic water-soluble polyelectrolytes with formate dehydrogenase and alcohol dehydrogenase. Biochemistry USSR 1984, 49(8):1113-1121.

15. Dikov M.M., Karulin A.Y., Osipov A.P., Egorov A.M., Berezin I.V., Mustafaev M.I., Kabanov V.A. Effect of synthetic water-soluble polyelectrolytes on the structure, catalytic activity and stability of formate dehydrogenase and alcohol dehydrogenase. Biochemistry USSR 1984, 49(9):1219-1227.

16. Tashmatova A.Y., Staroverov I.I., Dikov M.M., Ermolin G.A., Titov V.N., Masenko V.P. (RS) Immunological methods of myoglobin determination in blood serum in diagnostic of myocardial infarction. Bull.Cardiol.Cent.USSR 1984, (2):37-41.

17. Osipov S.G., Babayan G.V., Ermolin G.A., Dikov M.M., Titov V.N. (RS) Immune response to myoglobin in young athletes after exercise. Lab.Delo 1986, (9):550-553.

18. Ermolin G.A., Dikov M.M., Solovev A.V. (RS) Solid-phase immunoassay of myoglobin in diagnosis of acute myocardial infarction. Vopr.Med.Khim. 1986, 32(1):130-134.

19. Karulin A.Y., Dikov M.M., Egorov A.M. Determination of the binding constants of antibodies fractionated according to affinity for insulin. Biochemistry USSR 1986, 51(5):636-640.

20. Solovyov A.V., Ermolin G.A., Dikov M.M. (RS) Immunoenzymatic assay of myoglobinemia associated with acute myocardial infarction. *Terapevt.Arch.* 1986, 58(3):38-40.
21. Ermolin G.A., Shelepova T.M., Dikov M.M., Osmanov S.K., Voloschuk O.M. (RS) Application of enzyme immunoassays for determination of myoglobin, fibrinogen and fibrin-fibrinogen degradation products, fibronectin in diagnostics of somatic diseases. *Bull.Cardiol.Cent.USSR* 1987, (1):33-37.
22. Plaksin D.Y., Ermolin G.A., Tikhomirov O.Y., Dikov M.M. (RS) Erythroimmunoabsorption ultramicrotechnique for the screening of somatic antigens in acute myocardial infarction. *Bull.Cardiol.Cent.USSR* 1987, (2):21-25.
23. Baron I.I., Dikov M.M., Opaleva-Stegantseva V.A., Kurmanova L.V., Ermolin G.A. (RS) The time course of changes in concentration of myoglobin and autoantibodies to myoglobin in the blood serum of patients with myocardial infarction. *Terapevt.Arch.* 1987, 59(6):97-100.
24. Smirnov A.A., Dorogun B.N., Pomerantsev E.V., Ermolin G.A., Dikov M.M. e.a.(RS) Peculiarities in the time course of some electrocardiographic and biochemical indexes in patients with myocardial infarction on thrombolytic therapy. *Terapevt.Arch.* 1987, 59(10):17-21.
25. Soloviev A.V., Ermolin G.A., Ignashenkova G.V., Dikov M.M. (RS) Fibrinogen and fibrin degradation products in the blood of patients with acute myocardial infarction during rehabilitation in hospital. *Terapevt.Arch.* 1987, 59(10):21-23.
26. Soloviev A.V., Ermolin G.A., Dikov M.M., Ignashenkova G.V., Efremov E.E. (RS) Enzyme immunoassay for evaluation of homeostasis activity of patients in acute period of myocardial infarction. *Kazan.Med.Zh.* 1988, 69(5):338-340.
27. Malaya L.T., Ermolin G.A., Yabluchansky N.I., Kurmanova L.V., Dikov M.M. (RS) Kinetic of myoglobin and antibodies to myoglobin in the blood of myocardial infarction patients. *Klinich.Med.* 1988, 66(1):34-36.
28. Shelepova T.M., Ermolin G.A., Voloschuk O.M., Efremov E.E., Dikov M.M. (RS) Comparative characterization of polystyrene plates used in the enzyme immunoassay. *Zh.Microbiol.Epidemiol.* 1988, (7):72-75.
29. Kanskaya N.V., Romanko O.Y., Kun V.I., Ermolin G.A., Menyavtseva T.A., Dikov M.M. (RS) The level of antibodies to insulin in the blood of atherosclerotic patients and in healthy persons. *Terapevt.Arch.* 1988, 60(12):12-14.
30. Hidvegi T., Ermolin G.A., Efremov E.E., Dikov M.M., Panya A., Fust G. FN-C1Q and C1 INH C1R-C1S complexes as indicators of complement activation in patients with chronic lymphocytic leukemia. *Immunol.Lett.* 1989, 22(1):1-6.
32. Krylova S.M., Stafeeva O.A., Savitsky A.I., Ermolin G.A., Dikov M.M. (RS) Solid-phase fluorescence immunoassay of digoxin. *Vopr.Med.Khim.* 1990, 36(1):47-50.
33. Norden C., Ermolin G.A., Reimann H., Dikov M.M., Grunov G., Misselwitz T., Heine H. Impaired fibrinolysis characterizes the state of thrombophilia in patients with coronary heart disease in dependence on extent of atherosclerotic lesion. *Thrombosis Homeostasis.* 1989, 62(1):228.
33. Kim B.B., Dikova E.B., Sheller U., Dikov M.M., Gavrilova E.M., Egorov A.M. Evaluation of dissociation constants of antigen-antibody complexes by ELISA. *J.Immunol.Meth.* 1990, 131(2):213-222.

34. Dikov M.M., Springman E.B., Yeola S., Serafin W.E. Processing of pro-carboxypeptidase A and other zymogens in murine mast cells. *J.Biol.Chem.* 1994, 269(41):25897-25904.
35. Springman E.B., Dikov M.M., Serafin W.E. Mast cell pro-carboxypeptidase A. Molecular modeling and biochemical characterization of its processing within secretory granules. *J.Biol.Chem.* 1995, 270(3):1300-1307.
36. Dikov M.M., Springman E.B., Serafin W.E. Mast-cell procarboxypeptidase, protryptase, and prochymase are each activated by distinct mechanisms. *J.Allergy Clin. Immun.* 1995, 95: (1) 294-294.
37. Tchekneva E.E., Dikov M.M., Meyrick B.O. Preproendothelin-1 and endothelin converting enzyme gene expression in pulmonary vascular smooth muscle cells: Effect of hypertension associated factors. *Am.J.Respir.Crit.Care Med.* 1997, 155(4):785.
38. Dikov M.M., Reich M.B., Dworkin L., Thomas J.W., Miller G.G. A functional fibroblast growth factor-1 immunoglobulin fusion protein. *J.Biol.Chem.* 1998, 273(25):15811-15817.
39. Adachi Y., Lee C-T., Coffee K., Yamagata N., Ohm J.E., Park K-H., Dikov M.M., Arteaga C.L., Carbone D.P. Effect of genetic blockade of insulin-like growth factor receptor on signal transduction, and sensitivity to chemotherapy in human colon cancer cell lines. *Gastroenterology* 2002, 123(3).
40. Dikov M.M., Oyama T., Takahashi T., Sepetavec T., Adachi Y., Daniels T., Gabrilovich D.I., Carbone D.P. Mechanism of NF- κ B inhibition by vascular endothelial growth factor in hematopoietic progenitor cells. *Cancer Res.* 2001, 61:2015-2021.
41. Prokop A., Kozlov E., Nun Non S., Dikov M.M., Sephel G.C., Whitsitt J.S., Davidson J.M. Towards retrievable vascularized bioartificial pancreas: induction and long-lasting stability of polymeric mesh implant vascularized with the help of acidic and basic fibroblast growth factors and hydrogel coating. *Diabetes Technol. Ther.* 2001, 3(2):245-61.
42. Lee C-T., Park K.-H., Seol J.Y., Yoo C-G., Kim Y.W., Han S.K., Shim Y-S., Adachi Y., Coffee K., Dikov M.M., Carbone D.P. Recombinant Adenovirus expressing dominant negative insulin-like growth factor-1 receptor has anti-tumor effect on human lung cancer model. *Cancer. Gene Therapy* 2003, 10:57-63.
43. Byrd V.M., Dikov M.M., Kilkenny D.M., Reich M.B., Rocheleau J.V., Armistead W.J., Thomas J.W., Miller G.G. Fibroblast growth factor receptor-1 interacts with the T cell receptor signaling pathway. *Immunol. Cell Biol.* 2003, 81(6):440-50.
44. Lee C.T., Park K.H., Yanagisawa K., Adachi Y., Ohm J.E., Nadaf S., Dikov M.M., Curiel D.T., Carbone D.P. Combination therapy with conditionally replicating adenovirus and replication defective adenovirus. *Cancer Res.* 2004, 64(18):6670-5.
45. Dikov M.M., Ohm J.E., Ray N., Tchekneva E.E., Burlison J., Moghanaki D., Carbone D.P. Differential roles of vascular endothelial growth factor receptors 1 and 2 in dendritic cell differentiation. *J Immunol.* 2005, 174(1):215-22.
46. Tikhomirov O.Y., Dikov M.M., Carpenter G. Identification of proteolytic fragments from ErbB-2 that induce apoptosis. *Oncogene* 2005, 24(24):3906-13.
47. Hartig S.M., Greene R.R., Dikov M.M., Prokop A., Davidson J.M. Multifunctional nanoparticulate polyelectrolyte complexes. *Pharm. Res.* 2007, 24(12):2353-69.
48. Huang Y, Chen X, Dikov MM, Novitskiy S, Mosse CA, Yang L, Carbone DP. Distinct roles of VEGFR-1

and VEGFR-2 in the aberrant hematopoiesis associated with elevated levels of VEGF. *Blood*, 2007, 110(2):624-31.

49. Tchekneva EE, Khuchua Z, Davis LS, Kadkina V, Dunn SR, Bachman S, Ishibashi K, Rinchik EM, Harris RC, Dikov MM, Breyer MD. Single amino acid substitution in aquaporin 11 causes renal failure. *J Am Soc Nephrol*. 2008, 19(10):1955-64.

50. Ryzhov SV, Zaynagetdinov R, Goldstein A, Novitskiy SV, Biaggioni I, Blackburn M, Dikov MM, Feoktistov I. Effect of A2B adenosine receptor gene ablation on proinflammatory adenosine signaling in mast cells. *J Immunol*. 2008, 180(11):7212-20.

51. Ryzhov SV, Novitskiy SV, Zaynagetdinov R, Goldstein A, Carbone DP, Biaggioni I, Dikov MM, Feoktistov I. Host A(2B) adenosine receptors promote carcinoma growth. *Neoplasia*. 2008, 10(9):987-95. PMID: 18714400

52. Novitskiy SV, Ryzhov SV, Zaynagetdinov R, Goldstein A, Huang Y, Tikhomirov OY, Biaggioni I, Carbone DP, Feoktistov I, Dikov MM. Adenosine receptors in regulation of dendritic cell differentiation and function. *Blood* 2008, 112(5):1822-31. PMID: 18559975

53. Sano H, LeBoeuf JP, Novitskiy SV, Seo S, Dikov MM, Kume T. The Foxc2 transcription factor regulates tumor angiogenesis. *Biochem Biophys Res Commun*. 2010, 392(2):201-6 2010. PMID: 20060810

54. Novitskiy SV, Csiki I, Huang Y, Johnson D, Harth EM, Carbone D, Dikov MM. Anti-vascular endothelial growth factor treatment in combination with chemotherapy delays hematopoietic recovery due to decreased proliferation of bone marrow hematopoietic progenitor cells. *J Thorac Oncol*. 2010, 5(9):1410-5. PMID: 20683208

55. Huang Y, Lin L, Shanker A, Malhotra A, Yang L, Dikov MM, Carbone DP. Resuscitating cancer immuno surveillance: selective stimulation of DLL1-Notch signaling in T cells rescues T-cell function and inhibits tumor growth. *Cancer Res*. 2011, 71(19):6122-31. PMID: 21825014

56. Ryzhov S, Novitskiy SV, Goldstein AE, Biktasov A, Blackburn MR, Biaggioni I, Dikov MM, Feoktistov I. Adenosinergic regulation of the expansion and immunosuppressive activity of CD11b+Gr1+ cells. *J Immunol*. 2011, 187(11):6120-9. PMID: 22039302

57. Atochina-Vasserman EN, Biktasov AK, Abramova E, Cheng DS, Polosukhin VV, Tanjore H, Takahashi S, Sonoda H, Foye L, Venkov C, Ryzhov SV, Novitskiy S, Shlonimskaya N, Ikeda M, Blackwell TS, Lawson WE, Gow AJ, Harris RC, Dikov MM, Tchekneva EE. Aquaporin 11 insufficiency modulates kidney susceptibility to oxidative stress. *Am J Physiol Renal Physiol*. 2013;304(10):F1295-307. PMID: 23486012

58. Ryzhov SV, Biktasov AK, Goldstein AE, Zhang Q, Biaggioni I, Dikov MM, Feoktistov IA. Role of JunB in Adenosine A_{2B} Receptor-mediated VEGF Production. *Mol Pharmacol*. 2014, 85(1):62-73. PMID: 24136993

59. Thounaojam MC, Dudimah DF, Pellom ST, Uzhachenko RV, Carbone DP, Dikov MM, Shanker A. Bortezomib enhances expression of effector molecules in anti-tumor CD8⁺ T lymphocytes by promoting Notch-nuclear factor-κB crosstalk. *Oncotarget*. 2015, 6(32):32439-55.

60. Choma DP, Vanacore R, Naylor H, Zimmerman IA, Pavlichenko A, Pavlichenko A, Foye L, Carbone DP, Harris RC, Dikov MM, Tchekneva EE. Aquaporin 11 Variant Associates with Kidney Disease in Type 2 Diabetic Patients. *Am J Physiol Renal Physiol*. Dec 2015. [Epub ahead of print]

61. Biktasov AK, Dudimah DF, Uzhachenko RV, Park K, Akhter A, Arasada RR, Evans JV, Novitskiy SV,

Tchekneva EE, Carbone DP, Shanker A, Dikov MM. Multivalent Forms of the Notch Ligand DLL-1 Enhance Antitumor T-cell Immunity in Lung Cancer and Improve Efficacy of EGFR-Targeted Therapy. *Cancer Res.* 2015, 75(22):4728-41.

II. Patents

1. Berezin I.V., Dikov M.M., Egorov A.M. Method for preparation of stabilized enzymes containing SH-groups. SU Patent N 883176, 10/25/1979.
2. Ermolin G.A., Vnukov V.A., Sakandelidze O.G., Dikov M.M. Method for preparation of immunostimulator. SU Patent N 1361762, 8/15/1984.
3. Ermolin G.A., Karpov R.S., Kanskaya N.V., Dikov M.M. Method for differential diagnosis of acute myocardial infarction and angina pectoris. SU Patent N 1511690, 10/5/1988.
4. Dikov M.M., Ermolin G.A., Mamochkina E.N. Method for preparation of sorbent to low density lipoprotein. SU Patent N 1544059, 2/8/1990.
5. Dikov M.M., Ermolin G.A., Hlustov V.N., Kanskaya N.V., Karpov R.S. Method of determination of antibodies to low density lipoproteins in blood. Russian Patent N 1705747, 8/5/1993.
6. Prokop A., Dikov M.M., Williams P., Davidson J.M. Polymeric encapsulation system promoting angiogenesis. US Patent 6,383,478, May 2002.
7. Tchekneva EE, Dikov MM, Kadkina V, Polosukhina, D. Collection station for accelerated collection of the specimens from the rodents. Publication No. US-2011-0239953-A1, US Patent and Trademark Office, 2011.
8. Dikov MM, Tchekneva EE, Carbone DP, Lin L, Huang Y. Multivalent Delta-like 1 for regulation of notch signaling. Filing No. 61/442,538 US Patent and Trademark Office, 2014.
9. Tchekneva EE, Dikov MM, Harris RC. Methods and systems for prognosis and diagnosis of chronic kidney disease in diabetic subjects. Filing 61/653,784 US Patent and Trademark Office, 2014.

III. Abstracts (48 total)

IV. Book Chapters

1. Egorov A.M., Dikov M.M. (RS) Structure and mechanism of antibodies effects. *Zh.Vses.Khim.Soc.USSR* 1982, 27(4):21-28.
2. Egorov A.M., Dikov M.M. (RS) Stabilized biocatalysts on the base of NAD-dependent dehydrogenases. *Review of Science and Technology. Biotechnology*. Moscow, VINITI Publ., 1990, p.234-270.
3. Ermolin G.A., Dikov M.M., Efremov E.A., Kurmanova L.V., Ignashenkova G.V. Enzyme immunoassay in evaluation of state of homeostasis and diagnostics of it's disorders. In: *New in Cardiology*. E.I.Chazov ed.. Moscow, Vneshtorgizdat, 1992, p.141-144.
4. Garbriovich D.I., Dikov M.M. Vascular endothelial growth factor. In: *The Cytokine Handbook*, 4th Edition, A.W. Thomson and M.T. Lotze, editors, Elsevier Science Ltd., 2004, pp.1017-1034.
5. Dikov M.M., Chekneva I.S. Functional defects of dendritic cells in cancer. In "Dendritic Cells in Cancer". Shurin M. and Salter R., editors. Springer, NY, 2008.
6. Shanker A, Thounaojam MC, Mishra MK, Dikov MM, Uzhachenko RV. Innate-Adaptive Immune Crosstalk. *J Immunol Res.* 2015;2015:982465.
7. Shanker A, Dikov MM, Carbone DP. Promise of Immunotherapy in Lung Cancer. *Prog Tumor Res.* 2015;42:95-109.