

CURRICULUM VITAE FOR ACADEMIC PROMOTION

The Johns Hopkins University School of Medicine

(Signature) Dmitry N Grigoryev 1/13/2008
(Date of this version)

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments:

2005-Present: The Johns Hopkins University, School of Medicine
Instructor in Medicine

2005-Present: Johns Hopkins Bayview Medical Center Genetic Research Facility
Genomics Project Director

Personal Data:

The Johns Hopkins University School of Medicine
Division of Allergy and Clinical Immunology
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Education and Training (in chronological order):

- **Undergraduate**

1983-1987 North-West Medical College at the Chudnovsky Central Baltic Marine
Hospital, Petergoff, Russia – B.S.
Biomedical Informatics

2000 University of Maryland Baltimore County, Catonsville, Maryland
Computer Science

- **Doctoral/graduate**

1988-1992 The State Pavlov St. Petersburg University, School of Medicine, St.
Petersburg, Russia – M.D.
Medicine

1995-1999 University of Maryland at Baltimore, School of Medicine, Department of Pharmacology and Experimental Therapeutics – Ph.D.
Pharmacology

- **Postdoctoral** - (internship, residency, fellowship etc.)

1993-1995 Research Fellow
Johns Hopkins University School of Medicine, Division of Cardiology,
Baltimore, Maryland

1999-2000 Post-Doctoral Fellow
VA Medical Center, Department of Infectious Diseases, Baltimore,
Maryland

2000-2002 CRTA Fellow
Cancer Research Center, Molecular Modeling and Bioinformatics Section,
NCI, NIH, Bethesda, Maryland

2002-2005 NRSA Fellow
Johns Hopkins University School of Medicine, Division of Pulmonary and
Critical Care Medicine, Baltimore, Maryland

Professional Experience (in chronological order, earliest first)

1987-1988 Field Clinical Researcher
The Leningrad Central Ambulance Station, Russia

1993 Volunteer Researcher
Johns Hopkins University, School of Medicine, Division of Cardiology,
Baltimore, Maryland

1998 Research Assistant (part-time)
University of Maryland at Baltimore, School of Medicine, Division of
Neonatology

RESEARCH ACTIVITIES

- **Peer-reviewed scientific articles**

1. Furman M.I., **Grigoryev D.N.**, Bray P.F., Dise K.R., and Goldschmidt-Clermont P.J. (1994) Platelet tyrosine kinase and fibrinogen receptor activation. *Circulation Research* 75, 172-180.

2. Addo J.B., Bray P.F., Faraday N., **Grigoryev D.N.**, and Goldschmidt-Clermont P.J. (1995) Translocation, but not engagement, of integrin $\alpha 2\beta 3$ (GPIIb-IIIa) requires a functional actin cytoskeleton. *Atherosclerosis, Thrombosis, and Vascular Biology* 15(9), 1466-1473.
3. Weiss E.J., Goldschmidt-Clermont P.J., **Grigoryev D.N.**, Jin Y., Kickler T.S., and Bray P.F. (1995) A monoclonal antibody specific for platelet GPIIIa (SZ21) distinguishes PLA1 from PLA2. *Tissue Antigen* 46,374-381.
4. Goldschmidt-Clermont P.J., Schulman S.P., Bray P.F., Chandra N.C., **Grigoryev D.N.**, Dise K.R., Sagar M., Fox R.J., Coleman L.D., Richardson C., Dorsey F.C., duMee C., Kitt M.M., Ouyang P., Baughman K.L., and Gerstenblith G. (1996) Refining the treatment of women with unstable angina-A randomized, double blind, comparative safety and efficacy evaluation of IntegrinTM versus Aspirin in the management of unstable angina. *Clinical Cardiology* 19,869-874.
5. Long B.J., Tilghman S.L., Yue W., Thiantanawat A., **Grigoryev D.N.**, and Brodie A.M.H. (1998). The steroidal antiestrogen ICI 182,780 is an inhibitor of cellular aromatase activity. *J. Steroid Biochem. Molec. Biol.*, 67, 293-304.
6. Njar V.C.O., Kato K., Nnane I.P., **Grigoryev D.N.**, Long B.J., and Brodie A.M.H. (1998). Novel 17-azolyl steroids; potent inhibitors of human cytochrome 17 - hydroxylase-C17,20-lyase (P45017): potential agents for the treatment of prostate cancer. *J. Med. Chem.*, 41, 902-912.
7. **Grigoryev D.N.**, Long B.J., Njar V.C.O., Liu Y., Nnane I.P., and Brodie A.M.H. (1999). Effects of new 17 α -hydroxylase/C17,20-lyase inhibitors on the growth of LNCaP prostate cancer cells in vitro and in vivo. *Br. J. Cancer*, 81, 622-630.
8. **Grigoryev D.N.**, Kato K., Njar V.C.O., Long B.J., Ling Y-Z., Wang X., Mohler J, and Brodie A.M.H. (1999). Cytochrome P450c17-expressing Escherichia coli as a first-step screening system for P450 17 α -hydroxylase-C17,20-lyase inhibitors. *Analytical Biochemistry*, 267, 319-330.
9. Lu Q., Liu Y., Long B.J., **Grigoryev D.N.**, Gimbel M., and Brodie A.M.H. (1999). The effect of combining aromatase inhibitors with antiestrogens on tumor growth in a nude mouse model for breast cancer. *Breast Cancer Res. Treat*, 57, 183-192.
10. **Grigoryev D.N.**, Long, B.J., Njar, V.C.O., and Brodie, A.M.H. (2000). Pregnenolone stimulates LNCaP prostate cancer cell growth via the mutated androgen receptor: implications for the treatment of prostate cancer. *J. Steroid Biochem. Molec. Biol.* 75(1), 1-10
11. Long B.J., **Grigoryev D.N.**, Nnane I.P., Liu Y., Ling Y-Z., and Brodie A.M.H. (2000). Antiandrogenic effects of novel androgen synthesis inhibitors on hormone dependent cancer. *Cancer Res.* 60(23):6630-40
12. Nnane I.P., Long B.J., Ling Y-Z., **Grigoryev D.N.**, and Brodie A.M.H. (2000). Anti-tumour effects and pharmacokinetic profile of 17-(5'-isoxazolyl)androsta-4,16-dien-3-one in mice: an inhibitor of androgen synthesis. *British J. Cancer*, 83, 74-82.
13. Maitra R.*, **Grigoryev D.N.***, Bera T.K., Pastan I.H., and Lee B. (2003) Cloning, molecular characterization, and expression analysis of Copine 8. *Biochem Biophys Res Commun.* 303(3):842-7. *co-first authors
14. Jacobson J.R., Dudek S.M., Birukov K.G., Ye S.Q., **Grigoryev D.N.**, Girgis R.E., Garcia J.G.N. (2004) Cytoskeletal activation and altered gene expression in

- endothelial barrier regulation by simvastatin. *Am. J. Respir. Cell Mol. Biol.* 30(5):662-70.
15. **Grigoryev D.N.**, Finigan J.H., Hassoun P.M., and Garcia J.G.N. Searching for gene candidates in acute lung injury. (2004) *Critical Care Med.* 8(6):440-7.
 16. **Grigoryev D.N.**, Ma S-F., Ye S.Q., Irizarry R.A., Quackenbush J., and Garcia J.G.N. (2004) Orthologous gene expression profiling in multi-species models: search for candidate genes. *Genome Biology* 5(5):R34
 17. Jacobson J.R., Barnard J.W., **Grigoryev D.N.**, Ma S-F., Tuder R.M., and Garcia J.G.N. (2005) Simvastatin attenuates vascular leak and inflammation in murine inflammatory lung injury. *Am. J. Physiol. Lung Cell Mol. Physiol.* 288(6):L1026-32.
 18. **Grigoryev D.N.**, Ma S-F., Ye S.Q., Simon B., and Garcia J.G.N. (2005) In vitro identification and in silico utilization of interspecies sequence similarities using GeneChip technology. *BMC Genomics*, 6(1):62.
 19. Ma S-F.*, **Grigoryev D.N.***, Taylor A.D., Nonas S., Sammani S., Ye S.Q., Garcia J.G.N. (2005) Bioinformatic identification of novel early stress response genes in rodent models of lung injury. *Am. J. Physiol. Lung Cell Mol. Physiol.*, 289(3):L468-77. *co-first authors
 20. Li J., **Grigoryev D.N.**, Ye S.Q., Thorne L., Schwartz A.R., Smith P.L., O'donnell C.P., Polotsky V.Y. (2005) Chronic intermittent hypoxia up-regulates genes of lipid biosynthesis in obese mice. *J Appl Physiol.* 99(5):1643-8.
 21. Guo Y., Ma S-F., **Grigoryev D.N.**, Van Eyk J., and Garcia J.G.N. (2005) 1-DE MS and 2-D LC-MS analysis of the mouse bronchoalveolar lavage proteome. *Proteomics.* 5(17):4608-24.
 22. Girgis R.E., Ma S-F., Ye S., **Grigoryev D.N.**, Li D., Hassoun P.M., Tuder R.M., Johns R.A., Garcia J.G. (2005) Differential gene expression in chronic hypoxic pulmonary hypertension: effect of simvastatin treatment. *Chest.* 128(6 Suppl):579S.
 23. Simon B.A., Easley R.B., **Grigoryev D.N.**, Ma S-F., Ye S.Q., Lavoie T., Tuder R.M., Garcia J.G. (2006) Microarray analysis of regional cellular responses to local mechanical stress in acute lung injury. *Am J Physiol Lung Cell Mol Physiol.* 291(5):L851-61
 24. Angelini D.J., Hyun SW., **Grigoryev D.N.**, Garg P., Gong P., Singh I.S., Passaniti A., Hasday J.D., and Goldblum S.E. (2006) TNF α increases tyrosine phosphorylation of vascular endothelial-cadherin and opens paracellular pathway through fyn activation in human lung endothelia. *Am J Physiol Lung Cell Mol Physiol.* 291(6):L1232-45
 25. **Grigoryev D.N.**, Liu M., Cheadle C., Barnes K.C., and Rabb H. (2006) Genomic profiling of kidney ischemia reperfusion reveals expression of specific alloimmunity-associated genes: linking “immune” and “non-immune” injury events. *Transplantation Proc.* 38(10):3333-6
 26. Hassoun H.T., **Grigoryev D.N.**, Lie M.L., Liu M., Cheadle C., Tuder R.M., and Rabb H. (2007) Ischemic acute kidney injury induces a distant organ functional and genomic response distinguishable from bilateral nephrectomy. *Am J Physiol Renal Physiol.* 293(1):F30-40.
 27. **Grigoryev D.N.**, Ma S-F., Shimoda L.A., Johns R.A., Lee B., and Garcia J.G.N. (2007) Exon-based mapping of microarray probes: Recovering differential gene expression signal in underpowered hypoxia experiment. *Mol and Cell Probes* 21(2):134-9

28. Nonas S.A., Moreno Vinasco L., Ma S-F., Jacobson J.R., Desai A.A., Dudek S., Flores C., Hassoun P.M., Sam L., Ye S.Q., Moitra J., Barnard J., **Grigoryev D.N.**, Lussier Y.A., Garcia J.G. (2007) Use of consomic rats for genomic insights into ventilator-associated lung injury. *Am J Physiol Lung Cell Mol Physiol.* 293(2):L292-302
29. Gao L., Grant A.V., Rafaels N., Stockton-Porter M., Watkins T., Gao P., Chi P., Muñoz M., Watson H., Dunston G., Togias A., Hansel N., Sevransky J., Maloney J.P., Moss M., Shanholtz C., Brower R., Garcia J.G.N., **Grigoryev D.N.**, Cheadle C., Beaty T.H., Mathias R.A., Barnes K.C. (2007) Polymorphisms in the myosin light chain kinase gene that confer risk of severe sepsis are associated with a lower risk of asthma. *J Allergy Clin Immunol.* 119 (5), 1111-1118
30. Papaiahgari S., Yerrapureddy A., Reddy S.R., Reddy N.M., Dodd-O J.M., Crow M.T., **Grigoryev D.N.**, Barnes K., Tudor R.M., Yamamoto M., Kensler T.W., Biswal S., Mitzner W., Hassoun P.M., Reddy S.P. Genetic and Pharmacologic Evidence Links Oxidative Stress to Ventilator-Induced Lung Injury in Mice. *Am J Respir Crit Care Med.* 2007 Sep 27; [Epub ahead of print] PMID: 17901416
31. Gao L., Tsai Y.J., **Grigoryev D.N.**, Barnes K.C. (2007) Host defense genes in asthma and sepsis and the role of the environment. *Curr Opin Allergy Clin Immunol.* 7(6):459-67.
32. **Grigoryev D.N.**, Liu M., Hassoun H.T., Cheadle C., Barnes K.C., Rabb H. The local and systemic inflammatory transcriptome after acute kidney injury. *J Am Soc Nephrol.* 2008 Jan 30 [Epub ahead of print]
33. **Grigoryev D.N.**, Mathai S.C., Fisher M.R., Girgis R.E., Zaiman A.L., Houston-Harris T., Cheadle C., Gao L., Hummers L.K., Champion H.C., Garcia J.G.N., Wigley M.F., Tudor R.M., Barnes K.C., and Hassoun P.M. Identification of candidate genes in scleroderma-related pulmonary arterial hypertension. *Transl Res (In press)*

Extramural Sponsorship (current, pending, previous)

- **Grants/Current**

- | | |
|-----------|--|
| 2003-2008 | Molecular Approaches to Ventilator Associated Lung Injury
P50 HL073994-01 (PI Brower)
NIH
CORE E
Principal Investigator: Kathleen C. Barnes
Genomics Research Director: Dmitry N. Grigoryev |
| 2006-2008 | Genomic Basis of Acute Renal Failure Induced Lung Injury
\$100000 (Total direct costs)
NKF
Principal Investigator: Dmitry N. Grigoryev |
| 2004-2009 | Atopic Dermatitis and Vaccinia Network-Clinical Studies Consortium |

HHSN266200400029C (PI Beck)
NIH/NHLBI
Co-investigator: Dmitry N. Grigoryev

2006-2011 Core Center
P30 AR 053503 (PI Rosen)
NIH
Co-investigator: Dmitry N. Grigoryev

- **Previous**

2000-2001 Evaluation of the effects of TNF-alpha on pulmonary vascular permeability
\$65,000 (Total direct costs)
RT-013-N
ALA
Principal Investigator: Dmitry N. Grigoryev

2002-2005 Gene expression profiling of ventilator induced acute lung injury
\$150,000 (Total direct costs)
1F32 HL 074590-01A1
NIH/NHLBI
Principal Investigator: Dmitry N. Grigoryev

EDUCATIONAL ACTIVITIES

- **Educational Publications**

1. Ye S.Q., **Grigoryev D.N.**, Ma S-F., Parigi M., Shao W.L. Gene expression profiling of human endothelial cells by DNA microarray and SAGE. In Microvascular Research: Biology and Pathology, Eds Shepro D, 2005 Elsevier Inc., San Diego, Ch157:1067-1076.
2. **Grigoryev D.N.** Microsoft Excel and Access. In "Bioinformatics: A Practical Approach", Ed Ye S.Q., 2007 CRE Press, Ch16: 553-586.

- **Teaching**

Classroom instruction (Fall 1998, Pharmacological Methodology, Graduate Research Assistant, University of Maryland, Baltimore, MD)

Workshop (February 27, 2007, Microarray Basics for the Clinical Immunologist/Allergist: SNP Chip Array to Identify New Targets. Speaker at the 63rd AAAAI meeting, San Diego, CA)

- **Mentoring**

- **Pre-doctoral**

Daniel Angelini 1999-2000

- **Present Positions**

Johns Hopkins University School of Medicine,
Division of Anesthesiology and Critical Care
Medicine
Postdoctoral Fellow

- **Undergraduate**

Maribelis Olivares 2004

New York University School of Medicine
Medical Student

RECOGNITION

- 2008 Midwest Junior Faculty Travel Award to present current research at the Central Society for Clinical Research
- 2007 Oral Poster Award for outstanding scientific research, Fifth Symposium on Functional Genomics of Critical Illness and Injury
- 2007 Travel Award to speak at the Fifth Symposium on Functional Genomics of Critical Illness and Injury
- 2006 Midwest Trainee Travel Award to attend the Central Society for Clinical Research meeting
- 2005 Symposium Award (3rd Annual Symposium on Functional Genomics of Critical Illness and Injury) in recognition of outstanding research in the field of Functional Genomics
- 2003 The National Research Service Award Fellowship in Translational Research
- 2001 Cancer Research Training Award Fellowship in Bioinformatics
- 2000 The American Lung Association Research Training Fellowship in Vascular Biology
- 1998 Young Investigator Travel Award to attend International Conference on Biology of Prostate Growth

OTHER PROFESSIONAL ACTIVITIES

- **Journal peer review activities**

FASEB Letters
BMC Genomics
Microvascular Research
Endocrinology
Chemical Research in Toxicology

- **Professional Societies**

2006-present American Academy of Asthma, Allergy, and Immunology member
2005-present National Kidney Foundation member

2003-present	American Thoracic Society	member
1997-2000	American Association for Cancer Research	member
1990-1993	St. Petersburg Cystic Fibrosis Association	member