CURRICULUM VITAE

Name: Marek J. Honczarenko, M.D., Ph.D.

Office address: 1 North Waukegan Road
North Chicago, IL 60064

Home address: 807 Bronson Lane
Highland Park, IL 60035

E-mail: marek.honczarenko@abbvie.com; marekh@comcast.net

Office Phone: (847) 936-5186
Cell phone: (224) 321-2085

Professional Experience:

2017-present. AbbVie Inc.

Vice President, Global Immunology Development. Pharmaceutical Research and Development.

Accountable for creating and implementing clinical development strategies for AbbVie's marketed asset (Humira) and pre-registrational pipeline compounds in the Immunology Therapeutic Area (Rheumatology, Gastroenterology and Dermatology).

Responsible for:

- Setting up and executing on innovative therapeutic area vision, mission and strategy
- Execution of internal clinical development programs from early development (Phase 1 and Phase 2) through the registrational studies (Phase 3).
- Evaluation of external licensing opportunities.

2012-2017. Bristol-Myers Squibb (BMS)

2015-2017. **Therapeutic Area Head Immunoscience and Fibrosis*, R&D.***
2012-2015. **Therapeutic Area Head Immunoscience, Discovery Medicine & Clinical Biomarkers, *R&D.***

Accountable for the full clinical development cycle (Phase 1 through Phase 4) of Immunoscience and Fibrosis portfolio at BMS.

Responsible for:

- Development and execution of clinical and translational strategies for the portfolio of Immunoscience and Fibrosis clinical research programs.
- Design and implementation of clinical studies for Immunoscience and Fibrosis assets ranging from First in Human to Phase 4 Studies.
- Integration of translational medicine activities into development
- Appropriate alignment across the value chain for the effective integrated development of molecules
- Business development assessments

- Identification of novel targets, including assessment of the medical need and clinical relevance of targets in the context of disease

Manage team of 14 physician-scientists.

Chair for several governance committees

- Clinical Development Committee, Immunoscience and Fibrosis
- Translational R&D, Immunoscience and Fibrosis
- Development Team Forum, Immunoscience and Fibrosis
- Protocol Review Committee

Member of the Senior Leadership Team, Exploratory Clinical and Translational Research

2011-2012. Pfizer, Inc

Senior Director. Head Translational Immunology.
Immunology and Autoimmunity. BioTherapeutics Research and Development.

Accountable for strategic vision and mission of the Translational Immunology organization, and for the successful execution of the strategy through delivery of proof of concept clinical data packages.

Responsibilities:

- Medical and scientific leadership for clinical stage development strategies for therapeutics targeting autoimmune diseases, including SLE, RA, IBD and psoriasis.
- Scientific leadership and management for biomarker discovery and validation and for translation of these biomarkers into clinical studies.
- Directing multiple medical and scientific teams within Translational Immunology
- Management of external alliances and CROs for the Translational Immunology organization.
- Oversight and contributions to regulatory documents.

As a head of Translational Immunology, reporting to CSO, I built and managed team of 22 physicians and scientists, including 7 Director level colleagues.

Member of the Pfizer BioTherapeutic R&D Executive Leadership team.

In this role I was responsible for:

- Prioritization and resourcing of the multiple drug development programs within Immunology and Autoimmunity Business Unit.
- Preparation of the department business plan, yearly budget and timelines projections.
- Management of the multiple interactions within Pfizer Research and Discovery Units.
- Evaluation of the external investment opportunities.

Board Member for the Pfizer Center for Therapeutic Innovation-Boston (CTI).

Provided strategic leadership to the Boston Center for Therapeutic Innovation, newly created, entrepreneurial Research and Development Unit at Pfizer, dedicated to the establishment of global partnerships between Academic Medical Centers in Boston and Pfizer, to transform research and development through focus on translational medicine.

Member, Pfizer Worldwide R&D, Precision Medicine Committee.

Contributed to the Pfizer overall strategy of implementing systemic precision medicine approach in R&D.

2009-2011. MedImmune.

Medical Director, Rheumatology, Inflammation and Autoimmunity. Clinical Development.

Medical/Study Director for Phase 0 through Phase 2 clinical trials, including pivotal trials for Systemic Lupus Erythematosus. Responsible for:

- Leading teams to develop clinical strategies and execute clinical plans for new biologics to be used for the treatment of inflammatory and immune diseases (RA, SLE, Myositis, Scleroderma).
- Clinical protocol development for novel therapeutics targeting interferon and interferon receptors, and B lymphocytes; establishing and approving scientific methods for design and implementation of clinical protocols.
- Monitoring adherence to protocols; interacting with study Principal Investigators, handling protocol and medically relevant queries submitted by site investigators.
- Adverse events assessment and reporting, trail safety monitoring, including responding to health authorities and ethics committees, reviewing all safety data, medical queries. Member of the Safety Monitoring Committee at MedImmune.
- Execution, analysis and interpretation of clinical trials efficacy data, contributing to the development of study specific Data Review Plans, Statistical Analysis Plans and Significant Protocol Violations, ensuring consistency across portfolio of clinical projects.
- Coordinating and developing reports submitted to the FDA and Global Regulatory Authorities.
- Building and supporting KOL relationship within rheumatology/immunology, including advisory panels.

As a program medical director, I led a team of 9 clinical scientists, program managers, statisticians.

Translational Science Steering Committee. In this role, I was responsible for providing clinical advice for formulation of the biomarker strategies for the upcoming clinical trials in rheumatology. As a clinical team member of the committee, I served as a connecting person between Translational Science group and Clinical Development team. I designed, initiated and executed clinical protocol for Phase 0 biomarker study in Rheumatoid Arthritis.

Early Target Selection Committee. As a member of the committee, I reviewed and recommended early research/development programs for further clinical development. Performed due diligence for potential new targets, mergers and acquisitions, provided strategic clinical leadership for identifying new opportunities and next indications in rheumatology/immunology.

2006-2009. BiogenIdec.

Director Immunobiology and Translational Medicine.

Drug Discovery. Director drug development. Led programs focused on discovery and development of biological therapeutics for the treatment of autoimmune diseases (SLE, RA). In this role, I advanced novel therapeutics throughout discovery, preclinical development and IND preparation to enter clinical testing. 6 direct reports.

Translational Medicine. As a part of Translational Medicine group, I was TM clinician for several Phase I to III immunology and neurology clinical programs, coordinating clinical trials' biomarker strategies. I was the principal architect of novel biomarker strategies programs targeting autoimmune diseases. I introduced and developed a concept of application of cytomics for search of biomarkers in autoimmune diseases (SLE, RA) and identification of new therapeutic targets for SLE.

Flow Cytometry Facility. I was Medical/Scientific Director of the Flow Cytometry Research Services at BIIB headquarters in Cambridge. During my tenure facility developed into one of the leading flow cytometry centers in the Boston area. We offered 13 colors FACS analysis and 9 color sorting capabilities, and variety of instrumentation (3 sorters, 6 analyzers). To support facility, I managed a team of Senior Manager and associate scientist. I have initiated formation of the Core Flow Cytometry Center for R&D at BiogenIdec, which combined research, translational medicine and clinical services in one center of excellence.

As a facility Director, I became an active participant in forming national consortium created to establish a standardized flow cytometry platform for phenotypic analysis of patients' blood samples-Phenogenomics Program.

2000-2006. Children's Hospital Boston, Harvard Medical School.

Instructor in Pediatrics (HMS), Joint Program in Transfusion Medicine, Department of the Laboratory Medicine, Children's Hospital Boston (CHB) and Department of Pathology, Harvard Medical School (HMS).

My translational research has applied my hard-earned skills as immunologist, hematologist, and clinical scientist to the understanding and advancement of biology of the bone marrow hematopoietic cell. My research success has depended on basic science knowledge, laboratory skills, clinical insight, and interpersonal skills to coordinate a multi-disciplined team of scientists, clinicians, biostatisticians, and data managers through discovery research and ongoing clinical trials.
The overall goal of my laboratory studies was to determine the chemokine-mediated mechanism(s) which are critical for human bone marrow lymphoid development. Collectively, my findings argue that in the bone marrow, chemokine responses are developmentally regulated, which play a critical role in stem cell and progenitor B cell positioning and maturation. I was the first to describe the role of CXCR4 chemokine receptor in human bone marrow B lymphopoieis and for the first time proposed the concept of cross-talk among heterologous chemokines and an idea of complement anaphylatoxin system as a rapid regulator of trafficking and retention of human bone marrow hematopoietic cells.
Results of my studies were published in top tier journals (over 25 papers in JEM, Blood and Immunity) and my top papers have been well recognized by scientific community (more than 60 citations each so far).
During my tenure at Harvard Medical School, I supervised 2-3 PhD level scientists and 1-2 associate scientists. I also mentored and supervised graduate (MD or MD/PhD) students during lab rotations and undergraduate students (7 trainees, thesis papers defended with Summa Cum Laude).

2004-2006. **Director, Flow Cytometry Core Facility, Center for Human Cell Therapy, CBR Institute for Research (Immune Disease Institute), Harvard Medical School, Boston.**

Medical Director, Clinical Flow Cytometry Core Facility at the Center for Human Cell Therapy.

Clinical flow cytometry facility was positioned at the cutting edge of the FACS technology and was serving and educating Harvard scientific community in novel applications of flow cytometry (e.g. 10+ color flow cytometry, high speed cell sorting of rare human stem cell populations, analysis of cell signaling by FACS).
Core efforts were focused on facilitating clinical development of new cellular therapies as well as on identification of the novel disease biomarkers.
Directly supervised 1 PhD level scientist (Facility Technical Director) and 1 associate scientist.

2000-2004. **Director, Flow Cytometry Core Facility, Children's Hospital Boston.**

Medical Director, Core Facility, Joint Program in Transfusion Medicine.

It was the first facility at Medical School campus that offered both multicolor cell analysis (8+ colors capability) and ultra fast sorting of rare cell populations (sort at 100,000 events/s at a purity of more than 98%).
Directly supervised 1 associate scientist.

1995-2000. Department of Pathology and Laboratory Medicine University of Pennsylvania, Philadelphia

Postdoctoral researcher in pathology.

Conducted basic research on pathogenesis of retroviral, chronic disease of the Central Nervous System, and studied the role of chemokines on trafficking of human progenitor cells. Author of 2 publications in retrovirology and 3 publications on stem cell trafficking.

1994-1995. Internal Medicine, Hospitals of the Pomeranian School of Medicine, Szczecin, Poland.

Resident doctor.

1992-1993**. Elective Internship, Pediatrics and Internal Medicine, Southport and Formby District General Hospital, Southport, England.**

Intern in pediatrics.

Education:

1988-1994	M.D. *Summa cum laude,* Pomeranian Medical University, Szczecin, Poland
1999	Ph.D. *Summa cum laude,* Pomeranian Medical University, Szczecin, Poland *Dissertation: Murine model of retroviral disease of the Central Nervous System.*

Licensure and Certification:

1992	Clinical Trials Certificate, Erasmus Clinical Trials Program, Erasmus University, Rotterdam.
1994	Medical Doctor License (European Union), Board of Medicine
2001	Proficiency Certificate, FACS Sorting and Cell Analysis

Membership in Professional Societies:

2001 American Society of Hematology
2004 International Society for Analytical Cytology
2004 Clinical Cytometry Society
2006 American Association of Immunologists

Honors and Awards:

1993-1994 Scientific Scholarship from the National Institute of Health
1994 Award of the Dean of the Medical Faculty for Summa Cum Laude Graduation
1994 Award of the Scientific Association at the Pomeranian School of Medicine for Excellence in Science

Editorial boards:

Ad hoc reviewer for Blood, Stem Cells, Leukemia, Leukemia and Lymphoma, The Journal of Immunology, Biomedical Microdevices.

Research Support:

Completed Research Support

PO84800-01, Wagner (PI) 7/00 -7/05
NHLBI, Bethesda, MD;
Adhesion Molecules in Transfusion Biology.
Uncover the mechanisms involved in chemokine-mediated adhesion of progenitor cells in the bone marrow.
Role: Co-PI, Project 3.

R24HL074355, Silberstein (PI) 7/04-7/09
NHLBI, Bethesda, MD;
Center for Human Cell Therapy.
To facilitate the clinical development of new cellular therapies which use cells from blood, bone marrow, and muscle and other cell clusters to treat damaged and diseased tissues.
Role: Co-PI. Director Flow Cytometry Core Facility.

Patent applications:

- Methods and Compositions for Increasing the Affinity of Chemokines for Their Receptors
- Methods of Treating Inflammatory Disorders Using Anti-M-CSF Antibodies.
- Methods of Using Antibody Polypeptides that Antagonize CD40L to Treat Primary Immune Thrombocytopenia

Original Articles **(peer-reviewed publications in chronological order)**:

1. Ratajczak J, Machalinski B, Pluciennik E, **Honczarenko M**, Ratajczak MZ. The influence of Neutrophil-Activating Peptide 2 (NAP-2) on human erythropoietic progenitors. An in vitro study relevant to the pathogenesis of the anemia of chronic disease. Acta Haematologica Polonica. 1997; 28, 2:125-135.

2. Machalinski B, Gabriel A, **Honczarenko M**, Ratajczak MZ. Toxicity of Pyronin Y against human cord blood and bone marrow hematopoietic progenitor cells. Preliminary report. Acta Haematologica Polonica. 1998; 29: 319-325
3. Machalinski B, **Honczarenko M**, Ratajczak MZ. 1997. Isolation of mononuclear cells from bone marrow, peripheral and cord blood employing Ficoll-Paque (Pharmacia) or Gradisol L (Polfa). Comparison of both methods. Pol. Arch. Med. Wew. 1998; 99, 1: 15-23.
4. **Honczarenko M**, Machalinski B. Chemokines, chemokine receptors and pathogenesis of HIV infection. Postepy Biologii Komorki. 1998; 25, 2: 283-310.
5. **Honczarenko M**, Machalinski B, Marlicz W, Majka M, Kijowski J, Paczkowski M, Ratajczak J, Ratajczak MZ. Ex vivo expansion of human megakaryocytic progenitors as a method for ameliorating chemotherapy or haematopoietic transplant related thrombocytopenia. Onkol. Pol. 1998; 3-4: 117-123.
6. Majka M, **Honczarenko M**, Kijowski J, Paczkowski M, Gontarewicz A, Paczkowska E, Ratajczak MZ. Protooncogen c-MYB regulates telomerase activity in chronic myeloid leukemia cells. Onkol. Pol. 1998; 3-4: 111-115.
7. **Honczarenko M**, Douglas RS, Matthias C, Lee B, Ratajczak MZ, Silberstein LE. SDF-1 responsiveness does not correlate with CXCR4 expression levels of developing human bone marrow B cells. Blood. 1999; 94: 2990-2998
8. Cunto-Amesty G, Przybylski G, **Honczarenko M**, Monroe JG, Silberstein LE. Evidence that immunoglobulin specificities of AIDS-related lymphoma are not directed to HIV-related antigens. Blood. 2000; 95: 1393-1399.
9. Majka M, Ratajczak J, Lee B, **Honczarenko M**, Douglas RS, Kowalska MA, Silberstein LE, Gewirtz A, Ratajczak MZ. The role of HIV related chemokine receptors and chemokines in human erythropoiesis in vitro. Stem Cells. 2000; 18: 128-138.
10. Majka M, Rozmyslowicz T, **Honczarenko M**, Ratajczak J, Wasik M, Gaulton GN, Ratajczak MZ. Biological significance of the expression of HIV-related chemokine coreceptors (CCR5 and CXCR4) and their ligands by human hematopoietic cell lines. Leukemia. 2000; 14: 1821-1832.
11. Majka M, Janowska-Wieczorek A, Ratajczak J, Kowalska MA, Vilaire G, Zhixing K. Pan, **Honczarenko M**, Marquez LA, Poncz M, Ratajczak MZ. Stromal derived dactor-1 and thrombopoietin regulate distinct aspects of human megakaryopoiesis. Blood. 2000; 96: 4142-4151.
12. **Honczarenko M**, Le Y, Glodek AM, Majka M, Campbell JJ, Ratajczak MZ, Silberstein LE. CCR5-binding chemokines modulate CXCL12 (SDF-1)-induced responses of progenitor B cells in human bone marrow through heterologous desensitization of the CXCR4 chemokine receptor. Blood. 2002; 100: 2321-2329.
13. Glodek AM, **Honczarenko M**, Le Y, Campbell JJ, Silberstein LE. Sustained activation of cell adhesion is a differentially regulated process in B lymphopoiesis. Journal of Experimental Medicine. 2003 197: 461-473.
14. Reca R, Mastellos D, Majka M, Marquez L, Ratajczak J, Franchini S, Glodek AM, **Honczarenko M**, Spruce LA, Janowska-Wieczorek A, Lambris JD, Ratajczak MZ. Functional receptor for C3a anaphylatoxin is expressed by normal hematopoietic stem/progenitor cells, and C3a enhances their homing-related responses to SDF-1. Blood. 2003; 101: 3784 – 3793.
15. Lu J, **Honczarenko M**, Sloan S. Independent expression of the two paralogous *CCL4* genes in monocytes and B lymphocytes. Immunogenetics. 2004; 55: 706-711.
16. Murphy SL, **Honczarenko M,** Dugger NV, Hoffman PM, Gaulton GN. Disparate regions of envelope protein regulate syncytium formation versus spongiform encephalopathy in neurological disease induced by murine leukemia virus TR. J Virol. 2004; 78(15):8392-9.
17. De Franceschi L, Turrini F, **Honczarenko M,** Ayi K, Rivera A, Fleming MD, Law T, Mannu F, Kuypers FA, Bast A, van der Vijgh WJ, Brugnara C. In vivo reduction of erythrocyte oxidant stress in a murine model of beta-thalassemia. Haematologica. 2004; 89(11):1287-98.

18. Wysoczynski M, Reca R, Ratajczak J, Kucia M, Shirvaikar N, **Honczarenko M,** Mills M, Wanzeck J, Janowska-Wieczorek A, Ratajczak MZ. Incorporation of CXCR4 into membrane lipid rafts primes homing-related responses of hematopoietic stem/progenitor cells to an SDF-1 gradient. Blood. 2005; 105(1):40-8.
19. Le Y, **Honczarenko M,** Glodek AM, Ho DK, Silberstein LE. CXCL12-induced FAK activation and segregation into membrane domains is modulated by RGS1 in REH pro-B cells. J Immunology. 2005; 174(5):2582-90.
20. Mazo IB, **Honczarenko M,** Leung H, Cavanagh LL, Bonasio R, Weninger W, McEver R, Koni PA, Silberstein LE, and von Andrian UH. Bone marrow is a major reservoir and site of recruitment for central memory $CD8^+$ T cells. Immunity. 2005; 22(2):259-70.
21. De Franceschi L, Rivera A, Fleming MD, **Honczarenko M,** Peters LL, Gascard P, Mohandas N, Brugnara C. Evidence for a protective role of the Gardos channel against hemolysis in murine spherocytosis. Blood. 2005; 106: 1454-1459.
22. **Honczarenko M,** Lu B, Nicholson-Weller A, Gerard NP, Silberstein LE, Gerard C. C5L2 receptor is not involved in C3a/C3a-desArg-mediated enhancement of bone marrow hematopoietic cell migration to CXCL12. Leukemia. 2005; 19: 1682-1683.
23. **Honczarenko M,** Ratajczak MZ, Nicholson-Weller A, Silberstein LE. Complement C3a Enhances CXCL12 (SDF-1)-Mediated Chemotaxis of Bone Marrow Hematopoietic Cells Independently of C3a Receptor (C3aR). J Immunology. 2005; 195: 3698-3706.
24. **Honczarenko M,** Le Y, Swierkowski M, Ghiran I, Glodek AM, Silberstein LE. Human bone marrow stromal cells express a distinct set of biologically functional chemokine receptors. Stem Cells. 2006; 24(4):1030-41.
25. Murphy SL, Chung-Landers M, **Honczarenko M,** Gaulton GN. Linkage of reduced receptor affinity and superinfection to pathogenesis of TR1.3 murine leukemia virus. J Virol. 2006. 80(9):4601-9.
26. **Honczarenko M,** Glodek AM, Swierkowski M, Na IK, Silberstein LE. Developmental stage-specific shift in responsiveness to chemokines during human B cell development. Experimental Hematology. 2006; 34(8):1093-1100.
27. Zhu D, Hattori H, Jo H, Jia Y, Subramanian KK, Loison F, You J, Le Y, **Honczarenko M,** Silberstein L, Luo HR. Deactivation of phosphatidylinositol 3,4,5-trisphosphate/Akt signaling mediates neutrophil spontaneous death. Proc Natl Acad Sci U S A. 2006; 103(40):14836-41.
28. Glodek AM, Le Y, Dykxhoorn DM, Park SY, Mostoslavsky G, Mulligan R, Lieberman J, **Honczarenko M,** Silberstein LE. Focal Adhesion Kinase (FAK) is required for CXCL12-induced chemotactic and pro-adhesive responses in B-lineage and hematopoietic stem/progenitor cells. Leukemia. 2007; 21(8):1723-32.
29. Hartmann T, Leick M, Ewers S, Diefenbacher A, Simpson C, Nibbs R, Verzijl D, Schraufstatter I, **Honczarenko M,** Burger M. Human B cells express the orphan chemokine receptor CRAM-A/B in a maturation stage dependent and CCL5-modulated manner. Immunology. 2008; 125 (2): 252-262.
30. HartmannTN, Grabovsky V, Wang V, Desch P, Wollner S, Binsky I, Vallon-Eberhard A, Sapoznikow A, Haran M, Shachar I, Burger M, **Honczarenko M**, Greil R, Alon R. Circulating B-cell chronic lymphocytic leukemia cells display impaired migration to lymph nodes due to reduced LFA-1 expression. Cancer Research. 2009; 69 (7):3121-30
31. Pharmacokinetic, Pharmacodynamic, and Safety Profile of a Novel Anti-CD28 Domain Antibody Antagonist in Healthy Subjects. Shi R, **Honczarenko M,** Zhang S, Fleener C, Mora J, Lee SK, Wang R, Liu X, Shevell DE, Yang Z, Wang H, Murthy B. J Clin Pharmacol. 2016 Jul 12. doi: 10.1002/jcph.791.
32. The Biomarkers of Lupus Disease Study: A Bold Approach May Mitigate Interference of Background Immunosuppressants in Clinical Trials. Merrill JT, Immermann F, Whitley M, Zhou T, Hill A, O'Toole M, Reddy P, **Honczarenko M,** Thanou A, Rawdon J, Guthridge JM, James JA, Sridharan S. Arthritis Rheumatol. 2017 Jun; 69(6):1257-1266. doi: 10.1002/art.40086.

Book Chapters:

Honczarenko M, Campbell J and Silberstein LE. Chemokines and Chemokine Receptors. In: R Rich, T. Fleisher, B Kotzin, W Shearer and H Schroeder, editors. Clinical Immunology, Second Edition, 2001.

Invited Lectures:

1. Developmental expression and function of chemokine receptors on human B cells. "B Cell Lymphoproliferative Disorders" Conference, New York, NY 1998.
2. Developmental Stage Specific Shift in Responsiveness to CXC/CC Chemokines during B Cell Development in Human Bone Marrow. Novel Role of the MIP-3β/CCR7 in Early Progenitor B Cell Development. American Society of Hematology (ASH) meeting, San Diego, California 2003.
3. C3a Primes B Cell Responses to SDF-1 by Increasing Its Binding Affinity to the CXCR4 Chemokine Receptor. 12th International Congress of Immunology (ICI). Montréal, Québec, Canada 2004.
4. Evidence for a Functional Role of Chemokine Receptors in the Biology of Human Bone Marrow Stromal Cells. The Second Annual Meeting of the European Stem Cell Therapeutics Excellence. Krakow, Poland 2004.
5. Chemokines and Their Receptors as a Global Positioning System for Developing Bone Marrow B Cells: How to Stay on the Right Path towards Maturity. Biotech Seminars. Massachusetts General Hospital. Boston, 2005.
6. Function of Complement Anaphylatoxins in Human Bone Marrow Lymphopoiesis. Immunology Ground Rounds Seminar Series. Children's Hospital Boston, Harvard Medical School, 2006.
7. Application of Cytomics for Discovery of SLE Biomarkers. Monthly Lupus Lecture Series. Division of Rheumatology, Beth Israel Deaconess Medical Center, Harvard Medical School. 2008.
8. Role of Biomarkers in Design and Execution of SLE Clinical Trials. Harvard Catalyst: Harvard Clinical and Translational Science Center. Harvard Medical School. 2010.
9. Impact of baseline interferon pathway activation on widespread gene expression changes with disease flare in lupus patients: interim report from the BOLD (biomarkers of lupus disease) study. Plenary Session: Lupus and Sjögren's: basics - diagnosis - treatment. EULAR Congress. Berlin. 2012.
10. Can we shorten the clinical development timeframe in autoimmune diseases? Autoimmune & Inflammation Leaders' Forum. Boston. 2013
11. Clinical development in Systemic Lupus Erythematosus. Exploratory Clinical Development World. London. 2014.
12. Designing early stage clinical trials for biologics in combination with standard of care. Exploratory Clinical Development World. London. 2014.

Published Abstracts and Presentations:

1. **Honczarenko M,** Flicinski J, Przepiera H. The Study on the Influence of Environmental and Occupational Factors Among the Workers of Water Supply and Sewage Works in Szczecin. The 10th International Medical Sciences Student Congress, Istanbul 1994.
2. **Honczarenko M**, Brzosko M, Flicinski J, Przepiera H, Fiedorowicz-Fabrycy I. Workers with Rheumatic Complaints and Sickness Absence. The 13th European Congress of Rheumatology, Amsterdam. Rheumatology in Europe, 1995, supplement 3, 24; 134 abstracts

3. Brzosko M, **Honczarenko M**, Flicinski J, Przepiera H, Fiedorowicz-Fabrycy I. The Influence of Personal and Environmental Factors on the Occurrence of Low-Back Pain among the Workers of Water Supply and Sewage Works in Szczecin. 13th European Congress of Rheumatology, Amsterdam. Rheumatology in Europe, 1995, supplement 3, 24; 136 abstracts

4. Fiedorowicz-Fabrycy I, Brzosko M, Honczarenko K, Przepiera-Bedzak H, Flicinski J, **Honczarenko M**, Rybak K. The low-back pain among the workers of Water Supply and Sewage Works in Szczecin. Seventh International Seminar on the treatment of Rheumatic Diseases, 10-16, 12, 1995, Israel; 8 abstracts.

5. Fiedorowicz- Fabrycy I, Brzosko M, Honczarenko K, Przepiera-Bedzak H, Flicinski J, **Honczarenko M.** The low- back pain among the workers of Water Supply and Sewage Works in Szczecin. Progress in Rheumatology, 1996, VI.

6. Gaulton GN, **Honczarenko M**, Park B, Matuschke B. 1996. Regulation of developmental susceptibility to TR1.3 murine leukemia virus neurologic disease by differential expression of the ecotropic receptor on cerebral vessel endothelium. The 8th Workshop on the Pathogenesis of Animal Retroviruses, Saint-Malo, France; 19 abstracts.

7. **Honczarenko M**, Chung, MM, Shieh J, Park B, Gaulton GN. 1997. The molecular and cellular basis for TR1.3 induced syncytia formation. Cancer Center Scientific Symposium and Retreat, Philadelphia; 65 abstracts.

8. **Honczarenko M**, Feldman M, Hriesik C, Monroe JG, Silberstein LE. 1998. CXCR4 and CCR5 expression during human B cell development. The Second National AIDS Malignancy Conference, Bethesda. The Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998; 17, 4: Abstract 98.

9. **Honczarenko M**, Hriesik C, Monroe JG, Silberstein LE. Differential expression and function of chemokine receptors during B cell development. 1998 Meeting of the Institute of human Virology. Baltimore, Maryland. Abstract 311.

10. **Honczarenko M**, Hriesik C, Monroe JG, Silberstein LE. Developmental expression and function of chemokine receptors on human B cells. 1998. B Cell Lymphoproliferative Disrorders, New York. 64 abstract.

11. Majka M, Lee B, J. Ratajczak J, Pertusini E, **Honczarenko M**,. Kowalska MA, Wasik MA, Poncz M,. Silberstein LE, Gewirtz AM, Ratajczak MZ. Expression and function of HIV-11 co-receptors on human hematopoietic cell lines. Blood. 1998; supplement 1, 92. Abstract 671

12. Majka M, **Honczarenko M**, Ratajczak J, Lee B, Kowalska MA, Douglas RS, Poncz M, Silberstein LE, Gewirtz AM, Ratajczak MZ. The expression of the chemokine receptors during erythroid differentiation of human CD34+ cells. The role of chemokines on calcium flux, chemotaxis and proliferation. Blood. 1998; supplement 1, 92. Abstract 1508.

13. **Honczarenko M**, Douglas RS, Mathias C, Monroe JG, Silberstein LE Unlinked expression and function of CXCR4 and CCR5 on developing B cells: Implications for bone marrow B lymphopoiesis. Blood. 1998; supplement 1, 92. Abstract 101.

14. **Honczarenko M**, Douglas RS, Hriesik C, Monroe JG, Silberstein LE Unlinked expression and function of CXCR4 and CCR5 on developing B cells: Implications for bone marrow B lymphpoiesis. Keystone Symposia. Chemokines and Chemokine receptors. Keystone, Colorado. 1999. Abstract 312, page 51.

15. **Honczarenko M**, Silberstein LE, Cunto-Amesty G, Douglas RS. Chemokine receptor-mediated biological responses of B cells towards gp120 envelope proteins. Keystone Symposia. Chemokines and Chemokine receptors. Keystone, Colorado. 1999. Abstract 328, page 55.

16. **Honczarenko M,** Silberstein LE, Douglas RS, Hriesik C, Monroe JG, Unlinked expression and function of CXCR4 and CCR5 on developing B cells: Implications for bone marrow B

lymphopoiesis. Keystone Symposia. B lymphocyte biology and disease. Taos, New Mexico. 1999. Abstract 2072.

17. Majka M, Lee B, Ratajczak J, **Honczarenko M**, Pietrzkowski Z, Gewirtz AM, Silberstein LE, Ratajczak MZ. HIV related β-chemokines are secreted by human CD34+Kit+ cells. Penn Center for AIDS and HIV Research. First Annual Retreat. Philadelphia. 1999. Abstracts 19

18. Majka M, Lee B, **Honczarenko M**, Ratajczak J, Gewirtz AM, Silberstein LE, Ratajczak MZ. The stromal derived factor (SDF-1) receptor-CXCR4 is expressed on the human erythroid progenitors and SDF-1 is an important chemotactic factor for the early human erythroid cells. Comparison to other chemokine receptor-chemokines axes. Penn Center for AIDS and HIV research. First Annual Retreat. Philadelphia. 1999. Abstracts 27

19. **Honczarenko M**, Mathias C, Majka M, Ratajczak MZ, Silberstein LE Unlinked expression and function of CXCR4 and CCR5 on developing B cells: Implications for bone marrow B lymphpoiesis. Penn Center for AIDS and HIV research. First Annual Retreat. Philadelphia. 1999. Abstracts 27

20. Majka M, Rozmyslowicz T, Lee B, **Honczarenko M**, Pietrzkowski, Gaulton GN, Silberstein LE, Ratajczak MZ. Bone marrow CD34+ cells and megakaryoblasts secrete β-chemokines; implication for infectability by M-tropic human immunodeficiency virus (R5 HIV). 1999. Chemokines and Chemokine Receptors. Disease targets for therapeutic development. McLean, Virginia.

21. Rao SP, Riggs J, **Honczarenko M,** Schiff MC, Silberstein, LE. Introduction of a functional VDJ-μ chain into a human pro-B cell line downregulates TdT and RAG1 genes and allows differentiation to pre-B cell stage. "B lymphocytes: Basic biology and roles in autoimmune disease", American College of Rheumatology, 1999 Basic Research Conference. November 12-13, 1999, Boston, MA. (Abstract).

22. **Honczarenko M**, Mathias C, Majka M, Pietrzkowski Z, Ratajczak MZ, Silberstein LE. MIP-1β induced heterelogous desensitization of CXCR4 mediated signaling on early lineage B cells in human bone marrow. Blood. 1999; supplement 1, 94: 5a. Abstract 8.

23. Majka M, Rozmyslowicz T, Lee B, **Honczarenko M**, Pietrzkowski Z, Gaulton GN, Silberstein LE, Ratajczak MZ. Bone marrow CD34+ cells and megakaryoblasts secrete β–chemokines; Implications for infectability by M-tropic human immunodeficiency virus (R5 HIV). Blood. 1999; supplement 1, 94: 435a. Abstract 1934.

24. Majka M, Rozmyslowicz T, **Honczarenko M**, Lee B, Ratajczak J, Wasik M, Gaulton GN, Gewirtz AM, Silberstein LE, Ratajczak MZ. Biological significance of the expression of HIV related chemokine coreceptors (CCR5 and CXCR4) and endogenous secretion of chemokines by human hematopoietic cell lines. Blood. 1999; supplement 1, 94: 618a. Abstract 2746.

25. Silberstein LE, Rao SP, Riggs JM, **Honczarenko M**. Expression of VDJ-μ chain in a human pro-B cell line omduces differentiation to the immature-B cell stage independent of stroma cell contact. Blood. 1999; supplement 1, 94: 59b. Abstract 3416

26. **Honczarenko M,** Goldman J, Silberstein LE. SDF-1 induced adhesion of progenitor B lymphocytes to vascular cell adhesion molecules-1 (VCAM-1). Blood. 1999; supplement 1, 94: 164b. Abstract 3910

27. **Honczarenko M,** Majka M, Silberstein LE, Ratajczak MZ. An evidence that CD4 antigen is not expressed on human bone marrow derived CD34+ stem/progenitor cells. Blood. 2000; 96: 21a. Abstract 77.

28. Glodek AM, **Honczarenko M**, Goldman J, Silberstein LE. Differential responses of human bone marrow and peripheral blood B cells to SDF-1 induced adhesion to VCAM-1. Implications for the regulation of B lymphopoiesis. Blood. 2000; 96: 688a. Abstract 2967.

29. **Honczarenko M**, Mathias C, Glodek AM, Majka M, Pietrzkowski Z, Ratajczak MZ, Silberstein LE. Bone marrow B cells secrete □-chemokines that may modulate their

development through cross-talk and heterelogous desensitization of CXCR4 chemokine receptor. Blood. 2000; 96: 138b. Abstract 4292.

30. Przybylski GK, Cunto-Amesty G, **Honczarenko M**, Monroe JG, Silberstein LE. Evidence that AIDS-related lymphomas are derived from activated B-cells, but they are not directed to HIV antigens. 14th European Immunology Meeting EFIS 2000, Poznan, Poland. September 2000.Abstract 425.

31. Glodek AM, **Honczarenko M** and Silberstein LE. Differential responses of human bone marrow and peripheral blood B cells to SDF-1 induced adhesion to VCAM-1. Implications for the regulation of B lymphopoiesis. Keystone Symposia. Chemokines and Chemokine Receptors. Taos, New Mexico. February 16-21, 2001. Abstract 315, page 68.

32. **Honczarenko M**, Mathias C, Glodek AM, Majka M, Pietrzkowski Z, Ratajczak MZ, Silberstein LE. Bone marrow B cells secrete β-chemokines that may modulate their development through cross-talk and heterelogous desensitization of CXCR4 chemokine receptor. Keystone Symposia. Chemokines and Chemokine Receptors. Taos, New Mexico. February 16-21, 2001. Abstract 321, page 70.

33. Glodek A, **Honczarenko M**, Campbell J, Le Y, Silberstein LE. Transient versus sustained adhesion as fundamentally different physiologic processes: sustained SDF-1 induced adhesion is associated with prolonged FAK phosphorylation during early B cell development. Cell Adhesion and Migration in Inflammation and Cancer. Amsterdam, The Netherlands. October 17-20, 2001. Abstract, page 53.

34. **Honczarenko M**, Yi Le, Aleksandra M. Glodek, Silberstein LE. Human Bone Marrow Stromal Cells Express Functional Chemokine Receptors. Blood. 2001; supplement 1, 98: 11(1). Abstract 349.

35. Glodek A, **Honczarenko M**, Le Y, Campbell J, Silberstein LE. Transient versus sustained adhesion as fundamentally different physiologic processes: sustained SDF-1 induced adhesion is associated with prolonged FAK phosphorylation during early B cell development. Blood. 2001; supplement 1, 98: 11(1). Abstract 1235.

36. Glodek A, **Honczarenko M**, Le Y, Campbell J, Silberstein LE. Transient versus sustained adhesion as fundamentally different physiologic processes: sustained SDF-1 induced adhesion is associated with prolonged FAK phosphorylation during early B cell development. Keystone Symposia. Molecular mechanisms of Leukocyte Trafficking. Steamboat Springs, Colorado. April 9-14, 2002. Abstract 315, page 119.

37. Le Y, **Honczarenko M**, Glodek A, Ho DH, Silberstein LE. RGS1 modulates CXCL12/CXCR4 mediated responses in lipid rafts. Keystone Symposia. Molecular mechanisms of Leukocyte Trafficking. Steamboat Springs, Colorado. April 9-14, 2002. Abstract 325, page 122.

38. Franceschi L, Turrini F, **Honczarenko M**, Ayi K, Fleming MD, Law T, Gotta S, Kuypers FA, Bast A, van der Vijgh WJF, Brugnara C. Monohydroxyethylrutoside (monoHER), a Novel Antioxidant Agent, Reduces Membrane Oxidative Damage In Vivo in a Mouse Model of B-Thalassemia. Blood. 2002; 100: 11(1). Abstract 441.

39. **Honczarenko M**, Glodek AM, Silberstein LE. Developmental Stage Specific Shift in Responsiveness to CXC/CC Chemokines during Human Bone Marrow B Cell Maturation. Blood. 2002; 100: 11(1). Abstract 2887.

40. Glodek AM, **Honczarenko M**, Silberstein LE. Chemokines Induce Distinct Migratory and Adhesion Responses of Circulating Memory and Naive B Cells. Blood. 2002; 100: 11(2). Abstract 3698.

41. Le Y, **Honczarenko M,** Glodek A, Ho DH, Silberstein LE. CXCL12 mediated responses and their modulation by RGS1 are compartmentalized in membrane lipid rafts. Keystone Symposia. Chemokines and Chemokine Receptors. Breckenridge, Colorado. January 7-12, 2003. Abstract 219, page 68.

42. **Honczarenko M**, Glodek AM, Silberstein LE. Developmental Stage Specific Shift in Responsiveness to CXC/CC Chemokines during Human Bone Marrow B Cell Maturation. Keystone Symposia. B Cells and Antibodies: Laboratory to Clinic. Keystone, Colorado. January 14-19, 2003. Abstract 127, page 71.

43. Glodek AM, **Honczarenko M,** Silberstein LE. Chemokines Induce Distinct Migratory and Adhesion Responses of Circulating Memory and Naive B Cells. Keystone Symposia. B Cells and Antibodies: Laboratory to Clinic. Keystone, Colorado. January 14-19, 2003. Abstract 223, page 92.

44. **Honczarenko M**, Swierkowski M, Le Y, Glodek AM,. Ratajczak MZ, Nicholson-Weller A, Silberstein LE. C3a Primes B Cell Responses to SDF-1/CXCL12 by Increasing Its Binding Affinity to the CXCR4 Chemokine Receptor. Blood. 2003; 102: 11(1), Abstract 3047.

45. **Honczarenko M**, Glodek AM, Swierkowski M, Na IK, Silberstein LE. Developmental Stage Specific Shift in Responsiveness to CXC/CC Chemokines during B Cell Development in Human Bone Marrow. Novel Role of the MIP-3β/CCR7 in Early Progenitor B Cell Development. Blood. 2003; 102: 11(1), Abstract 162.

46. Le Y, **Honczarenko M**, Glodek A, Ho DH, Silberstein LE. CXCL12 mediated responses and their modulation by RGS1 are compartmentalized in membrane lipid rafts. Keystone Symposia. Lymphocyte activation and signaling. Steamboat Springs. Colorado. January 8-13, 2004. Abstract 243, page 75.

47. **Honczarenko M,** Nicholson-Weller A, Silberstein LE. C3a Enhances CXCL12-mediated chemotaxis of lymphocytes by increasing CXCL12 binding affinity to CXCR4. The Second Annual Meeting of the European Stem Cell Therapeutics Excellence. Krakow, Poland 7-8 June, 2004. Abstract page 23.

48. **Honczarenko M,** Le Y, Glodek AM, Swierkowski M, Silberstein LE. Evidence for a functional role of chemokine receptors in the biology of human bone marrow stromal cells. The Second Annual Meeting of the European Stem Cell Therapeutics Excellence. Krakow, Poland 7-8 June, 2004. Abstract page 26.

49. **Honczarenko M,** Nicholson-Weller A, Silberstein LE. C3a Primes B Cell Responses to SDF-1 by Increasing Its Binding Affinity to the CXCR4 Chemokine Receptor. 12th International Congress of Immunology (ICI). Montréal, Québec, Canada. July 18-23, 2004. Abstract 683, publication M10.7.

50. **Honczarenko M,** Glodek AM, Swierkowski M, Na IK, Silberstein LE. Developmental Stage Specific Shift in Responsiveness to CXC/CC Chemokines during B Cell Development in Human Bone Marrow. Novel Role of the CCR7 in Early Progenitor B Cell Development. 12th International Congress of Immunology (ICI). Montréal, Québec, Canada. July 18-23, 2004. Abstract 682, publication W 9.11.

51. Leick M, Catussen J, Hartmann TN, Ewers S, Diefenbacher A, **Honczarenko M**, Burger M. CRAM-A/B: a novel chemokine receptor on B cells. Joint Annual Meeting of Immunology of the Austrian and German Societies. Wiener Klinische Wochenschrift. 2008: 120; 179.

52. Hartman TN, Grabosky V, Wang W, Desch P, Wollner S, Binsky I, Vallon-Eberhart A, Sapoznikov A, Haran M, Shachar I, Burger M, **Honczarenko M,** Greil R, Alon R. Circulating B-cell Chronic Lymphocytic Leukemia Cells Display Impaired Migration to Lymph Nodes Due to Reduced LFA-1 Expression. Blood. 2008: 112 (11), Abstract 3135.

53. O'Toole M, Zhang Y, Seyhan A, Immermann FW, Hill AA, Reddy PS, Sridharan S, Lehmann M, Masferrer J, Zhou T, Mounts W, Whitley M, Walker T, Kamp S, James JA, **Honczarenko M**, Merrill JT. Gene Expression Patterns Associated with Medication Use, Disease Activity and SLE Patient Subgroups in the Biomarkers of Lupus Disease (BOLD) Study. ACR/ARHP Annual Scientific Meeting. 2011 Chicago, IL.

54. Sridharan S Zhou T, Immermann FW, Lehmann M, Masferrer J , **Honczarenko M**, Rawdon J,. James JA, Merril JT. Low Placebo Responses and Clinical Components of the BOLD

Study (Biomarkers of Lupus Disease) May Provide Useful Insights for SLE Clinical Trial Design. ACR/ARHP Annual Scientific Meeting. 2011 Chicago, IL

55. Seyhan A, O'Toole M, Zhang Y, Immermann FW, Hill A, Reddy P, Masferrer J, Zhou T, Mounts W, Whitley M, Walker T, Kamp S, James J Sridharan S, Merrill JT, **Honczarenko M.** Impact of Baseline Interferon Pathway Activation on Widespread Gene Expression Changes with Disease Flare in Lupus Patients: Interim Report from the Bold (Biomarkers Of Lupus Disease) Study. EULAR Congress. Ann Rheum Dis 2012;71(Suppl3):74

56. Shi R., Wang H., Suchard S., Nadler S., **Honczarenko M**, Zhang S, Yang Z. Model-based minimum anticipated biological effect level (MABEL) approach led to safe human starting dose of three domain antibodies for autoimmune diseases. Clinical Pharmacology & Therapeutics. 2015; 97, 55.

57. Shi R, **Honczarenko M**, Zhang S, Fleener CA, Mora J, Lee S, Liu X, Shevell DE, Yang Z, Wang H, Murthy B. A Novel Anti-CD28 Domain Antibody Antagonist Shows a Favorable Pharmacokinetic, Pharmacodynamic and Safety Profile. Arthritis Rheumatol. 2015; 67.

58. Catlett I, Aras U, Liu Y, Bei D, Girgis I, Murthy B, **Honczarenko M,** Rose S. A First-in-Human Study of BMS-986165, a Selective, Potent, Allosteric Small Molecule Inhibitor of Tyrosine Kinase 2. Annals of the Rheumatic Diseases, volume 76, supplement 2, year 2017, page 859