
Almaz Sharman, MD, PhD
THIRTY YEARS EXPERIENCE IN
HEALTH CARE MANAGEMENT AND BIOMEDICAL RESEARCH

EMPLOYMENT SUMMARY

Nazarbayev University Astana, Kazakhstan	Deputy Chairman of Executive Board Chairman of the Board Center for Life Sciences	2010-Present
National Medical Holding Astana, Kazakhstan	Chief Executive Officer Member of the Board	2008 - 2010 2010 - Present
Medtronic Inc. Almaty, Kazakhstan	Founder of Kazakhstan Country Office	2006 - 2008
US Agency for International Development Regional Mission for Central Asia Almaty, Kazakhstan	Country Office Coordinator for Kazakhstan Infectious Disease Advisor	2004 - 2006 2001 - 2004
The Johns Hopkins University, Baltimore, MD, USA	Associate at Bloomberg School of Public Health	1997 - 2004
ICF Macro, Demographic and Health Surveys Division, Calverton, MD, USA	Health Coordinator	1994 - 2001
University of Alabama at Birmingham, Immunobiology Vaccine Center, USA	Research Fellow	1991 - 1994
Bogomolets Medical Institute, Kiev, Ukraine	Visiting Scientist	1991
Institute of Physiology, Almaty, Kazakhstan	Research Associate	1988 - 1991
Institute of Immunology, Moscow, Russia	Visiting Scientist	1983 - 1988
Institute of Regional Diseases Ministry of Health of Kazakhstan	Intern and Resident	1982 -1985

EDUCATION

Bogomolets Medical Institute, Kiev, Ukraine	Dr. Sc.	Internal Medicine/Immunology	1991
Institute of Immunology, Moscow, Russia	PhD	Internal Medicine/Immunology	1985
Asfendiyarov National Medical University, Almaty, Kazakhstan	M.D.	Internal Medicine and Public Health	1982

LEADERSHIP TRAININGS

Leadership Development for Physicians in Academic Health Centers. Harvard University, Boston, MA, USA. October 14–26, 2012. Two weeks of intensive and systematic study of some of the critical leadership and management issues which face physicians in administrative positions and academic health centers.

Executive Development Seminar: Leading Change. Federal Executive Institute, Center for Executive Leadership, Charlottesville, VA, USA, February 8 – 14, 2004. Focused on developing and transitioning senior managers from technical, division-level work to strategic, agency-level leadership positions in relation to policy, strategic planning, leadership and change

MEMBERSHIP IN PROFESSIONAL SOCIETIES AND CHARITIES

Academy of Preventive Medicine of Kazakhstan - APM (<http://zdrav.kz/ru/index/about/en-apm.html>), President-elect since October 2012. APM is Kazakhstan's leading non-for profit public health organization representing most major disciplines of public health and medicine: healthcare and hospital management, medical research in hygiene, epidemiology, environmental health, maternal and child health, reproductive health, nutrition. APM is a full member of the World Federation of Public Health Associations.

American Public Health Association - APHA (<http://kaznmu.kz/eng/>). Member since 1998. APHA is the oldest and most diverse organization of public health professionals in the world and has been working to improve public health since 1872. APHA builds a collective voice for public health, working to ensure access to health care, protect funding for core public health services and eliminate health disparities, among a myriad of other issues.

Asfendiyarov National Medical University (<http://kaznmu.kz/eng/>), Professor Emeritus since December 2011. The Asfendiyarov University is Kazakhstan's leading medical education institution, established in 1932. Annually, more than 800 medical students graduate from Asfendiyarov University in such disciplines as internal medicine, surgery, obstetrics and gynecology, drug management, public health.

Spoon International Charity Foundation (<http://spoonfoundation.org/>), Member of the Board since October 2012. The mission of the Spoon Foundation is to improve the nutrition of orphaned, fostered, and adopted children so they can grow and thrive. The Spoon Foundation seeks to: give as many orphans as possible the chance for healthy development, influence nutrition policies and procedures for orphans around the world, ensure that adopted children get the nutrition they need once they come home

SCIENTIFIC JOURNALS EDITORIAL BOARD MEMBERSHIP

Central Asian Journal for Global Health: Pittsburgh, PA, USA, and Astana, Kazakhstan, Co-editor

Internet site on healthcare www.zdrav.kz: Editor-in-chief

Journal of Healthcare Management, Astana, Kazakhstan, Member of Editorial Board

Journal of Neurosurgery, Astana, Kazakhstan, Member of Editorial Board

Journal of Rehabilitation, Astana, Kazakhstan, Member of Editorial Board

LANGUAGES: Oral and written fluency in: English, Russian, and Kazakh

INTERNATIONAL EXPERIENCE

Kazakhstan	1994 – 1996, Demographic and Health Survey, Health Coordinator 1999 – 2000, Demographic and Health Survey, Health Coordinator 2001 – 2012, USAID international assistance programs, medical technology, hospital management, biomedical research
Russian Federation	1983 – 1988, Visiting scientist at Institute of Immunology, Ministry of Health
Ukraine	1991, Visiting scientist at Bogomolets Medical Institute 1999, Adult health survey design
Armenia	2000, Demographic and Health Survey: technical assistance with anemia study 2006, The World Bank consulting on National Health Survey
Kyrgyz Republic	1997 – 1998, Demographic and Health Survey, Health Coordinator
Uzbekistan	1996 – 1997, Demographic and Health Survey, Health Coordinator
Turkmenistan	2000 – 2001, Demographic and Health Survey, Health Coordinator
Mali	2000: Study of feasibility and acceptability of integrated population-based HIV-study, Principal Investigator
Egypt	1999: Technical assistance with anemia study
Zimbabwe	1999: Technical assistance with anemia and nutrition study
India	1998 and February 1999. Second National Family Health Survey (NFHS-2): Technical assistance with anemia and nutrition study.
Zambia	1998, Sexual Behavior Survey: Assessment visit and survey design

WORK EXPERIENCE

2010 – 2012 Nazarbayev University: Deputy Chairman of Executive Board and Chairman of the Board, Center for Life Sciences. Nazarbayev University is Kazakhstan's premier institution in the area of higher education and research (<http://www.nu.edu.kz>). One of university's strategic goals is to create Academic Healthcare System to integrate biomedical research, patient care and medical education. At this position provided leadership in establishing university's Center for Life Sciences, a biomedical research organization that focuses on genomics and personalized medicine, translational research, regenerative medicine, and clinical research. The Center is now fully functioning with a total of 30 research staff hired and trained, infrastructure built and equipped, five research grant applications approved by the Ministry of Education and Science with a total budget of \$5M, and research partnerships established with leading academic centers: University of Pittsburgh, Duke University, Columbia University, and US National Institutes of Health. Current task is to integrate Center for Life Sciences with six hospitals of the National Medical Holding and future School of Medicine to create university's Academic Healthcare System.

2008 – 2010 National Medical Holding (NMH): Founder and Chief Executive Officer, Member of the Board (since 2010). NMH is a pioneering project of Kazakhstan's healthcare initiated in 2008 at country's capital city of Astana (www.nmh.kz). Its mission is to introduce international standards of quality and safety of care, to ensure financial sustainability and growth, and to introduce innovative medical technologies. NMH is a joint stock company owned by Nazarbayev University. The majority (85%) of NMH funding comes from the Health Ministry and the rest (15%) comes from private sources. CEO's task was to coordinate commissioning of NMH hospitals (buildings, medical equipment, infrastructure), establish corporate management system, hire key staff, provide strategic management, and coordinate the development and implementation of business plans and key performance indicators. Currently the NMH comprises six state-of-the-art tertiary care hospitals with a total capacity of 1500 in-patient beds operating in the areas of maternal and child care, emergency care, cardiology and cardiac surgery, neurosurgery, internal medicine, nuclear medicine, and rehabilitation. Over 3000 doctors, nurses and ancillary staff provide patient care at NMH hospitals. NMH's Center for Maternal and Child Health was accredited by the Joint Commission International (JCI). It is the first hospital of such scale in post-soviet countries to receive the Joint Commission accreditation. At NMH's Center for Cardiac Surgery first heart ventricular assistance device implantation and first heart transplant surgery were performed. Since 2010, when NMH became part of Nazarbayev University, serve as a member of NMH Board responsible for Academic Healthcare System.

2006 – 2008 Medtronic Inc: Founder of Country Office for Kazakhstan. Main tasks at this job were to register country office, establish a network of distributors, and coordinate physician training, marketing program, product registration, and sales efforts. Successfully developed relationships with key opinion leaders among cardiac surgeons, interventional cardiologists, neurosurgeons, endocrinologists. Initiated and coordinated Medtronic's efforts in the areas of Cardiac Rhythm Disease Management (CRDM), Interventional Cardiology, Cardiovascular Surgery, Spinal and Biologics, Diabetes. During that time, also worked as a consultant for Capital Partners, Kazakhstan's leading infrastructure-development company to develop a private international multi-disciplinary hospital in Almaty city.

2004 – 2006 United States Agency for International Development (USAID): Country Office Coordinator for Kazakhstan. At this senior-level position served a primary liaison official for the US Government assistance program with the Government of Kazakhstan, U.S. Embassy, USAID contractors and grantees, and international donor organizations. Responsibilities included monitoring and coordination

of a broad technical assistance program in the areas of fiscal reform, enterprise development, democratization, financial reform, NGO development, health reform, infectious disease, and energy and environment. With understanding of the importance of resource management focused on establishing a dialogue and negotiations with the Government of Kazakhstan on a cost share agreement whereby the Government of Kazakhstan would actually pay a total of \$15 million for USAID technical assistance. This agreement, the Program Economic Development has been signed and ratified by the Parliament of Kazakhstan. It is currently ongoing bilateral cooperation program. As a member of Kazakhstan National Council on Health have provided professional expertise and assistance to Kazakhstan's Health Ministry in designing the National Health Reform Strategy, which has been described by The Lancet as "comprehensive and well conceived, based on contemporary ideas to health policy".

2001 – 2004 United States Agency for International Development, Regional Mission for Central Asia (USAID/CAR): Infectious Disease Advisor. Provided technical leadership, expert advice, as well as assistance in strategic development, program and budget design, and project implementation of infectious disease prevention and control activities throughout the five Central Asia countries (Kazakhstan, Uzbekistan, Kyrgyz Republic, Tajikistan and Turkmenistan). The responsibilities included: 1) overall management and direction of the US Centers for Disease Control and Prevention's (CDC) Central Asia Project; 2) overseeing Soros Network Regional Infectious Disease Prevention Program; 3) undertaking liaison between USAID/CAR offices, U.S. Embassies, donors and international organizations, and USAID contractors/grantees, as well as engaging in official personal contacts with high ranking officials from all countries in Central Asia to facilitate coordination of policies, approaches, and programs. As a member Country Coordination Mechanisms for the Global Fund to Fight Against HIV/AIDS, Tuberculosis and Malaria provided assistance to the governments of Kazakhstan, Kyrgyzstan and Uzbekistan in their applications to the Global Fund. This activity was resulted in the decision made by the Global Fund to provide grants to Kazakhstan, Kyrgyzstan and Uzbekistan in the amounts of \$22.5 million, \$15 million, and \$25 million, respectively. Additionally, provided leadership in the establishment of a \$450,000 Global Development Alliance (GDA) with U.S. company Becton Dickinson on HIV/AIDS monitoring, and based on that experience, pursued GDA opportunities with oil companies, commercial banks and other private entities working in Kazakhstan.

1997 – 2004 The Johns Hopkins University, Bloomberg School of Public Health: Associate. Was involved in university teaching and joint research programs in the areas of international health, infectious diseases, anemia, and health surveys.

1994 – 2001 ICF Macro International Inc., Demographic and Health Research Division: Health Coordinator. Worked at MEASURE DHS+ project funded by US Agency for International Development (USAID). Was responsible for coordinating all phases of demographic and health surveys (DHS) in Central Asia: Kazakhstan (1995, 1999), Uzbekistan (1996), Kyrgyz Republic (1997), Turkmenistan (2000). Responsibilities included initiation of the survey (assessment of data needs and survey feasibility, budget development and contract negotiations), as well as assistance to national survey implementing organizations with survey planning and design, recruiting the operational staff, interviewer training, fieldwork monitoring and supervision, data analysis, production of reports and dissemination of the survey results. Also worked with the national ministries of health on development of policy recommendations based on the results of the DHS surveys. Was responsible for designing biomarker components for the surveys, such as testing for anemia, retinol, HIV, and malaria. In collaboration with U.S. Centers for Disease Control and Prevention (CDC) and United Nations Joint Program on AIDS (UNAIDS), was involved in designing a methodology for integrated population-based HIV testing. The methodology was

implemented in several developing countries with high rates of HIV/AIDS, and has become a standard for DHS surveys. HIV testing data generated by using this methodology was used by UNAIDS to lower the estimate of the number of people afflicted by HIV in the world by 7 million cases. In 1997 and 1998, participated in a collaborative research project with Princeton University on reproductive health in the Central Asian Republics, which was resulted in a monograph and presentation to U.S. Congressional staff, and a series of recommendations to the governments of Central Asian countries on anemia prevention and reproductive health.

1991 – 1994. University of Alabama at Birmingham, Department of Medicine and Immunobiology Vaccine Center: Research Fellow. Worked as a member of international team of biomedical researchers on a US National Institutes of Health (NIH)-funded study of mucosal immunology and oral vaccine development. Main focus was on experimental models of hapten-induced inflammatory bowel disease and studying intraepithelial T lymphocytes

1986 – 1991 Institute of Physiology/World Health Organization (WHO) Collaborating Center on Nutrition, Almaty, Kazakhstan: Senior Researcher. Participated in various biomedical and public health projects related to nutrition and immunity. Responsibilities included coordination of clinical studies with laboratory investigation and collaboration with clinical personnel in medical research institutions and hospitals. During this period was also a visiting scientist at Institute of Immunology, Moscow, Russia, and Bogomolets Medical Institute, Kiev, Ukraine to participate in research collaboration in the area of immunology. These studies have resulted in numerous publications in scientific journals and a 1995 PhD dissertation and a 1991 Doctor of Medical Sciences (Dr.Sci) dissertation.

SELECTED PUBLICATIONS:

Tuberculosis in Kazakhstan: analysis of risk determinants in national surveillance data. Terlikbayeva A, Hermosilla S, Galea S, Schluger N, Yegeubayeva S, Abildayev T, Muminov T, Akiyanova F, Bartkowiak L, Zhumadilov Z, **Sharman A** and El-Bassel N. BMC Infectious Diseases 2012, 12:262, URL: <http://www.biomedcentral.com/1471-2334/12/262>

Modernization and growth in Kazakhstan (editorial). Central Asian Journal of Global Health, 2012, Vol 1, No 1; <http://cajgh.pitt.edu/ojs/index.php/cajgh/article/view/11/15>

Deploying smart bombs against cancer. Astana Times, July 6, 2012; <http://astanatimes.kz/index.php?uin=1290951494&pg=1341492185#news>

Smart bombs against cancer are reality. Interview published in newspaper “Kazakhstanskaya Pravda”, June 14, 2012: <http://www.kazpravda.kz/c/1339639076>

New era in medicine. Interview published in newspaper «Central Asia Monitor», May 17, 2002 <http://camonitor.com/archives/3994>

How young we would be. Article on research programs at Center for Life Sciences published in newspaper «New Generation» March 29, 2012: <http://www.np.kz/index.php?newsid=10635>

Nazarbayev University creates a unique model for integration of medical education, research and patient care. Interview published in newspaper “Kazakhstanskaya Pravda”, December 1, 2011: <http://www.kazpravda.kz/c/1322704799>

Demographic Transformations, Perspectives on Longevity, and Challenges for Health. In: The scientific basis for healthy aging and anti-aging processes (a monograph). Mary Ann Liebert inc. Publishers, New York, 179 p. 2011; http://zdrav.kz/attachments/Anti-aging%20Processess_ENGL.pdf

Theories of Aging and Its Biology and Physiology. **Sharman, A.**, Gulyaev, A., Issayeva, R., Akilzhanova, A. In: The scientific basis for healthy aging and anti-aging processes (a monograph). Mary Ann Liebert inc. Publishers, New York, 179 p. 2011; http://zdrav.kz/attachments/Anti-aging%20Processess_ENGL.pdf

Development of Innovative Programs for Healthy Aging: Geronteengineering and Gerontotechnologies. Zhumadilov, Z., Gulyaev, A., **Sharman, A.** In: The scientific basis for healthy aging and anti-aging processes (a monograph). Mary Ann Liebert inc. Publishers, New York, 179 p. 2011; http://zdrav.kz/attachments/Anti-aging%20Processess_ENGL.pdf

Quality of life, health and longevity. Nazarbayev University, «Atamura», 207 p., 2011

Winds of prairies and spirit of steppes: what is in common between the united states and Kazakhstan. Interview published in newspaper “Kazakh Adebieti”, February 12, 2011. <http://zdrav.kz/ru/index/about/publications/publication-03032012.html>

Horizons of longevity: kazakhstan’s new strategic goal of quality of life improvements and longevity. Interview published in newspaper “Kazakhstanskaya Pravda”, January 19, 2011: <http://www.kazpravda.kz/c/1295398529>

Synergy of interaction. interaction of medical education, research and patient care: a new paradigm for academic healthcare at Nazarbayev University. Interview published in newspaper “Kazakhstanskaya Pravda”, November 11, 2010: <http://www.kazpravda.kz/c/1289431658>

Hospital of the future: from the idea to realization. Interview published in newspaper “Kazakhstanskaya Pravda” about the National Medical Holding. November 3, 2010: <http://www.kazpravda.kz/c/1257190726>

Biomedicine, health and longevity (A monograph). APM-Medlink, Bethesda, MD, USA, 2010
Health Formula. Atamura, Almaty, 112p, 2009

Mission is possible. Interview published in newspaper “Kazakhstanskaya Pravda” about the National Medical Holding. June 28, 2008: <http://www.kazpravda.kz/c/1257190726>

Acquired immune deficiency syndrom (a monograph). NeuroNex, Bethesda, MD, USA, 305 p. 2006

Market-driven healthcare and its investment potential. Interview published in newspaper “Kazakhstanskaya Pravda”, November 17, 2005: <http://www.kazpravda.kz/c/1132179202>

US and Kazakhstan: trajectory of cooperation. Interview published in newspaper “Kazakhstanskaya Pravda”, August 2, 2005: <http://www.kazpravda.kz/c/1122923258>

Anemia (a monograph). Atamura, Almaty, 2004

Anemia among women and children. Sharman, A. Goldberg, H. in: Centers for Disease Control and Prevention and ORC Macro. 2003. Reproductive, Maternal and Child Health in Eastern Europe and Eurasia: A Comparative Report. Atlanta, GA (USA) and Calverton, MD (USA). pp 155-163

AIDS can be stopped. Interview published in newspaper “Kazakhstanskaya Pravda”, February 1, 2003:

<http://www.kazpravda.kz/c/1003020157>

«Anemia»: a monograph published in kazakhstan Interview published in newspaper “Kazakhstanskaya Pravda”, June 22, 2002: <http://www.kazpravda.kz/c/1000062201>

DHS+: building the "H" in the demographic and health surveys. Almaz Sharman. MEASURE DHS+, ORC Macro, American Public Health Association, 2001 : https://apha.confex.com/apha/129am/techprogram/paper_32262.htm

Anemia testing in population-based surveys: general information and guidelines for country monitors and program managers (A monograph). ORC Macro, Calverton, MD, USA, 83 p. 2000

Anaemia in Central Asia: Demographic and Health Surveys experience.

Almaz Sharman. Food and Nutrition Bulletin, vol. 19, no. 4, 1998, The United Nations University

Hapten-induced model of murine inflammatory bowel disease: mucosa immune responses and protection by tolerance. Elson CO, Beagley KW, **Sharman A**, Fujihashi K, Kiyono H, Tennyson GS, Cong Y, Black CA, Ridwan BW, McGhee JR. J Immunol. 1996 Sep 1;157(5):2174-85

Health care in Kazakstan. **Sharmanov T**, McAlister A, **Sharman A**. World Health Forum. 1996;17(2):197-9. PMID: 8936281

Differences in intraepithelial lymphocyte t cell subsets isolated from murine small versus large intestine. Beagley KW, Fujihashi K, Lagoo AS, Lagoo-Deenadaylan S, Black CA, Murray AM, **Sharman A**, Yamamoto M, McGhee JR, Elson CO, et al. J Immunol. 1995;154(11):5611-9.

Hormone receptor assays and their value in breast cancer therapy. Gaffney EV, **Sharman A**, Moody WE, Halpin DP, Blakemore WS, Elliott CB. Cancer Biother. 1993 Spring;8(1):17-28. Review. No abstract available.

The role of precipitating serum antibodies in tuberculosis patients. Klyshev TL, Muminov TA, **Sharman AT**, Pak AV. Probl Tuberk. 1991;(1):59-60 (Rus)

Pathologic phenotypes of alpha 1-protease inhibitor in patients with pulmonary tuberculosis. Muminov TA, Medvedski? SM, Talbaev TD, Il'chenko LA, **Sharman AT**. Probl Tuberk. 1991;(3):67-8 (Rus)

Effect of vitamin e deficiency on oxidative metabolism and antioxidant enzyme activity of macrophages. **Sharman AT**, Aidarkhanov BB, Kurmangalinov SM. Ann Nutr Metab. 1990;34(3):143-6.

Food substances and the functioning of the cells of the immune system. **Sharman AT**. Nutr Issues. 1990 Jan-Feb;(1):4-11

An increase in activity of natural killer cells in rats with vitamin a deficiency. Saparov AS, Kon Ila, **Sharman AT**. Nutr Issues. 1989 Mar-Apr;(2):30-2.

Effect of tocopherol on the oxidative metabolism of macrophages. **Sharman AT**, Aidarkhanov BB, Kurmangaliev SM. Biull Exp Biol Med. 1986 Jun;101(6):723-5.

Effect of pro- and antioxidant food factors on macrophage oxidative metabolism. **Sharman AT**. Nutr Issues. 1985 May-Jun;(3):52-5.

Macrophage oxidative metabolism and the enzyme function of antioxidant protection. Aidarkhanov

BB, **Sharmanov AT**. Dokl Akad Nauk SSSR. 1985;285(3):759-61

PUBLIC APPEARANCES AND PRESENTATIONS (YEAR 2012)

Astana TV interview at “Status Quo” Studio: <http://inzdrav.com/node/18>

TEDx Almaty, September 16, 2012: <http://tedxalmaty.com/>

TEDx Yesil, August 4, 2012: http://tedxyesil.com/?page_id=252

YouTube, Kazakhstan’s Prime Minister blog, September 2, 2012:
<http://www.youtube.com/watch?v=cBEOft-AphQ>

YouTube, Kazakhstan’s Prime Minister blog, July 10, 2012:
<http://www.youtube.com/watch?v=5p1DyUC-coE>

Astana Economic Forum, May 22 – 24, 2012: <http://www.youtube.com/watch?v=O29xD73j4xM>

Berlin Conference on Innovations and Investments in Healthcare, April 26 - 27, 2012:
http://www.amiando.com/eventResources/P/H/IUH67uS2Zyz13g/Final_Program_IHHC12.pdf

Numerous conferences and seminars on biomedical research, hospital management, reproductive health, cardiology, neurosurgery, and other relevant fields of biomedicine, clinical research and public health.