CURRICULUM VITAE

PERSONAL DATA:

LAST NAME: MIRTSKHULAVA

First Name: Merab

Physical Street Address for courier delivery: 9, Asatiani str, 0177,

Tbilisi, Georgia. NCDC

Home address:

22/26 Chikovani str.,0172, Tbilisi, GEORGIA

Telephone Home:995-595-599995; 612-644-76-16 USA;

Office: 995-232-398946

Emails. mmirtskhulava@yahoo.com; inftech@ncdc.ge

Gender: Male

Data of Birth – 01-02-1958 Country of Origin: Georgia Present Nationality: Georgian

Marital status – Married, Have 2 children

Languages and Fluency Level: English – good, Russian and Georgian – fluent

Social Security Number (USA) - *****0469

Former Sportsman

Former Biological weapon scientist Former Nuclear weapon scientist



EDUCATION:

Degree (Qualification) of Engineer-Physicist. Moscow Engineer-Physicists Institute, Moscow, Russia, 1974-1980; (Diploma N 260311 11-Mar-1980)

PhD equivalent Degree of Doctor of Biological sciences (Human Physiology-Biophysics- B.03.03 CN3). State Institute of Human Physiology, Committee of Science and technology, Tbilisi, Georgia, (Dissertation title – Biological action of Electromagnetic irradiation); (Diploma N 000073, 3-FEB-1994)

study program and alumni in USA

- 1. Fulbright Scholar University of Minnesota, 2007, research of biological action of electromagnetic irradiation on influenza virus. Fulbright scholarship board and US Department of State. Certificate, February, 2008, Washington, USA
- 2. Democracy Outreach/Alumni Grants Program Childhood Lead Poisoning Prevention in Georgia-17 MAY-30JUN, US Embassy in Georgia

WORK HISTORY:

LLC Avtandil, 4-th str, Minneapolis, MN, USA Program manager

Duties and accomplishments Dta base management of program - Research heath risks and water quality to environmental liability. 01/07-2015-11/09-2015

Local Expert. EC project G04.01/09 (Support to the Operators in the Preparation of Safety Assessment Reports for Georgian Radwaste Disposal and Interim Storage Sites) awarded "Service Contract No 293-257 for European Union External Action financed from the EU General Budget" (hereinafter the "Main contract") to the Consortium of TÜV NORD EnSys Hannover GmbH & Co. KG, Hannover and DBE Technology GmbH, 01-10-2014-01-05-2015

Consultant. Materials Research Institute of Iv.Javakhishvili Tbilisi State University, 01-01-2014-Present.

Duties and accomplishments: Radiation health risk research, radon prevention program

Senior specialist of Department of Chronic diseases, injuries, maternal and child health and environmental health, non-communicable diseases division - National Center for Disease Control and Public health of Georgia (NCDC). Tbilisi, 01-2011 - present; supervisor - Dr. Amiran Gamkrelidze Duties and accomplishments – Preparation environmental chemical safety and security program, Environmental and occupational health, behavioral health research and analysis, environmental risk assessment, Genetic Epidemiology or Statistical Genetics or Bioinformatics, Computational Biology, environmental liability, Non-Communicable Disease Prevention, promotion, . climate change, Elaborating and managing surveillance programs. Health and Human services research, Surface water quality technical regulations; Drinking water quality technical regulations and risk assessment; Biodiversity monitoring, Air quality technical regulations; Development of technical regulations of Noise; trans-boundary Climate Change, Environmental waste technical regulations; Development database directory of carcinogenic substances factors (Include toxic nanoparticles). Creating and implementation of surveillance systems (for HIV/AIDS, Viral Hepatitis, STD). Mathematical and computational models of the action of radiation on Biosystems -viruses, infectious agents and their hosts, prediction systems, Birth defects registry development. Natural disasters Emergency Preparedness and Response (Program and trainings) Program of rehabilitation for Children with disabilities, Assistance and Protection against Chemical Weapons, Chemical harmful substances their use, or threat of use, in accordance with the Convention and implementing national requirements.

Lab service consultant, Institute of Sanitary, Hygiene and Medical Ecology. 01-01-2011-01-01-2013. supervisor – Professor Ia Ganugrava

Duties and accomplishments – environmental liability, food safety, aquatic Health, toxicology, bioinformatics, genomic sequence data analysis, supervising routine microbiology laboratory procedures, Biosafety, research Radon health risks, Air and drinking water safety and quality, native immune responses and radiation risks, lab management, supervisor for implementing and design integrated programs in biodiversity and Biodiversity Conservation, ecology, chemical and radiation safety - include qualitative and quantitative analysis using water/gas chromatography, gas chromatography/mass spectroscopy, RtPCR for testing fish feminization, Gender violence research **Professor** – Medical University GEOMEDI, Georgia, Tbilisi, Public health management Faculty. 01-2011 – present, supervisor – Professor Marina Pirtskhalava

Duties and accomplishments – Supervising program of rehabilitation for children with disabilities, managing summer schools and surveys

Lecturing - Public Health Surveillance programs, Biophysics, Development environmental Health Policy strategies in Georgia.

Responsible for abroad education programs management -Managing and administration of education abroad programs, communication with international partners, advisement graduate and undergraduate students, and producing study abroad communication materials.

Invited professor of Department of Physics and Biophysics, Tbilisi State Medical University. 01-09-2007-curent. Supervisor -professor Alexander Tsibadze.

Duties and accomplishments – lecturing – Biophysics, health physics, Public Health Surveillance and Developing Public Health Software Applications using statistical programs Epi Info and. SPSS. Supervising doctoral students in Biophysics, statistic and management methods, sports epidemiology, radiation health effects, risk analysis, environmental and biological dose calculations;

Head of department of Informative Technologies - National Center for Disease Control and Public health of Georgia (NCDC). Tbilisi, 05-1989 –01-2011; supervisor – Dr. Paata Imnadze **Duties and accomplishments** – Statistical analyze of surveys, managing NCDC Public health epidemiological computer network; environmental risk assessment in regions of Georgia. *Modeling* Biological action of natural factors on biosystems. Elaborating surveillance programs (HIV/AIDS, TB). Health Outcomes research, radiation safety procedures and radiation protection

Country manager of program - Project: P322 - Regional evaluation of mining-related metals contamination, risks, and innovative remediation technologies in Ukraine and Georgia

(Monitor – Mike wireman – EPA, Denver, region 8, USA) 1-DEC-2007-1-DEC-2010. Duties and accomplishments – Research of Health risk and population health assessment in mine-related region's workers of Georgia, Environmental health and disease ecology Analyze, Investigation databases. Research of Environmental Characterization, Risk Assessment, water and Waste management at Mine Sites, Development environmental Health Policy strategies in Georgia.

Consultant of WHO and CDC volunteer officer - Data manager in Kazakhstan, POLIO-STOP program (CDC, WHO, UNICEF, Rotary International, Canadian Public Health Association) – under CDC supervision. May-July-2008.

Duties and accomplishments – Analyze and data management of measles and rubella surveillance system in Kazakhstan. Lecturing and running Trainings in EpiInfo software

Head of Department of Biomechanics and professor of State Academy of Physical Education and sports, Georgia, Tbilisi, 12-1996 - 04-2007- supervisor - Professor -D. Chitashvili

Duties and accomplishments – Developing education programs. Lecturing – computer sciences, statistical programs, Biophysical sciences, mathematics. Research – sports epidemiology, Coordinator of - Sports Integration and rehabilitation for Children with including children with behavioral disabilities. Supervising Summer sport schools for disable students and Child

Deputy IT director, Joint British- Swedish-Georgian Company "Toto-Lotto", Tbilisi. 03-1998 – 09-2001: Supervisor: Revaz Aitsuradze

Duties and accomplishments: Managing and supervising Toto-Lotto software program.

Research-worker Institute of Resorts research, physiotherapy and rehabilitation, Georgia, Tbilisi, 08-1982 -04-01-1995 Supervisor professor I. Tarkhan-Mouravi

Duties and accomplishments – Research of action of environmental factors (Radon radiation in Imereti region) on biological objects, Mathematical modeling of environmental and physical fields. Data base analyze.

Research-worker – Oncological center, Tbilisi, Georgia 04-1980-12-1981 Supervisor professor R. Vepkhvadze, Duties and accomplishments – Environmental risk factors research of cancer disease in children.

PROFESSIONAL ORGANIZATIONS

Union - Epidemiologists in Public health service – Scientific consultant in data base management. 01-2002 – current. Chairman - Maiko Chokheli

Consultant in data management, design, sampling and running of surveys, data cleaning and analyze, managing program -" climate change problems in Georgia"

Georgian Biosafety organization – 06-2010 – current

Biosafety and biosecurity

Member of Academy of Preventive Medicine - 2000 – current.

Environmental (Radiation) health research.

Director of National Olympic Academy of Georgia, 09-2000-current.

Work on Olympic education and integration of. children, including children with behavioral disabilities and disabled athletes with special health care needs, and families support. Organization of Summer sport schools, Gender violence research

International Center for Environmental Research 01/2013-current

Risk assessor, environmental risk assessment studies

Voting Member of SETAC Europe Council (**SEC**)

May-2012 - 2015.

Ecotoxicology, Biosafety, ecological chemistry, radiation, environmental modeling, nanaparticles

TRAINING AND PROFESSIONAL DEVELOPMENT:

Personal Care Assistant Training, Certificate Number: PCA47030420150720, course offered by Minnesota Department of Human Services, MN, USA, 07/20/2015

Children's environmental health - climate change, University of Minnesota, May, Certificate ,2015 **Physical protection and security management of radioactive sources.** US department of Energy, NNSA, July 2014, Tbilisi, Georgia

International advanced assistance and protection course Beijing, 24-28 June. The Peoples Republic of China. The organization for prohibition of Chemical weapon. China institute of Chemical Defense, 2013

Trainings in "Public health introversions to prevent HIV infection, Allina Hospitals and clinics, University of Minnesota, Tbilisi, Georgia, Certificate, 2012

Environmental Public health. Division of environmental health, School of public health, University of Minnesota, Tbilisi, Georgia, Certificate, 2012

Medical Chemistry in Public Health, Institute of Biostructure and bioimaging, Napoli, Italy. Certificate, April, 2012,

Assessment of traceability if measurements internal quality control proficiency testing and measurement uncertainties in testing labs - ISO/IEC 17025. TWINNING project, BAM, LATAC, DAkks, EU, Certificate, MARCH, 2012,.

Biosafety and Biosecurity, University Degli Studi, Milano, Italy, June, 2011

Occupation health and safety training course, Biosafety association, Certificate, 2011, Tbilisi, Georgia Toefl ITP,UN 300253, OSI NY (score 470), 2011, March

Environmental health. Division of environmental health, School of public health, University of Minnesota, Tbilisi, Georgia, Certificate,. 2011

Environmental health. Division of environmental health, School of public health, University of Minnesota, Tbilisi, Georgia, Certificate, 2010

Grant writing workshop. STCU. Tbilisi, Georgia, 2010.

Water/air Field Sampling, Tchiatura and Zestaponi, Georgia - US Environmental Protection Agency, Denver, region 8., USA, Tchiatura and Zestaponi, Georgia, Certificate, 2010

Field Sampling Training Program at Peru Greek, Colorado - US Environmental Protection Agency, Denver, region 8., USA, Certificate, 2009

Environmental Characterization and Risk Assessment at Hard Rock Mine Sites-Training course. US Environmental Protection Agency, National Center for Disease Control, and Public Health (Georgia); Science and Technology Center of Ukraine. Certificate, 2009;

Institutional Bioethics Review board/Good Clinical Practice. US Army Medical Research Institute of Infectious Diseases. Tbilisi, Georgia.2009

Defense Threat Reduction program, General Module and Lab module 1(TRNRSM-00013;

TRNSAF-00001; TRNSAF-00004; TRNSAF-00005; TRNSAF-00008; TRNSAF-00012; TRNSAF-00015; TRNSAF-00183; TRNSAF-00006; TRNSAF-00033; TRNSAF-00031; TRNSAF-00003;

TRNSAF-0000) Defense Threat Reduction Agency, USA, Certificate, 2008

Epidemiology module 6: Advanced Electronic Integrated Surveillance system (EIDSS) program – Defense Threat Reduction Agency, USA, Certificate, 2008

Course "Basic Security in the Field"- United Nations Department for Safety and Security, (Certificate of completion);

Course "Advanced Security in the Field" - United Nations Department for Safety and Security, 2008 (Certificate of completion);

Reproductive Epidemiology Trainings - Introduction to SAS software. Provided by the CDC, July, 2007 (Certificate of completion);

Course of <u>SAS Procedures and Data Analysis</u> – <u>University of Minnesota</u> (Fall 2007) (Lecturer Dr. William Adams, department of biostatistics);

International Course in applied epidemiology, Emory-CDC, Atlanta, USA, 2006. (Certificate);

Special Education Systems, Mashav, Jerusalem, Israel, 2005 (Certificate)

Course include "Problems integration and Education of children's with special needs"

SPSS course, SPSS Russia, Moscow, Russia, 2004 (Certificate N 754 –Introduction to SPSS data entry; Certificate N 753 Statistical Analyze using SPSS);

Microsoft approved courses, Microsoft Certified training center at Bauman MSTU, Moscow, Russia, 2003 (Certificates of Achievement Microsoft approved courses – M2151, M2152, M2153, M2154);

Intensive course in English as a Foreign language, International House Tbilisi, 2000 (Certificate, Grade B);

Epi manager, NCDC, WHO and UNICEF Georgian Offices, Tbilisi, 1999 (Certificate);

Open VMS system management, Digital Education and training Center, Moscow, Russia,1997 (Certificates of Completion courses EY-T483E; EY-T484E; EY-T359E).

Participation in National and international programs and surveys -

The Complex Study of Antioxidantes and Mineral components in Georgian Red Wines by Modern Physical-chemical Methods - DI/38/7-220/14 -SHOTA RUSTAVELI NATIONAL SCIENCE FOUNDATION. Researcher

Radon background in drinking and surface waters in areal of capital of Georgia – Tbilisi. Project # 5644. 2012-2014, SCIENCE AND TECHNOLOGY CENTER IN UKRAINE, SHOTA RUSTAVELI NATIONAL SCIENCE FOUNDATION. Researcher 05/2015-15/2017

Establishment of national sentinel-side, laboratory-based Salmonella surveillance system and outbreak response capacity for enhanced of foodborne disease in the Republic of Georgia, Project ISTC # G-1462 (BTEP # 119) - 2007-2012014; (Database manager)

Emerging zoonotic pathogens in Georgian bats, Project BTEP/ ISTC, G-2101, 2014 - 2015; (Database manager)

Patterns of HIV drug resistance and molecular epidemiology of HIV in Georgia, Project BTEP/ISTC, G-2103, 2014 - 2015; (Database manager)

Application of X-rays on *Brucella* spp. for creation a new vaccines on the base of attenuated microbes and determination of their immunogenecity – International Atomic Energy Agency (IAEA), 2012, Vienna, Austria. Researcher.

Bio-safety and Biosecurity risk management system for Georgia and Caucasus - EU commission (UNICRI) program-grant - Strengthening bio-safety and bio-security capabilities in South Caucasus and in Central Asian countries, Researcher, (2012-2014)

Nucleopeptidi per strategie biomediche, Istituto di biostrutture e bioimmagini, Italian Science and Rustaveli foundation Grant 2012-2014

Radon assessment program development - Institute of Sanitary, Hygiene and Medical Ecology and Tbilisi State University Program. Manager, 2012-2014.

System for bio-safety assessment and surveillance of drinking water in Georgia, EU commission (UNICRI) program-grant - Strengthening bio-safety and bio-security capabilities in South Caucasus and in Central Asian countries, Consultant (2012-2014)

Examination of Areas Contaminated with Arsenic and Environmental Risks Assessment STCU. 2010 Researcher.

Application of gamma irradiated *Brucella* spp. for creation a new vaccines on the base of attenuated microbes and determination of their immunogenecity – International Atomic Energy Agency (IAEA), 2010, Vienna, Austria. Researcher.

GAVI Alliance Support to Strengthen Coordination and Representation of Civil Society Organizations, GAVI, 2009, Project manager.

Epidemiological control of Partiality Dangerous Infectious in Georgia (Georgian Government Program) – recent; (**IT manager**).

Immunization program in Georgia (Georgian Government Program) – recent, (IT manager).

Manganese Ecotoxiological Impact on the Health Status of Children (UMN,

Grant - STCU) – 2009 (Scientist);

Influence of 100 free tobacco policy on Healthcare facilities and Secondary schools in Georgia" (2009); Data manager.

Alcohol and Other Drug Use in Georgian Students, pilot study rigorously following Criteria of European School Project on Alcohol and Other Drug (ESPAD) (SCAD/UNDP-2009); (Database manager).

Regional evaluation of mining-related metals contamination, risks, and innovative remediation technologies in Ukraine and Georgia – EPA,USA, 01-12-2007 -01-12-2010 (Project Country manager).

The Nutrition Survey of IDP-s of Primary School Students in some selected schools of Georgia (The United Nations World Food Program, WFP, 2006); (Database analyzer).

Rapid Nutrition Survey of Primary School Students in some selected vulnerable schools of Georgia (The United Nations World Food Program, WFP, 2005); (Database analyzer).

Hospital infections in Georgia (UMN, BTEF Grant, 2005); (Database manager).

Helicobacteria research in Georgia (CDC, BTEF Grant, 2005); (Database manager).

Regional epidemiological network (computer skills and IT trainings) (2004, UNICEF program); (Project manager).

Women's Reproductive Health Survey in Tbilisi and Imereti (J. Hopkins University program, 2002). (Database analyzer).

Women's Reproductive Health Survey in Tbilisi (J. Hopkins University program), 2001. (Database analyzer).

Epidemiological research of Amebiasys in Georgia (2001,CDC, BTEF Grant) (Database manager). Foodborne botulism on the Rise in the Republic of Georgia (2001, CDC,,BTEF Grant) (Database manager).

<u>Nutritional Status of Children Less Than Five Years of Age in Six Drought-Affected Regions of Georgia.</u> (USAID, Save the Children, 2000 - 2001), (**Database analyzer**).

Multifunctional Research of Mothers and Child's Health in Georgia (2000, UNICEF Project); (Database manager).

Improvement of epidemiological service in Georgia (informative Network), Grant, SOROS Foundation, 1999; (**IT manager**)

Multiple indicator cluster survey (1999, UNICEF Project); (Project manager).

IPA program Resume (1999, UNICEF Project); (Project manager).

Epidemiological control of Partiality Dangerous Infectious in Georgia, Georgian Government Program, 1997-1999; (**IT manager**)

Improvement of Epidemiological Service in Georgia SOROS Foundation, 1997, (IT manager)

Influence of electromagnetic fields on AIDS/HIV viruses (Ministry of Health of Georgia program, 1993-1995); (**Project manager**).

Computer skills: Windows XP. Vista, NT, MS office, WordPerfect, Open Office, GIS, SQL server, Merak mail server, Photoshop, PageMaker.

Statistic programs: Epi-Info, Epi-Map, SPSS, SAS, STATA, JMP.

Lab equipment skills – UV Spectroscopy, Phonophoresis, Eleqectrophoresis, AA spectrometry, ELISA, PCR. AE photometry; gas and liquid chromatography, gas chromatography/mass spectroscopy

Collaboration with international organizations and institutions: WHO, UNICEF, WFP, SOROS, USAID, SAVE THE CHILDREN, DIVERSITAS, EUROCAT., MASHAV.CDC, UNIVERSITY OF MINNESOTA, UNIVERSITY OF MICHIGSN, EMORY UNIVERSITY, J. HOPKINS UNIVERSITY, QUEENS UNIVERSITY OF BELFAST; SPORTS UNIVERSITY OF BARSELONA, UNIVERSITY OF HUMBURG; UNIVERSITY OF OXFORD; UNIVERSITY OF ULSTER, NY CITY UNIVERSITY, EUROPIAN UNIVERSITY

Publications: 116 Publications, 3 books, 6 – text books for students, 20 publications in per reviewed, 9 - in Impact Factor status editions

Citations for Mirtskhulava Merab – 17, Cited Publications: 18; H-Index: 5

Lecture Courses:

- Public Health (in English) (state medical university)
- Environmental Health Management at (English) University Medical Geomedi
- Public Health Statistical Software (English) University Medical Geomedi
- Medical Physics and Biophysics (Georgian and English) Physical Education and Sports Academy, the Medical Institute of the Medical Academy
- statistical analysis methods (in Russian): The United Nations World Health Organization World
- Information Technology (Georgian and English) Academy of Physical Education and Sport, Tbilisi Medical Institute.
- The action of radiation on biosistemeb (Biophysics): University of Minnesota, US, (Fulbright program)
- Biomechanics (Georgian and English) Minister of Physical Education and Sports Academy,
- scientific research methods of Physical Education and Sports Academy

SELECTED PUBLICATIONS:

- 1. *Mirtskhulava M., Maisuradze L., Djaparidze G. et. al.* Medical Physics and Biophysics (Textbook for students of Rehabilitation Faculty). Georgian Academy of Physical Education and Sports, 2002.24pp.
- 2. **Report** Nutritional Status of Children Less Than Five Years of Age in Six Drought-Affected Regions of Georgia /with participation Dershem L., Sakandelidze I.,., Mirtskhulava M., et. al./ (USAID, Save the Children, NCDC, CDC), Tbilisi, 2002),
- 3. Sanadze K., Chlikadze R., Tsanava Sh. Mirtskhulava M., et al. "Amoebiasis in Georgia and Sequence Conservation of Gal/GalNAc Lectin." EMBO Workshop on "Pathogenesis of amoebiasis: from genomics to disease", Pasteur Institute, Paris, France, May 19-21, 2003, page 67;
- 4. *Tatiashvili E. Piranishvili G., Mirtskhulava M.*, et al Parameters of cardiorespiratory system in the period of magnetic storms. Proceedings of Georgian Academy of Sciences. Biological series. A. V.30.N 6, 2004.P.-873-877;
- 5. *Mirtskhulava M*. Mechanisms of biological effectiveness of electromagnetic fields. In" Actual problems of nonmedical prevention, therapy and rehabilitation. Tbilisi, 2004. P.-230-231;
- 6. *Mirtskhulava M.*, *Tatiashvili E.*, *Chtashvili D. et al.* **Test of magnitolability**. Proceedings of Georgian Academy of Sciences. Biological series. A. 2005, V.31, N2.201-206;
- 7. *Moistsrapishvili K., Egoyan A., Salikvadze R., Mirtskhulava M., et al.* Biomechanical Analysis of Certain Sport Movements by Means of Video-Computer Modeling. Bulletin of Georgian Academy of Science V.172, N 3,2005, P.543-545.
- 8. **Egoyan A., Mirtskhulava M., Chitashvili D., Moistsrapishvili C., et al.,** Use of video-computer modeling of sports technique during competitions. Journal of Biomechanics, vol. 39, pp. S558-S559, 2006

- 9. *Dvali G., Mirtskhulava M., Zaridze K.* Nutrition Survey of students in some selected schools of Georgia. Preventive Medicine in the XXI Century. Collection of scientific works Volume III, 2006, Tbilisi, P.223-224;
- 10. Report on the rapid nutrition survey of IDP Students in some selected schools of Georgia /with participation Dvali G., Mirtskhulava M., et. al./ The State institute of Sanitary and Hygiene of Georgia, WFP.,2006
- 11. Tarkhan-Mouravi I. Tarkhnishvili N., Mirtskhulava M. et al. Epidemiology of some diseases among the population of the areas, connected to mining and processing of manganese. Interdepartmental collection of scientific works –"Problems of application of non pharmacological remedies in medicine" 2006, Tbilisi, P.51-55;
- 12. Ninashvili N., Chakvetadze N., Mirtskhulava M., Imnadze P. Helicobacter pylori prevalence and gastrointestinal symptoms in children, Republic of Georgia; Acta Clinica Belgica, Bimonthly Journal of the Belgian Societies of Internal Medicine and Clinical Biology, 2006; 61-5, p. 22.
- 13. Gotlieb S., Kretsimger K., Tarkhashvili N., Chakvetadze N., Chokheli M., Chubinidze M., Hoestra R.M., Jhorjoliani E., Mirtskhulava M. et al. Long-term outcomes of 217 botulism cases in the Republic of Georgia Clinical Infectious Diseases 2007;45:174–180
- 14. *Egoyan A., Mirtskhulava M., Chitashvili D., Moistsrapishvili C., et al.,*. Complex biomechanical analysis of sports technique on the example of long jumps Journal of Biomechanics, vol. 39, pp. S551-S552, 2006
- 15. Kakiashvili L., Mirtskhulava M., Feroyan E. Influence of improving program of correction of an orientation children having infringement of bearing. Medical Journal of Georgia. 2,2008. p75-78;
- 16. *Chitashvili D., Egoyan A., Mirtskhulava M., I. Khipashvili, et al.* Use of computer software for improvement of skills of young football players. Journal of Biomechanics Vol. 39, Supplement 1, Pages S547-S548, 2006
- 17. Report on Technical Assistance in data management in Kazakhstan. Mirtskhulava M. Republican Sanitary Epidemiological station of Kazakhstan, CDC, WHO. Almaty Kazakhstan, 2008
- 18. *Tsibadze A.*, *Zakharaia A. Mirtskhulava M.* Sound, Ultrasound, infrasound (Textbook for Medical Students), Tbilisi State Medical University, 2009, 40pp.
- 19. *Moistsrapishvili K.*, *Egoyan A.*, *Salikvadze R.*, *Mirtskhulava M.*, et al. Contribution of Certain Biomechanical Parameters. Bulletin of Georgian Academy of Science V.3, N 1,2009, P.543-545.
- 20. Gotlieb S., Kretsimger K., Tarkhashvili N., Chakvetadze N., Chokheli M., Chubinidze M., Hoestra R.M., Jhorjoliani E., Mirtskhulava M. et al. BOTULISM: Long-term outcomes of 217 botulism cases in the Republic of Georgia, Archivos de Infectología y Vacunas, Número 43, 14 de Noviembre de 2009.
- 21. Mirtskhulava M., Javaxadze R., Mebonia N., Chakvetadze N., Juruli M., Gvineria I., Tsereteli M. Occupational risk-factor's exposition on the Chiatura mining workers. Materials of Conference "Ecology and health". Signagi, Georgia, 2009;
- 22. Mirtskhulava M., Javakhadze R., Mebonia N., Chakvetadze N., Juruli M., Gvineria I., Tsereteli M.. Estimate of risks for development some diseases and symptoms among Chiatura mining workers. Collection of scientific works of Tbilisi State University. 2009, V.43.P.-110-112;
- 23. Wireman M., Mirtskhulava M., Griffin S., Water Resource Characterization and Risk Assessment: Tchiatura Mining District, Republic of Georgia. Abstract, NGWA GW Summit Denver, CO, 2010;
- 24. *Mirtskhulava M.* Possibilities of research modeling Asthma Disease related viral infections in Georgia, International NIAID Conference "Bioinformatics Tool and Techniques for Allergy and Infection Diseases Research", .NIAID, NIH,ISTC. Moscow, Russia, 2010,p-76..

- 25. Mirtskhulava M., Chakvetadze N., Mebonia N., Zaridze K., Tsereteli M., Grdzelishvili M., Javakhadze R., Juruli M., Meshvildishvili Ts. Health problems at Mine region of Chiatura. Georgia Chemical Journal. Vol. 10, N4, 2010, P-136-136
- 26. Barnabishvili N., Gamtsemlidze P., Mirtskhulava M., Barbakadze Z., Mirtskhulava N., Zaridze K. Etiology role of some viral in prevalence of Bronchial asthma. Experimental and Clinical Medicine. N 4, 59, 2010, 243-246.
- 27. *Tsanava Sh., Chokheli M., Mgeladze G., Egoyan A., Mirtskhulava M., Imnadze P.* Automated control system of laboratory research for transmitted diseases. Experimental and Clinical Medicine. N 4, 59, 2010,149-152.
- 28. *Grdzelishvili M.*, *Mirtskhulava M.*, *Chakvetadze N.*, *Giorgobiani M.*, *Lashkhauri M.* Hygienic estimation of polluted with heavy metals of drinking surface waters, connecting to mine and processing. Experimental and Clinical Medicine. N 4, 59, 2010,168-169.
- 29. *Mirtskhulava M*, **Gvakharia V., Chirakadze A.** Development and application of low-carbon technologies for utilization of manganese-containing waste and producing of high grade manganese ferroallows. "Microbial impact on element mobility", P-90, 2010, Friedrich-Schiller University, Jena, Germany.
- 30. Ninashvili N., Chakvetadze N., Mirtskulava M., Chachava T., Chubinidze M., Imnadze P. "Some patterns of Helicobacter Pylori prevalence in Dyspeptic children in Georgia", Oxford Journals "Annual of Oncology", Official Journal of the European Society for Oncology and the Japanese Society of Medical Oncology, Volume 21, 2010, Supplement 6, p. vi 46
- 31. *Mebonia N., Chakvetadze N., Mirtskulava M.*. Possible modification of risk factors for peptic ulcer among persons with Helicobacter Pylori infection in Georgia, European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), Lisbon, Portugal, November 11-13 2010, p.85
- 32. **Report GAVI** Alliance Support to Strengthen Coordination and Representation of Civil Society Organisations Mapping Exercise, Nomination Process, Management, GAVI Alliance, 2010
- 33. *Mirtskhulava M.*, *Wireman M.*, Report of Findings. Evaluation of mining-related metals contamination and ecological and human health risks associated with manganese mining and processing in Chiatura, Georgia. US Environmental Protection Agency; US Department of State, Georgian National Center For Disease Control, Science and Technology Center Ukraine; 20 pp. 2011.
- 34. *Pirtskhalava M., Javakhadze R., Mirtskhulava M., Chakvetadze N*. Environmental safety risk research. Georgian Medical News. N 3 (182), 2011, P-70-75
- 35. *King K., Pirtskhalava M.,, Mirtskhulava M.*, et al. Environmental exposure and women reproductive health. Experimental and Clinical Medicine. N 3, 59, 2011,19-20.
- 36. Brian Caruso, Merab Mirtskhulava, Michael Wireman, William Schroeder, Boris Kornilovich, Susan Griffin, Effects of Manganese Mining on Water Quality in the Caucasus Mountains, Republic of Georgia -- Mine Water Environ, DOI 10.1007/s10230-011-0163-3, TECHNICAL ARTICLE, 6 October 2011.
- 37. M. Ganugrava, N. Kekelidze, J. Chen, T. Jakhutashvili, G. Qajaia, E. Tulashvili, M. Elizbarashvili, M. Chkhaidze, M. Giorgobiani, M.Mirtskhulava, Individual Radon risks. In "Health and Social Medicine Management", Italy's Institute of Biostructure and Bioimage (IBB CNR UOS Napoli Center), University Geomedi, Georgia, Tbilisi, 2012. P.55-58.
- 38. *Tarkhashvili N, Chakvetadze N, Mebonia N, Chubinidze M, Bakanidze L, Shengelidze V, Mirtskhulava M.* et. al., Traditional risk factors for *Helicobacter Pulori* infection not found among patients undergoing diagnostic upper endoscopy Republic of Georgia, 2007-2008, International Journal of infectious diseases. 2012 Sep;16(9):e697-702. Epub 2012 Aug 4.
- 39. Makaradze Levan, Mirtskhulava Merab, Giorgobiani Marina; BRUCELLA EPIDEMIOLOGY IN GEORGIA; Days of Veterinary Medicine 2012; 3rd International Scientifi c Meeting; BOOK OF PROCEEDINGS; Skopje, Republic of Macedonia; 2-4 September 2012, P.62-63.

- 40. **Mirtskhulava M**., Chokheli M., Chirakadze A., Zaridze K. Cancer risks related to Arsenic waste in Georgia. ASPO 37-th annual meeting, Abstracts, P-63T, Memphis, Tennessee, March 9-12
- 41. **Riovello G., Pirtskhalava M., Egoyan A., Mirtskhulava M.,** The synthesis a chiral Nycleopeptide for Biomedical Approach. Experimental and Clinical Medicine N4. 70-73.2013
- 42. **Pirtskhalava M., Riovello G., Egoyan A., Mirtskhulava M., Monaseridze E.,**Usage of complex modeling of chiral Nycleopeptides in farmacy. Experimental and Clinical Medicine N4. 73-76.2013
- 43. Levan Makaradze, Zakaria Chekurishvili, Merab Mirtskhulava, Marine Ramishvili Resistance of *Salmonella* isolated from affected and dead animals, antibiotic sensitivity testing and selection of highly-effective preparation Pathomorphological changes in piglet liver during acute salmonellosis. Mac Vet Rev 2014; 37 (Suppl. 1) p.42-43. 2014.
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- 46. Giovani Roviello, Valentina Roviello, Marina Pirtskhalava, Alexander Egoyan and Merab Mirtskhulava Natural and artificial binders of polyriboadenylic acid and their effect on RNA structure Beilstein J. Nanotechnol. 2015, 6,
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Presentations on International Conferences and meetings

- 1. **Biological Effectiveness of Electromagnetic radiation on viruses**, Seminar Practical Methods for inactivation of viruses in environment. University of Minnesota, Department veterinary diagnostic medicine.2003 Oct 20-24; USA, St. Paul;
- 2. **Amoebiasis in Georgia and Sequence Conservation of Gal/GalNAc Lectin**. EMBO Workshop on "Pathogenesis of amoebiasis: from genomics to disease", Pasteur Institute 2003 May 19-21; Paris, France; 2003,
- 3. **Role of Physics in science integration**. Le Siecle d'Albert Einstein, Palais de I'UNESCO, Paris, 2005 Jul 20-22; France, Paris: UNESCO; 2005.p.12.
- 4. **Application of IT for increasing qualification of junior football players**. IX International scientific Congress Olympic sport for everyone. Sep 20-23; Ukraine, Kiev; 2005;
- Usage of MDLT-method for biomechanical analyses of athletes techniques at Competition stage. IX International scientific Congress - Olympic sport for everyone. 2006 Sep 20-23; Ukraine, Kiev; 2005.
- **6. Congenital malformations registry, Georgia**. EUROCAT 21-st Registry Leaders' Meeting. 2006 Jun 9-10; Austria. Graz;
- 7. Complex biomechanical analysis of sports technique on the example of long jumps
 Alexander Egoyan, Merab Mirtskhulava, Durmishkhan Chitashvili,et all. 5th World Congress
 of Biomechanics Munich, July 29th August 4th-2006, Poster session
- 8. Use of computer software for improvement of skills of young football players
 Durmishkhan Chitashvilia, Alexander Egoyana, Merab Mirtskhulavaa, et all.
 5th World Congress of Biomechanics Munich, July 29th August 4th-2006, Poster session
- 9. **Use of video-computer modeling of sports technique during competitions.** 5th World Congress of Biomechanics. 29July–4 August, Munich, Germany, 2006

- 10. Ecological and human population characterization of the problem mine regions in Georgia. Workshop "Environmental Characterization and Risk Assessment at Hard Rock Mine Sites". US Environmental Protection Agency, National Center for Disease Control and Public Health (Georgia); Science and Technology Center of Ukraine. Tbilisi, 2009
- 11. **Water Resource Characterization and Risk Assessment**: Chiatura Mining District, Republic of Georgia. NGWA GW Summit, Denver, CO, 2010
- 12. Possibilities of research modeling Asthma Disease related viral infections in Georgia, International NIAID Conference "Bioinformatics Tool and Techniques for Allergy and Infection Diseases Research", .Moscow, 2010.
- **13.** *Health problems at Mine region of Chiatura*. International conference "Modern problems of using of health resort resources, Sairme, Georgia, June, 2010
- 14. **Reproductive Health of Georgian Women living in the Chiatura region.** The International conference ECO-2010, July, Tbilisi, Georgia
- 15. Hygienic estimation of polluted with heavy metals of drinking surface waters, connecting to mine and processing. II international Conference "Health and ecology" Batumi, Georgia, September, 2010
- 16. **Developing and bench-scale testing of soft decontamination-remediation methods to be used in highland of Georgia.** 9-th Conference on Remediation, Friedrich-Schiller University, 4-5 OCT, 2010, Jena, Germany.
- 17. Application of gamma irradiated *Brucella* spp. for creation a new vaccines on the base of attenuated microbes and determination of their immunogenecity Tecknical meeting on the use of Irradiated vaccines in the control of infectious transbordary diseases in livestock, 11-15 OCT, 2010, International Atomic Energy Agency (IAEA), Vienna, Austria.
- 18. Developing of low-cost decontamination and remediation technologies and possibilities for commercialization. Georgian competitiveness Roundtable. STCU, October, 2010, Tbilisi, Georgia
- 19. Possible modification of risk factors for peptic ulcer among persons with Helicobacter Pylori infection in Georgia, European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), Lisbon, Portugal, November 11-13 2010
- 20. Ecosystem Protection in a Sustainable World: a Challenge for Science and Regulation, SETAC Europe 21th Annual Meeting. Milan, Italy, May 15-19, 2011
- 21. Manganese Mining Influence on Water Quality in the Caucasus Mountains, 35th AMOP Technical Seminar on Environmental Contamination and Response, Vancouver British Columbia Canada, 2012
- 22. Application of X-ray irradiated *Brucella* spp. for creation a new vaccines— Technical meeting on the use of Irradiated vaccines in the control of infectious transbordary diseases in livestock, 23-30 JUN, 2012, International Atomic Energy Agency (IAEA), Nairobi, Kenia
- 23. **BRUCELLA EPIDEMIOLOGY IN GEORGIA**; Days of Veterinary Medicine 2012; 3rd International Scientific Meeting;; Skopje, Republic of Macedonia; 2-4 September 2012
- 24. Cancer risks related to Arsenic waste in Georgia. ASPO 37-th annual meeting, Abstracts, March 9-12, 2013, Memphis, Tennessee
- 25. Temporal and spatial distribution of radioactivity in the soil of the Black Sea coast in the Supsa-Natanebi interfluvial region (Georgia). M. Elizbarashvili, L. Mtsariashvili, N. Kekelidze, T. Jakhutashvili, E. Tulashvili, M. Mirtskhulava, Z. Berishvili. Proc.of 14thInternational Multidisciplinary Scientific GeoConferences (SGEM-2014), GeoConference on Ecology, Economics, Education and Legislation, Vol. 2, pp. 657-664, 17-26, June, 2014, Albena, Bulgaria.
- 26. Manganese Mining Action on Air Quality and Health, Merab Mirtskhulava 38th AMOP, Technical Seminar on Environmental Contamination and Response. June 2 4 juin 2015, Sheraton Vancouver Wall Centre, Vancouver, (British Columbia). Canada

Awards:

Emerging Diversity award – Promising contributor to research practice, or training related to diversity – University of Michigan, National Center for Institutional Diversity, USA, 10/01/2009 **Deactivation of viruses by electromagnetic field**, University of Minnesota, MN, USA, CRDF research award 2003;

Meetings at Queens University of Belfast and Ulster University. Welcome Trust travel award, UK, 2003,.