

CURRICULUM VITAE

Karine R. Mayilyan

(in publications: Mailian, Mailyan, Maylian and Mayilyan)

CORRESPONDING ADDRESS

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PERSONAL DATA

Date of birth – 19 April 1968

Place of birth – Yerevan, Armenia

Gender – Female

Citizenship – Republic of Armenia

EDUCATION

1987-1992 *B.S./M.S. student* –
Yerevan State University (Faculty of Biology, Department of Biophysics),
Armenia – **Honorary diploma**

1992 *Visiting Student* –
Institute of Theoretical and Experimental Biophysics, Russian Academy of
Sciences, Poshchino, Russian Federation
Diploma work entitled: Comparative investigation of Sr⁺² and Ca⁺² binding by the
human apo- α -lactalbumin

1993-1994 *Participated student* –
The Full Course of Psychiatry at Yerevan State Medical University of the Health
Ministry of Armenia (Department of Psychiatry and Medical Psychology)

1995-2000 *Ph.D. student* –
Institute of Molecular Biology of Armenian National Academy of Sciences
(ANAS) – **Ph.D. diploma** (23 March, 2001)

DEGREE

2013 **Doctor of Sciences (Biology) - Habilitation degree in Armenia**
Thesis: “The HLA-III Genetic Diversity and the Complement Lectin Pathway in
Schizophrenia.”; Yerevan, Armenia

2001 **Doctor of Biology (Ph.D. equal in Armenia)**
Thesis: “Indexes of Neuro-immune Status of Organism in Aetiopathogenesis of
Schizophrenia.”; Yerevan, Armenia

PROFESSIONAL EXPERIENCE

Institute of Molecular Biology, Armenian National Academy of Sciences, Yerevan, Armenia

2001-up today **Senior Scientific Researcher**

2010-2018 **Head of ‘Eco-Genetics of Populations’ Group**
2001-2010 **Senior Scientific Researcher**
2000-2001 **Scientific Researcher**
1995-2000 **Ph.D. Student**
1992-1995 **Research Assistant**
1989-1992 **M.S. Student**

Clinical Brain Disorders Branch (CBDB), ‘Genes, Cognition, and Psychosis Program’, National Institute of Mental Health, NIH, Bethesda, MD, USA

2007-2009 **Professional Service Contractor/ Guest Researcher**
2006-2007 **Fulbright Visiting Fellow**

MRC Immunochemistry Unit, Department of Biochemistry, Oxford University, Oxford, UK

2005-2006 **Royal Society/NATO Visiting Fellow**
Research Field: Complement system lectin pathway in schizophrenia

Department of Psychiatry and Medical Psychology, Yerevan State Medical University, Health Ministry of Armenia, Yerevan, Armenia

1996-2001 **Scientific Researcher (part-time)**
Research Field: Molecular mechanisms of chatecholamine metabolism disorder in schizophrenia

Department of Pharmacology, Yerevan State Medical University, Health Ministry of Armenia, Yerevan, Armenia

1994-1996 **Scientific Researcher (part-time)**
Research Field: Mitochondrial ATPase activity in experimental hypokinesia

FELLOWSHIPS AND GRANTS

2015 German Academic Exchange Service (DAAD) Postdoctoral Fellowship (# 50015559): the research program entitled “**Neuropsychological effects of the Complement Regulator CSMD2 Genome-wide Associated Schizophrenia Risk Variants**” was implemented at the Department of Psychiatry, Psychotherapy and Psychosomatics, Martin-Luther-University Halle-Wittenberg (Head - **Prof. Dan Rujescu**), Halle/Salle, Germany (August -November 2015).

2013-2015 PI of the research grant #13-1F291 funded by the State Committee of Science of the Ministry of Education and Science of the Republic of Armenia: “**Schizophrenia Susceptibility Genes in the Major Histocompatibility Complex of Human Genome**”; the scientific consultant Prof. Daniel R. Weinberger – director and CEO of the Lieber Institute for Brain Development, Johns-Hopkins University Medical Campus, Baltimore, MD, USA.

2013-2015 PI of the State Committee of Science of the Republic of Armenia and the Russian Foundation for Basic Research joint research grant #13RF-060: “**Population Genetic Aspects of the Distribution and Variability of Invasive Species of Blood-sucking Diptera and Their Role in Shaping of the Fauna of Armenia**”; in collaboration with the Vavilov Institute of General Genetics (Head of Laboratory: Prof Ilya A. Zakharov), Russian Academy of Sciences, Moscow, Russian Federation.

- 2013-2014** Fulbright Scholarship (#68130188): the research program entitled “**How C4B Deficiency Associated with Schizophrenia May Affect Brain Development, Mental and Cognitive Functions**” was carried out at the Lieber Institute for Brain Development, Johns-Hopkins University Medical Campus, Baltimore, MD, USA (Host – **Dr. Daniel R. Weinberger**) in cooperation with the Center for Molecular and Human Genetics, the Research Institute at the Nationwide Children’s Hospital, Columbus, OH, USA (Host – **Dr. Yung C. Yu**).
- 2012-2013** PI of the research program (#NS-molbio-2645) entitled “**The Genetic Diversity of the HLA Region in Schizophrenia: the load on the HLA components involved in brain development and lifespan functioning**” supported by the Armenian National Science and Educational Fund and implemented at the Institute of Molecular Biology, Armenian NAS, Yerevan, Armenia
- 2011** German Academic Exchange Service (DAAD) Postdoctoral Fellowship (# A/04/05511, www.daad.de): the research program entitled “**Multi-Faceted Exploration of Genetic Diversity in the HLA Region in Schizophrenia**” was implemented in the Section of Molecular and Clinical Neurobiology (Head - **Dr. Dan Rujescu**), Department of Psychiatry, Ludwig-Maximilians-University, Munich, and Hospital of Psychiatry and Psychotherapy (Head - **Dr. Sibylle G. Schwab**, Dr. rer. nat.), Friedrich-Alexander-University, Erlangen-Nuremberg, Germany (September -December 2011).
- 2008- 2009** the USA Federal Government Contract (# HHSN271200800661P): the research program entitled “**RP-C4-CYP21-TNX modular complement C4 genotypes in schizophrenia**” was carried out at the CBDB, ‘Genes, Cognition, and Psychosis Program’, DIRP, NIMH, NIH, Bethesda, MD, USA (Head – **Dr. Daniel R. Weinberger**).
- 2007- 2008** the USA Federal Government Contract (# HHSN271200700340P): the research program entitled “**RP-C4-CYP21-TNX modular complement C4 genotypes in schizophrenia**” was carried out at the CBDB, ‘Genes, Cognition, and Psychosis Program’, DIRP, NIMH, NIH, Bethesda, MD, USA (Head – **Dr. Daniel R. Weinberger**).
- 2006-2007** Fulbright Scholarship (# 68430064): the research program entitled “**RP-C4-CYP21-TNX (RCCX) Modular Complement C4 Genotypes in Schizophrenia: the load of HLA III region RCCX genetic diversity within different ethnic and diseased vs. healthy groups**” was carried out at the CBDB, ‘Genes, Cognition, and Psychosis Program’, DIRP, NIMH, NIH, Bethesda, MD, USA (Host – **Dr. Daniel R. Weinberger**) in cooperation with the Center for Molecular and Human Genetics, Columbus Children's Research Institute and College of Medicine and Public Health, the Ohio State University Columbus, Columbus, OH, USA (Host – **Dr. Yung C. Yu**).
- 2005-2006** Royal Society/NATO Postdoctoral Fellowship (#16312/03B/LD): the research program entitled “**The Specifics of Complement Activation by Lectin Pathway in Schizophrenia**” was carried out in MRC Immunochemistry Unit at the Department of Biochemistry, Oxford University, Oxford, UK (Host – **Dr. Robert B. Sim**).

- 2005** NFSAT Travel Grant (#TG-05-02, www.nfsat.am) for participation at the International Congress on Schizophrenia Research, 2-6 April, 2005, Savannah, Georgia, USA: Pre-congress meeting with **Prof. Yung C. Yu** Center for Molecular and Human Genetics, Columbus Children's Research Institute and College of Medicine and Public Health, the Ohio State University Columbus, Columbus, OH, USA (March 2005).
- 2011** German Academic Exchange Service (DAAD) Postdoctoral Fellowship (# A/04/32935, www.daad.de): the research program entitled “**Genotypes of the Complement C4 in Schizophrenia**” was implemented in the Section of Molecular and Clinical Neurobiology (Head - **Dr. Dan Rujescu**), Department of Psychiatry, Ludwig-Maximilians-University, Munich, and the Complement Genetics Group (Head - **Prof. Peter M. Schneider**) at the Institute of Legal Medicine, Johannes Gutenberg-Universität Mainz, Mainz, Germany (June - September 2004).
- 2003** Korean ISTEP Fellowship for participation at "R&D Management Training Program for CIS and Eastern European Countries" Workshop (November 2003, Seoul, Korea).
- 2002-2003** INTAS Fellowship for Young Scientists (# YSF 2001/2 – 0110, www.intas.be): the research program “**Circulating Immune Complexes and Complement System in Schizophrenia**” was carried out in cooperation with MRC Immunochemistry Unit at the Department of Biochemistry, Oxford University, Oxford, UK (INTAS member state supervisor – **Dr. Robert B. Sim**).
- 2002** NFSAT Long Term Travel Grant for Promising Armenian Young Scientists and Engineers (# LTTG-02-02, www.nfsat.am): “**The Reelin Signaling Pathway in Schizophrenia: Haploinsufficient Animal Model**” project was implemented at the laboratory of **Prof. Brian Kirkpatrick** at the Maryland Psychiatric Research Center, Baltimore, USA (October 2002-January 2003).
- 2001** NATO Fellowship for participation at NATO Advanced Research Workshop “Schizophrenia & Schizotypal Personality: An Integration” (March 2001, Tuscany, Italy).

FIELDS OF SCIENTIFIC INTERESTS

Biological Psychiatry, Molecular Psychiatry, Molecular Biology, Neuroscience, Immunogenetics, Immunochemistry, Immunohistochemistry, Neurogenetics, Population Genetics, Neurobiology, Neurochemistry, Biochemistry, Biostatistics

ADDITIONAL COURSES

- 2002** 5th Level of General English Course at the American University of Armenia – **Certificate of achievement**
- 2000** The Course of the English Language at Advanced Level at the Center of Intensive Methods of Teaching “Lezounery Toun” Ltd (May-December, Yerevan). – **Certificate of achievement**
- 1999** “Contemporary Methods of Molecular & Cellular Biology” Training Seminar Series Organized by International Scientific and Educational Center of Armenian National Academy of Sciences of ANAS (Yerevan). – **Certificate of achievement**

1998 The Course of Informatics at the Institute of Informatics and Automatisation Problems of ANAS (Yerevan). – **Certificate of achievement**

PROFESSIONAL MEMBERSHIPS

2023-up today Armenian Psychiatric Association
2010-up today Scientific Council of Institute of Molecular Biology of ANAS
2005-up today Federation of Societies of Biological Psychiatry
2010-2015 Armenian Association of Biochemists
2005-2007 British Society for Immunology
2003-up today Armenian Society of Biological Psychiatry
2003-2008 Russian Society of Biological Psychiatry
2002-up today Armenian Society of Biochemistry
1998-2005 Scientific Council of Institute of Molecular Biology of ANAS
1998-2004 Chair of the Young Scientists Council of the Institute of Molecular Biology of ANAS
1997-2004 Young Scientists Council of the Presidium of Armenian National Academy of Sciences

HONOURS, AWARDS

2016 “**Productive Researcher – 2015**” award of the State Committee of Science of the Ministry of Education and Science of the Republic of Armenia
2014 “**Productive Researcher – 2014**” award of the State Committee of Science of the Ministry of Education and Science of the Republic of Armenia
2013 “**Productive Researcher – 2013**” award of the State Committee of Science of the Ministry of Education and Science of the Republic of Armenia (http://scs.am/uploads/Mrcuytner/2013/AG_2013_Awards.pdf)
2001 “**The Best Young Scientist of the National Academy of Sciences of the Republic of Armenia**” award of the Galoust Gulbenkian Foundation (<http://www.gulbenkian.pt>)
2000 “**The Best Young Scientist**” award of Scientific Council of the Institute of Molecular Biology, ANAS

ADDITIONAL PROFESSIONAL ACTIVITIES

2001 **Co-editor** for volume 2 of the “*Collection of Articles of the Young Researchers*” (National Academy of Sciences of Armenia)
2000 **Co-chair**, Republican Youth Scientific Conference on “*The Future of Ecological Science in Armenia*”

TEACHING COURSES

International Scientific Educational Center, National Academy of Sciences of RA, Yerevan, Armenia

2010-up today **Course of “Cellular and Tissue Engineering”**
2013-up today **Course of “Molecular Medicine”**

Department of Therapeutics, Faculty of General Medicine, University of Traditional Medicine, Yerevan, Armenia

2023-up today **Course of “Hereditary diseases”**
2022-up today **Course of “Medical Genetics”**

OTHER SERVICES

Institute of Molecular Biology, Armenian National Academy of Sciences, Yerevan, Armenia

- 2009-2012** **Member** of the Institutional Review Board
- 2004-2005** **Founder and Head** of the Institutional Review Board
- 2001-2005** **Supervisor** of 4 M.S. students
- 1999-2005** **Consultant** for the INTAS Young Scientist Programs
- 1998-2004** **Chair** of the Young Scientists Council
- 1996-1998** **Vise-chair** of the Young Scientists Council
- 1997-2004** **Member** of the Young Scientists Council of the Presidium of Armenian National Academy of Sciences

COMMUNITY- VOLUNTARY ACTIVITIES

"BIOECOMED" NGO

2001-up today Council Member

1999-up today Head of “Young Scientists’ Problems” Department

LANGUAGE CAPABILITY

Armenian – as a native speaker

Russian – good

English - free

Level of competence –**Speaking** –research work in: Oxford University, Oxford, UK; Maryland University, Baltimore, USA; Ludwig-Maximilians-University, Munich, Germany; Johannes Gutenberg-Universitat, Mainz, Germany; CBDB, NIMH, NIH, Bethesda, MD, USA; Lieber Institute for Brain Development, Baltimore, Maryland, USA; Columbus Children's Research Institute Columbus, OH, USA; Friedrich-Alexander-University, Erlangen-Nuremberg, Germany; several international meetings; e.g. NATO Advanced Research Workshop "Schizophrenia & Schizotypal Personality; KISTEP Workshop "R&D Management Training Program"; and other business and personal communications; **Reading** – scientific projects, articles and books, as well as business letters. **Writing** – scientific articles, business letters, projects and reports.

Signature _____

Karine. R. Mayilyan, D.Sc, Ph.D.

31.08.2023