



**Curriculum vitae  
Europass**

**Personal Information**

First name(s) / Surname **Zoltán Zsigmond Major**  
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Nationality hungarian

Citizenship romanian, hungarian

Date of birth 1980

Gender Male

**Name of the employer /  
Occupation or position held**

**National Center for Spinal Disorders Budapest  
Neurophysiology Department - Head of the Department  
Municipal Clinical Hospital Cluj-Napoca  
Neurology Ward – Primary neurologist  
Nexus Medical Association – President, Neurologist  
Technical University Cluj –Napoca – Neurology expert, advisor**

**Continuous / periodic  
collaborations**

**Cluj County Emergency Clinical Hospital, Neurosurgery Clinic – Intraoperative neurophysiological monitoring  
Oradea County Emergency Clinical Hospital, Neurosurgery Clinic – Intraoperative neurophysiological monitoring  
Alba Iulia County Emergency Clinical Hospital, Neurosurgery Clinic – Intraoperative neurophysiological monitoring**

**Medlife Hospital, Bucuresti – Intraoperative neurophysiological monitoring  
Humanitas Hospital, Cluj-Napoca – Neurology and Neurophysiology in the outpatient unit, Intraoperative neurophysiological monitoring  
Transilvania Hospital, Cluj-Napoca – Neurology and Neurophysiology in the in- and outpatient unit and, intraoperative neurophysiological monitoring**

**Work experience**

Dates 2005-present

Occupation or position held Primary neurologist (2019-)  
Gr III researcher (2018-2021)  
Assistant professor (2008-2018)  
PhD student (2005-2010)  
Neurology consultant ( since 2011)  
Neurology resident (2007-2011)  
Pediatric neurology resident (November 2005-2007)  
Physician in training (2005 jan-november)

**Main activities and  
responsibilities**

Education, formation, evaluation, scientific research – since 2005  
Various specific activities as a neurologist - since 2012  
Neurophysiology in outpatient setting – since 2004  
Intraoperative neurophysiological monitoring – Peripheral nervous system since 2010, CNS since 2014 (approx 750-800 operations)

**Name and address of the  
employer**

2008-2021 University of Medicine and Pharmacy "Iuliu Hațieganu" Cluj-Napoca, Tel: 0264 597 256, Fax: 0264 597 257, website: [www.umfcluj.ro](http://www.umfcluj.ro)  
2012- Municipal Clinical Hospital Cluj-Napoca, Tel: 0735406171, website: [www.scmci.ro](http://www.scmci.ro)  
2018- National Center for Spinal Disorders, Budapest, 1126 Budapest, Királyhágó u. 1-3. Telefon: (+36) 1 887-7900, website: [www.ogk.hu](http://www.ogk.hu)

**Type of business or sector**

University education / Specialized medical assistance – University of Medicine and Pharmacy "Iuliu Hațieganu", Research Center for Advanced Medicine - MedFuture / Municipal Clinical Hospital Cluj-Napoca, Cluj County Emergency Clinical Hospital, Technical University Cluj-Napoca, Transilvania Hospital, Medlife Hospital, Humanitas Hospital

**Education and training**

Period 2014-2015

Title of qualification awarded Post-doctoral studies

**Principal subjects / occupational  
skills covered**

Electrophysiology, neurophysiology: rTMS, MUNE, ENG, EMG, clinical activities in neurology

**Name and type of organization  
providing education and training**

University of Medicine and Pharmacy "Iuliu Hațieganu" Cluj-Napoca (Post-doctoral programme financed by POSDRU)

Period 2005-2010

Title of qualification awarded PhD

Principal subjects / occupational skills covered | Electrophysiology, neurophysiology; EMG, studii de conducere, EEG si potentiale evocate, activitati clinice in neurologie pediatria si neurologie

Name and type of organization providing education and training | University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca

Period | 1/ 2004-2005, 2/ 2023-

Title of qualification awarded | MSc in Clinical Pharmacology/ MSc in Plant protection (ongoing)

Principal subjects / occupational skills covered | Experimental neuropharmacology/ Special techniques for crops protection

Name and type of organization providing education and training | University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca/ Hungarian University of Transylvania "Sapientia"

Period | 1998-2004

Title of qualification awarded | MD

Principal subjects / occupational skills covered | Curriculum of the Faculty of General Medicine

Name and type of organization providing education and training | University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca

Period | 1994-1998

Title of qualification awarded | High School Graduation Certificate, Assistant Analyst Programmer

Principal subjects / occupational skills covered | General High School Curriculum and Informatics specialization

Name and type of organization providing education and training | "Báthory István" High School Cluj-Napoca

**Personal skills and competences**

Mother tongue | Hungarian, native

Other languages | Romanian, English, German

Self-assessment <i>European level (*)</i>	Comprehension				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production			
	C1	Experimented user	C1	Experimented user	C1	Experimented user	C1	Experimented user	C1	Experimented user
<b>Romanian</b>	C1	Experimented user	C1	Experimented user	C1	Experimented user	C1	Experimented user	C1	Experimented user
<b>English</b>	C1	Experimented user	C1	Experimented user	C1	Experimented user	C1	Experimented user	C1	Experimented user
<b>German</b>	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user

(\*) Common European Framework of Reference for Languages

Social skills and competences | - Communication capacity and ability  
- Capacity to adapt to high complexity and diversity situations  
- Teamwork

Organizational skills and competences | - Good organizing capacity  
- Gathering necessary finances, searching and communication with sponsors  
- Good negotiating skills  
- Experience in leadership (Neurology dept. (RO), Neurophysiology dept. (HU), Nexus General Ltd.(RO), Neurophysiology Ltd.(RO), Nexus Medical Association (RO), Nexus Neurofiziologia Ltd. (HU) )

Technical skills and competences | "Do it yourself" – wood and metal works, making furniture, construction techniques, tractor, excavator driving, agricultural skills, farming

Computer skills and competences | Certificated assistant analyst-programmer, high-level PC operator – MS Office , web-design, Statistical software: SPSS, Statistica; Educational/Research software: LabTutor, BioPac, MathLab; Graphics/design: CorelDraw, Photoshop etc.

Artistic skills and competences | Painting, sculpting, woodcuts, design

Other skills | Voluntary of the "International Children's Rescue Service", and "Nexus Medical"

Driving license | Category B vehicle



## Foreign specialization

- 22.04.-23.04.2008. - **Meet the professor - Intensive epileptology training** – workshop Zentrum Epilepsie Erlangen (ZEE), Erlangen, Germany
- 19.07. – 27.07.2008. - **7th Summer School of Myology** – Institut de Miologie, Hospital Pitie-Salpetriere, Paris, France
- 31.05.-04.06.2010. – **PRIME Course „Teaching and Learning, a course for medical educators”** – University of Brighton, Cluj-Napoca, Romania
- 16.09.2010. – **The multidisciplinary approach to NMDs: towards a harmonized practice** – TREAT-NMD training, Milano, Italia
- 28.06. – 29.06.2011. – **LabAuthor Software training: LabAuthor Level I – Editing LabTutor Experiments, LabAuthor Level II – Creating New LabTutor Experiments** – Oxford, United Kingdom
- 02.09.-06.11.2014. – **Writing in the Sciences** – Stanford University - on-line course
- 23.02.-27.02.2015. – **Intraoperative neurophysiological monitoring training** - National Center for Spinal Disorders, Budapest, Hungary
- 12.11.-13.11.2015. – **Intraoperative neurophysiological monitoring training** - National Center for Spinal Disorders, Budapest, Hungary
- 08.02.-12.02.2016 – **Long term epilepsy monitoring and intraoperative neurophysiological monitoring (ECoG)** - National Institute for Clinical Neurosciences, Budapest, Hungary
- 28.11.-06.12.2016 – **Long-term EEG monitoring, including invasive EEG methods and ECoG – strip electrodes, sEEG, and intraoperative monitoring** – National Institute for Clinical Neurosciences, Budapest, Hungary
- 07.12.-09.12.2016 – **Intraoperative neurophysiological monitoring training** – National Center for Spinal Disorders, Budapest, Hungary
- 22.02.-24.02.2017 – **NIM Eclipse Neurophys Training – Neuromonitoring in Spine, Cranial & Cardiovascular Surgeries** – Tolothenaz, Switzerland
- 27.03.-31.03.2017 – **Long-term EEG monitoring, including invasive EEG methods and ECoG – strip electrodes, sEEG, and intraoperative monitoring** – National Institute for Clinical Neurosciences, Budapest, Hungary
- 28.09.2017. – **International workshop on New Trends in Rehabilitation Robotics**, Cluj-Napoca, Romania (**Major Z**, Major K: Dynamometric Pre-Assessment of The Upper Limb – Input Values for Robotic Rehabilitation – invited speaker)
- 27.11.-01.12.2017. – **Intraoperative monitoring and epilepsy monitoring** – observational training – Hopitaux Universitaires Geneve, Geneva, Switzerland
- 08.12.2017. – **Exchange programme: Introduction to LCIG therapy** – Neurology Department, Semmelweis University, Budapest, Hungary
- 09.03.-10.03.2018 – **5th Fabry Expert Lounge meeting** - Fabry Expert Lounge, Madrid, Spain
- 27.08.-07.09.2018 – **Intraoperative monitoring** – observational training – National Center for Spinal Disorders, Budapest, Hungary
- 29.10.-31.10.2018 – **Long-term EEG monitoring training** - National Institute for Clinical Neurosciences, Budapest, Hungary
- 24.03.-25.03.2019 – **Exchange programme: Introduction to LCIG therapy** – Tel Aviv Sourasky Medical Center, Tel Aviv, Israel
- 01.04.-03.04.2019 – **Long-term EEG monitoring training** - National Institute for Clinical Neurosciences, Budapest, Hungary
- 26.05.-28.05.2019 – **12th International Epilepsy Colloquium** – Lyon, France
- 12.11.-15.11.2019 – **Long-term EEG monitoring and SEEG training** - National Institute for Clinical Neurosciences, Budapest, Hungary
- 11.12.-13.12.2019 – **Long-term EEG monitoring and SEEG training** - National Institute for Clinical Neurosciences, Budapest, Hungary
- 23.02.-25.02.2021 – **Digital SEEG Course** – Association for Research and Training in Epilepsy – online
- 02.09.-04.09.2021 - **8<sup>th</sup> Symposium (Continuation course) of the Hungarian Society of Clinical Neurophysiology** – Debrecen, Hungary
- 09.12.-11.12.2021. – **Mandatory Neurology Continuation Course** – POTE, Pecs, Hungary
- 14.09.-16.09.2022. – **14th International Epilepsy Colloquium** – Lausanne, Switzerland
- 21.02.-25.02.2023. - **13th European Training Course on “SEEG and the autonomic system”** – Association for Research and Training in Epilepsy, Venice, Italy
- 21.09.-22.09.2023. – **Ultrasound Basic Course of Upper Limb Spasticity (ULS) And Sialorrhea** – Special Hospital for Orthopedics and Rehabilitation Martin Horvat, Rovinj, Croatia
- 22.04.-26.04.2024. – **1st Paros Epilepsy Meeting - “State of the art anatomoclinical correlations of focal seizures”** - Association for Research and Training in Epilepsy, Paros, Greece
- 18.11.-20.11.2024. – **Course on Spinal Cord Stimulation for Chronic Pain** – Neurosurgery and Neurointervention Clinic, Semmelweis University, Budapest, Hungary
- 20.01.-24.01.2025. – **14th ILAE School on Pre-Surgical Evaluation for Epilepsy and Epilepsy Surgery (EPODES Basic)** – Brno, Czech Republic
- 11.02.-14.02.2025. – **SEEG Course – SEEG works...but not always!** – Association for Research and Training in Epilepsy, Venice, Italy

## Domestic specialization

- 13.03.-17.03.2006 – **Electroneurografie si electromiografie** – UMF „Iuliu Hatieganu”, Cluj-Napoca, Romania
- 19.09.2007. – **Educational Course: Focal Epilepsies in Childhood** – EUREPA – European Epilepsy Academy, Sinaia, Romania
- 22.10.-27.10.2007. – **EMG, EEG si polisomnografie** - UMF „Iuliu Hatieganu”, Cluj-Napoca, Romania
- 24.05.-25.04.2008 – **Baze in EMG si Neurografie** – UMF „Carol Davila”/Akademiska Sjukhuset (Uppsala), Bucharest, Romania
- 14.05.-16.05.2009 – **Traditie si progres in Farmacologie, Toxicologie si Oncologie clinica. Farmacologie, Algeziologie. Algeziologie pentru studenti si tineri medici** – UMF „Gr.T. Popa”, Iasi, Romania
- 13.05.-15.05.2010. – **Durerea la copii si adolescent. Farmacologie, Algeziologie. Algeziologie pentru studenti si tineri medici** – UMF „Gr.T. Popa”, Iasi, Romania
- 18.03.2011. – **Standards of care in the management of people with DMD** – TREAT-NMD training, Bucuresti, Romania
- 30.03.2012. – **Initiere si diagnostic electroencefalografic** – UMF „Carol Davila”, Bucharest, Romania (3 weeks)
- 30.11.2012. – **Initiere si diagnostic electromiografic si neurografic** - UMF „Carol Davila”, Bucharest, Romania (2 weeks)
- 01.03.2013. – **Diagnostic electromiografic si electroneurografic al afectiunilor neurologice si neurochirurgicale** - UMF „Carol Davila”, Bucharest, Romania (2 weeks)
- 18.04.-20.04.2013. – **Managementul Calitatii in Sectorul Medical si Comunicare Institutionala** – CREST – Baile 1 Mai, Romania
- 19.02.2015. – **Seminariile Departamentului de Neurostiinte** – Cluj-Napoca, Romania
- 01.06.-04.06.2015. – **RoNeuro Brain Days** – Cluj-Napoca, Romania
- 26.05.-27.05.2017. – **Management of advanced Parkinson's Disease with Infusion Therapies course** - Bucuresti, Romania
- 22.05.2017. - **Workshop: Current and future applications of non-invasive and invasive BCIs** - Cluj-Napoca, Romania
- 28.09.2017. – **Workshop: New trends in Rehabilitation Robotics** – Cluj-Napoca, Romania
- 04.10.-06.10.2018. – **Notiuni de baza de chirurgia epilepsiei. Clasificarea crizelor epileptice si epilepsiilor prin cazuri clinice** – Cluj-Napoca, Romania
- 23.04.2019. – **Innovative range of VNS solutions for Drug Resistant Epilepsy** - UMF „Iuliu Hatieganu”, SCM CJ, Nexus Medical – organizer
- 13.11.2020. – **Boala Parkinson: etiologie, diagnostic si abordare** - UMF "Victor Babes" Timisoara - online
- 07.04.2021. – **Training programare VNS** – SRIE, Eximia/LivaNova – online
- 04.03.-06.03.2022. – **Neurosurgical Masterclass: Inspiring the new generation** – Romanian Society of Neurosurgery, Cluj-Napoca, Romania

## Competencies

- Assistant analyst-programmer (1998)
- Competency in Electroencephalography and evoked potentials (2012)
- Competency in Electromyography (2013)
- Competency in Entrepreneurship (2015)

## Affiliation to scientific societies

- Hungarian Epilepsy League (MEL)
- Hungarian Society of Neurophysiology (MKNFT)
- Romanian Society Against Epilepsy (SRIE)

## Prizes

- Originality prize, IIIrd prize in the poster section at the 7th SNPCAR Congress, 24th September 2006, Neptun, Romania
- IInd prize in the poster section at the 8th SNPCAR Congress, 23rd September 2007, Sinaia, Romania
- „Best Poster Award” at the Second Joint Congress of GCNN and SSNN, 1-3 March 2009, Vienna, Austria
- IInd prize in the poster section at the XXVIIth National Conference of SRIE, 4-6th of October 2018, Cluj-Napoca, Romania
- PNP-III-P-1.1-PRECISI-2021-67200/2021 Awarded article: **Major ZZ**, Vaida C, Major KA, Tucan P, Simori G, Banica A, Brusturean E, Burz A, Craciunas R, Ulinici I, Carbone G, Gherman B, Birlescu I, Pisla D. The Impact of Robotic Rehabilitation on the Motor System in Neurological Diseases. A Multimodal Neurophysiological Approach. Int. J Environ Res Public Health 2020, 17, 6557.
- PNP-III-P-1.1-PRECISI-2021-67716/2021 Awarded article: **Major ZZ**, Vaida C, Major KA, Tucan P, Brusturean E, Gherman B et al. Comparative Assessment of Robotic versus Classical Physical Therapy Using Muscle Strength and Ranges of Motion Testing in Neurological Diseases. J Pers Med 2021, 11, 953. <https://doi.org/10.3390/jpm11100953>.

## Annexes

## Annexes

### A. International scientific meetings (presentation participation, co-author):

- **Second Joint Congress of GCNN and SSNN**, 1-3 March, 2009, Vienna, Austria: Vacaras V, Popescu D, **Major ZZ** et al: The neuroprotective effects of neurotrophic factors in Charcot-Marie-Tooth disease;
- **Second Joint Congress of GCNN and SSNN**, 1-3 March, 2009, Vienna, Austria: **Major ZZ**, Marginean I, Vacaras V et al: Abnormal waveforms of the flash VEPs in subjects with MS – awarded poster
- **International PhD Conference**, 17-18 May, 2010, Szeged, Hungary: **Major ZZ**: Evoked potentials in epilepsy-ADHD co-morbidity – oral presentation
- **23rd International Medical Sciences Student Congress**, 10-12 May, 2012, Istanbul, Turkey: P300 parameters in patients with relapsing-remitting multiple sclerosis undergoing treatment with glatiramer acetate –oral presentation
- **German-Romanian Course**, 29-30 April, 2014, Cluj-Napoca, Romania: **Major ZZ**: The role of electrophysiology in patients with peripheral nerve entrapment neuropathies and peripheral nerve injuries – invited speaker
- **Franco-Romanian Workshop Hematology-Immunology 4th edition**. 2-4 October, 2014, Cluj-Napoca, Romania: **Major ZZ**: Amyotrophic Lateral Sclerosis (ALS) versus Multifocal Motor Neuropathy with Conduction Blocks (MMN): an immunological comparison on a margin of a clinical case – invited speaker
- **The Second World Congress o Water Channel Proteins (Aquaporins and Relatives)**, 6-10 May, 2015, Cluj-Napoca, Romania
- **The XIIIth Congress of the Hungarian Epilepsy League**. 26-28th of May 2016, Szeged, Hungary
- **XXXIIIrd Epileptology Work Conference**. 13-15th October 2016, Győr, Hungary: Major ZZ, Petrus A: [Krónikus encephalitis epilepsziás rohamokkal. Esetleírások] – invited speaker
- **3rd International Conference for Doctoral Students (IPC 2017)**, June 22-23<sup>rd</sup>, 2017, Brasov, Romania: Major K, Carbone G, **Major ZZ**, Vaida C, Pisla D: Predefined assessment tools in robot assisted physical therapy after stroke – oral presentation
- **3rd Congress of Southeast Europe Neurosurgical Society**, September 14-17th, 2017, Cluj-Napoca, Romania: Balaci M, Oşlobanu A, **Major Z**, Florian IS: Anastomosis between ansa cervicalis and VII th nerve for facial paralysis – oral presentation
- **The 48th Congress of the Hungarian Society of Clinical Neurophysiology**, 4-6 April 2019, Kaposvár, Hungary – **Major ZZ**, Craciunas R, Major KA: 1Hz rTMS in progressive supranuclear palsy. Clinical cases - poster session
- **The 48th Congress of the Hungarian Society of Clinical Neurophysiology**, 4-6 April 2019, Kaposvár, Hungary – **Major ZZ**: Neurophysiological approach of compression myelopathy – poster session
- **The 15th Congress of the Hungarian League against Epilepsy, 29-30 October 2020**, Hungary – **Major ZZ**: Introduction of tertiary centers: Kolozsvár – oral presentation
- **Romanian-German Course, 09-11 April, 2021** - Cluj-Napoca, Romania: **Major ZZ**: Intraoperative monitoring for the spine – invited speaker, oral presentation
- **The 16th International Congress on Neuromuscular Diseases (ICNMD 2021)**, 08.-21.-22.-28.-29. May 2021 - Virtually from Vancouver, Canada – participation
- **The 17th International Congress on Neuromuscular Diseases (ICNMD 2022)**, 05.-09. July 2022 – Bruxelles, Belgium – Malfatti E, **Major ZZ**, Urtizberea JA. Diagnosing necrotizing myopathy with HMGCR antibodies – a quest proving time is muscle – e-poster + oral presentation
- **Meeting of the Hungarian Society for Spinal Disorders, 02.-03. September 2022** – Matrafured, Hungary – **Major ZZ**: Kiváltott válaszok myelopathiában – oral presentation
- **Romanian German Course: Brain Tumors, 20.-22. April 2023** - Cluj Napoca, Romania – **Major ZZ**: Art or craft ? – neurophysiology in the ponto-cerebellar angle – invited speaker, oral presentation
- **Krónikus fájdalomterápia – módszertani képzés III. Félév (online képzés), 12. February 2025** – Budapest, Hungary – Major ZZ: Elektrofiziológiai módszerek és helyük a krónikus fájdalmak differenciál-diagnosztikájában – invited speaker, oral presentation

### National scientific meetings (presentation participation, co-author):

- **The 7th SNPCAR congress**, 23.09.2006., Neptun, Romania: Orza D, Mărginean L, **Major ZZ**: Myotonia congenita – clinical case – awarded poster, abstract published in the SNPCAR journal
- **The 8th SNPCAR congress**, 19.-23.09.2007., Sinaia, Romania: **Major ZZ**, Coretchi A, Moga B, Nagy K: The stiff-person syndrome. Therapeutical aspects – awarded poster, abstract published in the SNPCAR journal;
- **The 8th SNPCAR congress**, 19.-23.09.2007., Sinaia, Romania: Berecki M, **Major ZZ**, Benga I: Chronic inflammatory demyelinating polyneuropathy – case report;
- **The 8th SNPCAR congress**, 19.-23.09.2007., Sinaia, Romania: **Major ZZ**, Rociu C, Benga I: Normal values of the motor and sensitive nerve conduction velocities (MNCV and SNCV) among the pediatric population of the clinic's cases – oral presentation
- **Simpozionul Rolul moleculelor multimodale (factorilor neurotrofici) in tratamentul bolilor neurologice**, 10th June 2013, Cluj-Napoca, Romania
- **Congresul National de Durere, Editia a III-a**, 7th.-9th. May 2015, Cluj-Napoca, Romania
- **Conferinta de promovare a rezultatelor in cercetare**, 24th July 2015, Cluj-Napoca, Romania
- **Simpozionul Noi tinte terapeutice in sindromul de intestin iritabil si pentru durerea reumatica**, 11th March 2016, Cluj-Napoca, Romania
- **The 42nd Congress of the Romanian Society of Neurosurgery**. 15-17th September 2016, Cluj-Napoca, Romania: **Major ZZ**, Florian Stefan: Posterior fossa tumors: technical aspects of intraoperative neurophysiological monitoring – invited speaker
- **The XXVth National Conference of the RSAE (SRIE)**, 4-6 October 2018, Cluj-Napoca, Romania – **Major ZZ**, Grosu LC, Brusturean ES: Epilepsy and encephalitis from the perspective of a row of cases – oral presentation
- **Inaugural meeting of the EEG Monitoring Unit of the Municipal Clinical Hospital Cluj-Napoca** – 28 March 2019, Cluj-Napoca, Romania - organizer, speaker
- **A XXVth National Conference of the RSAE (SRIE)**, 14-16 November 2019, Bucuresti, Romania – **Zoltan Zsigmond Major, Antal Berenyi, Daniel Fabo**: [Chirurgia epilepsiei și neuromodularea în Cluj, plan clinic și program de cercetare] – oral presentation
- **Congres ASNER 2023**, 27.-29. October 2023 – Targu Mures, Romania – **Major ZZ**: Monitorizare intraoperatorie in tumorile unghiului ponto-cerebelos – invited speaker, oral presentation
- **AI 13-lea Masterclass de Neurochirurgie**, 28. February – 02. March 2025 – Cluj-Napoca, Romania – **Major ZZ**: Presurgical evaluation in epilepsy surgery – invited speaker, oral presentation

- **Original full-text research articles published in Thomson-Reuters Web of Science (ISI) indexed journals:**
  - Meszaros I, Krausz TL, Fischer FE, Major ZZ, Popescu O. Expression of immunomodulatory genes in inflammatory and autoimmune diseases. *Romanian Biotechnological Letters*. 2010;6:5729-37
  - Major ZZ. Combined Evoked potentials in co-occurring ADHD and Epilepsy. *Idegyogy Sz*. 2011;64(7–8):248–56
  - Krausz LT, Fischer-Fodor E, Major ZZ, Fetica B. GTR-expressing regulatory T-cell subsets are increased in tumor-positive lymph nodes from advanced breast cancer patients as compared to tumor-negative lymph nodes. *Int J Immunopathol Pharmacol*. 2012;25(1):59-66.
  - Axente DD, Silaghi H, Silaghi CA, Major ZZ, Micu CM, Constantea NA. Operative outcomes of robot-assisted transaxillary thyroid surgery for benign thyroid disease: early experience in 50 patients. *Langenbecks Arch Surg*. 2013 Aug;398(6):887-94.
  - Axente DD, Major ZZ, Micu CM, Constantea NA. Technical Particularities of the Robot-Assisted Trans-Axillary Thyroidectomy. *Chirurgia*. 2013;108(3):422-28
  - Major ZZ, Văcăraș V, Buzoianu AD, Mureșanu FD. Glatiramer Acetate Treatment-Related Effects on Visual EPs and P300 Wave in Patients Suffering from Multiple Sclerosis. *Neurophysiology*. 2013;45(3):234-242.
  - Krausz LT, Major ZZ, Muresanu DF, Chelaru E, Nocentini G, Riccardi C. Characterization of CD4+ and CD8+ Tregs in a Hodgkin's lymphoma patient presenting with myasthenia-like symptoms. *Idegyogy Sz* 2013;66(9–10):343–348.
  - Văcăraș V, Major ZZ, Muresanu DF, Krausz LT, Marginean I, Buzoianu AD. Effect of glatiramer acetate on peripheral blood BDNF and phosphorylated TrkB levels in relapsing-remitting multiple sclerosis. *CNS & Neurological Disorders – Drug Targets*. 06/2014; 13(4):647-651. DOI: 10.2174/1871527313666140618110049
  - Văcăraș V, Major ZZ, Mariș E, Major KA, Buzoianu AD. [Multiple sclerosis with stroke-like symptoms: a diagnostic challenge. Case report]. *Orv Hetil* 2015;156(37):1514–1518.
  - Major ZZ, Vacaras V, Maris E, Crisan I, Florea B, Major KA, Muresanu DF. The electrophysiological changes after 1Hz rTMS in ALS patients. A pilot study. *Idegyogy Sz* 2016;69(3–4):E026–E031.
  - Vacaras V, Vithoulkas G, Buzoianu AD, Marginean I, Major ZZ, Vacaras V, Nicoara RD, Oberbaum M. Homeopathic Treatment for Postpartum Depression: A Case Report. *Journal of Evidence-Based Complementary & Alternative Medicine* 2016;(2016):1-4 (IF=1.931)
  - Vacaras V, Major ZZ, Buzoianu AD. Brain-derived neurotrophic factor levels under chronic natalizumab treatment in multiple sclerosis. A preliminary report. *Neurol Neurochir Pol* 2017, (51):221-226.
  - Axente DD, Major ZZ, Dudric VN, Constantea NA. Control of the functionality of the brachial plexus during robot-assisted transaxillary thyroid surgery. *Neurophysiology* 2017; 49(4): 295-300.
  - Sabin O, Bocșan IC, Trifa A, Major ZZ, Heghes SC, Brusturean Bota E, Buzoianu AD. Correlation between ABCB1 gene polymorphisms, antiepileptic drug concentrations and treatment response. *Revista Română de Medicină de Laborator* 2018; 26(4):479-487.
  - Major KA, Major ZZ, Craciunas R et al. Efficiency of Transcranial Magnetic Stimulation in Progressive Supranuclear Palsy: Estimation Using Goniometry and Dynamometry. *Neurophysiology* 2019; 51(1):57-62. <https://doi.org/10.1007/s11062-019-09791-y>.
  - Tucan P, Gherman B, Major KA, Vaida C, Major ZZ, Plitea N, Carbone G, Pislă D. Fuzzy Logic-Based Risk Assessment of a Parallel Robot for Elbow and Wrist Rehabilitation. *Int J Environ Res Public Health* 2020;17:654; doi:10.3390/ijerph17020654
  - Major ZZ, Vaida C, Major KA, Tucan P, Simori G, Banica A, Brusturean E, Burz A, Craciunas R, Ulinici I, Carbone G, Gherman B, Birlescu I, Pislă D. The Impact of Robotic Rehabilitation on the Motor System in Neurological Diseases. A Multimodal Neurophysiological Approach. *Int. J Environ Res Public Health* 2020, 17, 6557.
  - Major ZZ, Vaida C, Major KA, Tucan P, Brusturean E, Gherman B et al. Comparative Assessment of Robotic versus Classical Physical Therapy Using Muscle Strength and Ranges of Motion Testing in Neurological Diseases. *J Pers Med* 2021, 11, 953. <https://doi.org/10.3390/jpm11100953>.
  - Balaci GM, Oslobanu A, Major ZZ, Dăvid RE, Iepure M, Hancu D, Popa AM, Florian IS. Assessing the Efficacy of Anastomosis between Ansa Cervicalis and Facial Nerve for Patients with Concomitant Facial Palsy and Peripheral Neuropathy. *J Pers Med*. 2023, 13, 76. <https://doi.org/10.3390/jpm13010076>
- **Meeting abstracts published in Thomson-Reuters Web of Science (ISI) indexed journals:**
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  - Malfatti E, Major ZZ, Urtizberea JA. Diagnosing necrotizing myopathy with HMGR antibodies – a quest proving time is muscle. *Journal of Neuromuscular Diseases* 9 (2022) S288 DOI 10.3233/JND-229001
- **International, Thomson-Reuters Web of Science (ISI) indexed proceeding papers:**
  - Bocșan IC, Buzoianu AD, Militaru FC, Major ZZ. The influence of lamotrigine on rat behaviour. Reprinted from 9th Congress of the European Association for Clinical Pharmacology and Therapeutics (EACPT) International Proceedings. Medimond
- **Original full-text research articles published in journals indexed in international (non-ISI) databases:**
  - Șandor VI, Volda M, Bocșan CI, Șandor CT, Meszaros I, Major ZZ, Krausz LT. Comparative effects of keto-phenylbutazone and streptokinase on UV-induced skin inflammation in guinea pig. *Timișoara Medical Journal* 2006;56(2):280-283.
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- Tomescu-Baciu A, Krausz LT, **Major ZZ**. Immune receptor and cytokine expression in PMBC of Multiple Sclerosis patients. Romanian Journal of Biochemistry. 2009;46(Supplementa):69.
- Baniias-Palaghita L, **Major ZZ**, Catana C, Krausz TL, Vi Sandor. Terapia cu fumarati în scleroza multiplă. Medicina moderna. 2009;16(Suppl1):65-67.
- Sandor VI, Danciu MM, **Major ZZ**, Gheban D, Sabin O, Butură A, Trîmbițaș S. Histo-chemical changes produced by reserpine and dopamine in the adrenal medulla. Therapeutics Pharmacology and Clinical Toxicology. 2010;14(Supplement 3):37.
- Sandor VI, Niculae CE, Pătrulescu AM, Magyar DS, **Major ZZ**. The effects of fenoldopam in immobilization-induced gastric ulcers. Therapeutics Pharmacology and clinical Toxicology. 2010;14(Supplement 3):39.
- **Major ZZ**, Alda G. Neuromyelitis optica. Case report. Clujul Medical 2013;86(Supplement 3):S207

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- Sandor VI, Amza LC, Kenez EA, **Major ZZ**, Magyar DS, Chirica M et al. Efectul amfetaminei in administrare acuta in convulsiile prin pentetrazol. Pain and Drug Research – Zilele Medicamentului Editia a XIX-a. 2010;(Proceeding):29-34. ISSN: 1843-1038
- Sandor VI, Scurtea DM, Andresan-Marele FC, Gosa D, Butura A, **Major ZZ**, Kenez EA. Influenta tolperisoniei asupra efectelor stricninei la broasca si soarece. Pain and Drug Research – Zilele Medicamentului Editia a XIX-a. 2010;(Proceeding):35-40. ISSN: 1843-1038

**Books and book chapters:**

- Buzoianu AD, Militaru CF, Bocșan CI, **Zoltan MZ**. Antidepressants in the treatment of pain. In: Neurosciences: clinical application of recent knowledge (Eds. Dumitrașcu DL, Hoțoleanu C). Ed. Medicală Universitară "Iuliu Hațieganu", Cluj-Napoca. 2008; 148-157. ISBN 978-973-693-289-2
- Rajan S, Sharma D. „Neuroanestezia și neuromonitorizarea în chirurgia complexă a coloanei vertebrale și chirurgia cerebrală” in Ellenbogen RG, Sekhar LN, Kitchen ND. „Principiile chirurgiei neurologice” IVth ed., chapter adapted into romanian by **Major ZZ**, editor of the romanian version Prof. Dr. IS Florian, Ed. Elsevier-Hipocrate, 2018, 87-102. ISBN 978-6069-45762-7
- **Major ZZ**. Clinical Presentation. In: Florian IS, editor. Pineal region lesions Management Strategies and Controversial Issues. Springer; 2020. p. 27-32.

C. Research projects/grants

Program/Proiect	Rolul	Perioada
<b>FARMACYP</b> - Pharmacogenomic implications of genes CYP2C9, CYP2C19 and MDR1 polymorphisms in antiepileptic drugs therapeutic efficacy evaluation in idiopathic epilepsy - nr. 41-082 (PN-II)	Member	2007-2010
<b>TROMBOGEN</b> -Pharmacogenomic impact of the determination of VKORC1 and CYP2C9 genes over the efficacy, safety and costs of the anticoagulant treatment – nr. 42-127(PN-II)	Member	2008 - 2011
<b>ERIC</b> - Ascertaining the mechanism of fine-tuning of the immune response in the human tumoral and inflammatory pathology in order to find innovative therapies. - nr. 42-147(PN-II)	Member	2008 - 2011
The disease-modifying pharmaco-therapy induced expression of immunomodulatory receptors in relapsing-remitting multiple sclerosis - 27020/44/15.11.2011. (institutional grant)	Director	2011-2012
Comparison of electrophysiologic parameters in Myasthenia gravis patients with or without antibodies to acetylcholine receptors or muscle-specific tyrosine kynase, before and after treatment with pyrido-/neostigmine – 22714/27/06.10.2011. (institutional grant)	Mentor	2011-2012
Immunomodulatory receptor expression in the CSF of multiple sclerosis patients - 22714/46/06.10.2011. (institutional grant)	Mentor	2011-2013
<b>AgeWell</b> - Innovative Approaches regarding Rehabilitation and Assistive Robotics for Healthy Ageing - POC ID P_37_215, My SMIS Code 103415, Contract number 20/01.09.2016.	Member of the implementation team	2016-2020
EIT Health InnoStars RIS innovation project in partnership with TUCN	Coordinator of the MCHCJ partner	2019
Realizarea unui dispozitiv pentru livrarea prelungită și controlată a ruxolitinibului la pacienții cu glioblastom Proiect Experimental Demonstrativ, Competiția 2019 -PN-III-P2-2.1-PED2019-1387	Member	2020-2021
New frontiers in adaptive modular robotics for patient-centered medical rehabilitation – <b>ASKLEPIOS</b> , funded by European Union – NextGenerationEU and Romanian Government, under National Recovery and Resilience Plan for Romania, contract no. 760071/23.05.2023, code CF 121/15.11.2022, with Romanian Ministry of Research, Innovation and Digitalization, within Component 9, investment I8.	Member, neurology expert	2023-