



# Curriculum vitae

## PERSONAL INFORMATION

Sebastian Isac, M.D., Ph.D., D.E.S.A.

email:

ORCID ID: 0000-0002-2687-2611

UEF-ID BrainMap Code: U-1900-063H-6286

<https://publons.com/researcher/3143927/sebastian-isac/publications/>

<http://scholar.google.com/citations?user=nEalTPcAAAAAJ&hl=de> (Hirsch Index=12)

<https://www.webofscience.com/wos/author/record/IZQ-0389-2023> (Hirsch Index=10)

WOS Articles: 44

Nationality: Romanian

## Work Experience:

-01/05/2020- Present- Specialist in Anaesthesia and Intensive Care, Fundeni Clinical Institute, Bucharest (Romania)

-01/02/2019–01/05/2020-Specialist in Anaesthesia and Intensive Care  
Children Hospital V. Gomoiu, Bucharest (Romania)

-01/10/2015–30.09.2024 Assistant Professor-Physiology and Neurosciences  
C. Davila University of Medicine and Pharmacy, Bucharest (Romania)

-30.09.2024-present Lecturer- Anesthesia and Intensive Care 1- C. Davila University of Medicine and  
Pharmacy, Bucharest (Romania)

-26/07/2017–01/02/2019 Specialist in Anaesthesia and Intensive Care  
Filantropia Hospital, Bucharest (Romania)

-01/09/2014–01/01/2017 Junior Anaesthesiologist

Floreasca Hospital- Regional Trauma Centre, Bucharest (Romania)

-01/12/2013–01/08/2014 Junior Anaesthesiologist

Alfried Krupp Hospital, Essen (Germany)

-01/01/2012–01/12/2013 Junior Anaesthesiologist and Researcher

Academic Hospital Essen, Essen (Germany)

## Scientific Experience and Education:

-2024- Habilitation Thesis- Carol Davila University of Medicine and Pharmacy Bucharest- Romania

-01/09/2020- 2022- Postdoctoral Project- The impact of general anaesthesia on the immature brain  
previously exposed to perinatal asphyxia

-01/02/2020- PhD Degree- Carol Davila University of Medicine and Pharmacy, Bucharest- Magna cum  
Laude

-01/10/2014–30/01/2019 PhD Student (Governmental Scholarship) - "The impact of the maternal diet on  
the hypoxic-ischemic encephalopathy. A clinical, biochemical and epigenetic approach"

Carol Davila University of Medicine and Pharmacy, Bucharest (Romania)

-01/10/2014–Present Researcher in Neuroscience Laboratory

University of Medicine and Pharmacy- Physiology and Neuroscience Department, Bucharest (Romania)

-01/10/2006–30/09/2012 Medical Student

Carol Davila University of Medicine and Pharmacy, Bucharest (Romania)  
-01/10/2010–01/04/2011 ERASMUS Scholarship  
University of Medicine and Pharmacy, Vienna (Austria)

**Personal Skills:**

Mother tongue: Romanian

Foreign languages: German (Goethe Zertifikat-2011, Österreichisches Sprachdiplom-2010 )  
English (IELTS 2008)

**Communication skills:**

-good communication skills and flexibility gained through my experience as PhD Student  
-excellent contact skills with patients gained through my experience as health care provider

**Digital skills**

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SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem- solving
Independent user	Independent user	Independent user	Independent user	Independent user

**Additional Information:**

Honours and awards

- 2025- EDAIC Part II Evaluator (English, Romanian and German)
- 26.01.2019- PhD Degree in Medicine (Field: Physiology and Neurosciences)- *Magna cum Laude* (<https://umfcd.ro/sustinere-teza-drd-isac-i-sebastian/>)
- 01.04.2017- Diplomat of the European Society of Anaesthesiology and Intensive Care (D.E.S.A.)
- 01.09.2011 - Bachelor Thesis- Regional Anaesthesia of the Upper Limb

**Courses**

- 01.05.2016- 10.05.2016- Ultrasound Course for Anaesthesiologist- Hannover
- 01.10.2014-30.06.2015- Pedagogy Course- Bucharest
- 01.10.2014-30.06.2015- Bioethics in medical research Course-Bucharest
- 01.03.2015-08.03.2015- Transesophageal Ultrasound Course- Duesseldorf
- 06.2013-10.2013- Regional Anaesthesia Course- Neumarkt
- 01.05.2012-20.05.2012- Emergency Medicine Course
- 01.12-30.12.2007- Biostatistics Course- Bucharest

**Projects:**

01.12.2014- 01.12.2015- Operational Sectoral Programme Human Resources Development (POSDRU), project nr. 187/1.5/S/156069- Research 62- PhD studies in European context

**Conferences**

Oxidative Stress Induced By Organic Mercury Exposure. Cobilinschi, C., A-M. Cotae, I. Florea, S. Isac, R. Ungureanu, L. Mirea, R. C. Țincu, and I. M. Grințescu. Clinical Nutrition ESPEN, 2023.

Maternal diet alters the hippocampus epigenetic pattern in perinatal asphyxia. FENS Regional Meeting, Belgrade, 2019

The epigenetic transgenerational effect of maternal diet on offspring brain development in an animal model of perinatal asphyxia. Joint Event on annual epigenetics conference & International Conference on mechatronics, automation and systems engineering. Tokio 2018

Citicoline supplemented maternal diet protects the offspring hippocampus in perinatal asphyxia in rat. The 9th Conference of the National Neuroscience Society of Romania, Bucharest, 2018

The preventive effect of trans-resveratrol supplemented maternal diet on the hippocampal damage after perinatal asphyxia in rats. Medical International Conference for Students and Young Doctors, Bucharest, Romania, 2017

The neuroprotective effect of trans-resveratrol enriched maternal diet in immature hippocampus exposed to perinatal asphyxia. The 8th Conference of the National Neuroscience Society of Romania, Bucharest, 2017

Neuroprotective effect of oxytocin during in vivo neonatal hypoxia/hypercapnia in rats. Physiology 2016- Joint Meeting of the American Physiological Society and the Physiological Society. Dublin, 2016

A novel biochemical and epigenetic approach quantifying the hippocampus injury after perinatal asphyxia in rats. The 7th Conference of the National Neuroscience Society of Romania, Bucharest, 2016

Mild and severe perinatal asphyxia- an experimental model in rat. The 6th Conference of the National Neuroscience Society of Romania, Bucharest, 2015

## Articles

-**Sebastian Isac**, Anca Maria Panaitescu, Ana Spataru, Mara Iesanu, Alexandra Totan, Amalia Udriste, Natalia Cucu, Gheorghe Peltecu, Leon Zagrean, Ana-Maria Zagrean. Trans-resveratrol enriched maternal diet protects the immature hippocampus from perinatal asphyxia in rats, *Neuroscience Letters*, 2017, 653: 308-313, <https://doi.org/10.1016/j.neulet.2017.06.003>.

-Panaitescu AM, **Isac S**, Pavel B, Ilie AS, Ceanga M, Totan A, Zagrean L, Peltecu G, Zagrean AM. OXYTOCIN REDUCES SEIZURE BURDEN AND HIPPOCAMPAL INJURY IN A RAT MODEL OF PERINATAL ASPHYXIA, *Acta Endocrinol (Buchar)*., 2018, Volume 14(3): 315-319, <https://doi.org/10.4183/aeb.2018.315>.

-**Sebastian Isac**, Anca Maria Panaitescu, Mara Iesanu, Ioana Florentina Grigoras, Alexandra Totan, Amalia Udrist, Natalia Cucu, Gheorghe Peltecu, Leon Zagrean, Ana-Maria Zagrean. Maternal High-Fat Diet Modifies the Immature Hippocampus Vulnerability to Perinatal Asphyxia in Rats, *Neonatology*, 2018, 114 (4): 355-361, <https://doi.org/10.1159/000491383>

-Andrei, S., **Isac, S.**, Carstea, M., Martac, C., Mihalcea, L., Buzatu, C., Ionescu, D., Georgescu, D. E., Droc, G. Isolated liver trauma: A clinical perspective in a non-emergency center for liver surgery, *Experimental and Therapeutic*, 2022, 23:39, <https://doi.org/10.3892/etm.2021.10961>

-Iesanu, Mara Ioana, Carmen Denise Mihaela Zahiu, Ioana-Alexandra Dogaru, Diana Maria Chitimus, Gratiela Gradisteanu Pircalabioru, Suzana Elena Voiculescu, **Sebastian Isac**, Felicia Galos, Bogdan Pavel, Siobhain M. O'Mahony. Melatonin–Microbiome Two-Sided Interaction in Dysbiosis-Associated Conditions, *Antioxidants*, 2022, 11: 2244, <https://doi.org/10.3390/antiox11112244>

-Jipa, Miruna, **Sebastian Isac**, Artsiom Klimko, Mihail Simion-Cotorogea, Cristina Martac, Cristian Cobilinschi, and Gabriela Droc. Opioid-Sparing Analgesia Impacts the Perioperative Anesthetic Management in Major Abdominal Surgery, *Medicina*, 2022, 58(4): 487. <https://doi.org/10.3390/medicina58040487>

-Andrei S, **Isac S**, Jelea D, Martac C, Stefan MG, Cotorogea-Simion M, Buzatu CGS, Ingustu D, Abdulkareem I, Vasilescu C, Filipescu D, Droc G. COVID-19 Pandemic Was Associated with Lower Activity but Not Higher Perioperative Mortality in a Large Eastern European Center, *Med Sci Monit*, 2022, 28:e935809, <https://doi.org/10.12659/MSM.935809>

-Isac, T., **Isac, S.**, Ioanitescu, S., Mihaly, E., Tanasescu, M., Balan, D. G., Tulin, A., Iliescu, L. Dynamics of serum  $\alpha$ -fetoprotein in viral hepatitis C without hepatocellular carcinoma, *Experimental and Therapeutic Medicine*, 2021, 22(1): 749, <https://doi.org/10.3892/etm.2021.10181>

-**Sebastian Isac**, Anca Maria Panaitescu, Mara Ioana Iesanu, Vlad Zeca, Natalia Cucu, Leon Zagrean, Gheorghe Peltecu, Ana-Maria Zagrean. Maternal Citicoline-Supplemented Diet Improves the Response of the Immature Hippocampus to Perinatal Asphyxia in Rats, *Neonatology*, 2021, 117(6): 729-735, <https://doi.org/10.1159/000512145>

-Isac, T., **Isac, S.**, Rababoc, R., Cotorogea, M., Iliescu, L. Epigenetics in inflammatory liver diseases: A clinical perspective (Review), *Experimental and Therapeutic Medicine*, 2022, 23(5): 366, <https://doi.org/10.3892/etm.2022.11293>

-Punga D, **Isac S**, Paraipan C, et al. Impact of COVID-19 Infection on Liver Transplant Recipients: Does It Make Any Difference?, *Cureus*, 2022, 14(2): e22687, <https://doi.org/10.7759/cureus.22687>

-Bobirca, Florin, Catalin Gabriel Smarandache, Anca Bobirca, Cristina Alexandru, Dan Dumitrescu, Anca Pantea Stoian, Cristina Bica, Lacramioara Aurelia Brinduse, Anca Musetescu, Daniela-Elena Gheoca-Mutu, Sebastian Isac, Ioan Ancuta. The Outcome of Surgical Treatment for the Neuropathic Diabetic Foot Lesions—A Single-Center Study, *Life*, 2022, 12(8): 1156, <https://doi.org/10.3390/life12081156>

-Bobircă, Anca, Anca Emanuela Musetescu, Anca Bordianu, Anca Pantea Stoian, Teodor Salmen, Dan-Cristian Marinescu, Cristina Alexandru, Alesandra Florescu, Raluca Radu, **Sebastian Isac**, and et al. Novel Biomarkers Predictive of Diabetic Charcot Foot—An Overview of the Literature, *Life*, 2022, 12(11): 1944. <https://doi.org/10.3390/life12111944>

-**Sebastian Isac**, Bogdan Pavel, Maria Dobre, Elena Milanesi, Irina-Mihaela Matache, Raul-Mihai Paun, Artsiom Klimko, Mara Ioana Iesanu, Gabriela Droc, and Ana-Maria Zagrean. Does a Single Exposure to General Anesthesia Have a Cumulative Effect on the Developing Brain after Mild Perinatal Asphyxia?, *Life*, 2022, 10: 1568, <https://doi.org/10.3390/life12101568>

-Buzatu, Georgiana-Cristina, Florin-Teodor Bobirca, **Sebastian Isac**, Oana Antonia Mihalache, Mihail Cotorogea-Simion, Alina Tita, Cristian Cobilinschi, Maria Daniela Tanasescu, Anca Bobirca, and Gabriela Droc. The Cumulative Detrimental Effect of COVID-19 Pneumonia in a Patient with Myasthenic Crisis: A Case Report and Overview of the Literature, *Life*, 2022, 12(10): 1482, <https://doi.org/10.3390/life12101482>

-Cotorogea-Simion, Mihail, **Sebastian Isac**, Alina Tita, Letitia Toma, Laura Elena Iliescu, Adriana Mercan-Stanciu, Teodora Isac, Anca Bobirca, Florin Bobirca, Cristian Cobilinschi, and et al. Mesenteric Ischemia in a Patient with Essential Thrombocythemia: Does COVID-19 Play Any Role? A Case Report and Overview of the Literature, *Medicina*, 2022, 58(9): 1147 <https://doi.org/10.3390/medicina58091147>

-Cotorogea-Simion, Mihail, Bogdan Pavel, **Sebastian Isac**, Teodora Telecan, Irina-Mihaela Matache, Anca Bobirca, Florin-Teodor Bobirca, Razvan Rababoc, and Gabriela Droc. What Is Different in Acute Hematologic Malignancy-Associated ARDS? An Overview of the Literature, *Medicina*, 2022, 58(9): 1215, <https://doi.org/10.3390/medicina58091215>

-Bobirca, Anca, Cristina Alexandru, Anca Emanuela Musetescu, Florin Bobirca, Anca Teodora Florescu, Magdalena Constantin, Tiberiu Tebeica, Alesandra Florescu, **Sebastian Isac**, Mihai Bojinca, and et all. Anti-MDA5 Amyopathic Dermatomyositis—A Diagnostic and Therapeutic Challenge, *Life*, 2022, 8: 1108, <https://doi.org/10.3390/life12081108>

-Droc, Gabriela, Maria Camelia Stancioaica, Corina Gabriela Soare, Mihai-Gabriel Stefan, Daiana Ingustu, Cristina Martac, Daniel Coriu, **Sebastian Isac**, Nicolae Suci, and Stefan

Andrei. Acute Promyelocytic Leukemia and Severe Differentiation Syndrome in Pregnancy—A Management Challenge, *Life*, 2023, 13(5): 1141, <https://doi.org/10.3390/life13051141>

-Droc, Gabriela, Cristina Martac, Cristina Georgiana Buzatu, Miruna Jipa, Maria Daniela Punga, and Sebastian Isac. Orthotopic Liver Transplantation of a SARS-CoV-2 Negative Recipient from a Positive Donor: The Border between Uncertainty and Necessity in a Pandemic Era- Case Report and Overview of the Literature, *Medicina*, 2023, 59(5): 836, <https://doi.org/10.3390/medicina59050836>

-Ingustu, Daiana-Georgiana, Bogdan Pavel, Silvia-Ioana Paltineanu, Diana-Irene Mihai, Mihail Cotorogea-Simion, Cristina Martac, Madalina-Marieta Florescu, Cristian Cobilinschi, **Sebastian Isac**, and Gabriela Droc. The Management of Postoperative Cognitive Dysfunction in Cirrhotic Patients: An Overview of the Literature, *Medicina*, 2023, 59(3): 465, <https://doi.org/10.3390/medicina59030465>

-Droc, Gabriela, and **Sebastian Isac**. Perioperative Care in Patients with Chronic Liver Disease: What Can We Do More?, *Medicina*, 2023, 59(2): 384, <https://doi.org/10.3390/medicina59020384>

-Tincu, Radu Ciprian, Cristian Cobilinschi, Iulia Alexandra Florea, Ana-Maria Cotae, Alexandru Emil Băetu, **Sebastian Isac**, Raluca Ungureanu, Gabriela Droc, Ioana Marina Grintescu, and Liliana Mirea. Effects of Low-Level Organic Mercury Exposure on Oxidative Stress Profile, *Processes*, 2022, 10(11): 2388. <https://doi.org/10.3390/pr10112388>

-Sandru, Stefan, Dan Buzescu, Carmen Denise Mihaela Zahiu, Ana Spataru, Anca Maria Panaitescu, **Sebastian Isac**, Cosmin Ion Balan, Ana-Maria Zagrean, and Bogdan Pavel. Near-Infrared Spectroscopy Usefulness in Validation of Hyperventilation Test, *Medicina*, 2022, 58(10): 1396, <https://doi.org/10.3390/medicina58101396>

-Cobilinschi, Cristian, Radu Țincu, Raluca Ungureanu, Ioana Dumitru, Alexandru Băetu, **Sebastian Isac**, Claudia Oana Cobilinschi, Ioana Marina Grințescu, and Liliana Mirea. Toxic-Induced Nonthyroidal Illness Syndrome Induced by Acute Low-Dose Pesticides Exposure—Preliminary In Vivo Study, *Toxics*, 2022, 10(9): 511, <https://doi.org/10.3390/toxics10090511>

-Teodora Isac, Gabriela Droc, Artsiom Klimko, Mihail Cotorogea-Simion, Maria Dobre, Elena Milanese, Natalia Cucu, Andra-Elena Balcangiu-Stroescu, Laura Iliescu, **Sebastian Isac**. Epigenetic Modulation in Viral Hepatitis C Infected Patients after Successful Therapy, *Biointerface Research in Applied Chemistry*, 2023, 13(3):213

-Mihalcea Lucian, **Sebastian Isac**, Simion-Cotorogea Mihail, Klimko Artsiom and Droc Gabriela. Reverse Takotsubo cardiomyopathy after orthotopic liver transplantation. A case report, *The Journal of Critical Care Medicine*, 2022, 8(2): 117-122, <https://doi.org/10.2478/jccm-2022-0002>

-Bălan, Daniela-Gabriela; Avino, Adelaida; Mutu, Daniela-Elena Gheoca; Gaube, Alexandra; Neagu, Alexandra; Tulin, Raluca; **Isac, Sebastian**; Georgescu, Dragoș Eugen; Dragoș, Dorin; Cobilinschi, Claudia; Chiperi, Liviu Vasile; Ionescu, Dorin; Balcangiu-Stroescu, Andra-Elena; Călinoiu, Amalia Loredana; Văcăroiu, Ileana Adela. CORRELATION DEPENDING ON AGE BETWEEN SALIVA AND PLASMA PARAMETERS, *Internal Medicine / Medicina Interna* . 2022, 19(4): 27-35, <https://doi.org/10.2478/inmed-2022-0226>

-Văcăroiu, Ileana Adela; Calangiu, Filip; Tănase, Georgiana; **Isac, Sebastian**; Georgescu, Dragoș Eugen; Dragoș, Dorin; Cobilinschi, Claudia; Chiperi, Liviu Vasile; Ionescu, Dorin; Balcangiu-Stroescu, Andra-Elena; Călinoiu, Amalia Loredana; Tulin, Raluca; Bălan, Daniela -Gabriela. BIOMARKERS INVOLVED IN THE MINERAL-BONE DISORDERS SECONDARY TO CHRONIC HEMODIALYSIS, Internal Medicine / Medicina Interna, 2022, 19(4):17-25, <https://doi.org/10.2478-inmed-2022-0225>

-Georgescu, Dragoș-Eugen, Vacaroiu, Ileana Adela, Mincă, Alexandru, Maria-Daniela, Tanasescu, Droc, Gabriela, **Isac, Sebastian**, Tulin, Florentina-Raluca, Michire, Alexandru, Georgescu, Mihai-Teodor, Ionescu, Dorin, Bogdan, Caraban and Georgescu, Teodor-Florin. How COVID-19 Pandemics Changed the Treatment Protocols for Patients with Gynecological Tumors, ARS Medica Tomitana, 2021, 27(1): 50-57, <https://doi.org/10.2478/arasm-2021-0010>

### **Memberships**

2015- present- Member of the European Society of Anaesthesiology and Intensive Care

2015-present- Member of the Romanian Society of Anesthesia and Intensive Care

2014- present- Member of Romanian Neuroscience Society

20.04.2026

