

SNACC Secretary-Treasurer Application

Application Deadline: April 30, 2026 at 11:59pm ET

The Secretary/Treasurer is a member of the Executive Committee and in line to progress to President of the Society. The responsibilities of the Secretary/Treasurer are outlined in detail in [SNACC Bylaws](#). This includes managing the overall functioning of the society as a member of the Executive Committee, including but not limited to, the management of finances, budgeting, organizing annual meeting, fundraising, and strategically advancing SNACC, and perioperative neuroscience.

This position involves significant time commitment and attendance at all meetings of the Executive Committee and Board of Directors is required.

Minimum Prerequisites:

- At least five (5) years of active membership in SNACC in good standing is a prerequisite for nomination to this post.
- Demonstration of a track record of service to SNACC (such as service on the Board of Directors, leadership of SNACC committees/task forces, consistent service, and active contributions to committee activities)
- Dedication to the values of SNACC and its mission, and commitment to diversity, equity, and inclusion.
- Demonstration of meaningful contributions to neuroanesthesiology/neuroscience through research, education, or innovation.
- Leadership experience in nominee's institution and other relevant professional organizations will be accounted as strength for candidacy.

Self-nominations are accepted for this post. Alternatively, active members of the Society can nominate another member by describing the strengths of the nominee and highlights of their CV. The nominating committee will pursue consent from the nominee before considering their candidacy.

Nominee's Full Name	Eugenia Ayrian
Nominee's Email Address	eugenia.ayrian@gmail.com
Credentials (e.g., MD)	MD, FASA
Current Institution	University of Southern California (USC)
SNACC Member Since (Year)	2001

Upload Headshot



Upload CV



Curriculum Vitae - February, 2026.pdf

Services to SNACC, including leadership roles (limit to no more than five (5) most significant services)

1. Director-at-Large; Membership Committee Liaison to the Board - 2 years
2. Trainee engagement Committee - Head of Medically Challenging cases for Newsletter - 4 years
3. Member of Professional & Public Communications Committee - since 2002
4. "Classroom" Project for Goals and Objectives for Neurosurgical residency rotation - 6 years
5. Member of Task Force Committee for Developing the "Evaluation Tool for ACGME Milestones for Neuroanesthesiology" - Developed G&O for Basic and Advanced Neuroanesthesiology rotation for residents

Services/Accomplishments in Perioperative Neuroscience (limit to no more than five (5) most significant services)

1. PI and a participant in multiple research projects and publications in the world of Neuroanesthesiology
2. National and international lecturer on multiple topics in Neuroanesthesiology
3. Chair of Committee in Neuroanesthesiology at ASA
4. Head of the Division of Neuroanesthesiology at USC
5. Head of Neuroanesthesiology fellowship at USC

Other Leadership Experience (e.g., applicant's own institution or other professional organizations; limit to no more than five (5) services)

1. Secretary of the California Society of Anesthesiologists (CSA) – 2023-Present
2. Chair of Membership Committee at CSA - 2019-2023
3. Member of Membership Committee at the American Society of Anesthesiologists (ASA)
4. CSA Delegate to ASA – 2020-Present

5. Chair of four national CME meetings (2 in Hawaii and 2 in California) and one USC meeting - created the programs and delivered lectures on Neuroanesthesiology

Commitment to diversity, equity, and inclusion (limit 50 words)

I will promote fairness within the society. I will work tersely within Secretary-Treasurer scope of responsibilities to promote a fair environment for all members of SNACC.

How do you envision advancing SNACC as Secretary-Treasurer and future President? (limit 150 words)

There is a strong alignment between my experience and the responsibilities of the Secretary/Treasurer position. As CSA Secretary, I've led membership recruitment efforts, championing the growth and expanding Early Career engagement through targeted services. Under my leadership, CSA established a dedicated Medical Student Forum to support future leaders. My role on the CSA Finance Committee has strengthened my ability to integrate financial oversight with strategic membership development. As a current SNACC Director-at-Large and Membership Committee representative, I've effectively communicated committee initiatives and proposed strategies for membership growth. These include utilizing retired members as mentors for early-career members, developing a trainee-focused survey to support transition into active membership, conducting program directors' outreach. They were met by the Board with enthusiasm and strong potential for advancing SNACC's growth. I'm also committed to broadening SNACC's international reach. I currently lead an international USC collaboration, including monthly lectures for medical students, international scientific projects.

Anything else you would like considered in your candidacy? (limit 50 words)

I've undergone extensive leadership training and held leadership roles as Vice Chair of Education, Secretary of CSA, Neuroanesthesiology Committee Chair of ASA. My vision for SNACC is an Early Career membership engagement through ICPNT promotion and trainees' involvement in the Society; active collaboration with other organizations; increase of international participation.

Name of Person Submitting Nomination	Eugenia Ayrian
Email Address of Person Submitting Nomination	eugenia.ayrian@gmail.com

CURRICULUM VITAE

EUGENIA AYRIAN

FEBRUARY, 2026

PERSONAL INFORMATION:

Work

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HC4, 3600
Los Angeles, CA 90033

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Fax: (323) 441-8029

Work Email: eyarian@med.usc.edu
Eugenia.ayrian@gmail.com

Home

2151 Lenore Dr.
Glendale, CA 91206

Citizenship: USA

EDUCATION AND PROFESSIONAL APPOINTMENTS

EDUCATION:

1982-1983	High School, School #147, Yerevan, Armenia
1986-1987	Art Study Diploma, Major of Social Studies, Medical Institute, Yerevan, Armenia
1984-1990	Doctor of Medicine, Medical Institute, Yerevan, Armenia
2022-2023	Physician Leadership Program, Rossier School of Education and Keck School of Medicine, USC, Los Angeles, CA

POST-GRADUATE TRAINING:

1997-1998	Internship in Internal Medicine, LAC+USC Medical Center, Los Angeles
1998-2001	Residency in Anesthesiology, LAC+USC Medical Center, Los Angeles

ACADEMIC APPOINTMENTS:

1995-1997	Clinical Research Volunteer	Department of Medicine, Division of Endocrinology, UCLA
2001-2003	Instructor of Clinical Anesthesiology	Department of Anesthesiology, USC Keck School of Medicine
2003-2015	Assistant Professor of Clinical Anesthesiology	Department of Anesthesiology, USC Keck School of Medicine
2015 – 2022	Associate Professor of Clinical Anesthesiology	Department of Anesthesiology, USC Keck School of Medicine
2022-Present	Clinical Professor of Anesthesiology	Department of Anesthesiology, USC Keck School of Medicine

ADMINISTRATIVE APPOINTMENTS:

2011-2020	Director of Division of Neuroanesthesiology	Department of Anesthesiology, USC Keck School of Medicine, Anesthesiology, Los Angeles, California
2015-Present	Director of Neuroanesthesiology Fellowship	Department of Anesthesiology, USC Keck School of Medicine, Anesthesiology, Los Angeles, California
2019-2020	Director of Keck Medical Students Clerkship	Department of Anesthesiology, USC, Keck School of Medicine, Anesthesiology, Los Angeles, California
2020-2022	Director of Medical Students Education in Anesthesiology	Department of Anesthesiology, USC, Keck School of Medicine, Anesthesiology, Los Angeles, California
2022-Present	Vice Chair of Education	Department of Anesthesiology, USC, Keck School of Medicine, Anesthesiology, Los Angeles, California
10/2025-2/2026	Interim Director of Keck Medical Students Clerkship	Department of Anesthesiology, USC, Keck School of Medicine, Anesthesiology, Los Angeles, California

LICENSURE, CERTIFICATIONS**LICENSURE:**

1998-Present Physician and Surgeon License A77761 - California, Active

BOARD CERTIFICATION OR ELIGIBILITY:

2003-Present American Board of Anesthesiology- 35842970, Certified

HONORS, AWARDS:

1990	Medical Doctor Diploma with Honors	Medical Institute, Yerevan, Armenia
2015	Certificate of Recognition for Dedicated Service to the Committee on Admissions	Keck School of Medicine of USC
2017	Certificate of Recognition for Dedicated Service to the Committee of Admissions	Keck School of Medicine of USC
2018	1 st place award for Scientific Abstract Presentation	CSA Annual Meeting, Palm Springs, 2018
2021	Fellow of American Society of Anesthesiologists (FASA)	American Society of Anesthesiologists (ASA)
2022	Award in Recognition of Outstanding Teaching in Year 4 Medical Students	University of Southern California (USC)
2023	Certificate of completion of Leadership Development Program for Physician Leaders	University of Southern California (USC)
2023	Certificate of appreciation for participation in Korean Society Anesthesiologists Scientific Meeting	Korean Society of Anesthesiologists
2023	Certificate for successful completion of Physician Leadership Program, Cohort 1	Rossier School of Education and Keck School of Medicine, USC

TEACHING:

DIDACTIC TEACHING:

Anesthesiology Department

2001 - Present	Patient Care: Discussion of Patient's Condition and Preparation to the Surgery with the Resident on a Daily Basis	1 (daily)	Case Discussions and Teaching in the OR
2006	Brain Protection	2	Journal Club Moderator
2006-2007	Pulse Oximetry and BIS Monitoring	1 (yearly)	Morning Lecture Presenter
2007-2014	Barash, Chapter Review: "Neuroanesthesia"	1 (yearly)	Morning Lecture Presenter
2007-2012	Anesthesia for Neurosurgery	1 (yearly)	Morning Lecture Presenter
2007 – Present	Intravenous Induction Agents	1 (yearly)	Morning Lecture Presenter

2007 - Present	Posterior Fossa Craniotomy	1 (yearly)	Morning Lecture Presenter
July 2010	Postoperative Cognitive Dysfunction	2	Journal Club Moderator
October 2010	Round Table Discussion on Preservation, Protection, and Regeneration of the Brain	2	International Journal Club Moderator
May 2012	Inhalational versus Total Intravenous Anesthesia, POCD	2	Journal Club Moderator
March 2014	Evoked Potentials, Implications for Anesthesia	2	Afremnoon Lecture Presenter
April 2015	Infratentorial Craniotomy and Postoperative Respiratory Failure	2	Journal Club Moderator
April 2016	Role of Diuretics in Craniotomy	2	Journal Club Moderator
April 2017	IVD management during surgery	2	Journal Club Moderator
2019, 2021	Anesthesia for Neurosurgery. Hypothermia	2	Lecture for Senior Residents
2019, 2020	Anesthesia for an Awake Craniotomy	1	PBLD
2021	Anesthesia for Brain Tumor	1	Lecture for CA1 Residents
2021, 2023	Anesthesia for Awake Craniotomy	1	PBLD for CA3 Residents

Medical School
2013 – Present

2013 – Present	Teaching in the OR	0.5 (3 days per week)	Teaching in OR
2013 – Present	Annual Workshop for Airway Management	2 (yearly)	Workshop Moderator for Medical Students - MSIII, MSIV
2013 – Present	Introduction to Anesthesiology MSIII Rotation	1 (every 3-4 weeks)	Lecturer for Medical Students
2013-2022	Evaluation of Airway	2 (every 3-4 weeks)	Lecturer for Medical Students
2013- 2022	Preoperative Evaluation	2 (every 3-4 weeks)	Lecturer for Medical Students
2013- Present	IV Induction Agents	2 (every 3-4 weeks)	Lecturer for Medical Students
2013- Present	Muscle Relaxants	2 (every 3-4 weeks)	Lecturer for Medical Students
2013- 2022	Fluid Management	2 (every 3-4 weeks)	Lecturer for Medical Students
August 2016	Introduction to Anesthesiology. History and the Future	1	Core Lecturer for Medical Students

October 2016 – May 2018	Intravenous induction Agents + Muscle Relaxants	1 (every 6 weeks)	Core Lecturer for Medical Students
May 2018 - 2020	Intravenous induction Agents	1 (every 6 weeks)	
May 2018 - 2020	Muscle Relaxants	1 (every 6 weeks)	
2017 – 2020	Annual Workshop for Airway Management	2 (yearly)	Workshop Moderator for Medical Students - MSI, MSII
April 2019	Workshop for iv drawing for Medical students	1	Workshop moderator
April 2020, March 2021, March 2022 April, 2023	Overview of Vasopressors	1	Core Lecturer for Medical Students Transition to Residency Course
2025-Present	Basic Airway workshop	2	Workshop Moderator for Medical Students - MSI, MSII

CME COURSES DEVELOPED

CSA Online CME. Exp. Date: March 2018: <u>Ref #145544</u>	Pain and the Brain – What We Have Learned from Functional Neuroimaging	1	<u>S. Mackey, E. Ayrian</u> (Additional contributor - reviewer)
CSA, 2016	CSA Annual Anesthesia Meeting	10	Co-chair for Planning and Supporting PBLD Sessions
CSA, 2017	CSA Annual Anesthesia Meeting	24	Chair of the Meeting
CSA, 2020	CSA CME Meeting in Maui	25	Chair of the Meeting
V.ZelmanCenter for Distant and International Education, Anesthesiology Department, USC, 2022	1 st International Symposium of Anesthesiologists, Researchers and Educators on Safety in Anesthesiology	4	Chair and Moderator
V.ZelmanCenter for Distant and International Education, Anesthesiology Department, USC, 2023	2 nd International Symposium Anesthesiologists, Researchers, and Educators on Innovations in Anesthesiology	3.5	Chair and Moderator
V.ZelmanCenter for Distant and International Education,	Vladimir Zelman, MD, PhD Symposium in Safety and Sustainability in Perioperative care	7.5	Chair and Lecturer

Anesthesiology
Dpt, USC,
September, 2024
CSA, 2025

CSA CME Meeting in Kauai

Meeting Chair and Lecturer

COURSES DEVELOPED

2001	Neuroanesthesiology Syllabus	6	Discussed the goals of rotation and a collection of the latest review articles
2001-2009	Yearly Neuroanesthesiology Syllabus Update	3 (yearly)	A comprehensive exam has been created to evaluate the resident at the end of the rotation
2009-2010	Creation of Neuroanesthesiology Internet Site for Resident Education	3 (yearly)	Goals and Objectives, latest review articles, comprehensive exam, patient' management
2010 – 2020	Organization and Management of Official Neurosurgery Rotation for Residents	3 (yearly)	Update of information and comment on resident's work
2015	Establishment of Neuroanesthesiology Fellowship	10	Submission and Approval by the USC GME Committee
2018	Establishment of New Neuroanesthesiology Syllabus	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2018	Establishment of 3-weeks sub-surgical anesthesiology clerkship for MSIII	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2019	Establishment of 4-weeks elective anesthesiology clerkship for MSIV	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2020	Establishment of mandatory anesthesiology clerkship MSII-III	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2020	Establishment of on-line anesthesiology clerkship MSII-III	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2020	Establishment of Virtual MSIV anesthesiology rotation	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2020	Establishment of Virtual International Lecture Course	5	Managing the course program, scheduling, feedback

2021	for medical students in Novosibirsk, Russia	5	
	Management of Virtual International Anesthesiology Lecture Course for medical students in Novosibirsk, Russia	5	Managing the course program, scheduling, lecturing, feedback
2022	Management of Virtual International Anesthesiology Lecture Course for medical students in Novosibirsk, Russia	5	Managing the course program, scheduling, lecturing, feedback
2022	Women in Anesthesiology National Symposium for Medical Students	5	Creation and managing the program, scheduling, presenting, feedback
2023	Yearly Virtual International Lecture Course for medical students in Novosibirsk, Russia		Managing the course program, scheduling, feedback
2024	Research Rotation for residents	5	Rotation description, Goals and objectives, comprehensive exam, patient' management
2024	ACGME application for residency		Worked on application and its submitting
2024	Yearly Virtual International Lecture Course for medical students in Novosibirsk, Russia		Managing the course program, scheduling, feedback
2025	Yearly Virtual International Lecture Course for medical students in Novosibirsk, Russia		Managing the course program, scheduling, feedback
2025	Lecture Series for PGY-1 residents in Anesthesiology for Keck School of Medicine		Creating the course program of weekly lectures

UNDERGRADUATE, GRADUATE AND MEDICAL STUDENT (OR OTHER) MENTORSHIP:

2013	Anush Javaherian	MS-3	Guidance: residency application
2014	Samuel Hong	MS-4	Guidance: residency application

2015	Marie Le Clair	MS-3	Guidance: residency application
2017	Sydney Silzer	CA-3	QI: Use of iv Anetaminophen at the USC
2017-2018	Kevin Vu	Resident	QI: ICU and Hospital Stay after Complicated Spine Surgery
2017-2018	Jeremy Laney	Resident	QI: ICU and Hospital Stay after Complicated Spine Surgery
2019-2020	Alexandra S Kabanova	Gradute Student Thesis Committee	Internal medicine, Zelman Institute Of Medicine and Psychology, Novosibirsk, Russia
2020-2021	Betsega Wolde (Awelachew)	MSIV	Guidance: residency application
2020-2021	Braulio Fernandez	MSIII, MSIV	Guidance: residency application
2020-2021	Erika Baral	MSIII, MSIV	Guidance: residency application
2020-2021	Jason Hsieh	MSIII, MSIV	Guidance: residency application
2020-2021	Makela Stankey	MSIII, MSIV	Guidance: residency application
2021-2022	Christopher Tien	MSIV	Guidance: residency application
2021-2022	Nasir Khan	MSIII, MSIV	Guidance: residency application
2021-2022	Philip Paulson	MSIV	Guidance: residency application
2023	Angel Mendoza	High school student	Guidance: introduction to Medicine
2023	Lana Bouhler-Price	High school student	Guidance: introduction to Medicine
2023	Jonathan Martinez	Quantitative Biology/Applied Mathematics undergraduate	Dornsife/Keck Shadowing Program of USC
2023-2024	Harrison Ma	MSIV	Guidance: residency application
2023-2024	Yasko Mano	MSIV	Guidance: residency application

**GRADUATE STUDENT THESIS, EXAM AND DISSERTATION COMMITTEES:
POSTGRADUATE MENTORSHIP:**

2008-2011	Lisa Vu	Privet practiced	
G2011-2014	David Gutierrez	Privet practice	
2011-2014	Sawn Rooffian	Privet practice	
2011-2014	Bijan Navidi	Privet practice	
2014-2017	Christofer Lim	Privet Practice	
2014-2017	Sina Samie	Privet Practice	
2017	Anush Javaherian	Privet Practice	QI: Use of iv Anetaminophen at the USC
2017-2018	Kevin Vu	Privet Practice	QI: ICU and Hospital Stay after Complicated Spine Surgery
2017-2018	Jeremy Laney	Academic Practice	QI: ICU and Hospital Stay after Complicated Spine Surgery
2018-present	Kevin Liu	Privet Practice	Guidance: residency
2018-present	Adrian Ng	Privet Practice	Guidance: residency
2018-present	Alex Chen	Privet Practice	QI: ICU and Hospital Stay after Complicated Spine Surgery
2018-2020	Marie Le Clair	Privet Practice	QI Project/Abstract/Publication: Use of iv Anetaminophen in Spine Surgery. Top 5 Abstract, Best of the Meeting Award. American Society of Regional Anesthesia and Pain Management Meeting, Las Vegas, 2019
2019-Present	Jennifer Meeker	Privet Practice	Presentation on national CME meeting/ Publication: Caring for a cannabis naton: implications for an anesthesiologist
2018-2020	Robert Situ	Academic Practice	Guidance: residency

MENTORSHIP OF FACULTY:

2013-2016	Ellen Park	Anesthesiology, USC
2019-2020	Vibha Mahendra	Anesthesiology, USC
2022-Present	Ashley Balentyne	Anesthesiology, USC
2022-Present	Jessica Lee	Anesthesiology, USC
2023-Present	Stephanie Nercisiian	Anesthesiology, USC

SERVICE

DEPARTMENT SERVICE:

2001-2008	Member of Quality Improvement Committee	Anesthesiology, USC
2001-2013	Member of Residents Educational Committee	Anesthesiology, USC
2013-Present	Member of Clinical Competency Committee	Anesthesiology, USC
2017-2022	Member of Faculty Compensation Committee	Anesthesiology, USC
2018-Present	Member of Core Faculty	Anesthesiology, USC
2018-Present	Program Evaluation Committee (PEC)	Anesthesiology, USC
2020-Present	International collaboration with Zelman's School of Medicine and Psychology of Novosibirsk State University, Novosibirsk, Russia	Anesthesiology, USC
2022-Present	Member of Leadership Group Committee	Anesthesiology, USC
2023-Present	Member of Faculty Promotions Committee	Anesthesiology, USC

MEDICAL SCHOOL SERVICE:

2011-2019	Airway Management Annual Workshop for Medical Students III/IV	USC School of Medicine
2012-2020	Judge for Medical Student Research Forum & Poster Days	USC School of Medicine
2013-Present	Teaching Faculty for 3 rd Year Medical Students undergoing Anesthesiology Rotation: orientation of all new students coming for the 3 rd year Anesthesiology Rotation, 5 lectures for all 3 rd year medical students on the rotation	USC School of Medicine
2013-Present	Member of Medical Students Evaluation and Recruitment Subcommittee of Admission Committee	USC School of Medicine
2015-Present	Member of Student Selection Subcommittee of Admission Committee	USC School of Medicine
2016	Member of LCME Sub-Committee for the Institutional Self-Study Portion of the Upcoming Medical School Accreditation	USC School of Medicine
2017-2020	Basic Airway Management Annual Workshop for Medical Students I/II	USC School of Medicine
2019-2020	Workshop for iv drawing for Medical students I	USC School of Medicine
2019-Present	Member of Medical Education Curriculum Committee (MECC)	USC School of Medicine
2021-Present	Mentor for USC medical student team at international medical tournament in Dr. Zelman's School of Medicine and Psychology, Novosibirsk, Russia	USC School of Medicine
2021-Present	Member of International Studies Committee	USC School of Medicine
2023	Member of Student Recognition Awards Committee	USC School of Medicine
2023-Present	Member of Scholarship Committee	USC School of Medicine
2023-Present	Member of Curriculum Review Subcommittee	USC School of Medicine
2024-Present	Member of Course review Committee (CRC)	USC School of Medicine

HOSPITAL OR MEDICAL GROUP SERVICE:

2011-2023	Pharmacy & Therapeutic Committee Member: addressing the problems of drug shortages and needs of anesthesiologists in the operating room to the P&T Committee on monthly bases, facilitation of communication between Operating Room Pharmacy and anesthesiology attendings, residents, CRNAs	Keck Hospital of USC
2017-2020	Gender Equity Taskforce	Keck Hospital of USC
2023-Present	Mentorship shadowing program for undergraduate students	Keck Medical Center Office of Academic Affairs, USC Dana and David Dornsife College of Letters, Arts and Sciences and Keck School of Medicine of USC

UNIVERSITY SERVICE:

2014-2016	Member of USC Health Sciences IRB Committee	USC Keck School of Medicine
2021-Present	Member of USC International Studies Committee	USC Keck School of Medicine
2023-Present	Clinical Advisor for Global Medical Brigades (GMB)	USC Undergraduate Education

PROFESSIONAL SERVICE:

2011-Present	Communication Committee	SNACC
2012-2014	Head of Special Interest Group on Postoperative Cognitive Dysfunction	SNACC
2012-2019	District 3 Delegate	CSA
2012-Present	Member of Educational Programs Division (EPD)	CSA
2015-2017	Member of Task Force Committee for Developing the "Evaluation Tool for ACGME Milestones for Neuroanesthesiology"	SNACC
2017-2019	Member of the CSA Redistricting Task force	CSA
2017-Present	Member of Legislative Committee	CSA
2017-Present	Member of the ASA Committee on Neuroanesthesia	ASA
2017-Present	Member of the ASA Abstract Review Subcommittee on Clinical Neurosciences	ASA
2018-Present	Trainee Engagement Committee (TEC)	SNACC
2018-Present	California Delegate/Alternative Delegate to ASA	ASA
2019-Present	Leader of Challenging Cases Project for Newsletter	SNACC
2019-2023		
2019-Present	Assistant Secretary	CSA

2019-2023	Member of Exacutive Committee	CSA
2019-2021	Chair of Membership Committee	CSA
2019-Present	Member of Hawaii Meetings EPD Subcommittee	CSA
2020-2021	Member of ASA Educational Track Neuroanesthesia Subcommittee	ASA
2020-Present	Vice Chair of the ASA Committee on Neuroanesthesia	ASA
2021- Present	Member of Professional & Public Communications Committee	CSA
2021-Present	“Neuroanesthesia Classroom” Project for Goals and Objectives for Neurosurgical residency rotation	SNACC
2021-Present		
2021-Present	Member of Finance and Administration Committee	CSA
2021-Present	Chair of the ASA Committee on Neuroanesthesiology	ASA
2022-Present	Member of ASA Committee on Residents and Medical Students	ASA
2023-Present	Member of CSA Committee on Women Anesthesiologists	CSA
2023-Present	Member of Bealdding Educational and Career Opportunities Now (BEACON) Program	CSA
2023-Present	Secretary	CSA
2023-Present	Lecturship for high school students – USA/International	Envision’s National Youth Leadership Forum (NYLF)
2023-Present		
2024-Present	Member of ASA Membership Committee	ASA
2024-2025	Ad Hoc Committee on Mentorship	ASA
2024-2025	Member of Education Advisory Board	AUA
2024-Present	Director-at-Large at SNACC	SNACC

PROFESSIONAL SOCIETY MEMBERSHIPS:

1998-Present	American Society of Anesthesiologists (ASA)
2001-Present	Californian Society of Anesthesiology (CSA)
2001-Present	Society for Neuroscience in Anesthesiology and Critical Care (SNACC)
2018-2025	Society for Education in Anesthesia (SEA)
2018-Present	Armenian Society of Anesthesiologists and Intensive Care Specialists
2022-2025	Association of University Anesthesiologists (AUA)
2022-Present	Society of Academic Associations of Anesthesiology and Perioperative Care (SAAPM)

MAJOR LEADERSHIP POSITIONS:

2011-2020	Director of Division of Neuroanesthesiology	Organization and management of the Neuroanesthesiology rotation for the residents, management of on-line site for the rotation, including the formulations of Goals and Objectives, educational material and references discussion of interesting cases and Article of the month, testing and evaluation of residents' performance
2012-Present	Administrative responsibilities for USC School of Medicine	Interviewing/valuating the applicants for USC Medical School Selecting the applicants for USC Medical School Yearly participation in judging of Medical students at Research Forum & Poster presentation
2014-2020	Organizer of Bimonthly Interdisciplinary High-risk Patients Spine Preoperative meetings	Quality improvement through multidisciplinary team approach to patient care (Neurosurgery, Orthopedic Spine Surgery, Neuroanesthesiology, Pain Management, Neurointensive Care), development of interdisciplinary protocols for management of patients with complicated spine procedures, engagement in research project for improvement of patient care and a publication on new recommendations on management of patients with complicated spine procedures
2015-Present	Director of Neuroanesthesiology Fellowship	Submission of application for the fellowship, submission and preparation of the Proposal for the Neuroanesthesiology Fellowship, development of Goals and Objectives and the curriculum for the fellowship based on recommendations of Society for Neuroscience in Anesthesiology and Critical Care (SNACC) in combination with specifics of the Anesthesiology Department at the USC
April 14-17, 2016	Chair for planning and supporting the PBLD sessions	CSA Annual Anesthesia Meeting: PBLD sessions program creation.

April 27-30, 2017	Chair	CSA Annual Anesthesia Meeting: Program creation, speakers' selection and invitation, abstracts selection, activity selection, advertisement. Program moderation, opening and closing remarks
October 2018	Moderator	ASA Annual Meeting, Clinical Oral Neuroscience Abstract Session
October 2018	Moderator	ASA Annual Meeting, Medically Challenging Cases Session
October 2019	Moderator	ASA Annual Meeting, Clinical Neuroscience Abstract Session
October 2019	Moderator	ASA Annual Meeting, Medically Challenging Cases Session
2019-2020	Director of Keck Medical student Rotation	Submission of application for MSIII sub-surgical and MSIV elective anesthesiology rotation, creation of syllabus, management of the rotation
2020-2023	Director of Medical Students' Anesthesiology Rotation at USC	Submission of application for MSIII sub-surgical and MSIV elective anesthesiology rotation, creation of syllabus, management of the rotation
Feb 8-12, 2020	Chair	CSA Winter Anesthesiology Conference: Program creation, speakers' selection and invitation, abstracts selection, activity selection, advertisement. Program moderation, opening and closing remarks
2020-Present	Director	Head of V. Zelman Center of Distance & International Education, Learning, and Science
2020-Present	Organizer/Moderator	Monthly lectures to Medical students of Vladimir Zelman School of Medicine and Psychology, Novosibirsk, Russia: Speaker's selection, Program moderation, opening and closing remarks
October, 2021 (organized in 2020)	Moderator/author	ASA Annual meeting: Program creation, speakers' selection and invitation, Submission to ASA. Program moderation, opening and closing remarks
February, 2022	Chair/Moderator	1 st International Symposium of Anesthesiologists, Researchers and Educators on Safety in Anesthesiology. Program moderation, opening and closing remarks
March, 2022	Co-Moderator	Anesthesiology Department Meeting on Solidarity with Ukrainian Medical Community
May, 2022	Judge	59 th Annual Western Anesthesia Residents' Conference (WARC)
July, 2022	Vice Chair of Education	Overseeing education of medical students, residents, fellows, faculty in Anesthesiology Department
May, 2023	Chair/Moderator	2 nd International Symposium of Anesthesiologists, Researchers and Educators on Innovations in Anesthesiology. Program moderation, opening and closing remarks
September, 2024	Chair/Presenter	1 st US Anesthesiology Department CME meeting - Vladimir Zelman, MD, PhD Symposium in Safety and Sustainability in Perioperative care
2024	Director-at-large	SNACC

February, 2026	Organizer, ASA Committee Chair	Monitor Journal theme: Evolving practices in Neuroanesthesiology – Guest Editorial and 5 articles
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COMMUNITY SERVICE:

September 2017	Organizer of ASA President Visit	LAC+USC Medical Center	Organizer of the visit of the ASA President to LAC+USC Medical Center
May, 2023 and May, 2024	ASA Legislative Conference Attendee	ASA/CSA	Capitol Hill meetings with Representatives to promote the work of anesthesiologists in the US

RESEARCH AND SCHOLARSHIP

EDITORSHIPS AND EDITORIAL BOARDS:

2013-present	Member of the International Advisory Board	Journal of Anesthesiology Clinical Pharmacology
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MANUSCRIPT REVIEW:

2003-2007	Journal of Neurosurgery
2010	World Neurosurgery
2013, 2015, 2017	Journal of Critical Care
2014 – Present	Journal of Anesthesiology Clinical Pharmacology
2019 – Present	Public Library of Science - PLOS ONE – Journal
2024-Present	Journal of Neurosurgical Anesthesiology

MAJOR AREAS OF RESEARCH INTEREST

Past research

1. Development of Urogenital tract, Yerevan Medical Institute, Armenia, 1988
2. Impairment of speech in patients with stroke, Yerevan Medical Institute, Armenia, 1989
3. Role of the hypothalamic-pituitary-adrenal axis in the menopause, One-year placebo-controlled evaluation of Alprostadil administered by medicated urethral system for erection, UCLA, 1996
4. Intraoperative Hypothermia for Intracranial Aneurism Surgery (IHAST), 2005 (Identifier: **NCT00029133**)
5. Early postoperative cognitive dysfunction and postoperative delirium after anesthesia with various hypnotics (PINOCCHIO Trial), Coordinator at USC, International Study, 2010-2019 (Identifier: **NCT00507195**)
6. Effectiveness of IV/PO acetaminophen in the perioperative period in reducing opiate use after lumbar and thoracic spine fusion: a double-blind, prospective, randomized, placebo-controlled trial, PI, IRB approved, trial in process, 2013-2018. *Clinicaltrials.gov* (Identifier: **NCT03104816**)

7. The Effect of Intraoperative Intravenous Acetaminophen on Intraoperative and Postoperative Opioid Use and Pain Scores in Minimally Invasive Spine Surgery: a Retrospective Study. Mentoring Resident's research, IRB approved, collection of information, USC, 2017-2019
8. Reduction in ICU and Hospital Stay as a Result of a Structured Approach to Perioperative Care for Patients Undergoing Complicated Spine Surgery, PI, IRB approved, collection of information, 2016-2018

GRANTS

FAER (FOUNDATION FOR ANESTHESIA EDUCATION AND RESEARCH) 2018 FAER Medical Student Anesthesia Research Fellowship (MSARF) Summer Program

Institution Name: Keck School of Medicine of USC
 Anesthesiology Department Chair: Holly Muir, MD, FRCA
 Anesthesiology Program Director/PI: Chelsia Varner, MD
 Student Education Faculty Member: **Eugenia Ayrian, MD**
 Primary MSARF Administrator: Kevin Blaine, MD, MPH

FAER (FOUNDATION FOR ANESTHESIA EDUCATION AND RESEARCH) 2019 FAER Medical Student Anesthesia Research Fellowship (MSARF) Summer Program

Institution Name: Keck School of Medicine of USC
 Anesthesiology Department Chair: Holly Muir, MD, FRCA
 Anesthesiology Program Director/PI: Chelsia Varner, MD
 Student Education Faculty Member: **Eugenia Ayrian, MD**, Sihab Sugeir, MD, Shane Dickerson, MD, Beamy Sharma, MD
 Primary MSARF Administrator: Kevin Blaine, MD, MPH

FAER (FOUNDATION FOR ANESTHESIA EDUCATION AND RESEARCH) 2024 FAER Resident Scholar Program Stipend

Institution Name: Keck School of Medicine of USC
 Anesthesiology Department Chair: Holly Muir, MD, FRCA
 Principal Investigator: **Eugenia Ayrian, MD, FASA**
 Student Education Faculty Member: David Kneiber, MD

FAER (FOUNDATION FOR ANESTHESIA EDUCATION AND RESEARCH) 2024 FAER Resident Scholar Program Stipend

Institution Name: Keck School of Medicine of USC
 Anesthesiology Department Chair: Holly Muir, MD, FRCA
 Principal Investigator: **Eugenia Ayrian, MD, FASA**
 Student Education Faculty Member: Jason Hsieh, MD

INVITED LECTURES, SYMPOSIA, KEYNOTE ADDRESSES

INTERNATIONAL

August 2006 Invited Lecture

How to be an Anesthesiologist in Hollywood

1. Medical Academy, San-Petersburg, Russia
2. Burdenko Neurosurgical Institute, Moscow, Russia
3. Community Hospital, Moscow, Russia

September 2010	Invited Lecture	Postoperative Cognitive Dysfunction 1. Russian Congress of Anesthesiologists and Reanimatologists, Moscow, Russia 2. Heart and Brain Congress in Novosibirsk
November 2010	Invited Lecture, Russian-American Medical Symposium	Russia Anesthesia for emergencies in Interventional Radiology Los Angeles, USA
May 2011	Invited Lecture	Anesthetic management of cerebral artery aneurysm clipping "Sapienza" University of Rome, Rome, Italy
May 2011	XI Annual European Neuroanesthesia Meeting	Anesthetic management of Intraoperative ICA aneurysm rupture and massive blood loss during clipping of a distal MCA aneurysm Siena, Italy
October 2011	"Safety in Anesthesia" Invited Lecture, V International Conference	Patient safety in Neuroanesthesia. USA experience Moscow, Russia
October 2013	"Safety in Anesthesia" Invited Lecture, V International Conference	Moderate sedation. Airway evaluation and management Moscow, Russia
October 2013	"Safety in Anesthesia" Invited Lecture, VI International Conference	Patient safety in Neuroanesthesia. USA experience Moscow, Russia
October 2013	"Safety in Anesthesia" Invited Lecture, VI International Conference	Awake craniotomy Moscow, Russia
February 2014	Educational Conference on minimally invasive technology in spine surgery	Patient Safety and Anesthetic Management in Spine Surgery Novosibirsk, Russia
March 2016	Invited Lecture	Postoperative Pain Management after Craniotomy Getafe University, Madrid, Spain
March 2018	Invited Lecture through Skype	Pulmonary Complications in Perioperative Period Novosibirsk State University Novosibirsk, Russia
September 2018	Invited Lecture through Tele Health/Mentoring Program	Pulmonary complications, Perioperative management of surgical patients Stepanakert, Kharabakh, Armenia
September 2018	Armenian Congress of Anesthesiology and Critical Care	Postoperative Cognitive Dysfunction – New Advances – Monitoring – Prevention – Decrease in Hospital Stay Yerevan, Armenia
September 2018	Armenian Congress of Anesthesiology and Critical Care	Perioperative management of patients undergoing complicated spine procedures. USC protocol. Yerevan, Armenia
April 2020		

	Invited lecture through YouTube	Dilemma of the 21st century- is general anesthetic harmful - Caring for patients with postoperative delirium: https://www.youtube.com/watch?v=2Guc555jtmw Novosibirsk State University Novosibirsk, Russia
September, 2020	Invited lecture (recorded in September)	Postoperative delirium, Forum of Anesthesiologists and Rheumatologists of Russia (FARR-2020) Moscow, Russia
October, 2021	Invited lecture (via Zoom)	Airway evaluation and management Monthly lectures to Medical students of Vladimir Zelman School of Medicine and Psychology, Novosibirsk, Russia
October, 2021	Invited lecture (recorded)	Safety and Anesthesia Challenges for Complex Spine Procedures, Forum of Anesthesiologists and Rheumatologists of Russia (FARR-2021) Moscow, Russia
November, 2022	Invited lecture (recorded)	Dilemma of the 21st century- is general anesthetic harmful - Caring for patients with postoperative delirium. Asian Australasean Congress of Anesthesiology, 2022 + KoreAnesthesia, 2022
October, 2023	Invited lecture (via Zoom)	Postoperative delirium and caring for delirious patient Monthly lectures to Medical students of Vladimir Zelman School of Medicine and Psychology, Novosibirsk, Russia
November, 2023	100 th Annual Scientific meeting of Korean Society of Anesthesiologists	Update on brain health initiative - Caring for delirious patient
November, 2023	100 th Annual Scientific meeting of Korean Society of Anesthesiologists	Deep brain stimulation - Making the miracle happen
October, 2024	Invited lecture to Novosibirsk Medical Students via Zoom	Complex Spine Procedures
February, 2025	Invited lecture to Novosibirsk Medical Students via Zoom	Awake craniotomy

NATIONAL

January 2011	Keynote Speaker for luncheon for CSA Board of Directors, Alzheimer's disease Foundation, and Senior residents	Postoperative Cognitive Dysfunction LAX Westin Hotel, Los Angeles, California
September 2013	Anesthesia Interest Group Symposium	Basic Airway Workshop Stanford University, California

September 2014	Anesthesia Interest Group Symposium	Basic Airway Workshop University of Irvine, California
April 2016	Invited Lecture, 2016 CSA Annual Anesthesia Meeting	Anesthetic Management for Complex Spine Procedures San Francisco, California
April 2017	Keynote Address, 2017 CSA Annual Anesthesia Meeting	Meeting Opening remarks San Francisco, California
April 2017	Invited Lecture, 2017 CSA Annual Anesthesia Meeting	POCD – New advances – Monitoring – Prevention – Decrease in Hospital Stay San Francisco, California
October 2018	Invited lecture, 2018 CSA Fall Meeting	Postoperative Cognitive Dysfunction Big Island, Hawaii
October 2018	Invited lecture, 2018 CSA Fall Meeting	Anesthetic Management of Cerebral Aneurysms and Moyamoya Disease Big Island, Hawaii
October 2018	Invited lecture, 2018 CSA Fall Meeting	Perioperative Management of the Patient During Awake Craniotomy, PBLD Big Island, Hawaii
October 2018	Invited lecture, 2018 CSA Fall Meeting	Anesthetic Management of Complex Spine Procedures Big Island, Hawaii
February 2020	Keynote Address, 2020 CSA Winter Anesthesia Meeting	Meeting Opening remarks Maui, Hawaii
February 2020	Invited lecture, 2020 CSA Winter Anesthesia Meeting	Dilemma of the 21st century- is general anesthetic harmful - Caring for patients with postoperative delirium Maui, Hawaii
February 2020	Invited lecture, 2020 CSA Winter Anesthesia Meeting	Anesthesia challenges for complex spine procedures Maui, Hawaii
February 2020	Invited lecture, 2020 CSA Winter Anesthesia Meeting	Deep Brain Stimulators- making the miracle happen! Maui, Hawaii
February 2020	Invited lecture, 2020 CSA Winter Anesthesia Meeting	The worst headache of my life! - Interventional neuroradiology- routine anesthetic and crisis management, PBLD
October, 2021	Snap talk presentation, 2021 ASA Annual Meeting	Anesthesia for Stroke Thrombectomy
October, 2022	Snap talk presentation, 2022 ASA Annual Meeting	Anesthesia for Carotid Stenting
April, 2023	Invited Lecture, 2023 CSA Annual Meeting	Update on ASA Brain Health Initiative
April, 2023	PBLD, 2023 CSA Annual Meeting	Crisis in Interventional Neuroradiology

July, 2023	Panel of Envision's National Youth Leadership Forum (NYLF) – 2 lectures for high school students – USA/International	Personal Dimensions of Medicine
October, 2023	Snap talk presentation, 2023 ASA Annual Meeting	Anesthesia for Carotid Stenting
October, 2023	Snap talk presentation, 2023 ASA Annual Meeting	Do We Need a Precordial Doppler – Recognizing and Managing Intraoperative Venous Air Embolism
April, 2024	CSA Annual meeting, 2024	Endovascular thrombectomy – pros and cons of General Anesthesia
July, 2024	Panel of Envision's National Youth Leadership Forum (NYLF) – 2 lectures for high school students – USA/International	Personal Dimensions of Medicine
November, 2024	Invited lectures, 2024 CSA Fall Anesthesia Meeting, Big Island, HI	1. Anesthetic Management of Cerebral Aneurysms and Moyamoya Disease 2. ASA Brain Health Initiative and Delirium 3. Perioperative management of the Neurosurgical Patient in the IR 4. Anesthesia Challenges in Complex Spine Procedures
March, 2025	Invited lecture CSA Annual meeting, Anaheim, CA	Brain Protection Made Simple: Key Pharmacological and Nonpharmacological strategies for the Occasional Neuroanesthesiologist
October, 2025	SNAP talk moderation	New Frontiers in Traumatic Brain Injury: Longitudinal Biomarkers, Tranexamic Acid, and Sex and Racial Differences
November, 2025	Invited lectures, 2025 CSA Fall Anesthesia Meeting, Big Island, HI	1. Craniotomies All day! Smooth sailing for the occasional neuroanesthesiologist! 2. Is general anesthesia harmful? – ASA brain health initiative. Caring for patients with postoperative delirium 3. Are you comfortable? – You are going to be awake! – Anesthetic management of the patient during awake craniotomy.
USC August, 2011	Neurosurgical Spine Meeting	Acetaminophen study Presentation: The Effectiveness of IV Acetaminophen in Perioperative Period in Reducing the Opiates Use after Lumbar Spine Fusions: a Double-blind, Prospective, Randomized, Placebo-controlled Clinical Trial
April, 2011	USCUH + Norris Physician Lunch Forum, USC Copper room	Moderate Sedation

June, 2016	Neurosurgical Spine Meeting	Acetaminophen study Presentation: The Effectiveness of IV/PO Acetaminophen in Perioperative Period in Reducing the Opiates Use after Lumbar Spine Fusions: a Double-blind, Prospective, Randomized, Placebo-controlled Clinical Trial. Final Steps of the Project
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INVITED GRAND ROUNDS, CME LECTURES

INTERNATIONAL

October, 2011	The 5th course of CME Program of Committee for European Education in Anesthesiology (CEEAA)	Anesthetic management of cerebral artery aneurysm clipping.) Moscow, Russia
October, 2012	Course of the European School of Anesthesiology, Ukrainian Society of Anesthesiologists (6th)	Patient safety in Neuroanesthesia. USA experience. Conference "Problems of Anesthetic Management and Intensive Care in Different Types of Surgery" Sudak, Ukraine
October, 2012	Course of the European School of Anesthesiology, Ukrainian Society of Anesthesiologists (6th)	Craniotomy in sitting position. Conference "Problems of Anesthetic Management and Intensive Care in Different Types of Surgery" Sudak, Ukraine

NATIONAL

April, 2013	CME Lecture, Medical Education Speakers Network	Perioperative Care. Pulmonary Complications, Citrus Valley Medical Center Los Angeles, California
December, 2014	CME Lecture, Medical Education Speakers Network	Moderate Sedation, Airway Evaluation and Management Glendale Adventist Medical Center, Glendale, California
March, 2015	CME Lecture, Medical Education Speakers Network	Fire Safety: Principles and Prevention, St. Francis Medical Center Los Angeles, California
April, 2016	CME Case Discussion, CSA Annual Anesthesia Meeting	PBLD: Perioperative Management of the Patient during Awake Craniotomy San Francisco, California
April, 2016	CME Case Discussion, CSA Annual Anesthesia Meeting	PBLD: Dexmedetomidine Use in the OR San Francisco, California
February, 2017	CME Lecture, Medical Education Speakers Network	Opioid Prescription Guidelines Pomona Valley Hospital Medical Center Los Angeles, CA
April, 2017	CME Case Discussion, CSA Annual Anesthesia Meeting	PBLD: Perioperative Management of the Neurosurgical Patient in the IR San Francisco, California
October, 2017	CME Lecture, Medical Education Speakers Network	Postoperative Delirium, Evaluation and Management, Citrus Valley Medical Center

		Los Angeles, California
November, 2017	CME Lecture, Medical Education Speakers Network	The Care of the Delirious Patient Good Samaritan Hospital Los Angeles, California
February, 2018	CME Lecture, Medical Education Speakers Network	Opioid Perscription Guidelines Pomona Valey Medical Center Pomona, California
April, 2018	CME Lecture, Medical Education Speakers Network	Muscle relaxants Methodist Hospital, Arcadia, California
November, 2018	CME Lecture, Medical Education Speakers Network	Perioperative Best Practices Providence Little Company of Mary Hospital San Pedro, California
October, 2020	CME Video/Podcast Presentation, Medical Education Speakers Network	Moderate Sedation Navidat Medical Center Salinas, CA

USC

January, 2013	Grand Rounds	Anesthetic Management for Spine surgery Department of Neurosurgery, USC
May, 2015	Grand Rounds	Awake craniotomy, Anesthetic Management Department of Neurosurgery, USC

DEPARTMENTAL

(Every 2-3 years)

2007 - Present	Grand Rounds	Posterior Fossa Craniotomy
2009 – Present	Grand Rounds	Anesthetic Management of Cerebral Artery Aneurysm Clipping
2010 - Present	Grand Rounds	Postoperative Cognitive Dysfunction
February 2011	Grand Rounds	Anesthesia for Emergencies in Interventional Radiology
2013 – Present	Grand Rounds	Anesthesia for Interventional Radiology
2014 – Present	Grand Rounds	Anesthetic Management for Spine Surgery
January 2015	Grand Rounds	Awake Craniotomy
April 2017 July, 2018	Grand Rounds	POCD – New advances – Monitoring –Prevention – Decrease in Hospital Stay
January 2020	Grand Rounds/ With Dr. Jennifer Meeker	Caring for a Cannabis Nation
January 2020	Grand Rounds	Anesthesia challenges for Complicated spine cases

PUBLICATIONS:

REFEREED JOURNAL ARTICLES:

1. **E. Babayan (Ayrian)**, V. Zelman, U. Polushin, A. Shegolev: Protection of the brain from ischemia: state-of-the-art. *Anesthesiologiya i Reanimatologiya (Anesthesiology and Intensive Care)* 5:4-14, 2005. ISSN 0201-7563.
2. M.M.Todd^{**}, B.J. Hindman, W.R. Clarke, and J.C. Torner, for the Intraoperative Hypothermia for Aneurysm Surgery Trial (IHAST) Investigators:... Keck School of Medicine at University of Southern California, Los Angeles (51): S. Giannotta, V. Zelman, E. Thomson, **E. Babayan (Ayrian)**, C. McCleary, D. Fishback...: **Mild Intraoperative Hypothermia during Surgery for Intracranial Aneurysm** – the IHAST Trial. *The New England Journal of Medicine* 352:135-145, 2005.
3. J.J. Pasternak^{**}, D.G.McGregor, W.L. Lanier, M.M. Todd; IHAST Investigators: ...S. Giannotta, V. Zelman, E. Thomson, **E. Babayan (Ayrian)**, C. McCleary, D. Fishback...: Effect of Nitrous Oxide Use on Long-term Neurologic and Neuropsychological Outcome in Patients Who Received Temporary Proximal Artery Occlusion during Cerebral Aneurysm Clipping Surgery. *Anesthesiology* 110(3):563-573, 2010. PMID: 19212259.
4. B.J. Hindman^{**}, E.O. Bayman, W.K. Pfisterer, J.C. Torner, M.M. Todd; IHAST Investigators: ...S. Giannotta, V. Zelman, E. Thomson, **E. Babayan (Ayrian)**, C. McCleary, D. Fishback...: No association between intraoperative hypothermia or supplemental protective drug and neurologic outcomes in patients undergoing temporary clipping during cerebral aneurysm surgery: findings from the Intraoperative Hypothermia for Aneurysm Surgery Trial. *Anesthesiology* 112(1):86-101, Jan 2010. PMID: 19952722.
5. H.P. Nguyen^{**}, J.G. Zaroff, E.O. Bayman, A.W.Gelb, M.M. Todd; Collaborators: ...S. Giannotta, V. Zelman, E. Thomson, **E. Babayan (Ayrian)**, C. McCleary, D. Fishback...: Perioperative hypothermia (33 degrees C) does not increase the occurrence of cardiovascular events in patients undergoing cerebral aneurysm surgery: findings from the Intraoperative Hypothermia for Aneurysm Surgery Trial. *Anesthesiology* 113(2):327-42. PMID: 20571361.
6. F. Bilotta^{**}, A. Doronzio, E. Stazi, L. Titi, I.O. Zeppa, A. Cianchi, G. Rosa, F.P. Paolona, S. Bergese, I. Asouhidou, P. Ioannou, A.E. Abramowicz, A. Spinelli, E. Delphin, **E. Ayrian**, V.Zelman and P. Lumb: Early postoperative cognitive dysfunction and postoperative delirium after anaesthesia with various hypnotics: study protocol for a randomised controlled trial - The PINOCCHIO trial. *Trials* 12:170, 2011. PMID: 21733178, ISSN 17456215.
7. B.A. Van Noord^{*}, J. Lee, Y.P. Zhang, P. Lumb, V. Zelman, F. Bilotta, and **E. Ayrian**: Anesthetic Maintenance with Propofol infusion is Less Expensive per Minute of Surgery than Sevoflurane or Desflurane. *Anaesth, Pain & Intensive Care* Vol 17(3):248-251, Sep-Dec 2013, ISSN 1607-8322.
8. **E. Ayrian**, A.D. Kaye, C.L. Varner, C. Guerra, N. Vadivelu, R.D.Urman, V. Zelman, P.D. Lumb, G. Rosa, F. Bilotta^{**}: Effects of Anesthetic Management on Early Postoperative Recovery, Hemodynamics and Pain after Supratentorial Craniotomy. *J Clin Med Res*, 7(10):731-741, 2015. PMID: 26345202.
9. N. Vadivelu^{**}, A.M. Kai, D.Tran, G. Kodumudi, A. Legler, **E. Ayrian**: Options for Perioperative Pain Management in Neurosurgery. *J of Pain Research*, Vol 9: 37-47, 2016. PMID: 26929661.
10. D. Sharma, J. Easdown, A. Zolyomi, **E. Ayrian**, P. Wheeler, G. Edelman, M. Mahala; Society for Neuroscience in Anesthesiology & Critical Care (SNACC) Neuroanesthesiology Milestones Task Force: Society for Neuroscience in Anesthesiology & Critical Care

- (SNACC) Neuroanesthesiology Education Milestones for Resident Education. *J Neurosurg Anesthesiol*, Jul;31(3):337-341, 2019. PMID: 30762721.
11. M. Le Clair, **E. Ayrian**, E.R. Mariano, S. Jha: The Effect of Intraoperative Intravenous Acetaminophen on Intraoperative and Postoperative Opioid Use and Pain Scores in Minimally Invasive Spine Surgery. *J Clin Anesth*. May 16;65:109748, 2020. PMID 32428807
 12. J.D. Meeker, **E. Ayrian**, E.R. Mariano: Daring discourse – no: Cannabinoids should not be used for acute postoperative pain management. *Regional Anesthesia and Pain Medicine Journal*. May 2020. PMID: 32471920
 13. **E. Ayrian**, S.H. Sugeir, A. Arakelyan, D. Arnaudov, P.C. Hsieh, J.V. Laney, P. Roffey, T.D. Tran, C.L. Varner, K. Vu, J.C. Liu: Impact of a Perioperative Protocol on Length of ICU and Hospital Stay in Complex Spine Surgery. *J Neurosurg Anesthesiol*. Jan;33(1):65-72, 2021, PMID: 31403978
 14. D. Thangathurai, M. Riad, Peter Roffey, S. Thangaratnam, **E. Ayrian**, A. Sedra, E. Strum, V. Zelman: Anticholinergic Syndrome: An Under Diagnosed Harmful Condition in The Perioperative and ICU Settings. *EC Pharmacology and Toxicology*. 11.1:06-14, 2023.
 15. . Krause, J. Chen, A. Sachdev, **E. Ayrian**, CF. Clavijo: Happy Medium: Blood Pressure Goals in the OR. *Monitor*. October, 2023.
<https://doi.org/10.1097/01.ASM.0000989948.98036.52>, P.
 16. KJ YANG, Mistry, **E. Ayrian**: Update on the Anesthesia Management in Adult Patients with Moyamoya Disease. *Curr Opin Anesthesiol*. July, 2024. PMID: 39011661
 17. **E. AYRIAN**: IN SEARCH OF THE PERFECT NEUROSURGICAL ANESTHETIC. GUEST EDITORIAL. *MONITOR*. FEBRUARY, 2026

REFEREED JOURNAL ARTICLES IN PREPARATION:

1. F. Bilotta, **E. Ayrian**, I. Asouhidou, F. Giovannini, A. Doronzio, S. Lolli, D. Lalli, F. Lanni F, V. Zelman, P. Lumb, G. Rosa: Early postoperative cognitive dysfunction and postoperative delirium after anesthesia with various hypnotics: a multicenter randomized controlled trial - The Pinocchio Trial – Interim analysis of safety and preliminary results, in preparation.

REFEREED REVIEWS, CHAPTERS, AND EDITORIALS:

1. **E. Ayrian**, C. Varner, Y. Marquez*, and S. Giannotta: Anesthesia and Neurosurgery: A Communication Paradigm. In: Handbook of Neuroanesthesia. 5th Edition; Philippa Newfield, James E. Cottrell. Lippincott Williams & Wilkins, Baltimore, Philadelphia, pp.86-98, 2012.
2. A. Tewary, M. Ghazanwy, and **E. Ayrian**: Obesity and Anesthesia for Spine and Neurosurgery. In: Oxford Textbook of Anesthesia for the Obese Patient. Editor: Ashish C Sinha, Oxford University Press, Oxford, UK, 2021. ISBN-13: 9780198757146. DOI: 10.1093/med/9780198757146.001.0001

REFEREED COMMENTS TO ARTICLE:

1. N.A. Pinner**, A.C. Hurdle, C. Oliphant, A. Reaves, B. Lobo, and A. Sills: Treatment of Warfarin-Related Intracranial Hemorrhage: A Comparison of Prothrombin Complex Concentrate and Recombinant Activated Factor VII. Comments by: **E. Ayrian**, V. Zelman. *World Neurosurgery* 754(6):631-635, 2010.
2. Qing-JV Zhao**, Xue-Guang Zhang, and Le-Xin Wang: Mild hypothermia therapy reduces blood glucose and improves neurological outcomes in patients with severe traumatic brain

injury. Comments by: **E. Ayrian**, V. Zelman. *Journal of Critical Care* 26 (3) 311-315, June 2011.

3. F. Salehpour**, A.M. Bazzazi, J. Porhomayon , N.D. Nader: Correlation between Coagulopathy and Outcome in Severe Head Trauma in Neuro-Intensive Care and Trauma units. Comments by: **E. Ayrian**, V. Zelman. *Journal of Critical Care* 26(4):352-356, 2011.

CLINICAL COMMUNICATION: (PUBLISHED CLINICAL TRIAL COMMUNICATIONS)

1. **E. Ayrian**: The Effectiveness of IV/PO Acetaminophen in the Perioperative Period in Reducing Opiate Use after Lumbar Spine Fusion. *ClinicalTrials.gov* April 2017.

NON-REFEREED JOURNAL ARTICLES, REVIEWS, OR OTHER COMMUNICATIONS:

1. **E. Babayan (Ayrian)**, V. Zelman, J. Berger, Y. Vater: Brain Protection. Pathophysiology and Clinical Application. *Seminars in Neuroanesthesia* 23(3):160-173, 2004. DOI: 10.1053/j.sane.2004.01.015
2. **E. Ayrian**: Brain surgery. *ASA site for patients*. Reviewed by E. Ayrian, MD. July, 2024. <https://www.asahq.org/madeforthismoment/preparing-for-surgery/procedures/brain-surgery/>

ABSTRACTS AND PRESENTATIONS:

1. **E. Babayan (Ayrian)**, T. Ayoub: Cell Saver Induced Coagulopathy in Liver Transplant. Presented at 39th Annual Western Anesthesia Residents' Conference Portland, Oregon, 2001.
2. **E. Ayrian**, D. Muhtar*: Case report: Aneurysm rupture and massive blood loss. Presented at: 1) *Neuroanesthesia Conference* in Siena, Italy, May, 2011; 2) *Western Anesthesia Residents' Conference*, 2011.
3. C.R. Rajaratnam*, **E. Ayrian**: Tonsillar Rupture Following Video-Laryngoscope Intubation: a case Report. Presented at ASA Chicago, October, 2011, **MCC06**¹.
4. **E. Ayrian**, V. Zelman: "Anesthetic Management of Intraoperative Internal Carotid Artery Rupture and Massive blood loss during clipping of a Distal Middle Cerebral Artery Aneurysm". Presented at SNACC Annual Meeting, Chicago, October, 2011. *Neurosurg Anesthesiol* 23(4):407:**A37**¹, October 2011.
5. V.L. Nogaki*, **E. Ayrian**, V. Zelman: Management of General Anesthesia in Patients with Acute Cardiomyopathy Associated with Subarachnoid Hemorrhage. Presented at Heart & Brain Conference, Paris, France, March 2012.
6. A.J. Cirone*, **E. Ayrian**, V. Zelman: Uncontrolled Uremic Bleeding during Transphenoidal Craniotomy for Pituitary Tumor Resection. Presented at ASA, Washington DC, October 2012, **MC50**¹.

¹ Abstracts, cited in Journals

7. V. Zelman^{**}, L. Raskin, **E. Ayrian**: New perspectives in development of Neuroanesthesiology and Critical Care. *Presented on the Congress of Anesthesiology and Critical Care* in Novosibirsk, Russia, 2012.
8. A. Doronzio^{**}, F. Lanni, **E. Ayrian**, Y.P. Zhang F. Bilotta^{**}, G. Rosa: Postoperative delirium after anesthesia with propofol, sevoflurane or desflurane: The Pinocchio trial. Interim analysis of safety and preliminary results. Presented as an Abstract at European Society of Anesthesiologists. *European J of Anaesthesiology* 30:108-109: **7AP3-6¹**, June 2013.
9. Guerra^{**}, **E. Ayrian**, E. Stazi, F. Lanni, G. Rosa, F. Bilotta^{**}: Anesthetic management and postoperative recovery after supratentorial craniotomy: a Systematic Review. *An Oral Presentation Abstract at European Society of Anesthesiologists* by F. Bilotta, June, 2013.
10. D. Lowe^{*}, E. Sunu^{*}, A. Darwish, **E. Ayrian**: Management of Severe Intracranial Hypertension in Orthotopic Liver Transplantation. *Presented at ASA San Francisco*, October, 2013, **NA MC707¹**.
11. C. Dong^{*}, V.L. Nogaki^{*}, V. Zelman, P.D. Lumb, and **E. Ayrian**: Neurogenic Stress Cardiomyopathy: Three unique cases of acute cardiomyopathy associated with subarachnoid hemorrhage. Presented at SNACC annual meeting, San Francisco, CA, October, 2013. *Neurosurg Anesthesiol* 25(4) 488:**SNACC93¹**, October 2013.
12. B.A. Van Noord^{*}, J. Lee, Yao Ping Zhang, F. Takla, P. Lumb, V. Zelman, F. Bilotta, and **E. Ayrian**: Anesthetic Maintenance with Propofol Infusion is Less Expensive per Minute of Surgical Time than Sevoflurane or Desflurane: A Randomized Prospective Trial. Accepted as an Abstract at SNACC annual meeting, San Francisco, CA, October, 2013. *Neurosurg Anesthesiol* 25(4):477:**SNACC7¹**, October 2013.
13. **E. Ayrian**, C. Varner, C. Guerra, V. Zelman, P. Lumb, G. Rosa, F. Bilotta: Anesthetic management and postoperative recovery after supratentorial craniotomy. Accepted as an Abstract at SNACC annual meeting, San Francisco, CA, October, 2013. *Neurosurg Anesthesiol* 25(4):485:**SNACC88¹**, October 2013.
14. V. Patel^{*}, **E. Ayrian**, V. Zelman: Neuronal Protection and Intraoperative Stability in Patients with Moyamoya Disease. Accepted as an Abstract at SNACC annual meeting, New Orleans, LA, October 2014. *Neurosurg Anesthesiol*:475:**SNACC-39¹**
15. S. Randazo^{*}, L. Gilbertson^{*}, C. Varner, V. Zelman, **E. Ayrian**: Management of Posterior Cervical Fusion in Patient with Severe Aortic Stenosis and Mitral Regurgitation. Accepted as an Abstract at SNACC annual meeting, New Orleans, LA, October 2014. *Neurosurg Anesthesiol*:493:**SNACC-72¹**
16. T.J. O'Barr^{*}, V. Zelman, **E. Ayrian**, A. Shbeeb^{*}, L. Gilbertson^{*}: Positive Neurological Outcome after Acute Neurosurgical Hemorrhage and Sustained Hypotension. Accepted as an abstract at SNACC and ASA annual meetings, New Orleans, LA, October 2014, **NA MC133¹**
17. N. Sadoughi^{*}, **E. Ayrian**, V. Zelman: Abnormal Acute Rise in Serum Potassium Level secondary to Transfusion of 3 U of PRBCs. Accepted as an Abstract at ASA annual meeting, New Orleans, LA, October 2014, **NA MC409¹**

¹ Abstracts, cited in Journals

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21. **E Ayrian**, F Acosta, D Arnaudov, P Hsieh, L Lovely, P Roffey, S Sugeir, D Thangathurai, T Tran*, C Varner, K Vu, J Wang, V Zelman, and J Liu: Reduction in ICU and Hospital Stay as a Result of a Structured Approach to Perioperative Care for Patients Undergoing Complicated Spine Surgery. Preliminary Results. Abstract at SNACC annual meeting, Boston, MA, October 2017. *Neurosurg Anesthesiol*:29(4):562; **SNACC-117¹**.
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27. L. Cohen, **E. Ayrian**: The Use of Google Trends Data to Investigate the Effects of COVID-19-Related Restrictions on Public Interest in Common Pain Management Procedures. Abstract presented at Medical Student research Forum at USC, Los Angeles, California, February, 2021.
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