Edward Bertaccini
Professor of Anesthesiology, Perioperative and Pain Medicine at the Palo Alto Veterans Affairs Health Care System

Bio

Edward J. Bertaccini, MD, is a native of San Jose, California. He is a Cardinal Bellarmine Award winning graduate of Bellarmine College Preparatory in San Jose. He completed his undergraduate training in Biochemistry and Quantum Physics at the University of California, Davis, where he graduated Summa Cum Laude. He subsequently attended the St. Louis University School of Medicine in St. Louis, MO.

Dr. Bertaccini returned home to complete his internship at the Santa Clara Valley Medical Center, and his anesthesiology residency with subsequent ICU fellowship at the Stanford University School of Medicine. Upon completion of his training in 1994, he joined the faculty of the Stanford University Department of Anesthesia and began service to his country via his post in anesthesia and critical care medicine at the VA Palo Alto Health Care System.

Dr. Bertaccini is currently a Professor of Anesthesiology and Intensive Care Medicine within the Stanford University School of Medicine and maintains an internationally recognized program in the molecular modeling of anesthetic action. He practices as a cardiac anesthesiologist and intensive care specialist at the VA Palo Alto Health Care System where he has served as both the director of the operating room and the acting co-director of the intensive care units. His clinical efforts have played an integral part of teams that have achieved national recognition for both cardiac surgery as well as intensive care outcomes.

ACADEMIC APPOINTMENTS

• Professor - Med Center Line, Anesthesiology, Perioperative and Pain Medicine
• Member, Bio-X
• Member, Maternal & Child Health Research Institute (MCHRI)
• Member, Wu Tsai Neurosciences Institute

PROFESSIONAL EDUCATION

• Residency, Stanford University Department of Anesthesia , Anesthesiology (1993)
• fellowship, Stanford University Department of Anesthesia , Critical Care Medicine (1994)

LINKS

• Bio Online at VA: http://www.paloalto.va.gov/services/anes/bios/bertaccini.asp

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Molecular structures of drugs related to clinical, anesthesia; molecular modeling related to biological activity.
Publications

PUBLICATIONS

• Assessment of Homology Templates and an Anesthetic Binding Site within the γ-Aminobutyric Acid Receptor. *Anesthesiology*
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• Predicting the transmembrane secondary structure of ligand-gated ion channels *PROTEIN ENGINEERING*
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• An In Vitro Model for Identifying Cardiac Side Effects of Anesthetics. *Anesthesia and analgesia*
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• Insights Into Receptor-Based Anesthetic Pharmacophores and Anesthetic-Protein Interactions. *Methods in enzymology*
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• Design and Implementation of a Perioperative Surgical Home at a Veterans Affairs Hospital. *Seminars in cardiothoracic and vascular anesthesia*
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• Identification of an Inhibitory Alcohol Binding Site in GABA(A) rho 1 Receptors *ACS CHEMICAL NEUROSCIENCE*
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• Molecular Modeling of a Tandem Two Pore Domain Potassium Channel Reveals a Putative Binding Site for General Anesthetics *ACS CHEMICAL NEUROSCIENCE*
  Bertaccini, E. J., Dickinson, R., Trudell, J. R., Franks, N. P.
  2014; 5 (12): 1246-1252

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  2014; 38 (3): 595-603

• Stabilization of the GluCl Ligand-Gated Ion Channel in the Presence and Absence of Ivermectin *BIOPHYSICAL JOURNAL*
November 10, 2013

Yoluk, O., Bromstrup, T., Bertaccini, E. J., Trudell, J. R., Lindahl, E.
2013; 105 (3): 640-647

- Association of age and packed red blood cell transfusion to 1-year survival - an observational study of ICU patients TRANSFUSION MEDICINE
  2013; 23 (4): 231-237

- Molecular Mechanism for the Dual Alcohol Modulation of Cys-loop Receptors PLOS COMPUTATIONAL BIOLOGY
  Murail, S., Howard, R. J., Broemstrup, T., Bertaccini, E. J., Harris, R. A., Trudell, J. R., Lindahl, E.
  2012; 8 (10)

- Teaching an Old GABA Receptor New Tricks ANESTHESIA AND ANALGESIA
  Trudell, J. R., Bertaccini, E., Maclver, M. B.
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  Bertaccini, E. J., Tradell, J. R.
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  Trudell, J. R., Bertaccini, E., Davies, D., ALKANA, R., Perkins, D., Lindahl, E., Murail, S., Harris, R. A., Howard, R.
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- Microsecond Simulations Indicate that Ethanol Binds between Subunits and Could Stabilize an Open-State Model of a Glycine Receptor BIOPHYSICAL JOURNAL
  Murail, S., Wallner, B., Trudell, J. R., Bertaccini, E., Lindahl, E.
  2011; 100 (7): 1642-1650

- Modeling Anesthetic Binding Sites within the Glycine Alpha One Receptor Based on Prokaryotic Ion Channel Templates: The Problem with TM4 JOURNAL OF CHEMICAL INFORMATION AND MODELING
  Bertaccini, E. J., Wallner, B., Tradell, J. R., Lindahl, E.
  2010; 50 (12): 2248-2255

- Normal Mode Gating Motions of a Ligand-Gated Ion Channel Persist in a Fully Hydrated Lipid Bilayer Model ACS CHEMICAL NEUROSCIENCE
  Bertaccini, E. J., Trudell, J. R., Lindahl, E.
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- The Molecular Mechanisms of Anesthetic Action: Updates and Cutting Edge Developments from the Field of Molecular Modeling. Pharmaceuticals (Basel, Switzerland)
  Bertaccini, E. J.
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  Bertaccini E
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• Effect of cobratoxin binding on the normal mode vibration within acetylcholine binding protein  
  JOURNAL OF CHEMICAL INFORMATION AND MODELING  
  Bertaccini, E. J., Lindahl, E., Sixma, T., Trudell, J. R.  
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  JOURNAL OF CHEMICAL INFORMATION AND MODELING  
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  29th Annual Meeting of the Research-Society-on-Alcoholism  
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• Normal Mode Analysis Reveals the Channel Gating Motion within a Ligand Gated Ion Channel Model  
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  Huang, P., Bertaccini, E., Loew, G. H.
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• Benzodiazepine Antagonists And Their Role In Anesthesia And Critical Care Anaesthetic Pharmacology Review
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