

Curriculum Vitae

Mouchumi Bhattacharyya
Professor and Statistical Consultant

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Education:

Ph.D., Bio-Statistics	Univ. of Wisconsin-Milwaukee, 1999
M. Phil., Statistics	Delhi University, India, 1992
M. Sc., Statistics	Delhi University, India, 1990
B. Sc., (Major: Statistics)	Cotton College, India, 1988

Professional Positions:

- **Department of Mathematics, University of the Pacific, CA**

<i>Professor of Statistics</i>	Sept 2015 –
<i>Associate Professor of Statistics</i>	Sept 2006 – Aug 2015
<i>Assistant Professor of Statistics</i>	Sept 2000 – Aug 2006

- **St. Joseph's Medical Center, Stockton, CA**

<i>Statistical Consultant</i>	Aug 2020 –
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- **College of the Pacific, University of the Pacific, CA**

<i>Director of Assessment</i>	June 2016 – May 2017
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- **Department of Statistics, Brigham Young University, Utah**

<i>Statistics Instructor</i>	Aug 1999 – June 2000
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- **Division of Biostatistics, Medical College of Wisconsin, WI**

<i>Assistant Statistical Consultant</i>	Jan 1997 - May 1998
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Peer-Reviewed Articles:

- *A Random Effects Model for Multistate Survival Analysis with Application to Bone Marrow Transplants.* **M. Bhattacharyya**, J. P. Klein. *Mathematical Biosciences*, 194 (2005) 37-48.
- *A Note on Testing in Aalen's Additive Hazards Regression Models.* **M. Bhattacharyya**, J. P. Klein. *Statistics in Medicine*, 24 (2005) 2235-2240.
- *The Associations between Gingival Crevice Fluid Matrix Metalloproteinase-9, Tissue Inhibitor of Metalloproteinase-1 and Periodontitis in Human Immunodeficiency Virus-Positive Patients.* T. Alpagot, V. Suzara, **M. Bhattacharyya**. *Journal of Periodontal Research*, 41 (2006) 491-497.
- *Longitudinal Evaluation of Prostaglandin E2 (PGE2) and Periodontal Status in HIV+ Patients.* T. Alpagot, J. Remien, **M. Bhattacharyya**, K. Konopka, W. Lundergan, and N. Duzgunes. *Archives of Oral Biology*, 52(11) (2007) 1102-1108.
- *The Association between Gingival Crevicular Fluid TGF-Beta1 Levels and Periodontal Status in HIV+ Patients".* T. Alpagot, K. Konopka, **M. Bhattacharyya**, S. Gebremedhin, N. Duzgunes. *Journal of Periodontology*, 79 (2008) 123-130.
- *Analyzing Survival Times Based on the Proportional Hazard Regression Model.* **M. Bhattacharyya**. *International Journal of Pure and Applied Mathematics*, 46(4) (2008) 493-500.
- *To Pool or not to Pool – A Comparison Between Two Commonly Used Test Statistics.* **M. Bhattacharyya**. *International Journal of Pure and Applied Mathematics*, 89(4) (2013) 497-510.
- *Energy Implications of consuming Caffeinated versus Decaffeinated Energy Drinks.* S. Shah, N. Nguyen, **M. Bhattacharyya**. *Journal of Pharmacy Practice*, 28(5) (2015) 482-483.
- *Cardiovascular Responses to Energy Drinks in a Healthy Population: the C-ENERGY Study.* T. Kozik, S. Shah, **M. Bhattacharyya**, T. Franklin, T. Connolly, W. Chien, G. Charos, M. Pelter. *American Journal of Emergency Medicine*, 34 (2016) 1205-1209.
- *Discomfort Reduction during Maxillary Anesthesia: A Clinical Split Mouth Study Using a High Frequency Oscillating Device.* F. Hakim, B. Fa, K.A. Schulze, S. Gupta, **M. Bhattacharyya**, M. Loo. *Dental Learning*, (2016) 1-11.
- *Operator Preference of Retraction Method during Anesthesia Delivery.* B. Fa, S. Gupta, **M. Bhattacharyya**. *StomaEdu J.*, 3(1) (2016) 10-15.

- *Electrocardiographic and Blood Pressure Effects of Energy Drinks and Panax Ginseng in Healthy Volunteers: A Randomized Clinical Trial.* S. Shah, A. Occiano, T. Nguyen, A. Chan, J. Sky, **M. Bhattacharyya**, K. O'Dell, A. Shek, N. Nguyen. *International Journal of Cardiology*, 218 (2016) 318-323.
- *A Comparison of Academic and Athletic Performances in the NCAA.* S. Bailey, **M. Bhattacharyya**. *College Student Journal*, 51(2) (2017) 173-182.
- *Cardiovascular responses to ENERGY drinks in a healthy population during eXercise: The C-Energy-X Study.* T. M. Kozik, M. G. Carey, **M. Bhattacharyya**, W. Chien, G. S. Charos, T. F. Connolly, M. C. Hickman, S. Schmidt, M. M. Pelter. *Journal of Electrocardiology*, 51 (2018) S1-S5.
- *Feasibility Study to determine if administration of Carbonic anhydrase inhibitor Acetazolamide (Diamox) will cause aquaresis but prevent hyponatremia in a healthy population: SALT Study.* G. S. Grewal, T. M. Kozik, M. C. Hickman, T. F. Connolly, R. S. Bajwa, **M. Bhattacharyya**. *Journal of Integrative Cardiology*, 4(4) (2018) 1-3.
- *An Exercise Program to Improve Depression and Sleep Disorders in Oncology Patients: The SAD Study.* T. M. Kozik, M. C. Hickman, S. Schmidt, T. F. Connolly, K. Paustenbach, P. Vosti, **M. Bhattacharyya**. *European Journal of Oncology Nursing*, 37 (2018) 19-22.
- *Impact of High Volume Energy Drinks Consumption on Electrocardiographic and Blood Pressure Parameters: A Randomized Trial.* S. A. Shah, A. Szeto, R. Farewell, A. Shek, D. Fan, K. Quach, **M. Bhattacharyya**, J. Elmiari, W. Chan, K. O'Dell, N. Nguyen, T. J. McGaughey, J. M. Nasir, S. Kaul. *Journal of the American Heart Association*, 8 (2019), 1-14.
- *Dentin Bonding in Class V Lesions and the Influence of the Patient's Age on Bond Strength.* H. Grandin, J. Milani, **M. Bhattacharyya**, K. Schulze. *Journal of the California Dental Association*, 48(12) (2020) 647-652.
- *Retrospective Study on Hospital Admissions due to Pyelonephritis in Type II Diabetic Patients.* D. Dhillon, T. Randall, D. Zezoff, **M. Bhattacharyya**. *Journal of Medical - Clinical Research & Reviews*, 5(6) (2021) 1-3.

Presentations and Presentations/Posters Citing M. Bhattacharyya:

- *A Random Effects Model for Multistate Survival Analysis with Application to Bone Marrow Transplants.* **M. Bhattacharyya**, J. P. Klein. American Statistical Association, Utah Chapter, October 20, 1999 (Invited Speaker).
- *A Random Effects Model for Multistate Survival Analysis with Application to Bone Marrow Transplants.* **M. Bhattacharyya**, J. P. Klein. American Mathematical Society Meeting, Washington DC, January 22, 2000. (Abstract Number: **950-62-657**)

- *A Random Effects Model for Multistate Survival Analysis with Application to Bone Marrow Transplants*. **M. Bhattacharyya**, J. P. Klein. Macalester College, Minnesota, February, 2000 (Invited Speaker).
- *Should it matter which group is chosen to be the control group?* **M. Bhattacharyya**. American Mathematical Society Meeting, Baltimore, Maryland, Jan 15 – Jan 18, 2003. (Abstract Number: **983-62-1401**)
- *A Note on Testing in Aalen's Additive Hazards Regression Models*. **M. Bhattacharyya**, J. P. Klein. American Mathematical Society Meeting, Phoenix, Arizona, Jan 7 – Jan 10, 2004. (Abstract Number: **993-62-1669**)
- *Assessing the Risks of the Two Graft Versus Host Diseases under the Proportional Hazard Regression Model*. **M. Bhattacharyya**. American Mathematical Society Meeting, Atlanta, Georgia, Jan 5 – Jan 8, 2005. (Abstract Number: **1003-62-1299**)
- *Longitudinal Evaluation of GCF MMP-9 and TIMP-1 in HIV+ Patients*. T. Alpagot, V. Suzara, **M. Bhattacharyya**. Periodontal Diagnosis, Session I. March 10, **2006**.
- *The Relationship Between TGF-Beta and Periodontal Status in HIV+ Patients*. T. Alpagot, K. Konopka, **M. Bhattacharyya**, N. Duzgunes. Epidemiology/Risk Factors, Session I. Presented by T. Alpagot. March 22, **2007**.
- *The Association Between GCF VEGF and Periodontitis in HIV+ Patients*. E. Unger, T. Alpagot, **M. Bhattacharyya**, K. Konopka, S. Gebremedhin, N. Duzgunes. *Periodontal-Systemic Interactions Posters*. Presented by S. Gebremedhin. July 4, **2008**.
- *Longitudinal Evaluation of GCF Interleukin-18 and Periodontitis in HIV+ Patients*. M. Hashimoto, T. Alpagot, **M. Bhattacharyya**, K. Konopka, S. Gebremedhin, N. Duzgunes. *Periodontal-Systemic Interactions Posters*. July 4, **2008**.
- *Ezetimibe's Magnitude of Benefit when Added to Statin Therapy: A Meta Analysis*. S. Shah, K. O'Dell, P. Salar, N. Naing, F. Acasio, U. Patel, **M. Bhattacharyya**, M. Criqui. Presented at American Heart Association: Nutrition, Physical Activity and Metabolism / Cardiovascular Disease Epidemiology and Prevention 2011 Scientific Sessions. Atlanta, Georgia. March 25, **2011**.
- *To Pool or not to Pool: A Comparison between Two Commonly Used Test Statistics*. **M. Bhattacharyya**. American Mathematical Society Meeting, Baltimore, Maryland, Jan 15 – Jan 18, 2014. (Abstract Number: **1096-62-2393**)
- *Erosive Potential of Energy Drinks*. W. H. Noble, K. A. Schulze, S. Habelitz, **M. Bhattacharyya**, S. Shrestha, N. Santucci. Poster#1501, AADR/IADR meeting, Boston, March 12, **2015**.
- *Active Engineering Education Modules: A Summary of Recent Research Findings*. A. Brown et.al and **M. Bhattacharyya**. ASEE Annual Conference, Seattle, June 15, **2015**.
- *C-ENERGY study: Cardiovascular responses to ENERGY drinks in a healthy population*. T. Kozik, **M. Bhattacharyya**, T. Franklin, T. Connolly, W. Chien, G. Charos, S. Shah, M. Pelter. Conference of the American Heart Association, Orlando, November 9, **2015**. Circulation, 132: A12689.

- *Electrocardiographic and Blood Pressure Effects of Energy Drinks and Panax Ginseng in Healthy Volunteers: A Randomized Clinical Trial.* S. Shah, A. Occiano, A. Nguyen, A. Chan, J. Sky, **M. Bhattacharyya**, K. O'Dell, A. Shek, N. Nguyen. Presented at the Annual conference of the American Heart Association/American Stroke Association, **March 2, 2016**, Phoenix, Arizona.
- *Push out Bond Strength of Fiber Posts and Additional Fillers in Root Canals.* S. Balasubramanian, K. Schulze, P. Roetzer, M. Pipalia, **M. Bhattacharyya**. Annual Meeting of the American Association of Dental Research. Los Angeles, **March 16-19, 2016**.
- *Diametral Tensile Strength Tests of Different Commercially Available Fiber Posts.* A. Chaney, K. Schulze, P. Roetzer, H. Alenezi, **M. Bhattacharyya**. Annual Meeting of the American Association of Dental Research. Los Angeles, **March 16-19, 2016**.
- *Repolarization Abnormalities Associated with Consumption of Energy Drinks.* T. Kozik, **M. Bhattacharyya**, T. Franklin, T. Connolly, W. Chien, G. Charos, S. Shah, M. Pelter. International Society of Computerized Electrocardiology Conference, Tucson, **April, 2016**.
- *Effects of Surface Treatments on Bond-Strength of Composites for Class-5-Fillings.* K.A. Schulze, W. Noble, H. Alanesi, **M. Bhattacharyya**. International Association of Dental Research, Seoul, South Korea, **June 24, 2016**.
- *Active Engineering Education Modules: Summary Paper of Five Years of Incremental Improvements to the Modules.* A. Brown et.al and **M. Bhattacharyya**. ASEE Annual Conference, New Orleans, **June 26-29, 2016**.
- *Evaluation of Shear Bond Strength using a 5th, 6th and 7th Generation Adhesives and Different Composites.* S. Behdad, P. Roetzer, **M. Bhattacharyya**, K. A. Schulze. Annual Meeting of the American Association of Dental Research. *To be presented.* Fort Lauderdale, **March 2018**.
- *Repolarization Changes in response to ENERGY drinks in healthy adults at rest and during eXercise: The C-Energy-X Study.* T. M. Kozik, **M. Bhattacharyya**, M. G. Carey, W. Chien, G. S. Charos, T. F. Connolly, M. C. Hickman, S. Schmidt, M. M. Pelter. *To be presented.* Annual Conference of the International Society for Computerized Electrocardiology, Park City, Utah, April 26, **2018**.
- *Shear-Bond-Strength of Nine Dual-Cured Build-Up Materials and a Light-Curing-Adhesive-System on Dentin.* D. Malla, K. A. Schulze, P. Roetzer, **M. Bhattacharyya**. Annual Meeting of the International Association of Dental Research. London, UK, **July 2018**.

Selected Grant Related Work:

NSF grant ID # 1023034, **2014-2015**. Title: *Improved Learning for Undergraduate Engineering Programs Using Finite Elements Learning Modules*. Independent Evaluator: **M. Bhattacharyya**.

Statistical Software Experience:

R, SAS, Minitab, S-Plus, SPSS.