# TOMOKI OKUNO

Department of Biostatistics, UCLA, Los Angeles, CA 90095

## EDUCATION

**University of California, Los Angeles**                                                 **Los Angeles, CA**
*PhD Biostatistics, Department of Biostatistics, UCLA Fielding School of Public Health*          *2023 – Expected 2027*

**University of California, Los Angeles**                                                 **Los Angeles, CA**
*MS Biostatistics, Department of Biostatistics, UCLA Fielding School of Public Health*          *2021 – 2023*

- GPA: 4.0/4.0
- Master's thesis: "Association of both short-term and long-term glycemic variability with the development of microalbuminuria in the ACCORD trial"

**Kyoto University**                                                                      **Kyoto, Japan**
*Master of Informatics, Department of Applied Analysis and Complex Dynamical Systems*          *2011 – 2013*

- GPA: 3.2/4.0
- Master's thesis: "Simulation of the Structural Color of Morpho Butterflies with Periodic Fast Multipole Methods"

**Kyoto University**                                                                      **Kyoto, Japan**
*Bachelor of Engineering, Faculty of Engineering*                                        *2007 – 2011*

- GPA: 3.4/4.0
- Thesis: "Shape Sensitivity Analysis with FMM in the Periodic Problems for Maxwell's Equation"

## AWARDS AND HONORS

- **Departmental Award** for full-funding for graduate studies at UCLA for 2023–2026
- **Wilshire Fellowship** in Geriatric Medicine at UCLA for 2022–2023 with a grant of $5,500

## PUBLICATIONS

- **T Okuno**, A Vansomphone, E Zhang, H Zhou, J Koska, P Reaven, JJ Zhou; Association of both short-term and long-term glycemic variability with the development of microalbuminuria in the ACCORD trial. Diabetes 2023; db230374.

## RESEARCH EXPERIENCE

**Department of Biostatistics at UCLA**                                                   **Los Angeles, CA**
*Graduate Student Researcher, Advisor: Dr. Jin J Zhou and Dr. Hua Zhou*                   *March 2022 – Present*

- Investigate the association of both short-term and long-term glycemic variability with the development of microalbuminuria for type 2 diabetes patients using the Cox proportional hazard model

- Conduct differential expression analysis with patients' genetic data to predict dysfunction after lung transplantation using Random Forest with time-varying covariates
- Examine the relationship and consistency between data extracted from the electronic health record in the US Veterans Affairs and continuous glucose monitoring data from Dexcom

# TEACHING EXPERIENCE

**Department of Biostatistics at UCLA**                                        **Los Angeles, CA**
*Teaching Assistant*

- Biostat 203A: Introduction to Data Management and Statistical Computing (2022 Winter)
- Biostat 216: Mathematical Methods for Biostatistics (2023 Fall)

# PROFESSIONAL EXPERIENCE

**Medley Inc. (TSE-Mothers)**                                                **Tokyo, Japan**
*Business Development and Promotion Specialist,* Business Enablement Group          *July 2019 – August 2021*

- Acquire new profit sources through collaboration with outside companies; collaborate internally to improve company processes and procedures
- Conducted research into medical products for clinics; spearheaded sales partnerships with medical product manufacturers for cross-selling initiative
- Launched inter-departmental projects for improving operations; facilitated clarification of departmental objectives and challenges to promote greater efficiency and risk reduction
- Led a 10-member team in designing an integrated business process including sales, contracting, billing, operational customer support and sales management techniques for a web-based medical questionnaire service (a relatively uncommon service); resulted in an acquisition of over 200 users in six months, a significant improvement since the service was launched in January 2018
- Actively engaging in the creation and development of a scheme and the conclusion of a contract to introduce telemedicine in more remote areas; working closely with the government of Okinawa in a demonstrative experiment providing free services to Yonaguni Island with a population of 1700 and one medical institution

**Freelance**                                                               **Tokyo, Japan**
*Consultant*                                                            *May 2018 – June 2019*

- Secured new outsourcing contracts with an e-commerce company and a tax accounting firm
- Managed an e-commerce database of 50,000 stores and helped to facilitate a large-scale system migration; determined adjusted costs for operating the new system
- Designed an asset management simulator to optimize asset allocation based on client information; helped to significantly reduce company operation costs and increase sales efficiency by automating data input, analysis, and output

**Japan Football Association**                                               **Tokyo, Japan**
*Japan National Football Team Marketer*                                      *May 2016 – April 2018*

- Developed a marketing strategy for the JFA; coordinated with ad agencies and JFA sponsors

- Achieved a greater than 10% YOY increase in the fan base through a marketing program targeting fan engagement; offered new experience-based content appealing to fans' empathy and attachment to the Japan National Team
- Segmented fans through cluster analysis (k-means method) to gain a deeper understanding of their needs and wants; drove strategic approaches that set clear targets and objectives to promote their experiences
- Planned and executed programming and marketing to enhance fan engagement with the 2018 FIFA World Cup, securing ten sponsors and twice the budget compared to the previous World Cup

**Accenture Japan Ltd.**                                                                  **Tokyo, Japan**
*Strategy Consultant*                                                             *July 2013 – April 2016*
- Engaged in consulting projects for more than ten organizations, including government offices and major retailers
- Analyzed work volume and expenses for operations conducted by municipalities nationwide for the Ministry of Health, Labour and Welfare; secured a 20% increase in the baseline compensation for these operations
- Designed a simulator that predicts customer unit price and sales volume; analyzed data on store locations of a major retailer using multiple regression analysis
- Studied design of a new visa category for the Ministry of Foreign Affairs to promote longer stays by wealthy visitors to Japan; analyzed similar systems in Australia and New Zealand
- Assisted a major retailer in doubling their digital promotions budget by designing an improved model for estimating marketing ROI

# S K I L L S

- **Statistical Skills**: Survival analysis, Longitudinal analysis, Random Forest, Multivariate linear models, Graphical models, Bayesian models
- **Computing Skills:** R, Julia, SAS, STATA, Google BigQuery, R Shiny, R Markdown, LaTeX
- **Ability:** Problem-solving, Critical thinking, Project management, Accuracy in work