Vita - Toby A. White

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Professional Designations

Fellow of the Society of Actuaries (FSA) – Finance track, January 2000
Chartered Financial Analyst (CFA) – January 2003

Education

University of Washington, Seattle, Washington
Ph.D. in Statistics
Date of Graduation: Fall 2008
Dissertation - *Latent Class Transition Modeling Extensions with Covariates: Application to the U.S. Elderly Chronically Disabled*

University of Iowa, Iowa City, Iowa
M.S. in Statistics and Actuarial Science
Date of Graduation: May 1996

Kalamazoo College, Kalamazoo, Michigan
B.A. in Mathematics and Music
Date of Graduation: June 1994

Budapest Semester in Mathematics, Budapest, Hungary, Fall 1992

Drake University Vita (detailed in upcoming pages)

Teaching
Scholarship
Service
Outreach
Advising/Mentoring

Summary of Teaching

Winner of David Lawrence Outstanding Undergraduate Teaching Award for CBPA, 2012-2013

Fall 2024:

ACTS 50 – Introduction to Actuarial Science
ACTS 131 – Probability
INS 51 – Principles of Insurance
STAT 130 – Probability for Analytics

Spring 2024:
ACTS 131 – Probability
FIN 197 (2 sections) – Seminar in Finance (Case Studies)

Fall 2023:
ACTS 131 – Probability

Spring 2023:
ACTS 120 – Interest Theory (UEC Class)
ACTS 140 – Statistics for Risk Modeling (UEC Class)

Fall 2022:
ACTS 050 (2 sections) – Introduction to Actuarial Science
ACTS 120 – Interest Theory (UEC Class)
ACTS 140 – Statistics for Risk Modeling (UEC Class)
FIN 095 – Personal Finance

Spring 2022:
ACTS 131 – Probability
FIN 95 – Personal Finance

Fall 2021:
ACTS 050 (2 sections) – Introduction to Actuarial Science
ACTS 131 – Probability
ACTS 135 – Mathematical Statistics (VEE Course for SOA)

Spring 2021:
ACTS 131 – Probability
FIN 102 (2 sections) – Advanced Corporate Finance

Fall 2020:
ACTS 120 – Interest Theory
FIN 102 – Advanced Corporate Finance

Spring 2020:
ACTS 135 – Mathematical Statistics (VEE Course for SOA)
INS 051 – Principles of Insurance
FIN 95 – Personal Finance

Fall 2019:
MATH 1210 – Statistics for the Life Sciences, Seattle University

Spring 2019:
ACTS 120 – Interest Theory
INS 051 – Principles of Insurance
FIN 198 – Applied Business Analysis (Capstone class for ACTS majors)

Fall 2018:
FIN 102 (2 sections) – Advanced Corporate Finance
ACTS 165 – Short-Term Actuarial Math II (Relates to Exam STAM)

Spring 2018:
ACTS 121 (2 sections) – Introduction to Derivatives
FIN 121 (finance-specific version of ACTS 121, see below)

Fall 2017:
FIN 102 (2 sections) – Advanced Corporate Finance
ACTS 141 – Statistical Modeling

Spring 2017:
ACTS 131 (2 sections) – Probability
FIN 121 (finance-specific version of ACTS 121, see below)
STAT 172 – GLM & Data Mining (completed last 8 weeks of semester)

Fall 2016:
ACTS 141 (2 sections) – Statistical Modeling
ACTS 150 – Life Contingencies I
-helps prepare students for SOA Exam MLC (along with ACTS 151)

Spring 2016:
FIN 102 (2 sections) – Advanced Corporate Finance
ACTS 141 – Statistical Modeling

Fall 2015:
ACTS 141 (2 sections) – Statistical Modeling
-helps prepare students for SOA Exam C (along with ACTS 132/160)
FIN 121 (finance-specific version of ACTS 121, see below)

Spring 2015:
FIN 102 (2 sections) – Advanced Corporate Finance
-VEE Course for Corporate Finance
ACTS 151 – Life Contingencies II
-helps prepare students for SOA Exam MLC (along with ACTS 150)

Fall 2014:
ACTS 131 (2 sections) – Probability
-helps prepare students for SOA Exam P
FIN 121 (finance-specific version of ACTS 121, see below)

Spring 2014:
ACTS 131 (2 sections) – Probability
ACTS 132 – Probability II
-helps prepare students for SOA Exam C (along with ACTS 141/160)

Fall 2013:
ACTS 121 / FIN 121 (2 sections) – Introduction to Derivatives
-helps prepare students for SOA Exams FM and MFE
ACTS 131 – Probability

Spring 2013:
ACTS 145 (2 sections) – Derivatives Mathematics
-helps prepare students for SOA Exam MFE

Fall 2012:
ACTS 121 / FIN 121 (2 sections) – Introduction to Derivatives
FIN 150 (now ACTS 145, see above)

Spring 2012:
FIN 193 (2 sections) – Portfolio Management & Investment Analysis
ACTS 140 – Interest Theory (now ACTS 120)
  -helps prepare students for SOA Exam FM

Fall 2011:
FIN 150 (2 sections) – Derivatives Mathematics
FIN 101 – Corporate Finance

Spring 2011:
FIN 101 (2 sections) – Corporate Finance
FIN 150 – Derivatives Mathematics

Fall 2010:
FIN 150 (2 sections) – Derivatives Mathematics
ACTS 140 (2 sections) – Interest Theory

Spring 2010:
FIN 101 (2 sections) – Corporate Finance
ACTS 160 – Credibility and Simulation
  -helps prepare students for SOA Exam C (along with ACTS 132/141)

Fall 2009:
FIN 150 (2 sections) – Derivatives Mathematics
ACTS 140 – Interest Theory

Spring 2009:
FIN 101 (2 sections) – Corporate Finance
STAT 131 – Probability (now ACTS 131)

Fall 2008:
FIN 150 (2 sections) – Derivatives Mathematics
ACTS 140 – Interest Theory

Summary of Scholarship

Refereed Scholarship:

- White, Toby, "The Changing of the Guard (from LIBOR to SOFR) and How Both Insurers and Regulators are Responding," *Journal of Insurance Regulation*, 40:5, p.1-29, October 2021.

- Chen, Yiqing, White, Toby, and Yuen, Kam Chuen, "Precise Large Deviations for Aggregate Claims with Arbitrary Dependence Between Claim Sizes and Waiting Times," *Insurance: Mathematics and Economics*, 97, p.1-6, March 2021.

- Senteza, Jimmy, Suh, Inchul, and White, Toby, "Under Armour: Will a Fallen Titan Recover?" *International Journal of Teaching and Case Studies*, 11:4, p.285-301, February 2021.

- White, Toby, "The Impact of Recent Market Volatility on Financial and Retirement Planning," *Society of Actuaries Call for Essays: The Impact of COVID-19 on Aging & Retirement*, published on www.soa.org, August 2020.

- Senteza, Jimmy, Suh, Inchul, and White, Toby, "Battling the Oil Death Spiral: ConocoPhillips v. Antero Resources," *Southeast Case Research Journal*, 16:2, p.95-116, Fall 2019.

- Long, Rick, Senteza, Jimmy, Suh, Inchul, and White, Toby, "J.C. Penney Corporation: Reinventing Retail," *Journal of Finance Case Research*, 17:1, 2018.

- White, Toby, *Measures of Investment Risk, Monte Carlo Simulation, and Empirical Evidence on the Efficient Markets Hypothesis*, Study Note IFM-21-18 for SOA Exam IFM (Investment and Financial Markets), Society of Actuaries: Schaumburg, IL, 2018.

- Rubin, Larry, Crowe, Kevin, Fisher, Adam, Ghaznawi, Omar, McCoach, Richard, Narva, Rachel, Schaulewicz, David, Sullivan, Tom, and White, Toby, "An Overview of the U.S. LTC Insurance Market: The Economic Need for LTC Insurance, the History of LTC Regulation & Taxation, and the Development of LTC Product Design Features," *SOA: Managing the Impact of Long-Term Care Needs and Expense on Retirement Security Monograph*, December 2014.

- Root, Thomas, Senteza, Jimmy, and White, Toby, "Characterizing Financial Risk Tolerance by Nationality: A Comparison of the U.S. and Uganda," *Journal of Business and Behavioral Sciences,* 26:2, p.156-173, Summer 2014.

- Gardner, Lisa, and White, Toby, "Managing Investment, Underwriting, and Production Risks from Drought-Related Agriculturual Exposures," *CAS eForum*, Winter 2014 (1st place winner ($700) in CAS Climate Change Essay Competition)

- White, Toby, and Erosheva, Elena, "Using Group-Based Latent Class Transition Models to Analyze Chronic Disability Data from the National Long-Term Care Survey 1984-2004," *Statistics in Medicine,* 32:20, p.3569-3589, September 2013.

- Gardner, Lisa, Santos, Christian, and White, Toby, "Actuarial Science Summer Camp for Women and Minorities," *Risk Management and Insurance Review*, (to be published in 16:2, p.1-13, Fall 2013).

- Long, Rick, Suh, Inchul, and White, Toby, "Netflix: DVD-by-Mail or Online Streaming?", *International Research Journal of Applied Finance*: *Case Studies,* June 2013

- White, Toby, "Recent Volatility in U.S. Equity Markets: A Review of Key Contributing Factors and Relationships," *Drake Management Review*, 2:2, p.8-31, April 2013.

- Bale, Jill, Senteza, Jimmy, and White, Toby, "A Model for Running an Undergraduate Business-Focused Case Competition," *International Research Journal of Applied Finance: Case Studies*, January 2013.

- Gardner, Lisa, and White, Toby, “Drake University’s Actuarial Science and Risk Management and Insurance Programs”, *CPCU eJournal*, July 2012.

- White, Toby (author), and Klugman, Stuart (editor), *Understanding Actuarial Practice*, Investments Section, Chapters 5-11 (p.55-168), Society of Actuaries: Schaumburg, IL, 2012.

- Erosheva, Elena, and White, Toby, “Issues in two-phase chronic disability measurement: An example of the National Long Term Care Survey”, *Journal of Official Statistics*, 26:2, p.317-339, June 2010.

Non-refereed Scholarship:

- *Exam MFE (Mathematics of Financial Engineering) Study Manual* Released – November 15, 2009 (Marketed by ACE Study Manuals, to be distributed by Actuarial Bookstore, 130 pages in length)

Recent Presentations:

-Chair for Invited Speaker Session, Act. Research Conf. (2023)
-Introduced Featured Speaker at Banquet, Act. Research Conf. (2023)
-Iowa Actuaries Club, *LIBOR v. SOFR (Interest Rate Benchmarks): Changing of the Guard*, March 2020
-Seattle University Math Colloquium, *How to Become an Actuary (and Trends in Actuarial Careers)*, October 2019
-Drake CBPA Research Seminar, *Idiosyncratic Volatility and Extreme Price Movements in U.S. Equity Markets*, April 2016
-Iowa Actuaries Club, *Can Health Care Co-Operatives Survive Now?*, February 2016 (co-presented with Lisa Gardner)
-Drake CBPA Research Seminar, *Characterizing Financial Risk Tolerance by Nationality: A Comparison of the U.S. and Uganda*, April 2013
-Drake CBPA Research Forum: Poster Session, *Recent Volatility in U.S. Equity Markets: A Review of Key Contributing Factors and Relationships*, April 2012
-Iowa Actuaries Club, *Extreme Volatility in U.S. Equity Markets and Associated Applications with Derivatives*, March 2012

-Society of Actuaries Education & Examination Central Review, *Overview of Investments Section (from upcoming Fundamentals of Actuarial Practice* text), July 2011
- Drake CBPA Research Seminar, *Best Practices for Running and Undergraduate Finance Case Competition*, November 2010
- Financial Education Association Annual Conference, San Antonio, Texas, *Model for an Undergraduate Finance Case Competition*, October 2010
    -Chair: ERP, Project Management, & Business Applications
- Drake Actuarial Student Society Orientation Meeting , *Drake Actuarial Program / SOA Exam Overview*, September2010
- University of Iowa Statistics Research Seminar, Iowa City, Iowa *Group-Based Extensions to Latent Class Transition Models with Applications to Old-Age Disability Survey Data*, February 2010
- Drake CBPA Research Seminar, *Group-Based Latent Class Transition Models: an Example from the NLTCS*, December 2009
-National Long-Term Care Survey Research Conference, Bethesda, Maryland, *Group-Based Latent Class Transition Models for the Elderly U.S. Chronically Disabled*, May 2009
-National Long-Term Care Survey Research Colloquium, Bethesda, Maryland, *Issues and Models in Survey Measurement of Chronic Disability*, May 2009
- ENAR International Biometrics Society, Spring Meeting, Washington D.C., *Latent Class Transition Models for the Elderly U.S. Chronically Disabled*, March 2008
- University Nevada-Las Vegas, Monthly Research Colloquium, Las Vegas, *Latent Class Transition Models for the Elderly U.S. Chronically Disabled*, February 2008
-University of Washington, Interdisciplinary Geriatric Research Forum, Seattle, *Latent Class Transition Models for the Elderly U.S. Chronically Disabled*, September 2007
-University of Washington, ACMS Undergraduate Weekly Seminar, Seattle, *Becoming an Actuary and Associated Applications in Probability and Finance*, May 2007, February 2007, November 2006, May 2006, May 2005, January 2003
-University of Washington, CSSS Graduate Student Seminar, Seattle, *Latent Class Transition Models with Covariates*, January 2007

Summary of Service

Compensation Committee for Drake University (Spring 2024-present)
Academic Appeals and Integrity Committee for Zimpleman College of Business (Fall 2024-present)
Chair of Drake Actuarial Science, Insurance, and Risk Management Department (Fall 2017-Spring 2023)
Member of Dean's Faculty Cabinet (Fall 2017-Spring 2023)
Accreditation Actuary for Drake/SOA UEC Program (2022–2023)
Author of Initial Application for Drake/SOA UEC Program
Author of Application for Drake/SOA CAE Renewal (2022-2023)
Faculty Judge/Mentor for Brooks Finance Case Competition (2023)
Faculty Judge for Insurance Disruption Days Competition (2022-2023)
Member of Committee for Possible Bermuda Transfer Program (2023)
Author of Application for CAS University Award (2022)
Member of Drake CBPA Research Committee (2021-Fall 2022)
Member of Search Committee ('22) ACTS Program Director
Member of Search Committee ('22) for non-tenure-track ACTS professor
Member of Search Committee ('21) for non-tenure-track ACTS professor
Member of Search Committee ('20) for non-tenure-track ACTS professor
Reviewer of 2 Chapters in new Actuarial Science text on Data Analytics
Participant in Summer Orientation for New Act.Sci. Students, 2020
Frequent Participant in events catered toward high-school perspectives interested in actuarial science (including panel discussions, Presidential Scholarship presentations, welcoming receptions, and office visits), 2018
Chair of Drake CBPA Undergraduate Curriculum Redesign Committee (Fall 2017-Summer 2019)
Member of Drake CBPA Promotion & Tenure Committee (2015-2017)
Designer of New Courses in Drake ACTS Curriculum (161/165/190), where 161/165 correspond to STM, and 190 is a Capstone (2016)
Writer of Foreword for Two Actuarial Science Books (Ju and Hung)
Faculty Mentor for Drake Actuarial Science Newsletter (Fall 2015-…)
Reviewer of Liang (Jason) Hong's Research Portfolio for Potential Tenure at Robert Morris University
Assignor of Courses to ACTS faculty (Fall 2014-Spring 2015)
Planner/Leader of ACTS departmental meetings (Fall 2014–Spring 2015)
Member of Undergraduate Curriculum Committee, CBPA (2014-present)
Member of Strategic Planning Committee, CBPA (2014)

Member of Search Committee ('16) for tenure-track ACTS professor
Member of Search Committee ('15) for ACTS Program Director
Member of Search Committee ('14) for 2 tenure-track ACTS professors
Member of Search Committee ('14) for 2 tenure-track ACTS professors
Member of Search Committee ('13) for tenure-track ACTS professor
BUS 004 Writing Assessor: (September 2013 - present)
Meet with High School (Actuarial) Perspectives – Summers 2013-2014
BUS 001 Writing Assessor: (September 2012 - present)
Travelers Actuarial Case Competition Faculty Liaison
(October 2012 – present)
BUS 003 Writing Assessor: (September 2010 - present)
CBPA Brooks Weekend Competition Co-Leader for third straight year:
(September 2009 – present)
Drake Actuarial Science Summer Camp (2011-2012)
Weekly Current Events Summary: (August 2010 - present)
Drake Racquetball Club: Faculty Sponsor: (August 2010 - present)
Drake Bowling Club: Faculty Sponsor: (August 2011 - present)
Drake Actuarial Student Society: Faculty Advisor: (2010-present)
Drake Actuarial Science Website: (January 2010)
Instructor for (Free) Drake Exam-Prep Seminar for SOA Exam MFE
Member of Search Committee ('09) for tenure-track actuarial professor
Member of Search Committee ('08) for tenure-track actuarial professor
Member of Search Committee ('08) for contract-based statistics professor
Author and Reviewer for Drake Actuarial Science Newsletter
Administrator of Drake Actuarial Communication, which includes
maintaining SOA student exam records + sending out DASS e-mails
Preparer of Evidence to Support Drake becoming a CAE (Center of
Actuarial Excellence); the on-site visit was completed October 2009
Sponsor and Selector of CFA Level I Scholarships for Drake students
Reviewer for about 12 Journal Articles (relating to my Ph.D. Research)

Summary of Outreach

Author for FAP (Fundamentals of Actuarial Practice) Content Redesign
Member of SOA Committee to Review Exam FM (2022 - present)
Member of Exam FAM Examination Committee (2022 - present)
Writer of CAS Exam Questions for Coaching Actuaries (2023)
General Officer for Exam IFM (2019-2022)

Regular Writer of Exam FM (Fin.Math) Exam Questions (2010 - present)
Regular Writer of Exam P (Probability) Exam Questions (2010 - present)
Member of SOA ASA Curriculum Redesign Committee (2021)
Writer of Revised Learning Objectives for SOA Exam P (2021-2022)
Consultant for Multi-State Lottery Association (Re: Lotto Fraud), 2018
Author of Study Note for SOA Exam IFM (Investments and Financial Markets) Re: Risk Measures, Simulation, and Market Efficiency, 2018
Reviewer for the Actuarial Science Program at University of St. Thomas
Member of Steering Committee for ASA Curriculum Redesign (2016-…)
Chair of Exam MFE/IFM Curriculum Committee (2014-2019)
Vice-Chair of Exam MFE (Mathematics of Financial Engineering) Committee (2013-2015); Member (2010-2012)
Member of Exam FM Curriculum Committee (2014)
Working with PwC on Analysis of LTC Insurance Data (2014-2015)
Member of Hickman Scholar Committee (for SOA) (2012-2015)
Consultant / Expert Witness for Attorney Chuck Crook (April 2012 – September 2012)
Instructor for River Glen Wealth Management Seminar on Risk Planning and Insurance: (September 2009 – December 2011)
Statistics Consultant for Research done by Professor Steve Scullen: (September 2009)
Chair of Assessment Development for Society of Actuaries FAP Exam Fundamentals of Actuarial Practice, (July 2009 – January 2010)
Curriculum Developer for River Glen Wealth Management Seminar on Risk Planning and Insurance, (Fall 2009)
Vice-Chair for Society of Actuaries Course 7 (Modeling), (2007-2008)
Question Writer/Grader for SOA Course 7 (Modeling), (2005-2006)
Writer of Sample Exam Derivatives Questions for SOA Exam FM, (2009)
Reviewer of Financial Math Questions for SOA Exam MFE, (2008)
Stalla/Becker Instructor for CFA Level 1 Review Classes, (2009)
Member of Drake Actuarial Science Advisory Board, (2009-present)
Lead instructor for following Chicago Actuarial Association courses:
-Actuarial Exam Seminar for Courses 2/FM (see above), (2001-2008)
-Actuarial Exam Seminar for Course 4, (2001-2003)

Summary of Advising/Mentoring

Advising:

I currently advise about 40 upper level actuarial majors

I also receive office visits and e-mails from both current Drake actuarial students and prospective students considering applying to our program

I have written letters of recommendation and acted as employment sponsor for numerous Drake actuarial students

Mentoring:

During the winter/spring semester 2011, I served as a mentor for Natasha Fee, as she worked through the SOA FAP computer modules; She received credit for an ‘independent study,’ per my supervision

During the winter/spring semester 2010, I served as a mentor for Molly Lundberg, as she worked through the SOA FAP computer modules; She received credit for an ‘independent study,’ per my supervision