Ding-Geng (Din) Chen, Ph.D. FASA, MASSAf

Executive Director and Professor in Biostatistics, College of Health Solutions,
Senior Global Futures Scientist, Julie Ann Wrigley Global Futures Laboratory
Arizona State University, Phoenix, AZ, USA.
Phone: 1-602-496-7877 (Work); Email: dinchen@asu.edu
ORCID: https://orcid.org/0000-0002-3199-8665
SCOPUS: https://www.scopus.com/authid/detail.uri?authorId=55536267800
ResearchGate: https://www.researchgate.net/profile/Ding-Geng-Chen
Google Scholar: https://scholar.google.com/citations?user=I0yhzg0AAAAJ&hl=en

QUALIFICATIONS OUTLINE

- Elected member, Academy of Science of South Africa (MASSAf), 2024
- Elected Fellow, American Statistical Association (FASA), 2016
- Elected member, International Statistics Institute (MISI), 2016
- Elected Fellow, Society for Social Work and Research (FSSWR), 2018
- Executive director and Professor of Biostatistics with more than 20 years' experience in academia with more than 200 professional publications and 41 books in biostatistical clinical trial methods, meta-analysis, multi-level modelling, joint modelling, and Bayesian statistics.
- More than 25 years' experience as a professional statistician and biostatistician for government, pharmaceutical, and biotech industries
- Editor-in-Chief: Springer Book Series-Emerging Topics in Statistics and Biostatistics (https://www.springer.com/series/16213)
- Editor-in-Chief: (https://www.springer.com/series/13402) ICSA Book Series in Statistics
- Successfully Funded with multi-million dollars by NIH R01 and other state and federal proposals
- Program Committee Board Member and Publicity Chair for Deming Conference of Applied Statistics (https://www.demingconference.org. A primer international conference in biostatistics for the biopharmaceutical industry and FDA regulations since 1945) with distinguished awards on long-term service and professional presentations at the Deming Conference

EDUCATION

Ph.D. in Statistics (January 1992 to June 1995)

Department of Mathematics and Statistics, University of Guelph, Canada

Dissertation: A Shrinkage Estimator for Combination of Bioassays (Published at Biometrics)

Supervisor: Professors Edward Carter, Peter Kim and John Hubert

MSc in Statistics (September 1985 to July 1987)

Department of Applied Mathematics**,** Hunan University, China.

MSc. Thesis: Robustness in Linear Model

Diploma in Applied Mathematics (September 1978 to July 1981)

Department of Mathematics, Jishou University, P. R. China

PROFESSIONAL EXPERIENCE

October 2021 to present. Arizona State University, Phoenix, AZ, USA

Executive Director and Professor in Biostatistics, College of Health Solutions

Senior Global Futures Scientist, Julie Ann Wrigley Global Futures Laboratory

July 2015 to September 2021. University of North Carolina at Chapel Hill, NC, USA

Wallace H. Kuralt Distinguished Professor in Biostatistics and Director of Consortium of statistical development and consultation, School of Social Work.

Professor in Biostatistics, Department of Biostatistics, Gillings School of Global Public Health,

December 2010 to June 2015. University of Rochester Medical Center, Rochester, NY, USA

Professor in Biostatistics, Department of Biostatistics and Computational Biology, School of Medicine and Dentistry, University of Rochester, NY, USA

Professor in Biostatistics, Center of Research, School of Nursing, University of Rochester, NY, USA

Professor in Biostatistics, Institute for Data Science, University of Rochester, NY, USA.

August 2009 to December 2010: Georgia Southern University, Statesboro, GA, USA

Karl E. Peace Endowed Eminent Scholar Chair in Biostatistics and Professor in Biostatistics, Department of Biostatistics, Jiann-Ping Hsu College of Public Health.

August 2005 to August 2009:

Professor in Biostatistics, Department of Mathematics and Statistics, South Dakota State University, Brookings, SD.

Professor in Biostatistics, Department of Surgery, Sanford School of Medicine, University of South Dakota, Sioux Falls, SD.

July 2000 to Aug 2005: International Pacific Halibut Commission, University of Washington, Seattle, USA. Biostatistician/Quantitative Scientist

May 1996 to July 2000: Pacific Biologic Research Station, Government of Canada, Canada Biostatistician/Research Scientist

June 1994 to May 1996: Ontario Ministry of Natural Resources, Sault Ste Maria, ON, Canada. Research Statistician

January 1992 to June 1994: University of Guelph, Guelph, ON, Canada.

Teaching and Research Assistant, Department of Mathematics and Statistics.

August 1987 to December 1991: Hunan University, Changsha, Hunan, China

Lecturer (USA Assistant Professor-equivalent), Department of Applied Mathematics.

OTHER PROFESSIONAL EXPERIENCE

April 30 2023 to May 12, 2023: Universidade Nova de Lisboa, Portugal

The Centro de Matemática e Aplicações of Universidade Nova de Lisboa (NOVA Math) invites Professor Ding-Geng (Din) Chen for a scientific research visit to NOVA Math facilities, located at NOVA School of Science and Technology, to take place from 30th April to 12th May of 2023, with the aim of dynamizing synergies and expanding collaborations between the College of Health Solutions of the University of Arizona and NOVA Math researchers.

March 2017 to Present: University of KwaZulu-Natal, Pietermaritzburg, South Africa.

Honorary Professor, School of Mathematics, Statistics and Computer Science.

Nov 2015 to Present: University of Pretoria, Pretoria, South Africa.
Extraordinary Professor and SARCHI in Biostatistics, Department of Statistics

July 2015 to July 2021. University of Rochester Medical Center, Rochester, NY, USA
Adjunct Professor in Biostatistics

May 1997 to May 1998. Institute of Chemical Toxicology, Wayne State University, Detroit, USA.
Visiting Scholar/Biostatistician

LEADERSHIP EXPERIENCE

October 2021 to Present. Executive Director in Biostatistics, College of Health Solutions (CHS), Arizona State University (ASU)

- Founding Executive Director
  - Create and establish a new biostatistics program with Master's and Ph.D. degrees
  - Lead research in biostatistics and integrative data harmonization
  - Mentor faculty and staff members
  - Supervise master's and Ph.D. students
- Biostatistics Core director
  - Lead the development and expansion of the "Biostatistics Consultation Core"
  - Supervise core senior and junior staff members
  - Coordinate and support research proposals and projects for the Biostatistics Core
  - PI/Co-PI/Co-I for research projects and proposals to federal and state funding agencies
- CHS Graduate Program Director Committee
  - Review and advise all graduate programs
  - Review new program development and submission
- College Research Advisory Committee
  - Review and advise research mission to CHS
  - Review research proposals submitted
- College Curriculum committee member (since August 2023)
  - Review new degree programs proposed to ASU
  - Review new courses developed by the CHS

July 2015 to September 2021. University of North Carolina at Chapel Hill, NC, USA

- Director of Consortium for Statistical Development and Consultation (CSDC) in Social Intervention Research
  - Built the first statistical simulation lab in social intervention research
  - Developed and disseminated methodology on experimental design and advanced statistical modeling for social intervention research (produced a series of methods and high-impact publications)
  - Offered training, consultation, and partnerships to translate research findings for practice and policy.
- Program Director on Social Research Methods and Data Analytics
  - Directed this new program with a group of faculty to lead the social work profession in developing and implementing new, advanced statistical methods to harness the power of burgeoning data. Faculty in this program have expertise in the use of qualitative and quantitative methods, including measurement development, causal analysis, Bayesian methods, social interventions, econometrics, and geographic information systems mapping.
  - Provided consultation and support within and outside our School and University for all phases of the research process, including formulating plans for participant recruitment, data collection, data management, and dataset construction.
  - Promoted the use of advanced methods in social science research, the Program on Social Research Methods and Data Analytics hosts workshops and seminars that are open to students and faculty from across campus. Faculty scholarship related to data analytics includes numerous publications on statistical causal inference, clinical trial biostatistics and biopharmaceutical applications, meta-analysis, Bayesian methods, and other topics.

December 2016 to Present: Deming Conference of Applied Statistics (The premier international conference in biostatistics for the biopharmaceutical industry and FDA regulations since 1945)

- Program Committee Board Member and Organizing Committee member, to develop and organize the annual conference program
- Publicity Chair to promote this conference nationally and internationally
- Featured speaker with an awarded medal for the invited tutorial for the last 12 years

January 2010 to December 2014. American Public Health Association.

Statistics Section, Chair-elect (2012), Chair (2013), Past-Chair (2014).

Program Committee Chair for 2010, 2011, 2012, 2013 and 2014.

December 2010 to June 2015. University of Rochester Medical Center, Rochester, NY, USA

- Executive member for "Center for Research and Evidence-Based Practice"
- Group leader for "Statistical Design and Analysis Consulting Group"
- Research Advisory Committee Member

August 2009 to December 2010: Georgia Southern University, Statesboro, GA, USA

- Karl E. Peace Endowed Eminent Scholar Chair in Biostatistics

August 2005 to August 2009: South Dakota State University and University of South Dakota

- Director and Coordinator of the biostatistics/bioinformatics Computational Sciences and Statistics (CSS) Ph.D. program
    - CSS Ph.D. Steering Committee member
- Coordinator of "Statistical Consulting Service"
- Group leader on "Biostatistics and Bioinformatics Research Group"
- Search Committee Chair for Bioinformatics faculty position to build the bioinformatics program

MEMBERSHIPS

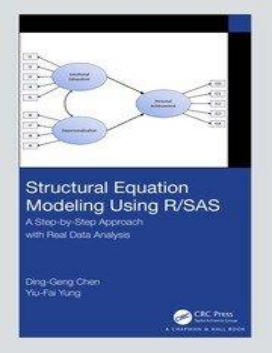
1) American Statistical Association (ASA), Elected Fellow 2016, Lifetime Member
2) International Statistical Institute (ISI), Elected member 2016, Lifetime Member
3) The International Biometric Society (IBS), Lifetime Member
4) International Chinese Statistical Association (ICSA), Lifetime member. Editor-in-Chief, Springer/ICSA Book Series in Statistics (2013-),
5) South Africa Statistics Association (SASA), Member (2017-)
6) American Public Health Association (APHA) Member (2012-), Elected Chair (2013), Chair (2014), Past Chair (2015) of the Applied Public Health Statistics Section.
7) Society for Social Work and Research (SSWR). Member (2015-); Elected Fellow (2020-)

BOOKS

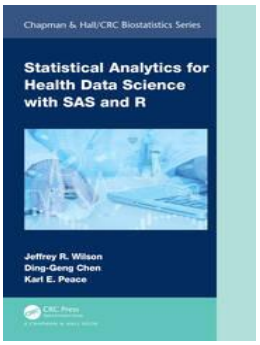
Co-Authored Books

1) **Chen, D. G**. and Wilson, J. (2025). **Advanced Statistical Analytics for Health Data Science using R/SAS**. Chapman & Hall/CRC. In press.

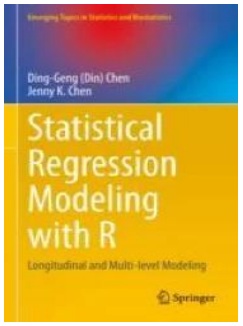
2) **Chen, D.G.** and Yiu-Fai Yung (2023). **Structural Equation Modelling Using R/SAS: A Step-by-Step Approach with Real Data Analysis**. Chapman and Hall/CRC.
(Published on July 24, 2023) 432 pages,
ISBN (ebook): 9781003365860,
ISBN (hardcopy): 9780367277352
https://www.routledge.com/9781003365860.



3) Wilson, J., **Chen, D. G**. and Peace, K. E. (2023). **Statistical Analytics for Health Data Science using R/SAS**.
Chapman & Hall/CRC.
(Published on March 28th, 2023, 312 pages.
http://www.routledge.com/9781032325620.
ISBN: 9781032325620.
Book Review from JASA:
https://www.tandfonline.com/doi/full/10.1080/01621459.2023.2273403

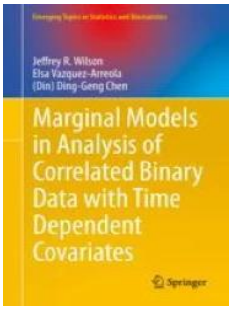


4) **Chen, D. G.** and Chen, J. K. (2021). **Statistical Regression Modeling Using R: Longitudinal and Multi-Level Modeling**.
Springer (Emerging Topics in Statistics and Biostatistics).
https://www.springer.com/gp/book/9783030675820.
DOI: 10.1007/978-3-030-67583-7. 228 pages.

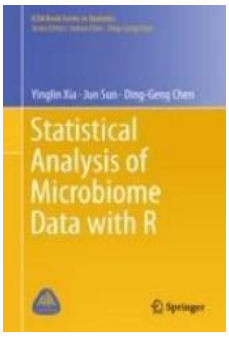


5) **Chen, D. G.,** and Peace, K. E. (2021). **Applied Meta-Analysis with R and Stata, Second Edition**.
Chapman & Hall/CRC Biostatistics Series. FL: Boca Raton.
544 pages (March 19, 2021).
https://www.routledge.com/Statistical-Meta-Analysis-using-R-and-Stata/Chen-Peace/p/book/9780367183837.
https://doi.org/10.1201/9780429061240.

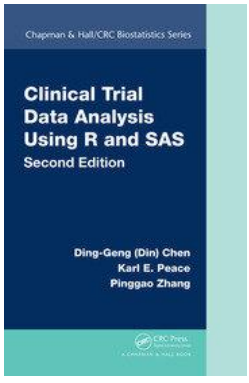
6) Wilson, J., Vazquez, E. and **Chen, D. G.** (2020). **Marginal Models in Analysis of Correlated Binary Data with Time-Dependent Covariates**. Springer (Emerging Topics in Statistics and Biostatistics). (Published on October 1, 2020).
(https://www.springer.com/gp/book/9783030489038) 166pages.
DOI: 10.1007/978-3-030-48904-5.



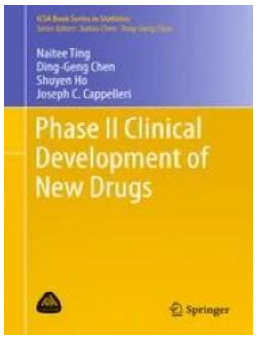
7) Xia, Y., Sun, J. and **Chen, D. G**. (2018). **Statistical Analysis of Microbiome Data with R**.
Springer (ICSA Book Series in Statistics)
Published on 20 October 2018, 505 pages.
(https://www.springer.com/us/book/9789811315336),
https://doi.org/10.1007/978-981-13-1534-3.



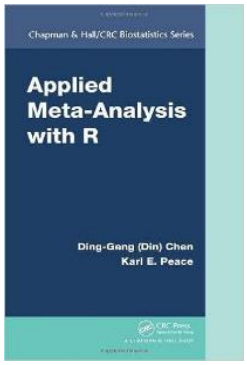
8) **Chen, D.G.**, Peace, K.E. and Zhang, P.G. (2017). **Clinical Trial Data Analysis using R and SAS**. Chapman & Hall/CRC Biostatistics Series. Boca Raton, FL.
Published on May 3, 2017 410 Pages 100 B/W Illustrations.
(https://www.crcpress.com/Clinical-Trial-Data-Analysis-Using-R-and-SAS-Second-Edition/Chen-Peace-Zhang/p/book/9781498779524).
https://doi.org/10.1201/9781315155104.



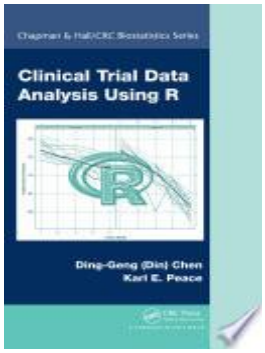
9) Ting, N., **Chen, D. G.**, Ho, S. and Cappelleri, J. (2017). **Phase II Clinical Development of New Drugs**.
Springer (ICSA Book Series in Statistics).
(http://www.springer.com/us/book/9789811041921),
Number of pages: 241. Published: 24 April 2017.
https://doi.org/10.1007/978-981-10-4194-5.



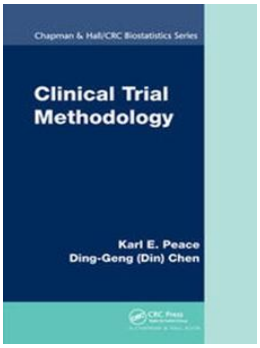
10) **Chen, D. G.** and Peace, K. E. (2013). **Applied Meta-Analysis with R**. (ISBN: 978-1-46-650599-5, 342 pages).
Chapman & Hall/CRC Biostatistics Series. FL: Boca Raton.
(https://www.crcpress.com/Applied-Meta-Analysis-with-R/Chen-Peace/p/book/9781466505995). Published by May 3, 2013.
DOI: 10.13140/2.1.3165.5368.



11) **Chen, D. G.** and Peace, K.E. (2011). **Clinical Trial Data Analysis using R**. Chapman & Hall/CRC Biostatistics Series. FL: Boca Raton.
(ISBN: 978-1-43-984020-7, 387 pages).
https://www.crcpress.com/Clinical-Trial-Data-Analysis-Using-R/Chen-Peace/p/book/9781439840207).
DOI: 10.13140/2.1.3362.1444.

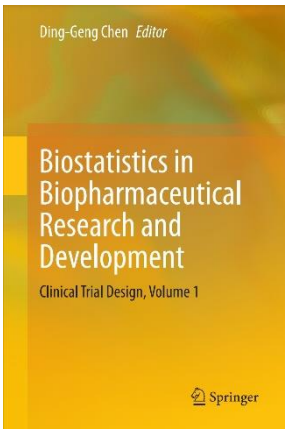


12) Peace, K.E. and **Chen, D. G**. (2010). **Clinical Trial Methodology**.
Chapman & Hall/CRC Biostatistics Series. FL: Boca Raton.
(ISBN: 978-1-58488-917-5, 420 pages, Published on July 20, 2010)
(https://www.crcpress.com/Clinical-Trial-Methodology/Peace-Chen/p/book/9781584889175).
DOI: 10.13140/2.1.4928.8646.

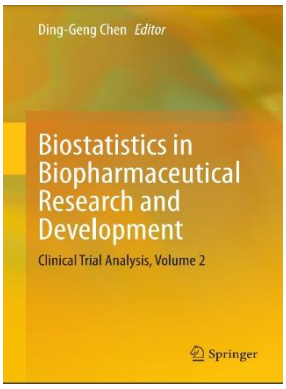


Co-Edited Books

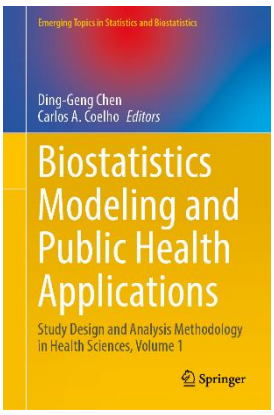
13) **Chen, D. G.** (2024). **Biostatistics in Biopharmaceutical Research and Development: Clinical Trial Design (Volume 1).**
Springer (ICSA Book Series in Statistics) .
ISBN 978-3-031-65947-8
ISBN 978-3-031-65948-5 (eBook)
https://doi.org/10.1007/978-3-031-65948-5
https://link.springer.com/book/10.1007/978-3-031-65948-5



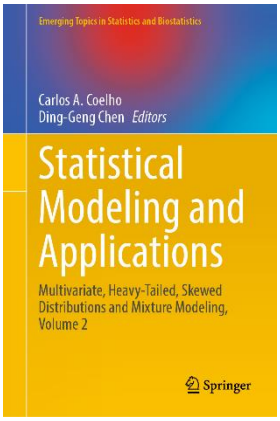
14) **Chen, D. G.** (2024). **Biostatistics in Biopharmaceutical Research and Development: Clinical Trial Data Analysis (Volume 2).**
Springer (ICSA Book Series in Statistics).
ISBN 978-3-031-65936-2
ISBN 978-3-031-65937-9 (eBook)
https://doi.org/10.1007/978-3-031-65937-9
https://link.springer.com/book/10.1007/978-3-031-65937-9



15) **Chen, D. G.** and Coelho, C. A. (2024). **Biostatistics Modelling and Public Health Applications-Study Design and Analysis Methodology in Health Sciences** (Volume 1). Springer (Emerging Topics in Statistics and Biostatistics).
Hardcover ISBN: 978-3-031-69689-3
Softcover ISBN: 978-3-031-69692-3
eBook ISBN: 978-3-031-69690-9
https://link.springer.com/book/9783031696893.



16) Coelho, C. A. and **Chen, D. G.** (2024). **Statistical Modeling and Applications - Heavy-Tailed, Skewed Distributions and Mixture Modeling**, Volume 2.



Springer (Emerging Topics in Statistics and Biostatistics).

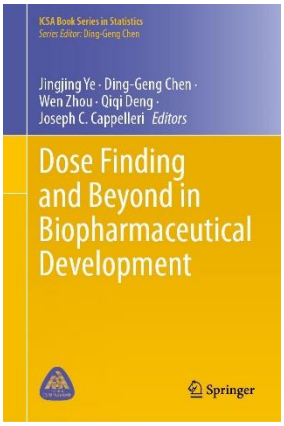
Hardcover ISBN: 978-3-031-69621-3

Softcover ISBN: 978-3-031-69624-4

eBook ISBN: 978-3-031-69622-0

https://link.springer.com/book/9783031696213

17) Ye, J., **Chen, D. G.,** Zhou, W. Deng, Q. and Cappelleri, J. C. (2024). **Dose Finding and Beyond in Biopharmaceutical Development**. Springer (ICSA Book Series in Statistics).



Publication Date: 01 November 2024

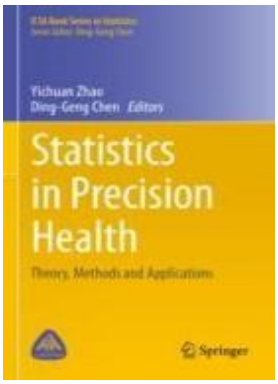
Hardcover ISBN: 978-3-031-67109-8

Softcover ISBN:978-3-031-67112-8

eBook ISBN: 978-3-031-67110-4

https://link.springer.com/book/9783031671098.

18) Zhao, Y. and **Chen, D. G**. (2024). **Statistics in Precision Health: Theory, Methods and Applications**. Springer (ICSA Book Series in Statistics): 544 pages. Published at June 24, 2024.



eBook ISBN: 978-3-031-50690-1;

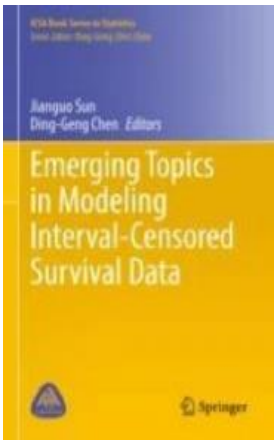
Hardcover ISBN: 978-3-031-50689-5;

Softcover ISBN: 978-3-031-50692-5.

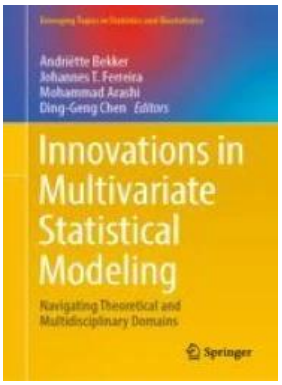
https://link.springer.com/book/9783031506895.

DOI: https://doi.org/10.1007/978-3-031-50690-1

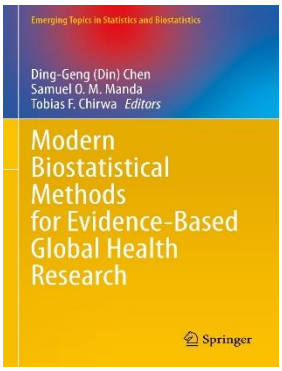
19) Sun, J., and **Chen, D. G.** (2022). **Emerging Topics in Modeling Interval-Censored Survival Data**. Springer (ICSA Book Series in Statistics). 340 pages, published at Nov 30, 2022.
Hardcover ISBN: 978-3-031-12365-8;
Softcover ISBN:978-3-031-12368-9
eBook ISBN: 978-3-031-12366-5
https://link.springer.com/book/9783031123689.
https://doi.org/10.1007/978-3-031-12366-5.



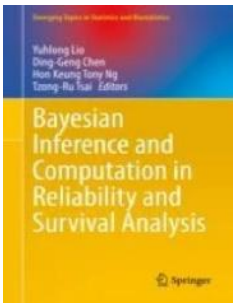
20) Bekker, A., Ferreira, J., Arashi, M. and **Chen, D. G.** (2022). **Innovations in Multivariate Statistical Modeling: Navigating theoretical and Multidisciplinary Domains**.
Springer (Emerging Topics in Statistics and Biostatistics).
439 pages. Published at December 16, 2022.
https://link.springer.com/book/9783031139703.
DOI: https://doi.org/10.1007/978-3-031-13971-0.



21) **Chen, D. G.,** Manda, S. and Chirwa, T. (2022). **Modern Biostatistical Methods for Evidence-Based Global Health Research**.
Springer (Emerging Topics in Statistics and Biostatistics).
(https://link.springer.com/book/9783031110115).
480 pages.
https://doi.org/10.1007/978-3-031-11012-2.

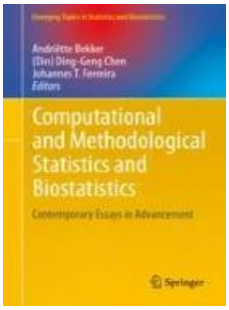


22) Lio. Y., **Chen, D. G.,** Ng, H.K. and Tsai, T. (2022) **Bayesian Inference and Computation in Reliability and Survival Analysis**.
Springer (ICSA Book Series in Statistics). 364 pages
https://link.springer.com/book/9783030886578.
https://doi.org/10.1007/978-3-030-88658-5.

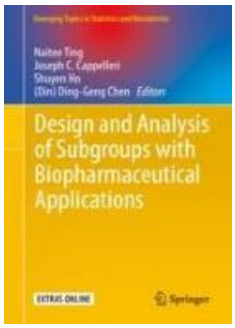


23) Zhao, Y. and **Chen, D. G.** (2021). **Modern Statistical Methods for Health Research**. Springer
(ICSA Book Series in Statistics). 496 pages.
https://www.springer.com/gp/book/9783030724368.
https://doi.org/10.1007/978-3-030-72437-5.

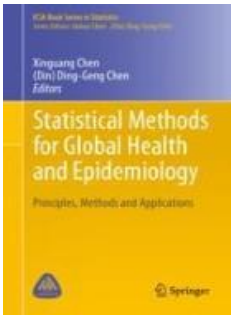
24) Bekker, A., **Chen, D. G**. and Ferreira, J. (2020). **Computational and Methodological Statistics and Biostatistics - Contemporary Essays with Advancements**.
https://www.springer.com/gp/book/9783030421953.
Springer (Emerging Topics in Statistics and Biostatistics). 543 pages.
DOI: 10.1007/978-3-030-42196-0.
ISBN: 978-3-030-42195-3.



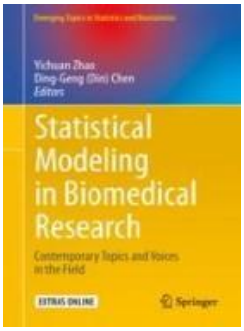
25) Ting, N., Cappelleri, J., Ho, S. and **Chen, D. G.** (2020). **Design and Analysis of Subgroups with Biopharmaceutical Applications**,
Springer (ICSA Book Series in Statistics). 400 pages.
DOI: 10.1007/978-3-030-40105-4,
Hardcover ISBN: 978-3-030-40104-7.
https://www.springer.com/gp/book/9783030401047.



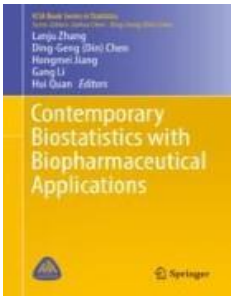
26) Chen, X. and **Chen, D. G**. (2020). **Statistical Methods in Global Health and Epidemiology: Principles, Methods and Applications**. Springer
(ICSA Book Series in Statistics). 403 Pages,
ISSN: 2199-0980,
DOI:10.1007/978-3-030-35260-8.
(https://www.springer.com/gp/book/9783030352592).



27) Zhao, Y. and **Chen, D. G.** (2020). **Statistical Modelling in Biomedical Research**.
Springer (ICSA Book Series in Statistics). (https://www.springer.com/gp/book/9783030334154). 491 pages,
ISSN: 2524-7735.
DOI:10.1007/978-3-030-33416-1.

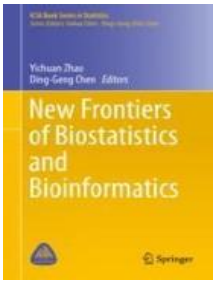


28) Zhang, L., **Chen, D. G**., Jiang, H., Li, G., Quan, H. (2019). **Contemporary Biostatistics with Biopharmaceutical Applications**,
Springer (ICSA Book Series in Statistics). 336 pages,
ISSN: 2199-0980.
DOI: 10.1007/978-3-030-15310-6.
(https://www.springer.com/gp/book/9783030153090).

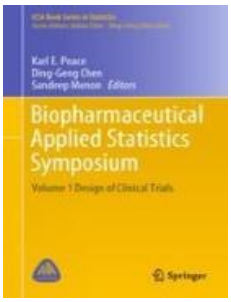


29) Lio. Y. Ng, H.K., Tsai, T. **Chen, D. G.** (2019). **Statistical Quality Technologies: Theory and Practice**,
Springer (ICSA Book Series in Statistics).
(https://www.springer.com/gp/book/9783030207083). 402 pages.
ISSN: 2199-0980.
https://doi.org/10.1007/978-3-030-20709-0

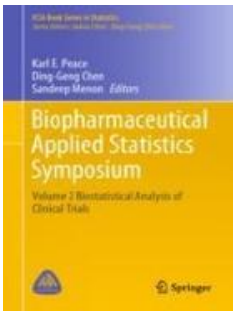
30) Zhao, Y. and **Chen, D. G.** (2018). **New Frontier in Biostatistics and Bioinformatics**. Springer (ICSA Book Series in Statistics).
Published: 05 December 2018, 463 pages.
(https://www.springer.com/us/book/9783319993881).
https://doi.org/10.1007/978-3-319-99389-8.



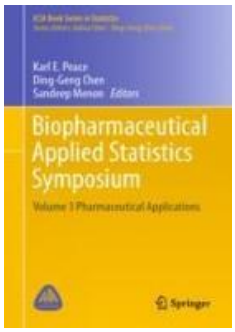
31) Peace, K.E., **Chen, D. G**. and Sandeep Menon. (2018). **Biopharmaceutical Applied Statistical Symposium. (Volume 1**: **Design of Clinical Trials)**.
Springer (ICSA Book Series in Statistics).
Published: 20 August 2018, 409 pages.
(http://www.springer.com/us/book/9789811078286).



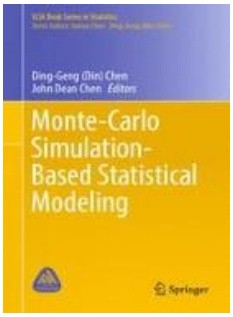
32) Peace, K.E., **Chen, D. G**. and Sandeep Menon. (2018). **Biopharmaceutical Applied Statistical Symposium. (Volume 2: Biostatistical Analysis of Clinical Trials).**
Springer (ICSA Book Series in Statistics).
Published: 31 August 2018, 245pages.
(http://www.springer.com/us/book/9789811078255).



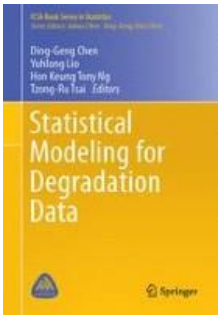
33) Peace, K.E., **Chen, D. G**. and Sandeep Menon. (2018**). Biopharmaceutical Applied Statistical Symposium. (Volume 3: Pharmaceutical Applications)**. Springer (ICSA Book Series in Statistics). Published: 14 September 2018, 426pages.
(http://www.springer.com/us/book/9789811078194).
https://doi.org/10.1007/978-981-10-7820-0.



34) Chen, D. G. and Chen, J.D. (2017). **Monte-Carlo Simulation-Based Statistical Modelling**.
Springer (ICSA Book Series in Statistics).
(http://www.springer.com/us/book/9789811033063).
https://doi.org/10.1007/978-981-10-3307-0.
Published: 14 July 2018, 430pages.

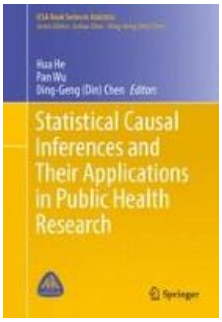


35) **Chen, D** .G., Lio, Y., Ng, H.K. and Tsai, T. (2017**). Statistical Modelling for Degradation Data**.
Springer (ICSA Book Series in Statistics),
Published: 14 September 2017, 376 pages.
(http://www.springer.com/us/book/9789811051937).
https://doi.org/10.1007/978-981-10-5194-4.



36) **Chen, D. G.,** Jin, Z., Li, G., Li, Y., Liu, A. and Zhao, Y. (2017). **New Advances in Statistics and Data Science**.
Springer (ICSA Book Series in Statistics).
http://www.springer.com/us/book/9783319694153.
https://doi.org/10.1007/978-3-319-69416-0. 348pages

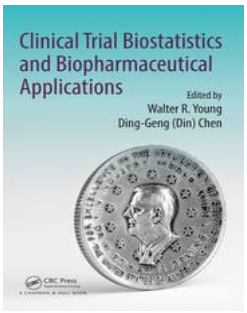
37) He, H., Pan, W. and **Chen, D. G**. (2016). **Statistical Causal Inferences and their Applications in Public Health Research**.
Springer (ICSA Book Series in Statistics).
(http://www.springer.com/us/book/9783319412573).
https://doi.org/10.1007/978-3-319-41259-7.
Published: 04 November 2016, 321 pages.



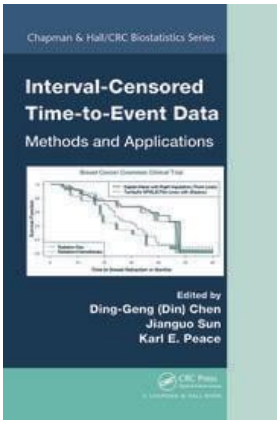
38) **Chen, D. G**., Chen, J., Lu, X., Yi, G. and Yu, H. (2016). **Advanced Statistical Modelling in Data Sciences**.
Springer (ICSA Book Series in Statistics).
(http://www.springer.com/us/book/9789811025938).
https://doi.org/10.1007/978-981-10-2594-5.
Published: 15 December 2016, 222 pages.

39) **Chen, D. G.** and Wilson, J. (2015). **Innovative Statistical Methods for Public Health Data**.
Springer (ICSA Book Series in Statistics). (http://www.springer.com/us/book/9783319185354).
https://doi.org/10.1007/978-3-319-18536-1.
Published: 12 September 2015, 351 pages.

40) Young, W. and **Chen, D. G.** (2014). **Clinical Trial Biostatistics and Biopharmaceutical Applications.** (ISBN: 978-1-48-221218-1, 589 pages) Chapman & Hall. FL: Boca Raton. (https://www.taylorfrancis.com/books/edit/10.1201/b17716/clinical-trial-biostatistics-biopharmaceutical-applications-walter-young-ding-geng-din-chen). https://doi.org/10.1201/b17716.



41) **Chen, D. G.,** Sun, J. and Peace, K. E. (2012). **Interval-censored Time-to-Event Data: Methods and Applications**. Chapman and Hall/CRC, Biostatistics Series. FL: Boca Raton. (https://www.crcpress.com/Interval-Censored-Time-to-Event-Data-Methods-and-Applications/Chen-Sun-Peace/p/book/9781466504257). https://doi.org/10.1201/b12290, 434 pages. ("Favorite Books from the 2012 International Society for Clinical Biostatistics Conference": http://click.bsftransmit1.com/ViewInBrowser.aspx?pubids=9009%7c7735%7c936634%7c69639&digest=40f%2ba528OJj31oimlc7wZQ&sysid=1)



PROFESSIONAL PUBLICATIONS

Research Papers in Statistical/Biostatistical Methodology

1) Albert Whata, Justine Nasejje, Tshilidzi Mulaudzi, Najmeh Nakhaei Rad, and **Ding-Geng Chen** (2025)**.** Adapting and evaluating deep-pseudo neural network for survival data with time-varying covariates. **Journal of Applied Statistics**.

https://doi.org/10.1080/02664763.2024.2444649. https://www.tandfonline.com/doi/full/10.1080/02664763.2024.2444649?scroll=top&needAccess=true.

2) Rene Stander, Inger Fabris-Rotelli; **Ding-Geng Chen** (2025) Variogram estimation for spatial lattice data. **Spatial Statistics**. Accepted
3) Rian Botes, Inger Fabris-Rotelli, Kabelo Mahloromela, Christine Kraamwinkel, **Ding-Geng Chen** (2025). Selected Algorithms: An optimised rabies vaccination schedule for rural settlements. **Spatial Statistics**. Volume 65, 100877. https://doi.org/10.1016/j.spasta.2024.100877.
4) Habte Tadesse Likassa, **Ding-Geng Chen** (correspondence author), Kewei Chen, Yalin Wang, and Wenhui Zhu (2024). Robust PCA with L_w, and $L_{2,1}$ Norms: New Method for Low-Quality Retinal Image Enhancement. **Journal of Imaging**. 2024, 10(151). https://doi.org/10.3390/jimaging10070151.
5) **Chen, DG.,** Chung, Y. & Beyene, K.M. Estimate Time-To-Infection (TTI) Vaccination Effect When TTI for Unvaccinated Group is Unknown. **Statistics in Biosciences**, **16**, 723–741 (2024). https://doi.org/10.1007/s12561-024-09417-w
6) Kassu Mehari Beyene, **Ding-Geng Chen**, Yehenew Getachew Kifle (2024). A Novel Non-Parametric Time-Dependent Precision-Recall Curve Estimator for Right-Censored Survival Data. **Biomedical Journal**. 66, 2300135. https://doi.org/10.1002/bimj.202300135
7) Yu, Lili, Liu, L. and **Chen, D. G**. (2024) Extending Buckley-James Method for Heteroscedastic Survival Data. **Journal of Statistical Computation and Simulation**. 94(8), 1776–1792. DOI: 10.1080/00949655.2024.2303349. https://doi.org/10.1080/00949655.2024.2303349
8) Kassu Mehari Beyene and **Ding-Geng Chen** (2024). Time-dependent ROC curve estimator for correlated right-censored time-to-event data. **Statistical Methods for Medical Research**. 33(1) 162–181. https://doi.org/10.1177/09622802231220496
9) Yuhlong Lio, **Ding-Geng Chen**, Tzong-Ru Tsai, Liang Wang (2024). The Reliability Inference for Multicomponent Stress-Strength Model under the Burr X Distribution. **Applied Mathematics, 4:394-426.** https://doi.org/10.3390/appliedmath4010021.
10) Rene Stander, Inger Fabris-Rotelli, **Ding-Geng Chen** (2024). Multiscale decomposition of spatial lattice data for hotspot detection. **South Africa Statistical Journal**, 58(1):57-79. https://doi.org/10.37920/sasj.2024.58.1.4. https://www.journals.ac.za/sasj/article/view/5842/3852

11) Samawi, H., **Chen, D. G.,** Yin, J. and Alsharman, M. (2024). Performance of Diagnostic Tests Based on Continuous Bivariate Markers. **Journal of Applied Statistics**. 51:3, 497-514. https://doi.org/10.1080/02664763.2022.2137478.

12) Yehenew Kifle, **Ding-Geng Chen**, Mesfin Haileyesus (2023). Multivariate Frailty Models using Survey Weights with Applications to Twins Infant Mortality in Ethiopia. **Statistics and Its Interface**. Volume 16: 493-502. DOI: https://dx.doi.org/10.4310/22-SII738. Published on April 14, 2023.

13) Samawi, H., **Chen, D. G.,** Ahmed, F., and Kersey, J. (2023). Medical Diagnostics Accuracy Measures and Cut-point Selection: An Innovative Approach Based on Relative Net Benefit. **Communications in Statistics-Theory and Methods**. 52:14, 5010-5025. https://doi.org/10.1080/03610926.2021.2001016

14) Mehrdad Naderi, Elham Mirfarah, Matthew Bernhardt & **Ding-Geng Chen** (2022) Semiparametric inference for the scale-mixture of normal partial linear regression model with censored data, **Journal of Applied Statistics**, 49(12): 3022-3043. DOI: 10.1080/02664763.2021.1931821.

15) Mirfaraha, E., Naderia, M. and **Chen, D. G.** (2021). Mixture of linear experts model for censored data: A novel approach with scale-mixture of normal distributions. **Computational Statistics and Data Analysis**. https://doi.org/10.1016/j.csda.2021.107182: 107-182.

16) **Chen, D.-G**.; Gao, H.; Ji, C. (2021). Bayesian Inference for Stochastic Cusp Catastrophe Model with Partially Observed Data. **Mathematics**. 2021 9(24), 3245: 1-9. https://doi.org/10.3390/math9243245.

17) Samawi, H.M. and **Chen, D. G.** (2021). Ranked Simulated Resampling: A More Efficient and Accurate Resampling Approximations for Bootstrap Inference. **Journal of Statistical Computation and Simulation**. 91(18): 3709-3720. https://www.tandfonline.com/doi/full/10.1080/00949655.2021.1946065. https://doi.org/10.1080/00949655.2021.1946065

18) **Chen, D. G.,** Gao, H., Ji, C. And Chen, X. (2021). Stochastic cusp catastrophe model and it's Bayesian computation. **Journal of Applied Statistics**. 48:13-15. 2714-2733. https://doi.org/10.1080/02664763.2021.1922993.

19) Yu, L., **Chen, D.G**. and Liu, J. (2021). Efficient Estimation of the asymptotic variance-covariance matrix in EM algorithm using interpolation method. **Journal of Statistical Planning and Inference**. 211:119-130. (https://doi.org/10.1016/j.jspi.2020.06.005)

20) **Chen, D.G**, Liu, D., Min, X. and Zhang H. (2020). Relative efficiency of using summary and individual information in random-effects meta-analysis. **Biometrics**, 76(4): 119-1329. (https://doi.org/10.1111/biom.13238).

21) Burger, D., Schall, R., Ferreira, J. and **Chen, D. G.** (2020). A robust Bayesian mixed-effects approach for zero-inflated and highly skewed longitudinal count data emanating from the zero-inflated discrete Weibull distribution. **Statistics in Medicine**. 39(9):1275-1291. https://doi.org/10.1002/sim.8475.

22) Burger, D., Jacobs, R., Schall, R., **Chen, D. G**. (2019). A generalized Bayesian nonlinear mixed-effects regression model for zero-inflated longitudinal count data in Tuberculosis trials. **Pharmaceutical Statistics**. 18(4) 420-432. PMID: 30957394. DOI: 10.1002/pst.1933. (**This paper won the Herbert Sichel Medal. https://sastat.org/#/sichel_medal)**

23) Yu, L., Liu, L. and **Chen, D. G.** (2019). A homoscedasticity test for the Accelerated Failure Time model. **Computational Statistics**. 34(1): 433-446. DOI:10.1007/s00180-018-0840-9.

24) Berger, D., Schall, R. and **Chen, D. G**. (2018). Robust Bayesian nonlinear mixed-effects modelling of time to positivity in Tuberculosis trials. **Pharmaceutical Statistics**, 17:615-628. https://doi.org/10.1002/pst.1877

25) Tang, W., He, H., Wang, W.J. and **Chen, D. G.** (2018). Untangle the Structural and Random Zeros in Statistical Modeling. **Journal of Applied Statistics**, 45(9) 1714-1733. PMID: 30906098, PMCID: PMC6426322. https://doi.org/10.1080/02664763.2017.1391180.

26) **Chen, D. G**. and Ho, S. (2017). From statistical power to statistical assurance: It's time for a paradigm change in clinical trial design. **Communications in Statistics - Simulation and Computation.** 46(10): 7957-7971. DOI:10.13140/RG.2.2.16067.30247.

27) **Chen, D. G.,** Ting, N. and Ho, S. (2017). Informative Priors or Non-Informative Priors? A Bayesian Re-Analysis of Binary Data from Macugen Phase III Clinical Trials. **Communications in Statistics-Simulation and Computation**, 46(6):4535-4546. DOI: 10.1080/03610918.2015.1122049. http://dx.doi.org/10.1080/03610918.2015.1122049.

28) **Chen, D. G**. (2016). Robustness for Shrinkage estimate in combination of multivariate Bioassay. **Communications in Statistics -Theory and Method**. 45(18):5380-5391. DOI: 10.1080/03610926.2013.815205. WOSUID: WOS:000380898500010.

29) Balakrishnan, N., Tsai, T. R., Lio, Y. L., Jiang, N. and **D. G. Chen** (2015). Reliability Inference on Composite Dynamic Systems Based on Burr Type-XII Distribution. **IEEE Transactions on Reliability.** 64(1) 144-153. DOI: 10.1109/TR.2014.2338251. wosuid: WOS:000350865900013

30) He, H., Wang, W., Crits-Christoph, P., Gallop, R., Tang, W., **Chen, D. G**. and Xin M. Tu. (2014). On the implication of structural zeros as independent variables in regression analysis: applications to alcohol research. **Journal of Data Science**. 12(3): 439-460. PMCID: PMC5628625. NIHMSID: NIHMS861478. PMID: 28989340.

31) Yu, L., Liu, L. and **Chen, D. G.** (2013). Weighted Least-Squares Method for Right-Censored Data in Accelerated Failure Time Model. **Biometrics**. 69: 358-365. DOI: 10.1111/BIOM.12032.

32) **Chen, D. G.**, Yu, L. Peace, K.E. Lio, Y.L. and Wang, Y. (2013). Approximating the baseline hazard function by Taylor Series for interval-censored time-to-event data. **Journal of Biopharmaceutical Statistics** 23(3): 695-708. PMID: 23611204. DOI: 10.1080/10543406.2012.756497.

33) **Chen, D. G.,** Y.L. Lio and Jiang, N. (2013). Lower Confidence Limits on the Generalized Exponential Distribution Percentiles under Progressive Type-I Interval Censoring, **Communications in Statistics-Simulation and Computation**, 42(09):2106-2117. DOI: 10.1080/03610918.2012.695842.

34) Xie, C. and **Chen, D. G.** (2013). Letter to the Editor on "Graphical Approaches for multiple comparison procedures using weighted Bonferroni, Simes, or parametric tests" with "gMCP" R Package. **Biometrical Journal**. 55(2): 264-265. DOI: 10.1002/BIMJ.201200116

35) Xie, C., Lu, X. and **Chen, D. G.** (2013). Weighted Multiple Testing Corrections for Correlated Binary Endpoints. **Communication in Statistics-Simulation and Computation.** 42(8):1693-1702. DOI: 10.1080/03610918.2012.674599.

36) Yu, L., Yu, R., Liu, L. and **Chen, D.G.** (2012). Extended Quasi-Likelihood with Fractional Polynomials in the Frame of the ATF model. **Statistics in Medicine**, 31(13):1369-1379. DOI: 10.1002/SIM.4470

37) Samawi, H, Dunbar, M and **Chen, D.G**. (2012). Steady state ranked GIBBS sampler. **Journal of Statistical Computation and Simulation**. 82(8):1223-1238. DOI: 10.1080/00949655.2011.575378.

38) Lio, Y., **Chen, D.G.** and Tsai, T. (2011). Parameter Estimations for Generalized Rayleigh Distribution under Progressively Type-I Interval Censored Data. **Open Journal of Statistics**. 1:45-57. doi:10.4236/ojs.2011.12006

39) **Chen, D. G.** (2010). Incorporating historic control information with Empirical Bayes. **Computational Statistics and Data Analysis**. 54: 1646-1656. DOI: 10.1016/J.CSDA.2010.01.023.

40) **Chen, D.G**. and Lio, Y. (2010). Parameter Estimations for Generalized Exponential Distribution under Progressive Type-I Interval Censoring. **Computational Statistics and Data Analysis**. 54 (6): 1581-1591. DOI: 10.1016/J.CSDA.2010.01.007

41) Zhang, P. G., **Chen, D. G.** and Roe, T. (2010). Choice of Baselines in Clinical Trials: A Simulation Study from Statistical Power Perspective. **Communications in Statistics-Simulation and Computation.** 39(7): 1305-1317. DOI: 10.1080/03610918.2010.491170.

42) **Chen, D. G** (2009). A quantal statistical isobologram model to identify joint action for chemical mixtures. **Environmetrics**. 20(1) 101-109. **https://doi.org/10.1002/env.918**.

43) **Chen, D. G.** and Lio, Y (2009). A Novel Estimation Approach for Mixture Transition Distribution Model in High-Order Markov Chains. **Communications in Statistics-Simulation and Computation**. 38(5):990-1003. DOI: 10.1080/03610910802715009.

44) **Chen, D. G.** and Lio, Y, L. (2008). Comparative Studies on Frailties in Survival Analysis, **Communications in Statistics - Simulation and Computation**. 37(8):1631-1646. DOI: 10.1080/03610910802061727.

45) **Chen, D. G**. (2007). Bootstrapping Estimation for Relative Potency in the Combinations of Bioassays. **Computational Statistics and Data Analysis**. 51:4597-4604. DOI: 10.1016/J.CSDA.2006.07.040.

46) **Chen, D. G**. (2007). Dose-time-response cumulative multinomial generalized linear model. **Journal of Biopharmaceutical Statistics**, Vol 17, No 1. 173-185. DOI: 10.1080/10543400601001543.

47) **Chen, D.G.** and Xiao, Y. (2006). A general model for analyzing data from a mark-recapture experiment with an application to the Pacific halibut. **Environmental and Ecological Statistics**. 13:149-161. DOI: 10.1007/S10651-005-0002-4.

48) **Chen, D. G**., Carter, E.M., Hubert, J. J. and Kim, P. T. (1999). Empirical Bayes Estimation for Combination of Multivariate Bioassays. **Biometrics**. 55(4), 1035-1043. DOI: 10.1111/J.0006-341X.1999.01038.X.

Public Health and Epidemiology Research

49) Denekew Bitew Belay, Seniat Mulat, Nigussie Adam Birhan and **Ding-Geng Chen** (2025). Bivariate Multilevel Modeling of Antenatal Care Contacts and Place of Delivery among Reproductive-Aged Women in Ethiopia. **PLOS ONE**. Accepted.

50) Hall, W. J., Dawes, H. C., Hannay, J. W., Williams, D. Y., Frey, J. J., Srivastava, A., Chapman, M. V., **Chen, D.**, Ramon, M. E., & Payne, B. K. (2024). Development and initial validation of the Implicit Internalized Sexual Orientation Stigma Affect Misattribution Procedure (Internal-SOS-AMP). **Frontiers in Psychology**. 15:1385410. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2024.1385410/full. https://doi.org/10.3389/fpsyg.2024.1385410.

51) Habte Tadesse, **Ding-Geng Chen** and Dayu Sun (2024). A Novel RPCA Method using Log-Weighted Nuclear and $L_{2,1}$ Norms combined with Contrast-Limited Adaptive Histogram Equalization (CLAHE) for High Dimensional Natural and Medical Image Data. **International Journal of Statistics in Medical Research, 13,** 275-290. https://doi.org/10.6000/1929-6029.2024.13.25.

52) Nakhaei Rad, N., Salehi, M., Mehrali, Y., **Chen, D.-G**.(2024). Skew-Symmetric Generalized Normal and Generalized t-Distributions. **Axioms** 2024, 13, 782. https://doi.org/10.3390/axioms13110782

53) Tafese Ashine, Habte Tadesse Likassa, and **Ding-Geng Chen** (2024). Estimating Time-to-Death and Determining Risk Predictors for Heart Failure Patients: Bayesian AFT Shared Frailty Models with the INLA Method. **Stats** 7(3), 1066-1083; https://doi.org/10.3390/stats7030063.

54) Iketle Aretha Maharela, Lizelle Fletcher and **Ding-Geng Chen (**Correspondence Author**)** (2024). Modified Cox Models: A Simulation Study on Different Survival Distributions, Censoring Rates, and Sample Sizes. **Mathematics,** 12(18), 2903; https://doi.org/10.3390/math12182903.

55) Setegn Muche Fenta, Haile Mekonnen Fenta, Seyifemickael Amare Yilema, **Ding-Geng Chen** & Amsalu Worku Mekonnin (2024). Individual and community-level factors associated with adequate antenatal care service utilization in sub-Saharan Africa. **Tropical Medicine and Health** 52, Article #70. https://doi.org/10.1186/s41182-024-00631-2.

56) Wombacher, Natalie R; Lancaster, Hope S; Scherer, Nancy; Kaiser, Ann P.; **Chen, Ding-Geng**; Yamashita, Renata (2024). The Impact of Enhanced Milieu Teaching with Phonological

Emphasis (EMT+PE) on the Speech and Language Outcomes for Toddlers with Cleft Palate in Brazil and the United States. **International Journal of Speech-Language Pathology**. https://doi.org/10.1080/17549507.2024.2342783.1–13

57) **Chen, D. G.** (2023). Event History Analysis with R, 2nd ed. The American Statistician. 7(13): 340-341. https://doi.org/10.1080/00031305.2023.2230758 (Book review).

58) Rhodes, C.A. Thomas, N., O'Hara, K., L., Hita, L., Blake, A., Wolchik, S. A., Fisher, B., Freeman, M., & **Chen, D**., Berkel, C. (2023). Enhancing the focus: How does parental incarceration fit into the overall picture of Adverse Childhood Experiences (ACEs) and Positive Childhood Experiences (PCEs). **Research on Child and Adolescent Psychopathology. 51, 1933–1944. https://doi.org/10.1007/s10802-023-01142-0** https://link.springer.com/article/10.1007/s10802-023-01142-0.

59) Yaser Tahamtani, Marjan Nouri-Keshtkar, Mohadese Shojaei Shahrokhabadi, Azadeh Ghaheri, Roya Hosseini, Hassan Ketabi, Mojtaba Farjam, **Ding-Geng Chen**, Mehdi Rezaeian, Reza Homayounfar, Mehdi Totonchi (2023). Role of Gender in Explaining Metabolic Syndrome Risk Factors in an Iranian Rural Population: A Structural Equation Modelling Approach. **Scientific Reports**. 13(1) 16007 (2023). https://doi.org/10.1038/s41598-023-40485-y

60) Guan, T., Chapman, M. V., Zerden, L. D., Sharma, A., **Chen, D**., & Song, L. (2023). Correlates of illness uncertainty in cancer survivors and family caregivers: A systematic review and meta-analysis. **Supportive Care in Cancer**.31 (242). https://doi.org/10.1007/s00520-023-07705-7

61) Reza Faryabi, Tahereh Rahimi, Salman Daneshi, Ehsan Movahed,* Ali Reza Yusefi, Mohadeseh Shojaei Shahrokhabadi, **Ding-Geng (Din) Chen**, Saeedeh Azaraeen and Cain C. T. Clark. (2022). Stress Coping Styles in Family and Relatives of Coronavirus Disease 2019 (COVID-19) Patients in the South of Iran: Application of Lazarus and Folkman's Theory of Stress Coping. **The Open Public Health Journal 15(1): 1-8.** DOI: 10.2174/18749445-v15-e220927-2021-243

62) Thasmika Mohan, Najmeh Nakhaei Rad, and **Ding-Geng Chen**. (2022). A Möbius-transformed toroidal distribution for dihedral angles modelling in protein structure. **Proceedings of the 63rd Annual Conference of the South African Statistical Association,** 41-54. (https://www.journals.ac.za/sasj/Proceedings)

63) Mohadeseh Shojaei Shahrokhabadi, **Ding-Geng Chen**, Sayed Jamal Mirkamali, Anoshirvan Kazemnejad, Farid Zayeri.(2021). Marginalized Two-Part Joint Modeling of Longitudinal Semi-Continuous Responses and Survival Data: with Application to Medical Expenses.

Mathematics 2021, 9, 2603. https://doi.org/10.3390/math9202603 (published on October 15, 2021)

64) Mustefa, Y. and **Chen, D.G**. (2021). Accelerated Failure-Time Model with Weighted Least-Squares Estimation: Application on Survival of HIV Positives. **Archives of Public Health**. 79:88. Page 1 to 7. https://doi.org/10.1186/s13690-021-00617-0.

65) Rene Stander, Inger Fabris-Rotelli, **Ding-Geng Chen** and Gregory Breetzke (2021). Multiscale Decomposition of Spatial Lattice Data for Feature Detection. **Proceedings of the Second Southern African Conference for Artificial Intelligence Research**. 123-138.

66) FRANCES, M, SALEHI, M, BEKKER, A, ARASHI M, FERREIRA, J, **CHEN, DG** & ESMAELI, F. COVID-19 demographic information dashboard. AI Expo Africa 2021 Online

67) Mahdi Salehi, Mohammad Arashi, Andriette Bekker, Johan Ferreira, **Ding-Geng Chen**, Foad Esmaeili, and Motala Frances (2021). A Synergetic R-Shiny Portal for Modeling and Tracking of COVID-19 Data. **Frontiers in Public Health**. Vol 8. 1-10. https://www.frontiersin.org/articles/10.3389/fpubh.2020.623624/full. https://doi.org/10.3389/fpubh.2020.623624.

68) Vazquez, E., Wilson, J. and **Chen, D. G.** (2020). Analysis of correlated data with feedback for time-dependent covariates for psychiatry research. **General Psychiatry (Biostatistical Methods in Psychiatry)**. 33:e100263. doi:10.1136/gpsych-2020-100263: 1-4.

69) **Chen, D. G.**, Chen, X. & Chen, J. K. Reconstructing and forecasting the COVID-19 epidemic in the United States using a 5-parameter logistic growth model. **Global Health Research and Policy** 5, 25 (2020). https://doi.org/10.1186/s41256-020-00152-5. (SA)

70) Guan, T., Guo, P., Santacroce, S. J. **Chen, D.G**., and Song, S. (2020). Illness Uncertainty and Its Antecedents for Patients With Prostate Cancer and Their Partners. **Oncology Nursing Forum**. 47(6), 721–731. PMID: 32078620. DOI: 10.1188/20.ONF.721-731.

71) Guang, T., Santacroce, S., **Chen, D.G**. and Song, L. (2020). Illness Uncertainty, Coping, and Quality of Life among Patients with Prostate Cancer. **Psycho-Oncology**.29(6):1019-1025. https://doi.org/10.1002/pon.5372

72) Vanessa E. Miller, **Chen, D. G**., Deborah Barrett, Charles Poole, Yvonne Golightly, Richard Ohrbach, Joel D. Greenspan, Roger B. Fillingim, William Maixner, Gary D. Slade1. (2020). Understanding the relationship between features associated with pain-related disability in people with painful TMD: an exploratory structural equation modeling approach. **Pain**. 161(12):2710-2719. (Impact Factor 6.029 accessed in 2020). PMID: 32639367 PMCID:

PMC7669591 DOI: 10.1097/j.pain.0000000000001976.

73) Chen, X., Wang, Y. And **Chen, D. G**. (2019). Nonlinear dynamics of binge drinking among U.S. high school students in grade 12: Cusp catastrophe modeling of national survey data. **Journal of Nonlinear Dynamics, Psychology, and Life Sciences**. 23(4): 465-490.

74) Vanessa E. Miller, Charles Poole, Yvonne Golightly, Deborah Barrett, **Ding-Geng Chen**, Richard Ohrbach, Joel D. Greenspan, Joel Greenspan, Gary D. Slade (2019). Characteristics associated with high-impact pain in people with TMD: a cross-sectional study. **The Journal of Pain**. 20(3): 288-300. PMID: 30292793 PMCID: PMC6424335 DOI: 10.1016/j.jpain.2018.09.007.

75) Michael A. Close, Leslie A. Lytle, Anthony J. Viera, **Ding-Geng Chen**, Laura A. Linnan and Carmina G. Valle (2018). Identifying and describing segments of office workers by activity patterns, **International Journal of Workplace Health Management**, 11(1):16-30.

76) Michael Andrew Close, Leslie A Lytle, **Ding-Geng Chen**, Anthony J. Viera (2018). Using the theory of planned behavior to explain intention to eat a healthful diet among Southeastern United States office workers. **Nutrition & Food Science**. 48(2). DOI: 10.1108/NFS-06-2017-0123.

77) Chen, X., **Chen, D. G**. and Yu, B. (2018). Investigation of cumulative marijuana-use and risk of cardiovascular disease incidence in middle age with longitudinal data. **American Journal of Public Health**, 108(4) e11-e12. doi: 10.2105/AJPH.2018.304307

78) Chen X, Yu B, **Chen, D. G.** (2018). Probabilistic discrete event systems modeling of nonlinear transitions between electronic and combustible cigarette smoking with the 2014 National Youth Tobacco Survey data. **International Journal of Nonlinear Dynamics, Psychology, and Life Sciences**; 22 (3): 289-312 (PMID:29928556).

79) Yu B, Chen X, Stanton B, **Chen D. G**., Xu Y, Wang Y. (2018). Quantum changes in self-efficacy and condom-use intention among youth: A chained cusp catastrophe model. **Journal of Adolescence**. 68:187-197. http://dx.doi.org/10.1016/j.adolescence.2018.07.020

80) Sun, J., Zhou, Q. and **Chen, D. G.** (2018). Clinical Trials: Interval-censored failure time data. **Encyclopedia of Biopharmaceutical Statistics**, 589-596. DOI: 10.1201/9781351110273-140000031.

81) **Chen, D. G**. (2018) Meta-Analysis in Clinical Trials Using R, **Encyclopedia of Biopharmaceutical Statistics**, 603-611. DOI: 10.1201/9781351110273-140000040.

82) Chen, X., Yu, B., Stanton, B., Cook, R. L., **Chen, D. G.** & Okafor, C. (2018). Medical marijuana

laws and marijuana use among U.S. adolescents: Evidence from Michigan Youth Risk Behavior Surveillance data. Journal of Drug Education, 48(1-2), 18–35. https://doi.org/10.1177/0047237918803361

83) Ting, N. and **Chen, D. G**. (2018). Analysis of Dose-Finding Clinical Trials with a real example using R. **Encyclopedia of Biopharmaceutical Statistics**. 866-875. DOI: 10.1201/9781351110273-140000080.

84) **Chen, D. G.** and Chen, X. (2017). Cusp Catastrophe Nonlinear Regression Model and its Application to Health and Behavioral Research. **International Journal of Environmental Research and Public Health**. (Special issue "Invitations in Biostatistical Methods and Data for Public Health Research") 14(10)1-15.

85) Shook-Sa, B. E., **Chen, D. G.** and Zhou, H. (2017). Using Structural Equation Modeling to Assess the Links between Tobacco Smoke Exposure, Volatile Organic Compounds, and Respiratory Function for Adolescents Aged 6 to 18 in the United States. ***International Journal of Environmental Research and Public Health***. (Special issue "Invitations in Biostatistical Methods and Data for Public Health Research"), 14:1-13. https://www.ncbi.nlm.nih.gov/pubmed/28946686. DOI: 10.3390/ijerph14101112

86) **Chen, D. G.** (2017). Comparing Geographic Area-Based and Classical Population-Based Incidence and Prevalence Rates, and Their Confidence Intervals. **Preventive Medicine Reports**. 7:116-118. DOI: 10.1016/j.pmedr.2017.05.017

87) **Chen, D. G.,** Fang. D. and J. Wlison (2017). Meta-analysis of two studies with random effects? **The Journal of Minimally Invasive Gynecology**. 24(5) 689-690.

88) Musekiwa1, A., Manda, S., Mwambi, H.G. and **Chen, D. G.** (2016). Meta-analysis of Effect Sizes Reported at Multiple Time Points Using General Linear Mixed Model. **PLOS ONE**.11(10) 1-13. URL: https://publons.com/wos-op/publon/358866/. DOI: 10.1371/JOURNAL.PONE.0164898. WOSUID: WOS:000386711100015

89) **Chen, D. G.,** Chen, X. and Zhang, K. (2016). An Exploratory Statistical Cusp Catastrophe Model. **Data Science and Advanced Analytics**. 100-109. DOI 10.1109/DSAA.2016.17.

90) Hu, X., Chen, X., Cook, R.L., **Chen, D. G.** and Okafor, C. (2016). Modeling Drinking Progression in Youths with Cross-sectional Data: Solving an Under-identified Probability Discrete Event System. **Current HIV Research**. 14:93-100. DOI: 10.2174/1570162X13666151029102044.

91) **Chen, D. G**. (2015). Meta-analysis for psychiatric research using free software R. **Shanghai**

Achieve Psychiatry. 27(3): 195-199. Doi: 10.11919/j.issn.1002-0829.215063. PMID: 26300603. PMCID: PMC4526834.

92) Nakai, M., **Chen, D. G.,** Nishimuraa, K. and Miyamotoa, Y. (2014). Comparative Study of Four Methods in Missing Value Imputations under Missing Completely at Random Mechanism. ***Open Journal of Statistics***. 4:27-37. DOI: 10.4236/ojs.2014.41004

93) Brown, M. L., Yukata, K., Farnsworth, C. W., **Chen, D. G.**, Awad, H., Hilton, M. J., O'Keefe1, R. J., Xing, J., Mooney, R. A. and Zuscik, M. J. (2014). Delayed Fracture Healing and Increased Callus Adiposity in a C57BL/6J Murine Model of Obesity-Associated Type 2 Diabetes Mellitus. **PLoS ONE**. 9(6): 1-11. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4049817/pdf/pone.0099656.pdf).

94) Chen, X., Stanton, B., **Chen, D. G.** and Li, M. (2013). Is Intention to Use Condom a Linear Process? Cusp Modeling and Evaluation of an HIV Prevention Intervention Trial. **Nonlinear Dynamics, Psychology, and Life Sciences** 17(3):385-403. PMCID: PMC4106698

95) Baumgarten, K. M., Oliver, H. A., Foley, J. **Chen, D. G.,** Autenried, P., Duan, S. and Heiser, P. (2013). Human Growth Hormone May Be Detrimental When Used to Accelerate Recovery from Acute Tendon-Bone Interface Injuries. **Journal of Bone and Joint Surgery**, 95(9):783-789. DOI: 10.2106/JBJS.L.00222.

96) Malekian, R., Abdullah, A. and **Chen, D. G.** (2011) ROMA: determine the maximum end-to-end delay based on a new Resource reservation method over Mobile IPv6 routing Architecture. **Australian Journal of Basic and Applied Sciences**, 5(4):239-251.

97) **Chen, Ding-Geng**, Karl E. Peace, Lili Yu, Yuhlong Lio, Yibin Wang. (2010) Interval-Censoring in Biomedical and Biopharmaceutical Clinical Trials. **BIOCOMP** 2010: 779-784.

98) Aloia, J.F, **Chen, D-G**, Yeh, J.K. and Chen, H.(2010). Serum vitamin D metabolites and intestinal calcium absorption efficiency in women. **American Journal of Clinical Nutrition**. 92(4):835:840. DOI: 10.3945/AJCN.2010.29553.

99) Aloia, J. F., **Chen, D. G**. and Chen, H. (2010). The 25(OH)D/PTH Threshold in Black Women. **Journal of Clinical Endocrinology & Metabolism**. 95(11):5069-5073. DOI: 10.1210/JC.2010-0610.

100) **Chen, D. G**. (2010). Estimate the relative potency in parabolic bioassay. **Journal of Advances and Applications in Statistical Sciences**. 2(1):1-18. https://www.mililink.com/issue_content.php?id=58&iId=143.

101) Moyad, M. A., Robinson, L. A., Zawada, E. T., Kittelsrud, J. **Chen, D. G.,** Reeves, S. G and Weaver, S. (2010). Immunogenic Yeast-Based Fermentate for Cold/Flu-like Symptoms in Nonvaccinated Individuals. **The Journal of Alternative and Complementary Medicine**. 16(2): 213-218. DOI: 10.1089/ACM.2009.0310.

102) **Chen, D. G.** and Lio, Y (2009). A Note on the Maximum Likelihood Estimation for the Generalized Gamma Distribution Parameters under Progressive Type-II Censoring. International **Journal of Intelligent Technology and Applied Statistics**. 2(2):145-152. DOI:10.6148/IJITAS.2009.0202.05. Corpus ID: 126250415

103) Assimacopoulos, A., Alam, R., Arbo, M., Nazir, J., **Chen, D. G**. and Weaver, S. (2008). A Brief Retrospective Review of Medical Records Comparing Outcomes for Inpatients Treated via Telehealth versus In-person Protocols: Is telehealth equally effective as in-person visits for treating neutropenic fever, bacterial pneumonia, and infected bacterial wounds? **Telemedicine and e-Health**, 14(8):762-768. DOI: 10.1089/TMJ.2007.0128.

104) Xiong, J., **Chen, D. G**. and Yang, Z. (2007). A Shrinkage Estimator for Combination of Bioassays. **Acta Mathematicae Applicatae**, 23(3):467-476. DOI: 10.1007/S10255-007-0386-Z.

Statistical Methods in Social Intervention Research and Measurements

105) Okumu, M., Ansong, D., Koomson, I., & Chen, D-G. (2024). How Financial Resilience Affects Social and Public Health Policy Choices in Sub-Saharan Africa: Empirical Insights from the COVID-19 Pandemic. **Journal of the Society for Social Work and Research**. 15(1): 43-67. https://doi.org/10.2139/ssrn.3955418

106) **Chen, D. G.** and Chen, X. (2022). Full Longitudinal Mediation Analysis of HIV/AIDS Knowledge, Self-Efficacy and Condom-Use Intention in Youth. **Journal of the Society for Social Work and Research**, 13(1) 161-177. http://dx.doi.org/10.1086/718477

107) Chung, G., Lanier, P. and **Chen, D. G**. (2022). What predicts mother's use of spanking in the first 6 years of early childhood? A latent growth curve analysis. **International Journal on Child and Family Social Work**. https://doi.org/10.1111/cfs.12866, 27(2): 173-184.

108) Yong Li; Qiang Ren; **Ding-Geng Chen** (2021). Measurement Invariance of the Kessler Psychological Distress Scale (K10) among Children of Chinese Rural-to-Urban Migrant Workers. **Brain and Behavior**. 11(2): E2417. (https://doi.org/10.1002/brb3.2417).

109) Bo, A., Hai, A. H., **Chen, D.,** & Hammock, K. (2021). Risk of bias assessments in systematic

reviews and meta-analyses of behavioral interventions for substance use outcomes. **Journal of Clinical Epidemiology**. Vol 139: 20-27. PMID: 34166755. DOI: 10.1016/j.jclinepi.2021.06.012

110) Bo, A., Zhang, L., Lu, W., **Chen, D. G.** (2021). Moderating effects of positive parenting on the perceived peer alcohol use and adolescent alcohol use relationship: Racial, ethnic, and gender differences. **Child and Adolescent Social Work Journal**. 2:59-43. https://doi.org/10.1007/s10560-021-00780-x

111) Chung, G., Ansong, D., **Chen, D.G.** and Brevard, K. (2021). Identifying treatment moderators of a trauma-informed parenting intervention with children in foster care: Using model-based recursive partitioning Child Abuse & Neglect. **Child Abuse & Neglect**. 117: 10.31219/osf.io/aqxer.

112) Parisi, A., Guan, T., and **Chen, D. G.** (2021). The effectiveness of The Seven Challenges® Program for addressing substance misuse: A systematic review. **Journal of Social Work Practice in the Addictions**. 21:4, 317-332, DOI: 10.1080/1533256X.2021.1973831.

113) **Chen, D. G.,** Pan, W., and Kainz, K. (2021). Stepped-wedge Cluster Randomized Control Trial for Intervention Research: Design and Analysis. **Journal of the Society for Social Work and Research**. 12(2): 421-436. doi: 10.1086/714135.

114) **Chen, D.G.,** Ansong, D., Brevard, K.C., Okumu, M., and Bo, A. (2021). Joint Modeling of Longitudinal Devereux Early Childhood Assessment Data and Time to Permanency from Randomized Longitudinal Intervention Studies in Social Welfare Research. **Journal of the Society for Social Work and Research**, 12(1): 247-262. https://www.journals.uchicago.edu/doi/10.1086/713768.

115) Herrenkohl, T. I., Nikki R. Wooten, Lisa Fedina, Jennifer L. Bellamy, Alicia C. Bunger, **Ding-Geng Chen**, Jeffrey M. Jenson, Bethany R. Lee, Jungeun Olivia Lee, Jeanne C. Marsh, Phyllis Solomon, Anne Williford (2020). Advancing Our Commitment to Antiracist Scholarship. **Journal of the Society for Social Work and Research.** 11(3): 365-368**.** https://www.journals.uchicago.edu/doi/pdf/10.1086/711561. DOI: 10.1086/711561.

116) **Chen, D. G.,** Testa, M.F., Ansong, D. and Brevard, K.C. (2020). Evidence Building and Information Accumulation: Bayesian Paradigm Cohesive for Social and Health Intervention Research. **Journal of the Society for Social Work and Research**. 11(3): 483-498. https://www.journals.uchicago.edu/doi/pdf/10.1086/711376. wosuid: WOS:000350865900013

117) Bo, A., Wu, S., **Chen, D. G.**, Marsiglia, F., Zhu, Y., Zhang, L., & Zhu B. (2020). Understanding

alcohol-specific antecedents among Chinese vocational school adolescents. **Addictive Behaviors**. 110, 106483. https://doi.org/10.1016/j.addbeh.2020.106483.

118) **Chen, D.G**. and Ansong, D. (2019). Bayesian Spatial-Temporal Modeling of Space and Time Dynamics: A Practical Demonstration in Social and Health Research**. Journal of the Society for Social Work and Research**. 10(2) 275-299. https://www.journals.uchicago.edu/doi/full/10.1086/703444.

119) Chen, X. and **Chen, D.G.** (2019). Cognitive Theories, New Paradigm in Quantum Behavior Change, and Cusp Catastrophe Modeling in Social Behavioral Research. **Journal of the Society for Social Work and Research**. 10(1) 127-159. https://www.journals.uchicago.edu/doi/full/10.1086/701837.

120) **Chen, D.G.,** Fraser, M. and Cuddeback, G. (2018). Assurance in Intervention Research: A Bayesian Perspective on Statistical Power. **Journal of the Society for Social Work and Research**. 9(1): 158-173. doi: 10.1086/696239. https://www.journals.uchicago.edu/doi/full/10.1086/696239.

121) **Chen, D.G.** and Fraser, M. (2017). A Bayesian Approach to Sample Size Estimation and the Decision to Continue Program Development in Intervention Research. **Journal of the Society for Social Work and Research**. 8(3) 457-470. https://www.journals.uchicago.edu/doi/full/10.1086/693433.

122) **Chen, D.G**. and Fraser, M. (2017). A Bayesian Perspective on Intervention Research: Using Prior Information in the Sequential Development of Social and Health Programs. **Journal of the Society for Social Work and Research**. 8(3) 441-456. https://www.journals.uchicago.edu/doi/full/10.1086/693432.

Statistical Methods and Applications in Nursing Research

123) Davis, S.P., **Chen, D. G**.(2021). A Path Analysis Model of Fatigue in Crohn's Disease and Ulcerative Colitis. **Research in Nursing and Health**. Accepted.

124) Lin, Feng, Quanjing Chen, Kelsey McDermott, Alanna Jacobs, **Ding-Geng Chen**, Giovanni Schifitto, Yeates Conwell, Kathi Heffner, Mark Mapstone, Anton Porsteinsson, Duje Tadin (2021). The neurocognitive effects of a 6-week computerized cognitive training in older adults with amnestic mild cognitive impairment (CogTE study).

125) Davis, S. P., **Chen, D. G.**, Crane, P.B., Bolin, L. P., Johnson, L. A. and Long, M. (2021).

Influencing Factors of Inflammatory Bowel Disease - Fatigue: A Path Analysis Model. **Nursing Research**. 2021 Jul-Aug; 70(4): 256–265. doi: 10.1097/NNR.0000000000000517

126) Hyekyun Rhee, Brenda McQuillan, **Ding-Geng Chen** & Shannska Atis (2017). Perceptions about interpersonal relationships and school environment among middle school students with asthma, **Journal of Asthma**, DOI: 10.1080/02770903.2016.1277540, 54(9): 905-910.

127) Tucker, R., Quinn, J.J., **Chen, D. G.** and Chen, L. (2016). Psychometrics of the Kansas City Cardiomyopathy Questionnaire Adapted for Family Caregiver/Significant Other. **Journal of Nursing Measurement**. 24(3) 142-161.

128) Lin, F., Heffner, K., Ren, P., Tivarus, M., Brasch, J., **Chen, D. G**., Mapstone, M., Porsteinsson, A., & Tadin. (2016) Cognitive and Neural Effects of Vision-Based Speed of Processing Training in Older Adults with Amnestic Mild Cognitive Impairment: A Pilot Study. **Journal of the American Geriatrics Society**. 64(6):1293-1298. PMID: 27321608 PMCID: PMC4916855 DOI: 10.1111/jgs.14132

129) Tucker, R., Quinn, J.J., **Chen, D. G.** and Chen, L. (2016). Kansas City Cardiomyopathy Questionnaire (KCCQ) Administered to Hospitalized Heart Failure Patients. **Journal of Nursing Measurement**. 24(2) 245-257. DOI: 10.1891/1061-3749.24.2.245

130) Wilde, M., McMahon, J. M., McDonald, M. V., Tang, W., Wang, W., Brasch, j., Fairbanks, E., Shah, S., Zhang, F. and **Chen, D. G.** (2015). Self-management intervention for long-term indwelling urinary catheter users: randomized clinical trial. **Nursing Research**. 64(1):24-34. PMID: 25502058 PMCID: PMC4268883 DOI: 10.1097/NNR.0000000000000071.

131) **Chen, D. G**., Chen, X., Lin, F., Lio, Y.L. Kitzman, H. (2015) Systemize the Probabilistic Discrete Event Systems with Moore-Penrose Generalized-Inverse Matrix Theory for Cross-Sectional Behavioral Data. **Journal of Biometrics and Biostatistics**. 6:219:1-6. doi: 10.4172/2155-6180.1000219. PMCID: PMC4855876

132) Katy Eichinger, Jeanne Dekdebrun, Nuran Dilek, Shree Pandya, and **Ding-Geng Chen** (2014). Physical Activity Profile and Barriers to Physical Activity in Individuals with Myotonic Dystrophy. Neurology, 82(10). **https://doi.org/10.1212/WNL.82.10_supplement.P5.084**.

133) **Chen, D. G.**, Lin, F., Chen, X., Tang, W. and Kitzman, H. (2014). Cusp Catastrophe Model: a nonlinear model for health outcomes research. **Nursing Research**. 63(3): 211-220. (PubMed Central (PMC) public access at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4066972)

134) **Chen, D. G**., Chen, X, Lin, F., Wan Tang, Yuhlong Lio, Yuanyuan Guo (2014) Cusp Catastrophe Polynomial Model: Power and Sample Size Estimation. **Open Journal of**

Statistics. 4:803-813. **DOI:** 10.4236/ojs.2014.410076

135) Blackmore, E. R., Groth, S.W., **Chen, D. G**., Gilchrist, M.A. and O'Connor, T.G. and Moynihan, J.A. (2014). Depressive symptoms and proinflammatory cytokines across the perinatal period in African American women. **Journal of Psychosomatic Obstetrics & Gynecology**, 35(1):8-15. DOI: 10.3109/0167482X.2013.868879. WOSUID: WOS:000332821300002

136) Lin, F., Roiland, R, **Chen, D. G.** and Qiu, C. (2014). Linking Cognition and Frailty in Middle and Old Age: Metabolic Syndrome Matters. **International Journal of Geriatric Psychiatry**. 30(1) 64-71. PMID: 24733716 PMCID: PMC4198518 DOI: 10.1002/gps.4115

137) Lin, F., Roiland, R., Polesskaya, O., Chapman, B., Johnson, M., Brasch, J., **Chen, D**., & Mapstone, M.(2014). Fatigability Disrupts Cognitive Processes' Regulation of Inflammatory Reactivity in Old Age. **The American Journal of Geriatric Psychiatry**. 22(12) 1544-1554. DOI: 10.1016/J.JAGP.2013.12.003. WOSUID: WOS:000345118500020

138) Lin F., Heffner K.L., Mapstone M., **Chen D. G.,** & Porsteinsson A.P. (2014). Frequency of Mentally Stimulating Activities Modifies the Relationship between Cardiovascular Reactivity and Executive Function in Old Age. **The American Journal of Geriatric Psychiatry**. 22(11):1210-1221. DOI: 10.1016/J.JAGP.2013.04.002.

139) Lin, F., Roiland, R., Heffner, K., Johnson, M., **Chen, DG**., & Mapstone, M. (June, 2014). Evaluation of Objective and Perceived Mental Fatigability in Older Adults with Vascular Risk. **Journal of Psychosomatic Research**. 76(6):458-464. DOI: 10.1016/J.JPSYCHORES.2014.04.001.

140) Lin, F., **Chen, D. G.,** Vance, D., Ball, K, K. and Mapstone, M.(2013). Longitudinal Relationships between Subjective Fatigue, Cognitive Function, and Everyday Functioning in Old Age. **International Psychogeriatrics**. 25(02) 275-285. DOI: 10.1159/000363285.

141) Lin, F., **Chen, D. G.,** Vance, D. and Mapstone, M. (2013). Trajectories of Combined Laboratory- and Real world-based Speed of Processing in Community-Dwelling Older adults. *Journal of Gerontology Series B:* ***Psychological Sciences and Social Sciences*** 68(3):364-373. (http://psychsocgerontology.oxfordjournals.org/content/68/3/364.full.pdf+html)
DOI: 10.1093/GERONB/GBS075.

142) Stein, K. **Chen, D. G**. , Colleen, K., Collen, C. and Trabold, N. (2013). Disordered Eating Behaviors in Young Adult Mexican American Women: Prevalence and Associations with Health Risks. **Eating Disorders**, 14(4):476-483. PMID: 24183140. PMCID: PMC5731461. DOI: 10.1016/j.eatbeh.2013.08.001

143) Stein, K. F. Wing, J. Corte, C., **Chen, D. G.,** Nuliyala, U. and Wing, J. (2013). A randomized clinical trial of an identity intervention program for women with eating disorders. **European Eating Disorders Review** 21(2): 130-142 (March 2013). DOI: 10.1002/ERV.2195.

144) Lin, F., Friedman, E., Quinn, J., **Chen, D. G.,** & Mapstone, M. Effect of Leisure Activities on Inflammation and Cognitive Function in an Aging Sample. **Archives of Gerontology and Geriatrics**. 54(3): 398-404. [PMID: 22377120]. DOI: 10.1016/J.ARCHGER.2012.02.002

145) Lester, P. E. Stefanacci, R.G. **Chen, D. G**. (2009). Nursing Home Procedures on Transitions of Care. **Journal American Medical Directors Association**. 10(9):634-8. Epub 2009 Oct 9. DOI: 10.1016/J.JAMDA.2009.06.008

146) Moyad, M, Robinson, L. Zawada, E. Kittelsrud, J. **Chen, D. G.,** Reeves, S. Weaver, S. A.(2008). Effects of a modified yeast supplement on cold/flu symptoms. **Urologic Nursing**, 28(1):50-55. PMID: 18335698

Statistical Methods and Applications in Bioinformatics and Microarrays

147) (**Affymetrix Microarray**) Fedora Sutton, **D. G. Chen**, Xijin Ge and Don Kenefick (2009). Cbf genes of the Fr-A2 allele are differentially regulated between long-term cold-acclimated crown tissue of freeze-resistant and - susceptible, winter wheat mutant lines. **BMC Plant Biology**. 9(34)1-9.

148) **(Statistics in cDNA Microarray)** Guo, X, Rosa, A., **Chen, D. G**. and Wang, X.(2008). Molecular Mechanisms of Primary and Secondary Mucosal Immunity Using Avian Infectious Bronchitis Virus as a Model System. **Veterinary Immunology and Immunopathology**. 121(3-4):332-343.

149) **(Statistics in Affymetrix Microarray)** Liu, Y., Fu Li, **Chen, D. G**. and Deeb, S. S.(2007). Identification of multiple photoreceptor genes regulated by Thyroid hormone in the human retinoblastoma cell line WERI by expression microarray analysis. **Vision Research** 47(17) 2314-2326.

Statistical Methods and Applications in Environmental Health

150) Updegraff, K., Zimmerman, Kozak, P., **Chen, D. G**. and Price, M. (2010). Estimating the uncertainty of modeled carbon sequestration: The GreenCert(TM) System. **Environmental**

Modelling & Software. 25:1565-1572. DOI: 10.1016/J.ENVSOFT.2010.05.009

151) Wang, X and **Chen, D.G.** Recombinant murine cytomegalovirus vector activates human monocyte-derived dendritic cells in a NF-B dependent pathway. **Molecular Immunology** 46 (2009) 3462–3465. DOI: 10.1016/J.MOLIMM.2009.08.001

152) Baker, D.R., Moxley, R.A., Steele, M.B., LeJeune, J.T. Christopher-Hennings, J., **Chen, D. G.,** Hardwidge, P. R. and Francis, D. H. (2007). Virulence variation among Escherichia coli O157: H7 strains isolated from human disease outbreaks and healthy cattle. **Applied and Environmental Microbiology**. 7338-7346. doi: 10.1128/AEM.00755-07. PMCID: PMC2168223. PMID: 17890332

153) Kittelsrud, J., Fieldsend, J., Bishop, D. T., **Chen, D. G**., Knoflicek, W. and Dressing, M. C. (2007). Comparison of Three Outreach Strategies to Achieve Weight Loss in a Rural, Adult Population: Results of the South Dakota School District Benefits Fund OPTIFAST Outreach Research Study. **Telemedicine Information Exchange**. 1-10.

154) Pounds, J.G., Jamal Haider, **D. G. Chen** and Moiz Mumtaz. (2004). Interactive Toxicity of Simple Chemical Mixtures of Cadmium, Mercury, Methylmercury and Trimethyltin: Model-dependent Responses. **Environmental Toxicology and Pharmacology** 18:101-113. https://doi.org/10.1016/j.etap.2004.05.012

155) **Chen, D.G**. and Pounds, J.G. (1998). A non-linear isobologram model with Box-Cox transformation to both sides for chemical mixtures. **International Journal of Environmental Health Perspectives**. 106, Supplement 6, 1367-1371. https://doi.org/10.1289/ehp.98106s61367

Artificial Intelligence/Neural Network Model/Fuzzy Logic Model in Ecological Modelling

156) Nishda, T., **Chen, D. G**. and Mohri, M. (2007). Fuzzy logic analysis for the spawner-recruitment relationship of bigeye tuna in the Indian Ocean incorporating the environmental regime shift. **Ecological Modelling**. 203: 132-140. DOI: 10.1016/J.ECOLMODEL.2005.11.049

157) Dreyfus-León, M. and **D. G. Chen** (2007). Recruitment prediction with Genetic Algorithms with application to the Pacific Herring Fishery. **Ecological Modelling**, 203: 141-146. https://doi.org/10.1016/j.ecolmodel.2005.09.016

158) **Chen, D. G**. and Hare, S. R. (2006). Neural network and fuzzy logic models for pacific halibut recruitment analysis. **Ecological Modelling**. Vol 195. 11-19.

https://doi.org/10.1016/j.ecolmodel.2005.11.004

159) Chen, D. G. and Soyupak, S. (2005). A Comparison of Regression, Neural Network and Fuzzy Logic Models for Estimating Chlorophyll-A Concentrations in Reservoirs. **International Journal of Ecology and Development**. Vol. 3:65-77.

160) Soyupak, S. and **Chen, D.G.** (2004). Fuzzy Logic Model to Estimate Seasonal Pseudo Steady State Chlorophyll-a Concentrations in Reservoirs. **Environmental Modeling & Assessment** 9:51-59. http://www.ceser.in/ceserp/index.php/ijed/article/view/5032.

161) **Chen, D.G**. (2006). Classification of fish stock-recruitment relationships in different environmental regimes by fuzzy logic with the bootstrap re-sampling approach. **Ecological Informatics.** 385-408. https://doi.org/10.1007/3-540-28426-5_19.

162) Chen, D. G. (2001). Detecting Environmental Regimes in Fish Stock-Recruitment Relationships by Fuzzy Logic. **Canadian Journal of Fishery and Aquatic Sciences**. 58: 2139-2148. https://doi.org/10.1139/f01-155.

163) **Chen, D. G**. B. Hargreaves, Ware, D. M and Liu, Yingnan (2000). A Fuzzy logic model with Genetic Algorithms for analyzing fish stock-recruitment relationship, **Canadian Journal of Fishery and Aquatic Sciences,** 57:1878-1887. https://doi.org/10.1139/f00-141

164) **Chen, D.G**. and Ware, D. M. (1999). A neural network model for forecasting fish stock recruitment. **Can. J. Fish. Aquat. Sci.**, Vol. 56:2385-2396. https://doi.org/10.1139/f99-178

Statistical Methods and Applications in Fisheries and Ecological Modelling

165) Xiong, J., **Chen, D. G**. and Zhao, Y. (2007). A State-space model for mark-recapture experiments and its applications. Journal of Shenzhen University (Science and Engineering), 24(3):322-323. https://journal.szu.edu.cn/en/oa/DArticle.aspx?type=view&id=2007030121.

166) **Chen, D.G**. (2004). Bias and bias correction in fish recruitment prediction. **North American Journal of Fisheries Managemen**t, 24:724-730. https://doi.org/10.1577/M03-053.1

167) **Chen, D.G.,** Xie, Y., Mulligan, T.J. and MacLennan, D.N.(2004). Optimal partition of effort between observations of fish density and migration speed for a riverine hydro-acoustic Duration-in-beam sampling method. **Fisheries Research**, 67:275-282. https://doi.org/10.1016/j.fishres.2003.11.001.

168) Nishida, T. and **D. G. Chen**. (2004). Incorporating spatial autocorrelation into the General Linear Model with an application to the yellowfin tuna (Thunnus albacares) longline CPUE

data. **Fisheries Research** 70:265-274. https://doi.org/10.1016/j.fishres.2004.08.008

169) Irvine, J.R., **Chen, D.G**. and Jon T. Schnute (2003). Retrospective Sampling: A Planning Tool for Field Programs. **Fisheries** 28(8): 25-30. **https://doi.org/10.1577/1548-8446(2003)28[25:RS]2.0.CO;2**.

170) **Chen, D.G.** and Holtby, L.B. (2002). A regional meta-model for stock-recruitment analysis using empirical Bayesian approaches. **Canadian Journal of Fishery and Aquatic Sciences**. 59(9):1503-1514. https://doi.org/10.1139/f02-118

171) **Chen, D.G.,** Irvine, J.R. and Cass, A.(2002). Incorporating Allee effects in fish stock-recruitment models and applications for determining reference points. **Canadian Journal of Fishery and Aquatic Sciences**, 59(2):242-249. https://doi.org/10.1139/f02-005

172) Chen, D. G. (2001). Detecting Environmental Regimes in Fish Stock-Recruitment Relationships by Fuzzy Logic. **Canadian Journal of Fishery and Aquatic Sciences**. 58: 2139-2148. https://doi.org/10.1139/f01-155

173) **Chen, D. G.** and J. Irvine (2001). A Semiparametric Approach to Analyze Stock-recruitment Relationship with environmental effects and Fishery Interventions. **Canadian Journal of Fishery and Aquatic Sciences**. 58: 1178-1186. DOI: 10.1139/f01-037

174) Mulligan, T. and **Chen, D. G. (**1998). A Split-beam Echo Counting Model: Development of Statistical Procedures. **ICES Journal of Marine Science**. 55, 905-917. https://doi.org/10.1006/jmsc.1998.0353

Statistical Methods and Applications in Forest Research

175) Sullivan, T.P., Wagner, R.G., Pitt, D.G., Lautenschlager, R.A and **Chen, D.G**. (1998). Changes in diversity of plant and small mammal communities after herbicide application in sub-boreal spruce forest. **Canadian Journal of Forest Research** 28: 168-177. https://doi.org/10.1139/x97-205

Publications in Chinese

176) Chen, D. G. (1990). On equality between Least Square Estimator and Best Linear Unbiased Estimator. (in Chinese). **Journal of Jishou University** Vol. 1, p 5-8.

177) Chen, D. G. (1990). Comparison of linear model. (in Chinese). **Journal of Hunan University**.17(2),119-23. **(Mathematical Review Quote Number: MR 1 084 927)**

178) Chen, D. G. (1989). The Relationship between the Least Squares Estimate and the Best Linear Unbiased Estimate (in Chinese). **Hunan Daxue Xuebao (Journal of Hunan University**. 6(1), 132-137. **(Mathematical Review Quote Number: MR 90m:62157)**

179) **Chen, D. G**. (1989). Problems of selecting econometrics models. (in Chinese). Hunan Annals of Mathematics. 9(1-2), 88-93.

180) Wang, L.Z and **Chen, D. G**. (1988). The analysis of the un-equilibrium of aggregate demand and aggregate supply. (in Chinese). Journal of Jishou University, Vol. 3, p. 13-20.

181) **Chen, D.G**. (1987). Optimal control of sale price. (in Chinese). Journal of Mathematical Economics, 1987 Special Issue, p. 265-267.

182) Wong, L.Z and **Chen, D. G**. (1987). (in Chinese). Evaluation on the theory of international constraint income and payment growth. Journal of Jishou University. 1, p. 2-9.

Book Chapters

183) Yichuan Zhao, **Ding-Geng Chen (2024).** Precision Health: Past, Current, and Future. In *Zhao, Y. and Chen, D.G. (eds.). Statistics in Precision Health: Theory, Methods and Applications.* Springer. Chapter 1. p 3-11. https://doi.org/10.1007/978-3-031-50690-1_1.

184) **Chen, D.G**. and Singini, I. (2022). Joint Modeling for Longitudinal and Interval-Censored Survival Data: Application to IMPI Multi-Center HIV/AIDS Clinical Trial. In *Sun, J. and Chen, D.G. (eds.). Emerging Topics in Modeling Interval-Censored Survival Data.* Springer. Chapter 13. Pp 253-269. https://doi.org/10.1007/978-3-031-12366-5. https://doi.org/10.1007/978-3-031-12366-5_13

185) Varadan Sevilimedu, Lili Yu*, **(Din) Ding-Geng Chen**, Yuhlong Lio (2022). Misclassification Simulation Extrapolation Procedure for Interval-Censored Log-Logistic Accelerated Failure Time Model. In *Sun, J. and Chen, D.G. (eds.). Emerging Topics in Modeling Interval-Censored Survival Data.* Springer. Chapter 15. Pp 295-308. https://doi.org/10.1007/978-3-031-12366-5. https://doi.org/10.1007/978-3-031-12366-5_15

186) Tobias F. Chirwa, Pascalia O. Munyewende, **Ding-Geng (Din) Chen,** and Samuel O. M. Manda (2022). Sub-Saharan African Region Strategies to Improve Biostatistics Capacity: Exploring Collaborations Between Training and Research Institutions. In *Chen, D.G., Manda, S. and Chirwa, T. (eds.). Modern Biostatistical Methods for Evidence-Based Global Health Research.* Springer. Chapter 1. Pp 1-6. https://doi.org/10.1007/978-3-031-11012-2_1

187) **Chen, D. G.** (2022). Statistical Meta-Analysis and Its Efficiency: A Real Data Analysis and a Monte-Carlo Simulation Study. In *Chen, D.G., Manda, S. and Chirwa, T. (eds.). Modern Biostatistical Methods for Evidence-Based Global Health Research.* Springer. Chapter 6. Pp137-165. https://doi.org/10.1007/978-3-031-11012-2_6

188) Alfred Musekiwa, Samuel O. M. Manda, Henry G. Mwambi, **Ding-Geng (Din) Chen**, Samuel A. Abariga, Michael McCaul, Eleanor Ochodo, and Anke Rohwer (2022). Longitudinal Meta-Analysis of Multiple Effect Sizes. In *Chen, D.G., Manda, S. and Chirwa, T. (eds.). Modern Biostatistical Methods for Evidence-Based Global Health Research.* Springer. Chapter 8. Pp 203-231. https://doi.org/10.1007/978-3-031-11012-2_8

189) Ebenezer Ogunsakin and **Chen, D. G.** (2022). Bayesian Spatial Modelling of Association Between Incidence of HIV and Socio-demographic Predictors of HIV Infection Using Conditional Autoregressive Model. In *Chen, D.G., Manda, S. and Chirwa, T. (eds.). Modern Biostatistical Methods for Evidence-Based Global Health Research.* Springer. Chapter 13. Pp 339-354. https://doi.org/10.1007/978-3-031-11012-2_13

190) Ebenezer Ogunsakin and **Chen, D. G.** (2022). Estimating Determinants of Stage at Diagnosis of Breast Cancer Prevalence in Western Nigeria Using Bayesian Logistic Regression. In *Chen, D.G., Manda, S. and Chirwa, T. (eds.). Modern Biostatistical Methods for Evidence-Based Global Health Research.* Springer. Chapter 14. Pp 355-374. https://doi.org/10.1007/978-3-031-11012-2_14

191) Lin, Y., Tsai, T., **Chen, D. G.**, Lio. Y. (2022). A Competing Risk Model Based on a Two-Parameter Exponential Family Distribution Under Progressive Type II Censoring. In *Yuhlong Lio, Ding-Geng Chen, Hon Keung Tony Ng, Tzong-Ru Tsai. (eds.). Bayesian Inference and Computation in Reliability and Survival Analysis.* Springer. Chapter 4. pp 57-101. https://doi.org/10.1007/978-3-030-88658-5_4

192) **Chen, D. G.**, Lio. Y., Wilson, J. (2022). Bayesian Approach for Joint Modeling Longitudinal Data and Survival Data Simultaneously in Public Health Studies. In *Yuhlong Lio, Ding-Geng Chen, Hon Keung Tony Ng, Tzong-Ru Tsai. (eds.). Bayesian Inference and Computation in Reliability and Survival Analysis.* Springer. Chapter 16. pp 343-355. https://doi.org/10.1007/978-3-030-88658-5_16

193) **Chen, D.G**. and Lio, Y.L. (2020). A Family of Generalized Rayleigh-Exponential-Weibull Distribution and its Application to Modeling the Progressively Type-I Interval Censored Data. In *Bekker, A., Chen, D.G. and Ferreira, J. (eds.). Computational and Methodological Statistics*

and Biostatistics: Contemporary Essays in Advancement. Springer. Chapter 21. Pp 529-543. https://doi.org/10.1007/978-3-030-42196-0

194) **Chen, D. G.** and Chen, X. (2020) Logistic Cusp Catastrophe Regression for Binary Outcome: Method Development and Empirical Testing. In *Chen, X. and Chen, D.G.(eds.). Statistical Methods for Global Health and Epidemiology*. Springer. Chapter 16:373-394. ISBN: 978-3-030-35259-2. https://doi.org/10.1007/978-3-030-35260-8_16

195) Chen, X., Wang, K. and **Chen, D.G.** (2020) Cusp Catastrophe Regression Analysis of Testosterone in Bifurcating the Age-Related Changes in PSA, a Biomarker for Prostate Cancer. In *Chen, X. and Chen, D.G.(eds.). Statistical Methods for Global Health and Epidemiology*. Springer. Chapter 15:353-372. https://doi.org/10.1007/978-3-030-35260-8_15

196) Ogunsakin, R. and **Chen, D.G.** (2020) Bayesian Spatial-Temporal Disease Modeling With Application to Malaria. In *Chen, X. and Chen, D.G.(eds.). Statistical Methods for Global Health and Epidemiology*. Springer. Chapter 13:319-334. https://doi.org/10.1007/978-3-030-35260-8_13

197) **Chen, D.G.,** Chen, X. and Qin H. (2020) Moore-Penrose Generalized-Inverse Solution to Age-Period-Cohort Modeling for Historical Epidemiology and Global Health. In *Chen, X. and Chen, D.G.(eds.). Statistical Methods for Global Health and Epidemiology*. Springer. Chapter 10:243-256. https://doi.org/10.1007/978-3-030-35260-8. https://doi.org/10.1007/978-3-030-35260-8_10

198) Chen, X., Yu, B. and **Chen, D.G.** (2020) A 4D Indicator System of Count, P Rate, G Rate and PG Rate for Epidemiology and Global Health. In *Chen, X. and Chen, D.G.(eds.). Statistical Methods for Global Health and Epidemiology*. Springer. Chapter 8:201-218. https://doi.org/10.1007/978-3-030-35260-8_8

199) Jyun-You Chiang, Hon Keung Tony Ng, Tzong-Ru Tsai, Yuhlong Lio and **Ding-Geng Chen** (2019). A Survey of Control Charts for Simple Linear Profiles Autocorrelation Use. In *Lio, L., Ng, H.K.T., Tsai, T.R. and Chen, D.G.(eds.). Statistical Quality Technologies: Theory and Practice*. Springer. Chapter 5: 109-126. https://doi.org/10.1007/978-3-030-20709-0_5

200) Jyun-You Chiang, Hon Keung Tony Ng, Tzong-Ru Tsai, Yuhlong Lio and **Ding-Geng Chen** (2019). Economical Sampling Plans with Warranty. In *Lio, L., Ng, H.K.T., Tsai, T.R. and Chen, D.G.*(eds.). *Statistical Quality Technologies: Theory and Practice.* Springer. Chapter 9: 211-230. https://doi.org/10.1007/978-3-030-20709-0_9. ISBN: 978-3-030-20708-3

201) **Chen, D.G.** and Chen, J. K. (2018). Statistical Power and Bayesian Assurance in Clinical Trial

Design. In *Zhao, Y. and Chen, D.G. (eds.). New Frontiers of Biostatistics and Bioinformatics*. Springer, Chapter 9: pages 193-200. https://doi.org/10.1007/978-3-319-99389-8_9

202) **Chen, D.G**. and Peace K.E. (2018). Meta-Analysis for rare events in Clinical Trials. In *Peace, K.E., Chen, D.G. and Menon, S.M. (Eds.): Biostatistical Analysis of Clinical Trials*. Springer. Chapter 8: 127-150. https://doi.org/10.1007/978-981-10-7826-2_8

203) Tzong-Ru Tsai, Y.L. Lio, Nan Jiang, Hon Keung Tony Ng and **Chen, D.G.** (2017) Optimal Designs for LED Degradation Modeling. In *Chen, D.G. and Lio, Y.L. Ng, H.K. and Tsai, T. (Eds.): Statistical Modeling for Degradation Data*. Springer. Chapter 8: 149-170. https://doi.org/10.1007/978-981-10-5194-4_8

204) Jacq Crous, Nico Wilke, Schalk Kok, **Ding-Geng (Din) Chen**, Stephan Heyns (2017). On system identification for accelerated destructive degradation testing of nonlinear dynamic systems. In *Chen, D.G. and Lio, Y.L. Ng, H.K. and Tsai, T. (Eds.): Statistical Modeling for Degradation Data*. Springer. Chapter 17: 336-364. https://doi.org/10.1007/978-981-10-5194-4_17.

205) Zhang, K, and **Chen, DG.** (2016). Overcoming the Computing Barriers in Statistical Causal Inference. In *He, H., Wu, P. and Chen, D.G.(Eds.): Statistical Causal Inferences and Their Application to Public Health Research*. Springer. Chapter 7: page 125-137. https://doi.org/10.1007/978-3-319-41259-7_7

206) **Chen, D.G**. and Ho, Shuyen. 2016. From Statistical Power to Statistical Assurance: It's Time for the Paradigm Change in Clinical Trial Design. In *JSM Proceedings*, Biopharmaceutical Statistics Section. Alexandria, VA: American Statistical Association.

207) **Chen, D.G.,** Chen, X. and Feng Lin (2015) Solve Probabilistic Discrete Event Systems with Moore-Penrose Generalized-Inverse Method to Extract Longitudinal Characteristics from Cross-Sectional Survey Data. In *Chen, D.G. and Wilson, J. (Eds.): Innovative Statistical Methods for Public Health Data*. Springer. Chapter 5: page 81-96. https://doi.org/10.1007/978-3-319-18536-1_5

208) Hua He, Wenjuan Wang, **Chen, D. G.** and Wan Tang (2015). On the effects of structural zeros in regression models. In *Chen, D.G. and Wilson, J. (Eds.): Innovative Statistical Methods for Public Health Data*. Springer. Chapter 6: page 97-116. https://doi.org/10.1007/978-3-319-18536-1_6

209) Yu-Jau Lin, Y. L. Lio, **Chen, D. G.** and Nan Jiang (2015). Modeling Based on Progressively Type-I Interval Censored Sample. In *Chen, D.G. and Wilson, J. (Eds.): Innovative Statistical*

Methods for Public Health Data. Springer. Chapter 7: page 117-152. https://doi.org/10.1007/978-3-319-18536-1_7

210) Xinguang (Jim) Chen and **Chen, D. G.** (2015). Cusp catastrophe modeling in medical and health research. In *Chen, D.G. and Wilson, J. (Eds.): Innovative Statistical Methods for Public Health Data*. Springer. Chapter 12: page 265-190. https://doi.org/10.1007/978-3-319-18536-1_12

211) Yan Ma, Wei Zhang and **Chen, D. G.** (2015). Meta-analytic Methods for Public Health Research. In *Chen, D.G. and Wilson, J. (Eds.): Innovative Statistical Methods for Public Health Data*. Springer. Chapter 15: page 325-340. https://doi.org/10.1007/978-3-319-18536-1_15

212) Hu, C. Dignam, J. and **Chen, DG**. (2014). Competing Risks and Their Applications in Cancer Clinical Trials. In *Walter, Y. and Chen, D.G.(Eds.): Clinical Trial Biostatistics and Biopharmaceutical Applications*. Chapman and Hall. Chapter 10: pp 247-272.

213) Ma, L. Feng, Y., **Chen, DG**. and Sun, J. (2014). Interval-censored time-to-event data and their applications in clinical trials. In *Walter, Y. and Chen, D.G.(Eds.): Clinical Trial Biostatistics and Biopharmaceutical Applications*. Chapman and Hall. Chapter 12: pp 307-333.

214) Xie, C. Lu, X. and **Chen, DG** (2014). Comparative Study of Five Weighted Parametric Multiple Testing Methods for Correlated Multiple Endpoints in Clinical Trials. In *Walter, Y. and Chen, D.G.(Eds.): Clinical Trial Biostatistics and Biopharmaceutical Applications*. Chapman and Hall. Chapter 16: pp 421-434.

215) **Chen, D.G**., Chen, X., Tang, W. and Lin, F. (2014). Sample Size Determination to Detect Cusp Catastrophe in Stochastic Cusp Catastrophe Model: A Monte-Carlo Simulation-Based Approach. Lecture In W.G. Kennedy, N. Agarwal, and S.J. Yang (Eds.): SBP 2014, Lecture Notes in Computer Science 8393, pp. 35–41. https://doi.org/10.1007/978-3-319-05579-4_5

216) Chen, X. and **Chen, D. G**.(2014). Mutual Information Technique in Assessing Crosstalk through a Random-Pairing Bootstrap Method. In W.G. Kennedy, N. Agarwal, and S.J. Yang (Eds.): SBP 2014, Lecture Notes in Computer Science 8393, pp. 245–252. https://doi.org/10.1007/978-3-319-05579-4_30

217) Nakai, M. Lio, Y. **Chen, D. G**., Nishimura, K. Watnabe, M. and Moyamoto, Y. (2014). Comparative studies for Cox hazards model based on the population-based cohort study of Japan. JSM Proceeding. Section on Statistics in Epidemiology, pp. 650–654.

218) **Chen, DG**. Yu, L. Peace, K.E. and Sun, J. (2013). Bias and its remedy in interval-censored time-to-event applications. In *D.G. Chen, K.E. Peace and J. Sun (Eds.): Interval-Censored*

Time-to-Event Data: Methods and Applications. Chapman & Hall/CRC Biostatistics Series. pp. 311-328. https://www.taylorfrancis.com/chapters/mono/10.1201/b12290-20/bias-remedy-interval-censored-time-event-applications-ding-geng-din-chen-jianguo-sun-karl-peace.

219) Xie, C., Lu, X., Singh, R. and **Chen, D.G.** (2013). Effect of Misspecified Correlations in Parametric Multiple Testing Methods for Correlated Tests. JSM2013 Proceeding, Biopharmaceutical Section, 1753-1764.

220) **Chen, D**. G., Yu, L. and Peace, E. K. 2012, Bias and its Remedy in Interval-Censored Time-to-Event Applications. In *"Interval-Censored Time-to-Event Data: Methods and Applications" Eds. Ding-Geng Chen, Jianguo Sun, and Karl E. Peace. (Ed.).* Chapter 11: pp311-328.

221) Karki, A. Ge, X., **Chen, DG.,** Sutton, F. Sparse Principal Component Analysis (SPCA) of Wheat Microarray Data Identifies Co-Expressed Genes Differentially Regulated by Cold Acclimation. Proceeding of American Statistics Association. 2011: 2159-2170.

222) **Chen, D. G**. and Lio, Y. L. A Parametric Bootstrap Procedure for the Generalized Exponential Distribution Under Progressive Type-I Interval Censoring. Proceeding of 2010 Joint Statistical Meeting, (10 pages).

223) **Chen, D. G.** and Lio, Y.L. (2008). Simulation Studies for Mixture Transition Distribution Model in High-Order Markov Chains. In JSM Proceedings, Statistical Computing Section. Alexandria, VA: American Statistical Association.

224) Zhang, P. G. and **Chen, D. G. (2008).** Statistical Power Simulations on the Choice of Baselines in Clinical Trials. In JSM Proceedings, Biopharmaceutical Section. Alexandria, VA: American Statistical Association.

225) **Chen, D.G**. and Irvine, J. (2007). Using fuzzy logic to quantify climate change impacts on spawner-recruitment relationships for fish from the North-eastern Pacific ocean, pp 197-209. In "Advanced Methods for Decision Making and Risk Management in Sustainability Science" Edited By J. Kropp and J. Scheran.

226) Nishida, T. and **D. G. Chen**. (2007). Incorporating spatial autocorrelation into the General Linear Model with an application to the yellowfin tuna (Thunnus albacares) longline CPUE data. In "GIS/Spatial Analysis in Fishery and Aquatic Sciences", Edited by Nishida, Kailola and Caton. Vol 3:197-212.

227) Shmagin, B. and **D. G. Chen** (2007). Understanding and mapping water resources by multidimensional statistics and fuzzy logic: Missouri River basin case. Nature Proceedings. http://precedings.nature.com/documents/1071/version/1.

228) **Chen, D.G**. and Richard Leickly (2004). A Test for Spatially Correlated Data: an Alternative to the traditional t-test. In GIS/Spatial Analysis in Fishery and Aquatic Sciences. Edited by Nishida, T., Kailola, P, J. and Hollingworth, C. E. p223-240.

229) **Chen, D.G.** (2002). A Bayesian model with a bivariate normal-lognormal prior distribution and a nonlinear mixed-effect model for a regional fish stock-recruitment meta-model. 2002 Proceedings of the American Statistical Association, Bayesian Statistical Science Section, New York.

230) **Chen, D.G**. (2002). A Fuzzy Logic View on Classifying Stock-Recruitment Relationships in Different Environmental Regimes. In Ecological Informatics: Understanding Ecology by Biologically-Inspired Computation Edited by Recknagel, F. (Springer Verlag, Berlin) page 329-352 (Chapter 17).

231) Mumtaz, M. M., El-Masri, H., **Chen, D. G**., and J.G. Pounds (2000). Joint Toxicity of Inorganic Chemical Mixtures: the Role of Dose Ratios. Metal Ions in Biology and Medicine, Vol. 6, Eds. J. Centeno, P. Collery, G. Vernet, R. Finkelman, H. Gibb and J. C. Etienne, John Libbey Eurotext, Paris, P297-299.

232) Pella, J., Masuda, M. and Chen, D. G. (1998). Forecast methods for in-season Management of the Southeast Alaska Chinook salmon Troll Fishery. In Fishery Stock Assessment Models Edited by F. Funk, T. J. Quinn, J. Heifetz, J. N. Ianelli, J. E. Powers, J. F. Schweigert, P. J. Swullivan and C. I. Zhang, p287-314.

233) Mulligan, T., Chen, D.G. and Aubry, P. (1997). A Stochastic Migration Model for the Fraser River Salmon Management. Proceedings of the Section on Government Statistics and Section on Social Statistics of the American Statistical Association, p216-220.

Research Reports

234) Irvine, J. R. and **Chen, Ding-Geng** (2004). Status Assessments-Some Consequences of Using Different Salmon Indices. North Pacific Anadromous Fish Commission (NPAFC Doc. 808) 10p.(http://www.npafc.org/new/publications/Documents/PDF%202004/808(Canada).pdf)

235) G. H. Williams and **Chen, D.G**. (2004). Pacific halibut discard mortality rates in the 1990-2002 Alaskan groundfish fisheries, with recommendations for monitoring in 2004-2006. Int.Pac. Halibut Comm. Report of Assessment and Research Activities 2003:227-244.

236) **Chen, D.G**., Hare, S.R. and G. H. Williams (2004). Bycatch mortality and length composition

for IPHC area 4A, 4B and 4CDE from 1990 to 2002. Int. Pac. Halibut Comm. Report of Assessment and Research Activities 2003:245-252.

237) Hare, S. R., G. H. Williams and **Chen, D.G**. (2004). Bycatch mortality and size distribution extrapolation methodology. Int. Pac. Halibut Comm. Report of Assessment and Research Activities 2003:255-274.

238) **Chen, D.G.** (2004). Preliminary analysis of the IPHC PIT tagging experiment in 2003. Int. Pac. Halibut Comm. Report of Assessment and Research Activities 2003:377-390.

239) **Chen, D.G**. and Richard Leickly (2003). Where are our halibut? Displaying spatial and temporal distributions of Pacific halibut using GIS technology. Int.Pac.Halibut Comm. Report of Assessment and Research Activities 2002.

240) **Chen, D.G.** (2002). A Bayesian model with a bivariate normal-lognormal prior distribution and a nonlinear mixed-effect model for a regional fish stock-recruitment meta-model. 2002 Proceedings of the American Statistical Association, Bayesian Statistical Science Section, New York.

241) **Chen, D.G.** (2002). Analyzing mark-recapture data for Pacific halibut with a state-space model. Int.Pac.Halibut Comm. Report of Assessment and Research Activities 2001.313-328.

242) Forsberg,J.E.,**Chen, D.G.** and Kong,T.M. (2002). Variance comparison for surface and breakand-burn ages. Int.Pac.Halibut Comm. Report of Assessment and Research Activities 2001. 263-270.

243) Williams, G.H. and **Chen, D.G**. (2002). Pacific halibut discard mortality rates in the 1990-2000 Alaskan groundfish fisheries, with recommendations for monitoring in 2002. Int.Pac.Halibut Comm. Report of Assessment and Research Activities 2001.215-230.

244) J. R. Irvine, C. K. Parken, **D. G. Chen**, J. Candy, T. Ming, J. Supernault, W. Shaw and R. E.Baily (2001). 2001 Assessment of Stock Status for coho salmon from the Interior Fraser River.Canadian Stock Assessment Secretariat Research Document,2001/083, pp68.

245) **Chen, D.G**. and Clark, W.G. (2001). Survey bait comparison. Int.Pac.HalibutComm. Report of Assessment and Research Activities 2000.183-202.

246) Riddell, B., D.A. Nategaaal and **Chen. D.G.** (2000). A Biological-based escapement goal for Cowichan river Fall Chinook salmon (Oncorhynchus tshawytscha). PSARC (Pacific Scientific Advice Review Committee) working paper S00-17.

247) B. Riddell, **D. G. Chen** and G. Brown. (2000). Stock Description and Biologically-Based Escapement Goals for the Harrison River Fall Chinook. Canadian Stock Assessment Secretariat

Research Document 99/140, pp122, PSARC working paper S00-18.

248) Holtby, B. Finnegan, B. **Chen, D. G**. and Peacock. D. (1999). Biological assessment of Skeena River Coho salmon. Canadian Stock Assessment Secretariat Research Document 99/140, pp122.

249) Ryall, P. Murray, C. Palermo, V. Bailey, D. and Chen. D.G. (1999). Status of Clockwork Chum salmon stock and review of the clockwork management strategy. Canadian Stock Assessment Secretariat Research Document 99/169 (ISSN 1480-4883), p134.

250) PSC (Pacific Salmon Commission). (1999). Joint Chinook Technical Committee Report. TCCHINOOK (99)-3. Maximum Sustained Yield or Biologically Based Escapement Goals for

251) Selected Chinook Salmon Stocks Used by the Pacific Salmon Commission's Chinook Technical Committee for Escapement Assessment. P108

252) PSC (Pacific Salmon Commission). (1999). Joint Chinook Technical Committee Report. TCCHINOOK (99)-2. 1995 and 1996 Annual Report.

253) Mulligan, T., **Chen, D.G**. and Aubry, P. (1997). A Stochastic Migration Model for the Fraser River Salmon Management. Proceedings of the Section on Government Statistics and Section on Social Statistics of the American Statistical Association, p216-220.

254) PSC (Pacific Salmon Commission). (1997). Joint Chinook Technical Committee Report. TCCHINOOK (97)-3. Evaluation of three methods for predicting the abundance index for Chinook salmon available to the Southeast Alaska troll fishery.

255) **Chen, D.G.** (1995). A Shrinkage Estimator for Combination of Bioassays. Ph.D. Dissertation. University of Guelph.

256) **Chen, D.G.,** Kim, P. T., Carter, E.M. and Hubert, J.J. (1993). Combination of Parabolic Bioassays. Department of Mathematics and Statistics. University of Guelph. Statistical series 1993-266, 21p.

257) **Chen. D. G**., Kim, P. T., Carter, E.M. and Hubert, J.J. (1993). Estimation for parabolic bioassay. Department of Mathematics and Statistics. University of Guelph. Statistical series 1993-261, 18p.

258) **Chen, D.G.,** Kim, P. T., Carter, E.M. and Hubert, J.J. (1993). A Bayesian estimator in combination of multivariate bioassays. Department of Mathematics and Statistics. University of Guelph. Statistical series 1993-260, 14p.

259) **Chen, D.G**., Kim, P. T., Carter, E.M. and Hubert, J.J. (1993). A Bayesian analysis for combining slope-ratio bioassays. Department of Mathematics and Statistics. University of

Guelph. Statistical series 1993-259, 16p.

260) **Chen, D.G**., Kim, P. T., Carter, E.M. and Hubert, J.J. (1993). Bayesian estimation in combination of parallel-line bioassays. Department of Mathematics and Statistics. University of Guelph. Statistical series 1993-258, 10p.

261) **Chen, D.G.,** Kim, P. T., Carter, E. M. and Hubert, J.J. (1993). Using prior information in combination of symmetric bioassays. Department of Mathematics and Statistics. University of Guelph. Statistical series 1993-257, 21p.

PROFESSIONAL PRESENTATIONS

- **Keynotes and Plenary**

1) **Chen, D. G.** (2024). Big Data and Statistical Meta-Analysis. IX Workshop on Computational Data Analysis and Numerical Methods (WCDANM) September 05 to 07, University of Evora, Portugal (https://www.wcdanm2024.uevora.pt/invited-speakers/).

2) **Chen, D. G.** (2024). How to Estimate COVID-19 Vaccine Efficacy. June 28, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

3) **Chen, D. G.** (2024). A Maximum Likelihood Estimation on COVID-19 Vaccine Efficacy When the Time-to-Infection for Unvaccinated Group is Unknown. June 21, 2024, For the BioMath2024 (The annual international conference on Mathematical Methods and Models in Biosciences, Cutty Sark Resort, Scottburgh, South Africa) (https://www.up.ac.za/cf-biomath2024/; from June 16 to June 21, 2024).

4) **Chen, D. G.** (2023). Bayesian Assurance over Statistical Power in Clinical Trial Design. INTERNATIONAL SYMPOSIUM ON MODERN BIOSTATISTICS AND STATISTICS, JULY 4th, 2023, FUTURE AFRICA, University of Pretoria, South Africa.

5) **Chen, D. G.** (2022). Integrative Data Harmonization and Statistical Joint Modeling in Evidence-Based Research. 2022 5th International Conference on Mathematics and Statistics (ICoMS 2022: http://www.icoms.org/keynote.html). Paris, France. June 18, 2022. Virtual Conference due to COVID.

6) **Chen, D. G.** (2022). What's the Truth? Understanding Statistics and Evidence-Based Medicine. Health Talk, College of Health Solutions, Arizona State University. February 17, 2022.

7) **Chen, D. G.** (2021) Big Data Inference and Statistical Meta-Analysis. December 19, 2021. International Conference on Causal Inference with Big Data. Institute for Mathematical Sciences, National University of Singapore. https://ims.nus.edu.sg/events/causal-inference-with-big-data/.
8) **Chen, D. G.** (2021) Integrative Data Harmonization and Statistical Meta-Analysis (Distinguished Lecture). November 19, 2021. Department of Mathematics and Statistics, Georgia State University.
9) **Chen, D. G**. (2021). Data Synthesis with Bayesian Modeling and Meta-Analysis In Evidence-Based Public Health Intervention Research. American Public Health Association, October 24, 2021.
10) **Chen, D. G.** (2021). Bayesian Computation on Stochastic Cusp Catastrophe Model. 2021 4th International Conference on Mathematics and Statistics (ICoMS 2021). Paris, France. June 25, 2021. Virtual Conference.
11) **Chen, D. G.** (2021). Stochastic Cusp Catastrophe Model and its Applications. The Fourth International Conference on Physics, Mathematics and Statistics (ICPMS2021). May 20, 2021. Virtual Conference.
12) **Chen, D. G.** (2020). Data Fusion and Statistical Meta-Analysis in Big-Data Era. 2020 3rd International Conference on Mathematics and Statistics (ICoMS 2020). Paris, France. June 22, 2020. Virtual Conference.
13) **Chen, D.G.** (2019) Survival Data Analysis with Accelerated Failure Time Model. The 6th African International Conference on Statistics. Arsi University, Adama, Ethiopia, May 30, 2019
14) **Chen, D.G**. (2018). Bayesian paradigm in social intervention research on evidence building. International Conference on Social Sciences & Interdisciplinary Studies. Rome Italy. June 18, 2018.
15) **Chen, D. G**. (2018). Evidence-Based Intervention Research: How to Build Evidences from Meta-Analysis and Bayesian Modeling**.** Chinese Academy of Social Sciences, Changsha, Hunan, P.R. China. May 26, 2018
16) **Chen, D. G**. (2015). Big Data Era to Statistical Meta-Analysis. 57th South Africa Statistical Association Annual meeting, Pretoria, SA (Dec 1, 2015)

Invited Workshops and Short Courses

17) **Ding-Geng Chen** and Najmeh Nakhaeirad (2024) Meta-Analysis and Network Meta-Analysis in Public Health Applications. The 65th Annual Conference of the South Africa Statistical Association. Stellenbosch, Cape Town, South Africa (https://uctcmc.eventsair.com/65th-annual-conference-of-the-south-african-statistical-association/). Date: 18 November, 2024, and Time: 08h30 to 13h00. https://uctcmc.eventsair.com/65th-annual-conference-of-the-south-african-statistical-association/pre-conference-workshops.

18) **Chen, D. G.** and Yiu-Fai Yung (2024). Structural Equation Modeling Using R and SAS (https://www.wcdanm2024.uevora.pt/course-sem-using-r/). Thursday (September 5): 08:30 am – 13:00 pm. IX Workshop on Computational Data Analysis and Numerical Methods (WCDANM) September 05 to 07, University of Evora, Portugal.

19) Jianguo Sun and **Ding-Geng (Din) Chen** (2024). Analysis of Interval-Censored Time-to-Event Data: Methods and Applications. Annual Joint Statistical Meeting (JSM), American Statistical Association (ASA) (https://ww2.amstat.org/meetings/jsm/2024/index.cfm, August 3 to 8, 2024). Short course delivered at Sunday, Aug 4: 1:00 PM - 5:00 PM, CE_16C: Professional Development Course/CE, Oregon Convention Center: Room: B116. https://ww3.aievolution.com/JSMAnnual2024/Events/viewEv?ev=5138.

20) **Chen, Ding-Geng** and Yiu-Fai Yung (2024) Structural equation modeling and its applications using R and SAS. The 2024 ICSA Applied Statistics Symposium, Nashville, Tennessee. Full-day in-person workshop, Sunday, June 16, 2024, from 8am to 5pm. https://symposium2024.icsa.org/program/course-catalog/

21) **Ding-Geng Chen** and Jeffrey Wilson (2024). Workshop on Statistics and Society. Invited by Department of Economics, Faculty of Social Sciences, University of Guyana, Guyana, South America. January 23 to 24, 2024. Two-day in-person workshop.

22) Kassu Mehari Beyene and **Ding-Geng (Din) Chen** (2023). Evaluating Predictive Accuracy of Survival Models Using the ROC Curve and Related Measures in Clinical Trial Applications. December 4, 2023. The 79th Annual Deming Conference on Applied Statistics. https://demingconference.org/wp-content/uploads/2023/12/2023-Deming-Conference-Printed-Program-v1.3.pdf

23) **Ding-Geng Chen** (2023) Jointly Analyze Longitudinal Data & Time-To-Event Simultaneously: Joint-Modeling and Latent-Class Joint-Modeling. 64th Annual Conference of the South Africa Statistical Association, Durban, South Africa. November 28, 2023. https://app.glueup.com/event/sasa-2023-78969/

24) Jeffrey Wilson and **Ding-Geng Chen** (2023). Modern-Day Data Analysis Techniques and Solutions in Biostatistics. University of West Indies, Trinidad. October 9 to 10. Two-day in-person workshop.

25) **Chen, D. G.** (2023). How To Jointly Analyze Longitudinal Data & Time-To-Event Simultaneously: An Integrative Data Harmonization Approach. Invited by Centro de Matemática e Aplicações of Universidade Nova de Lisboa. May 4, 2023, 9am to 5pm, one-day in-person workshop.

26) **Chen, D. G.** (2023). Stepped-Wedge Cluster Randomized Controlled Trial for Intervention Research: Design and Analysis. Invited by Advocate Aurora Research Institute. May 3, 2023, 2:30pm to 5pm, two and half hours workshop by zoom. https://www.advocateaurorahealth.org/research/

27) **Chen, D. G.** and Wilson J. (2023). Meta-Analysis and Network meta-analysis in Health Policy research and applications. International Conference on Health Policy Statistics (ICHPS). January 9, 2023. Two-hour in-person workshop.

28) Wilson, J. and **Chen, D**. (2022). Marginal Models in Analysis of Correlated Binary Data with Time Dependent Covariates. Applied Statistics Symposium-Statistical Innovation in the Era of Artificial Intelligence and Data Sciences. International Chinese Statistical Association. University of Florida, Gainesville, June 19, 2022 (full day short course).

29) **Chen, D. G.** (2022). Stepped-Wedge Cluster Randomized Controlled Trial for Intervention Research: Design and Analysis. University of Connecticut. January 25, 2022. Two-hour workshop by zoom.

30) Wilson, J. and **Chen, D**. (2021). Marginal Models in Analysis of Correlated Binary Data with Time Dependent Covariates in Biomedical Clinical Trials. Deming Conference of Applied Statistics. Virtual, December 6, 2021 (half day).

31) Xia, Y., and **Chen, D. G.** (2020). Statistical Analysis of Microbiome Data with R ICSA 2020 Applied Statistics Symposium. Virtual, December 13, 2020 (full day workshop).

32) Xia, Y., and **Chen, D. G**. (2020). Recent Development in Analyzing Microbiome Data from Clinical Trials. Deming Conference of Applied Statistics. Virtual, December 7, 2020 (half day workshop).

33) **Chen, D. G**. and Chen, X. (2020). Moderation, Mediation and Longitudinal Mediation Analysis: Case Studies and Practical Demonstration using R/Mplus. Society of Social Work Research, annual conference, Washington, DC. Jan 16, 2020 (half-day workshop).

34) **Chen, D. G**.(2019). Longitudinal Data Analysis and Latent Growth Curve Modelling in Public Health. 2019 ICSA Applied Statistics Symposium, Rayleigh NC June 9, 2019 (half-day)

35) **Chen, D. G**. (2019). **St**atistical Meta-Analysis and Quantitative Intervention Research. Department of Social Work and Social Administration, The University of Hong Kong. May 5 to 6, 2019 (2-day).

36) Burger, D. and **Chen, D. G. (2018).** Bayesian Nonlinear Models for Bactericidal Activity of Tuberculosis Drugs. Deming Conference of Applied Statistics. Atlantic City, December 1, 2018 (half day).

37) **Chen, D. G**. (2018). Advanced Statistics in R: Generalized Linear Models & Multi-Level Modelling. Data Matters: Data Science Short Course Series. August 13-14, 2018 (2-day Workshop).

38) **Chen, D. G**. (2018). Statistical Modelling (Regression and Hierarchical Linear Regression) and Computing Using R. CentralSouth University, Changsha, China. June 6-7, 2018 (2-day Workshop).

39) **Chen, D. G.** and Fraser, M. (2018). Bayesian Modelling in intervention research. Society of Social Work Research, annual conference, Washington, DC. Jan 11, 2018 (1-Day Workshop).

40) **Chen, D. G**. and Chen, X. (2018). A cusp catastrophe model for social behavioral research. Society of Social Work Research, annual conference, Washington, DC. Jan 12, 2018 (1-day workshop).

41) Joseph C. Cappelleri and **Ding-Geng Chen** (2017). Meta-Analysis and Network Meta-Analysis in Clinical Trials. The 73rd Deming Conference on Applied Statistics. Atlantic City, NJ. December 5, 2017.

42) **Chen, D. G.** and Sun, J. (2017). Interval-Censored Time-to-Event Data: Methods and Applications. European Joint Conference on Biometrics and Biopharmaceutical Statistics. Monday August 28, 2017, Vienna, Austria.

43) **Chen, D. G**. and Manda, S. (2017). Applied Meta-analysis using R. 61st World Statistics Congress - ISI2017(www.isi2017.org). July 15, 2017.

44) Yu, L., Liu, L. and **Chen, D. G.** (2017). A Homoscedasticity Test for the Accelerated Failure Time Model. (http://www.icsa.org/icsa/events/july-2-5-2017-2017-icsa-china-conference-focus-lifetime-data).

45) **Chen, D. G**. (2017). Cusp catastrophe linear regression model and its applications. EcoSta2017, Hong Kong, June 16, 2017.

46) **Chen, D. G.** (2017). Capturing the Quantum Changes in Human Behavior: Innovative Solutions to and Practical Application of the Cusp Catastrophe Modeling. The 29th Association for Psychological Science, Annual Convention, May 28, 2017

47) **Chen, D. G.** (2017). Time for the Paradigm Change in clinical trial design. The 5th Workshop on Biostatistics and Bioinformatics. (http://www.icsa.org/icsa/events/may-5-7-2017-5th-workshop-biostatistics-and-bioinformatics-0), May 6, 2017.

48) **Chen, D. G.** and Liu, F. (2017). Missing Data Analysis with SAS/R. American Statistical Association/Conference on Statistical Practice, Jacksonville, FL Feb 23, 2017, 1pm to 5pm.

49) **Chen, D. G.** (2017). Longitudinal and Multi-level Modelling using R. Society of Social Work and Research Annual Conference, Jan 12, 2017, New Orleans, Half-day Workshop from 8 am to 12pm.

50) Ma, Y. and **Chen, D. G.** (June 12 2016). Applied Meta-analysis Using R. International Chinese Statistical Association 2016 Symposium. Atlanta.

51) **Chen, D. G.** (2016). Applied Meta-Analysis Using R. Conference on Statistical Practice, American Statistical Association, San Diego. 2/18/2016 1:30 to 5:30pm

52) Xie, C. and **Chen, D. G**. (2015). Multiple Testing for Correlated Multiple Endpoints in Clinical Trials. The 71th Deming Conference in Applied Statistics, Atlantic City, NJ, USA. December 7, 2015. Atlantic City, NJ, USA.

53) **Chen, D. G.** (2015). "Meta-Analysis with R/SAS". 57th South Africa Statistical Association annual meeting, University of Pretoria, South Africa (Dec 3, 2015)

54) **Chen, D. G**. and Hu, C. (2014). "Competing Risks in Cancer Clinical Trials". The 70th Deming Conference in Applied Statistics, Atlantic City, NJ, USA. December 9, 2014.

55) **Chen, D. G**. (2014) "Meta-Analysis using R". The Illinois Chapter of the American Statistical Association Fall Workshop (Oct 10, 2014), Chicago, IL, USA.

56) Sun, J. and **Chen, D. G.** (2014). "Interval-Censored Time-to-Event Data: Methods and Applications". Joint Statistical Meeting, American Statistical Association. Tuesday, August 5 1-5 pm. Boston, MA, USA.

57) **Chen, D. G.** (May 16 to June 6, 2013). Biostatistics in R - Applications to Clinical Trials. Online course for "Statistics.com". Arlington, VA, USA.

58) **D. G. Chen** (2013). Applied Meta-analysis Using R. December 10, 2013. The 69th Deming Conference in Applied Statistics, Atlantic City, NJ, USA

59) **Chen, D. G**. (2013). Applied Meta-analysis using R. Twentieth Annual Biopharmaceutical Applied Statistics Symposium (BASS XX), Orlando, FL. 11/6-11/7, 2013. (received Plaque of Honor for this short course)

60) **Chen, D. G.** (May 17 to June 7, 2013). Biostatistics in R - Applications to Clinical Trials. Online course for "Statistics.com". Arlington, VA, USA.

61) **Chen, D. G.** and Sun, J. **(2012):** Interval-Censored Time-to-Event Data: Methods and Applications. December 3, 2012. The 68th Deming Conference in Applied Statistics, Atlantic City, NJ, USA.

62) **Chen, D. G.** (May 18 to June 8, 2012). Biostatistics in R - Applications to Clinical Trials. Online course for "Statistics.com". Arlington, VA, USA.

63) **D. G. Chen** (2012). Clinical Trial Data analysis using R. International Biometric Conference, Kobe, Japan, 8/26/2012.

64) **Chen, D. G.** (Nov 18 to Dec 2, 2011). Biostatistics in R - Applications to Clinical Trials. Online course for "Statistics.com". Arlington, VA, USA.

65) **Chen, D. G.** (May 27 to June 23, 2011). Biostatistics in R - Applications to Clinical Trials. Online course for "Statistics.com". Arlington, VA, USA.

66) **Chen, D. G.** (June 24th to July 15th, 2011). Clinical Trial Data Analysis Using R. online course for statcourse.com, Huntington Beach, CA, USA.

67) Chen, D. G. (2011). Clinical Trial Data Analysis Using R. December 2011. The 67th Deming Conference in Applied Statistics, Atlantic City, NJ, USA.

Recent Invited Talks

68) **Chen, D.** G. (2024). Estimate COVID-19 Vaccine Efficacy When the Time-to-Infection for Unvaccinated Group is Unknown. December 16, 2024. The 18th International Joint Conference on Computational and Financial Econometrics (CFE) and Computational and Methodological Statistics (CMStatistics). Kings College, London, UK. https://members.biometricsociety.org/ibc2024/events/ibc2024schedule

69) **Chen, D. G.** (2024). Estimate COVID-19 Vaccine Efficacy with Time-to-Infection Data. American Public Health Association Annual conference. October 30, 2024. (in-person presentation)

70) **Chen, D. G.** (2024). Estimate Vaccine Efficacy with Time-to-Infection Data. Department of Statistics and Data Science, Faculty of Sciences, National University of Singapore (NUS). July 17, 2024. (in-person presentation)

71) **Chen, D. G.** (2024). Personal Experience and Advice on Mentoring Researchers and Students. June 11, 2024. South Africa Statistical Association (zoom presentation)

72) **Chen, D. G.** (2024). Statistical Meta-analysis in Big Data Era. March 15, 2024. Department of Mathematical Statistics and Actuarial Science, Faculty/Fakulteit: Natural and Agricultural Sciences / Natuur-en Landbouwetenskappe, Bloemfontein 9300, Republic of South Africa/Republiek van Suid-Afrika.

73) **Chen, D. G.** (2024). Biostatistics in Precision Oncology. March 6, 2024. 2nd PAN AFRICAN CANCER RESEARCH INSTITUTE (PACRI) INTERNATIONAL MEETING, Future Africa, University of Pretoria, South Africa

74) **Chen, D. G.** (2023). Statistical power to Bayesian assurance in superiority clinical trials. December 18, 2023. The16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023), HTW Berlin, University of Applied Sciences (Wilhelminenhof campus), Berlin, http://www.cmstatistics.org/RegistrationsV2/CMStatistics2023/viewSubmission.php?in=1245&token=76276q8390800pp48s28np555n70o139.

75) Arne Ring, **Chen, D. G.,** and Rachid El-Galta (2023). Complex assurance considerations when designing biosimilar trials. December 18, 2023. The 16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023), HTW Berlin, University of Applied Sciences (Wilhelminenhof campus), Berlin, http://www.cmstatistics.org/RegistrationsV2/CMStatistics2023/viewSubmission.php?in=1521&token=4qp88s7sr537rs8s466q20r9790q2775

76) Najmeh Nakhaeirad, Vahid Fakoor and **Chen, D. G**. (2023). Goodness of fit tests for partly interval censored survival data. December 16, 2023. The 16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023), HTW Berlin, University of Applied Sciences (Wilhelminenhof campus), Berlin, http://www.cmstatistics.org/RegistrationsV2/CMStatistics2023/viewSubmission.php?in=1205&token=02q8qo418699p98025sr05op5o489sp6

77) Stander, R. Fabris-Rotelli, I. and **Chen, D. G**.(2023) Variogram estimation for spatial lattice data. SAMSA-Southern Africa Mathematical Statistical Association, University of Pretoria, South Africa. 11/21/2023

78) **Chen, D. G.** (2023). Estimate COVID-19 Vaccine Efficacy When the Time-to-Infection for Unvaccinated Group is Unknown. ONE HEALTH SYMPOSIUM. SAMSA-Southern Africa Mathematical Statistical Association, University of Pretoria, South Africa. 11/20/2023.

79) **Chen, D. G.** (2023). AI & ML for Health Science Research. Faculty of Health Sciences, University of Pretoria. South Africa. Nov 6, 2023. (zoom presentation)

80) **Chen, D. G.** (2023). Big Data Inference and Statistical Meta-Analysis. Department of Biostatistics, Bioinformatics & Biomathematics, Georgetown University Medical Center/Lombardi. October 13, 2023. (zoom presentation)

81) **Chen, D.** (2023). How to Assure a Successful Study: from Statistical Power to Bayesian Assurance. Biostatistics Seminar Series. College of Health Solutions, Arizona State University. September 20.

82) Jeffrey Wilson and **D. G. Chen** (2023) FIT TING MARGINAL MODELS IN ANALYZING CORRELATED BINARY SATA WITH TIME DEPENDENT COVARIATES. The 7th African International Conference (AIC) on Statistics, June 14, 2023. http://maics2023.uca.ma/

83) **Chen, D. G.** (2023). From Statistical Power to Bayesian Assurance: Time for Paradigm Change in Clinical Trial Design. The 7th African International Conference (AIC) on Statistics, June 14, 2023. http://maics2023.uca.ma/

84) **Chen, D. G.** (2023). Big Data Inference and Statistical Meta-Analysis. Invited by Centro de Matemática e Aplicações of Universidade Nova de Lisboa. May 10, 2023.

85) N. Nakhaeirad and **D.-G. Chen** (2022). The weighted least squares method for heteroscedastic interval censored survival data. CMStatistics 2022, London, December 18, 2022.

86) I. Maharela, **D. Chen**, and L. Fletcher (2022). Modelling non-homogeneous censored time-to-event data using semiparametric accelerated failuretime model. CMStatistics 2022, London, December 18, 2022

87) **Ding-Geng Chen** (2022). Biostatistical Services and Research. 2022 Research Computing Expo. Arizona State University, August 2, 2022.

88) **Ding-Geng Chen** (2022). Statistical Joint Modeling in Integrative Data Harmonization. International Symposium of Biostatistics and Machine-Learning, University of Pretoria, July 26, 2022.

89) **Chen, D. G.** and Singini, I. L. (2022). Latent-Class Joint-Model and Shared-Parameter Joint-Model with Influence Diagnostics for Longitudinal and Survival Data from a multi-center clinical trial. ICSA 2022 China Conference. Xian, China, July 3rd, 2022 (Virtual due to COVID)

90) **Chen, D. G.** (2022). Joint modeling for longitudinal and interval censored survival data, Invited Sessions 4C: New fronts in joint modeling and machine learning. International Chinese Statistical Association, Applied Statistical Symposium. University of Florida, Gainesville, Monday, Jun 20, 2022.

91) **Chen, D.G.** (2022). Cusp Catastrophe Modeling and its Bayesian Computation. Arizona State University, SoMASS Statistics Seminar, April 22, 2022

92) **Chen, D.G.** (2022). Big-Data Analysis v.s. Meta-Analysis. Department of Epidemiology and Biostatistics, University of Arizona, January 26, 2022.

93) **Chen, D.G.** (2022). Integrative Data harmonization with Bayesian Modeling in Evidence-Based Health Intervention Research. College of Health Solutions, Arizona State University, January 20, 2022. Zoom presentation

94) **Chen, D. G.** (2021). Statistical Meta-Analysis with Summary Statistics and Individual Patient-level Data. TRCC (Texas Regional CTSA Consortium) Quantitative Seminar Series. University of Texas Medical Branch (UTMB), Preventive Medicine and Population Health-Office of Biostatistics, October 26, 2021.

95) **Chen, D. G.** (2020). Meta-Analysis and the related research. University of North Carolina-Greensboro, Department of Mathematics and Statistics. September 30, 2020. (zoom due to COVID-19)

96) **Chen, D. G.** (2020). Meta-Analysis in Evidence-based Public Health Research. Division of Epidemiology and Biostatistics, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa. May 26, 2020. (zoom due to COVID-19)

97) **Chen, D**. & Chen, X. (2020) - Cusp Catastrophe Modeling in Social Behavioral Research: Method Development and Analysis, Feb 25, 2020. The 23rd Annual American Association of Behavioral and Social Sciences Conference, Las Vegas.

98) Chen, X. & **Chen, D.** - Examine Binge Drinking Behavior among U.S. Adolescents Using a Newly Established Cusp Catastrophe Modeling Method, Feb 24, 2020. The 23rd Annual American Association of Behavioral and Social Sciences Conference, Las Vegas.

99) **Chen, D. G.**, Ansong, D., Brevard, K., Okumu, M and Testa, M. (2020) Evidence building and information accumulation: Bayesian paradigm cohesive for child welfare intervention research.

Society of Social Work Research annual conference. Jan 19, 2020, Washington, D.C.

100) **Chen, D. G.** Homoscedasticity in the Accelerated Failure Time Model. International Conference on Statistical Distributions and Applications. Grand Rapids, MI, USA, October 12, 2019.

101) **Chen, D. G.** A statistical distribution for simultaneously modeling skewness, kurtosis and bimodality. International Conference on Statistical Distributions and Applications. Grand Rapids, MI, USA, October 11, 2019.

102) **Chen, D.G**. A homogeneity in the accelerated failure time model. ICSA Applied Statistics Symposium, Raleigh NC, June 10, 2019

103) **Chen, D.G.** Statistical Meta-Analysis and its Efficiency, The School of Mathematics, Statistics and Computer Science, University of KwaZulu-Natal, South Africa, May 21, 2019.

104) **Chen, D.G.** A Homogeneity Test and Weighted Least-Squares Method for Right-Censored Data in Accelerated Failure Time Model. Department of Applied Mathematics. The Hong Kong Polytechnic University, May 8, 2019.

105) Hou, J., Daw, R., He, C., **Chen, D.G.** and Sun, D. (2019). Bayesian CUSP Catastrophe Model for Sudden Changes. Statistical and Applied Mathematical Sciences Institute (SAMSI), USA, Feb 28, 2019. (**Abstract**: The cusp catastrophe model uses a discontinuous nonlinear function to model and predict sudden changes. Due to the complexity of the discontinuous nonlinear relationship, there are issues in fitting the statistical cusp regression model and the gradient-based optimization methods do not work anymore. To fill the gap, we have developed a Bayesian method for the cusp regression model and the posterior mean is used to obtain estimates of the parameters. Furthermore, the partial swarm optimization algorithm is incorporated to speed up the convergence of the Markov chain Monte Carlo algorithm. Extensive simulation studies showed that the Bayesian method yielded a better parameter estimate than those form both the maximal likelihood estimation and the traditional stochastic differential equations method under the Maxwell convention)

106) **Chen, D. G**. and Lio, YL (2018). A Novel Generalized Rayleigh-Exponential-Weibull Distributions and its Application to Model Progressively Type-I Interval-Censored Data. 11th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2018), University of Pisa, Italy, 14-16 December 2018.

107) **Chen, D. G**. (2018). Meta-Analysis Using Summary Statistics and Individual Participant-level Data. Department of Statistical Science, Cornell University, USA, October 17, 2018.

108) **Chen, D. G**. (2018). Data fusion with meta-Analysis. Statistical and Applied Mathematical Sciences Institute (SAMSI), USA, October 9, 2018.

109) **Chen, D. G**. (2018). Relative efficiency of using summary and individual data in meta-analysis. Department of Mathematics and Statistics, University of Maryland Baltimore County, USA, October 5, 2018.

110) **Chen, D. G**. (2018). Bayesian in Intervention Research. Behavioral & Integrative Neuroscience Quantitative Forum. University of North Carolina- Chapel Hill. October 1.

111) **Chen, D. G**. (2018). Statistical Meta-analysis and its efficiency. Department of Public Health, Central South University, Changsha, China, June 1, 2018.

112) **Chen, D. G**. (2018). Public health research and Meta-analysis. School of Public Health, Faculty of Health Sciences, University of Wits, South Africa, May 18, 2018.

113) **Chen, D. G**. (2017). Cusp Catastrophe Regression Model and Its Applications. Department of Statistics, University of South Carolina. November 9.

114) **Chen, D. G**. (2017). From Study Design to Statistical Analysis: A Bayesian Perspective on Intervention Research. Department of Biostatistics and Department of Epidemiology, University of Florida, Nov 2.

115) **Chen, D. G**. (2017). Cusp Catastrophe Regression Model and Its Applications. Behavioral & Integrative Neuroscience Quantitative Forum. University of North Carolina- Chapel Hill. September 18.

116) **Chen, D. G.** and Ansong, D. (2017) Bayesian Spatial-Temporal Modeling of HIV Risk among Adolescents in Africa. 61st World Statistics Congress - ISI2017 (www.isi2017.org). July 16-21, 2017.

117) **Chen, D. G.** and Chen, X. (2017). Cusp Catastrophe Linear Regression Model and its Applications. International Conference on Econometrics and Statistics. Hong Kong. June 15-17, 2017

118) **Chen, D.** G., Wu, S. Wu, Q. (2016). Introducing Missing Data Analysis in Social Work Research. Society of Social Work and Research Annual Conference, Jan 14, 2017, New Orleans, Symposium.

119) **Chen, D. G.** and Fraser, M. (2016). Bayesian Intervention Research. Society of Social Work and Research Annual Conference, Jan 14, 2017, New Orleans, Symposium.

120) **Chen, D. G.** and Chen, X. (2016). Cusp Catastrophe Model and its Application in Public Health Behavior Research. 4th International Symposium on Biostatistics, International Biometric Society-China, Shanghai, July 2, 2016.

121) **Chen, D. G.** and Chen, X. (2016). Cusp Catastrophe model and its applications. University of KwaZulu-Natal, South Africa. December 5, 2016

122) **Chen, D. G**. (2016) R for meta-analysis and network meta-analysis. 23RD Annual Biopharmaceutical Applied Statistics Symposium(BASS), Rockville, Maryland, October 24, 2016.

123) **Chen, D. G.,** Chen, X. amd Zhang, K.(2016) An Exploratory Statistical Cusp Catastrophe Model. 2016 IEEE International Conference on Data Science and Advanced Analytics. Montreal, Canada. October 17, 2016.

124) **Chen, D. G**. (2016). Meta-Analysis Using R. Session on Data Synthesis and Meta-Analysis. Conference on Statistical Practice, American Statistical Association. San Diego. Feb 20, 2016.

125) **Chen, D. G**. (2015) "Interval-Censored Time-to-Event Data: Parametric, Nonparametric, Semi-Parametric Survival Data Analysis". Mini-plenary at 57th South Africa Statistical Association annual meeting, University of Pretoria (Dec 1, 2015)

126) **Chen, D. G**. (2015) "Big-data Perspectives in Biostatistics and Bioinformatics". Big-Data Summit, University of Pretoria, South Africa (Nov 28, 2015)

127) Chen, X. and **Chen, D. G**. (2015). "Theory-supported cusp catastrophe modeling in analyzing public health data", American Public Health Association Annual Conference Chicago, IL. USA. Nov 2, 2015.

128) **Chen, D. G.** (2014). Meta-Analysis with R. Department of Statistics, Kansas State University. December 4, 2014.

129) **Chen, D. G**., Chen, X and Tang, W. (2014). Sample Size Determination for stochastic cusp catastrophe model: a simulation-based approach. 2014 American Public Health Association, Invited session "Modelling Social Behavior", 11/19/2014.

130) **Chen, D. G**. (2014). Meta-analysis for public health data. SON Research and Innovation Grand Rounds, University of Rochester Medical Center. 10/29/2014. Wed 12:00-13:00pm.

131) **Chen, D. G**. (2014). Meta-analysis with summary statistics vs. meta-analysis with individual patient-level data. Department of Mathematics and Statistics, University of Guelph. 10/28/2014, Tuesday 2:30-3:30pm.

132) (Invited Discussant). **Chen, D. G**. (2014). "Model the Structural Zeroes in Mental Health Research". 2014 JSM, August 5, 2014.

133) **Chen, D. G. (2014).** Big data and meta-analysis using R. Department of Statistics, University of Pretoria, South Africa, Monday, May 5, 2014.

134) **Chen, D. G.,** Chen, X., Tang, W. and Lin, F. (2014) Sample size determination to detect cusp catastrophe model: a Monte-Carlo simulation approach. The 2014 International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction (SBP), Washington, DC, 4/2-4/4, 2014

135) **Chen, D. G.**, Dungang Liu and Heping Zhang (August 7, 2013). Relative efficiency for random-effects meta-analysis using summary statistics and individual patient data. 2013 Joint Statistical Meeting, Montreal, Canada

136) Chen, D. G. (2012) Issues on Factorial Experimental Design. Tianjin International Joint Academy of Biotechnology and Medicine, China. July 11, 2012

137) Chen, D. G. (2012) ROC and Diagnostics. Tianjin International Joint Academy of Biotechnology and Medicine, China. July 10, 2012

138) Chen, D. G. (2012) Stock Assessment Modelling using State-of-art software R. Shanghai Fishery University, China. July 6, 2012

139) Chen, D. G. (2012) Statistical Computing using R. Guangzhou University, China. July 4, 2012

140) Chen, D. G. (2012) Bayesian Modelling. Guangzhou University, China. July 3, 2012

141) **Chen, D. G**. (2007) Hybrid Global Genetics Algorithms with Quasi-Newton Methods for Neural Network Models. EcoSummit 2007.

Other Presentations

142) Alfred Musekiwa, Samuel Manda, Henry Mwanmbi, and **Chen, D.** G. (2024). Longitudinal Meta-analysis of Multiple Effect sizes. The 32nd International Biometric Conference (IBC2024). December 10, 2024. https://members.biometricsociety.org/ibc2024/events/ibc2024schedule

143) **Chen, D. G.** (2024). Estimate COVID-19 Vaccine Efficacy When the Time-to-Infection for Unvaccinated Group is Unknown. The 32nd International Biometric Conference (IBC2024). December 10, 2024. Atlanta, USA.

144) Mahboubeh Akbari Lakeh, **Ding-Geng Chen**, and Najmeh Nakhaeirad (2024). Heteroscedastic accelerated failure time model for length-biased right-censored data. Friday, November 22, 2024. https://uctcmc.eventsair.com/65th-annual-conference-of-the-south-african-statistical-association/programme.

145) Isaac Singini and **Ding-Geng Chen** (2024). Joint modeling for longitudinal and interval-censored survival data. Friday, November 22, 2024. https://uctcmc.eventsair.com/65th-annual-conference-of-the-south-african-statistical-association/programme.

146) Seyifemichael Yilema, **Ding-Geng Chen**, and Najmeh Nakhaeirad (2024). Geospatial small area estimation of hemoglobin levels of women and children in official statistics. Thursday, November 21, 2024. https://uctcmc.eventsair.com/65th-annual-conference-of-the-south-african-statistical-association/programme.

147) Venter, L. **Ding-Geng Chen**, and Inger Fabris-Rotelli (2024). Sample size calculations in diagnostic accuracy studies with frequentist and Bayesian approaches. Thursday, November 21, 2024. https://uctcmc.eventsair.com/65th-annual-conference-of-the-south-african-statistical-association/programme.

148) DB Belay, **Ding-Geng Chen**, Najmeh Nakhaeirad (2024). Bayesian Multivariate joint modeling of longitudinal and time-to-event data using HIV/AIDS patients. June 26, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

149) HM Fenta, **Ding-Geng Chen**, Temesgen T Zewotir, Najmeh Nakhaei Rad (2024). Spatiotemporal Models with Confounding Effects: Application on Under-Five Mortality across subSaharan African Countries. June 26, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

150) MA Lakeh, N Nakhaei Rad, **DG Chen** (2024). Pseudo-Observation Approach for Length-Biased Cox Regression Model. June 26, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

151) N Nakhaeirad, A Whata, and **D.G. Chen** (2024). Dynamic joint-modeling of multivariate longitudinal and survival outcomes using deep learning. June 27, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus,

University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024;

152) R Stander, IN Fabris-Rotelli, and **DG Chen** (2024). A geostatistical approach for predicting hotspots in spatial lattice data. June 27, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

153) L Venter, **D Chen**, and I Fabris-Rotelli (2024). Assurance in Diagnostic Accuracy Studies. June 27, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

154) LO Baloi, N Nakhaeirad, and **D. Chen (2024).** Estimation of incubation period and generation time of COVID-19 based on observed length-biased and interval censored epidemic cohort. June 27, 2024 at the SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).

155) **Chen, D. G.,** Seltzer, R. Kurka, J. Acciai, F. (2022). How to Reshape Longitudinal Data Using… REDCap, SAS, R, Stata and SPSS, Wednesday, Oct. 26, 2022. College of Health Solutions, Arizona State University.

156) **Chen, D. G.,** Seltzer, R. Kurka, J. Acciai, F. (2022). How to Do Longitudinal Data Analysis Using… REDCap, SAS, R, Stata and SPSS, Wednesday, Nov. 30, 2022. College of Health Solutions, Arizona State University.

157) **Chen, D. G.,** Seltzer, R. Kurka, J. Acciai, F. (2022). How to Do Power Calculations and Sample Size Determinations, Wednesday, Sept. 28, 2022. College of Health Solutions, Arizona State University.

158) Thasmika Mohan, Najmeh Nakhaei Rad, **D. G. Chen** (2022). A MÖBIUS-TRANSFORMED TOROIDAL DISTRIBUTION FOR DIHEDRAL ANGLES MODELLING IN PROTEIN STRUCTURE, South Africa Statistical Association, Nov 29, 2022. Georgia, South Africa.

159) I. Singini, **D. Chen**, F. Gumedze (2022). Latent Class Joint Model for Longitudinal and Survival Data: an alternative to influence diagnostics for shared parameter joint model. South Africa Statistical Association, Nov 29, 2022. Georgia, South Africa.

160) Iketle Maharela, **Ding-Geng Chen**, LizelleFletcher (2022). Modelling Non-Homogeneous Censored Time-to-Event Data using Semiparametric Accelerated Failure Time Model: Simulation and Applications. International Symposium of Biostatistics and Machine-Learning,

University of Pretoria, July 27, 2022.

161) Christine Kraamwinkel, Inger Fabris-Rotelli, Rian Botes, Kabelo Mahloromela, **Ding-Geng Chen** (2021). On the use of Voronoi tessellations for detection of spatial inhomogeneity in regular spatial point patterns. South Africa Statistical Association annual conference, December 2, 2021.

162) Ren´e Stander*, IN Fabris-Rotelli, **D.G. Chen**, and G Breetzke (2021). Multiscale decomposition of spatial lattice data for feature detection. South Africa Statistical Association annual conference, December 3, 2021.

163) Mohadeseh Shojaei Shahrokhabadi, **Ding-Geng (Din) Chen** (2021), Marginalized Two-Part Joint Models for Generalized Gamma Family of Distribution. South Africa Statistical Association annual conference, December 3, 2021.

164) Isaac Singini, **Ding-Geng (Din) Chen**, Freedom Gumedze, (2021). Latent Class Joint Model for Longitudinal and Survival Data: an alternative to in influence diagnostics for shared parameter joint model. South Africa Statistical Association annual conference, December 3, 2021.

165) Brevard, K., Ansong, D., Testa, M. and **Chen, D. G. (**2020) Evaluation of the Illinois Birth through three IV-E Waiver demonstration: the impact of a trauma-informed parenting intervention on child permanency outcomes. Society of Social Work Research annual conference. Jan 17, 2020, Washington, D.C.

166) Miller V, **Chen, D. G**, Barrett D, Ohrbach R, Slade G (2019). Exploring the relationship between factors associated with pain-related disability in people with painful TMD: a structural equation modeling approach. Society for Epidemiologic Research Annual Meeting, Minneapolis, MN June 18-21 2019.

167) Chen, X., **Chen, D. G.** and Lan, G. (2015). Identify Non-identifiable Markov-Based Systems for Studying the Dynamics of Adolescent Marijuana Use with Cross-Sectional Data. The 25th Annual International Conference, the Society for Chaos Theory in Psychology and Life Sciences, July 29-31, 2015, Gainesville, Florida

168) Quinn, J.R., Friedman, M., Stein, K.F., Tucker, R., & **Chen, D. G**. (2014, September). Family Caregivers' Perceptions of Patients' Health Status and Time to Hospitalization for Decompensating Heart Failure. Poster presentation at the 2014 State of the Science Congress on Nursing Research,

169) Wilde, M., McMahon, J., McDonald, M., Tang, W., Wang, W. Brasch, J., Fairbanks, E., Shah, S., Zhang, F., **Chen, D. G. (**2014, June). Self-management in long - term urinary catheter users. Paper presented at WOCN Society's 46th Annual Conference, Nashville, TN.

170) Zhang, F., Wilde, M.H., **Chen, D. G.,** Wang, W., & Tang, W.(2014). Symptoms of catheter-associated urinary tract infections (CAUTI) in long-term indwelling urinary catheter users. Poster presented at the 2014 ENRS conference, Philadelphia, PA

171) Stein, K., Corte, C. and **Chen, D. G.** Identity Impairment: The Coginitive Foundation of Disordered Eating and Weight Control Behaviors (DEWCB) in Mexican American Women (MA). The 26th Eastern Nursing Research Society, 4/9-4/11, 2014. Philadelphia, PA.

172) Quinn, J. Friedman, M. Stein, K., Tucker, R. and Chen, DG. Family Caregivers' Perception of Patients' Health Status and Time to Hospitalization for Decompensating Heart Failure. The 26th Eastern Nursing Research Society, 4/9-4/11, 2014. Philadelphia, PA.

173) Chen, X. and **Chen, D. G.** Mutual information technique in assessing crosstalk through a random-pairing bootstrap method. The 2014 International Conference on Social Computing, Behavioral-Cultural Modeling, and Prediction (SBP), Washington, DC, 4/2-4/4, 2014

174) Quinn, J.R., Stein, K.F., Friedman, M.N., Chen, L., Tucker, R., & **Chen, D.G.** (2013) Recognition of Worsening heart failure and care-seeking by chronic heart failure patients prior to hospitalization. Poster presentation at the Council for the Advancement of Nursing Science (CANS) Conference, Washington, DC, October 16, 2013.

175) Nakai, N., **Chen, DG.,** Nishimura, K.,Miyamoto, Y. (August 7, 2013). Comparative Study of Four Methods in Missing Value Imputations with Dropouts from Longitudinal Studies. 2013 Joint Statistical Meeting, Montreal, Canada

176) Xie, C., Lu, X., **Chen, DG**., Singh, RS. (August 7, 2013). Effect of Misspecified Correlations in Parametric Multiple Testing. 2013 Joint Statistical Meeting, Montreal, Canada.

177) **Chen, DG**. Chen, X and Lin, F. (July 26, 2013). Statistical Power Analysis for the Polynomial Cusp Catastrophe Model: A Simulation-Based Approach. 23nd Annual Conference for Society for Chaos Theory in Psychology and Life Sciences, Portland, OR.

178) Jill R. Quinn, Karen F. Stein, Maureen Friedman, Leway Chen, Rebecca Tucker, **Ding-Geng Chen** (2013). Recognition of Worsening Heart Failure and Care Seeking by Chronic Heart Failure Patients Prior to Hospitalization. COUNCIL FOR THE ADVANCEMENT OF NURSING SCIENCE 2013, July 2013.

179) **D. G. Chen**. (Contributed Presentation) Interval-censored time-to-event data analysis. International Biometric Conference, Kobe, Japan, 8/30/2012

180) Quinn, J.R., Chen, L., Brasch, J., Smith, J.A., Tucker, R., & **Chen, D.G**. (September 2011). Symptom Recognition and Decision to Seek Care by Both Chronic Heart Failure Patients and Their Family Caregivers/Significant Others Prior to Hospitalization. Poster presentation. 15th Annual Scientific Meeting Heart Failure Society of America. Boston, MA.

181) Jill R. Quinn, Rebecca Tucker, Leway Chen, Judy Brasch, Joyce A. Smith, **Ding-Geng Chen**. Comparing Perceptions of Chronic Heart Failure Patients' Health Status Prior to Hospitalization by Patients and Their Family Caregiver/Significant Others. "*Quality Care and Outcomes Research in Cardiovascular Disease and Stroke 2011 Scientific Sessions", Washington, D.C. May 12-14, 2011*

182) Chen, Ding-Geng, Yu, Lili and Lio, Y.L. Fractional Polynomials in Analyzing Interval-Censored Time-to-Event Data. Joint Statistical Meetings, American Statistical Association. Miami Beach, FL, July 30-August 4.

183) Lio, Y.L. and **Chen, Ding-Geng**. Simulation Study for the estimations of Generalized Rayleigh Parameters under Progressive type-I Interval Censoring. Joint Statistical Meetings, American Statistical Association. Miami Beach, FL, 7/30-8/4.

184) Samir S. Deeb, Darren Bisset, **Ding-Geng Chen**, Maria N. Pavlova. Regulation of Retinal Gene Expression by Thyroid Hormone and it Receptors During Mouse Development**.** *The Association for Research in Vision and Ophthalmology(ARVO). Fort Lauderdale, FL*, May 1, 2011.

185) Sutton, Fedora, Karki, Amrit and **Chen, Ding-Geng**, Microarray data analysis using Sparse Principal Component Analysis (SPCA). The 7th International Conference on Data Mining July 18-21, 2011 Las Vegas, USA.

186) Xueshui Guo, **D. G. Chen**, Artur J.M. Rosa, Xiuqing Wang (Oct 20-21, 2006). Kinetics of local gene transcription profiles during the development of mucosal immunity using avian infectious bronchitis virus as a model system. American Society for Microbiology 66th Annual meeting.

187) Sajjad, I. and **Chen, D. G**., Raul Jindal and John Ryan. Hemodialysis Access: a systematic review of outcomes. The 10th Biennial symposium on dialysis access. May 18-19, 2006, Arizona.

188) Miller, R., **Chen, D. G**,. Bottolfson, D. and Ryan, J. J. Carotid Endarterectomy Outcomes in a

Medium-Sized Veterans Affairs Hospital Setting. American College of Surgery.

189) Shmagin, B. and **Chen, D**. Understanding and mapping water resources by multidimensional statistics and fuzzy logic: Missouri River basin case. 2006 Western SD Hydrology Conference April 18, 2006, Rushmore Plaza Civic Center – Rapid City, South Dakota.

190) J.G. Pounds, PL Pokorski, **D.G. Chen**, M Mumtaz: Target Organ Variability in the Toxicity of Chemical Mixtures. The Toxicologist, 54;2000.

191) Pounds, J., P. L. Pokorski, **D. G. Chen** and M. Mumtaz (2000). Target Organ Variability in the Toxicity of Chemical Mixtures. Toxicological Sciences 49(1S)

192) Pounds, J., **DG Chen**, and M Mumtaz (1998). Importance of model fitting in the Assessment of Chemical Mixtures. Toxicological Sciences 47(1S):1543A.

193) **DG Chen** and JG Pounds (1998). Analysis of Chemical Mixtures by Non-linear Isobologram Model with Box-Cox Transformation-to-both-sides for Chemical Mixtures. Toxicological Sciences 47(1S):1687A

194) Hadir J, **Chen, D**, M Mumtaz, and Pounds JG.(1996). Model-dependent cytotoxic interactions of Metals. Toxicologist: 17:40a.

195) Haider, J., **Chen, D. G**. and Pounds, J. G. (1996). Model-Dependent Cytotoxic Responses to Defined Chemical Mixtures of Metals. Fundamental and Applied Toxicology 30(1):40a

RESEARCH GRANTS AND CONTRACTS

Active Research Projects:

1) HHS: Agency for Healthcare Research and Quality (AHRQ). (PD/PI: Wang, Dongwen). Title: Development and Evaluation of an Online Contraception Decision Aid for Transgender and Gender-Nonconforming (TGNC) Persons Assigned Female at Birth (AFAB). Major Goals: The proposed project will develop and evaluate an online contraceptive decision aid for the transgender and gender-nonconforming (TGNC) individuals assigned female at birth (AFAB). It will generate evidence to use digital health interventions to improve gender-minority groups' health. The project has long-term potential impacts to advance health and healthcare equity. 8/1/2024-7/31/2028. $1,597,266.00.

   Role: Co-I/Biostatistician (FTE: 1.2 month per year)

2) HHS: National Institutes of Health (NIH). 6922-05-IMPROVE-S001 (PD/PI: Berkel, Cady). Title: IMPROVE Community Implementation Program. Major Goals: The proposed funding

would support a community-engaged, equity focused approach to the development of implementation strategies to expand the reach of culturally appropriate doula services. 8/15/2023-8/14/2024. $1,873,710.00

Role: Co-I/Biostatistician (FTE: 1.2 month per year)

3) (HHS: National Institutes of Health (NIH). 1T32DK137525-01. PD/PI: Whisner, Corrie). **Title: Interdisciplinary Systems based Training for Precision Nutrition.** Major Goals: This training program will provide an interdisciplinary, comprehensive training in precision nutrition topics, reflecting the expertise of our mentor team in nutrition and metabolism (obesity and diabetes; microbiome and functional foods; energy balance; wearable technologies; and digital health interventions) and artificial intelligence and systems modeling (multimodal and multiscale data integration; systems biology; actionable and interpretable AI; AI-based personalization ; time-series and mobile device analytics; and geographic information systems). Project/Proposal Start and End Date: 9/1/2023-8/31/2028 (FTE 1.2 Months per year). Total Award Amount: $1,956,926.00.

Role: Co-I/Mentor. https://sites.google.com/asu.edu/asu-interact.

4) HHS: National Institutes of Health (NIH). 1R01MH132746-01A1. Blair Braden (PI), Kewei Chen (Co-I), Ding-Geng Chen (Co-I), Edward Ofori (Co-I). **Title: The Aging Autistic Brain: Multi-modal imaging to predict accelerated memory decline.** The objectives of this research are to characterize hippocampal and memory aging trajectories and identify the combination of MRI measures that best predict accelerated memory decline in middle-age and older adults with autism spectrum disorder (ASD), compared to matched non-ASD. This is relevant to public health because findings will advance fundamental knowledge of brain aging vulnerabilities and mechanisms in ASD. Our long-term goal is identifying biomarkers and intervention targets for precision medicine care of aging autistic adults. 12/7/2023-11/30/2028. Total Amount: $3,757,519.00.

Role: Co-I/Biostatistician (FTE: 1 month per year)

5) NIH/NIDDK: Chad Stecher (PI) and Matthew Buman (Co-I), Ding-Geng Chen (Co-I), Dorothy Banks (Co-I). https://reporter.nih.gov/project-details/10804152: 1R01DK135488-01A1

Title: StandUPTV Habits: Feasibility trial for maintaining reductions in sedentary screen time (R01). Major Goal: In preliminary work by PI Stecher, mindfulness meditation after breakfast or coffee in the morning increased daily meditation performance during an 8-week post-intervention maintenance period. However, implementing action plans for maintaining eSST

reduction requires remote and objective eSST monitoring technologies that to date have not been available. Recently, our team has developed these technical capabilities through our StandUPTV mHealth platform that uniquely enables us to develop and test an action planning strategy for maintaining reductions in eSST. We are eager to learn more about this research. Amount: $603,643

Role: Co-I

6) HHS: Agency for Healthcare Research and Quality (AHRQ): William Riley (PI), Cady Berkel (Co-I), Ding-Geng Chen (Co-I), Marisa Domino (Co-I), Maria Adela Grando (Co-I), Ellen Green (Co-I), Danny Hughes (Co-I), Li Liu (Co-I), Matthew Martin (Co-I), Roshini Moodley Naidoo (Co-I), Anita Murcko (Co-I), Punam Ohri-Vachaspati (Co-I), Chinedum Ojinnaka (Co-I), Chad Stecher (Co-I), Dongwen Wang (Co-I). Collaborator: Valleywise Health (Dr. Michael White PI). https://reporter.nih.gov/project-details/10815487. **1P30HS029764-01**.

Grant Title: Southwest Safety Net Embedded Scientist Training and Research (SSNE-STaR) Center (P30). Major Goals: Our goal is to help improve the health equity of historically disadvantaged populations with a strong commitment to the needs of Native American, Hispanic, homeless, refugee and other underserved populations by strengthening the capacity of our partner safety net healthcare organizations (SNHs) to generate evidence that informs practice for better health outcomes in underserved populations. To accomplish this goal, we will create the Southwest Safety Net Embedded Scientist Training and Research (SSNE-STaR) Center. Arizona State University College of Health Solutions (ASU CHS) and Valleywise Health (VH) will create the Southwest Safety Net Embedded Scientist Training and Research (SSNE-STaR) Center. The SSNE-STaR vision is to improve the health equity of historically disadvantaged populations, with a strong commitment to the needs of American Indians, Hispanic, homeless, and other underserved populations. The SSNE-STaR will support the scientific training and professional development of Scholars embedded across Arizona SNOs (safety net organizations) to produce evidence-based research and gain proficiency in rapid-cycle implementation. The SSNE-STaR is a collaboration among academic and diverse safety net organizations including inpatient and ambulatory care health systems, federally qualified health centers, Tribal health centers, community partners, and other stakeholders, with equity as a cross-cutting focus, and primary care, maternal care, and disabilities as research priorities. ASU is a Hispanic Serving Institution focused on inclusion, health equity, and continuous improvement. VH is the only public teaching hospital and health care system in Arizona,

providing services to underserved, low-income, and ethnically diverse populations, over 60% Hispanic. Amount: $4,978,282

Role: Co-I/Leader of research Methods Section (0.6 month per year)

7) (Department of Health and Human Services, National Institute of Health PI: Dr. Mindy McEntee). Arizona State University Community Health Worker Training Program (ASU CHWTP). HRSA to support the development and launch of a Community Health Worker Training Program (CHW-TP) to improve services for medically underserved populations in Arizona to develop an online training program paired with local internship and apprenticeship opportunities at community partner sites for 200 learners. 9/15/2022 to 9/14/2025, Total $2,999,934.

Role: Co-I/Data Core Director (FTE 11.25%-Year 1, 20%-Year 2, 25%-Year 3)

8) HHS: National Institutes of Health (NIH). 1R01DK135488-01A1. PD/PI: Stecher, Chad. Title: StandUPTV Habits: Feasibility trial for maintaining reductions in sedentary screen. Major Goals: This mobile health (mHealth) pilot study will develop an intervention to maintain reductions in sedentary screen time (SST) over 12 months using a novel habit formation strategy among a nationally-recruited sample of adults at-risk for diabetes. 12/15/2023-11/30/2026. $896,736.00

Role: Co-I (FTE 0.36 calendar months in year 3)

9) (Department of Health and Human Services: National Institutes of Health. R01DC020162-01A1 (PI: Dr. Ayoub Daliri). Title: Auditory prediction and error evaluation in the speech of individuals who stutter. Major Goals: This project's overall objective is to elucidate the role of predictive sensorimotor processes in the breakdowns of speech fluency in children and adults who stutter. We will address this question using behavioral and neurophysiological recordings combined with neurostimulation techniques. Our central hypothesis is that stuttering is associated with deficits in predictive sensorimotor processes, leading to inaccurate predictions. 1/1/2023 to 12/31/2027, Total $3,383,859.

Role: Co-I (FTE 0.6 month per year)

Completed Research Projects:

10) (American Health Law Association) Health Law Association Salary Survey design and Implementation. $10,000(Contract), 05/01/2022-05/01/2023.

Role: PI

11) (Arizona State University, Co-PIs: Shannon D. R. Ringenbach and Ding-Geng Chen). Modified Assisted Cycle Therapy (ACT) for Young Children with Down syndrome: Pilot data. $17,900. 05/01/2022-04/30/2023.

Role: Co-PI

12) (South Africa Department of Science and Technology and National Research Foundation, **PI: Chen**). South Africa Research Chair Initiative (SARChl) Research Chair in Biostatistics (Tier 1), R13,400,000 (South Africa Rand)

Role: PI and Chair Holder. January 1, 2018 to December 31, 2022.

13) (South Africa National Research Foundation, PI-Chen). NRF INCENTIVE FUNDING FOR RATED RESEARCHERS (IPRR). R50,000 (South Africa Rand). 01/012020-12/31/2025. Reference Number: RA161126211001 and UNIQUE GRANT NO: 127727.

Role: PI

14) (Illinois Department of Children and Family Service, PI: Ansong) Family First Prevention Services Evaluation, #1005709016. ($546,563). This study is testing the impact of several promising evidence-based interventions (as rated by the Title IV-E Prevention Services Clearinghouse) on child safety, permanency, and well-being of children at risk of foster care placement in the state of Illinois. Participants: The study is targeting children at risk of entering foster care, pregnant current or former foster youth, children recently reunified, and children in adoptive or guardianship arrangements. Procedures (methods): The study is using a quasi-experimental design to evaluate the effectiveness of the promising interventions on child welfare outcomes.

Role: Co-I/ Biostatistician. 7/2020-6/2022.

15) (U.S. Department of Justice, PI: Cuddeback) Reducing recidivism and improving outcomes among probationers with mental illnesses: combining mental health probation with supported employment. Office of Justice Programs. Amount: $740,693 (2019-2022).

Role: Co-I/Biostatistician (10%).

16) (North Carolina Department of Public Safety, PI: Cuddeback) Assessing the Reliability and Validity of the North Carolina Department of Public Safety Risk and Needs Assessment for Offenders. 01/21/21-12/31/21, Total funding $149,334.

Role: Co-I/Biostatistician (16.5%).

17) (Illinois Department of Children and Family Service, PI: Ansong) Illinois Birth through Three Title IV-E Waiver: Child and Family Intervention IB3. 07/01/2018-06/30/2020. Total Amount:

$1,071,692.

Role: Co-I/Biostatistician, 16.5% for 08/01/2018 to 07/31/202019 and 33% for 08/01/2019 to 07/31/2020.

18) (North Carolina Department of Public Safety, PI: Cuddeback) Specialty Mental Health Probation: A Randomized Controlled Trial. Bureau of Justice Assistance GMS Award 2015-SM-BX-0004 (through a subcontract with the North Carolina Department of Public Safety). Total Amount: $670,000 (2016 – 2019).

Role: Co-I/Biostatistician (5%)

19) (NIMHD 1R21MD012687, PI: Hall). Implicit Internalized Stigma: Measuring and Examining a Determinant of Mental Health Disparities for Sexual Minorities. 8/1/2018-3/31/2020. $422,799. (This project has three aims: (1) Creating an implicit internalized sexual minority stigma instrument using an Affect Misattribution Procedure (AMP) approach; (2) Evaluating the reliability (internal consistency and test-retest reliability) and validity (convergent, discriminant, and predictive validity) of the implicit internalized sexual minority stigma version of the AMP; and (3) Examining concurrent and predictive relationships between implicit internalized sexual minority stigma and outcomes of depressive symptoms and anxiety).

Role: Co-I/biostatistician.

20) (NIMH, 1R34MH111855. PI: Wilson). Improving Mental Health Services for Prisoners with Mental Illness. Amount: $1,063,042 (12/1/2017-3/30/2020). The focus of this three-year study is on developing an intervention to improve behavioral health and criminal justice outcomes among persons with serious mental illnesses who are involved in the criminal justice system.

Role. Co-I/Biostatistician.

21) (NIH, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), R01HD075635. Multi-PI: Chen, X.-University of Florida and Chen, D.-University of North Carolina at Chapel Hill) Modeling quantum change in adolescent sexual initiation and condom use (with a cusp catastrophe model development). $ 1,728,486, 07/1/2013-04/31/2019.

Role: Multi-PI (Methodology).

22) (NIH/NINR 1R01NR015452-01A1. PI: Lin) Neurophysiological Aspects of Vision-based Speed of Processing Cognitive Training in Older Adults with Mild Cognitive Impairment. 9/5/2015-7/31/2019, $2,008,192.

Role: Co-I/Biostatistician.

23) (NIH/NINR R01 NR014451-01A1, PI, Rhee). Peer-Led Asthma Self-Management Program for

Adolescents (PLASMA): A Multi-site randomized controlled study to implement and evaluate a peer-led asthma self-management for adolescents (PLASMA) program. 9/15/2014-6/30/2019, $3,596,217.

Role: Co-I/Biostatistician

24) (National Institute of Mental Health, NCPO10370922, PI Cuddeback). Aligning supervision strategies for individuals in need of services and treatment (NC-ASSIST). 3/1/2016-2/28/2019. $314,222. NC ASSIST will integrate the following smart supervision strategies within specialty mental health probation (SMHP) in six North Carolina counties: (1) alignment of service plans with risk and needs assessment (RNA) results; (2) training officers to use smart supervision strategies; (3) using graduated incentives and sanctions; (4) engaging SMHP officers in performance-driven personnel practices (i.e., skill-based training, motivational interviewing with audiotaping, supervision and feedback, mental health supervision and coaching); (5) training officers in dual diagnosis motivational interviewing (DDMI), which is an innovative, evidence-based adaptation to motivational interviewing (MI) that focuses on developing motivation through a client-centered approach to problem-solving; and (6) expanding SMHP's intervention capacity through the community-capacity building, cross-system training, and information sharing).

Role: Co-I/Biostatistician.

25) (U.S. Department of Health and Human Services under a subcontract with Westat, Inc., PI: Testa) Kansas Intensive Permanency Program (Permanency Innovations Initiative Evaluation). 07/01/2017-06/30/2018. $712,363.

Role: Co-I/Biostatistician

26) (National Council of State Boards of Nursing, PI: Ying) Impact of State Scope-of-Practice Regulation on the Availability of Nurse Practitioners in Caring for Vulnerable Populations" $300k, 1/2015-1/2017.

Role: Co-I/Biostatistician.

27) (PI: Chen): Causal Inferences for Zero-Inflated Models in Health Promotion/Health Behavior Outcomes Research. Faculty Research Support Grants, University of Rochester. 7/1/2013-6/30/2014. $9,965

28) (PI: Flannery) Lung Cancer: Structured Pain/Symptom Assessment for functional Well-Being. Oncology Nursing Society. The purpose of this pilot project is to examine the feasibility of a

study designed to test the efficacy of a structured pain and symptom assessment as a telephone-delivered intervention to reduce distress and improve wellbeing.

Biostatistician. 7/2012 to 6/2014. Co-I/Biostatistician.

29) NIH (1 R01 DA021624-02, Olds, D.) Visiting Intervention Age-17 Follow-up of Home. This study is a longitudinal follow-up of 670 primarily African-American women and their 17-year-old firstborn children enrolled since 1990 in a highly significant randomized controlled trial (RCT) of prenatal and infancy home visiting by nurses. Nurses in this program are charged with improving pregnancy outcomes, child health and development, and maternal economic self-sufficiency. 04/01/08-02/28/14, $1,144,772, Co-I/Biostatistician.

30) (Deebs, PI and Chen, Co-PI). Molecular Genetics of Color Vision. NIH. $1,960,455. 07/2008-07/2011. Co-PI.

31) (PI: Pesis-Katz). FAIR Health Inc. Upstate Health Research Network. "Examining the Association between Quality of Care information in the NYS Cardiac Surgery Reports and Negotiated Prices with Insurance Plans". 1/1/2011 to 6/30/2011. (Biostatistician)

32) (Eid, PI and Chen, Co-PI). Functional Status of Vitamin D in Patient with Statin Related Myopathy, $54,000. Department of Veterans Affairs. 1/2008-12/2008.

33) Chen (PI). Developing a Nonlinear Random-Effect Model for Limits of Detection and Limits of Quantitation in Agricultural/Environmental Measurements, USDA. 10/01/2008 to 09/31/2009. $20,000.

34) Stein (PI) and Chen(Biostatistician). Synoptic weather forecasting and web-based information delivery systems for managing crop disease risk in multiple regions of the U.S.". USDA. $1,180,115. 07/2008-12/2009.

35) Chen (contract PI) A randomized, double-blind, placebo-controlled, parallel-group study to evaluate the effect of 500mg EpiCor™ on allergy symptoms. Biostatistician, $190,000. Embria Health Inc. 03/01/2008-12/31/2008.

36) Chen (PI). Developing a mixed statistical model and a full Bayesian integrated approach to identify the differentially expressed genes in non-replicated/small-sample microarray experiment. $70,494, SD Governor's 2010 Individual Research Grant. 08/07-08/08.

37) Gonzalez (PI), Chen (Co-PI). Metabolomics and Functional Genomics of Seed Lipid Biosynthesis in Cuphea. USDA. $20,000. 11/06-11/08.

38) Chen. NSF/EPSCoR Rushmore Initiative for Excellence in Research, $13,750. 08/2005 to 08/2006

39) Pounds and Chen. "Identification and Characterization of toxicant interactions". for Toxic Substances and Disease Registry. $90,203(US), Biostatistician. May 1995 to May 1999.

Statistical Consulting Projects:

40) ATI-450-RA-202: A Phase 2b, Randomized, Multicenter, Double-blind, Parallel Group, Placebo Controlled, Dose Ranging Study to Investigate the Efficacy, Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of Multiple Doses of ATI-450 Plus Methotrexate (MTX) Versus Placebo Plus MTX in Patients with Moderate to Severe Active Rheumatoid Arthritis (RA) who have had an Inadequate Response to MTX Alone. IQVIA/Aclaris Therapeutics, Inc. DSMB Biostatistician. From September 24, 2021.
41) TAK-755-2001: A Phase 2b, multicenter, randomized, double-blind study of safety and efficacy of TAK-755 (rADAMTS13) with minimal to no plasma exchange (PEX) in the treatment of immune-mediated thrombotic thrombocytopenic purpura (iTTP). From Jan 6 2023 to Jan 5, 2026.
42) TAK-755-3002: A Phase 3b, prospective, open-label, multicenter, single treatment arm, continuation study of the safety and efficacy of TAK-755 (rADAMTS-13, also known as BAX 930/SHP655) in the prophylactic and on-demand treatment of subjects with severe congenital thrombotic thrombocytopenic purpura (cTTP; Upshaw-Schulman Syndrome, or hereditary thrombotic thrombocytopenic purpura). IQVIA/Takada. DMC Biostatistician. From October 9, 2021.
43) INZ701-101: A Phase 1/2, Open-Label, Multiple Ascending Dose Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of INZ-701 Followed by an Open-Label Long-Term Extension Period in Adults with ENPP1 Deficiency. IQVIA/Inozyme Pharma, Inc. Boston, MA USA. DMC Biostatistician. From Sept 7 2021.
44) INZ701-201: A Phase 1/2, Open-Label, Multiple Ascending Dose Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of INZ-701 Followed by an Open-Label Long-Term Extension Period in Adults with ENPP1 Deficiency. IQVIA/Inozyme Pharma, Inc. Boston, MA USA. DMC Biostatistician. From Sept 7 2021.
45) aTTP-2019-5881: A Phase II CT on Acquired thrombotic thrombocytopenic purpura (aTTP). IQVIA/Takeda. DMC Biostatistician, From May 2019 to December 31, 2021.
46) cTTP-281102: A phase 3, prospective, randomized, controlled, open-label, multicenter, 2

period crossover study with a single arm continuation evaluating the safety and efficacy of BAX 930 (rADAMTS13) in the prophylactic and on-demand treatment of subjects with severe congenital thrombotic thrombocytopenic purpura (cTTP, Upshaw-Schulman Syndrome [USS], hereditary thrombotic thrombocytopenic purpura [hTTP]) (A phase 3, randomized controlled study of prophylactic and on-demand treatment of cTTP with BAX 930/SHP655 (rADAMTS13)). IQVIA/Takada, DMC Biostatistician. From 11/15 2019.

47) ATI-450-HS-201. A Phase 2a, Randomized, Double-blind, Placebo-controlled Study to Investigate the Efficacy, Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of ATI-450 vs Placebo in Patients with Moderate to Severe Hidradenitis Suppurativa (HS). IQVIA/Aclaris Therapeutics, Inc. DSMB Biostatistician. From Nov 24, 2021 to Jan 2023.

48) SHP-616-302: A randomized double-blind placebo-controlled study to evaluate the efficacy and safety of Cinryze® (C1 esterase inhibitor [human]) for the treatment of acute antibody-mediated rejection in kidney transplant patients. PPD/Shire ViroPharma, Inc. DMC Biostatistician. April 2015 to December 31, 2020.

49) SHP-626-201: A Phase 2 Double-Blind, Randomized, Placebo-controlled, Dose-finding Study to Evaluate the Safety, Tolerability, and Efficacy of Volixibat Potassium, an Apical Sodium-Dependent Bile Acid Transporter Inhibitor (ASBTi) in Adults with Nonalcoholic Steatohepatitis (NASH). ICON/Shire Human Genetic Therapics, Inc. DMC Biostatistician. June 2016 to June 2020.

50) BAX-930: A phase 3, prospective, open-label, multicenter, two-arm, two-period study evaluating the safety and efficacy of BAX 930 (rADAMTS13) in the prophylactic and on-demand treatment of subjects with severe hereditary thrombotic thrombocytopenic purpura (hTTP) (Upshaw-Schulman Syndrome). Quintles. From March 2, 2017 to March 1, 2021.

51) Prospective, open-label trial to evaluate efficacy of lyophilized fecal microbiota transplantation for treatment of recurrent C. difficile infection: Phase II Study. Vancouver Island Health Authority and Royal Jubilee Hospital. DMC Biostatistician. October 2017 to July 2020.

52) A clinical trial with 12-Week, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate The Effect Of A 500 mg Daily Dose Of Epicor™ On The Common Cold Or Influenza. In Subjects Who Have Not Received Influenza Vaccination Compared To Subjects Who Have Received Influenza Vaccination. Avera McKennan Hospital and University Health Center, SD. DMC Biostatistician. September 2006 to August 2009.

53) A phase 3, randomized controlled study of prophylactic and on-demand treatment of cTTP with

BAX 930/SHP655 (rADAMTS13). QuintileIMS, Expert DMC member. March 2017 to March 2021.

54) A randomized double-blind placebo-controlled study to evaluate the efficacy and safety of Cinryze® (C1 esterase inhibitor [human]) for the treatment of acute antibody-mediated rejection in kidney transplant patients. Shire ViroPharma, Inc. Expert DMC member. April 2015 to December 2020.

55) A Phase 2 Double-Blind, Randomized, Placebo-controlled, Dose-finding Study to Evaluate the Safety, Tolerability, and Efficacy of Volixibat Potassium, an Apical Sodium-Dependent Bile Acid Transporter Inhibitor (ASBTi) in Adults with Nonalcoholic Steatohepatitis (NASH). Shire Human Genetic Therapics, Inc. June 2016 to June 2018.

56) Orthopaedic Institute, Sioux Falls, SD. Contract Biostatistician to support clinical trial design, data analysis and manuscript development. 2008 to 2011.

57) May, 2008 to May, 2010: Environmental Statistics Consultant. Develop a geo-spatial model to estimate the uncertainty of modeled carbon sequestration. EverGreen, Denver, CO.

58) September 2006 to December 2008, Biostatistics Consultant. Hematech Inc. (A division of Kirin Pharmaceutical), Sioux Falls, SD. This biostatistical consulting contract is to support HemaTech's research and operation to develop treatments for antibiotic-resistant infections or producing new drugs and human antibodies to help fight diseases.

59) September 2006 to August 2009: Biostatistics Consultant. Avera Research Institute, Avera McKennan Hospital and University Health Center, SD. This consulting contract is to support the Avera research for its clinical trials and biostatistical needs in all aspect. Projects completed with manuscripts published are:

   I. A clinical trial with 12-Week, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate The Effect Of A 500 mg Daily Dose Of Epicor™ On The Common Cold Or Influenza. In Subjects Who Have Not Received Influenza Vaccination Compared To Subjects Who Have Received Influenza Vaccination. I designed and analyzed this trials and the manuscript is being written for publications. (Two papers are published)

   II. A 12-Week, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study To Evaluate The Effect Of A 500 mg Daily Dose Of Epicor® On cold sore outbreaks.

   III. A 52-week research and monitoring project to support the study of the South Dakota School District Benefit Fund Optifast Outreach Research Study on weight-loss. The

project is completed and a paper is published.

IV. A retrospective review of medical records to compare the outcomes of the in-patients diagnosed with and infected bacterial wound, neutropenic fever or bacterial pneumonia and treated by an infectious disease specialist via tele-health versus a face-to-face manner. A paper is published.

60) Biostatistical analysis for a 12-Week, Randomized, Double-Blind, Placebo-Controlled clinical trial of modified yeast-based intervention (EpiCor) on the Incidence and Duration of Common Cold/flu-like symptom among healthy participants vaccinated for seasonal influenza. $7,000. 11/2007.

61) Power Analysis of the Choice of Primary Efficacy Variables and Baselines in Clinical Trials with Pre-dialysis Patients. Shire Pharmaceutical. $18,000. 05/2007-08/2007

62) Expert Reviewer for Southeast Data, Assessment and Review 9. New Orleans, Louisiana, $11,790, 03/2006

63) Expert Reviewer for Southeast Data, Assessment and Review 10. Atlanta, Georgia, Louisiana, $12,060, 06/2006

64) Expert Reviewer for Pacific hake/whiting stock assessment model. Seattle, WA, $11,935, 02/2007

65) Expert Reviewer for Alaska flatfish stock assessment model. Seattle, WA, $15,660, 06/2007

66) Morishima and Chen. Estimation of mean length at age and fishery harvest rate for CTC model. Pacific Salmon Commission. $45,500. May 2005 to Dec 2006

67) Morishima and Chen. Reformulation of algorithms for estimating fishery impacts using the CTC Chinook model. Pacific Salmon Commission. $54,500. May 2004 to April 2005

TEACHING ACTIVITIES

- **Arizona State University**

  1). HCD300: Biostatistics, Undergraduate (31 for West Campus Class and 41 for Downtown campus class), Fall 2022.

  2). HCD300: Biostatistics, Undergraduate (36 students), Spring 2022.

- **The University of North Carolina at Chapel Hill**

  1) SOWO 916: Structural Equation Modelling. Ph.D. Students

Spring Semester of 2016 (6 students), 2017 (11 students), 2018(10 students), 2019(11 students), 2020(9 students)

2) SOWO 917: Multilevel Modelling. Ph.D. students.
Fall semester of 2015 (15 students), 2016 (10 students), 2017 (8 students), 2018 (12 students), 2019(13 students), 2020 (13 students).

- **University of Pretoria, South Africa**

1) STK 880: Statistical Modelling and Computing. Master/Ph.D students (Fall 2017, 2018, 2019)

- **University of Rochester**

1) NUR 544: "Advanced Biostatistics Data Analysis" for Ph.D. students to advanced clinical trial design and real data analysis (2012 Fall)
2) NUR 511: Quantitative Methods (2013 Fall).

- **Georgia South University**

1) BIOS 9130: Statistics Consulting for DrPH students (2009 Fall, 2010 Fall)
2) BIOS 7535: Data Analysis Using SAS. 2010 Spring for MPH and DrPH students
3) BIOS 9331: Meta-Analysis and Research Seminar. 2010 Fall for DrPH students

- **South Dakota State University**

1) CSS (Computational Science and Statistics) 703: Statistical Modeling and Computing using R (2006 Fall; 2008 Fall, for Ph.D. students).
2) CSS 890: Research Seminar (2005 Fall; 2008 Fall, for Ph.D. students).
3) CSS 898: Optimization with Constraints (2007 Spring for Ph.D. students)
4) Stat 787: Regression Analysis II (2009 Spring for both Ph.D. and MSc. students)
5) Stat 792-S03: Linear Models (2005 Fall for both Ph.D. and MSc students)
6) Stat 791: Adaptive Design in Clinical Trials (2008 Fall for Ph.D. students)
7) Stat 492/592: Statistical Methods (2007 Spring and 2008 Spring for Ph.D. and MSc students; 2008 Summer for training medical directors and researchers at the Medical school)
8) Stat 720: Bayesian Statistics (2007 Fall for Ph.D. students)
9) MATH 592: Bioinformatics (2006 Fall for both undergraduate and graduate students)

10) MATH 791: Genetic Algorithms and Optimization (2006 Fall for Ph.D. students)
11) Stat 792: Statistics in Bioassay (2006 Spring for Ph.D. students)

PROFESSIONAL ACTIVITIES AND HONORS

Awards and Honors

1) 2014: "Award of Recognition" for significant contribution to the success for Deming Conferences. American Statistical Association/American Society of Quality/Deming Conference on Applied Statistics.
2) 2013: "Outstanding Leadership Award", American Public Health Association.
3) 2013: "Meritorious Lecture plaque", Biopharmaceutical Applied Statistics Symposium.

Editorial Activities

1) Chief Editor, Springer book series of "Emerging Topics in Statistics and Biostatistics" https://www.springer.com/series/16213 (2018-)
2) Chief Editor, Springer/ICSA Book Series in Statistics (http://www.springer.com/series/13402) (2014-)
3) Co-editor (with Professor Jeffrey Wilson), Johns Hopkins University Press Public Health Statistics Series Book Series (December 2016- December 2019)
4) Associate Editor, Journal of the Society for Social Work and Research (2018-2021)
5) Associate Editor, Journal of Statistical Computation and Simulation (2009-2019)
6) Editorial Board member, Journal of Bioanalysis and Biostatistics (2016-2018)
7) Editor, SOJ Clinical Trials (2015-2018)
8) Editor Board of "International Journal of Ecological Informatics" (2004-2013)
9) Editorial Board, Biostatistics, Bioinformatics and Biomathematics (2009-2010)
10) Editorial Board, Advances and Applications in Statistical Sciences (2008-2009)
11) Editor, International Journal of Bulletin of Statistics and Economics (2006 - 2009)
12) Editor, International Journal of Ecology and Development (2004-2009)

Professional Activities

1) Scientific Committee Member and Invited Speaker (2024): IX Workshop on Computational Data Analysis and Numerical Methods (WCDANM). University of Evora, Portugal.

2) Organizing Committee Member (2024): SYMSTAT2024 (2024 International Symposium on Modern Statistics and Biostatistics), Future Africa Campus, University of Pretoria, South Africa. (https://www.up.ac.za/cf-symposium2024; June 26 to June 28, 2024).
3) Publicity Chair, The 79th Annual Deming Conference on Applied Statistics. December 4 to December 8, 2023. https:///www.demingconference.org.
4) Session Moderator, The 79th Annual Deming Conference on Applied Statistics. December 6, 2023. https:///www.demingconference.org.
5) Session Organizer and Chair: Statistical power to Bayesian assurance in clinical trials. December 18, 2023. The 16th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2023) will be hosted by HTW Berlin, University of Applied Sciences (Wilhelminenhof campus), Berlin, Germany. http://www.cmstatistics.org/CMStatistics2023/schedule_slot.php?slot=M.
6) Program Committee member, Dose Finding and Other Topics in Drug Development, June 8-9, 2023, at the Storrs campus of The University of Connecticut in honor of Dr. Naitee Ting's 70th birthday (https://events.stat.uconn.edu/drug-development/committees.html).
7) Committee member, publicity chair and moderator. 78th Deming Conference in Applied Statistics. December 5-9, 2022, Philadelphia.
8) Session Chair, Session EO741: Testing independence in high-dimensional statistics. 15th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2022), King's College London, December 18, 2022.
9) Co-organizer. International Symposium on Modern Biostatistics and Machine Learning. July 26 to 28, 2022. https://www.up.ac.za/statistics/article/3082879/biostatistics-symposium-july-2022
10) Scientific Committee member, 2022 Stata Conference, August 4-5, 2022. Washington, D. C. https://www.stata.com/meeting/us22/
11) Invited Session Chairs on 2019 ICSA Applied Statistics Symposium, Rayleigh, NC June 9-12, 2019, for "Session 33-Recent Advances in modern survival analysis and the novel application", "Session 41- Advances in Meta-analysis", "Session 69-Modelling and Inference for Complex Dependence in Large Datasets".
12) Chair-elect (2012), Chair (2013), Past-Chair (2014), Statistics Section, American Public Health Association
13) Program Committee Co-Chair, 142th American Public Health Association Annual Meeting,

New Orleans, LA, Nov 15-19, 2014

14) US National Institute of Health (NIH) invited special panel (2014/08 ZRG1 AARR-G (55) R RFA Panel: Tobacco Control Regulatory Research) reviewer for research proposals submitted to NIH for funding, Bethesda, MD. June 3, 2014.
15) Program Committee Chair, 141th American Public Health Association Annual Meeting, Boston, MA, Nov 2-6, 2013
16) Program Committee Chair, 140th American Public Health Association Annual Meeting, San Francisco, CA, October 27-31, 2012
17) Program Committee Co-Chair, 138th American Public Health Association Annual Meeting, Denver, CO, November 6-10, 2010.
18) Statistics Program co-Chair, 138th American Public Health Association Annual Meeting
19) Program Committee member of Biopharmaceutical Applied Statistics Symposium
20) Program moderator of BASS XVI (Nov 2009), BASS XVII (Nov 2010)
21) Section Chair for Biopharmaceutical Section, ENAR 2010, New Orleans, LA
22) Section Chair for Computation Statistics, JSM 2010, Vancouver.
23) Full member of Sigma Xi (The Scientific Research Society)
24) National Science Foundation special panel reviewer (October 2005).
25) Foundation member of the international society of ecological informatics (ISEI)
26) Section Chair for the 2nd international conference for ISEI in Australia, 2000
27) Selected member of the International Scientific Committee for the 3rd Conference of ISEI in Italy, 2002
28) Invited Reviewer for professional journals (JASA, Statistics in Medicine, Biometrics, Computational Statistics & Data analysis, Journal of Statistical Computation and Simulations; Journal of Agricultural, Biological, and Environmental Statistics; Journal of Biopharmaceutical Statistics; International Journal of Ecological Modelling and Systems Ecology; Journal of Computational and Graphical Statistics; International Journal of Environmental Health Perspectives and more).

Department, School, and University Activities

- **The University of North Carolina at Chapel Hill**

1) Director of Consortium for Statistical Development and Consultation, August 2015-October

2021

2) Associate Director of Data Analytics, Jan 2016-October 2021
3) Ph.D. Committee, 2015-October 2021
4) Institutional Review Board Committee (2017-2021)

- **University of Rochester**
  1) Executive member, Center for Research and Evidence-Based Practice.
  2) Group leader, "Statistical Design and Analysis Consulting Group": bi-weekly consulting meeting for the School faculty and Ph.D. students on statistical design and analysis
  3) Member of Ph.D. Sub-Committee
  4) College Research Advisory Committee Member to direct research plan and missions

- **Georgia Southern University**
  1) College Promotion and Tenure Committee (2009-2010)
  2) College Research Advisory Committee member (2009-2010)

- **South Dakoda State University**
  1) Coordinator for the biostatistics/bioinformatics Computational Sciences and Statistics (CSS) Ph.D. program at South Dakota State University (SDSU)
  2) CSS Ph.D. Steering Committee member between SDSU and the University of South Dakota.
  3) Coordinator for the statistical consulting service for faculty, graduate students, local business and research centres.
  4) Search Committee Chair for Bioinformatics faculty position to build the bioinformatics program
  5) Group leader on Biostatistics and Bioinformatics Research Group

Faculty, Researchers and Students Mentored

Postdocs

1) Dr. Habte Tadesse (Feb 2024 to June 2025). College of Health Solutions, Arizona State University
2) Dr. Seyifemickael Amare Yilema (July 2024 to June 2026). Department of Statistics,

University of Pretoria, South Africa.

3) Dr. Haile Mekonnen (January 2024 to October 2024). Department of Statistics, University of Pretoria, South Africa.
4) Dr. Mahboobe Akbari (August 2023 to July 2025). Department of Statistics, University of Pretoria, South Africa.
5) Dr. Denekew Bitew (August 2023 to July 2025). Department of Statistics, University of Pretoria, South Africa.
6) Dr. Kassu Mehari Beyene (October 2022 to Nov 2023). College of Health Solutions, Arizona State University
7) Dr. Isaac Singini (May 2021-May 2022). Department of Statistics, University of Pretoria, South Africa. Research topics in Latent-class joint modeling and model diagnostics.
8) Dr. Moses Okumu (August 2019-August 2021). School of Social Work, The University of North Carolina at Chapel Hill
9) Dr. Ai Bo (August 2019-August 2020). School of Social Work, The University of North Carolina at Chapel Hill
10) Dr. Mohadesch Shojai (March 2020-December 2021). Department of Statistics, University of Pretoria, South Africa. Research topics in zero-inflated marginal joint modeling.
11) Dr. Elham Mirfarah (March 2019-March 2021). Department of Statistics, University of Pretoria, South Africa. Research topics in Survival modeling and accelerated failure time modeling.
12) Dr. Mehrdad Naderi (May 2020-March 2021). Department of Statistics, University of Pretoria, South Africa. Research topics in Survival modeling.
13) Dr. Ropo Ebenezer Ogunsakin (August 2018 - December 2019). Department of Statistics, University of Pretoria, South Africa. Research topics in Geospatial modeling on HIV/AIDS data. Successfully completed and full-time employed as a biostatistician at UKZN.
14) Dr. Wang, W(June 2013-June 2014), University of Rochester. Research topics in zero-inflated modeling.

Ph.D. Students

1) Rene Stander (2021-2023, Co-supervisor with Professor Inger Fabris-Rotelli as supervisor). Multiscale decomposition of spatio-temporal lattice data for hotspot prediction. Department of Statistics, University of Pretoria, South Africa.

2) Iketle Maharela (2016-2023, supervisor). Comparative study between accelerated failure time models and the Cox proportional hazards model when the assumptions are violated using Monte Carlo simulations. Department of Statistics, University of Pretoria, South Africa.
3) Gilson Honvoh (Fall 2019-October 2021, Committee member) Department of Biostatistics, The University of North Carolina at Chapel Hill.
4) Haipeng Gao: Department of Statistics and Operations Research (Fall 2017 to Spring 2019, with Professor Chuanshu Ji, Committee member). Title: Bayesian Inference for Stochastic Cusp Catastrophe Model. The University of North Carolina at Chapel Hill.
5) Elaina Sabatine (Fall 2016 to Spring 2019, with Professor Lippold, School of Social Work, Committee member). Title: Blooming where they are planted: closing cognitive achievement gaps with non-cognitive skills. The University of North Carolina at Chapel Hill
6) Angela You (Fall 2015 to Spring 2018, with Professor Dean Duncan, School of Social Work, Committee member); Title: Psychotropic Medication in Foster Care. The University of North Carolina at Chapel Hill
7) Vanessa Miller (Fall 2016-Spring 2018 with Professor Gary Slade, Department of Dental Ecology and Department of Epidemiology, Gilling's School of Global Health. Committee member). Title: Painful Temporomandibular Joint Disorder (TMD) and Related Disability. The University of North Carolina at Chapel Hill
8) Michael Close (Fall 2016 to Spring 2018, with Professor Leslie Lytle, Department of Health Behavior, Gillings School of Global Health). Title: Identifying and Describing Segments of Office Workers By Activity Patterns: Associations with Demographic Characteristics, Levels of Physical Activity, and Body Mass Index. The University of North Carolina at Chapel Hill
9) Tarisai Chimbwa (June 2018-June 2019, Died due to COVID-19 infection), Department of Statistics, University of Pretoria, South Africa.
10) Alfred Musekiwa, PhD in Biostatistics (with Professors Samuel Manda and Henry Mwambi. June 2013-July 2017. School of Mathematics, Statistics and Computer Science, University of KwaZulu-Natal, South Africa. Employed as an associate professor at University of Pretoria now.
11) Suzanne O'Brian (2011, with Ingersoll, G. and Xue, Y.). University of Rochester.
12) Rebecca Tucker (2012, with Quinn, J. and Chen, L) University of Rochester.

13) Annette Graph (2013, with Kearney, M. and Fielding, S.) University of Rochester.
14) Wu, P.(2013, with Tu, X. and He, H.) University of Rochester.
15) Tao Yu (2013, with Liang, H, Salzman, P. and Qiu, X.) University of Rochester.
16) Xiao Zhang (2014, with McDermott, D., Mudholkar, G. and Qiu, X.) University of Rochester.
17) Tian Chen (2015, Tu, X., He, H. and Thurston, S.) University of Rochester.
18) Frank DiLiberto (2014, with Quinn, J.) University of Rochester.
19) Brenda McQuillian (2016, with Rhee, H.) University of Rochester.
20) Tom Brandenburger (2009). Department of Mathematics and Statistics, South Dakoda State University, now an associate Professor at SDSU;
21) Alfred Furth (2009) Department of Mathematics and Statistics, South Dakoda State University, now president and CEO at Capital Card.

Masters Students

1) Layla Norman (Jan 2020-Sept, 2023). Statistical meta-analysis. Department of Statistics, University of Pretoria, South Africa.
2) Dietrich Bauermerster (Jan 2021-May 2023). Comparison Between the Performance of Continuous and Dichotomized Joint Modelling. Department of Statistics, University of Pretoria, South Africa.
3) Rian Hendrik Botes (January 2021 to December 2022): An optimised rabies vaccination schedule for rural settlements. Department of Statistics, University of Pretoria, South Africa. Co-supervised with Professor Inger Fabris-Rotelli as supervisor.
4) Mhlengi Mgaga (With Professor Henry Mwambi. June 2017-Dec 2018). Title: Meta-analysis with application to estimating combined estimators of effect sizes in biomedical research. School of Mathematics, Statistics and Computer Science, University of KwaZulu-Natal, South Africa.
5) Farrar, Carly Ann (Fall 2017-Spring 2019) School of Social Work, The University of North Carolina at Chapel Hill.
6) Gaylord, Shannon Marie (Fall 2017-Spring 2019) School of Social Work, The University of North Carolina at Chapel Hill.
7) Martin, Brenna Kathleen (Fall 2017-Spring 2019) School of Social Work, The University of North Carolina at Chapel Hill.

8) Pardue, Jodi H.(Fall 2017-Spring 2018) School of Social Work, The University of North Carolina at Chapel Hill.
9) Smith, Olivia Lee Wilson (Fall 2017-Spring 2019) School of Social Work, The University of North Carolina at Chapel Hill.
10) Rebaka Worthley (2009) Department of Mathematics and Statistics, South Dakoda State University
11) XiangFan Yin (2008). Department of Mathematics and Statistics, South Dakoda State University
12) Krishna Deepthi (2008) Department of Mathematics and Statistics, South Dakoda State University
13) Ramu Sudhagoni (2008) Department of Mathematics and Statistics, South Dakoda State University
14) Mike Wallinga (2008) Department of Mathematics and Statistics, South Dakoda State University

Undergraduate Students

- Honor Students: Itumeleng Choche (2020); Dietrich Bauermesister (2020); Tebogo Mphahlel (2020); Keamogetse (Bella) Makoe (2020). Department of Statistics, University of Pretoria, South Africa.