

## **Curriculum Vitae 01-15-13**

**Gideon K. D. Zamba**

Department of Biostatistics

College of Public Health

The University of Iowa

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### **Education**

- 01–1999 : 09–2003 Ph.D. Statistics  
School of Statistics, University of Minnesota  
Area of concentration: Change Point Theory: Control
- 01–1999 : 09–2001 M.S. Statistics  
School of Statistics, University of Minnesota
- 09–1990 : 08–1995 B.S.–M.S. Applied Mathematics  
Département de Mathématiques, Université du Bénin, Lomé-Togo

### **Current Position and Appointments**

Associate Professor of Biostatistics, University of Iowa, July 2012 –present

- Director, Iowa Biostatistics ISIB, January 2009–present
- Biostatistician for the Holden Comprehensive Cancer Center HCCC Aug 2005–present
- Biostatistician for the Biostatistical Consulting Center BCC, 2004–present

### **Previous Positions**

- 08–2006 : 07–2012 Assistant Professor, Department of Biostatistics, The University of Iowa
- 08–2004 : 08–2006 Clinical Assistant Professor, Department of Biostatistics, The University of Iowa
- 08–2003 : 08–2004 Visiting Assistant Professor, Department of Biostatistics, The University of Iowa
- 09–2001 : 06–2003 Primary Instructor, School of Statistics, University of Minnesota
- 09–2000 : 05–2001 Lab Instructor, School of Statistics, University of Minnesota
- 01–2000 : 09–2000 Research Assistant, Consulting Center, School of Statistics, University of Minnesota
- 09–1999 : 01–2000 Teaching Assistant, School of Statistics, University of Minnesota
- 09–1994 : 05–1997 Primary Math Instructor, Lycée Kouvahey, Lomé-Togo

## Courses Instructed

Course Title	Institution	Terms	Level
Biostatistical Methods	The University of Iowa	1	G
Biostatistical Computing (Honors)	The University of Iowa	6	G
General Biostatistics	The University of Iowa	2	U
Research Data Management	The University of Iowa	1	G
Intro to Biostatistical Computing	The University of Iowa	2	G
Introduction to Biostatistics	The University of Iowa	3 <sup>†</sup>	U/G
Design and Analysis of Biomed Studies	The University of Iowa	1	G
Statistical Methods in Clinical Trials	The University of Iowa	1	G
Intro to Statistical Analysis (Honors)	University of Minnesota	4 <sup>‡</sup>	U
Data Analysis	University of Minnesota	2 <sup>‡</sup>	U
Applied Regression Analysis w/Computing	University of Minnesota	2	G
Math: Analysis, Algebra, Geometry (Honors)	Lycée Kouvahey, Lomé Togo	6	

<sup>†</sup> Instructed large lecture sections ( $\geq 70$  students)

<sup>‡</sup> Instructed large lecture sections ( $\geq 100$  students)

U/G : Undergraduate/Graduate level

## Professional Development

- University of Iowa Carver College of Medicine Teaching Scholar Program: Certificate of Teaching Skills Course Completion (January–December 2012).
- Non-Western Ways of Learning and Teaching (2009). The University of Iowa, Center for Teaching
- Creating a Professional Portfolio (2009). The University of Iowa, Center for Teaching
- Applying Problem-Based Learning across Curricula (2008). The University of Iowa, Center for Teaching
- International Biometric Society New Investigator Conference (Mar 2008). Crystal City, VA
- Institute of Mathematical Statistics New Researchers Conference (Aug 2–6, 2005). University of Minnesota, Minneapolis, Minnesota

## Awards & Honors

- University of Iowa Carver College of Medicine Teaching Scholar Program (2012-2014)
- CPH Faculty Teaching Award (2011). College of Public Health, The University of Iowa
- Thank a Teacher note of appreciation (2009). The University of Iowa Center for Teaching

- Excellence in Teaching Award (2002). School of Statistics, University of Minnesota
- Distinguished Instructor Award (1997). Lycée Kouvahey, Lomé Togo

### Research Interests: Methodology

Biostatistics	Computational Statistics	Multivariate Statistics
Syndromic Surveillance	Dynamic Processing	Reliability & Recurrence
Change Point Problems	Sequential Analysis	$6\sigma$ Health Management

### Research Interests: Collaborative

Cancer	Emphysema	Glaucoma	Influenza
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### Refereed Publications : Methodology

- Yang, M., **Zamba, K. D.**, Cavanaugh, J.E. (2013). Markov Regression Models for Count Time Series with Excess Zeros: A Partial Likelihood Approach. *Statistical Methodology*, to appear
- Adekpedjou, A., **Zamba, K. D.** (2012). A Chi-Squared Goodness of Fit Test for Recurrent Event Data. *Journal of Statistical Theory and Application* 11, 2, 97-119.
- **Zamba, K. D.**, Adekpedjou, A., Yang, M. (2012). Inter-event Times Estimation for Correlated Recurrent Event Data under Informative Monitoring. *South African Journal of Statistics*, 46, 155–184
- **Zamba, K. D.**, Tsiamyrtzis P., Hawkins, D. M. (2011). A Three-State Recursive Sequential Bayesian Algorithm for Biosurveillance . *Computational Statistics and Data Analysis*, doi: 10.1016/j.csda.2011.04.015.
- **Zamba, K. D.**, Adekpedjou, A. (2010). Parameter Estimation for Correlated Recurrent Events under Informative Monitoring. *Statistical Methodology*, 8 (2011), 273-290.
- **Zamba, K. D.**, Hawkins, D. M. (2009). A multivariate change point model for change in mean vector and/or covariance structure. *Journal of Quality Technology* 41, 3
- **Zamba, K. D.**, Tsiamyrtzis, P., Hawkins, D. M. (2008). Sequential Bayesian control model for influenza-like-illness and early detection of intentional outbreaks. *Health Edition, Quality Engineering* 20(4):495-507.
- **Zamba, K. D.**, Hawkins, D. M. (2006). A multivariate change point model for statistical process control. *Technometrics* 48(4):539-549.

- Hawkins, D. M., **Zamba, K. D.** (2005). Statistical process control for shifts in mean or variance using a changepoint formulation. *Technometrics* 47:164-173.
- Hawkins, D. M., **Zamba, K. D.** (2005). A change-point model for a shift in variance. *Journal of Quality Technology* 37(1):21-31.
- Hawkins, D. M., **Zamba, K. D.** (2004). On Small Shifts in Quality Control. *Quality Engineering* 16:143-149.

### Refereed Publications : Collaborative

- Wall, M., Doyle C.K., Artes P., Johnson C., Zamba, K. D. (2013). The Repeatability of Mean Defect with Size III and Size V Standard Automated Perimetry. *Investigative Ophthalmology & Visual Science*, To appear.
- Abusin, G., Abu-Arja, R., Gingrich, R., Silverman, M., Zamba Gideon K.D., Schlueter, A., (2013). An Algorithm for Utilizing Peripheral Blood CD34 Count as a Predictor of the need for Autologous Stem Cell Mobilization–Cost Effectiveness Analysis. *Journal of Clinical Apheresis*.
- Menda, Y., Boles Ponto, LL., Scultz, M.K., Zamba Gideon K.D., Watkins G.L., Bushnell, D.L., Madsen M.T., Sunderland J.J., Graham M.M., O’Dorisio T.M., O’Dorisio,S.M. (2012). Repeatability of 68Ga-DOTATOC PET Imaging in Neuroendocrine Tumors. To appear in *Pancreas*.
- Sullivan, R. M., Zhang J., Zamba Gideon K. D., Lip G. YH., Zimmerman, M. B., Olshansky, B. (2012). Relation of Gender Specific Risk of Ischemic Stroke in Patients with Atrial Fibrillation to Differences in Warfarin Anticoagulation Control (from AFFIRM). *American Journal of Cardiology* <http://dx.doi.org/j.amjcard.2012.08.014>.
- Krishna, I. S., Grout R. W., Wilson, J. M., Cook-Granroth, J. E., Zamba, K. D., Hoffman, E. A. (2012). Repeatability and Sample Size Assessment Associated with Computed Tomography-Based Lung Density Metrics. To appear in *Academic Radiology*.
- Santillon, M., Santillon, D., Fleener, D., Stegmann, B., Zamba, K. D., Hunter, S., Yankowitz, J. (2012). Single Umbilical Artery: Does Side Matter? *Fetal Diagnosis and Therapy* doi:10.1159/000338133.
- Lemke, C., Graham, J., Geary, S., Zamba, K. D., Lubaroff, D., Salem, A. (2011). Chitosan is a surprising negative modulator of cytotoxic CD8+ T cell responses elicited by adenovirus cancer vaccines. To appear in *Molecular Pharmaceutics*.
- Muniz, V., Barnes, J. Paliwal, S., Zhang, X., Tang, X., Chen, S., Zamba, K. D., Cullen, J., Meyerholz, D., Meyers, S., Davis, N., Grossman, S., Henry, M., Quelle, D. (2011). The ARF tumor suppressor inhibits tumor cell colonization independent of p53 in a

novel mouse model of pancreatic ductal adenocarcinoma metastasis. To appear in *Molecular Cancer Research*.

- Kay C. N., Pavan P. R., Small, L. B., Zhang, T., Zamba, K. D., Cohen, S. M. (2011). Familial Trends in a Population with Macular Holes. To appear in *Retina*.
- Shamshirsaz, A. A., Buekers, T., DeGeest, K., Bender, D., Zamba, K. D., Goodheart, M. J. (2011). A Single Institution Evaluation of Factors Important in Fallopian Tube Carcinoma Recurrence and Survival. To appear in *International Journal of Gynecological Cancer*.
- Botond B., Lorentzen D., Durairaj L., Pezzulo A. A., Nakano Y., Launspach J., Stoltz D. A., Zamba K. D., McCray P. B., Zabner J., Welsh M. J., Nauseef W. M. (2011). Concentration of the antibacterial precursor thiocyanate in cystic fibrosis airway secretions. To appear in *Free Radical Biology & Medicine*.
- Jacobson, G., Zamba, K. D., Betts, V., Muruganandham, M. and Buechler, J. (2011). Image-based treatment planning of the post-lumpectomy breast utilizing CT and 3TMRI. *International Journal of Breast Cancer*, vol. 2011, doi: 10.4061/2011/246265.
- Navalkhe-Chiwane, P., O'Dorisio, T., Lynch, C., Zamba, K. D., O'Dorisio, S. (2010). Incidence, Survival and Prevalence of Neuroendocrine Tumors versus Neuroblastoma in Children and Young Adults: Nine Standard SEER Registries, 1975–2006 *Pediatric Blood and Cancer* to appear.
- Wall, M., Woodward K. R., Doyle C.K., Zamba, K. D. (2010). The Effective Dynamic Ranges of Standard Automate Perimetry Sizes III and V, Motion and Matrix Perimetry. *Archives of Ophthalmology*, vol. 128, 5, 570–576.
- Prybil, L., Peterson, R., Brezinski, P., Roach W., Zamba, K. D. (2010). Board Oversight of patient care Quality in Community Health System. *American Journal of medical Quality*, 25, 1, 34–41.
- Kwon, S., Jamal, M., Zamba, K. D., Stumbo, P., Samuel, I. (2010). Validation of a novel physical activity assessment device in morbidly obese females. *Journal of Obesity*, vol. 2010, 10.1155/2010/856376
- Dawson, J. D., Cavanaugh, J. E., Zamba, K. D., Rizzo, M. (2010). Modeling lateral control in driving studies. *Accident Analysis & Prevention*, vol. 42 (3), 891-897.
- McNamara, A., Piester, L., Meyerholz, D. K., Zamba, K. D., Sokolich, J. C., Jaskille, A. D., Griffin, M. A., Light, T. D. (2009). Apoptosis is differentially regulated by burn severity and dermal location. In Press *Journal of Surgical Research*.
- Meyerholz, D. K., Piester, T. L., Sokolich, J. C., Light, T. D., Zamba, K. D. (2009). Morphologic parameters for assessment of burn severity in an acute burn injury rat model. *International Journal of Experimental Pathology* 90(1):26-33

- Jacobson, G., Lammler, J., Zamba, K. D., Hua, L., Goodheart, M. J. (2009). Thromboembolic events in patients with cervical carcinoma: Incidence and effect on survival. *Gynecologic Oncology* 113: 2, 240-44.
- Tsai R., Dennis L., Lynch, C. F., Snetelaar L., Zamba K. D., Scott-Conner C. (2009). The risk of developing arm lymphedema among breast cancer survivors: a meta-analysis of treatment factors. *Annals of Surgical Oncology* 16, 7, 1959-72.
- Meyerholz, D. K., McNamara, A., Piester, T., Orion K., Zamba, K. D., Light, T. (2009). Pharmacologic modification to resuscitation fluid following thermal injury- is Drotrecogin alpha the answer to arrest burn depth progression? *The Journal of Trauma, Injury, Infection and Critical Care* 67(5): 996-1003
- Staffey, K. S., Raghuvier, D., Leonard, A., Brooks, B. A. , Andrew, M. Pretorius, B. S., Laynez, W., Ackermann, B. S., Zamba, K. D., Dickson, E., Kerber, R. E. (2008). Liquid ventilation with perfluorocarbons facilitates resumption of spontaneous circulation in a swine cardiac arrest model. *Elsevier Resuscitation* 78:77-84.
- Ahmed, A., Zamba, K. D., DeGeest, K., Lynch, C. F. (2008). The impact of surgery on survival of elderly women with endometrial cancer in the SEER Program from 1992-2002. *Gynecologic Oncology* 111(1):35-40.
- Berger, K. L., Barriga, F., Lace, M. J., Turek, L., Zamba (Gideon), K. D., Domann, F., Lee, J. H., Klingelutz, A. J. (2006). Cervical keratinocytes containing stably replicating episomal HPV-16 are refractory to transform by oncogenic H-Ras. *Journal of Virology* 356 (1-2):68-78.

#### **Encyclopedia / Book Chapter / Book / Book Review / Report**

- Romitti, P., Puzhankara, S., Mathews, K., Zamba, K. D., Cunniff, C., Andrews, J., Matthews, D. James, K., Miller, L., Druschel, C., Fox, D., Pandya, S. Ciafolini, E., Adams, M., Mandel, D., Ouyang, L., Constantin, C., Costa, P. (2009). Prevalence of Duchenne/Becker Muscular Dystrophy Among Males Aged 5–24 Years – Four States 2007. *CDC Morbidity and Mortality weekly Report* 58, 40.
- Prybil, L., Levey, S., Peterson, R., Brezinski, P., Zamba, K. D., Amendola, A., Price, J., and Roach, W. (2009). Governance in High-Performing Community Health Systems: A Report on Trustee and CEO Views. *Grant Thornton LLP*, Chicago, IL.
- Zamba, K. D. (2008). Statistical development of quality in medicine. *The American Statistician* 62(4):359-360.
- Prybil, L. Levey, S., Peterson, R., Dennis, H., Brezinski, P., Price, J., Zamba, K. D., Roach, W. (2008). A governance in non-profit community health systems. *Grant Thornton LLP*, Chicago Illinois.
- Hawkins, D. M., Qiu, P., Zamba, K. D. (2007). Change Point Problems. *Encyclopedia of Statistics in quality and reliability* John & Wiley.

## Manuscripts Submitted / Under Review

- Yang, Ming., **Zamba, K. D.**, Cavanaugh, J.E. (2013). Markov Regression Models for Count Time Series with Excess Zeros. *Statistical Methodology*

## Ph.D. Dissertation

- Zamba, K. D. (2003). “Issues in Statistical Process Control : Change Point Theory”  
Dissertation advisor: Professor Douglas M. Hawkins.

## Invited Presentations

- Zamba, K.D.(2013). Why Consider Biostatistics for Graduate Studies? Universidad Metropolitana, March 2, 2013, San Juan, Puerto Rico.
- Zamba, K.D., Mitchell, Colleen (2013) The professions of Mathematical Biology and Biostatistics, ‘Tu Futuro en las Matemáticas’, Universidad Metropolitana, March 1, 2013, San Juan, Puerto Rico (Panel discussion).
- Zamba, K.D.(2013). A Type of Goodness-of-fit Test in the Presence of Recurrent Events Data, Department of Mathematics and Statistics, University of Maryland at Baltimore County, Feb 15 2013, Baltimore, MD.
- Zamba, K.D., Adekpedjou, A., Johnson, C. A., Wall, M. (2012). Diffusion Injection Model for Visual Field Change, Poster presentation, ARVO May 6–10 2012, Fort Lauderdale, Florida.
- Zamba, K. D.(March 2012). The Work of Biostatisticians: Graduate School Requirements in Biostatistics for Students with Math Background. SIDIM 2012, UPR Mayagüez (February 29, 2012).
- Zamba, K. D., Adekpedjou, A., Doyle, C., Johnson, C., Wall, M. (January 2012). Performance of a Series of Glaucoma Change Probability Criteria. International Visual Field and Imaging Symposium. The University of Melbourne, Victoria, Australia (January 22-25, 2012).
- Zamba, K. D., Kummet, C., Tamegnon, M., Johnson, C., Wall, M. (September 2011). Some Statistical Issues in Visual Field Change Detection. Glaucoma Progression Scholar (GPS) Meeting, Skaneateles, NY, September 23–24.
- Zamba, K. D. (August 2011). Recursive Dynamic Models : A Bayesian Approach. Joint Statistical Meetings, Miami Beach, Florida, August 1–4.
- Zamba, K. D. (March 2011). Mathematics in Action through Statistics and Biostatistics. Université Catholique de l’Afrique de l’Ouest; UCAO Lomé Togo March 21–13.

- Zamba, K. D., Tsiamyrtizis, P., Hawkins, D. M. (May 2010). Recursive Sequential Bayesian Algorithm for Bio-Surveillance. Joint Research Conference, NIST, Rockville, MD, May 25–27.
- Zamba, K. D. (Dec 2008) A Bayesian Analytical Tool for Influenza-Like-Illnesses and Detection of Intentional Releases. Department Colloquium, Department of Statistics, The University of Iowa, Iowa City, IA.
- Zamba, K. D. and Tsiamyrtizis, P. and Hawkins, D. M. (Jan 2008). Bayesian Analytical Tool for ILI Control and Detection of Outbreaks. International Conference on Statistics and Mathematical Related Fields(including preceding) Hawaii, Honolulu
- Zamba, K. D. (Dec, 2007). Bayesian Analytical Tool for ILI Control and Detection of Intentional Outbreaks. Department Colloquium, Department of Biostatistics, The University of Iowa, Iowa City, IA.
- Zamba, K. D. (Sept, 2007). The Role of a Biostatistician: Boundless Window of Opportunities. Seminar, Department of Mathematics and Biological Sciences, Lincoln University, Chester, PA.
- Zamba, K. D., Tsiamyrtizis, P. & Hawkins, D. M. (Oct 2006). Bayesian Analytical Tool for ILI and Detection of Intentional Outbreak, International Society for Disease Surveillance (ISDS), Baltimore, MD.
- Zamba, K. D. and Tsiamyrtizis, P. (Oct 2005). Analytical Syndromic Surveillance Tool for ILI and Intentional Release of Biological Agents, Syndromic Surveillance Conference, Seattle, WA.
- Zamba, K. D. and Hawkins, D. M. (Aug 2005). A Multivariate Change Point Model for Statistical Control, Joint Statistical Meeting (JSM), Minneapolis, MN.
- Zamba, K. D. (Aug 2005). Quality Control Techniques for Disease Monitoring: An Example in the Area of Syndromic Surveillance. New Researcher Conference, Minneapolis, MN.
- Zamba, K. D., Tsiamyrtizis, P. & Hawkins, D. M. (May 2005). Syndromic Surveillance Model for Influenza-Like-Illnesses(ILI) and Intentional Release of Biological Agents Using Sequential Bayesian Technique. Quality and Productivity Research Conference, Carlson School of management, University of Minnesota, MN.
- Zamba, K. D. & Hawkins, D. M. (Jan 2005). SPC for Shift in Mean or Variance Using the Change Point Formulation-Its: Application to Evaluate Gold Mine Samplers. Hawaii International Conference on Statistics, Mathematics and Related Fields, Honolulu, HI.
- Zamba, K. D. & Hawkins, D. M. (2004). A Change Point Model for Shift in Variance. INFORMS, Denver, CO.



- Zamba, K. D. (2003). A Change Point Problems. School of Statistics, University of Minnesota, Minneapolis, MN.
- Zamba, K. D. (July, 2003). Some Issues in SPC : Change Point Problems. Department Colloquium, Department of Biostatistics, The University of Iowa, Iowa City, IA.

### Contributed Presentations

- Yang, M., Cavanaugh, J. E., Zamba K. D. (2013). State-Space Models for Count Time Series with Excess Zeros ENAR, Orlando FL, March 10–13 2013.
- Bhatt S. P., Hoffman E., Newell J. D., Sieren J. C., Washko G. M. D., Stinson, D., Zamba K. D. (2013). Comparison of Spirometric Thresholds in Diagnosing Smoking Related Airflow Obstruction. American Thoracic Society International Conference, Philadelphia, PA May 17–22 2012.
- Kawaguchi E., Harper K., Zamba, K. D. (2012). Survival Function Estimation with Recurrent Events: Case of Retinal Neural Firing. ABRCMS, San Jose, CA, November 2012.
- Withanage De M., Adekpedjou, A., Zamba, K. D. (2012). A Generalized Chi-Squared Goodness of Fit Test for Recurrent Failure Time Data. Joint Statistical Meetings, San Diego, CA, July 28-August 2.
- Adekpedjou, A., Zamba, K. D. (2012). Recurrent Events: Modeling and Inference. Laboratoire Equippe, Maison de la recherche, Université de Lille 3, France, May 10 2012.
- Wall, M., Doyle, C. K., Eden, T. L., Johnson, C. A., Zamba K. D. (2012). Detection of Glaucomatous Progression Using Stimulus Size V, Poster presentation, ARVO May 6–10 2012, Fort Lauderdale, Florida.
- Doyle, C. K., Eden, T. L., Zamba, K. D., Johnson, C. A., Wall, M. (2012). Size Threshold Perimetry Performs as well as Standard Perimetry with Stimulus Sizes III, V, and VI for Glaucoma Detection, Poster presentation, ARVO May 6–10 2012, Fort Lauderdale, Florida.
- Yang, M., Zamba, K. D., Cavanaugh, J. E. (2012). Markov Regression Models for Count Time Series with Excess Zeros: A partial Likelihood Approach, ENAR, Washington DC, April 1-4.
- Kummet, C., Zamba, K. D., Doyle, C., Johnson, C., Wall, M. (January 2012). Optimal Pointwise Linear Regression Criteria for Detecting Glaucoma Progression. International Visual Field and Imaging Symposium. The University of Melbourne, Victoria, Australia (January 22-25, 2012).

- Wall, M., Doyle, C. K., Zamba, K. D., Artes, P., Johnson C. A. (January 2012). The Repeatability of Mean Deviation with Size III and V Standard Automated Perimetry. International Visual Field and Imaging Symposium. The University of Melbourne, Victoria, Australia (January 22-25, 2012).
- Wall, M., Doyle, C. K., Zamba, K. D., Johnson C. A. (September 2011). The Repeatability of MD with Size III and V Standard Automated Perimetry. Ninth Biennial Meeting, North American Perimetric Society, Skaneateles, NY, Sep 22–23
- Adekpedjou, A., Zamba, K. D., (September 2011). Chi-Squared Goodness of Fit Test with Recurrent Event Data. Department of Statistics, Kansas-State University, KS, September 15.
- Yang, M., Zamba, K. D., Cavanaugh, J. E., (August 2011). Analysis of Zero-Inflated Count Time Series : A Partial Likelihood Approach. Joint Statistical Meetings, Miami Beach, Florida, August 1–4.
- Adekpedjou, A., Zamba, K. D. (August 2011). A Chi-Squared Type Goodness of Fit test for Recurrent Event Data. Joint Statistical Meetings, Miami Beach, Florida, August 1–4.
- Iyer, K. S. Grout, R. W., Burnette, B., Zamba, K.D., Hoffman E. A. (2011). Intra-Subject Repeatability of CT-Based Lung Density Measures Following Single Breath-Hold Scans. Poster presentation, American Thoracic Society, ATS, Denver, Colorado.
- Grout, R. W., Iyer, K. S., Burnette, N., Wilson, J. M., Zamba, K. D., Hoffman E. A. (2011). Repeatability of A Standardized CT-based Metric, Pi10, Used As An Index Of Airway Wall Remodeling. Poster presentation, American Thoracic Society, ATS, Denver, Colorado.
- Grout, R. W., Iyer, K. S., Egbert, B. P., Burnette, N., Zamba, K. D., Hoffman, E. A. (2011). Airway Metric Intra-subject Repeatability on MDCT Imaging For Normal Smokers And Non-smokers. Poster presentation, American Thoracic Society, ATS, Denver, Colorado.
- Hasegawa, M., Burnette, N. E., Zamba, K. D., Xie, D., Hoffman, E. A. (2011). Atlas os Normal Human Lung: Exploring Gender difference in Lung Parenchymal Metrics. Poster presentation, American Thoracic Society, ATS, Denver, Colorado.
- Davis, C., Zamba, K. D., Doyle, C. K., Sherman, K., Johnson, C., Wall, M. (May 2011). Bigger is better: Larger stimulus sizes reduce test-retest variability in visual field testing of glaucoma patients. Poster presentation, ARVO 2011, Fort Lauderdale, Florida.
- Zamba, K. D., Doyle, C. K., Tamegnon, M., Johnson, C. A., Wall, M. (May 2011). Sensitivity Analysis of a Series of Glaucoma Change Probability Criteria. Poster presentation, ARVO 2011, Fort Lauderdale, Florida.

- Doyle, C. K., Zamba, K. D., Johnson, C. A., Artes, P., Wall, M. (May 2011). Repeatability of Mean Deviation with Size III and Size V Standard Automated Perimetry. Poster presentation, ARVO 2011, Fort Lauderdale, Florida.
- Davis, C., Zamba, K. D., Doyle, C. K., Sherman, K., Johnson, C., Wall, M. (Aug 2010). Bigger is better: Larger stimulus sizes reduce test-retest variability and maintain sensitivity in visual field testing of glaucoma patients. Poster presentation, University of Iowa, Iowa City, IA.
- Sullivan, R. M., Zhang, J., Olshansky, B., Zamba, K. D. (May 2010). Is Risk of Stroke in Atrial Fibrillation Gender Specific due to Differences in Anticoagulation? 31<sup>st</sup> Annual Scientific Sessions of the Heart Rhythm Society, Denver, CO.
- Jacobson, G. M., Buechler-Price J. L., Betts, V., Muruganandham, M., Zamba, K. D. (April 2010). Image-based treatment planning of the post-lumpectomy breast utilizing CT and 3T MRI. The 3<sup>rd</sup> World Congress 2010 Cancer Conference, Shanghai, China, April 25, 2010.
- Wall, M., Doyle, C. K., Zamba, K. D., Johnson, C. A. (March 2010). The Effect of Stimulus Size on Repeatability in Glaucoma using Goldmann Sizes III V and VI. 19<sup>th</sup> Annual Imaging and Perimetry Society Meeting, Tenerife, Spain; March 23-26.
- Tsiamyrtizis, P., Zamba, K. D., Hawkins, D. M. (July 2009). A Bayesian SPC Approach in Modeling an Epidemic (2009). International Symposium on Statistical Process Control(ISSPC), Nantes, France.
- Orion, K., McNamara, A., Piester, L., Meyerholz D. K., Zamba, K. D., Xie D., Sokolich, J. C., Jaskille, A. D., Michelle A., Light, T. D. (December 2008). Drotrecogin alpha (activated) decreases the adnexa apoptotic ratio in acute burn resuscitation. American College of Surgeons Committee on Trauma Resident Research Competition, Kansas City, KS. (Research Award winner).
- McNamara, A., Piester, L., Meyerholz, D. K., Zamba, K. D., Sokolich, J. C., Jaskille, A. D. Griffin, M. A., Light T. D. (November 2008). Apoptosis is differentially regulated by burn contact time and dermal location in an acute thermal injury rat model. American Medical Association Medical Student Section/Resident-Fellow Section Interim Meeting, Orlando, FL.
- Orion, K., McNamara, A. Piester, L. Meyerholz, D. K., Zamba, K. D. Sokolich, J. C., Jaskille, A. D., Xie D., Light, T. (October 2008). Drotrecogin alpha (activated) decreases the adnexa apoptotic ratio in acute burn resuscitation. Surgery Postgraduate Conference, Iowa Chapter of the American College of Surgeons Committee on Trauma Resident Research Competition at University of Iowa Carver College of Medicine. (Won Iowa Chapter of ACS-COT resident research award).

- Tsiamyrtizis, P. Zamba, K. D., Hawkins, D. M. (2008). A Sequential Bayesian Control Model for Influenza-Like Illnesses. Bayesian Conference, Austin, TX.
- Piester, T. L., Meyerholz, D. K., Zamba, K. D., Sokolich, J. C., Jaskille, A. D., Light, T. D. (2008). The Histologic Effects of Drotrecogin Alfa (Activated) on Inflammation and Burn Depth in a Rat Burn Model. Proceedings of 2008 Western Trauma Meeting, Squaw Creek, CA.
- Piester, T. L., Meyerholz, D. K., Zamba, K. D., Sokolich, J. C., Jaskille, A. D., Light, T. D. (2007). The Effects of Xigris on Inflammation and Burn Depth in a Rat Burn Model. Medical Student Research Day, College of Medicine, University of Iowa, IA.
- Dawson, J. D., Cavanaugh, J. E., Zamba, K. D. (2007). Modeling Lateral Position and Control in Driving Studies of Elderly Populations. Joint Statistical Meetings, Salt Lake City, UT
- Dawson, J. D., Cavanaugh, J. E., Zamba, K. D. (2006). Measuring Lateral Control in Driving Studies. Biometric Society (ENAR) Annual Meeting, Tampa, FL.
- Skinstad, A. H., Zamba, K. D. (2005). Alcohol Use and Abuse in a Community Sample of Caucasian Women 60 Years of Age and Over. 28<sup>th</sup> Annual Meeting of the Research Society on Alcoholism, Santa Barbara, CA
- Wallis, A. B., Zamba K. D. (2004). Predictors for Low Birth Weight for Mexican and Non Mexican Latina Women: Palm Beach County, Florida and Des Moines, Iowa. International Conference of Urban Health in Boston, MA.

### **External Research Support(Collaborative)**

- Currently funded as a co-investigator on a US Department of Health and Human Services (USDHHS), National Institute of Health (NIH) research training grant(5T15-HL097622 NHLBI). Title of proposal: “Iowa Summer Institute in Biostatistics II (ISIB-II) ” PI: Kathryn Chaloner; Key Personnel Gideon Zamba; Amount of funding 20% of salary. Period of funding July 1<sup>st</sup> 2013 to July 31<sup>st</sup> 2015.
- Currently funded as a biostatistician & co-investigator on the US Department of Veterans Affairs grant number 1R01MH086482 - 01A2. Title of proposal: “Combined Illness Management and Psychotherapy in Treating Depressed Elders” PI: Carolyn Turvey. Amount of funding 15% of salary support. Period of funding February 1<sup>st</sup> 2011 to January 31<sup>st</sup> 2014.
- Currently funded as a biostatistician & co-investigator on the US Agency of Healthcare Research and Quality grant number 1 R18HS018396-01A1. Title of proposal: “Evaluation of TeamSTEPPS Implementation for Community Hospital Patient Safety” PI: Marcia Ward. Amount of funding 5% of salary support. Period of funding 2010 to 2015.

- Currently funded as a biostatistician co-investigator on the US Department of Veterans Affairs grant(VA IPA). Title of proposal: “Improved Assessment of Visual Field Change” PI: Michael Wall. Amount of funding 10% of salary. Period of funding May 1<sup>st</sup> 2010 to April 30<sup>th</sup> 2012.
- Currently funded as a co-investigator on a National Heart Lung and Blood Institute (NHLBI), National Center for Research Resources (NCRR), National Institute of Health (NIH) research training grant(T15-HL097622-01 NHLBI). Title of proposal: “Iowa Summer Institute in Biostatistics (ISIB)” PI: Kathryn Chaloner. Amount of funding 15% of salary. Period of funding August 20<sup>th</sup> 2009 to July 31<sup>st</sup> 2012.
- Currently funded as a Biostatistician on a Department of Defense (DOD) research grant(W81XWH-07-1-0032 P00002/DOD). Title of proposal: “Vaccine Immunotherapy for Prostate Cancer” PI: David Lubaroff. Amount of funding 5% of salary. Period of funding February 1<sup>st</sup> 2008 to May 14<sup>th</sup> 2010.
- Currently funded as a Biostatistician mentor on a National Institute of Health (NIH) research grant(1 R03 CA130031-01/NIH). Title of proposal: “Arm Lymphedema in Female Breast Cancer Cases Diagnosed in Iowa” PI: Rebecca Tsai. Period of funding April 1<sup>st</sup> 2008 to March 31<sup>st</sup> 2010.
- Currently funded as a Biostatistician on a Cystic Fibrosis Foundation (CFF) research grant(BANFI07A0/Cystic Fibrosis Foundation). Title of proposal: “Defective SCN-Secretion Impairs Host Defense in CF” PI: Banfi Botond. Amount of funding 5% of salary. Period of funding July 1<sup>st</sup> 2007 to June 30<sup>th</sup> 2010.
- Currently funded as a Biostatistician on a UI research grant (UI01/dd000189-02). Title of proposal:“Surveillance and Epidemiologic Research of Duchenne and Becker Muscular Dystrophy” PI: Paul Romitti. Amount of funding 10% of salary. Period of funding September 1<sup>st</sup> 2007 to August 30<sup>th</sup> 2008.
- Currently funded as a Biostatistician mentor on a National Institute of Health (NIH) research training grant(NIH/NIGMS 1 T32 GM077973-01). Title of proposal: “Statistics in Microbiology, Infectious Diseases & Bioinformatics” PI: Kathryn Chaloner. Period of funding August 1<sup>st</sup> 2006 to June 3<sup>th</sup> 2011.
- Currently funded as a Biostatistician on a National Cancer Institute (NCI) research grant(1 P30 CA086862-10). Title of proposal: “Cancer Center Support Grant” PI: George J. Weiner. Amount of funding 25% of salary. Period of funding August 1<sup>st</sup> 2005 to June 30<sup>th</sup> 2010.
- Funded as a Biostatistician on a NIDCD research grant. Title of proposal: “A Comparison of Language Intervention Programs-Data Management Center” PI: William Clarke. Amount of funding 14% of salary. Period of funding August 1<sup>st</sup> 2003 to November 2004.

## Professional Activities: Department–College–University

Service Committee	Role on Committee	Year of Service
Biostat MS Exam Committee	Member/Chair	04 05 <sup>c</sup> 06 07 <sup>c</sup> 08 09 <sup>c</sup> 10 11
Biostat Recruitment/Admission Committee	Member	07-present
Biostat Diversity Committee	Member	07 08 09
Biostat Computing Committee	Member	04-present
Biostat Self-study Committee	Member	07 08
Biostat Faculty Search Committee	member	07 08
Biostat MPH Committee	Member	07 08
Biostat Student Awards Committee	Member/Chair	04 <sup>c</sup> 05-present
CPH Faculty Council	Member/Secretary	09-present
CPH MPH Steering Committee	Member	05 06
CPH MPH Curriculum Committee	Member	05 06
CPH Diversity Committee	Member	07 08
HCCC Protocol Review Board	Member	06-present
HCCC Data Safety Monitoring Board	Member	06-present
U of I AGEP Advisory Board	Member	08-present
U of I Coordinating Council on STEM	Member	11-present

<sup>c</sup>: Chair

CPH: College of Public Health

MPH: Master of Public Health

HCCC: Holden Comprehensive Cancer Center

AGEP: Alliance for Graduate Education and Professoriate

## Professional Activities: Graduate Advising

- Currently serving as doctoral dissertation advisor for 1 student
- Have served on 6 Ph.D. exam committees and 6 master's committees (outside Biostatistics)
- Have served on 4 Ph.D. dissertation committees
- Have served as academic advisor for 8 master's students in Biostatistics
- Have served as master's preceptorship advisor for 4 students
- Have served as supervisor for 10 Graduate Research Assistants
- Have served as mentor for 6 ISIB students

### **Professional Activities: PhD Dissertation**

- Yang, Ming (2012). Statistical Models for Count Time Series with Excess Zeros May 2012. Co-advised with Joseph Cavanaugh.

### **Professional Activities: Master's Preceptorship Directed**

- Tamegnon, Monelle (2012). Glaucoma Progression Detection in Visual Field: An Adaptation of the Truncated Product Method, December 2012
- Wang, Zhenzhen (2012). Diffusion Injection Method for Change Detection in Visual Field, December 2012
- Yu, Lixi (2012). Nerve Fiber Layer Pedestal Estimation Using Non-Parametric Jump Regression May 2012
- Szecsei, Denise (2011). Survey administration application for Neurology Trials, The University of Iowa, completed in May 2011
- Kummet, Colleen M. (2010). Sensitivity of Point-wise Linear Regression in the Detection of Glaucoma Progression, The University of Iowa, completed in Dec 2010
- Zhao, Shanshan (2007). Evaluation of Three Entropy Methods in Driving Study. Department of Biostatistics, The University of Iowa, completed in May 2007
- Zhang, Jie (2005). Propensity Score Methods for Health Disparity: Florida v.s. Iowa. Department of Biostatistics, The University of Iowa, completed in April 2005

### **Professional Activities: ISIB Research Mentorship**

- Kawaguchi Eric, Harper Katrina (2012). Survival Function Estimation with Recurrent Events: Case of Retinal Neural Firing. Department of Biostatistics, The University of Iowa; Department of Statistics, California State Polytechnic University, Pomona & Department of Mathematics, Carlton College, Northfield Minnesota, completed in July 2012
- Rivera-Torres, Paula; T. Leon-Cruz, Jorge (2011). Gender Difference in Airway Tree Assessment, Department of Biostatistics, The University of Iowa, & Department of Mathematics, University of Puerto Rico-Humacao, completed in July 2011
- Rivera-Quiñones, Vanessa; Cardona-Meléndez, Gloriell (2010). Study of Glaucoma Change Probability for Open-angle Glaucoma, Department of Biostatistics, The University of Iowa, & Department of Mathematics, University of Puerto Rico - Río Piedras, completed in July 2010

- Pagan-Rivera, Keyla (2009). Stimulus Response Latency Estimation, Department of Biostatistics, The University of Iowa, & Department of Mathematics, University of Puerto Rico - Río Piedras, completed in July 2009
- Harris, Tenecia (2008). Time Series Modeling in Driving Studies, Department of Biostatistics, The University of Iowa, & Middle Georgia College, GA, completed in July 2008

## Industrial Experience

01–2004 : present Private Statistical Consultant; Design and Analysis  
 01–2003 : 12–2004 Consultant; Expert systems Sylogy software company  
 06–1997 : 08–1998 QC Operator; on-line QC; Boston Scientific–Scimed

## Professional Membership

10–2011 : present Member, International Perimetry Society  
 01–2008 : present Member, American Society for Quality  
 01–2008 : present Member, The Iowa Society for Quality  
 01–2007 : present Member, International Biometric Society (ENAR)  
 10–2005 : present Member, International Society for Disease Surveillance (ISDS)  
 01–2002 : present Member, Institute of Mathematical Statistics  
 10–2006 : 12–2008 Co-chair, Statistical Research Committee, ISDS  
 01–2003 : 01–2009 Member, American Mathematical Association

## Language Skills

- English : Fluent (speaking, writing, translating, holding seminars and talks)
- French : Fluent (speaking, writing, translating, holding seminars and talks)
- Eʋe ; Mina ; Aḡlõa : Fluent (speaking, writing, translating, holding seminars and talks)
- Deutsch : Knowledge (G1b, Goethe Institut Lomé Togo, July 1996 with honors). Need some polishing up to be fluent though. *“If you don’t use it, you lose it...”*

## Computing Skills

- Operating Systems: Unix, Linux, Macintosh, Windows
- Software & programming: R, S, S-Plus, Arc, Xlisp-Stat, SAS, C++, MacAnova
- Typography: L<sup>A</sup>T<sub>E</sub>X



## References

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