

# John A. Kairalla

Department of Biostatistics  
College of Medicine  
College of Public Health & Health Professions  
University of Florida  
PO Box 117450, Gainesville, FL 32610

Phone: (352) 294-5918  
Fax: (352) 294-5931  
Office: CTRB 5233  
johnkair@ufl.edu

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## EDUCATION

- 2007 **Ph.D. in Biostatistics**  
University of North Carolina at Chapel Hill  
Dissertation: "An Internal Pilot Study with Interim Analysis for Gaussian Linear Models" (top 10% graduate selection: Delta Omega)  
Supporting program: Epidemiology
- 2002 **B.S.P.H. in Biostatistics**  
**B.A. in Mathematics**  
University of North Carolina at Chapel Hill  
Highest Distinction (GPA) and Highest Honors (Thesis)  
Supported by four-year full out-of-state academic scholarship (15 given annually)

## PROFESSIONAL EXPERIENCE

- 2013- Senior Statistician for Acute Lymphoblastic Leukemia (ALL) clinical trials  
Children's Oncology Group
- 2010- **Assistant Professor/Research Assistant Professor**  
Department of Biostatistics, Colleges of Medicine and Public Health & Health Professions, University of Florida
- 2009-2013 **Research Assistant**  
VA Rehabilitation Outcomes Research Center REAP, Gainesville, FL
- 2007-2010 **Assistant Professor**  
Division of Biostatistics, Department of Epidemiology and Health Policy Research, College of Medicine, University of Florida
- 2004-2007 **Graduate Research Assistant**  
University of North Carolina Department of Biostatistics  
Development of methods and software for internal pilot studies and design and analysis for Medical Image Display and Analysis Group
- 2002-2004 **Graduate Research Assistant**  
University of North Carolina Department of Orthopaedics  
Worked with pediatric orthopaedic surgeon Richard C. Henderson, M.D., Ph.D. to research factors predicting bone densities (BMD) and rates of change in bone densities in adolescent cerebral palsy patients
- 1998-2000 **Technical Assistant**  
Advanced Software Products Group, Inc., Naples, FL

Primary duties: database management and filtration, product manual writing and editing, PR material creation and dissemination

## HONORS

- 2008- Delta Omega Honorary Society in Public Health, Theta Chapter
- 2006-2007 NIH Pre-Doctoral grant in Environmental Biostatistics, PI: Amy Herring
- 2002-2005 NIH Pre-Doctoral grant in Cardiovascular Clinical Trials, PI: Lloyd J. Edwards
- 2002 Delta Omega Honorary Society in Public Health Undergraduate Award
- 2002- Phi Beta Kappa Society
- 2002- Pi Mu Epsilon Honorary National Mathematics Society
- 2000- Golden Key International Honour Society
- 1998-2002 University of North Carolina Dean's List
- 1998-2002 UNC Honors Program

## PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

- UF Health Cancer Center (Member at Large)
- The American Statistical Association
- International Biometrics Society/Eastern North American Region (ENAR)
- The Society for Clinical Trials
- Local Arrangements Chair, 2011 International Biometrics Society/ENAR Conference
- Session Chair (Power and Sample Size), *2011 International Biometrics Society/ENAR*
- Session Moderator, *Society for Clinical Trials 31<sup>st</sup> Annual Meeting*, 2012
- Session Chair, *Annual Meeting of the FL Chapter of the American Statistical Association*, 2014
- IT coordinator, UF Department of Biostatistics (2011-present)
- Chair, Research Finance Committee, UF Department of Biostatistics (2013-present)
- Chair, Recruitment Committee, UF Department of Biostatistics (2014-present)
- Member, Department Development Committee, UF Department of Biostatistics (2014-present)

## PEER REVIEWED PUBLICATIONS

- Kairalla J.A.**, Hubbard Winkler S.L., Feng H. (2015). Understanding the provision of assistive mobility and daily living devices and service delivery to veterans post-stroke. (Accepted for publication in the *American Journal of Occupational Therapy*).
  - Kairalla J.A.**, Coffey C.S., Thomann M.A., Shorr R.I., Muller K.E. (2015) Adaptive Designs for Comparative Effectiveness Research Trials. *Clinical Research and Regulatory Affairs*, **32**(1), 36-44. doi10.3109/10601333.2014.977490.
  - Cara-Fuentes G., **Kairalla J.A.**, Ishimoto T., Rivard C., Johnson R.J., and Garin E.H. (2014). Rituximab in Idiopathic Nephrotic Syndrome: Does it Make Sense? *Pediatric Nephrology*, **29**:1313-1319. doi10.1007/s00467-013-2534-4. PMC3856183
  - Kneipp S.M., **Kairalla J.A.**, and Sheely A.L. (2013). A randomized controlled trial to improve health among women receiving welfare in the U.S.: the relationship between employment outcomes and the economic recession. *Social Science & Medicine*, **80**, 130-140. PMC3577993 (free PMC article <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3577993/>)
  - Kairalla J.A.**, Coffey C.S., Thomann M.A., and Muller K.E. (2012). Adaptive Trial Designs: A Review of Barriers and Opportunities. *Trials*, **13**:145. DOI: 10.1186/1745-6215-13-145. PMC3519822 (open access <http://www.trialsjournal.com/content/pdf/1745-6215-13-145.pdf>)
- \*BioMed Central 'Highly accessed' article

- Abdulnour H.A., Williams J.L., **Kairalla J.A.**, and Garin, E.H. (2012). Does hydronephrosis predict the presence of severe vesicoureteral reflux? *European Journal of Pediatrics*, **171**, 1605-1610. PMID:22735979
- Mirza A., Mo J., Holt J., **Kairalla J.A.**, Heft M., Ding M., Ahn A. (2012). Is there a relationship between throbbing pain and arterial pulsations? *Journal of Neuroscience*, **32**, 7572-7576. PMC3376713
- Cowan L.J., Stechmiller J.K., Rowe M., and **Kairalla J.A.** (2012). Enhancing Braden Pressure Ulcer Risk Assessment in acutely ill adult veterans. *Wound Repair and Regeneration*, **20**, 137-148. PMID:22304370
- Bendixen, R.M., Elder, J.H., Donaldson, S., **Kairalla, J.A.**, Valcante, G., Ferdig, R.E. (2011). Effects of a Father-Based In-Home Intervention on Perceived Stress and Family Dynamics in Parents of Children With Autism. *American Journal of Occupational Therapy*, **65**, 679–687. PMC3252214
- Kneipp S.M., **Kairalla J.A.**, Lutz B.J., Pereira D., Hall A.G., Flocks J., Beeber L., Schwartz T. (2011). Public Health Nursing Case Management for Women Receiving Temporary Assistance for Needy Families: A Randomized Controlled Trial Using Community-Based Participatory Research. *American Journal of Public Health*, **101(9)**, 1759-1768. PMC3154225
- Staras S.A.S., **Kairalla J.A.**, Hou W., Sappenfield W., Thompson D., Ranka D., Shenkman E.A. (2011) Association between perinatal medical expenses and a waiver to increase Florida Healthy Start services within Florida Medicaid programs: 1998 to 2006. *Maternal and Child Health Journal*, **16**, 1567-1575. PMC3505550 (open access <http://www.springerlink.com/content/kg3131vt21ng65k7/fulltext.pdf>)
- Elder, J.H., Donaldson, S.O., **Kairalla, J.**, Valcante, G., Bendixen, R., Ferdig, R., Self, E., Walker, J., Palau, C., and Serrano, M. (2011). In-Home Training for Fathers of Children with Autism: A Follow Up Study and Evaluation of Four Individual Training Components. *Journal of Child and Family Studies*, **20**: 263-271. (open access <http://www.springerlink.com/content/n701583726446610/fulltext.pdf>) PMC3087101
- Kairalla J.A.**, Muller K.E., and Coffey C.S. (2010). Combining an Internal Pilot with an Interim Analysis for Single Degree of Freedom Tests. *Communications in Statistics: Theory and Methods*. **39(20)**: 3717-3738. (free PMC article: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2965034/>) PMC2965034
- Kneipp, S.M., **Kairalla, J.A.**, Stacciarini, J., Pereira, D., and Miller, M.D. (2010). Comparison of Depressive Symptom Severity in Low-income Women. *Nursing Research*, **59(6)**: 380-388. PMC3057908
- Rowe M.A., **Kairalla J.A.**, and McCrae, C.S. (2010). Sleep in Dementia Caregivers and the Effect of a Nighttime Monitoring System. *Journal of Nursing Scholarship*, **42(3)**: 338-347. PMID:20738745
- Rowe M., Ahn H., Pe Benito A., Stone H., Wilson A., and **Kairalla J.** (2010). Injuries and unattended home exits in persons with dementia: a 12-month prospective study. *American Journal of Alzheimer's Disease & Other Dementias*, **25(1)**: 27-31. PMC2821464

Kneipp S.M., **Kairalla J.A.**, Stacciarini J.M., Pereira D. (2009) The Beck Depression Inventory II Factor Structure Among Low-Income Women. *Nursing Research*, **58(6)**: 400-409. PMID:19918151

**Kairalla J.A.**, Coffey C.S., and Muller K.E. (2008). GLUMIP 2.0: SAS/IML® software for planning internal pilots. *Journal of Statistical Software*, **28(7)**: 1-32. (open access: <http://www.jstatsoft.org/v28/i07>)

Coffey C.S. and **Kairalla J.A.** (2008). Adaptive Clinical Trials: Progress and Challenges. *Drugs in R&D* **9(4)**: 229-242. PMID:18588354

Coffey C.S., **Kairalla J.A.**, and Muller K.E. (2007). Practical methods for bounding type I error rate with an internal pilot design. *Communications in Statistics: Theory and Methods* **36(11)**: 2143-2158. DOI: 10.1080/03610920601143634

\*Winner of 2008 Science Unbound Foundation Award for Statistics.

Henderson R.C., **Kairalla J.A.**, Barrington J.W., Abbas A., Stevenson R.D. (2005). Longitudinal changes in bone density in children and adolescents with moderate to severe cerebral palsy. *The Journal of Pediatrics* **146(6)**:769-775. PMID:15973316

Henderson R.C., **Kairalla J.**, Abbas A., Stevenson R.D. (2004). Predicting low bone density in children and young adults with quadriplegic cerebral palsy. *Developmental Medicine and Child Neurology* **46(6)**:416-419. PMID:15174534

\* Rated #6 in the “2004 Top Ten Articles on Developmental Disabilities” by the American Academy for Cerebral Palsy and Developmental Medicine

## OTHER PUBLICATIONS

Hilden J., Brown P., **Kairalla J.A.**, Wang C. (2015) Spring 2015 COG Safety Report: AALL0631, A Phase III Study of Risk Directed Therapy for Infants with Acute Lymphoblastic Leukemia (ALL): Randomization of Highest Risk Infants to Intensive Chemotherapy +/- FLT3 Inhibition.

**Kairalla J.A.**, Coffey C.S., Thomann M.A., Shorr R.I., Muller K.E. (2014). Adaptive Designs for Comparative Effectiveness Research Trials. 27<sup>th</sup> *International Biometric Conference (IBC) 2014 Abstracts*, July 2014, Florence, Italy. International Biometric Society. (<http://www.ibs-italy.info/scientific-programme.html>). ISBN-13: 978-0-9821919-3-4.

Winick N., **Kairalla J.A.**, Helian S. (2014) Fall 2014 COG Study Progress Report: AALL06N1: A Study of Neurocognitive Function in Children Treated for ALL: A Group-wide, Non-Therapeutic Companion Study to AALL0232

Dreyer Z., **Kairalla J.A.**, An Q. (2014) Fall 2014 COG Study Progress Report: AALL08P1— Intensified PEG-Asparaginase in High Risk Acute Lymphoblastic Leukemia (ALL): A Pilot Study.

**Kairalla J.A.** and Wang C. (2014) Fall 2014 Data Safety Monitoring Committee Report: AALL0631, A Phase III Study of Risk Directed Therapy for Infants with Acute Lymphoblastic Leukemia (ALL): Randomization of Highest Risk Infants to Intensive Chemotherapy +/- FLT3 Inhibition.

Hilden J., Brown P., **Kairalla J.A.**, Wang C. (2014) Fall 2014 COG Study Progress Report: AALL0631, A Phase III Study of Risk Directed Therapy for Infants with Acute

Lymphoblastic Leukemia (ALL): Randomization of Highest Risk Infants to Intensive Chemotherapy +/- FLT3 Inhibition.

**Kairalla J.A.**, Helian S. (2014) Fall 2014 Data Safety Monitoring Committee Report: AALL0622, Intensified Tyrosine Kinase Inhibitor Therapy (Dasatinib: IND# 73969, NSC# 732517) in Philadelphia Chromosome Positive Acute Lymphoblastic Leukemia.

Slayton W.B., **Kairalla J.A.**, Helian S. (2014) Fall 2014 COG Study Progress Report: AALL0622, Intensified Tyrosine Kinase Inhibitor Therapy (Dasatinib: IND# 73969, NSC# 732517) in Philadelphia Chromosome Positive Acute Lymphoblastic Leukemia.

Winkler, SL, Cooper, R, Kraiger, K, Ludwig, A, Krueger, Gaunaurd, I, Fisher, A, **Kairalla, J**, Elliott, S, Wilson, S, Esquenazi, A. (2014) Self-management intervention for amputees in a virtual world environment. *Proceedings 10<sup>th</sup> International Conference on Disability, Virtual Reality, and Associated Technologies, Gothenburg, Sweden, September 2014*: 401-404.

**Kairalla J.A.**, Li L. (2014) Spring 2014 Data Safety Monitoring Committee Report: AALL0631, A Phase III Study of Risk Directed Therapy for Infants with Acute Lymphoblastic Leukemia (ALL): Randomization of Highest Risk Infants to Intensive Chemotherapy +/- FLT3 Inhibition.

Hilden J., Brown P., **Kairalla J.A.**, Li L. (2014) Spring 2014 COG Study Progress Report. Report: AALL0631, A Phase III Study of Risk Directed Therapy for Infants with Acute Lymphoblastic Leukemia (ALL): Randomization of Highest Risk Infants to Intensive Chemotherapy +/- FLT3 Inhibition.

Rowe M., Farias J., Brewster G., McCrae C., Roth A., and **Kairalla J** (2014). Is the Sleep Deficit in Dementia Caregivers due to Undiagnosed Sleep Apnea? *Sleep* 37: a157.

**Kairalla J.A.**, Coffey C.S., Thomann M.A., Muller K.E. (2013). Adaptive Designs for Comparative Effectiveness Trials. *JSM Proceedings, ENAR Section* 1301-1311.

Jordan M.M., Holt J., Kang D., **Kairalla J.**, King C., Fillingim R., Ding M., Ahn A. (2013). Psychophysical properties of throbbing pain in a human experimental model of pain. *Cephalalgia*: 33:157-158. Published abstract for the International Headache Conference.

Winkler S.L., Feng H., **Kairalla J.A.**, Cowper-Ripley D.C., Wang X., Hoenig H. (2012). Data cleaning strategies for VA NPPD assistive technology data. *VA Information Resource Center (VIREC) Technical Report*.

**Kairalla J.A.**, Coffey C.S., Muller K.E., Thomann M.A. (2012). Adaptive Designs for Clinical Comparative Effectiveness Research: Are We Ready? Published refereed abstract A65 from: Abstracts from the Society for Clinical Trials Annual Meeting, Miami, May 21–23, 2012, *Clinical Trials*: 9: 450-554. DOI: 10.1177/1740774512453224

Ahn A.H. and **Kairalla J.A.** (2011). Mirror, mirror on the wall: what effectiveness research shows us about headache care. *Pain* 152: 1695-1696. PMID:21435787

**Kairalla J.A.**, Coffey C.S., Muller K.E. (2010). Achieving the Benefits of Both an Internal Pilot and Interim Analysis in Large and Small Samples, *JSM Proceedings, ENAR Section* 5239-5252.

**Kairalla, J.A.**, Coffey, C.S., Muller, K.E. (2010). Achieving the Benefits of Both an Internal Pilot and Interim Analysis in Large and Small Samples. Published refereed abstract A10 from: Abstracts from the 31st Meeting of the Society of Clinical Trials, Baltimore, May 16-19, 2010, *Clinical Trials*: 7:418. DOI: 10.1177/1740774510374795

Elder, J.H., Donaldson, S.O., **Kairalla, J.**, Valcante, G., Ferdig, R. (2010). Training Fathers of Children with Autism, *Nursing Outlook* 58(2), e10. Published refereed abstract.

Staras S.A.S., **Kairalla J.A.**, Shenkman E.A. (2010). Healthy Start Program Evaluation. Report submitted to Florida Agency for Health Care Administration.

**Kairalla J.A.** (2007). An Internal Pilot Study with Interim Analysis for Gaussian Linear Models. Ph.D. dissertation, The University of North Carolina at Chapel Hill. ProQuest Digital Dissertations database (Publication No. AAT 3289134). K.E. Muller and C.S. Coffey, advisors.

**Kairalla J.A.** (2002). Survey of BSPH in Biostatistics Graduates, UNC-Chapel Hill, 1978-2001. *Institute of Statistics Mimeo Series, University of North Carolina at Chapel Hill 2231T*. BSPH-Biostatistics highest honor thesis, UNC-Chapel Hill. Craig D. Turnbull, advisor.

#### IN REVIEW OR REVISION

Ha S., Carnaby G., **Kairalla J.**, Peoples-Sheps M., Yaghjian L., Xu X. Association between air pollution and oral cleft defects: a systematic review and analysis. (in review).

Jordan M.M., Holt J.L., Kang D., **Kairalla J.A.**, King C.D., Fillingim R.B., Ding M., Ahn A.H. A human experimental model of throbbing pain has psychophysical properties comparable to clinical pain. (in review).

**Kairalla J.A.**, Coffey C.S., and Muller K.E. Achieving the Benefits of Both an Internal Pilot and Interim Analysis in Large and Small Samples. (in revision).

#### INVITED PRESENTATIONS

**Kairalla J.A.**, Coffey C.S., Thomann M.A., Shorr R.S., Muller K.E. (February 2014). Adaptive Designs for Comparative Effectiveness Trials. *Annual Meeting of the Florida Chapter of the American Statistical Association*, (Gainesville, FL).

Thomann M.A., Coffey C.S., **Kairalla J.A.**, and Muller K.E. (June 2012). Adaptive Sample Size Designs for Comparative Effectiveness Clinical Trials. *Annual Meeting of the International Biometrics Society: Western North America Region*, (Fort Collins, CO).

Shorr R.I., Coffey C.S., Muller K.E., and **Kairalla J.A.** (February 2012). Quantitative Pitfalls in Comparative Effectiveness Research and How to Avoid Them. University of Florida Internal Medicine Grand Rounds.

**Kairalla J.A.** (April 2011). Adaptive Designs in Clinical Research. Department of Biostatistics, University of Alabama Birmingham. Invited Seminar.

**Kairalla J.A.** (February 2007). An Internal Pilot Study with Interim Analysis for Gaussian Linear Models. Department of Epidemiology and Health Policy Research, University of Florida.

Coffey C.S. and **Kairalla J.A.** (May 2005). Adaptive Designs for Clinical Trials. *The Society for Clinical Trials 26th Annual Meeting*, Portland, OR. Pre-conference Workshop.

#### **REFEREED/CONTRIBUTED PRESENTATIONS**

Slayton W.B., **Kairalla J.A.**, Schultz K.R., Devidas M., Helian S., Pulsipher M., Chang B.H., Carroll W.L., Borowitz M.J., Brown V.I., Winick N.J., Carroll A.J., Heerema N.A., Gastier-Foster J.M., Wood B.L., Mizrahy S., Hunger S (To be presented May 2015). Outcomes of Dasatinib Plus Intensive Chemotherapy or Stem Cell Transplant (SCT) for Philadelphia Chromosome Positive Acute Lymphoblastic Leukemia (Ph+ ALL) on Children's Oncology Group AALL0622. Accepted for podium presentation at the *2015 American Society of Clinical Oncology Annual Meeting* (Chicago, IL).

Winick N.J., Embry L.M., Hardy K.K., **Kairalla J.A.**, Devidas M., Armstrong D., Hunger S., Carroll W.L., Larsen E., Raetz E.A., Loh M.L., Noll R. (To be presented June 2015). Neurocognitive function of children treated for high-risk B-acute lymphoblastic leukemia (HR-ALL) randomized to Capizzi (CMTX) versus high-dose methotrexate (HDMTX): A report from the Children's Oncology Group (COG). Accepted for podium presentation at the *2015 American Society of Clinical Oncology Annual Meeting* (Chicago, IL).

Manini T, Marta C, Harris T, Swami S, Murphy R., Newman A., Pahor M., Satterfield S., Schwartz A., Simonsick E., **Kairalla J.**, Mazumder D., Lele A., Patel M. and Joseph G. (April 2015) Comparing and contrasting low appendicular lean mass criteria for definitions of sarcopenia. Symposium podium presentation at the *International Conference on Frailty & Sarcopenia* (Boston, MA).

Winkler S.L., Cooper R., Kraiger K., Ludwig A., Krueger, Gaunaud I., Fisher A., **Kairalla J.**, Elliott S., Wilson S., Esquenazi A. (September 2014) Self-management intervention for amputees in a virtual world environment. *10<sup>th</sup> International Conference on Disability, Virtual Reality, and Associated Technologies* (Sweden).

**Kairalla J.A.**, Coffey C.S., Thomann M.A., Shorr R.I., Muller K.E. (July 2014). Adaptive Designs for Comparative Effectiveness Research Trials. *International Biometric Conference (IBC)*, (Florence, Italy).

Rowe M., Farias J., Brewster G., McCrae C., Roth A., and **Kairalla J.** (June 2014) Is the Sleep Deficit in Dementia Caregivers due to Undiagnosed Sleep Apnea? *Sleep 2014* (Minneapolis, MN).

Jordan M.M., Holt J., Kang D., **Kairalla J.**, King C., Fillingim R., Ding M., Ahn A. (June 2013). Psychophysical properties of throbbing pain in a human experimental model of pain. *International Headache Conference* (Boston, MA).

Osmani T.M., Freytes M., Young M.E., Castro J.G., **Kairalla J.A.**, Ahern J.K. (February 2013). Communication, Family Functioning, and Veteran's Post-deployment Reintegration: A Pilot Study. *Florida Undergraduate Research Conference 2013* (Gainesville, FL).

Kneipp S.M., **Kairalla J.A.**, Sheely A.L (October 2012). How recession-proof are PHN interventions? Recession exposure, health, and employment outcome findings from a recent RCT. *Annual Meeting of the American Public Health Association* (San Francisco, CA).

Ahn A.H., Holt J, Jordan M.J., Mo J., Ding M., **Kairalla J.A.**, Fillingim R.B., King C.D. (October 2012). Psychophysical properties of a human experimental model of the throbbing quality of pain. *Neuroscience 2012* (New Orleans, LA).

**Kairalla J.A.**, Coffey C.S., Thomann M.A., Muller K.E. (August 2012). Adaptive Designs for Comparative Effectiveness Trials. *Annual Joint Statistical Meetings*, (San Diego, CA).

Vogel B., **Kairalla J.**, Wang X., Litt E., Castro J., Wilson L., Cowper-Ripley D., and Reker D (July 2012). Predicting Potential Demand for OEF/OIF Rehabilitation Services in the VHA. *2012 HSR&D/QUERI National Meeting*, (National Harbor, MD).

Litt E.R., Vogel W.B., **Kairalla J.**, Cowper Ripley D.C., Wilson L.K., Castro J.G., Wang X. (July 2012). Using GIS Tools in Prioritizing Rehabilitation Service Sites for OEF/OIF Veterans. *VA HSR&D / QUERI National Meeting* (Washington, DC).

Feng H., Winkler S.H., **Kairalla J.A.**, Ripley D.C., Hoenig H. (June 2012). The Provision Prediction of Assistive Technology Devices in Post-Stroke Veterans by Decision Modeling. *Academy Health Annual Research Meeting*, (Orlando, FL).

**Kairalla J.A.**, Coffey C.S., Muller K.E., Thomann M.A., Shorr R.I., Torner J.C., Chrischilles E.A. (May 2012). Adaptive designs for clinical comparative effectiveness research: Are we ready? *The Society for Clinical Trials 33<sup>rd</sup> Annual Meeting*, (Miami, FL).

**Kairalla J.A.**, Thomann M.A., Coffey C.S. Shorr R.I., Muller K.E. (April 2012). Two-Stage Designs for Adaptive Comparative Effectiveness Trials. *Annual Meeting of the International Biometrics Society: Eastern North America Region*, (Washington, DC).

Ahn A.H., Mirza A., Mo J., Holt J, **Kairalla J.**, Heft M, Ding M (March 2012). Arterial Pulsations Are Unrelated to the Throbbing Quality of Acute Pain. The throbbing percept of acute pain does not encode arterial pulsations. *65<sup>th</sup> American Academy of Neurology Annual Meeting* (San Diego, CA).

Ahn A.H., Mirza A.F., Mo J., Heft M.A., Ding M., **Kairalla J.A.** (November 2011). The throbbing percept of acute pain does not encode arterial pulsations. *Neuroscience 2011* (Washington, DC).

Kneipp, S.M., **Kairalla, J.A.**, Lutz, B., Pereira, D., Hall, A., Flocks, J., Beeber, L., and Schwartz, T. (April 2011) Key Findings from a “Ground Up” Approach: A Community-Based Participatory Research (CBPR)-Designed Intervention to Improve the Health of Women in Welfare Transition Programs. *2011 From Disparities Research to Disparities Interventions: Lessons Learned and Opportunities for the Future of Behavioral Health Services* (Arlington, VA).

**Kairalla J.A.**, Muller K.E., and Coffey C.S. (March 2011). Internal pilot study with interim analysis for multiple degree of freedom hypothesis tests. *Annual Meeting of the International Biometrics Society: Eastern North America Region*, (Miami, FL).



Vogel, W.B., **Kairalla, J.A.**, Cowper-Ripley, D., Litt, E. (February 2011). VHA Enrollment Rates across the Rural-Urban Continuum. *28th VA Health Services Research and Development Service (HSR&D) National Meeting*, (National Harbor, MD).

Elder, J.H., Donaldson, S., **Kairalla, J.**, Valcante, G., Bendixen, R., Ferdig, R., Self, E., Walker, J., Palau, C., and Serrano, M. (September 2010). Perceived Stress and Family Dynamics in Fathers and Mothers of Children with Autism. National Institute of Nursing Research 25<sup>th</sup> Anniversary Scientific Symposium, (Bethesda, MD).

Elder, J.H., Donaldson, S., **Kairalla, J.**, Bendixen, R., Self, E. (September 2010). Perceived Stress and Family Dynamics in Parents of Children with Autism. 2010 State of the Science Congress on Nursing Research, (Washington, DC).

**Kairalla, J.A.**, Coffey, C.S., and Muller, K.E. (August 2010). Achieving the Benefits of Both an Internal Pilot and Interim Analysis in Small Samples. *Annual Joint Statistical Meetings*, (Vancouver, BC).

**Kairalla, J.A.**, Coffey, C.S., and Muller, K.E. (May 2010). Achieving the Benefits of Both an Internal Pilot and Interim Analysis in Large and Small Samples. *The Society for Clinical Trials 31<sup>st</sup> Annual Meeting*, (Baltimore, MD).

Elder, J.H., Donaldson, S., **Kairalla, J.**, Valcante, G., and Ferdig, R. (November 2009). Training Fathers of Children with Autism. *American Academy of Nursing 36<sup>th</sup> Annual Meeting and Conference*. (Atlanta, GA).

**Kairalla J.A.**, Coffey C.S., and Muller K.E. (August 2009). Achieving the Benefits of both an Internal Pilot and Interim Analysis while Controlling Type I Errors. *Annual Joint Statistical Meetings*, (Washington, DC).

Elder, J.H., Donaldson, S., **Kairalla, J.**, Bendixen, R., Valcante, G., Ferdig, R., Self, E., Walker, J., Palau, C., Serrano, M., and Galante, T. (May 2009). Comparisons of Mother-Child and Father-Child Interactions During In-Home Play Sessions for Children with Autism. *The Eighth Annual International Meeting for Autism Research*, (Chicago, IL).

Donaldson, S., Elder, J.H., **Kairalla, J.**, Valcante, G., Bendixen, R., Ferdig, R., Self, E., Mutch, P.J., Murphy, T., Walker, J., Palau, C., Serrano, M., and Galante, T. (May 2009). Differences in Perceptions of Mothers and Fathers of Children with Autism in Regards to Stress, Family Cohesion, and Adaptability. *The Eighth Annual International Meeting for Autism Research*, (Chicago, IL).

Gensiejewski, H., Taber, K., Taber, R., Sigsby, L.M., and **Kairalla J.A.** (March 2009). Perceptions perioperative nurses' caring behaviors: Part II. *56<sup>th</sup> Annual Association of Perioperative Registered Nurses (AORN) Congress*, (Chicago, IL).

Rowe M., **Kairalla J.**, Kelly A., Pe Benito A. (November 2008). Perception of poor sleep in caregivers: Is high night-to-night variability a key? *61<sup>st</sup> Annual Scientific Meeting, Gerontological Society of America*, (National Harbor, MD).

**Kairalla J.A.**, Coffey C.S., and Muller K.E. (August 2008). GLUMIP 2.0: SAS/IML software for planning internal pilots. *Annual Joint Statistical Meetings*, (Denver, CO).

**Kairalla J.A.**, Muller K.E., and Coffey C.S. (March 2008). Internal pilot with interim analysis for single degree of freedom hypothesis tests. *Annual Meeting of the International Biometrics Society: Eastern North America Region*, (Crystal City, VA).

Galante, L., Sigsby, LM, & **Kairalla, J.** (March 2008). Perceptions of perioperative nurses' caring behaviors. *55th Annual Association of Perioperative Registered Nurses (AORN) Congress*, (Anaheim, CA).

Muller K.E., Coffey C.S., **Kairalla J.A.**, and Johnson J.L. (March 2008). GLMIP 1.0: SAS/IML software for planning repeated measures internal pilots. *Annual Meeting of the International Biometrics Society: Eastern North America Region*, (Crystal City, VA).

**Kairalla J.A.**, Muller K.E., and Coffey C.S. (August 2007). An internal pilot study with interim analysis for Gaussian linear models. *Annual Joint Statistical Meetings*, (Salt Lake City, UT).

**Kairalla J.A.**, Muller K.E., and Coffey C.S. (March 2007). An internal pilot study with interim analysis for Gaussian linear models. *Annual Meeting of the International Biometrics Society: Eastern North America Region*, (Atlanta, GA).

**Kairalla J.A.**, Coffey C.S., and Muller K.E. (August 2006). GLUMIP 2.0: Free SAS/IML® software for planning internal pilots. *Annual Joint Statistical Meetings*, (Seattle, WA).

**Kairalla J.A.**, Coffey C.S., and Muller K.E. (March 2005). GLUMIP 2.0: Free SAS/IML® software for planning internal pilots. *Annual Meeting of the Eastern North America Region of the Biometrics Society*, (Austin, TX).

## LOCAL/UNIVERSITY PRESENTATIONS

Winkler SL, **Kairalla J**, Feng H. (February 2014) Who gets which wheelchair or other assistive device: user versus facility predictors. Nova Southeastern University Research Day (Ft. Lauderdale, FL).

Winkler S.L., **Kairalla J**, Feng H. (May 2013). Non-Veteran Level Factors Related to the Prescription of Assistive Technology Devices and Services to Veterans Post-stroke. *Miami VA Research Day Symposium*. (Miami, FL). \*Honorable Mention

Osmani T.M., Freytes M., Young M.E., Castro J.G., **Kairalla J.A.**, Ahern J.K. (April 2013). Communication, Family Functioning, and Veteran's Post-deployment Reintegration: A Pilot Study. Honors poster presented at UF Public Health and Health Professions Research Day. (Gainesville, FL).

Jordan M.M., Holt J., Kang D., **Kairalla J.**, King C., Fillingim R., Ding M., Ahn A. (March 2013). Psychophysical properties of throbbing pain in a human experimental model of pain. University of Florida College of Medicine Celebration of Research (Gainesville, FL).

**Kairalla, J.A.** (April 2012) Adaptive designs for clinical comparative effectiveness research. *University of Florida Department of Biostatistics Spring Seminar Series*.

**Kairalla, J.A.** (March 2010) Achieving the Benefits of Both an Internal Pilot and Interim Analysis in Large and Small Samples. *University of Florida Department of Epidemiology and Health Policy Research Seminar Series*.

Elder, J.H., Donaldson, S., **Kairalla, J.**, Bendixen, R., Valcante, G., Ferdig, R., Self, E., Walker, J., Palau, C., Serrano, M., and Galante, T. (March 2009). Comparisons of Mother-Child and Father-Child Interactions During In-Home Play Sessions for Children with Autism. *Seventh Annual Research & Malasanos Lectureship Day*, College of Nursing, University of Florida, (Gainesville, Florida).

Donaldson, S., Elder, J.H., **Kairalla, J.**, Valcante, G., Bendixen, R., Ferdig, R., Self, E., Mutch, P.J., Murphy, T., Walker, J., Palau, C., Serrano, M., and Galante, T. (March 2009). Differences in Perceptions of Mothers and Fathers of Children with Autism in Regards to Stress, Family Cohesion, and Adaptability. *Seventh Annual Research & Malasanos Lectureship Day*, College of Nursing, University of Florida, (Gainesville, Florida).

Gensiejewski, H., Taber, K., Taber, R., Sigsby, L.M., and **Kairalla J.A.** (March 2009). Perceptions perioperative nurses' caring behaviors: Part II. *Seventh Annual Research & Malasanos Lectureship Day*, College of Nursing, University of Florida, (Gainesville, Florida).

Galante, L., Sigsby, LM, & **Kairalla, J.** (March 2008). Perceptions of perioperative nurses' caring behaviors. *Sixth Annual Research & Malasanos Lectureship Day*, College of Nursing, University of Florida, (Gainesville, Florida).

## **JOURNAL EDITOR**

*Sage Open* 2013, 2014 (Article Editor)

## **AD-HOC JOURNAL REVIEWS**

*Stroke* 2011, 2012, 2013(x2)

*Critical Care* 2011

*Circulation* 2007, 2008, 2009(x2), 2013, 2014

*The Journal of the International Neuropsychological Society* 2009(x4)

## **TEACHING**

**Instructor or Co-Instructor**, University of Florida

Biostatistical Computing with SAS (PHC 6937): 2014

Design and Conduct of Clinical Trials I (GMS 6818): 2010, 2011, 2012, 2013

Design and Conduct of Clinical Trials II (GMS 6819): 2010, 2011, 2014

Applied Biostatistics II (GMS 6841): 2009, 2013

Biostatistics Journal Club (PHC 6937): 2014

Intro to Clinical and Translational Research (GMS 7093): 2013 (Group Leader)

**Guest Lecturer**, University of Florida

Longitudinal Research Design (GMS 6829): 2008, 2009, 2010

Advanced Design and Methodology for Case-Control Studies: 2011, 2012

Design and Conduct of Clinical Trials II: 2012, 2015

Biostatistics Journal Club: 2012, 2013(x2), 2014, 2015

Research Designs in Health Outcomes and Policy (2013)

**Teaching Assistant**, University of North Carolina Department of Biostatistics:

Advanced Linear Models II (Bios 767), 2007

Principles of Statistical Inference (Bios 600), 2005

Probability and Statistical Inference I (Bios 660), 2004

Intermediate Statistical Methods (Bios 662), Fall 2003

## STUDENTS MENTORED

### Chair or Co-Chair (Doctoral Level):

Current:

- Hui Zeng: Adaptive Designs (UF-Biostatistics)

### Committee Member (Doctoral Level):

Current:

- Sandie Ha: Association between pollution and birth defects (UF-Epidemiology)
- Paul Arthur: Provider Safety, Violence, and Potential for Harm in the Veterans Affairs System (UF-Rehabilitation Science)
- Isaac Sia: Communicative Disorders (UF-Rehabilitation Science)
- Shanjun Helian: UF-Biostatistics

Graduated:

- Elizabeth Radke “Incidence and Risk Factors of Ciguatera Fish Poisoning in the Caribbean and Florida” (UF-Epidemiology)
- Sunil Swami: Does anticholinergic (AC) use contribute to cognitive decline and development of dementia? (UF-Epidemiology)

### Chair (Masters Level):

Graduated: Wenru Zhou, Yuqi Liang (UF-Biostatistics)

### Committee Member (Masters Level):

Graduated: Scott Gulig, Mansi Prasad, Bharath Gottam, Wan Xu (UF-Biostatistics)

## GRANTS and CONTRACTS

Contract #00114327 (Sanofi US Services) Manini(PI) 2/07/2014 - 2/06/2016

Database analyses for Sarcopenia research.

The goal of the proposed work is to examine the natural history of sarcopenia (loss of muscle mass) and other contributing factors (e.g. muscle strength and comorbid conditions). The results of this research will define cohorts for targeting in clinical trials.

Role: Investigator

1R01HL121023 – 01 (NIH) Manini (PI) 2/1/2014-1/31/2018

MtDNA variant modifiers of cardiopulmonary responsiveness to physical activity

We will integrate clinical, behavioral, and genetic data in models to predict the heterogeneity in cardiopulmonary responsiveness to physical activity. By identifying genetic modifiers, this research will provide a starting point to build a personalized medicine framework to better improve cardiovascular health with physical activity.

Role: Co-Investigator

1U10CA180899-01 (NIH-NCI) Devidas (PI) 3/1/2014-2/28/2019

Children’s Oncology Group Statistics and Data Center.

The major goals of this project are to provide Database/Statistical support for COG therapeutic and Biology clinical trials.

Role: Co-Investigator

**COG Protocols:** Senior Study Statistician on the following COG protocols:

- AALL0622, AALL06N1, AALL0631, AALL08P1, AALL1431 (pending), AALL14P1(pending), AALL1521 (pending)

1R24HS022021-01 (AHRQ) Winkler(PI) 04/05/2013-1/31/2016

Dissemination of Amputation and Prosthetic Evidence-based Medicine (DAP-EM)

The major goal of this project is conduct a randomized clinical trial to compare individual-amputee (health-patient centered) outcomes of an self-management intervention based on evidence-based medicine delivered on CD-ROM versus an interactive virtual world environment

Role: Co-Investigator (UF PI)

1 R01 AG039495-01 (NIH-NINR) Rowe(PI) 8/1/2011-7/31/2015

Improving Dementia Caregiver Sleep and the Effect on Heart Disease Biomarkers

The overall goal of this project is to test whether an intervention specially targeted for this population improves CG sleep, and to explore the relationships between sleep, sleep improvement and CHD biomarkers in a longitudinal study of dementia caregivers

Role: Co-Investigator (UF PI)

U10 CA98413 (NIH-NCI) Anderson (PI) 3/1/2008-2/28/2014

Children's Oncology Group Statistics and Data Center.

Statistics and data coordinating for the Children's Oncology Group (COG), a National Cancer Institute (NCI) sponsored pediatric cancer clinical trials cooperative group, with over 200 institutional members from all over the USA, Canada, Europe and Australia.

Role: Co-Investigator

IIR 11-119 VHA (HSR&D) Mann(PI) 1/01/2012-12/31/2015

Nonpharmacologic Management of Challenging Behaviors in Veterans with Dementia

The objective is to test the efficacy of a transformative patient-centric intervention designed to reduce the burden of neuropsychiatric symptoms (MPS) in Veterans with dementia that live at home with family caregivers.

Role: Investigator

K01 ES019177 (NIH/NIEHS) Xu(PI) 12/08/2011-11/30/2016

Associations between Ambient Air Pollution and Adverse Birth Outcomes in Florida

The goal of this mentored research is to investigate the health effects of air pollution on fetal health.

Role: Co-investigator

VHA (HSR&D) Velozo(PI) 10/1/2011-09/30/2014

Item Banking Across the Continuum of Care

The objective of this study is to use IRT measurement models to develop FIM-MDS item banks (physical functioning and cognitive) and to develop short forms and computer adaptive tests.

Role: Investigator

VHA Freytes(PI) 04/01/2012-03/31/2014

Racial/ethnic variation in family functioning post-deployment

The objective is to examine racial/ethnic variations in Veterans and their significant others' (SO's; spouse/live-in partner) perceptions of post-deployment in multiple dimensions of family functioning.

Role: Investigator

The University of Florida Shuster(Core Director) 07/01/2009-03/31/2014

Clinical and Translational Science Award, Research Design and Analysis Program

The goals are to establish RDAP as an early point of contact to facilitate interdisciplinary CTS, provide a robust training portfolio of basic and advanced graduate courses and short

courses in research design, data acquisition and management and analysis concepts and to develop and adopt new methodology needed for CTS design and analysis.

Role: Co-Investigator

VHA B7168R (RR&D) Winkler(PI) 07/01/2010-06/30/2012

Provision of Assistive Technology to Veterans Post-Stroke

The grant's goal is to determine the extent to which VHA facility type and presence of rehabilitation therapist staffing affect the provision of Assistive Technologies (AT) for veterans post-stroke.

Role: Co-Investigator

VHA O4706R (RR&D) Vogel(PI) 05/01/2008-04/30/2012

Cost-Effectiveness of Stroke Rehabilitation Settings in the VA

The aims of the project are to examine the variation in treatment costs, outcomes, and the cost-effectiveness of rehabilitation services for VHA stroke patients in (1) no post-acute rehabilitation and post-acute care in (2) outpatient setting (3) a non-specialized inpatient location (4) nursing home setting, (5) subacute rehabilitation unit, and (6) specialized acute rehabilitation unit.

Role: Biostatistician

3UL1RR029890-03S1 (NIH NCRR) Kairalla(Lead PI) 05/23/2011-03/31/2012

Adaptive Comparative Effectiveness Trials for Comparing Two Treatments

The project will develop and disseminate defensible guidelines for using adaptive sample size re-estimation methods for comparing two treatments in the CER setting. This will be accomplished by literature review, simulation studies, and a clear dissemination plan.

Role: Lead PI and Project Director

VHA DHI 08-114 (HSR&D) Vogel(PI) 01/1/2009 – 12/31/2011

Identifying Potential Demand for VA Rehab Services for OEF/OIF Veterans

The objective of this proposed research is to improve access to rehabilitation services for Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veterans with spinal cord injury (SCI), traumatic brain injury (TBI), and amputations.

Role: Biostatistician

VA RR&D HSR&D RORC-REAP Pilot Levy(PI) 10/01/2010-09/30/2011

Mechanisms of Central and Peripheral Sensitization in Headache and TBI

The aim of the project is to obtain evidence for the mechanisms underlying post-deployment headache. The hypothesis is that there is evidence for both peripheral and central pain sensitization in those with a history of concussion or mild TBI and post-deployment headache.

Role: Statistician

VA RR&D HSR&D RORC-REAP Core Vogel(PI) 09/15/2008-09/30/2011

Statistical Support, RORC, REAP Project

Provide statistical support in design, analysis, and interpretation of rehabilitation studies for the RORC REAP project.

Role: Statistician

VA248P0139 Skenkman(PI) 08/15/2007-08/14/2010

Stroke QUERI, VA RORC

The work of the Stroke QUERI project is to reduce the risk of stroke and to improve the quality of life for all VA patients with stroke, and those at risk, through collaboration with

other VA organizations to implement best practices. QUERI works to improve the quality of healthcare for veterans by implementing research findings into routine clinical practice.

Role: Statistician

The Agency for Health Care Administration (ACHA)

Skenkman(PI)

04/01/2009-03/30/2010

Evaluating Florida's Programs Designed to Improve Birth Outcomes

The goal of this project is to evaluate the impact of three Florida programs designed to improve birth outcomes including an in-depth, community specific analysis of the 2001 Healthy Start waiver, an intervention within high risk obstetric clients, and an intervention within the neo-natal intensive care unit.

Role: Statistician

R01 NR009406-01A1 (NIH-NINR) Kneipp (PI)

9/15/2005 - 05/31/2009

NIH / NINR

CBPR to Reduce Women's Health Disparities thru TANF

The aims of the project are to: 1) redesign the current health screening tool used in welfare-to-work programs to be culturally sensitive and relevant, and 2) test the effectiveness of a comprehensive public health nursing intervention to improve health screening, referral, and management of chronic conditions; ability to navigate the Medicaid system; employment duration; and health outcomes among women leaving welfare for work using a participatory research approach.

Role: Statistician

R01 NR04297-06A2 (NIH-NINR) Elder (PI)

05/01/1998 - 05/31/2009

NIH / NINR

Fathers as In-Home Trainers of Autistic Children

Specific aims of this proposal are: (a) to evaluate the effects of the expanded father training on skill acquisition by fathers, (b) to evaluate the effects of the expanded father training on skill acquisition by mothers, (c) to evaluate the effects of the expanded in-home training on parental stress and family cohesion, and (d) to develop a Web based investigator-father feedback system and evaluate its feasibility during the training protocol and maintenance phases with a subset of five families.

Role: Statistician

R01 CA095749-03 (NIH-NCI) Muller (PI)

01/15/2003-12/31/2007

NIH / NCI

Internal Pilots for Repeated Measures ANOVA

The research will explore the use of internal pilots within repeated measures setting.

Role: Graduate Research Assistant