# Alexander P Keil

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## Education and Qualifications

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| 2014 | Ph.D., Epidemiology | University of North Carolina at Chapel Hill |
| 2010 | M.S.P.H., Epidemiology | University of North Carolina at Chapel Hill |
| 2003 | B.S.(Hons), Biology | Santa Clara University |

## Employment History

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| 2014-Present | **Postdoctoral Fellow, Chapel Hill, NC**<br>Mentored, independent research into methods for occupational and radiation epidemiology. |
| 2011 | **Teaching Assistant, Chapel Hill, NC**<br>Design lectures, lab activities, homework, and tests, as well as grading responsibilities for an introductory SAS programming class. |
| 2008-2013 | **Research Assistant, Chapel Hill, NC**<br>Aid a variety of research tasks for the Community Health Effects of Sewage Sludge (CHESS) longitudinal study and update of Oak Ridge National Laboratories worker cohort. Responsibilities include data management, data abstraction and summarization from state records, report preparation and presentation to community groups and basic epidemiologic analyses. |
| 2006-2008 | **Data Abstractor, Chapel Hill, NC**<br>Primarily responsible for investigating children's psychological evaluations and other records concerning autism associated behaviors in North Carolina elementary schools and Children's Developmental Services Agencies. Other duties included data cleaning, scheduling, and training of new abstractors. |

## Awards and Honors

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| 2014 | EPICOH 2014 Young investigator Award - Best Abstract |
| 2013 | Marilyn & Al Tyroler Scholarship in Epidemiology |
| 2012 | Sidney Kark Award for Distinguished Teaching Assistant - The University of North Carolina at Chapel Hill Gillings School of Global Public Health, Department of Epidemiology |
| 2010-2014 | National Institute of Environmental Health Sciences Training Grant - Occupational Epidemiology |
| 2008-2010 | National Institute of Environmental Health Sciences Training Grant - Environmental Epidemiology |

## Professional Society Memberships

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| 2008-Present | Society of Epidemiologic Research |
| 2008-Present | International Society of Environmental Epidemiology |

# Publications and presentations

## PhD thesis

1. Keil, A. P. (2014). "Healthy Worker survivor bias in a cohort of uranium miners from the Colorado Plateau". PhD thesis. University of North Carolina at Chapel Hill.

## Peer-reviewed research papers

1. Buckley, J. P., A. P. Keil, L. J. McGrath, and J. K. Edwards (2015). Evolving methods for inference in the presence of healthy worker survivor bias. *Epidemiology*.
2. Keil, A. P., D. B. Richardson, and M. A. Troester (2015). Healthy worker survivor bias in the Colorado Plateau uranium miners cohort. *Am J Epidemiol*.
3. Keil, A. P., J. L. Daniels, and I. Hertz-Picciotto (2014). Autism spectrum disorder, flea and tick medication, and adjustments for exposure misclassification: the CHARGE (CHildhood Autism Risks from Genetics and Environment) case-control study. *Environmental Health* **13**(1), 3.
4. Keil, A. P., J. K. Edwards, D. B. Richardson, A. I. Naimi, and S. R. Cole (2014). The Parametric g-Formula for Time-to-event Data: Intuition and a Worked Example. *Epidemiology* **25**(6), 889–897.
5. Wing, S., A. Lowman, A. P. Keil, and S. Marshall (2014). Odors from sewage sludge and livestock: Associations with self-reported health. *Public Health Reports* **129**(6), 505–515.
6. Richardson, D. B., S. Wing, A. Keil, and S. Wolf (2013). Mortality among workers at Oak Ridge National Laboratory. *Am J Ind Med* **56**(7), 725–732.
7. Keil, A. P., S. Wing, and A. Lowman (2011). Suitability of public records for evaluating health effects of treated sewage sludge in north carolina. *North Carolina Medical Journal* **72**(2), 98–104.
8. Keil, A. P., J. L. Daniels, U. Forssen, C. Hultman, S. Cnattingius, K. C. Söderberg, M. Feychting, and P. Sparen (2010). Parental Autoimmune Diseases Associated With Autism Spectrum Disorders in Offspring. *Epidemiology* **21**(6), 805–808.

## Invited talks

1. Keil, A. P. (2014). *Estimating the effects of occupational exposure interventions on cardiovascular outcomes using the parametric g-formula*. Environmental and Occupational Epidemiology Seminar Series, University of North Carolina at Chapel Hill Department of Epidemiology.
2. Keil, A. P. (2014). *Estimating the effects of occupational exposure interventions on cardiovascular outcomes using the parametric g-formula*. Cardiovascular Disease Epidemiology Seminar Series, University of North Carolina at Chapel Hill Department of Epidemiology.
3. Keil, A. P., D. Richardson, and S. Cole (2014). *Controlling healthy worker survivor bias of the radon-lung cancer dose-response in a cohort of uranium miners*. International Society of Environmental Epidemiology annual meeting.
4. Keil, A. P. and J. Edwards (2012). *Comparison of three causal models to control time-varying confounding in a cohort of bone marrow transplant recipients.* Causal Inference Research Group Meeting, University of North Carolina at Chapel Hill.
5. Keil, A. P., J. Daniels, and I. Hertz-Picciotto (2009). *Prenatal Imidacloprid Exposure and Subsequent Diagnosis of Autism Spectrum Disorder in a California Case-Control Study.* Environmental and Occupational Epidemiology Seminar Series, University of North Carolina at Chapel Hill Department of Epidemiology.

## Conference presentations

1. Keil, A. P., D. Richardson, and S. Cole (2014). Controlling healthy worker survivor bias of the radon-lung cancer dose-response in a cohort of uranium miners. In: *EPICOH: Scientific Comittee on Epidemiology in Occupational Health annual meeting*.
2. Keil, A. P., J. Edwards, A. Naimi, and S. Cole (2013). Comparison of three causal models to control time-varying confounding in a cohort of bone marrow transplant recipients. In: *Society of Epidemiologic Research annual meeting*.
3. Keil, A. P., D. Richardson, and S. Cole (2011). Are Marginal Structural Models useful to appropriately control the Healthy Worker Survivor Effect for occupational epidemiological studies? In: *EPICOH: Scientific Comittee on Epidemiology in Occupational Health annual meeting*.
4. Keil, A. P., J. Daniels, and I. Hertz-Picciotto (2009). Prenatal Imidacloprid Exposure and Subsequent Diagnosis of Autism Spectrum Disorder in a California Case-Control Study. In: *International Conference on Role of Environmental Stressors in the Developmental Origins of Disease*.