

# Steven J. Koch

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CONTACT INFORMATION	Assistant Professor, Physics & Astronomy University of New Mexico Albuquerque, NM	mobile: 505-263-7400 email: <a href="mailto:stevekochscience@gmail.com">stevekochscience@gmail.com</a> LinkedIn: <a href="http://www.linkedin.com/in/stevekoch">www.linkedin.com/in/stevekoch</a>
OBJECTIVE	To join a team where I can leverage my talents in coding, data acquisition, automation, algorithm development, data analysis, and visualization.	
CODING	LabVIEW / NI-DAQmx (extensive experience), Python / PyLab / scikit-learn / Django / web.py, R, C, Java, LaTeX, git / github stackoverflow reputation 132	
OTHER SKILLS	Image processing / tracking, hardware automation, molecular biology, microscopy, arduino, metal machining, Monte Carlo and Markov chain analysis, teaching and mentoring	
EDUCATION	<b>Cornell University</b> , Ithaca, NY <i>Ph.D., Physics (Biophysics minor)</i> <b>May 2003</b> <ul style="list-style-type: none"><li>• Dissertation: Probing protein-DNA interactions by unzipping single DNA molecules with a laser trapping microscope</li><li>• Advisor: Professor Michelle D. Wang</li></ul> <i>M.S., Physics</i> <b>2000</b>  <b>University of Michigan</b> , Ann Arbor, MI <i>B.S., Honors Physics</i> <b>1996</b>	
RECENT EXPERIENCE	<b>University of New Mexico</b> , Albuquerque, NM <i>Assistant Professor</i> <b>August 2006 – May 2013</b> <p>One large grant (DTRA, \$1.5M, co-PI with Atlas), state of the art optical tweezers and automated kinesin gliding motility assays. Two Ph.D. students graduated, two more expected in 2013. Mentored 8 undergraduate researchers. Taught more than 700 students, mostly undergraduate courses, with excellent reviews. Open-science advocate.</p> <b>Sandia National Labs</b> , Albuquerque, NM <i>CINT Distinguished Postdoctoral Fellow, Appointee</i> <b>2003 – 2006</b> <p>Implemented wide array of collaborative biophysics projects across Sandia and LANL / CINT. Major publications in MEMS (Applied Physics Letters) and Kinesin (Fungal Genetics and Biology)</p> <b>Cornell University</b> , Ithaca, NY <i>TA / RA</i> <b>1996 – 2003</b> <p>Designed and built state of the art optical tweezers. Invented single-molecule technique for probing protein-DNA interactions (2002 Biophysical Journal, 90 citations)</p>	
SCIENTIFIC PUBLICATIONS	Available on my Google Scholar page (Steven J. Koch <a href="http://goo.gl/kszZ3">http://goo.gl/kszZ3</a> ). Highly-cited publications in Biophysical Journal (2002, 90 citations), Physical Review Letters (2003, 47 citations), Advanced Materials (2008, 26 citations), Nano Letters (2008, 18 citations), Applied Physics Letters (2006, 17 citations), Fungal Genetics and Biology (2007, 7 citations).	
HONORS AND AWARDS	Addgene Resource Sharing Award, CINT postdoctoral fellowship, US Dept. Ed. GAANN TA/RA fellow, Honorable Mention NSF Graduate Research Fellowship, U. Michigan: Sigma Pi Sigma, Phi Beta Kappa, James B. Angell Scholar, and Sharon Naughton-Briggs Memorial Scholarship.	