

# Curriculum Vitae

## Boris B. Blinov

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**Education** *Ph.D. in Physics*, University of Michigan, 2000  
*M.S. in Physics*, Moscow State University, 1995

**Research area** Quantum information and computation, ion trapping, atomic physics

### ***Positions held***

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09/2005 - present University of Washington, Department of Physics,  
*Assistant Professor*

06/2001 - 08/2005 FOCUS Center, Department of Physics, University of Michigan  
*Postdoctoral Research Fellow*

06/2000 - 05/2001 Spin Physics Center, Department of Physics, University of Michigan  
*Postdoctoral Research Fellow*

01/1996 - 05/2000 Spin Physics Center, Department of Physics, University of Michigan  
*Graduate Student Research Assistant*

09/1993 - 08/1994 Spin Physics group, Department of Physics, University of Michigan  
*Visiting Research Investigator*

### ***Memberships***

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1994 - present Member, American Physical Society

2003 - present Associate Member, Michigan Center for Theoretical Physics

### ***Awards and honors***

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*Faculty Excellence in Undergraduate Teaching Award* (University of Washington Department of Physics, 2008).

Nominated by the University of Washington for the *Packard Foundation Fellowship for Science and Engineering* (2007).

Finalist, *Young Scholar Competition at "Amazing Light" Symposium* (Berkeley, CA 2005).

### **Service**

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2009 Co-Organizer, *Southwest Quantum Information and Technology Workshop* (SQuInT)  
2009 Co-Organizer, *2<sup>nd</sup> Integrated Atomic Systems Workshop* (AIS-2)  
2009 Member, Program Committee, *International Quantum Electronics Conference* (IQEC)  
2007 - Member, SQuInT Steering Committee  
2004 Member, Local Organizing Committee, *International Workshop on Trapped Ion Quantum Computing*

### **Grants**

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2009 – 2012 NSF Quantum Information and Revolutionary Computing (**\$290,000**) “*Ultrafast Quantum Logic Gates with Trapped Ions.*” Single PI.

2009 – 2013 NSF Precision Measurements (**\$1,577,520**) “*Experiments Using Long Coherence Times in Atoms.*” co-PI with PI E. N. Fortson, co-PIs S. Gupta, B. Heckel and T. Loftus.

2009 – 2012 NSF MRI (**\$970,688**) “*Development of a passive phase-stabilized femtosecond laser system for spatio-temporal imaging and frequency metrology in the infrared.*” PI with co-PIs E. N. Fortson, S. Gupta, M. Raschke and T. Loftus.

2008-2011 NSF Optical Physics (**\$440,000**) “*Remote Entanglement of Trapped Ions and Loophole-Free Bell Inequality Tests.*” Single PI.

2007-2008 DURIP – Army Research Office (**\$95,000**) “*Ultrafast excitation of trapped ion qubits for quantum information processing, long-distance quantum communication and cryptography.*” Single PI.

2006-2007 UW Royalty Research Fund (**\$33,465**) “*Fiber-coupled single-photon source for quantum communication and cryptography using trapped atomic ions.*” Single PI.

### **Invited Talks at Conferences (including presentations by group members)**

2010 May	International Conference on Quantum Optics and Quantum Information (Kyiv, Ukraine) ( <b>M. Dietrich</b> )
2007 May	Northwest Section of American Physical Society Annual Meeting (Pocatello, ID)
2006 November	Frontiers in Quantum and Biological Information Processing Workshop (Orlando, FL)
2006 October	New Laser Scientist Conference (Rochester, NY)
2005 October	Amazing Light: Vision for Discovery Symposium (Berkeley, CA)
2005 June	Cross Border Workshop (Columbus, OH)
2005 March	Gordon Conference on Quantum Information Science (Ventura, CA)
2004 July	International Technology Roadmap for Semiconductors Architectures Workshop (San Francisco, CA)
2004 May	Division of Atomic, Molecular and Optical Physics (Tucson, AZ)
2003 August	Quantum Enabled Science and Technology (Santa Fe, NM)
2003 June	Quantum Electronics and Laser Science (Baltimore, MD)
2003 May	Simons Conference on Quantum and Reversible Computation (Stony Brook, NY)
2002 October	Optical Society of America Annual Meeting (Orlando, FL)
2002 August	FOCUS Kickoff Conference (Ann Arbor, MI)

### **Colloquia and Seminars**

2010 April	Physical Chemistry Seminar (University of Washington, Seattle, WA)
2009 November	AMO Seminar (University of British Columbia, Vancouver, BC)
2009 May	AMO Seminar (Northwestern University, Evanston, IL)
2009 March	CM Seminar (University of Wisconsin, Madison, WI)
2009 January	Frontiers of Physics Seminar (University of Washington, Seattle, WA)
2009 January	CMA Seminar (University of Washington, Seattle, WA)
2008 September	Physics Department Seminar (Reed College, Portland, OR)
2008 March	Physics Colloquium (University of British Columbia, Vancouver, BC)
2007 April	Physics Colloquium (Washington State University, Pullman, WA)
2006 June	Quantum Information Seminar (Sandia National Labs, Albuquerque, NM)
2006 April	AMO Seminar (Oregon Center for Optics, U. of Oregon, Eugene, OR)
2005 November	CM Seminar (University of Washington, Seattle, WA)
2005 July	AMO Seminar (GA Tech, Atlanta, GA)
2005 March	Physics Colloquium (University of Nebraska, Lincoln, NE)
2005 March	AMO Seminar (University of New Mexico, Albuquerque, NM)
2005 February	CM Seminar (MIT, Boston, MA)
2005 January	Physics Colloquium (University of Washington, Seattle, WA)
2005 January	AMO Seminar (University of Wisconsin, Madison, WI)
2004 November	AMO Seminar (University of Delaware, Newark, DE)
2004 September	Quantum Information Science Seminar (University of Illinois, Urbana, IL)
2004 March	Applied Physics Seminar (University of Michigan, Ann Arbor, MI)
2004 March	AMO Seminar (SUNY, Stony Brook, NY)
2004 January	Spin Physics seminar (University of Michigan, Ann Arbor, MI)

**Popular accounts of research covered by:** Gizmodo, Journal of Engineering and Technology, Nature, New Scientist, Optics and Photonics News, Photonics Spectra, Physics Today, Physics World, Science News, Technology Review, and Wired.

## Publications

### Journals

#### 2006 - 2010

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30. "Hyperfine and Optical Barium Ion Qubits," M. R. Dietrich, N. Kurz, T Noel, G. Shu and B. B. Blinov, Phys. Rev. A **81**, 052328 (2010).
29. "Combing a qubit", B.B. Blinov, Physics **3**, 30 (2010).
28. "Efficient fluorescence collection from trapped ions with an integrated spherical mirror", G. Shu, M. R. Dietrich, N. Kurz, and B. B. Blinov, Phys. Rev. A **81**, 042321 (2010).
27. "Quantum Mechanics: Hidden Context", B. B. Blinov, Nature **460** 464-465 (2009).
26. "Use of a Microcontroller for Fast Feedback Control of a Fiber Laser," M. R. Dietrich and B. B. Blinov, [arXiv:0905.2484] Submitted (2009).
25. "Trapped ion imaging with a high numerical aperture spherical mirror", G. Shu, M. R. Dietrich, N. Kurz, and B. B. Blinov, J. Phys. B: At. Mol. Opt. Phys. **42** 154005 (2009).
24. "Precision measurement of the branching ratio in the  $6P_{3/2}$  decay of BaII with a single trapped ion", N. Kurz, M. R. Dietrich, G. Shu, R. Bowler, J. Salacka, V. Mirgon, and B. B. Blinov, Phys. Rev. **A 77** 060501(R) (2008).
23. "Nuclear magnetic octupole moment and the hyperfine structure of the  $5D_{3/2,5/2}$  states of the  $Ba^+$  ion", K. Beloy, A. Derevianko, V. A. Dzuba, G. T. Howell, B. B. Blinov and E. N. Fortson, Phys Rev **A 77**, 052503 (2008).
22. "Quantum Networking with Photons and Trapped Atoms", D.L. Moehring, M.J. Madsen, K. Younge, R.N. Kohn Jr., P. Maunz, L.-M. Duan, C. Monroe, and B.B. Blinov, J. Opt. Soc. Am. **B 24**, 300 (2007).
21. "Efficient Photoionization-Loading of Trapped Cadmium Ions with Ultrafast Pulses", L. Deslauriers, M. Acton, B. B. Blinov, K.-A. Brickman, P. C. Haljan, W. K. Hensinger, D. Hucul, S. Katnik, R. N. Kohn Jr., P. J. Lee, M. J. Madsen, P. Maunz, S. Olmschenk, D. L. Moehring, D. Stick, J. Sterk, M. Yeo, K. C. Younge, and C. Monroe, Phys. Rev. **A 74**, 063421 (2006).
20. "Broadband laser cooling of trapped atoms with ultrafast pulses", B. B. Blinov, R. N. Kohn Jr., M. J. Madsen, P. Maunz, D. L. Moehring, and C. Monroe, J. Opt. Soc. Am. **B 23**, 1170 (2006).
19. "Precision lifetime measurements of a single trapped ion with ultrafast laser pulses", D. L. Moehring, B. B. Blinov, D. W. Gidley, R. N. Kohn Jr., M. J. Madsen, T. D. Sanderson, R. S. Vallery, and C. Monroe, Phys. Rev. **A 73**, 023413 (2006).

#### 2002 - 2005

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18. "Experimental Bell Inequality Violation with an Atom and a Photon", D.L. Moehring, M. J. Madsen, B.B. Blinov, and C. Monroe, Phys. Rev. Lett. **93**, 090410 (2004).
17. "Zero-Point cooling and low heating of trapped  $^{111}\text{Cd}^+$  ions", L. Deslauriers, P. C. Haljan, P. J. Lee, K-A. Brickman, B. B. Blinov, M. J. Madsen, C. Monroe, Phys. Rev. **A 70** 043408 (2004).
16. "Quantum Computing with Trapped Ion Hyperfine Qubits", B. B. Blinov, D. Leibfried, C. Monroe,

and D. J. Wineland, Quant. Inf. Proc. **3**, 45 (2004).

15. "Scalable Trapped Ion Quantum Computation with a Probabilistic Ion-Photon Mapping", L.-M. Duan, B.B. Blinov, D.L. Moehring, C. Monroe, Quant. Inf. Comp. **4**, 165 (2004) (e-print arXiv quant-ph/0401020).

14. "Observation of entanglement between a single trapped atom and a single photon", B.B. Blinov, D.L. Moehring, L.-M. Duan and C. Monroe, Nature **428**, 153 (2004).

13. "Atomic Qubit Manipulation with an Electro-Optic Modulator", P.J. Lee, B.B. Blinov, K. Brickman, L. Deslauriers, M.J. Madsen, R. Miller, D.L. Moehring, D. Stick, and C. Monroe, Optics Letters **28**, 1582 (2003).

12. "Sympathetic Cooling of Trapped  $Cd^+$  Isotopes", B.B. Blinov, L. Deslauriers, P. Lee, M.J. Madsen, R. Miller, and C. Monroe, Phys. Rev. **A 65**, 040304(R) (2002).

### **1994 – 2002 (Ph. D. work: Polarized beams and targets)**

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11. "99.6% Spin-Flip Efficiency in the Presence of a Strong Siberian Snake", B. B. Blinov, Z. B. Etienne, A. D. Krisch, M. A. Leonova, W. Lorenzon, V. S. Morozov, C. C. Peters, V. K. Wong, K. Yonehara, V. A. Anferov, P. Schwandt, E. J. Stephenson, B. von Przewoski, and H. Sato, Phys. Rev. Lett. **88**, 014801 (2002).

10. "Spin-flipping polarized electrons", V. S. Morozov, V. A. Anferov, B. B. Blinov, A. D. Krisch, W. Lorenzon, C. C. Peters, K. Yonehara, M. Farkhonden, W. A. Franklin, K. D. Jacobs, H. Kolster, S. Sirca, T. Smith, E. Tsentalovich, J. Viereg, G. T. Zwart, and E. Six, Phys. Rev. ST Accel. Beams **4**, 104002 (2001).

9. "Spin-flipping with an rf-dipole and a full Siberian snake", B.B. Blinov, Ya.S. Derbenev, T. Kageya, D.Yu. Kantsyrev, A.D. Krisch, V.S. Morozov, D.W. Sivers, V.K. Wong, V.A. Anferov, P. Schwandt, and B. von Przewoski, Phys. Rev. ST Accel. Beams **3**, 104001(2000).

8. "Spin flipping a stored polarized proton beam with an rf dipole", V.A. Anferov, B.B. Blinov, D.Yu. Kantsyrev, A.D. Krisch, D.W. Sivers, C.M. Chu, P. Schwandt, B. von Przewoski, and V.N. Grishin, Phys. Rev. ST Accel. Beams **3**, 041001 (2000).

7. "Synchrotron-sideband snake depolarizing resonance", B.B. Blinov, V.A. Anferov, Ya.S. Derbenev, T. Kageya, A.D. Krisch, W. Lorenzon, D.W. Sivers, K.V. Sourkont, V.K. Wong, S.S. Youssof, C.M. Chu, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, B. von Przewoski, and H. Sato, Rev. ST Accel. Beams **2**, 064001 (1999).

6. "Unexpectedly wide rf-induced synchrotron sideband depolarizing resonances", C.M. Chu, T.J.P. Ellison, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, B. von Przewoski, V.A. Anferov, B.B. Blinov, M.A. Bychkov, D.D. Caussyn, E.D. Courant, D.A. Crandell, Ya.S. Derbenev, W.A. Kaufman, A.D. Krisch, W. Lorenzon, T.S. Nurushev, R.A. Phelps, L.G. Ratner, V.K. Wong, C. Ohmori, M.G. Minty, P.S. Martin, A.D. Russell, and D.W. Sivers, Phys. Rev. **E 58**, 4973 (1998).

5. "Spin Flipping in the Presence of a Full Siberian Snake", B.B. Blinov, V.A. Anferov, Ya.S. Derbenev, T. Kageya, A.D. Krisch, W. Lorenzon, L.G. Ratner, D.W. Sivers, K.V. Sourkont, V.K. Wong, C.M. Chu, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, B. von Przewoski, and H. Sato, Phys. Rev. Lett. **81**, 2906 (1998).

4. "First observation of a snake depolarizing resonance", R.A. Phelps, V.A. Anferov, B.B. Blinov, D.A. Crandell, S.V. Koutin, A.D. Krisch, T.J. Liu, L.G. Ratner, V.K. Wong, C.M. Chu, S.Y. Lee, T.

Rinckel, P. Schwandt, F. Sperisen, E.J. Stephenson, B. von Przewoski and H. Sato, Phys. Rev. Lett. **78**, 2772 (1997).

3. "*Spin flipping through an intrinsic depolarizing resonance by strengthening it*", D.A. Crandell, V.A. Anferov, B.B. Blinov, D.D. Caussyn, Ya.S. Derbenev, S-Q. Hu, S.V. Koutin, A.D. Krisch, T.J. Liu, R.A. Phelps, L.G. Ratner, V.K. Wong, C.M. Chu, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, E.J. Stephenson, B. von Przewoski and M. Berglund, Phys. Rev. Lett. **77**, 1763 (1996).

2. "*Spin flipping a stored polarized proton beam*", D.D. Caussyn, Ya.S. Derbenev, T.J.P. Ellison, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, E.J. Stephenson, B. von Przewoski, B.B. Blinov, C.M. Chu, E.D. Courant, D.A. Crandell, W.A. Kaufman, A.D. Krisch, T.S. Nurushev, R.A. Phelps, L.G. Ratner, V.K. Wong and C. Ohmori, Phys. Rev. Lett. **73**, 2857 (1994).

1. "*First test of a partial Siberian snake during polarized beam acceleration*", B.B. Blinov, C.M. Chu, E.D. Courant, D.A. Crandell, W.A. Kaufman, A.D. Krisch, T.S. Nurushev, R.A. Phelps, D.B. Raczkowski, L.G. Ratner, V.K. Wong, D.D. Caussyn, Ya.S. Derbenev, T.J.P. Ellison, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, E.J. Stephenson, B. von Przewoski, R. Baiod, M.G. Minty, C. Ohmori, and U. Wienands, Phys. Rev. Lett. **73**, 1621 (1994).

### **Conference proceedings**

13. "*Barium Ions for Quantum Computation*", M. R. Dietrich, A. Avril, R. Bowler, N. Kurz, J. S. Salacka, G. Shu and B. B. Blinov, Non-Neutral Plasma Physics VII: Workshop on Non-Neutral Plasmas 2008, James R. Danielson and Thomas Sunn Pedersen, eds., AIP Conf. Proc. **1114** (1) 25 (2009) .

12. "*Ion Trap Networking: Cold, Fast, and Small*", D. L. Moehring, M. Acton, B. B. Blinov, K.-A. Brickman, L. Deslauriers, P. C. Haljan, W. K. Hensinger, D. Hucul, R. N. Kohn, P. J. Lee, M. J. Madsen, P. Maunz, S. Olmschenk, D. Stick, M. Yeo, C. Monroe, and J. Rabchuk, **Laser Spectroscopy XVII**, E. A. Hinds, A. Ferguson, and E. Riis, (eds.), World Scientific, Singapore 2005, pp. 421-428.

11. "*99.9% Spin-Flip Efficiency in the Presence of a Strong Siberian Snake*", V. S. Morozov, B. B. Blinov, Z. B. Etienne, A. D. Krisch, M. A. Leonova, A. M. T. Lin, W. Lorenzon, C. C. Peters, D. W. Sivers, V. K. Wong, K. Yonehara, V. A. Anferov, P. Schwandt, E. J. Stephenson, B. von Przewoski, and H. Sato, AIP Conf. Proc. **675**(1) 776 (2003).

10. "*Siberian Snakes and Spin-flipping in Storage Rings*", B.B. Blinov, 2<sup>nd</sup> Workshop on Physics with an Electron Polarized Light-Ion Collider, AIP Conf. Proc. **588**(1) 355 (2001).

9. "*Spin-flipping with an rf-dipole and a full Siberian snake*", A. M. T. Lin, B. B. Blinov, Ya. S. Derbenev, T. Kageya, D. Yu. Kantsyrev, A. D. Krisch, V. S. Morozov, J. R. Murray, D. W. Sivers, V. K. Wong, K. Yonehara, V. A. Anferov, C. M. Chu, P. Schwandt, B. von Przewoski, V. N. Grishin, V. L. Solovianov, K. Jacobs, and G. T. Zwart, AIP Conf. Proc. **570**(1) 736 (2001).

8. "*Synchrotron-sideband snake depolarizing resonances*", T. Kageya, V. Anferov, B. Blinov, C. Chu, Ya. Derbenev, A. Krisch, S. Lee, W. Lorenzon, T. Rinckel, H. Sato, P. Schwandt, D. Sivers, K. Sourkont, F. Sperisen, B. vonPrzewoski, V. Wong, and S. Youssef, AIP Conf. Proc. **570** 893 (2001).

7. "*Michigan ultra-cold polarized atomic hydrogen jet target*", B. B. Blinov, S. E. Gladysheva, T. Kageya, D. Yu. Kantsyrev, A. D. Krisch, V. G. Luppov, V. S. Morozov, J. R. Murray, R. S. Raymond, N. Borisov, V. Fimushkin, V. Grishin, A. Mysnik, and D. Kleppner, AIP Conf. Proc. **570** 856 (2001).

6. *"Spin-Flipping a Stored Polarized Proton Beam with an rf Dipole"*, B.B. Blinov, Ya.S. Derbenev, T. Kageya, D.Yu. Kantsyrev, A.D. Krisch, V.S. Morozov, D.W. Sivers, V.K. Wong, V.A. Anferov, P. Schwandt, and B. von Przewoski, 7th Conference on Intersections of Particle and Nuclear Physics, AIP Conf. Proc. **549**(1) 662 (2000).
5. *"Polarized atomic hydrogen beam studies in the Michigan ultra-cold jet"*, R. S. Raymond, B. B. Blinov, N. S. Borisov, J. Cheng, A. M. Davidenko, V. V. Fimushkin, S. E. Gladysheva, V. N. Grishin, T. Kageya, D. Yu. Kantsyrev, D. Kleppner, A. D. Krisch, V. G. Luppov, V. S. Morozov, J. R. Murray, J. J. Neumann, and B. Yankama, AIP Conf. Proc. **549**(1) 674 (2000).
4. *"Ultra-cold methods for polarized atomic hydrogen"*, V. G. Luppov, J. D. Arnold, B. B. Blinov, M. A. Bychkov, S. E. Gladysheva, A. D. Krisch, A. M. T. Lin, R. S. Raymond, V. V. Fimushkin, V. V. Mochalov, and P. A. Semenov, AIP Conf. Proc. **421** 119 (1998).
3. *"First test of a partial Siberian snake for acceleration of polarized protons"*, D. D. Caussyn, R. Baiod, B. B. Blinov, C. M. Chu, E. D. Courant, D. A. Crandell, Ya. S. Derbenev, T. J. P. Ellison, W. A. Kaufman, A. D. Krisch, S. Y. Lee, M. G. Minty, T. S. Nurushev, C. Ohmori, R. A. Phelps, D. B. Raczkowski, L. G. Ratner, P. Schwandt, E. J. Stephenson, F. Sperisen, B. von Przewoski, U. Wienands, and V. K. Wong, AIP Conf. Proc. **343** 85 (1995).
2. *"Spin flipping a stored vertically polarized proton beam with an RF solenoid"*, R.A. Phelps, B.B. Blinov, C. M. Chu, E.D. Courant, D.A. Crandell, W.A. Kaufman, A.D. Krisch, T.S. Nurushev, L.G. Ratner, V.K. Wong, D.D. Caussyn, Ya.S. Derbenev, T.J.P. Ellison, S.Y. Lee, T. Rinckel, P. Schwandt, F. Sperisen, E. J. Stephenson, B. von Przewoski, and C. Ohmori, AIP Conf. Proc. **343** 118 (1995).
1. *"Status on the Michigan-MIT ultra-cold polarized hydrogen jet target"*, V. G. Luppov, B. B. Blinov, J. A. Bywater, S. Chin, V. V. Churakov, G. R. Court, W. A. Kaufman, D. Kleppner, A. D. Krisch, Yu. M. Melnik, J. B. Muldavin, T. S. Nurushev, J. S. Price, A. F. Prudkoglyad, R. S. Raymond, V. B. Shutov, and J. A. Stewart, AIP Conf. Proc. **339** 698 (1995).

## Student Advisees

### Graduate Students

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Chen-Kuan Chou, U. of Washington (2010 - )  
 Thomas Noel, U. of Washington (2009 - )  
 Matthew Hoffman, U. of Washington (2009 - )  
 Michelle Brochman, U. of Washington (2008)  
 Kalista Smith, U. of Washington (2007)  
 Adam Kleczewski, U. of Washington (2006 - )  
 Matthew Dietrich, U. of Washington (2006 - 2009) **Ph.D. 2009**  
 Gary Howell, U. of Washington (2006 - 2008)  
 Li Wang, U. of Washington (2006 - 2007)  
 Gang (Rick) Shu, U. of Washington (2005 - 2010) **Ph.D. 2010**  
 Nathan Kutz, U. of Washington (2005 - )

### Undergraduate Students

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Katherine Mitchell (2009 - )  
 Eric Magnuson (2009 - )  
 Anya Davis (2009 REU)

Corey Adams (2009 REU)  
Yonatan Cohen, U. of Washington (2009) (*Wizemann Institute, grad. student*)  
Bing Chen, U. of Washington (2009 - )  
Jennifer Porter, U. of Washington (2009 - 2010)  
Chris Dostert U. of Washington (2008 – 2010)  
Tom Reicken, U. of Washington (2008 - 2009)  
Edan Shahaar, U. of Washington (2008 - 2009)  
Frank Garcia, U. of Washington (2008 - 2009)  
Aaron Avril, U. of Washington (2008 - )  
Peter Greene, U. of Washington (2008) (*UC Davis, grad. student*)  
Thomas Chartrand (2008 REU)  
Sanghoon Chong, U. of Washington (2007 - 2009) (*U. Penn, grad. student*)  
Phil Nelsen, U. of Washington (2007)  
Joseph Pirtle, U. of Washington (2007 - 2008) (*Microsoft*)  
Nathan Pegram, U. of Washington (2007 - 2008) (*Intellectual Ventures*)  
Ryan Bowler, U. of Washington (2006 - 2008) (*U. Colorado, grad. student*)  
Viki Mirgon, U. of Washington (2006 - 2008)  
Joanna Salacka, U. of Washington (2006 - 2008) (*U. Michigan, grad student*)