
CURRICULUM VITAE

Nicholas L. Baird, Ph.D.
Assistant Research Professor
nicholas.baird@ucdenver.edu

Department of Neurology, Mail Stop B182
University of Colorado School of Medicine
12700 East 19th Avenue
Aurora, CO 80045

Lab: room 5440E, 303-724-3756
Office: room 5006, 303-724-5238
Fax: 303-724-4329

Education and Training

- 1999-2002 B.S. (Microbiology with Honors), Colorado State University, Ft. Collins, CO
GPA: 3.7/4.0
Thesis: Investigation of Signal Transduction Pathways that Regulate Reactivation of Herpes Simplex Virus Type 1
- 2002-2009 Ph.D. (Microbiology and Immunology), Pennsylvania State University College of Medicine, Hershey, PA
GPA: 3.6/4.0
Dissertation: Acyl Determinants of the Herpes Simplex Virus Type 1 UL11 Tegument Protein Required for Membrane Trafficking and Virion Envelopment
- 2009-2013 Postdoctoral Research Scholar, University of Montana, Montana Biotechnology Center, Missoula, MT
- 2013-2016 Postdoctoral Research Fellow, University of Colorado School of Medicine, Aurora, CO

Academic Appointments

- 2016-present Assistant Research Professor, Department of Neurology, University of Colorado School of Medicine, Aurora, CO

Teaching

- 2003-2007 Graduate Student Teaching Assistant, Medical Microbiology Laboratory Component of Biological Basis of Disease (BBD 716), Pennsylvania State University College of Medicine, Hershey, PA

Scientific Community Involvement

- 2014-present Treasurer and co-organizer, Colorado Alphaherpesvirus Latency Society
Annual international symposium of ~70 attendees to discuss clinical and scientific advances of alphaherpesvirus latency, reactivation and associated diseases

Selected Awards and Honors

- 1998 Eagle Scout, Boy Scouts of America
- 1999-2002 University Honors (Participant and Scholar), Colorado State University
- 2001 Golden Key National Honor Society, Colorado State University
- 2001-2002 Beckman Scholars Award, Colorado State University
- 2002 Phi Beta Kappa Honor Society, Colorado State University
- 2002 Academic Achievement Award, Colorado State University
- 2013 Postdoctoral Oral Presentation (1st place), Rocky Mountain Branch, American Society for Microbiology
- 2013 Don Gilden Pioneer in NeuroVirology Lectureship Award, Investigator in Training, International Society of NeuroVirology
- 2014 Postdoctoral Oral Presentation (2nd place), Rocky Mountain Branch, American Society for Microbiology

Invited Speaker and Panel Discussant

2015 Fisher Scientific Seminar, University of Colorado School of Medicine, Aurora, CO
 2016 Department of Neurology Research Retreat, University of Colorado School of Medicine, Aurora, CO
 2016 New Investigator Panel Discussant, International Society for NeuroVirology, Toronto, Ontario, Canada
 2017 Biomolecular Sciences Graduate Programs Seminar Series, Boise State University, Boise, ID
 2017 School of Pharmacy, Regis University, Denver, CO

Selected Presentations

2014 Department of Immunology and Microbiology; University of Colorado School of Medicine, Aurora, CO
 2014 American Society of Virology; Colorado State University, Fort Collins, CO
 2016 Rocky Mountain Branch American Society for Microbiology, Regis University, Denver, CO

Editorial Board

2017-present BMC Infectious Diseases, Viral Diseases section; Associate Editor

Invited Reviewer

BMC Infectious Diseases
 Cells
 International Journal of Environmental Research and Public Health
 International Journal of Molecular Sciences
 Journal of General Virology
 Journal of NeuroVirology
 Pathogens
 PLOS Pathogens
 Viruses

Current Funding

NIH - R01 NS093716
 07/01/2015 – 06/30/2020
 Nicholas L. Baird (PI)
 Neurobiology of Varicella Zoster Virus

NIH – R13 AG046051
 04/01/2017 – 03/31/2020
 Randall Cohrs (PI)
 Annual Symposium of the Colorado Alphaherpesvirus Latency Society
 Role: Key Personnel, Treasurer

Completed Funding

NIH - R21 AI099870
 04/01/2012 – 03/31/2014
 Jack Nunberg (PI)
 Molecular Determinants of Host-cell Interactions Required for Arenavirus Replication
 Role: Key Personnel

NIH - T32 NS007321
 07/01/2010 – 06/30/2015
 Don Gilden (PI)
 Neurovirology-Molecular Biology Training Grant
 Role: Postdoctoral Fellow (07/01/2013 – 06/30/2016)

Publications

1. Turner, J., Turner, O.C., **Baird, N.**, Orme, I.M., Wilcox, C.L., Baldwin, S.L. 2003. Influence of increased age on the development of herpes stromal keratitis. *Exp. Gerontol.* 38:1205-1212.
2. Spector, D. J., Johnson, J.S., **Baird, N.L.**, Engel, D.A. 2003. Adenovirus type 5 DNA-protein complexes from formaldehyde cross-linked cells early after infection. *Virology* 312:204-212.
3. **Baird, N. L.**, Yeh, P.C., Courtney, R.J., Wills, J.W. 2008. Sequences in the UL11 tegument protein of herpes simplex virus that control association with detergent-resistant membranes. *Virology* 374:315-321.
4. **Baird, N. L.**, Hughes, D.J., Wills, J.W. 2010. Myristylation and palmitoylation of HSV-1 UL11 are not essential for its function. *Virology* 397:80-88.
5. Harper, A. L., Meckes Jr., D.G., Marsh, J.A., Ward, M.D., Yeh, P.C., **Baird, N.L.**, Wilson, C.B., Semmes, O.J., Wills, J.W. 2010. Interaction domains of the UL16 and UL21 tegument proteins of herpes simplex virus. *J. Virol.* 84(6):2963-2971.
6. Han, J., Chadha, P., Meckes Jr., D.G., **Baird, N.L.**, Wills, J.W. 2011. Interaction and interdependent packaging of tegument protein UL11 and glycoprotein E of herpes simplex virus. *J. Virol.* 85(18):9437-9446.
7. **Baird, N. L.**, York, J., Nunberg, J.H. 2012. Arenavirus infection induces discrete cytosolic structures for RNA replication. *J. Virol.* 86(20):11301-11310.
8. **Baird, N. L.**, Yu, X., Cohrs, R.J., Gilden, D. 2013. Varicella zoster virus (VZV)-human neuron interaction. *Viruses* 5(9):2106-15.
9. **Baird, N. L.**, Bowlin, J.L., Cohrs, R.J., Gilden, D., Jones, K.L. 2014. Comparison of VZV RNA sequences in human neurons and fibroblasts. *J. Virol.* 88(10):5877-5880.
10. **Baird, N. L.**, Bowlin, J.L., Yu, X., Jonić, S., Haas, J., Cohrs, R.J., Gilden, D. 2014. Varicella zoster virus DNA does not accumulate in infected human neurons. *Virology* 458-459:1-3.
11. Nagel, M. A., James, S.F., Traktinskiy, I., Wyborny, A., Choe, A., Rempel, A., **Baird, N.L.**, Gilden, D. 2014. Inhibition of pSTAT1 nuclear translocation and antiviral protein expression in human brain vascular adventitial fibroblasts infected with varicella zoster virus. *J. Virol.* 88(19):11634-11637.
12. **Baird, N. L.**, Bowlin, J.L., Hotz, T.J., Cohrs, R.J., Gilden, D. 2015. Interferon-gamma prolongs survival of varicella zoster virus-infected human neurons *in vitro*. *J. Virol.* 89(14):7425-7427.
13. Gilden, D., Nagel, M., Cohrs, R., Mahalingam, R., **Baird, N.** 2015. Varicella zoster virus in the nervous system. *F1000Research*, 4(F1000 Faculty Rev):1356, doi: 10.12688/f1000research. 7153.1.
14. Blauth, K., Soltys, J., Matschulat, A., Reiter, C.R., Ritchie, A., **Baird, N.L.**, Bennett, J.L., Owens, G.P. 2015. Antibodies produced by clonally expanded plasma cells in multiple sclerosis cerebrospinal fluid cause demyelination of spinal cord explants. *Acta Neuropathologica* 130(6):765-781.
15. Henderson, H. H., Timberlake, K.B., Austin, Z.A., Badani, H., Sanford, B., Tremblay, K., **Baird, N.L.**, Jones, K., Rovnak, J., Fietze, S., Gilden, D., Cohrs, R.J. 2016. Occupancy of RNA polymerase II (S5P) and RNA polymerase II (S2P) on VZV genes 9, 51 and 66 is independent of transcript abundance and polymerase location within the gene. *J. Virol.* 90(3):1231-1243.
16. Cohrs, R. J., Badani, H., Bos, N., Scianna, C., Hoskins, I., **Baird, N.L.**, Gilden, D. 2016. Alphaherpesvirus DNA replication in dissociated human trigeminal ganglia. *J. Neurovirol.* 22(5):688-694.
17. Keller, A. C., Badani, H., McClathey, P.M., **Baird, N.L.**, Bowlin, J.L., Bouchard, R., Perng, G.C., Reusch, J.E.B., Kaufer, B.B., Gilden, D., Shahzad, A., Kennedy, P.G.E., Cohrs, J.R. 2016. Varicella zoster virus infection of human fetal lung cells alters mitochondrial morphology. *J. Neurovirol.* 22(5):674-682.
18. Cohrs, R.J., Badani, H., **Baird, N.L.**, White, T.M., Sanford, B., Gilden, D. 2017. Induction of varicella zoster virus DNA replication in dissociated human trigeminal ganglia. *J. Neurovirol.* 23(1):152-157.
19. Cohrs, R.J., Lee, K.S., Beach, A., Sanford, B., **Baird, N.L.**, Como, C., Graybill, C., Jones, D., Tekeste, E., Ballard, M., Chen, X., Yalacki, D., Fietze, S., Jones, K., Lenac Rovis, T., Jonjic, S., Haas, J., Gilden, D. 2017. Targeted genome sequencing reveals varicella-zoster virus open reading frame 12 deletion. *J. Virol.* 91(20):e01141-17.
20. **Baird, N.L.**, Cohrs, R.J. 2017. Alphaherpesvirus latency society symposium. *J. Neurovirol.* 23(4):642-655.
21. Como, C.N., Pearce, C.M., Cohrs, R.J., **Baird, N.L.** 2018. Interleukin-6 and type 1 interferons inhibit varicella zoster virus replication in human neurons. *Virology*. 522: 13-18.
22. Bubak, A.N., Como, C.N., Blackmon, A.M., Fietze, S., Mescher, T., Jones, D., Cohrs, R.J., Paucek, P., **Baird, N.L.**, Nagel, M.A. 2018. Varicella zoster virus induces nuclear translocation of the neurokinin-1 receptor, promoting lamellipodia formation and viral spread in spinal astrocytes. *J. Infect. Dis.* 218:1324-1335.

Book Chapter

1. **Baird, N. L.**, Bowlin, J.L., Nagel, M.A., Gilden, D. 2016. Varicella zoster virus. In: Antimicrobial Therapy and Vaccines, 3rd Edition, (V.L. Yu, R. Weber, D. Raoult, eds.), ESun Technologies LLC, Pittsburgh, PA.