

CURRICULUM VITAE**ANNA Y. KLINTSOVA, PH.D.**

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CURRENT APPOINTMENT:

September 2018 PROFESSOR, Department of Psychological and Brain Sciences,
University of Delaware

EDUCATION:

Ph.D. (Candidate of Science)	Feb. 1992	Department of Medicine Moscow State University of Friendship between Nations Moscow, Russia	Neuroscience, Neuroanatomy
B.S.	June 1980	Biology Department, Moscow State University Moscow, Russia	Physiology, Histology & Cytology
B.S.	June 1989	Moscow State Institute of Foreign Languages, Moscow, Russia	English

PROFESSIONAL EMPLOYMENT AND EXPERIENCE:

September 2018 - Present PROFESSOR, Department of Psychological and Brain Sciences,
 Director of Behavioral Neuroscience Area, DE Neuroscience COBRE Co-Director
University of Delaware

September 2010 – August 2018 ASSOCIATE PROFESSOR, Department of Psychological and Brain Sciences
University of Delaware

September 2004 – August 2010 ASSISTANT PROFESSOR, Psychology Department, **University of Delaware**

September 2002 – August 2004 ASSISTANT PROFESSOR, Department of Psychology,
SUNY - Binghamton University

January 1995 – August 2002 RESEARCH ASSISTANT PROFESSOR, Associate Director of the Fetal
 Alcohol Study Group, Laboratory of Dr. W.T. Greenough,
University of Illinois at Urbana-Champaign, Beckman Institute

August 1993 - RESEARCH ASSOCIATE IN NEUROBIOLOGY

- December 1994** Laboratory of Dr. Peter C. Brunjes, Department of Psychology, **University of Virginia**
- January 1993 - August 1993** POSTDOCTORAL RESEARCH FELLOW
(**International Brain Research Organization Fellowship**)

Lab. Dr. William B Levy & Dr. Nancy L Desmond
Department of Neurosurgery, **University of Virginia**
- March 1985 - January 1993** RESEARCH ASSOCIATE
Laboratory of Clinical Neuromorphology, **National Research Center of Mental Health, Russian Academy of Medical Sciences**, Moscow
Completed thesis "Synaptic Plasticity in the Dopaminergic Brain Areas under the Chronic Effect of Amphetamine and Haloperidol" and received PhD degree
- 1980-1985** RESEARCH ASSOCIATE
Neuroscience Lab, MIRA, Russian Academy of Sciences, Moscow, Russia

RESEARCH INTERESTS:

- Brain plasticity (neuronal, synaptic and glia) in normal and damaged state
- Developmental alcohol exposure and potential therapeutic approaches: animal models
- Quantitative neuroanatomy and morphology

FELLOWSHIPS AND AWARDS

- 1993 International Brain Research Organization, Postdoctoral Research Training Fellowship
- 1993 Women in Neuroscience Travel Award
- 1997 Neurobehavioral Teratology Society, Award for Excellence in Research
- 1997 Winter Conference for Brain Research, Fellowship Award
- 2004 ISBRA Travel Award, to present a paper at 12th World Congress on Biological Alcohol Research
- 2006 William Evans Visiting Fellow, annual award from the University of Otago, Dunedin, New Zealand, to visit and work in the University for 2 months
- 2007 Grant from the Faculty of Arts Endowment Fund, University of Manitoba, to give a lecture in Psychology Department and at the Manitoba Institute of Child Health
- 2018 Delaware's 2018 Neuroscientist of the Year
- 2021 **Fulbright Scholar Award**
- 2020 NIH Center for Scientific Review, AA 4 Study Section, Member (2020-2024)
- 2021 Stage 2/Editorial Board reviewer for the NIH Director's New Innovator Award (DP2) Program.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Society for Neuroscience
- Research Society on Alcohol
- International Brain Research Organization
- International Society for Biomedical Research on Alcoholism
- Neurobehavioral Teratology Society
- FASDSG (Fetal Alcohol Spectrum Disorders Study Group)

Electron Microscopy Society of America
 Women in Neuroscience
 Faculty for Undergraduate Neuroscience

CURRENT SUPPORT

1. Project/Proposal Title: **"Hippocampal-thalamo-prefrontal circuitry damage and therapeutic intervention in a model of FASD"**
 Type: R01 -- R01AA027269 Role: PI
 Source of Support: NIH/NIAAA Dates: 09/01/2019 - 08/31/2024
 Total Award Amount: \$1,988,814
2. Project/Proposal Title: **"DE Neuroscience Center COBRE"** Phase III
 Type: P30 – P30GM145765 Role: Co-PI (with Dr. M. Harrington at DE State University)
 Source of Support: NIH/NIGMS Dates: 09/01/2022 - 08/31/2027
 Total Award Amount: \$2,078,703

PAST SUPPORT

1. Project Title: **"Hippocampal-thalamo-prefrontal circuitry damage in an animal model of FASD"**
 Type: R21 -- R21AA026613 Role: PI
 Source of Support: NIH/NIAAA Dates: 09/28/2018 – 08/31/2020
 Total Award Amount (UD): \$250,000

PUBLISHED SCHOLARLY WORK

I. PUBLICATIONS IN PEER REVIEWED JOURNALS (H-index = 37 per Google Scholar)

1. Milbocker KA, Williams LT, Caban-Rivera DA, Smith IF, Kurtz S, McGarry MDJ, Wattrisse B, Van Houten EEW, Johnson CL, **Klintsova AY** (2024) Magnetic resonance elastography captures a transient benefit of exercise intervention on forebrain stiffness in a rat model of fetal alcohol spectrum disorders. *Alcohol: Clinical & Experimental Research*, 00, 1-12. Available from: <https://doi.org/10.1111/acer.15265> (IF = 3.5)
2. Milbocker KA, Smith IF, **Klintsova AY** (2023) Maintaining a Dynamic Brain: A Review of Empirical Findings Describing the Roles of Exercise, Learning, and Environmental Enrichment in Neuroplasticity from 2017-2023. *Brain Plasticity*, Pre-press, pp. 1-21, 2023 DOI: 10.3233/BPL-230151
3. Milbocker KA, Smith IF, Brengel EK, LeBlanc GL, Roth TL, **Klintsova AY** (2023) Exercise in Adolescence Enhances Callosal White Matter Refinement in the Female Brain in a Rat Model of Fetal Alcohol Spectrum Disorders. *Cells*, 12(7):975. DOI: [10.3390/cells12070975](https://doi.org/10.3390/cells12070975) (IF = 6.0)
4. Smith IF, Gursky ZH, **Klintsova AY** (2022) Representation of prefrontal axonal efferents in the thalamic nucleus reuniens in a rodent model of fetal alcohol exposure during third trimester. *Front Behav Neurosci*. 2022 Sep 8;16:993601. doi: 10.3389/fnbeh.2022.993601 (IF = 3.6)
5. Milbocker KA, LeBlanc GL, Brengel EK, Hekmatyar KS, Kulkarni P, Ferris CF, **Klintsova AY** (2022) Reduced and delayed myelination and volume of corpus callosum in an animal model of Fetal Alcohol Spectrum Disorders partially benefit from voluntary exercise. *Scientific Reports*, 2022, 12: 10653. doi.org/10.1038/s41598-022-14752-3 (IF = 5.0)
6. Gursky ZH, Klintsova AY (2022) Rat Model of Late Gestational Alcohol Exposure Produces Similar Life-Long Changes in Thalamic Nucleus Reuniens Following Moderate- Versus High-Dose Insult, *Alcohol and Alcoholism*, 57(4), 413-420, <https://doi.org/10.1093/alcalc/agac008> (IF = 3.9)
7. Milbocker KA, Campbell TS, Collins N, Kim S, Smith IF, Roth TL, **Klintsova AY** (2021) Glia-Driven Brain Circuit Refinement Is Altered by Early-Life Adversity: Behavioral Outcomes. *Front. Behav. Neurosci*. 15:786234. doi: 10.3389/fnbeh.2021.786234 (IF = 3.6)

8. Gursky ZH, Savage LM, **Klintsova AY** (2021) Executive functioning-specific behavioral impairments in a rat model of human third trimester binge drinking implicate prefrontal-thalamo-hippocampal circuitry in Fetal Alcohol Spectrum Disorders. **Behav Brain Res.** 2021 May 7;405: 113208. doi: 10.1016/j.bbr.2021.113208. Epub 2021 Feb 25. PMID: 33640395 (IF = 3.3)
9. Gursky ZH, **Klintsova AY**. (2021) Changes in Representation of Thalamic Projection Neurons within Prefrontal-Thalamic-Hippocampal Circuitry in a Rat Model of Third Trimester Binge Drinking. **Brain Sci.** 2021 Mar 4;11(3):323. doi: 10.3390/brainsci11030323. PMID: 33806485 (IF = 3.2)
10. Milbocker KA, **Klintsova AY** (2020) Examination of cortically projecting cholinergic neurons following exercise and environmental intervention in a rodent model of fetal alcohol spectrum disorders. **Birth Defects Res.** Nov 10. doi: 10.1002/bdr2.1839. Online ahead of print. PMID: 33174398
11. Savage LM, Nunes PT, Gursky ZH, Milbocker KA, **Klintsova AY** (2020) Midline Thalamic Damage Associated with Alcohol-Use Disorders: Disruption of Distinct Thalamocortical Pathways and Function. **Neuropsychol Rev.** Aug 12. doi: 10.1007/s11065-020-09450-8. Online ahead of print. PMID: 32789537.
12. Gursky ZH, Johansson JR, **Klintsova AY** (2020) Postnatal alcohol exposure and adolescent exercise have opposite effects on cerebellar microglia in rat. **Int J Dev Neurosci.** Jul 18. doi: 10.1002/jdn.10051. Online ahead of print. PMID: 32681672.
13. Gursky ZH, Spillman EC, **Klintsova AY** (2020) Single-day Postnatal Alcohol Exposure Induces Apoptotic Cell Death and Causes long-term Neuron Loss in Rodent Thalamic Nucleus Reuniens. **Neuroscience**, 435:124-134. doi: 10.1016/j.neuroscience.2020.03.046. PMID: 32251710.
14. Gursky ZH, Savage LM, **Klintsova AY** (2019) Nucleus reuniens of the midline thalamus of a rat is specifically damaged after early postnatal alcohol exposure. **Neuroreport**, Jul 3; 30(10): 748-752. PMID: 31095109. [Article is featured on the journal's cover].
15. **Klintsova AY**, Hamilton DA, Mooney SM, Petrenko CLM (2019) Proceedings of the 2018 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. **Alcohol**, Jun; 69:47-55. doi: 10.1016/j.alcohol.2019.05.005.PMID: 31173861.
16. Wozniak JR, **Klintsova AY**, Hamilton DA, Mooney SM (2018) Proceedings of the 2017 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. **Alcohol**, Dec; 81:7-14. doi: 10.1016/j.alcohol.2017.10.007. Review.PMID: 29550584.
17. Boschen KE, Keller SM, Roth TL, **Klintsova AY** (2018) Epigenetic mechanisms in alcohol- and adversity-induced developmental origins of neurobehavioral functioning. **Neurotoxicol Teratol.**, 66: 63-79. PMID: 29305195, PMCID: PMC5856624.
18. Ruggiero MJ, Boschen KE, Roth TL, **Klintsova AY** (2018) Sex differences in early microglial colonization of the developing rat hippocampus following a single-day alcohol exposure. **J Neuroimmune Pharmacol.**, 13:189-203. <https://doi.org/10.1007/s11481-017-9774-1> PMID: 29274031
19. Medina AE, Wozniak JR, **Klintsova AY**, Hamilton DA (2017) Proceedings of the 2016 annual meeting of the Fetal Alcohol Spectrum Disorders Study Group. **Alcohol**, 65, 19-24. PMID: 29084625
20. Boschen KE, **Klintsova AY** (2017) Disruptions to Hippocampal Adult Neurogenesis in Rodent Models of FASD. **Neurogenesis**, 4: 1, e1324259, DOI: 10.1080/23262133.2017.1324259.
21. Gursky ZH, **Klintsova AY** (2017) Wheel Running and Environmental Complexity as a Therapeutic Intervention in an Animal Model of FASD. **Journal of Visual Experiments**, e54947, DOI:10.3791/54947 PMID: 28190057
22. Boschen KE, McKeown SE, Roth TL, **Klintsova AY** (2017) Impact of exercise and a complex environment on hippocampal morphology, Bdnf gene expression and DNA methylation in male rat pups neonatally exposed to alcohol. **Dev Neurobiology**, 77(6): 708-725 DOI: 10.1002/dneu.22448. [Epub 2016].
23. Boschen KE, Ruggiero MJ, **Klintsova AY** (2016) Neonatal binge alcohol exposure increases microglia activation in the developing rat hippocampus. **Neuroscience**, 324:355-366. PMID: 26996510
24. Valenzuela CF, Medina AE, Wozniak JR, **Klintsova AY** (2016) Proceedings of the 2015 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. **Alcohol**, 50, 37-42. PMID: 26695590
25. Hamilton GF, Criss K, **Klintsova AY** (2015) Voluntary Exercise Partially Reverses Neonatal Alcohol-Induced Deficits in mPFC Layer II/III Dendritic Morphology of Male Adolescent Rats. **Synapse**, 69(8), 405-415. PMID: 25967699
26. Boschen KE, Criss KJ, Palamarchouk V, Roth TL, **Klintsova AY** (2015) Effects of developmental alcohol exposure vs. intubation stress on BDNF and TrkB expression in the hippocampus and prefrontal cortex of neonatal rats. **Int J Dev Neurosci**, 43: 16-24. PMID: 25805052
27. Boschen KE, Hamilton GF, Delorme JE, **Klintsova AY** (2014) Activity and Social Behavior in a Complex Environment in Rats Neonatally Exposed to Alcohol. **Alcohol**, 48(6):533-41. PMID: 25150044
28. Hamilton GF, Jablonski SA, Schuffino FL, St Cyr SA, Stanton ME, **Klintsova AY** (2014) Exercise and environment as an intervention for neonatal alcohol effects on hippocampal adult neurogenesis and learning. **Neuroscience**, 265; 274-290. PMCID: PMC4005875

29. Wagner JL, [Klintsova AY](#), Greenough WT, Goodlett CR (2013) Rehabilitation training using complex motor learning rescues deficits in eyeblink classical conditioning in female rats induced by binge-like neonatal alcohol exposure. *Alcohol Clin Exp Res*. 37(9):1561-70. PMID: 23647404
30. [Klintsova AY](#), Hamilton, GF, Boschen, KE (2013) Long-Term consequences of Developmental Alcohol Exposure on Brain Structure and Function: Therapeutic Benefits of Physical Activity. *Brain Sci*. 3, 1-38; doi:10.3390/brainsci3010001
31. Schreiber, W.B., St. Cyr, S.A. Jablonski, S.A., Hunt, P.S., [Klintsova, A.Y.](#), Stanton, M.E. (2013) Effects of Exercise and Environmental Complexity on Deficits in Trace and Contextual Fear Conditioning Produced by Neonatal Alcohol Exposure in Rats. *Developmental Psychobiology* 55(5):483-95. PMID:22644967
32. Murawski, N.J., [Klintsova, A.Y.](#), Stanton, M.E. (2012) Neonatal alcohol exposure and the hippocampus in developing male rats: effects of behaviorally induced CA1 c-Fos expression, CA1 pyramidal cell number and contextual fear conditioning, *Neuroscience*, 206:89-99.
33. Hamilton GF, Boschen KE, Goodlett CR, Greenough WT, [Klintsova AY](#) (2012) Housing in Environmental Complexity Following Wheel Running Augments Survival of Newly-Generated Hippocampal Neurons in a Rat Model of Binge Alcohol Exposure during the Third Trimester Equivalent. *Alcohol Clin Exp Res* 36(7):1196-2042. PMID: PMC4543282
34. Hamilton GF, Murawski NJ, St. Cyr SA, Jablonski SA, Schiffrino FL, Stanton ME , [Klintsova AY](#). (2011) Neonatal alcohol exposure disrupts hippocampal neurogenesis and contextual fear conditioning in adult rats. *Brain Research*, 1412: 88-101.
35. Vetreno RP, [Klintsova AY](#) and Savage LM (2011) Stage-dependent alterations of progenitor cell proliferation and neurogenesis in an animal model of Wernicke-Korsakoff syndrome. *Brain Research*, 1391:132-46.
36. Hamilton GF, Whitcher LT and [Klintsova AY](#) (2010) Postnatal binge-like alcohol exposure decreases dendritic complexity while increasing the density of mature spines in mPFC layer III pyramidal neurons. *Synapse*, 64:127-135.
37. Helfer, JL, Goodlett, CR, Greenough, WT, [Klintsova, AY](#). (2009) The Effects of Exercise on Adolescent Hippocampal Neurogenesis in a Rats Model of Binge Alcohol Exposure During the Brain Growth Spurt. *Brain Research*, 1294: 1-11.
38. Helfer JL, Calizo LH, Dong WK, Goodlett CR, Greenough WT, [Klintsova AY](#) (2009) Binge-like Postnatal Alcohol Exposure Triggers Cortical Gliogenesis in Adolescent Rats. *Journal of Comparative Neurology*, 514(3): 259-271.
39. Whitcher LT, [Klintsova AY](#). (2008) Postnatal binge-like alcohol exposure reduces spine density without affecting dendritic morphology in rat mPFC. *Synapse*, 62(8):566-73.
40. [Klintsova AY](#); Helfer JL; Calizo LH; Dong WK; Goodlett CR; Greenough WT. (2007) Persistent impairment of hippocampal neurogenesis in young adult rats following early postnatal alcohol exposure. *Alcohol Clin Exp Res*, 31(12): 2073-2082.
41. [Klintsova AY](#), Helfer JL, Goodlett CR, Greenough WT (2007) Neurogenesis in adult hippocampus: Postnatal alcohol and adult exercise effects. In: Structural, functional, neurochemical and immunochemical aspects of brain plasticity and asymmetry. Ed: Illarionov SN. Ikar, Moscow, pp. 300-304
42. Uranova NA, Vikhрева OV, Zimina IS, Rakhmanova VI, [Klintsova AY](#), Black J, Greenough WT, Orlovskaya DD (2007) Abnormal patterns of cortical synaptic connectivity in schizophrenia. *Vestn Ross Akad Med Nauk*. 3:8-14 (in Russian).
43. Savage LM, Roland J, [Klintsova A](#). (2007) Selective septohippocampal – but not forebrain amygdalar – cholinergic dysfunction in diencephalic amnesia. *Brain Research*, 1139:210-219.
44. Roegge CS, Morris JR, Villareal S, Wang VC, Powers BE, [Klintsova AY](#), Greenough WT, Pessah IN, Schantz SL. (2006) Purkinje cell and cerebellar effects following developmental exposure to PCBs and/or MeHg. *Neurotoxicol Teratol*. 28(10), 74-85.
45. Guerri C, Pascual M, Garcia-Minguillan MC, Charness ME, Wilkemeyer MF, [Klintsova AY](#), Goodlett CR, Greenough WT, Sakata-Haga H, Dominguez HD, Thomas JD (2005) Fetal Alcohol Effects: Potential Treatments from Basic Science. *Alcohol Clin Exp Res*, 29(6): 1074-1079.
46. [Klintsova AY](#), Dickson E, Yoshida R, Greenough WT (2004) Altered expression of BDNF and its high-affinity receptor TrkB in response to complex motor learning and moderate exercise. *Brain Research*, 1028(1):92-104.
47. Briones TL, [Klintsova AY](#), Greenough WT (2004) Stability of synaptic plasticity in the adult rat visual cortex induced by complex environmental exposure. *Brain Research*, 1018: 130-135.
48. Weiler IJ, Spangler CC, [Klintsova AY](#), Grossman AW, Kim SH, Bertaina-Anglade V, Khaliq H, de Vries FE, Lambers FA, Hatia F, Base CK, Greenough WT (2004) Fragile X mental retardation protein is necessary for neurotransmitter-activated protein translation at synapses. *Proc Natl Acad Sci U S A*, 101 (50):17504-9.
49. Black J, Kodish IM, Grossman AW, [Klintsova AY](#), Orlovskaya DD, Vostrikov V, Uranova N, Greenough WT. (2004) Quantitative Pathology of Layer V Pyramidal Neurons in Schizophrenic Prefrontal Cortex. *Am J of Psychiatry*, 161(4):742-4.
50. Roegge CS, Wang VC, Powers BE, [Klintsova AY](#), Villareal S, Greenough WT, Schantz SL. (2004) Motor Impairment in Rats Exposed to PCBs and Methylmercury During Early Development. *Toxicol Sci*, 77(2):315-24.
51. F. Angenstein, R.E. Settlege, J.E. Kacharina, S.T. Moran, S.-C. Ling, [A. Klintsova](#), J. Eberwine, D.F. Hunt, W.T. Greenough. RACK1, a receptor for activated C kinase, links metabotropic glutamate receptor activation with dendritic translational control. (2002) *J Neurosci*, 22(20):8827-37.

52. **Klintsova AY**, Scamra C., Hoffman M., Goodlett CR., Napper RMA and WT. Greenough. Therapeutic effect of complex motor skill learning on binge-like postnatal alcohol-induced motor performance deficits: II. Quantitative Study of Synaptic Plasticity Using Unbiased Stereology. (2002) *Brain Research*, 937, p. 83-93.
53. J.D.Churchill, A.W.Grossman, S.A.Irwin, R.Galvez, **A.Y.Klintsova**, I.J.Weiler, W.T.Greenough. (2002) A Converging-Methods Approach to Fragile X Syndrome. *Dev. Psychobiol*, 40:323-338.
54. Greenough, W.T., **Klintsova, A.Y.**, Irwin, S.A., Galvez, R., Bates, K.E., and Weiler, I.J. (2001) Synaptic regulation of protein synthesis and the fragile X protein. *Proc Natl Acad Sci U S A*, 98: 7101-7106.
55. E.P.Riley, J.D. Thomas, C.R.Goodlett, **A.Y.Klintsova**, W.T.Greenough, B.L.Hungund, F.Zhou, Y.Sari, T.Powrozek, T.-K.Li. (2001) Fetal Alcohol Effects: Mechanisms and Treatment. *Alcohol Clin Exp Res*, v.25, 5, 110S-116S.
56. Magin RL, Lee JK, **Klintsova A**, Carnes KI, Dunn F. Biological effects of long-duration, high-field (4 T) MRI on growth and development in the mouse. *J Magn Reson Imaging*. 2000 Jul;12(1):140-9. doi: 10.1002/1522-2586(200007)12:1 PMID: 10931573
57. **A.Y.Klintsova**, C.R.Goodlett, W.T.Greenough. (1999) Therapeutic motor training ameliorates cerebellar effects of postnatal binge alcohol. *Neurotoxicology and Teratology*, 22, 125-132.
58. **A.Y.Klintsova**, W.T.Greenough. (1999) Synaptic plasticity in cortical systems. *Current Opinions in Neurobiology*, v.9, p.203-208. PMID: 10322189
59. T.A. Jones, N. Hawrylak, **A.Y. Klintsova**, W.T. Greenough. (1998) Brain Damage, Behavior, Rehabilitation, Recovery, and Brain Plasticity. *Mental Retardation and Developmental Disabilities Research Reviews*, 4, 231-237.
60. **A.Y. Klintsova**, R.M. Cowell, R.A. Swain, R.M.A. Napper, C.R. Goodlett, W.T.Greenough. (1998) Therapeutic effect of complex motor skill learning on binge-like postnatal alcohol-induced motor performance deficits: I. Behavioral results. *Brain Research*, 800(1), p. 48-61.
61. N.S.Waters, **A.Y.Klintsova**, T.C.Foster. (1997) Insensitivity of the hippocampus to environmental stimulation during postnatal development. *J. Neuroscience*, 17(20), p. 7967-7973.
62. **A.Y.Klintsova**, J.T.Matthews, C.R.Goodlett, R.M.A.Napper, W.T.Greenough. (1997) Therapeutic motor training increases parallel fiber synapse number per Purkinje neuron in cerebellar cortex of rats given postnatal binge alcohol exposure: Preliminary report. *Alcohol Clin Exp Res*, v.21, No. 7, 1257-1263.
63. I.J.Weiler, S.A.Irwin, **A.Y.Klintsova**, C.M.Spencer, A.D.Brazelton, K.Miyashiro, T.A.Comery, B.Patel, J.Eberwine, W.T. Greenough. (1997) Fragile X mental retardation protein is translated near synapses in response to neurotransmitter activation. *Proc. Natl. Acad. Sci. USA*, 94, p.5395-5400.
64. T.A.Jones, **A.Y.Klintsova**, V.L.Kilman, A.M.Sirevaag, W.T.Greenough. (1997) Induction of multiple synapses by experience in the visual cortex of adult rats. *Neurobiology of Learning and Memory*, 68, p.13-20.
65. **Klintsova A.Y.**, Levy W.B., Desmond N.L. (1995) Astrocytic volume fluctuates in the hippocampal CA1 region across the estrous cycle. *Brain Research*, 690, p. 269-274.
66. **Klintsova A.Y.**, Philpot B.D., Brunjes P.C. (1995) Expression of *c-fos* in pre- and postnatal development of the rat olfactory bulb. *Dev. Brain Research*, v.86, pp.114-122.
67. Philpot B.D., **Klintsova A.Y.**, Brunjes P.C. (1995) Oligodendrocyte/Myelin-Immunoreactivity in the developing olfactory system. *Neuroscience*, v.67, 4, pp.1009-1019.
68. Uranova, N.A., Orlovskaya, D.D., Apel, K., **Klintsova, A.Yu.**, Haselhorst, U., Schenk, H. (1991) Morphometric study of synaptic patterns in the rat caudate nucleus and hippocampus under haloperidol treatment. *Synapse*, v.7, pp.253-259.
69. Burbaeva, G.S., Androsova, L.V., **Klintsova, A.Yu.** (1988) The influence of Psychotropic Drugs on the Brain Tubulin. *J.of Neuropath. & Psychiat.*, v.88, 5 (in Russ.).
70. **Klintsova, A.Yu.**, Uranova, N.A., Schenk, H. and Haselhorst U. (1990) Synaptic Plasticity in Rat's Medial Prefrontal Cortex under Chronic Haloperidol Treatment Produced Behavioral Sensitization. *J. Hirnforsch.*, v.31, 2 (in Engl.), 175-179.
71. Uranova, N.A., **Klintsova, A.Yu.**, Schenk, H. and Haselhorst U. (1989) The effects of Amphetamine on Synaptic Plasticity in Rat's Medial Prefrontal Cortex. *J. Hirnforsch.*, v.30, 1 (in Engl.),45-50.
72. **Klintsova, A.Yu.**, Uranova, N.A., Schenk, H., Haselhorst, U. and Istomin, V.V. (1989) The effects of Haloperidol on Synaptic Plasticity in Rat's Medial Prefrontal Cortex. *J.Hirnforsch.*, v.30, 1 (in Engl.), 51-57.
73. **Klintsova, A.Yu.**, Uranova, N.A. (1987) The effects of Haloperidol on the Ultrastructure of some structures of Dopaminergic system of the brain. *J. of Neuropath. & Psychiat.*, v.87, 7 (in Russ.).
74. **Klintsova, A.Yu.**, Uranova, N.A., Schenk, H. and Haselhorst U. (1986) Ultrastructure of the synapses in Tuberculum olfactorium under the haloperidol treatment. In: *Scientific publications of the Institute of Brain, Acad. Med. Sci. USSR*, (in Russ.).
75. Uranova, N.A., and **Klintsova, A.Yu.** (1986) Ultrastructure of the synapses of Helix pomatia ganglions. *Arch. anat., histol. and embryol.*, v.5 (in Russ.)

II. BOOK CHAPTERS:

1. Z.H. Gursky and **A.Y. Klintsova**. Frontal Lobe Dysfunction after Developmental Alcohol Exposure - Implications from Animal Models. Chapter 15, pp 139-148. In: R.R. Watson and S.Zibadi "Addictive Substances and Neurological Disease", Academic Press, Elsevier, Inc., 2017.
2. K.E.Boschen and **A.Y.Klintsova**. Neurotrophins in the Brain: Interaction with Alcohol Exposure during Development. In: G. Litwack, Ed., "Vitamins and Hormones", v. 104 "Neurotrophins", pp 197-242. Academic Press/Elsevier, 2017. PMID: 28215296
3. W.T. Greenough, J.E. Black, **A.Y. Klintsova**, K.E. Bates, I.J. Weiler. Experience and Plasticity in Brain Structure: Possible Implications of Basic Research Findings for Developmental Disorders. In: S.H. Broman and J. M. Fletcher, Eds., "Neurobehavioral Consequences of Early Brain Disorders", Oxford University Press, 1999.

III. ABSTRACTS – CONFERENCE PRESENTATIONS (* - undergraduate student)

1. KA Milbocker, LT Williams, AO Wronski*, ED Zarate*, M Grogin*, H Schwarb, **AY Klintsova**, CL Johnson. Magnetic resonance elastography captures subtle changes in hippocampal CA1 stiffness between phases of the rat estrous cycle. Poster submitted to International Society for Magnetic Resonance in Medicine Conference, Singapore, May 2024.
2. I.F. Smith; L.T. Williams; K.A. Milbocker; D.A. Caban-Rivera; S. Kurtz; M.D.J. McGarry; E.E.W. Van Houten; C.L. Johnson; A. Y. **Klintsova**. Running and environmental complexity as a means of ameliorating the impact of neonatal alcohol exposure on alterations to brain structure and elasticity. Poster presented at the Research Society on Alcohol Annual Meeting, June 2023, Bellevue, Washington.
3. K. A. Milbocker; L.T. Williams; I.F. Smith; D.A. Caban-Rivera; S Kurtz; M.D.J. McGarry; E.E.W. Van Houten; C.L. Johnson; **A. Y. Klintsova**. Exercise Intervention in Adolescence Mitigates Alterations to Adolescent Forebrain Elasticity in Female Rats Exposed to Alcohol During the Brain Growth Spurt. Poster presented at the Research Society on Alcohol Annual Meeting, June 2023, Bellevue, Washington. – *Recipient of postdoctoral Enoch Gordis Award, top award of the Society.*
4. S. Kim, J. J. Stout, H.L. Rosenblum, **A.Y. Klintsova**, A.L. Griffin. Reduced prefrontal-hippocampal oscillatory synchrony in a rat model of FASD. Poster presented at the Research Society on Alcohol Annual Meeting, June 2023, Bellevue, Washington.
5. I. F. Smith, S. C. Gustafson, M. J. Grogin*, **A. Y. Klintsova**. Running And Environmental Complexity as a Means of Ameliorating the Impact of Neonatal Alcohol Exposure on Alterations to Axonal Representation in the Prefrontal-Reuniens-Hippocampal Circuit. Poster presented at the Annual Meeting of the Society for Neuroscience, November 2023, Washington, DC.
6. S. C. Gustafson, I. F. Smith, M. J. Grogin*, **A. Y. Klintsova**. Investigation of Cell Type-Specific Loss in the Nucleus Reuniens of the Midline Thalamus Following Single-Day Alcohol Exposure in a Rodent Model of FASD. Poster presented at the Annual Meeting of the Society for Neuroscience, November 2023, Washington, DC.
7. S. Kim, J. J. Stout, H.L. Rosenblum, **A.Y. Klintsova**, A.L. Griffin. Alcohol exposure during third trimester equivalent alters prefrontal – hippocampal theta coherence during spatial working memory task in rat. Poster presented at the Annual Meeting of the Society for Neuroscience, November 2023, Washington, DC.

INVITED PRESENTATIONS AND LECTURES 2018-PRESENT (>35 PRIOR TO 2018)

1. 2023 Invited seminar, Dept. of Neuroscience, Univ. of New Mexico, November 16, 2023
2. 2023 Research Society on Alcohol Annual Meeting, Invited Symposium Speaker, June 2023, Bellevue, Washington
3. 2023 Invited talk, Neuroscience Institute, University of Louvain, Brussels (Belgium), April 25, 2023
4. 2023 Invited talk, Vrije Universiteit Brussels (Belgium), April 26, 2023
5. 2023 Invited seminar, Dept. of Psychology, SUNY-Binghamton, NY, February 1, 2023
6. 2022 Invited lecture at the University of Warsaw, Psychology Department, March 9, 2022
7. 2022 Invited talk at the Medical University of Warsaw, Department of Science, March 24, 2022
8. 2022 Invited lecture at Jagiellonian University, Krakow, April 20, 2022
9. 2022 Invited lecture at Sorbonne University, Paris, April 29, 2022
10. 2022 Invited talk at Cambridge, May 10, 2022
11. 2018 Invited seminar, Washington University – St. Louis, March 9, 2018
12. 2018 Invited symposium speaker, INS (International Neuropsychological Society) Meeting – Prague, Czech Republic, July 19, 2018

PROFESSIONAL ACTIVITIES – ORGANIZED SYMPOSIA 2018-PRESENT

2024	Research Society on Alcohol Annual Meeting, Symposium Organizer and Chair, Minneapolis, MN, June 2024
2023	DE Neuroscience Symposium, co-organizer and co-chair, December 2023
2022	DE Neuroscience Symposium, co-organizer and co-chair, October 2022
2019	First UD Neuroscience Symposium, co-organized and co-chair, February 2019

TEACHING (2018-present):

University of Delaware:

Fall 2023	Introduction to Neuroscience Honors (NSCI320-080)
Fall 2022	Advanced Neuroanatomy (NSCI626); Introduction to Neuroscience Honors (NSCI320-080)
Fall 2021	Seminar Neuroplasticity (NSCI633); Introduction to Neuroscience Honors (NSCI320-080)
Fall 2020-Spring 2021	Sabbatical Leave – Fulbright Scholar
Spring 2020:	Seminar Neuroplasticity (NSCI633); Introduction to Neuroscience Honors (NSCI320-080)
Spring 2019:	Advanced Neuroanatomy (NSCI626)

RESEARCH SUPERVISION:

Graduate students (12), undergraduate students (30), Senior Thesis research (15)

Graduate students:

Jennifer Helfer (MS)
 Lee Whitcher (MS)
 Kerry Criss (MS, 2015)
 Michael Ruggiero (MS, 2016)
 Gillian Hamilton (2010-2012) defended her PhD on October 8, 2012
 Karen Boschen (2010-2016) defended her PhD on April 8, 2016
 Zachary Gursky (2014 – 2020) defended his PhD on October 13, 2020
 Katrina Milbocker (2017 – 2022) defended on December 21, 2022
 SuHyeong Kim (PhD, 2019 – current)
 Ian Smith (PhD, 2020-current)
 Eric Brengel (MS, 2021-2022)
 Gillian LeBlanc (MS, 2021-2022)
 Natalie Onesi (MS, 2022 – 2023)
 Sarah Gustafson (MS, 2023-current)
 Casey Bodner (PhD, 2023 – current)

Senior Thesis students (since 2010):

Alejandro Morales (2011-2012) - Neuroscience Undergraduate Senior Thesis: "Effects of neonatal alcohol exposure on synaptic integration of newly born granule cells in the adult dentate gyrus"
 Mia Castiglione (2012-2013) - Neuroscience Undergraduate Senior Thesis: "Effect of voluntary exercise on c-fos expression in the hippocampus of rats exposed to alcohol neonatally"
 James Delorme (2012-2013) - Neuroscience Undergraduate Senior Thesis: "Behavior in a complex environment following voluntary exercise in rats exposed neonatally to alcohol"
 Samuel Modlin (2013-2014) - Neuroscience Undergraduate Senior Thesis: "Effect of neonatal alcohol exposure on c-Fos expression in hippocampal CA3 following exploration of novel context in adolescence"
 Michael Ruggiero (2014-2015) - Neuroscience Undergraduate Senior Thesis: "Effect of PD4-9 alcohol exposure on hippocampal microglial activation in the developing rat brain"
 Sarah McKeown (2014-2015) - Neuroscience Undergraduate Senior Thesis: "Number and morphology of immature neurons in the adult rat dentate gyrus following developmental alcohol exposure"
 Shaqran Shareek (2015-2016) – Neuroscience Undergraduate Senior Thesis: "Apoptosis in the Prefrontal Cortex Following a One Day Binge Ethanol Exposure"

Zubin Hussain (2015-2016) – Neuroscience Undergraduate Senior Thesis: “Effects of Postnatal Day 4 Binge Ethanol Exposure on Hippocampal Cell Proliferation Rate During Early Development”
 Julia Johansson (2016-2018) – UD Science&Engineer Scholar, Neuroscience Senior Thesis defended in Spring, 2018
 Emma Spillman (2016 – 2018) - UD Science&Engineer Scholar, Neuroscience Senior Thesis defended in Spring, 2018
 Natalie Ginn (2016 – 2019) - UD Science&Engineer Scholar, Senior Thesis defended May 14, 2019
 Eric Brengel (2017 – 2021)
 Gillian LeBlanc (2017 – 2021)
 Natalie Onesi (2020 – 2022)
 Sarah Gustafson (2021 – 2023)

SYNERGISTIC ACTIVITIES:

Institutional Service

- CAS Promotion & Tenure Committee (2023-2025)
- CAS Grievance Committee (2023-2025)
- DE Neuroscience Center COBRE Grant Co-PI and Co-Director (UD site) (September 2022 – current)
- Interdisciplinary Neuroscience PhD Program, Co-Chair of the Development Committee (September 2018 – current)
- IACUC, Chair (September 2016 - August 2017)
- IACUC, Member (September 2010 – August 2020)
- Health Science Advisory and Evaluation Committee, Member, 2004 -2014
- International Travel Award Committee, member – Spring 2005
- UD Senior Thesis Program, Member of the Board of Senior Thesis Readers (2010-current)
- Ph.D. thesis committee, Elena Kokkoni (Dept. of Physical Therapy)

Departmental Service

- Behavioral Neuroscience Area director (December 2016 – current)
- Mentor of a tenure-track Assistant Professor, Dr. Jackie Schwarz, 2013 – 2019
- Chair of the faculty (tenure-track) search committee (2011, 2021)
- Faculty Search Committee for Behavioral Neuroscience position (2006, 2008, 2009, 2018)
- Member of the Department Chair search committee, PBS Department (2010, 2013, 2024)

Service to the Scientific Community outside the University of Delaware

- **President of the Fetal Alcohol Spectrum Disorders Study Group (FASDSG)**, 2017-2018; Vice-President 2016-2017; Secretary 2014-2015; Treasurer 2015-2016
- **Brain Plasticity**, editorial board
- NIH (NIAAA) AA-4 1 Neuroscience Review Subcommittee (**standing member**) 2020 - 2024
- NIH Director’s New Innovator Award (*Stage 2/Editorial Board reviewer*) 2021-2022
- NIH 2020/01 ZRG1 F02A Fellowships: Behavioral Neuroscience/Scientific Review Group (October 2019, February 2020)
- NSF ad-hoc grant reviewer (2007, 2010, 2013, 2015)
- NIH Behavioral Neuroscience Fellowship Study Section (F02A) – October 2019
- NIH (NIAAA) Alcohol Research Centers (ARC) Review, Special Panel (*reviewer*) – May 2018
- NIH (NIAAA) AA-4 1 Neuroscience Review Subcommittee (*ad hoc reviewer*) (2010, 2011, 2013, 2014, 2015, 2016)
- NIH (NIMH) ZMH1 ERB-L Review panel (*ad hoc reviewer*) (2010)
- NSERC (Natural Sciences and Engineering Research Council of Canada) Discovery Grants Program Reviewer (2016, 2023)
- The Royal Society (Great Britain), Reviewer for the Dorothy Hodgkin Fellowships 2018 (March 2018)
- The King’s Health Partners R&D Challenge Fund, *invited reviewer* (June 2018)
- Grants and Fellowships F.R.S.-FNRS (Belgium) – *invited reviewer* (annually since March 2018)
- National Academy of Sciences (Poland) - *invited reviewer* (March 2017, 2019, 2020)
- Reviewer for the Netherlands Organization for Scientific Research (NOW) (Earth and Life Sciences) (2008)
- Peer reviewer for *Acta Neurobiologiae Experimentalis*, *Alcohol*, *Alcoholism: Clinical and Experimental Research* (ACER), *Behavioral Neuroscience*, *Biological Psychiatry*, *Brain*, *Brain Research*, *European Journal of Neuroscience*, *Frontiers in Behavioral*

Neuroscience, Glia, International Journal of Developmental Neuroscience, International Journal of Neuropsychopharmacology, Neurological Sciences, Neuropsychologia, Neuroscience, Neurobiology of Aging, NeuroReport, PLOS One, Proceedings of the National Academy of Science (PNAS), Synapse