Douglas Institute ADHD and Severe Disruptive Behaviour Disorders Fellowship Dr. Grizenko

Name of Institution: Douglas Mental Health University Institute

Type of Fellowship: Clinical/Research Fellowship

Number of positions: One per year

Length of Fellowship: 1 year

Fellowship Program Director: Dr. N. Grizenko

Program Information:

The Severe Disruptive Behaviour Disorders (SDBD) Program at the Douglas Institute is a tertiary program that consists of two components: the SDBD Day Hospital and ADHD clinic. The program is dedicated to a tripartite clinical/research/teaching mission. The aim of the fellowship is to develop expertise in the diagnosis, evaluation and treatment of the full spectrum of ADHD and comorbid disorders. It stresses understanding and appropriate use of medication, medication titration and psychological interventions including individual and family therapy, CBT, social skills training, anger management, parent training and appropriate milieu treatment. Research is a key component of the program and the fellow will be expected to join ongoing research project or create their own research project.

Research conducted in the SDBD program and ADHD clinic includes:

- 1. Trying to understand the etiology of ADHD through a pharmacobehavioural study of genetic and environmental risk factors in ADHD.
- 2. Epigenetics in ADHD: Understanding the role of maternal stress and smoking during pregnancy and development of ADHD.
- 3. Using brain imaging to further dissect etiological pathways in ADHD.
- 4. Efficacy of careful medication and tailored case management follow-up for children with ADHD.
- 5. Obesity and ADHD.
- 6. Physical activity and ADHD.
- 7. Effectiveness of various interventions including parent training groups, social skills groups and summer day camp for children with ADHD.

Name of Fellowship supervisor: Dr. Natalie Grizenko Names of Teaching Faculty:

- -Roles: Dr. N. Grizenko -Child psychiatrist, Medical Chief of the Child and Adolescent Psychiatry Program, whose main clinical practice is in the field of ADHD and severe disruptive disorders will be the primary clinical and academic supervisor. She will ensure adequate exposure to all aspects of the treatment program, guide reading and the help to develop and implement research projects.
- -Roles: Dr. R. Joober -psychiatrist and geneticist will also offer research supervision and assist in the development and implementation of research projects.
- -The fellow will benefit from the close collaboration of a highly specialized multidisciplinary team consisting of psychiatrists, researchers, psychologists, social workers, nurses, educators and psychoeducators.
- -Major strengths: The team is a highly productive, highly specialized interdisciplinary team with an excellent clinical, teaching and research record. Furthermore, the resident will have access to one of the most extensive data basis of over 750 patients with ADHD (including detailed genotyping and phenotyping).

Academic Facilities:

- -The Douglas Mental Health University Institute is a large facility dedicated to treating the full gamut of mental health problems across the life span. The SDBD Day Hospital services deals with children with very severe psychopathology and much comorbidity. Researchers at the SDBD program and ADHD clinic are affiliated with the institution's well-known and highly regarded research center. The program is well-equipped with dedicated staff and secretarial support, large research staff and access to statistical consultation. The program has regular weekly clinical rounds and research meetings. There are also weekly grand rounds in the Child Psychiatry Program.
- -The program has excellent computer facilities and the hospital library is easily accessible.
- -Availability of a genetics lab (Dr. Joober) and neuroimaging.
- -The Douglas Mental Health University Institute is equipped with teleconferencing equipment. The program offers clinical consultation via telepsychiatry.

Fellow Duties and Responsibilities:

-The fellow will have no call responsibilities.

- -The fellow will have access to secretarial, nursing and program coordination assistance. Research assistants will also be available to assist the fellow in the execution of research projects (data collection, scheduling of participants, database management and data analysis).
- -The fellow will be responsible for assessing and treating children with ADHD within the clinical research program.
- -The fellow will attend weekly interdisciplinary clinical meetings and weekly research meetings.
- -The fellow will be expected to present during the academic year in grand rounds.
- -The fellow will be expected to complete a research project that can be based on the already existing data base or newly collected data and write it up for publication. The fellow will also be encouraged to present results at national and international conferences.
- -According to the interest of the fellow he or she may choose to supervise residents and medical students and may choose to learn specific interventions such as CBT with ADHD children, parent training, family therapy, social skills training, anger management and completion of ADOS on children with ADHD and comorbid Asperger's Syndrome.

Curriculum:

- -The fellow will be responsible for assessing and treating children with ADHD and various comorbidities.
- -Clinical work in the Day Hospital is optional and will be done alongside the clinical supervisor. The fellow will have the opportunity to be exposed to very difficult to manage patients.
- -Reading material will be assigned on an as per needed basis.
- -The fellow will attend grand rounds in child psychiatry and have the opportunity to participate in meetings of different research axis of the Douglas Research Center, adult grand rounds, case-conferences and journal clubs.
- -The fellow will also receive mentorship in research, statistical analysis, teaching and working with community partners.

Recent publications (2012-2017):

- 1. Hantson, J., Wang, P.P., Grizenko-Vida, M., Ter-Stepanian, M., Harvey, W.J., Joober, R. & Grizenko, N. Effectiveness of a therapeutic summer camp for children with Attention-Deficit/Hyperactivity Disorder: Phase 1 Clinical Intervention Trial. <u>Journal of Attention Disorders</u>, 2012, 16(7): 610-617.
- 2. Sengupta, S.M., Grizenko, N., Thakur, G.A., Bellingham, J., De Guzman, R., Robinson, S., Ter-Stepanian, M., Polotskaia, A., Shaheen, S.M., Fortier, M-E., Choudry, Z., Joober, R., Differential association between the norepinephrine transporter gene and ADHD-role of gender and subtype. J. Psychiatry Neurosciences, 2012, 37(2):129-137.

- 3. Grizenko, N., Fortier, M-E., Zadorozny, C., Thakur, G.A., Schmitz, N., Duval, R., Joober, R., Maternal stress during pregnancy, ADHD symptomatology in children and genotype: gene-environment interaction. <u>J Can Academy .of Child and Adolescent Psychiatry</u>. 2012, 21(1):9-15. (Featured article).
- 4. Choudry, Z., Sengupta, S., Thakur, G., Page, V., Schmitz, N., Grizenko, N., Joober, R. Catechol-o-methyltransferane (COMT) gene and executive function in children with ADHD. <u>Journal of Attention Disorders</u>, 2012, March 26, DOI:101177/10870547123815.
- 5. Choudry, Choudry, Z., Sengupta, S.M., Grizenko, N., Fortier, M.-E., Thakur, G., Bellingham, J., Joober, R., Association between LPHN3 and ADHD disorder: interaction with maternal stress during pregnancy. <u>J Child Psychol Psychiatry</u>, 2012 Aug 53(8):892-902 doi:10.1111/j1469-7610.2012.02551x, Epub 2012, Apr. 7.
- 6. Thakur, G., Sengupta, S., Grizenko, N., Schmitz, N., Page, V., Joober, R. Maternal smoking during pregnancy and ADHD: a comprehensive clinical and neurocognitive characterization. <u>Nicotine and tobacco research</u>, 2013, Jan. 15(1) 149-57, doi:10.1093/ntr/nts102, Epub 2012, Apr. 22.
- 7. Fortier, M.-E., Sengupta, S.M., Grizenko, N., Bellingham, J., Choudhry, Z., Joober, R. Genetic evidence for the association of the hypothalamic-pituatary-adrenal (HPA) axis with ADHD and methylphenidate treatment response Neuromolecular Medicine, Oct 10,2012, doi:10.1007/s12017-012-8202-1, 2013, March 15 (1):122-32.
- 8. Thakur, G.A. Sengupta, S.M., Grizenko, N. Choudry, Z., Joober, R. Family-based association study of ADHD and genes increasing the risk for smoking behavior <u>Arch Dis Child.</u> 2012, Dec.:97(12):1027-33, doi:10.1136/archdischild2012301882, Epub 2012, Oct, 29.
- 9. Grizenko, N., Zhang, D.D.Q., Polotskaia, A., Joober, R., Efficacy of methylphenidate in ADHD children within the normal and gifted intellectual spectrum. <u>J</u> Can Academy of Child and Adolescent Psychiatry, 2012, 21(4):282-288.
- 10. Thakur, G., Sengupta, S.M., Grizenko, N., Choudry, Z., Joober, R., Comprehensive phenotype/genotype analysis of norepinephrine transporter gene (SL6A2) in ADHD: relationship to maternal smoking during pregnancy <u>PLOS ONE</u>, 2012:7(11):e49616, doi:10.1371/journal. pone.0049616. Epub 2012, Nov. 20.
- 11. Harvey, W.J., Wilkinson, S., Pressé, C., Joober, R., Grizenko, N., Scrapbook interviewing and children with ADHD. <u>Qualitative Research in Sport, Exercise and Health</u>, 2012, 4(1): 62-79.
- 12. Wilkinson, S., Harvey, W.J., Bloom, G.A., Joober, R. & Grizenko, N., Student Teacher Experience Physical education in a service-learning project for children with Attention-Deficit Hyperactivity Disorder. Physical Education and Sports Pedagogy-2012, DOI:10 1080/17408989.2012, 690385.
- 13. Harvey, W.J., Wilkinson, S., Pressé, C., Joober, R., Grizenko, N. Children say the darndest things: Physical activity and children with ADHD. <u>Physical Education and Sport Pedagogy</u>, 2014 19 (2):205-220.

- 14. Choudry, Z., Sengupta, S.M., Grizenko, N., Harvey, W.J., Fortier M.-E., Schmitz, N., Joober, R. Body Weight and ADHD: examining the role of self-regulation <u>PLOS ONE</u>, 8(1):e 55351.doi 10.1371/journal.pone.0055351 epub: Jan. 29, 2013.
- 15. Grizenko, N., Pereira, R.M., Joober, R., Sensitivity of scales to evaluate change in symptomatology with psychostimulants in different ADHD subtypes. <u>Canadian Journal of Child and Adolescent Psychiatry</u>, 2013, 22(2):153-158.
- 16. Choudhry, Z., Sengupta, S.M., Grizenko, N., Thakur, G.A., Fortier, M.-E., Schmitz, N., Joober, R. Association between obesity-related gene FTO and ADHD. <u>Obesity</u>, 2013, March 20, doi:10-1002/oby.20444.
- 17. Labbé, A., Liu, A., Atherton, J., Grizenko, N., Sengupta, S., Joober, R., Refining psychiatric phenotypes for response to treatment: contribution of LPHN3 in ADHD American Journal of Medical Genetics Neuropsychiatric Genetics Part B, 2012, .
- 18. Hébert, J., Polotskaia, A., Joober, R., Grizenko, N., Adherence to psychostimulant medication in children with ADHD: The role of attitudes. <u>Canadian Journal of Child and Adolescent Psychiatry</u>, 2013; 22(4):203-309.
- 19. Grizenko, N., Cai, E., Jolicoeur, C., Ter-Stepanian, M., Joober, R., Effects of methylphenidate on acute math performance in children with attention-deficit/hyperactivity disorder, Canadian Journal of Psychiatry, 2013; 58(10):632-639.
- 20. Sengupta, S.M., Fortier, M.-E., Thakur, G.A., Bhat, V., Grizenko, N., Joober, R. Parental psychopathology in families of children with Attention-Deficit/Hyperactivity Disorder and exposed to maternal smoking during pregnancy. <u>Journal of Child Psychology and Psychiatry</u>, 2015, 56 (2):122-129.
- 21. Grizenko, N., Fortier, M.-E., Gaudreau-Simard, M., Jolicoeur, C., Joober, R. The effect of stress during pregnancy on IQ and ADHD symptomatology. Canadian Journal of Child and Adolescent Psychiatry, 2015,24(2):92-99.
- 22. Grizenko, N., Osmanlliu, E., Fortier, M-E., Joober, R. Increased risk of asthma in children with ADHD: Role of prematurity and maternal stress during pregnancy. Canadian Journal of Child and Adolescent Psychiatry, 2015,24(2):109-115.
- 23. Grizenko, N., Eberle, M.L., Fortier-M.-E., Côté-Corriveau, G., Jolicoeur, C., Joober, R. Apgar scores associated with ADHD symptom severity. Canadian Journal of Psychiatry, DOI:10.1177/0706743716635544, 2016,61(5):283-290.
- 24. Ter-Tepanian, M., Grizenko, N., Cornish, K., Talwar, V., Mbekou, V., Schmitz, N., Joober, R. Attention and executive function in children diagnosed with attention deficit/hyperactivity disorder: the role of comorbid disorders. and Canadian Journal of Child Adolescent Psychiatry (accepted)
- 21. Grizenko, N., Fortier, M.-E., Gaudreau-Simard, M., Jolicoeur, C., Joober, R. The effect-of-stress during pregnancy on IQ and ADHD symptomatology. JCACAP (accepted 2015).