Jessica Johnson (919) 451-1559 jsj8duke@gmail.com www.jessicajohnsonart.com

EDUCATION

Icahn School of Medicine at Mount Sinai, New York, NY: September 2017 – June 2019 Master of Public Health, Epidemiology, June 20, 2019 Cumulative GPA: 4.0

Pratt Institute, Brooklyn, NY: August 2009 - May 2011 Master of Fine Arts, New Forms, May 16, 2011 Cumulative GPA: 4.0

Duke University, Durham, NC: August 2002 - May 2006 Bachelor of Science, Biology, May 14, 2006; Certificate: Visual Arts Cumulative GPA: 3.4 Certificate GPA: 4.0

EXPERIENCE

Research Technician II

Icahn School of Medicine at Mount Sinai, Pamela Sklar Division of Psychiatric Genomics Data Scientist, Huckins and Stahl Laboratories

Icahn School of Medicine at Mount Sinai, Pamela Sklar Division of Psychiatric Genomics

April 2019 - Present

May 2018 – April 2018 New York, NY

- Responsible for grant budget tracking and ordering for over 12 different NIH-funded R01 grants
- Responsible for grant submission documentation

Administrative Coordinator of the Division of Psychiatric Genomics

Icahn School of Medicine at Mount Sinai, Division of Psychiatric Genomics, Sklar Laboratory March 2012 – May 2018 Laboratory Supervisor

- Responsible for the set-up and maintenance of the Sklar lab in the Division of Psychiatric Genomics. The focus of the lab is to understand the underlying genetic causes of debilitating psychiatric diseases such as schizophrenia and bipolar disorder. Projects include GWAS and Whole-Exome sequencing for multiple Schizophrenia studies, and production of induced Pluripotent Stem cell lines from fibroblasts collected from patients with schizophrenia and bipolar disorder.
- Project manager for the Molecular Profiling of Schizophrenia grant, a multi-million dollar grant involving RNAseq, ATACseq, Hi-C and scRNAseq of brain cells in cases and controls. Responsible for the grant budget (>1 million per year), sample and data generation and tracking.
- Project manager for the CommonMind Consortium, a large consortium whose goal is to generate and analyze large-scale genomic data from human subjects with neuropsychiatric disease. Responsible for coordination of all CommonMind sample delivery, storage, sequencing, genotyping and tracking, including PsychENCODE project tracking. Performed RNA and DNA isolation from homogenized brain tissue for RNAseq, whole genome sequencing and genotyping (+2,000 samples).
- Project manager for the PsychChip genotyping project. Responsible for coordination of all sample delivery, storage and tracking for over 15,000 DNA samples being genotyped at the Mount Sinai Genomics Core on the Illumina PsychChip.
- Responsible for the receipt, tracking and isolation of DNA, RNA, plasma and serum from blood for 5 different studies.
- Responsible for culturing and freezing fibroblast cell lines from patient skin biopsies for two studies, to be later used for the creation of iPSC. Also responsible for culturing human and mouse cell lines for laboratory DropSeq experiments.
- Responsible for all ordering of laboratory supplies and machinery, as well as maintenance of all laboratory equipment, and including setting up new equipment for future projects.
- Responsible for the tracking, shipment and storage of over 60,000 DNA, RNA, blood and tissue samples. Responsible for the freezer alarm monitoring software and virtual freezer sample tracker for the lab.
- Responsible for training new lab members in lab safety and laboratory-specific SOPs.

Memorial Sloan Kettering Cancer Center, Sloan Kettering Institute, Mayr Laboratory

June 2011 – March 2012 New York, NY

- Performed experiments to study the regulation of gene expression in mammalian cells with an emphasis on the biological consequences of Alternative Polyadenylation (APA) in normal, stem, and cancer cells. Responsibilities include maintaining and harvesting cell lines with subsequent RNA and mRNA extraction/purification, Fluorescence-Activated Cell Sorting (FACS), Northern blots, cDNA synthesis, cloning and transformation, mini-, midi-, and maxi-prep of plasmids, PCR, qPCR.
- Was responsible for the maintenance of laboratory stocks, buffers and other supplies, as well as for making sure that the laboratory complied with radioactive, chemical and fire safety protocols.

New York, NY

New York, NY

Ronald Feldman Fine Arts

Intern to the Archivist

- Digitally catalogued the entire gallery library and digitally archived gallery images by scanning slides, transparencies and photographs into Photoshop, where they were subsequently colour-corrected and organized.
- Created and edited Press Kits for the gallery's artists.

Duke University, Duke Center for Human Genetics

Research Technician II

- Performed Comparative Genomic Hybridization (CGH) experiments using microarrays to identify candidate genes involved in Autism Spectrum Disorder.
- Performed high-throughput genotyping of SNPs on Illumina linkage panels for individuals with Osteoarthritis and performed sequencing
 of candidate genes to identify novel SNPs in a family-based study for Osteoarthritis.
- Carried out Taqman allelic discrimination of SNPs for the HABC, AGENDA, CATHGEN, and GENECARD projects (over 1,000 SNPs on 30,000 samples); performed high-throughput genotyping of candidate genes involved in Atherosclerosis and Sarcopenia.
- Carried out bisulfite conversion, cloning and sequencing of E. coli clones to study methylation patterns of aortic smooth muscle cells.
- Performed basic lab tasks including the following: gel electrophoresis, PCR, Sanger sequencing, DNA and RNA isolation, making reagents, etc.

National Institute of Environmental Health Sciences (NIEHS), Mason Laboratory

Research Assistant

- Studied the expression of telomeric genes in *Drosophila melanogaster* using RT PCR, DNA and RNA extraction, cDNA synthesis, chromatin immunoprecipitation, nuclei isolation and southern blots.
- Was responsible for maintaining fly colonies and fly breeding.

Duke University, Dong Laboratory

Research Assistant

 Investigated cross-talk in the SAR pathway in Arabidopsis thaliana by performing a mutant screen and using DNA and RNA extraction/isolation, PCR, Northern blots, plant infection and cloning techniques.

GRANTS/AWARDS

Early Career Award, Eating Disorders Research Society 2020 Conference, October 16, 2020 Induction into the Delta Omega Honorary Society, Icahn School of Medicine at Mount Sinai, June 20, 2019 Blue Ribbon Oral Presentation, Public Health Research Day, Icahn School of Medicine at Mount Sinai, May 30, 2019 Call for Images, Friedman Brain Institute, First Place, May 2019 Call for Images, Friedman Brain Institute, Second Place, May 2018 Collaboration Development Grant, Duke University, February 2014 Award for Academic Excellence, Pratt Institute, May 15, 2011 Mary Duke Biddle Foundation Visual Arts Award, Duke University, May 13, 2006 Undergraduate Research Support Grant, Duke University, January 2006

EXHIBITIONS/PUBLICATIONS/TALKS

2021 Cover Illustration for January 2021 Cell publication

2020	Poster Presentation. World Congress of Psychiatric Genomics Virtual Conference, October 16-22, 2020.
	Oral Presentation. Eating Disorders Research Society Virtual Conference, October 12-16, 2020.
	Cover illustration for August 2020 Biological Psychiatry publication
	Cover illustration for June 2020 Trends in Neurosciences publication
	Oral Presentation. Genomics of Brain Disorders, Cambridge, UK. March 18-20, 2020.

2018 "The Rise and Reign of Robert the Bruce", illustration for theguardian.com, November 2018. <u>https://www.theguardian.com/rise-of-robert-the-bruce/ng-interactive/2018/oct/29/king-robert-the-bruce-scottish-history</u> "Resistance Rises", illustration for theguardian.com, September 2018. <u>https://www.theguardian.com/resistance-rises</u>

Cover Illustration for August 2018 Nature Neuroscience publication.

Art of the Brain, Group Show, Grady Alexis Gallery, New York, NY: March 12 – April 27, 2018.

- 2017 Created the cover art and interior illustrations for Charney, Dennis S., Joseph D. Buxbaum, Pamela Sklar and Eric J. Nestler. "Neurobiology of Mental Illness", 5th edition. Oxford University Press, 2017.
 - "Reinventing the Jet Engine", illustration for theguardian.com, September 27, 2017. <u>https://www.theguardian.com/preparing-for-9-billion/ng-interactive/2017/sep/27/reinventing-jet-engine-airplanes-</u> <u>technology-turbofan-engine</u>

"20 Years of BioRad", illustration colouring page for BioRad Labs, September 9, 2017.

June 2006 – August 2009 Durham, NC

May 2005 – August 2005 Research Triangle Park, NC

> June 2004 – June 2006 Durham, NC

<u>http://www.bio-rad.com/webroot/web/pdf/lse/literature/be917_edu-coloring-sheet.pdf</u> "BioRad Explorer Panda Kit", illustration colouring page for BioRad Labs, April 4, 2017. <u>http://www.bio-rad.com/webroot/web/pdf/lse/literature/panda-coloring-sheet.pdf</u>

- 2016 Eclectricity Evolution, Group Show, CreativeBloch Gallery, Brooklyn, NY: November 3, 2016 February 1, 2017.
 Bedazzled, Group Show, Lehman College Art Gallery, New York, NY: September 20, 2016 January 14, 2017.
 Respiration, Installation, Café Grumpy, New York, NY: July 25, 2016.
 Cellular Networks, Solo Show, Café Grumpy, New York, NY: July 1 31, 2016.
- 2015 **Exposition Art & Science**, Group Show, Curie Museum, Institut Curie, Paris, FR: May 16 October 31, 2015. **Translating the Exome**, Solo Show, Brown Gallery, Duke University, Durham, NC: March 20 – April 20, 2015.
- 2013 Created the cover art for Charney, Dennis S., Joseph D. Buxbaum, Pamela Sklar and Eric J. Nestler. "Neurobiology of Mental Illness", 4th edition. Oxford University Press, 2013.

Hot Wood Resident Artists Show, Group Show, Hot Wood Arts Gallery, Brooklyn, NY: November – December, 2013.

Curate NYC 2013, Group Show, Rush Arts Gallery, New York, NY: October 24 – November 2, 2013. Crumbs of Light: Glitter, Sequins & Tinsel in Contemporary Art, Group Show, The Oak Room Gallery, Columbus, OH: October 5 – 31,

2013.

2013 Governor's Island Art Fair, Governor's Island, New York, NY: September 7 – 29, 2013. Hot Wood Volume VI: Winter Masquerade Ball, Group Show, Hot Wood Arts Gallery, Brooklyn, NY: February 23 – March 31, 2013.

Hot Wood Volume V: Resident Artists Show, Group Show, Hot Wood Arts Gallery, Brooklyn, NY: November 10 – December 16, 2012.
 Exogenesis, Group Show, C.C.C.P. North Light Gallery, Brooklyn, NY: August 31 – September 30, 2012.
 MATTER, Group show, Brooklyn Artists Gym, Brooklyn, NY: June 9 – July 9, 2012.
 The 4th Annual Mount Sinai Employee Art Exhibit, Mount Sinai Hospital, New York, NY: May 9 – May 29, 2012.
 Khan, Suhair, Louise Hohorst, Zahra Khan and Jessica Johnson. "The New Art Stars", Vogue India [Online], February 21, 2012.
 www.vogue.in/content/new-art-stars.

2011 Global Art Projects: International Artists at Home and Abroad, Group show, Broadway Gallery, New York, NY: October 19 – November 7, 2011.

Artist Lecture for the **Yo! Brooklynites!** Exhibition, Hadas Gallery, Brooklyn, NY: August 17, 2011. **Yo! Brooklynites!**, Group show, Hadas Gallery, Brooklyn, NY: July 10 – August 17, 2011. **Pratt Fine Art Graduate MFA Exhibition**, Group show, Pratt Manhattan Gallery, New York, NY: May 13 – 27, 2011. **Last Dance with the Red Queen**, Solo show, Pratt Studios Gallery, Brooklyn, NY: April 25 – 29, 2011. **College Art Association NY Area MFA Exhibition**, Group show, Hunter College, New York, NY: February 9 – April 9, 2011.

- 2010 **TedX 2nd Year MFA Pratt Graduate Group Show**, Group show, Steuben Gallery, Pratt Institute, Brooklyn, NY: November 8 15, 2010. **Fall Semester Pratt MFA Graduate Student Group Show**, Group show, Steuben Gallery, Pratt Institute, Brooklyn, NY: September 2010.
- Fall Semester Pratt MFA Graduate Student Group Show, Group show, Steuben Gallery, Pratt Institute, Brooklyn, NY: September 2009.
 Genetics! Solo show, Duke Center for Human Genetics, Duke University, Durham, NC: June 6 August 17, 2009.
- 2008 Human Code, Solo show, Smith Warehouse, Duke University, Durham, NC: November 8 January 8, 2008.
- Visual Poetics, Group show, Smith Warehouse, Duke University, Durham, NC: April 27 May 14, 2006.
 A Human Construction, Solo show, Smith Warehouse, Duke University, Durham, NC: April 5 26, 2006.

Huckins, L., et. al. Polygenic regulation of PTSD severity and outcomes among World Trade Center responders. BioRxiv, December 8, 2020.

Mullins, et. al. Genome-wide association study of over 40,000 bipolar disorder cases provides novel biological insights. BioRxiv, September 18, 2020.

Dueñas, Hillary, Carina Seah, Jessica S. Johnson, Laura M. Huckins. Implicit Bias of Encoded Variables: Frameworks for addressing structured bias in EHR-GWAS Data. Human Molecular Genetics, September 2, 2020.

Charney, A., et al. Sampling the host response to SARS-CoV-2 in hospitals under siege. Nature Medicine (2020).

Han, L., et al. Functional annotation of rare structural variation in the human brain. Nature Communiations, 11 (2990): June 12, 2020.

Dobbyn, A., et al. Targeted Sequencing of Genes Most Likely to Harbor Rare Causal Variants in Schizophrenia. Biological Psychiatry, Vol. 87 (9): May 20, 2020.

Szatkiewicz, J., et al. Characterization of single gene copy number variants in schizophrenia. Biological Psychiatry, Vol 87 (8): October 4, 2019.

Hoffman, G., et. al. CommonMind Consortium provides transcriptomic and epigenomic data for Schizophrenia and Bipolar Disorder. Scientific Data

- Girdhar, K., et al. Cell-specific histone modification maps link schizophrenia risk to the neuronal epigenome. Nature Neuroscience, July 23, 2018.
- Dobbyn, A., et al. Landscape of Conditional eQTL in Dorsolateral Prefrontal Cortex and Co-localization with Schizophrenia GWAS. *American Journal of Human Genetics*, 6(102), June 7, 2018: 1169-1184.
- Hauberg, et al. Differential Activity of Transcribed Enhancers in the Prefrontal Cortex of 537 cases with Schizophrenia and Controls. *Molecular Psychiatry* (2018).
- Giambartolomei, C., et. al. A Bayesian Framework for Multiple Trait Co-localization from Summary Association Statistics. *Bioinformatics*, March 19, 2018.
- Gandal, MJ, et. al. Shared molecular neuropathology across major psychiatric disorders parallels polygenic overlap. *Science*, 9;359(6376), February 9, 2018: 693-697.
- Huckins, et al. Transcriptomic Imputation of Bipolar Disorder and Bipolar subtypes reveals 29 novel associated genes. *BioRxiv*, November 21, 2017.
- Hauberg, ME et. al., Large-Scale Identification of Common Trait and Disease Variants Affecting Gene Expression. American Journal of Human Genetics, 100(6), June 1, 2017: 885 894.
- Fromer et. Al. Gene Expression Elucidates Functional Impact of Polygenic Risk for Schizophrenia. Nature Neuroscience, September 26, 2016.
- Topol et. Al. Dysregulation of miRNA-9 in a Subset of Schizophrenia Patient-Derived Neural Progenitor Cells. Cell Reports 15, 1-13, May 3, 2016.
- E. Rees et. Al. Analysis of exome sequence in 604 trios for recessive genotypes in schizophrenia. Translational Psychiatry, 21 July, 2015.
- Illustration for Benjamin M Neale, Pamela Sklar. Genetic analysis of schizophrenia and bipolar disorder reveals polygenicity but also suggests new directions for molecular interrogation. Current Opinion in Neurobiology, Volume 30, February 2015; pp. 131-138.
- Fromer et. Al. De novo mutations in schizophrenia implicate synaptic networks. Nature, 22 January, 2014.
- Khan, Suhair, Louise Hohorst, Zahra Khan and Jessica Johnson. "The New Art Stars", Vogue India [Online], February 21, 2012. www.vogue.in/content/new-art-stars.
- Nolan et. Al. Fine mapping of a linkage peak with integration of lipid traits identifies novel coronary artery disease genes on chromosome 5. BMC Genetics, 13:12, February 27, 2012.
- Chen et. Al. Genome-wide linkage analysis of quantitative biomarker traits of osteoarthritis in a large, multigenerational extended family. Arthritis & Rheumatism, Vol. 62 (3), 25 Feb. 2010: pp. 781-790.
- Gregory et. Al. Genomic and epigenetic evidence for oxytocin receptor deficiency in autism. BMC Medicine, 7:62, 22 October 2009.
- Shah et. Al. Neuropeptide Y Gene Polymorphisms Confer Risk of Early Onset Atherosclerosis. PLoS Genetics, v. 5 (1): January 2009.
- Shah et. Al. ALOX5AP variants are associated with in-stent restenosis after percutaneous coronary intervention. Atherosclerosis, Volume 201, Issue 1. November 2008: pp. 148 154.
- Frydrychova, Radmila Capkova, Harald Biessmann, Alexander Y. Konev, Mikhail D. Golubovsky, <u>Jessica Johnson</u>, Trevor K. Archer, and James M. Mason. **Transcriptional Activity of the Telomeric Retrotransposon HeT-A in** *Drosophila melanogaster* is Stimulated as a Consequence of Subterminal **Deficiencies at Homologous and Nonhomologous Telomeres.** *Molecular and Cellular Biology*, Vol. 27, no. 13. July 2007: pp. 4991-5001.
- Spoel, Steven H., Jessica S. Johnson, and Xinnian Dong. Regulation of Trade-Offs Between Plant Defenses Against Pathogens with Different Lifestyles. Proceedings of the National Academy of Sciences of the United States of America (PNAS), Vol. 104, no. 47. November 20, 2007: pp. 18842 18847.

SKILLS/INTERESTS/GROUPS

Certificate for Coursera "Virology I: How Viruses Work", Prof. Vincent Racaniello, *Treasurer*, Pratt Artists League, Pratt Institute, Brooklyn, NY Member of the College Art Association November 15, 2013 June 2010 – May 2011 August 2010 – August 2011

Languages: French, intermediate (writing, reading, speaking)

Computer: Microsoft Office suite, Adobe Design Suite, Applied Biosystems SDS for Taqman and qPCR, GenePix Pro 6.0, Illumina BeadStudio 3.1, Sequencher 4.8, some knowledge of Unix.

Interests: Sculpture, bookmaking, cooking, reading, virology and Environmental and Public Health issues.