Dmitry A. Lyalin, PhD, FACMG

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Education

BS, MSc, Moscow State University, Russia
PhD, Texas A&M University
ABMGG Fellowship, Children's Mercy Hospital

Licenses & Certifications

2017 American Board of Medical Genetics and Genomics, Clinical Cytogenetics
2019 American Board of Medical Genetics and Genomics, Clinical Molecular Genetics

Recent Invited Presentations

2025 Student Workshop: Pathways to Careers within Medical Genetics and Genomics", ACMG 2025 Annual Meeting, Los Angeles, CA, March 2025

Invited talk "Implementation of precision medicine in population health" Chapel Hill, NC, October 26, 2024

Selected Publications

Peer Reviewed Papers

Alwan A, Vincent C, **Lyalin D**, Mikhailov, A. "Unusual Glomerular Abnormalities in a Patient with Combined COL4A5-NPHS1 Variants", Kidney Medicine, Published online January 12, 2026

Repnikova E, **Lyalin D**, Sukhanova M. "Prognostic and predictive biomarkers in T-lymphoblastic leukemia", Book Chapter in "Laboratory Assessments of Pediatric Leukemia", Springer Nature, Accepted for publication

Jackson-Cook C, Barrie E, **Lyalin D**, Gwilliam K, Martin K, Alhareeri A, Lawce H. Chromosome Stains. in eds. P Hu and J Smith, The AGT Cytogenetics Laboratory Manual, 5th edition, John Wiley & Sons, Inc., Hoboken, NJ, 2025

Galdon G., Pourhabibi Zarandi N., Deebel, N., Zhang, S., Cornett, O., **Lyalin, D.,** Pettenati, M., Lue Y., Wang, C., Swerdloff, R., Shupe, T., Bishop, C., Stogner, K., Kogan, S., Howards, S., Atala, A., and Sadri-Ardekani, H. "*In vitro* Generation of

Haploid Germ Cells from Human XY and XXY Immature Testes in a 3D Organoid System", Bioengineering 2024, 11, 677

Lyalin, D., Romanov, Y., "A *de novo* interstitial 19q13.12q13.32 duplication: Report of a novel patient and literature review", Genetics in Medicine, 2024, 101632, P728

Fenu E, Beaty M, Insuasti-Beltran G, Pettenati M, **Lyalin D** "A Unique Case of der(16)t(1;16) Identified in B-Lymphoblastic Leukemia", Atlas Genet Cytogenet Oncol Haematol. 2021-10-27

Repnikova E, **Lyalin D**, McDonald K, et al., "CNTN6 copy number variations: Uncertain clinical significance in individuals with neurodevelopmental disorders", European Journal of Medical Genetics, 2020 Jan;63(1):103636

Roberts J, **Lyalin D**, Tosatto N, Rana P, Fadoul H, Welsh H, Zhang L, Cooley L, Repnikova E "Novel mosaic SRY gene deletions in three newborn males with variable genitourinary malformations", Am J Med Genet A. 2018 Jul 28

Posters/Abstracts

"A Clinical Laboratory's Approach to Curating Unexpected Variants in Pharmacogenes", ACMG 2025 Annual Meeting, Los Angeles, CA, March 2025

"The power of multi-omics in confirming the pathogenicity of a DDX11 variant causing Warsaw syndrome", ACMG 2025 Annual Meeting, Los Angeles, CA, March 2025

"Chimerism in DNA of saliva, buccal, urine and eyebrow specimens from pediatric recipients after allogeneic hematopoietic stem cell transplantation (aHSCT): implication for DNA-based molecular testing", AMP Annual Meeting, Vancouver, Canada, November 2024

"Unusual Glomerular Abnormalities in a Patient with Combined COL4A5-NPHS1 Variants", American Society of Nephrology, Kidney Week 2024, October 2024

"The Sanford Health Preemptive Genetic Screening Program - Allele Frequencies for Recurrent variants in CDC Tier 1 Diseases, CYP2C19, and Others", ACMG 2020 Annual Meeting, San-Antonio, TX

"The Sanford Health Preemptive Genetic Screening", ACMG 2019 Annual Meeting, Seattle, WA, April 2019

"First Report of Loss of Function in MID2: A Case of MID2-Related X-linked Intellectual Disability", ACMG 2018 Annual Meeting, Charlotte, NC, April 2018