

Mirjam van der Burg, PhD studied chemistry at the University of Leiden (1992-1997) and received her master in Biochemistry & Molecular biology (cum laude) in March 1997. In May 1997 she started her PhD training at the Dept. of Immunology of the Erasmus University on a project entitled Recombination processes during human B-cell differentiation. She defended her thesis in June 2002. Since January 2002 she is leader of the Workgroup Primary Immunodeficiencies, since 2018 at the Leiden University Medical Center. The PID laboratory of Mirjam van der Burg is an international reference center for diagnostics and research for SCID, DNA repair disorders and antibody deficiencies. The research lines are directly related to these entities and aim for identification of underlying genetic cause and studying the effect of the monogenetic defects on the immune system especially on B and T-cell differentiation and antigen receptor repertoire formation.



Her group is part of the Pediatric hematopoietic stem cell transplantation center of the Leiden University Medical Center, where she works on immune reconstitution post-HSCT in patients with PID. She is workgroup leader of the EuroFlow PID group, which aims for standardization of flow cytometric diagnosis for PID within Europe. Furthermore, she is project leader of the Dutch implementation pilot study for SCID in the neonatal screening program (SONNET, www.sonnetstudie.nl), which resulted in national implementation in January 2021. From 2014-2020, she was board member of the European Society for Immunodeficiencies (ESID).

Relevant Literature:

1. Delineating Human B Cell Precursor Development With Genetically Identified PID Cases as a Model. Wentink MWJ, T. K, Perez-Andres M, Del Pino Molina L, IJspeert H, Kavelaars F, Lankester AC, Lecrevisse Q, van Dongen JJM, Orfao A, **van der Burg M**. *Front Immunol*. 2019 Nov 26;10:2680.
2. The EuroFlow PID Orientation Tube for Flow Cytometric Diagnostic Screening of Primary Immunodeficiencies of the Lymphoid System. **van der Burg M**, Kalina T, Perez-Andres M, Vlkova M, Lopez-Granados E, Blanco E, Bonroy C, *et al*. *Front Immunol*. 2019;10:246.
3. ATM: Translating the DNA Damage response to Adaptive Immunity. Weiering TJ, Takada S, Weemaes CMR, van Schouwenburg PA, **van der Burg M**. *Trends Immunol*. 2021 Mar 1:S1471-4906(21)00025.
4. Normal Numbers of Stem Cell Memory T Cells Despite Strongly Reduced Naive T Cells Support Intact Memory T Cell Compartment in Ataxia Telangiectasia. Weiering TJ, Melsen JE, van Ostaijen-Ten Dam MM, Weemaes CMR, Schilham MW, **van der Burg M**. *Front Immunol*. 2021 Jun 24;12:686333.
5. EuroFlow Standardized Approach to Diagnostic Immunophenotyping of Severe PID in Newborns and Young Children. Kalina T, Bakardjieva M, Blom M, Perez-Andres M, Barendregt B, Kanderová V, Bonroy C, Philippé J, Blanco E, Pico-Knijnenburg I, Paping JHMP, Wolska-Kuśnierz B, Pac M, Tkaczyk J, Haerynck F, Akar HH, Formánková R, Freiberger T, Svatoň M, Šedivá A, Arriba-Méndez S, Orfao A, van Dongen JJM, **van der Burg M**. *Front Immunol*. 2020 Mar 19;11:371.

6. Parents' Perspectives and Societal Acceptance of Implementation of Newborn Screening for SCID in the Netherlands. Blom M, Bredius RGM, Jansen ME, Weijman G, Kemper EA, Vermont CL, Hollink IHIM, Dik WA, van Montfrans JM, van Gijn ME, Henriët SS, van Aerde KJ, Koole W, Lankester AC, Dekkers EHBM, Schielen PCJI, de Vries MC, Henneman L, **van der Burg M**. *J Clin Immunol*. 2021 Jan;41(1):99-108.
7. Second Tier Testing to Reduce the Number of Non-actionable Secondary Findings and False-Positive Referrals in Newborn Screening for Severe Combined Immunodeficiency. Blom M, Pico-Knijnenburg I, Imholz S, Vissers L, Schulze J, Werner J, Bredius R, **van der Burg M**. *J Clin Immunol*. 2021 Nov;41(8):1762-1773.
8. Recommendations for uniform definitions used in newborn screening for severe combined immunodeficiency. Blom M, Zetterström RH, Stray-Pedersen A, Gilmour K, Gennery AR, Puck JM, **van der Burg M**. *J Allergy Clin Immunol*. 2022 Apr;149(4):1428-1436.