



## Curriculum Vitae

Personal information **Nadine Binai**

### Work experience

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01/2024 – present College ter beoordeling van Genesmiddelen (CBG-MEB), Utrecht, The Netherlands

Function: Quality Assessor (biotechnological products)

04/2020 – 12/2023 Janssen Vaccines & Prevention BV, Leiden, The Netherlands

Function: Senior Scientist Product Characterization

Responsibilities: Project lead for the RSV AdVAc© based vaccine candidate for Product Characterization deliverables (i.e.; criticality analysis and control strategy, comparability, product characterization, forced degradation) includes managing a team of non-direct reports to deliver module 3 dossier granules and source documents for clinical and commercial regulatory filings as well as representation in cross-functional teams (i.e.; investigations); Pillar lead for stability characterization developing strategies across programs; Project lead for cross-functional project to improve communication between departments; Line manager for a Product Characterization Scientist, Representation at scientific meetings; Collaboration with academia on investigating new analytical tools for vaccine characterization

08/2016 – 03/2020 Janssen Vaccines & Prevention BV, Leiden, The Netherlands

Function: Scientist Product Characterization

Responsibilities: Coordination of Product Characterization deliverables for several AdVAc© based vaccines; Help define characterization strategies, write characterization plans and reports and coordinate the execution of characterization plans; Lead the definition of product critical quality attributes, together with a cross functional team; Write, together with the CMC team, comparability plans and reports; Contribution to the applicable sections of regulatory dossiers; Participation as a team member in cross functional project teams; Representation at scientific meetings; Collaboration with academia on investigating new analytical tools for vaccine characterization

08/2011 – 07/2016 Biomolecular Mass Spectrometry and Proteomics Group, Faculty of Science, Utrecht University, Utrecht, The Netherlands, Head: Prof. A.J.R. Heck

Function: Postdoctoral Researcher and lab manager

Lab management tasks: Instrumentation and people management, communication with instrument suppliers and technical support, training people to use equipment

Research: Various collaboration projects including a contract research project with Janssen IDV on Proteome analysis of adenoviral vectors, 2 projects on phosphoproteome analysis of T cells in collaboration with Karolinska Institute and Erasmus MC and a project on development of new LC methods in collaboration with Thermo Scientific.

02/2010 – 06/2011 Musculoskeletal Research Group, Institute of Cellular Medicine, Newcastle University, Newcastle-upon-Tyne, United Kingdom, Head: Prof J. van Laar

Function: Postdoctoral Researcher

Research: Effects of endothelin-1 on monocytes in systemic sclerosis. The auto-immune disease systemic sclerosis is characterized by low grade inflammation and vasculopathy leading to increased extracellular matrix (ECM) deposition in affected tissues. We investigated the differentiation potential of monocytes into ECM producing cells, possibly participating in fibrogenesis.

04/2006 – 04/2009 Paul-Ehrlich-Institute, Langen, Germany under supervision of Dr. PD S. Weßler

Function: PhD student

Research: Influence of the estrogen receptor on the leptin-induced Stat3 activation in breast cancer cells. Adipositas correlates with an enhanced risk of developing malignant diseases such as breast cancer. We investigated the influence of the peptide hormone leptin on signalling pathways leading to oncogene expression.

## Education and training

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04/2006 – 12/2009 Doctorate Study: Goethe University Frankfurt/Main, Germany, Department of Biological Sciences, Degree: PhD in cell biology

10/2000 – 02/2006 University: University of Technology Darmstadt (TUD), Germany, Institute of Biology Major studies: Microbiology, Plant physiology and Biochemistry, Degree: Diploma in biology (comparable to MSc)

## Additional information

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### Publications

- van den Ham HJ, Binai NA, Zaaaraoui-Boutahar F, Heck AJR, Andeweg AC., Proteomic Profiling of Mouse Helper T Cell Differentiation. *Proteomics*. 2019 Apr;19(7)

- van Ooijen MP, Jong VL, Eijkemans MJC, Heck AJR, Andeweg AC, **Binai NA**, van den Ham HJ., Identification of differentially expressed peptides in high-throughput proteomics data. Brief Bioinform. 2018 Sep 28;19(5)
- Joshi RN, **Binai NA**, Marabita F, Sui Z, Altman A, Heck AJR, Tegnér J, Schmidt A., Phosphoproteomics Reveals Regulatory T Cell-Mediated DEF6 Dephosphorylation That Affects Cytokine Expression in Human Conventional T Cells. Front Immunol. 2017 Sep 25;8:1163.
- **Binai, N.A.**, Marino, F., Soendergaard, P., Bache. N., Mohammed, S., Heck, A.J.R., Rapid Analyses of Proteomes and Interactomes Using an Integrated Solid-Phase Extraction-Liquid Chromatography-MS/MS System. Journal of Proteome Research 2015 Feb 6;14(2):977-85
- Marino, F., Cristobal, A., **Binai, N.A.**, Bache, N., Heck, A.J., Mohammed, S., Characterization and usage of the EASY-spray technology as part of an online 2D SCX-RP ultra-high pressure system. Analyst. 2014 Nov 10;139(24):6520-8.
- **Binai, N.A.**, Bisschops, M.M.M., van Breukelen, B., Mohammed, S., Loeff, L., Pronk, J.T., Heck, A.J.R., Daran-Lapujade, P., Slijper, M., Proteome adaptation of *Saccharomyces cerevisiae* to severe calorie restriction in Retentostat cultures. Journal of Proteome Research 2014 Aug 1;13(8):3542-53
- **Binai, N.A.**, Carra, G., Löwer, J., Löwer, R., Wessler, S., Differential gene expression in ER $\alpha$ -positive and ER $\alpha$ -negative breast cancer cells upon leptin stimulation. Endocrine. 2013; 44:496–503
- **Binai, N.**, O'Reilly, S., Griffiths B, van Laar JM, Hügle T. Differentiation potential of CD14+ monocytes into myofibroblasts in patients with systemic sclerosis. PLoS One. 2012;7(3):e33508.
- **Binai, N.A.**, Damert, A., Carra, G., Steckelbroeck, S., Löwer, J., Löwer, R., Wessler, S.; Estrogen receptor expression influences leptin-induced Stat3 activation. International Journal of Cancer (2009) Jul 1;127(1):55-66.
- **Binai, N.A.\***, Knauer, O.\*. Carra, G., Beckhaus, T., Hanschmann, KM., Renné, T., Backert, S., Karas, M., Wessler, S.; Differential phosphoproteome profiling reveals a functional role for VASP in *Helicobacter pylori*-induced cytoskeleton turnover in gastric epithelial cells. Cellular Microbiology (2008) 10(11), 2285-2296 \* contributed equally

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