

## Marianne Antonius Jakobsen\_ Curriculum Vitae

Marianne Antonius Jakobsen  
KI, Klinisk Immunologi  
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### Uddannelse

Ph.D., Syddansk Universitet  
Dimissionsdato: 20. apr. 2005

Cand .Scient, Syddansk Universitet  
Dimissionsdato: 14. maj 1998

### Ansættelser

2019-                   Klinisk lektor(10 %) ved Klinisk Institut, Syddansk Universitet.  
2014-                   Teknisk assessor, DANAK  
2014-2018           Klinisk Adjunkt (10 %) ved Klinisk Institut, Syddansk Universitet.  
2010-                   Leder af molekylærbiologisk laboratorium på Klinisk Immunologisk Afd., Odense Universitetshospital  
2009                   Produktspecialist i Roche Diagnostics A/S  
2003-2008          Leder af molekylærbiologisk laboratorium på Klinisk Immunologisk Afd., Odense Universitetshospital  
2002                   Barselsvikar for molekylærbiolog på Klinisk Immunologisk Afd., Odense Universitetshospital  
1999-2002          Forskningsassistent/ph.d. studerende på Klinisk Immunologisk. Afd., Odense Universitetshospital

### Kurser

- Universitetspædagogikum
- Research management, Danish Diabetes Academy

Herudover mere end 25 kurser, både nationale og internationale, herunder bl.a:

- ESID WintherSchool in Immunodeficiency 2012, Windsor, England.
- Transfusion Science Educational Course, Barcelona, Spanien

### Fagligt tillidserhverv

2019-                   National tværfaglig arbejdsgruppe omkring revidering af "Det gode svar" på genetiske og kromosomanalyser  
2017-                   National tværfaglig arbejdsgruppe omkring revidering af "Det gode svar" på genetiske og kromosomanalyser  
2014-2015           National tværfaglig arbejdsgruppe omkring udarbejdelse af "Det gode svar" på genetiske og kromosomanalyser  
2013-                   Arbejdsgruppe omkring Knoglemarvsdonorer, Vest.  
2015-                   Udvalget for molekylærgenetik under DSKI (Dansk selskab for klinisk immunologi)  
2015-                   Assessor på Sanger sekventering hos EMQN (The European Molecular Genetics Quality Network)

### Publikationer

#### **Hematologically important mutations: The autosomal forms of chronic granulomatous disease (third update)**

Roos, D., van Leeuwen, K., Hsu, A. P., Priel, D. L., Begtrup, A., Brandon, R., Rawat, A., Vignesh, P., Madkaikar, M., Stasia, M. J., Bakri, F. G., de Boer, M., Roesler, J., Köker, N., Köker, M. Y., Jakobsen, M., Bustamante, J., Garcia-Morato, M. B., Shephard, J. L. V., Cagdas, D. & 16 flere, Tezcan, I., Sherkat, R., Mortaz, E., Fayezi, A., Shahrooei, M., Wolach, B., Blancas-Galicia, L., Kanegane, H., Kawai, T., Condino-Neto, A., Vihinen, M., Zerbe, C. S., Holland, S. M., Malech, H. L., Gallin, J. I. & Kuhns, D. B., dec. 2021, I: Blood Cells, Molecules and Diseases. 92, 102596.

**Pyrin Inflammasome Activation Abrogates Interleukin-1 Receptor Antagonist, Suggesting a New Mechanism Underlying Familial Mediterranean Fever Pathogenesis**

Mortensen, S. B., Hansen, A-B. E., Mogensen, T. H., Jakobsen, M. A., Beck, H. C., Harvald, E. B., Lambertsen, K. L., Johansen, I. S. & Andersen, D. C., nov. 2021, I: *Arthritis & Rheumatology*. 73, 11, s. 2116-2126

**Impact of Male Origin Microchimerism on Cardiovascular Disease in Women: A Prospective Cohort Study**

Hallum, S., Gerds, T. A., Sehested, T. S. G., Jakobsen, M. A., Tjønneland, A. & Kamper-Jørgensen, M., 4. maj 2021, I: *American Journal of Epidemiology*. 190, 5, s. 853-863

**Altered Antibody Response to Epstein-Barr Virus in Patients With Rheumatoid Arthritis and Healthy Subjects Predisposed to the Disease: A Twin Study**

Svendsen, A. J., Westergaard, M. C. W., Draborg, A. H., Holst, R., Kyvik, K. O., Jakobsen, M. A., Junker, P. & Houen, G., 11. mar. 2021, I: *Frontiers in Immunology*. 12, 8 s., 650713.

**Male origin microchimerism and ovarian cancer**

Hallum, S., Jakobsen, M. A., Gerds, T. A., Pinborg, A., Tjønneland, A. & Kamper-Jørgensen, M., 3. mar. 2021, I: *International Journal of Epidemiology*. 50, 1, s. 87-94

**Impact of RHD genotyping on transfusion practice in Denmark and the United States and identification of novel RHD alleles**

Vege, S., Sprogøe, U., Lomas-Francis, C., Jakobsen, M. A., Antonsen, B., Aeschlimann, J., Yazer, M. & Westhoff, C. M., jan. 2021, I: *Transfusion*. 61, 1, s. 256-265

**Molecular pathways in patients with systemic lupus erythematosus revealed by gene-centred DNA sequencing**

Sandling, J. K., Pucholt, P., Hultin Rosenberg, L., Farias, F. H. G., Kozyrev, S. V., Eloranta, M. L., Alexsson, A., Bianchi, M., Padyukov, L., Bengtsson, C., Jonsson, R., Omdal, R., Lie, B. A., Massarenti, L., Steffensen, R., Jakobsen, M. A., Lillevang, S. T., Lerang, K., Molberg, Ø., Voss, A. & 12 flere, Trolldborg, A., Jacobsen, S., Syvänen, A. C., Jönsen, A., Gunnarsson, I., Svenungsson, E., Rantapää-Dahlqvist, S., Bengtsson, A. A., Sjöwall, C., Leonard, D., Lindblad-Toh, K. & Rönnblom, L., jan. 2021, I: *Annals of the rheumatic diseases*. 80, 1, s. 109-117

**STK4 Deficiency Impairs Innate Immunity and Interferon Production Through Negative Regulation of TBK1-IRF3 Signaling**

Jørgensen, S. E., Al-Mousawi, A., Assing, K., Hartling, U., Grosen, D., Fisker, N., Nielsen, C., Jakobsen, M. A. & Mogensen, T. H., jan. 2021, I: *Journal of Clinical Immunology*. 41, 1, s. 109-124

**A novel ABO allele with a 21-bp duplication identified in two unrelated European individuals with weak A expression**

Jakobsen, M. A., Hult, A. K., Hellberg, Å., Crottet, S. L., Sprogøe, U. & Olsson, M. L., dec. 2020, I: *Transfusion Medicine*. 30, 6, s. 508-512

**Potential anti-EBV effects associated with elevated interleukin-21 levels: a case report**

Assing, K., Nielsen, C., Jakobsen, M., Andersen, C. B., Skogstrand, K., Gaini, S., Preiss, B., Mortensen, S. B., Skov, M. N. & Rasmussen, L. D., dec. 2020, I: *BMC Infectious Diseases*. 20, 8 s., 878.

**Characteristics of patients with familial Mediterranean fever in Denmark: a retrospective nationwide register-based cohort study**

Mortensen, S. B., Hansen, A. E., Lundgren, J., Barfod, T. S., Ambye, L., Dunø, M., Schade Larsen, C., Andersen, D. C., Jakobsen, M. A. & Johansen, I. S., nov. 2020, I: *Scandinavian Journal of Rheumatology*. 49, 6, s. 489-497

**Next Generation Sequencing-Based Fetal ABO Blood Group Prediction by Analysis of Cell-Free DNA from Maternal Plasma**

Rieneck, K., Egeberg Hother, C., Clausen, F. B., Jakobsen, M. A., Bergholt, T., Hellmuth, E., Grønbeck, L. & Dziegiel, M. H., 1. feb. 2020, I: *Transfusion Medicine and Hemotherapy*. 47, 1, s. 45-53

**Association between neutropenia and IgG antineutrophil antibodies in a case of CD40LG deficiency due to two novel mutations**

Assing, K., Nielsen, K. R., Tenstad, H. B., Jakobsen, M. A., Nielsen, C., Grosen, D. & Hartling, U. B., feb. 2020, I: *Clinical Case Reports*. 8, 2, s. 313-316

**Genetic susceptibility to angiotensin-converting enzyme-inhibitor induced angioedema: A systematic review and evaluation of methodological approaches**

Ali, H. A., Lomholt, A. F., Mahmoudpour, S. H., Hermanrud, T., Bygum, A., von Buchwald, C., Jakobsen, M. A. & Rasmussen, E. R., 11. nov. 2019, I: PLOS ONE. 14, 11, 11 s., e0224858.

**Acquired complement C1 esterase inhibitor deficiency in a patient with a rare SERPING1 variant with unknown significance**

Rasmussen, E. R., Aanæs, K., Jakobsen, M. A. & Bygum, A., 1. sep. 2019, I: BMJ Case Reports. 12, 9, 5 s., e231122.

**The use of next-generation sequencing for the determination of rare blood group genotypes**

Jakobsen, M. A., Dellgren, C., Sheppard, C., Yazer, M. & Sprogøe, U., jun. 2019, I: Transfusion Medicine. 29, 3, s. 162-168

**Noninvasive fetal RHD genotyping to guide targeted anti-D prophylaxis-an external quality assessment workshop**

Clausen, F. B., Barrett, A. N., Noninvasive Fetal RHD Genotyping EQA2017 Working Group, Christiansen, M., Jakobsen, M. A., Steffensen, R., Sølling Sørensen, A., Wulf-Johansson, H. & Dziegiel, M. H., maj 2019, I: Vox Sanguinis. 114, 4, s. 386-393

**CD18 is redundant for the response to multiple vaccines: A case study**

Assing, K., Nielsen, C., Hansen, H. T., Jakobsen, M. A., Skogstrand, K., Brasch- Andersen, C., Hartling, U. B. & Fisker, N., feb. 2019, I: Pediatric Allergy and Immunology. 30, 1, s. 136-139

**White blood cell mitochondrial DNA copy number is decreased in rheumatoid arthritis and linked with risk factors. A twin study**

Svensden, A. J., Tan, Q., Jakobsen, M. A., Thyagarajan, B., Nygaard, M., Christiansen, L. & Mengel-From, J., jan. 2019, I: Journal of Autoimmunity. 96, s. 142-146

**Hereditary angioedema: a mother diagnosing her child using Google as a diagnostic aid**

Srikantharajah, T., Jakobsen, M. A. & Bygum, A., 3. okt. 2018, I: BMJ Case Reports. 2018, 225825.

**Results of noninvasive prenatal RHD testing in Gestation Week 25 are not affected by maternal body mass index**

Jakobsen, M. A., Rosbach, H. K., Dellgren, C., Yazer, M. & Sprogøe, U., 4. sep. 2018, I: Transfusion. 58, 10, s. 2421-2425

**Gennemgang af en ny type arveligt angioødem med normal komplement C1-inhibitor**

Okholm-Hansen, M. B., Winther, A. H., Fagerberg, C., Jakobsen, M. A. & Bygum, A., 2018, I: Ugeskrift for Læger. 180, 11, s. 2-5 V06170468.

**Clinical characteristics and real-life diagnostic approaches in all Danish children with hereditary angioedema**

Aabom, A., Andersen, K. E., Fagerberg, C., Fisker, N., Jakobsen, M. A. & Bygum, A., 16. mar. 2017, I: Orphanet Journal of Rare Diseases. 12, 10 s., 55.

**Evidence of perturbed germinal center dynamics, but preserved antibody diversity, in end-stage renal disease**

Assing, K., Nielsen, C., Jakobsen, M., Scholze, A., Nybo, M., Soerensen, G., Mortensen, S., Nielsen, K. E. V., Barington, T. & Bistrup, C., jun. 2016, I: Immunity, Inflammation and Disease. 4, 2, s. 225-234

**Microchimerism of male origin in a cohort of Danish girls**

Müller, A. C., Jakobsen, M. A., Barington, T., Vaag, A. A., Grunnet, L. G., Olsen, S. F. & Kamper-Jørgensen, M., 2016, I: Chimerism. 6, 4, s. 65-71

**Infantile Hemophagocytic Lymphohistiocytosis in a Case of Chediak-Higashi Syndrome Caused by a Mutation in the LYST/CHS1 Gene Presenting With Delayed Umbilical Cord Detachment and Diarrhea**

Nielsen, C., Agergaard, C. N., Jakobsen, M. A., Møller, M. B., Fisker, N. & Barington, T., 6. mar. 2015, I: Journal of Pediatric Hematology/Oncology. 37, 2, s. e73-e79

**Immunodeficiency associated with a nonsense mutation of IKBKB**

Nielsen, C., Jakobsen, M. A., Larsen, M. J., Müller, A. C., Hansen, S., Lillevang, S. T., Fisker, N. & Barington, T., nov. 2014, I: Journal of Clinical Immunology. 34, 8, s. 916-921

**A case of high-titer anti-D hemolytic disease of the newborn in which late onset and mild course is associated with the D variant, RHD-CE(9)-D**

Jakobsen, M. A., Nielsen, C. & Sprogøe, U., 1. okt. 2014, I: Transfusion. 54, 10, s. 2463-2467

**Testosterone treatment increases androgen receptor and aromatase gene expression in myotubes from patients with PCOS and controls, but does not induce insulin resistance**

Eriksen, M. B., Glinborg, D., Nielsen, M. F. B., Jakobsen, M. A., Brusgaard, K., Tan, Q. & Gaster, M., sep. 2014, I: Biochemical and Biophysical Research Communications. 451, 4, s. 622-626

**Routine noninvasive prenatal screening for fetal RHD in plasma of RhD-negative pregnant women-2years of screening experience from Denmark**

Banch Clausen, F., Steffensen, R., Christiansen, M., Rudby, M., Jakobsen, M. A., Jakobsen, T. R., Krog, G. R., Madsen, R. D., Nielsen, K. R., Rieneck, K., Sprogøe, U., Homburg, K. M., Baech, J., Dziegiel, M. H. & Grunnet, N., 2014, I: Prenatal Diagnosis. 34, 10, s. 1000-5 6 s.

**Identification of a novel STAT3 mutation in a patient with hyper-IgE syndrome**

Mogensen, T., Jakobsen, M. A. & Larsen, C. S., 2013, I: Scandinavian Journal of Infectious Diseases. 45, 3, s. 235-8

**Genetical analysis of all Danish patients diagnosed with chronic granulomatous disease**

Jakobsen, M. A., Katzenstein, T. L., Valerius, N. H., Roos, D., Fisker, N., Mogensen, T. H., Jensen, P. Ø. & Barington, T., 2012, I: Scandinavian Journal of Immunology. 76, 5, s. 505-11 7 s.

**Report of the first nationally implemented clinical routine screening for fetal RHD in D- pregnant women to ascertain the requirement for antenatal RhD prophylaxis**

Clausen, F. B., Christiansen, M., Steffensen, R. N., Jørgensen, S., Nielsen, C., Jakobsen, M. A., Madsen, R. D., Jensen, K. S., Krog, G. R., Rieneck, K., Sprogøe, U., Homburg, K. M., Grunnet, N. & Dziegiel, M. H., 2012, I: Transfusion. 52, 4, s. 752-8 7 s.

**Molecular diagnosis of patients with chronic granulomatous disease**

Jakobsen, M. A. & Barington, T., 1. dec. 2010, I: Current Topics in Genetics. 4, s. 55-64 10 s.

**Postmortem detection of hepatitis B, C, and human immunodeficiency virus genomes in blood samples from drug-related deaths in Denmark\***

Eriksen, M. B., Jakobsen, M. A., Kringsholm, B., Banner, J., Thomsen, J. L., Georgsen, J., Pedersen, C. & Christensen, P. B., 1. sep. 2009, I: Journal of Forensic Sciences. 54, 5, s. 1085-8 3 s.

**Detection of non-ΔGT NCF-1 mutations in chronic granulomatous disease**

Jakobsen, M. A., Pedersen, S. S. & Barington, T., 1. aug. 2009, I: Genetic testing and molecular biomarkers. 13, 4, s. 505-10 5 s.

**Peroxisome proliferator-activated receptor alpha, delta, gamma1 and gamma2 expressions are present in human monocyte-derived dendritic cells and modulate dendritic cell maturation by addition of subtype-specific ligands**

Jakobsen, M. A., Petersen, R. K., Kristiansen, K., Lange, M. & Lillevang, S. T., 2006, I: Scandinavian Journal of Immunology. 63, s. 330-337

**Peroxisome proliferator-activated receptor alpha, delta, gamma1 and gamma2 expressions are present in human monocyte-derived dendritic cells and modulate dendritic cell maturation by addition of subtype-specific ligands**

Jakobsen, M. A., Petersen, R. K., Kristiansen, K., Lange, M. & Lillevang, S. T., 2006, I: Scandinavian Journal of Immunology. 63, 5, s. 330-337

**Gene therapy of X-linked severe combined immunodeficiency by use of a pseudotyped gammaretroviral vector.**

Gaspar, H. B., Parsley, K. L., Howe, S., King, D., Gilmour, K. C., Sinclair, J., Brouns, G., Schmidt, M., Von Kalle, C., Barington, T., Jakobsen, M. A., Christensen, H. O., Al Ghonaium, A., White, H. N., Smith, J. L., Levinsky, R. J., Ali, R. R., Kinnon, C. & Trasher, A. J., 2004, I: Lancet. 364(9452), s. 2181-2187

**Serum Concentration of the Growth Medium Markedly Affects Monocyte-Derived Dendritic Cells' Phenotype, Cytokine Production Profile and Capacities to Stimulate in MLR.**

Jakobsen, M. A., Møller, B. K. & Lillevang, S. T., 2004, I: Scandinavian Journal of Immunology. 60(6), s. 584-591

**Lipid-binding proteins modulate ligand-dependent trans-activation by peroxisome proliferator-activated receptors and localize to the nucleus as well as the cytoplasm**

Helledie, T., Antonius, M., Sorensen, R. V., Hertzog, A. V., Bernlohr, D. A., Kølvråa, S., Kristiansen, K. & Mandrup, S., 1. nov. 2000, I: Journal of Lipid Research. 41, 11, s. 1740-1751 11 s.

## Kongresser

Aktiv deltagelse i diverse internationale symposier og kongresser:

- Tildelt pris for Top poster Abstract ved Annual meeting 2016 for Association of American Blood Banking (AABB ) for :The Use Of Next Generation Sequencing For Determination Of alleles Of Rare Blood Group Antigens ved MA. Jakobsen, C. Dellgren, C. Sheppard, U. Sprogøe and M. Yazer
- Foredrag: Rate and cases of false positive and false negative results of noninvasive determination of antenatal RHD status ved 51. annual meeting in Deutschen Gesellschaft für Transfusionsmedizin und Immunhämatologie (DGTI) 2018: .
- Foredrag: Standardization of data analysis of multiplex PCR for non-invasive prenatal RHD testing (NIP RHD) using FastFinder ved 11 European Meeting on Molecular Diagnostic (EMMD).