

Susanne Brix
Professor
Department of Biotechnology and Biomedicine
Section for Protein Science and Biotherapeutics
Disease Systems Immunology
DTU Microbes Initiative
Type of address: Postal address.
Bygningstorvet
116B, 121C
2800
Kongens Lyngby
Denmark
Email: sbrix@dtu.dk, sbp@bio.dtu.dk
Mobile: +4521604264
Web address: <http://www.bioengineering.dtu.dk/>,
<https://www.bioengineering.dtu.dk/english/researchny/research-sections/section-for-protein-science-and-biotherapeutics/diseasesystemsimmunology>



Profile

The research focuses on host-microbiota interactions in life-style mediated diseases, with particular focus on allergy, asthma, inflammatory bowel diseases, obesity-related disorders and functional somatic disorders. In this regard, we have specific interest in early-in-life programming of immune function towards later disease trajectories, in mechanisms controlling immune regulation at barrier sites such as the gut and lungs, and in the gut-brain axis. We continuously expand and use high-throughput single-cell technologies, high sensitivity antibody-based assays and proteomics to define functional immune cell subsets, signaling molecules and biomarkers in tissues, mucosal secretions and blood from clinical studies in children and adults, and in experimental model systems. We examine host factors of importance for host-microbe interactions by use of co-culture models of microbes with primary epithelial and immune cells and develop bioinformatics-based tools to decipher the type of microbial immunoregulatory metabolites and compounds in human metagenomic samples from the intestine and airway compartments. The work is centered on systems wide analysis, and the group has made recent major achievements regarding microbiome-immune interactions in relation to programming of different asthma disease endotypes during childhood.
Research keywords: Diet, gut and lung microbiomes (abundance and function), sequencing of Ig-coated bacteria to identify disease-driving microbes, profiling of immune cell heterogeneity and functionality in tissues, inflammatory responses, immune regulation (in vivo and experimental systems), early life programming and lifestyle-associated diseases.

Qualifications

PhD in Immunology

Award Date: 30 Sept 2005

MSc chemical engineering/biotechnology

Award Date: 6 Jul 1998

Research outputs

Effect of anterior quadratus lumborum block with ropivacaine on the immune response after laparoscopic surgery in colon cancer: a substudy of a randomized clinical trial

Balsevicius, L., Urbano, P. C. M., Hasselager, R. P., Mohamud, A. A., Olausson, M., Svraka, M., Wahlstrøm, K. L., Oppermann, C., Gögenur, D. S., Hølmich, E. R., Cappelen, B., Sækmose, S. G., Tanggaard, K., Litman, T., Børglum, J., Brix, S. & Gögenur, I., 2024, (Accepted/In press) In: *Regional Anesthesia and Pain Medicine*. rapm-2023-104896.

Generating single-cell gene expression profiles for high-resolution spatial transcriptomics based on cell boundary images

Zhang, B., Li, M., Kang, Q., Deng, Z., Qin, H., Su, K., Feng, X., Chen, L., Liu, H., Fang, S., Zhang, Y., Li, Y., Brix, S. & Xu, X., 2024, In: *Gigabyte*. 2024, 13 p., gigabyte110.

Gut microbiota signatures in inflammatory bowel disease

Vestergaard, M. V., Allin, K. H., Eriksen, C., Zakerska-Banaszak, O., Arasaradnam, R. P., Alam, M. T., Kristiansen, K., Brix, S. & Jess, T., 2024, In: *United European Gastroenterology Journal*. 12, 1, p. 22-33

Intratumoral induktion af type I interferonrespons i solide tumorer

Löffler, L., Gögenur, I., Brix, S. & Gögenur, M., 2024, In: Ugeskrift for Laeger. 186, 1, p. 43-47 5 p.

Maternal inflammation during pregnancy is associated with risk of ADHD in children at age 10

Rosenberg, J. B., Richardt Møllegaard Jepsen, J., Mohammadzadeh, P., Sevelsted, A., Vinding, R., Sørensen, M. E., Fagerlund, B., Horner, D., Aagaard, K., Brix, S., Følsgaard, N., Schoos, A-M. M., Stokholm, J., Chawes, B., Pantelis, C., Dalgaard, S., Glenthøj, B. Y., Bilenberg, N., Bønnelykke, K. & Ebdrup, B. H., 2024, In: Brain Behavior and Immunity. 115 , p. 450-457 8 p.

Specific gut pathobionts escape antibody coating and are enriched during flares in patients with severe Crohn's disease

Eriksen, C., Danneskiold-Samsøe, N. B., Moll, J. M., Myers, P. N., Bondegaard, P. W., Vejrum, S., Hansen, T. B., Rosholm, L. B., Rausch, P., Allin, K. H., Jess, T., Kristiansen, K., Penders, J., Jonkers, D. & Brix, S., 2024, In: Gut. 73, p. 448-458

Age-dependent changes in the gut microbiota and serum metabolome correlate with renal function and human aging

Sun, L., Li, Z., Hu, C., Ding, J., Zhou, Q., Pang, G., Wu, Z., Yang, R., Li, S., Li, J., Cai, J., Sun, Y., Li, R., Zhen, H., Sun, S., Zhang, J., Fang, M., Chen, Z., Lv, Y., Cao, Q., & 36 othersSun, Y., Gong, R., Huang, Z., Duan, Y., Liu, H., Dong, J., Li, J., Ruan, J., Lu, H., He, B., Li, N., Li, T., Xue, W., Li, Y., Shen, J., Yang, F., Zhao, C., Liang, Q., Zhang, M., Chen, C., Gong, H., Hou, Y., Wang, J., Zhang, Y., Yang, H., Zhu, S., Xiao, L., Jin, Z., Guo, H., Zhao, P., Brix, S., Xu, X., Jia, H., Kristiansen, K., Yang, Z. & Nie, C., 2023, In: Aging Cell. 22, 12, 20 p., e14028.

Association between lipid-A-producing oral bacteria of different potency and fractional exhaled nitric oxide in a Norwegian population-based adult cohort

Khomich, M., Lin, H., Malinovschi, A., Brix, S., Cestelli, L., Peddada, S., Johannessen, A., Eriksen, C., Real, F. G., Svanes, C. & Bertelsen, R. J., 2023, In: Journal of Translational Medicine. 21, 11 p., 354.

Development and validation of a minimally invasive and image-guided tape stripping method to sample atopic skin in children

Yélamos, O., Andersen, D., Pont, M., Iglesias, P., Potrony, M., Domínguez, M., Herrero, A., Alejo, B., Mateu, J., Røpke, M., Danneskiold-Samsøe, N. B., Malvehy, J., Guy, R. H., Brix, S. & Puig, S., 2023, In: Clinical and Experimental Dermatology. 48, 2, p. 80-88 9 p.

Environmental impact on quantitative resistome dynamics in the human gut during early life

Chatzigiannidou, I., Moll, J. M., Johansen, P. L., Myers, P. N., Dehli, R. I., Eriksen, C., Scheynius, A., Kristiansen, K., Mie, A., Alm, J. & Brix, S., 2023. 2 p.

Fungi and bacteria in the beds of rural and urban infants correlate with later risk of atopic diseases

Lehtimäki, J., Gupta, S., Hjelmsø, M., Shah, S., Thorsen, J., Rasmussen, M. A., Soverini, M., Li, X., Russel, J., Trivedi, U. , Brix, S., Bønnelykke, K., Chawes, B. L., Bisgaard, H., Sørensen, S. J. & Stokholm, J., 2023, In: Clinical and Experimental Allergy. 53, 12, p. 1268-1278 11 p.

Gut microbiota maturity mediates the protective effect of siblings on food allergy

BIS Investigator Group, Gao, Y., Stokholm, J., O'Hely, M., Ponsonby, A-L., Tang, M. LK., Ranganathan, S., Saffery, R., Harrison, L. C., Collier, F., Gray, L., Burgner, D., Molloy, J., Sly, P. D., Brix, S., Frøkiær, H. & Vuillermin, P., 2023, In: Journal of Allergy and Clinical Immunology. 152, 3, p. 667-675

IgG and IgM cooperate in coating of intestinal bacteria in IgA deficiency

Eriksen, C., Moll, J. M., Myers, P. N., Pinto, A. R. A., Danneskiold-Samsøe, N. B., Dehli, R. I., Rosholm, L. B., Dalgaard, M. D., Penders, J., Jonkers, D. MAE., Pan-Hammarström, Q., Hammarström, L., Kristiansen, K. & Brix, S., 2023, In: Nature Communications. 14, 12 p., 8124.

Incidence of functional somatic diseases in a population-based cohort: The DanFunD study

Schovsbo, S. U., Kårhus, L. L., Bjerregaard, A. A., Petersen, M. W., Frostholm, L., Fink, P., Carstensen, T. B. W., Eplov, L. F., Benros, M., Brix, S., Madsen, A. L., Linneberg, A., Jørgensen, T. & Dantoft, T. M., 2023, In: International Journal of Behavioral Medicine. 30, p. S60-S61 2 p., 240.

Intratumoural induction of type I interferon response in solid tumours

Löffler, L., Gögenur, I., Brix, S. & Gögenur, M., 2023, In: Ugeskrift for Laeger. 185, 34

Metabolic Profiling Early Post-Allogeneic Haematopoietic Cell Transplantation in the Context of CMV Infection

Rasmussen, K. K., Dos Santos, Q., MacPherson, C. R., Zucco, A. G., Gjærde, L. K., Ilett, E. E., Lodding, I., Helleberg, M., Lundgren, J. D., Nielsen, S. D., Brix, S., Sengeløv, H. & Murray, D. D., 2023, In: Metabolites. 13, 9, 11 p., 968.

Microbiota-based skin phenotypes in children with atopic dermatitis reflect a distinctive host response

Chatzigiannidou, I., Johansen, P. L., Andersen, D., Yélamos, O., Hjort, S. K., Quezada, J. A. D., Suvorova, M., Ács, N., Eriksen, C., Combalia, M., Iglesias, P., Dominguez, M., Potrony, M., Guy, R. H., Malvehy, J., Røpke, M., Pont, M., Puig, S. & Brix, S., 2023. 1 p.

Neoadjuvant intratumoral influenza vaccine treatment in patients with proficient mismatch repair colorectal cancer leads to increased tumor infiltration of CD8+ T cells and upregulation of PD-L1: a phase 1/2 clinical trial

Gögenur, M., Balsevicius, L., Bulut, M., Colak, N., Justesen, T. F., Fiehn, A-M. K., Jensen, M. B., Høst-Rasmussen, K., Cappelen, B., Gaggar, S., Tajik, A., Zahid, J. A., Bennedsen, A. L. B., D'Ondes, T. D. B., Raskov, H., Sækmose, S. G., Hansen, L. B., Salanti, A., Brix, S. & Gögenur, I., 2023, In: Journal for ImmunoTherapy of Cancer. 11, 5, 13 p., e006774.

Oral administration of helminth fluid modulates distinct tuft cell and immune-metabolic cues linked to reduced body fat

Andersen, D., Moll, J. M., Arora, P., Danneskiold-Samsøe, N. B., Sonne, S. B., Workman, C. T., Williams, A. R., Kristiansen, K. & Brix, S., 2023, In: Parasite Immunology. 45, 7, 12 p., e12998.

Prenatal exposure to ambient air pollution associates with early life immune perturbations

Tingskov Pedersen, C-E., Eliasen, A. U., Ketzel, M., Brandt, J., Loft, S., Frohn, L. M., Khan, J., Brix, S., Rasmussen, M. A., Stokholm, J., Morin, A., Ober, C., Bisgaard, H., Pedersen, M. & Bønnelykke, K., 2023, In: Journal of Allergy and Clinical Immunology. 151, 1, p. 212-221 10 p.

Quantitative Resistome Dynamics in the Human Gut During Early Life

Chatzigiannidou, I., Moll, J. M., Johansen, P. L., Delhi, R. I., Myers, P. N., Scheynius, A., Kristiansen, K., Mie, A., Alm, J. & Brix, S., 2023, p. 220-220. 1 p.

Specific gut pathobionts escape antibody coating and are enriched during flares in patients with severe Crohn's disease

Eriksen, C., Danneskiold-Samsøe, N., Moll, J., Myers, P., Bondegaard, P., Jensen, S., Rosholm, L. B., Jess, T., Allin, K., Jonkers, D. M., Penders, J., Kristiansen, K. & Brix, S., 2023. 1 p.

The associations between infections and functional somatic disorders: A cross-sectional population-based study

Schovsbo, S. U., Mollehave, L. T., Petersen, M. W., Bjerregaard, A. A., Holm Eliasen, M., Brix, S., Eplov, L. F., Kårhus, L. L., Fink, P., Linneberg, A., Dantoft, T. M., Jørgensen, T. & Benros, M. E., 2023, In: International Journal of Behavioral Medicine. 30, p. S52-S53 2 p., 190.

The gut microbiota in multiple sclerosis varies with disease activity

Thirion, F., Sellebjerg, F., Fan, Y., Lyu, L., Hansen, T. H., Pons, N., Levenez, F., Quinquis, B., Stankevic, E., Søndergaard, H. B., Dantoft, T. M., Poulsen, C. S., Forslund, S. K., Vestergaard, H., Hansen, T., Brix, S., Oturai, A., Sørensen, P. S., Ehrlich, S. D. & Pedersen, O., 2023, In: Genome Medicine. 15, 17 p., 1.

Three alginate lyases provide a new gut *Bacteroides ovatus* isolate with the ability to grow on alginate

Rønne, M. E., Tandrup, T., Madsen, M., Hunt, C. J., Myers, P. N., Moll, J. M., Holck, J., Brix, S., Strube, M. L., Achmann, F. L., Wilkens, C. & Svensson, B., 2023, In: Applied and Environmental Microbiology. 89, 10, e0118523.

Association between infections and functional somatic disorders: a cross-sectional population-based cohort study

Schovsbo, S. U., Møllehave, L. T., Petersen, M. W., Ahrendt Bjerregaard, A., Eliasen, M., Pedersen, S. B., Eplov, L. F., Kårhus, L. L., Fink, P., Linneberg, A., Dantoft, T. M., Jørgensen, T. & Benros, M. E., 2022, In: BMJ Open. 12, 11, 10 p., e066037.

Associations of 25 hydroxyvitamin d and high sensitivity c-reactive protein levels in early life

Brustad, N., Fink, N. R., Stokholm, J., Bønnelykke, K., Følsgaard, N. V., Hougaard, D., Brix, S., Lasky-su, J., Weiss, S. T. & Chawes, B. L., 2022, In: Nutrients. 14, 1, 9 p., 15.

DanFunD – disentangling functional somatic disorders using classical epidemiological methods

Dantoft, T., Weinreich Petersen, M., Benrod, M., Poulsen, C., Eplov, L., Gormsen, L., Frostholt, L., Carstensen, T., Eliasen, M., Lund Kårhus, L., Skovbjerg, S., Ahrendt Bjerregaard, A., Brix, S., Linneberg, A., Fink, P. & Jørgensen, T., 2022, In: Journal of Psychosomatic Research. 157, 1 p., 110844.

Distinct Functional Metagenomic Markers Predict the Responsiveness to Anti-PD-1 Therapy in Chinese Non-Small Cell Lung Cancer Patients

Fang, C., Fang, W., Xu, L., Gao, F., Hou, Y., Zou, H., Ma, Y., Moll, J. M., Yang, Y., Wang, D., Huang, Y., Ren, H., Zhao, H., Qin, S., Zhong, H., Li, J., Liu, S., Yang, H., Wang, J., Brix, S., & 2 others Kristiansen, K. & Zhang, L., 2022, In: Frontiers in Oncology. 12, 13 p., 837525.

Distinct infant feeding type-specific plasma metabolites at age 3 months associate with body composition at 2 years

van Beijsterveldt, I. A. L. P., Myers, P. N., Snowden, S. G., Ong, K. K., Brix, S., Hokken-Koelega, A. C. S. & Koulman, A., 2022, In: Clinical Nutrition. 41, 6, p. 1290-1296 7 p.

Effects of immune checkpoint inhibitor-based combination therapies on the gut microbiota in advanced melanoma patients

Li, J., Xu, L., Peng, Z., Jiang, H., Chao, F., Ding, Y., Moll, J. M., Li, D., Wen, X., Wang, J., Ding, Q., Zhang, L., Kristiansen, K., Brix, S. & Zhang, X., 2022, In: Annals of Oncology. 33, Supplement 7, p. S934-S934 1 p., 841P.

Examine the public health impacts of functional somatic disorders using the DanFunD study

Jørgensen, T., Dantoft, T. M., Weinreich Petersen, M., Eriksen Benros, M., Poulsen, C. H., Falgaard Eplov, L., Gormsen, L., Frostholt, L., Carstensen, T. B. W., Holm Eliasen, M., Kårhus, L. L., Skovbjerg, S., Bjerregaard, A. A., Brix, S., Linneberg, A. & Fink, P., 2022, In: Scandinavian Journal of Public Health. 50, 7, p. 988-994 7 p.

Genome-wide study of early and severe childhood asthma identifies interaction between CDHR3 and GSDMB

Eliasen, A. U., Pedersen, C. E. T., Rasmussen, M. A., Wang, N., Soverini, M., Fritz, A., Stokholm, J., Chawes, B. L., Morin, A., Bork-Jensen, J., Grarup, N., Pedersen, O., Hansen, T., Linneberg, A., Mortensen, P. B., Hougaard, D. M., Bybjerg-Grauholt, J., Bækvad-Hansen, M., Mors, O., Nordentoft, M., & 14 others Børglum, A. D., Werje, T., Agerbo, E., Söderhall, C., Altman, M. C., Thysen, A. H., McKennan, C. G., Brix, S., Gern, J. E., Ober, C., Ahluwalia, T. S., Bisgaard, H., Pedersen, A. G. & Bønnelykke, K., 2022, In: Journal of Allergy and Clinical Immunology. 150, 3, p. 622-630

Genomic and microbial factors affect the prognosis of anti-pd-1 immunotherapy in nasopharyngeal carcinoma

Xu, L., Ma, Y., Fang, C., Peng, Z., Gao, F., Moll, J. M., Qin, S., Yu, Q., Hou, Y., Kristiansen, K., Fang, W., Brix, S. & Zhang, L., 2022, In: Frontiers in Oncology. 12, 11 p., 953884.

Maternal gut microbiota during pregnancy and the composition of immune cells in infancy

Gao, Y., O'Hely, M., Quinn, T. P., Ponsonby, A. L., Harrison, L. C., Frøkiær, H., Tang, M. L. K., Brix, S., Kristiansen, K., Burgner, D., Saffery, R., Ranganathan, S., Collier, F. & Vuillermin, P., 2022, In: Frontiers in Immunology. 13, 11 p., 986340.

Metabolomics in early life and the association with body composition at age 2years

van Beijsterveldt, I. A. L. P., Snowden, S. G., Myers, P. N., de Fluiter, K. S., van de Heijning, B., Brix, S., Ong, K. K., Dunger, D. B., Hokken-Koelega, A. C. S. & Koulman, A., 2022, In: Pediatric Obesity. 17, 3, 12 p., e12859.

Multi-omics analyses of serum metabolome, gut microbiome and brain function reveal dysregulated microbiota-gut-brain axis in bipolar depression

Li, Z., Lai, J., Zhang, P., Ding, J., Jiang, J., Liu, C., Huang, H., Zhen, H., Xi, C., Sun, Y., Wu, L., Wang, L., Gao, X., Li, Y., Fu, Y., Jie, Z., Li, S., Zhang, D., Chen, Y., Zhu, Y., & 15 others Lu, S., Lu, J., Wang, D., Zhou, H., Yuan, X., Li, X., Pang, L., Huang, M., Yang, H., Zhang, W., Brix, S., Kristiansen, K., Song, X., Nie, C. & Hu, S., 2022, In: Molecular Psychiatry. 27, p. 4123-4135 13 p.

Neonatal metabolome of cesarean section and risk of childhood asthma

Gürdeniz, G., Ernst, M., Rago, D., Kim, M., Courraud, J., Stokholm, J., Bønnelykke, K., Björkbom, A., Trivedi, U., Sørensen, S. J., Brix, S., Hougaard, D., Rasmussen, M., Cohen, A. S., Bisgaard, H. & Chawes, B., 2022, In: The European Respiratory Journal. 59, 6, 2102406.

Orally active bivalent V_H-H construct prevents proliferation of F4⁺ enterotoxigenic *Escherichia coli* in weaned piglets
Fiil, B. K., Thrane, S. W., Pichler, M., Kittilä, T., Ledsgaard, L., Ahmadi, S., Hermansen, G. M. M., Jelsbak, L., Lauridsen, C., Brix, S. & Laustsen, A. H., 2022, In: iScience. 25, 4, 18 p., 104003.

Profiling the Atopic Dermatitis Epidermal Transcriptome by Tape Stripping and BRB-seq

Hu, T., Todberg, T., Andersen, D., Danneskiold-Samsøe, N. B., Hansen, S. B. N., Kristiansen, K., Ewald, D. A., Brix, S., Rosa, J. C. D., Hoof, I., Skov, L. & Litman, T., 2022, In: International Journal of Molecular Sciences. 23, 11, 12 p., 6140.

Vaginal dysbiosis in pregnancy associates with risk of emergency cesarean section: a prospective cohort study

Haahr, T., Clausen, T. D., Thorsen, J., Rasmussen, M. A., Mortensen, M. S., Lehtimäki, J., Shah, S. A., Hjelmsø, M. H., Bønnelykke, K., Chawes, B. L., Vestergaard, G., Jacobsson, B., Larsson, P-G., Brix, S., Sørensen, S. J., Bisgaard, H. & Stokholm, J., 2022, In: Clinical Microbiology and Infection. 28, 4, p. 588-595 8 p.

Vigtig grundforskning sker ikke af sig selv. Det skal prioriteres af politikere – og vælgere

Agger, J. W., Hachem, M. A., Laustsen-Kiel, A. H., Damgaard, R. B., Workman, C., Dirac, A., Brix Pedersen, S., Morth, J. P., Martinussen, J., Voldborg, B., Holck, J., Larsen, T. O., Jelsbak, L., Mateiu, R., Pedersen, L. E., Marcussen, M. H., Zeuner, B., Bentzon-Tilia, M., Emnéus, J., Møller, M. S., & 5 othersBuell, A. K., Schoof, E., Seibold, G. M., Sternberg, C. & Christensen, B. B., 2022, In: Information.

Virus-specific airway immune response in early life is associated with childhood asthma

Melgaard, M. E., Chawes, B. L. K., Jensen, S. K., Stokholm, J., Schoos, A. M., Brix, S., Eliasen, A., Pedersen, C. T., Bisgaard, H. & Bonnelykke, K., 2022, In: European Respiratory Journal. 60, suppl. 66, 1098.

Acid Hydrolysis of Gluten Enhances the Skin Sensitising Potential and Drives Diversification of IgE Reactivity to Unmodified Gluten Proteins

Ballegaard, A-S. R., Castan, L., Larsen, J. M., Piras, C., Villemin, C., Andersen, D., Madsen, C. B., Roncada, P., Brix, S., Denery-Papini, S., Mazzucchelli, G., Bouchaud, G. & Bøgh, K. L., 2021, In: Molecular Nutrition and Food Research. 65, 23, 13 p., 2100416.

A genome-wide association study for gut metagenome in Chinese adults illuminates complex diseases

Liu, X., Tang, S., Zhong, H., Tong, X., Jie, Z., Ding, Q., Wang, D., Guo, R., Xiao, L., Xu, X., Yang, H., Wang, J., Zong, Y., Liu, W., Liu, X., Zhang, Y., Brix, S., Kristiansen, K., Hou, Y., Jia, H., & 1 othersZhang, T., 2021, In: Cell Discovery. 7, 1, 15 p., 9.

Airway immune mediator levels during asthma-like symptoms in young children and their possible role in response to azithromycin

Carlsson, C. J., Rasmussen, M. A., Pedersen, S. B., Wang, N., Stokholm, J., Chawes, B. L., Bønnelykke, K. & Bisgaard, H., 2021, In: Allergy. 76, 6, p. 1754-1764 11 p.

Development of a minimally-invasive method, guided by *in vivo* non-invasive imaging, to sample atopic skin

Yelamos, O., Andersen, D., Iglesias, P., Potrony, M., Dominguez, M., Herrero, A., Alejo, B., Mateu, J., Røpke, M., Pont Giralt, M., Danneskiold-Samsoe, N. B., Kristiansen, K., Malvehy, J., Guy, R., Brix, S. & Puig, S., 2021, In: Journal of Investigative Dermatology. 141, 5, supplement, p. S23-S23 1 p., 130.

Effects of maternal high-fat/high sucrose diet on hepatic lipid metabolism in rat offspring

Ingvorsen, C., Lelliott, C. J., Brix, S. & Hellgren, L. I., 2021, In: Clinical and Experimental Pharmacology and Physiology. 48, 1, p. 86-95 10 p.

Gut microbiota perturbation in IgA deficiency is influenced by IgA-autoantibody status

Moll, J. M., Myers, P. N., Zhang, C., Eriksen, C., Wolf, J., Appelberg, K. S., Lindberg, G., Bahl, M. I., Zhao, H., Pan-Hammarström, Q., Cai, K., Jia, H., Borte, S., Nielsen, H. B., Kristiansen, K., Brix, S. & Hammarström, L., 2021, In: Gastroenterology. 160, 7, p. 2423-2434.e5

***Bifidobacterium* species associated with breastfeeding produce aromatic lactic acids in the infant gut**

Larsen, M. F., Sakanaka, M., von Burg, N., Mörbe, U., Andersen, D., Moll, J. M., Pekmez, C. T., Rivollier, A., Michaelsen, K. F., Mølgaard, C., Lind, M. V., Dragsted, L. O., Katayama, T., Frandsen, H. L., Vinggaard, A. M., Bahl, M. I., Brix, S., Agace, W., Licht, T. R. & Roager, H. M., 2021, In: *Nature Microbiology*. 30, 30 p., 1367–1382.

Identification of novel molecular markers of disease severity and skin itchiness in children with atopic dermatitis

Andersen, D., Yélamos, O., Røpke, M., Giralt, M. P., Danneskiold-Samsøe, N. B., Kristiansen, K., Malvehy, J. N., Guy, R., Puig, S. & Brix, S., 2021, In: *Journal of Investigative Dermatology*. 141, 5, Supplement, p. S22-S22 1 p., 122.

Innate IL-23/Type 17 immune responses mediate the effect of the 17q21 locus on childhood asthma

Wang, N., Brix, S., Larsen, J. M., Thysen, A. H., Rasmussen, M. A., Workman, C. T., Stokholm, J., Bønnelykke, K., Bisgaard, H. & Chawes, B. L., 2021, In: *Clinical and Experimental Allergy*. 51, 7, p. 892–901

Maternal prenatal gut microbiota composition predicts child behaviour

BIS Investigator Group, Dawson, S. L., O'Hely, M., Jacka, F. N., Ponsonby, A-L., Symeonides, C., Loughman, A., Collier, F., Moreno-Betancur, M., Sly, P., Burgner, D., Tang, M. L. K., Saffery, R., Ranganathan, S., Conlon, M. A., Harrison, L. C., Brix, S., Kristiansen, K. & Vuillermin, P., 2021, In: *EBioMedicine*. 68, 10 p., 103400.

Metabolomics in early life and the association with body composition at age 2 years

van Beijsterveldt, I., Snowden, S., Myers, P. N., de Fluitter, K., Brix, S., Ong, K., Dunger, D., Hokken-Koelega, A. & Koulman, A., 2021, *European Society for Paediatric Endocrinology (ESPE) 59th Annual Meeting, Online, September 2021: Abstracts*. SUPPL 1 ed. Karger, Vol. 94. p. 82-82 1 p. P1-33. (Hormone Research in Paediatrics).

Neonatal Airway Immune Profiles and Asthma and Allergy Endpoints in Childhood

Chawes, B. L., MygindWolsk, H., Jakob Carlsson, C., Rasmussen, M. A., Følsgaard, N., Stokholm, J., Bønnelykke, K., Pedersen, S. B., MalbySchoos, A-M. & Bisgaard, H. F., 2021, In: *Allergy*. 76, 12, p. 3713-3722 10 p.

Network of Interactions Between Gut Microbiome, Host Biomarkers, and Urine Metabolome in Carotid Atherosclerosis

Li, R-J., Jie, Z-Y., Feng, Q., Fang, R-L., Li, F., Gao, Y., Xia, H-H., Zhong, H-Z., Tong, B., Madsen, L., Zhang, J-H., Liu, C-L., Xu, Z-G., Wang, J., Yang, H-M., Xu, X., Hou, Y., Brix, S., Kristiansen, K., Yu, X-L., & 2 othersJia, H-J. & He, K-L., 2021, In: *Frontiers in Cellular and Infection Microbiology*. 11, 12 p., 708088.

Small Intestinal Tuft Cell Activity Associates With Energy Metabolism in Diet-Induced Obesity

Arora, P., Andersen, D., Moll, J. M., Danneskiold-Samsøe, N. B., Xu, L., Zhou, B., Kladis, G., Rausch, P., Workman, C. T., Kristiansen, K. & Brix, S., 2021, In: *Frontiers in Immunology*. 12, 13 p., 629391.

Systems-wide effects of short-term feed deprivation in obese mice

Andersen, D., Roager, H. M., Zhang, L., Moll, J. M., Frandsen, H. L., Danneskiold-Samsøe, N. B., Hansen, A. K., Kristiansen, K., Licht, T. R. & Pedersen, S. B., 2021, In: *Scientific Reports*. 11, 11 p., 5716.

The baseline gut microbiota directs dieting-induced weight loss trajectories

Jie, Z., Yu, X., Liu, Y., Sun, L., Chen, P., Ding, Q., Gao, Y., Zhang, X., Yu, M., Liu, Y., Zhang, Y., Kristiansen, K., Jia, H., Brix, S. & Cai, K., 2021, In: *Gastroenterology*. 160, 6, p. 2029.e16-2042.e16

The maternal gut microbiome during pregnancy and offspring allergy and asthma

Gao, Y., Nanan, R., Macia, L., Tan, J., Sominsky, L., Quinn, T. P., O'Hely, M., Ponsonby, A-L., Tang, M. L., Collier, F., Strickland, D. H., Dhar, P., Brix, S., Phipps, S., Sly, P. D., Ranganathan, S., Stokholm, J., Kristiansen, K., Gray, L. & Vuillermin, P., 2021, In: *Journal of Allergy and Clinical Immunology*. 148, 3

Urbanized microbiota in infants, immune constitution and later risk of atopic diseases

Lehtimäki, J., Thorsen, J., Rasmussen, M. A., Hjelmsø, M., Shah, S., Mortensen, M. S., Trivedi, U., Vestergaard, G. A., Bønnelykke, K., Chawes, B. L., Brix, S., Sørensen, S. J., Bisgaard, H. & Stokholm, J., 2021, In: *Journal of Allergy and Clinical Immunology*. 148, 1, p. 234-243 10 p.

Assessment of fecal DNA extraction protocols for metagenomic studies

Yang, F., Sun, J., Luo, H., Ren, H., Zhou, H., Lin, Y., Han, M., Chen, B., Liao, H., Brix, S., Li, J., Yang, H., Kristiansen, K. & Zhong, H., 2020, In: *GigaScience*. 9, 7, 12 p., giaa071.

Body fluid from the parasitic worm *Ascaris suum* inhibits broad-acting pro-inflammatory programs in dendritic cells

Arora, P., Moll, J. M., Andersen, D., Workman, C. T., Williams, A. R., Kristiansen, K. & Brix, S., 2020, In: *Immunology*. 159, 3, p. 322-334 13 p.

Cheaters shape the evolution of phenotypic heterogeneity in *Bacillus subtilis* biofilms

Martin, M., Dragoš, A., Otto, S. B., Schäfer, D., Brix, S., Maróti, G. & Kovács, Á. T., 2020, In: *ISME Journal*. 14, p. 2302-2312 11 p.

Data integration for prediction of weight loss in randomized controlled dietary trials

Nielsen, R. L., Helenius, M., Garcia, S. L., Roager, H. M., Aytan-Aktug, D., Hansen, L. B. S., Lind, M. V., Vogt, J. K., Dalgaard, M. D., Bahl, M. I., Jensen, C. B., Muktupavela, R., Warinner, C., Aaskov, V., Gøbel, R., Kristensen, M., Frøkiær, H., Sparholt, M. H., Christensen, A. F., Vestergaard, H., & 8 othersHansen, T., Kristiansen, K., Brix, S., Petersen, T. N., Lauritzen, L., Licht, T. R., Pedersen, O. & Gupta, R., 2020, In: *Scientific Reports*. 10, 1, 15 p., 20103.

Delivery mode and gut microbial changes correlate with an increased risk of childhood asthma

Stokholm, J., Thorsen, J., Blaser, M. J., Rasmussen, M. A., Hjelmsø, M., Shah, S., Christensen, E. D., Chawes, B. L., Bønnelykke, K., Brix, S., Mortensen, M. S., Brejnrod, A., Vestergaard, G., Trivedi, U., Sørensen, S. J. & Bisgaard, H., 2020, In: *Science Translational Medicine*. 12, 569, 14 p., eaax9929.

Distinct immune phenotypes in infants developing asthma during childhood

Thysen, A. H., Waage, J., Larsen, J. M., Rasmussen, M. A., Stokholm, J., Chawes, B., Fink, N. R., Pedersen, T. M., Wolsk, H., Thorsteinsdottir, S., Litman, T., Renz, H., Bønnelykke, K., Bisgaard, H. & Brix, S., 2020, In: *Science Translational Medicine*. 12, 529, 12 p., eaaw0258.

Early life bacterial airway colonization, local immune mediator response and risk of otitis media

Christensen, E. D., Thorsen, J., Stokholm, J., Pedersen, T. M., Brix, S., Krogfælt, K. A., Schjørring, S., Chawes, B., Bønnelykke, K., Bisgaard, H. & Rasmussen, M. A., 2020, In: *Journal of Medical Microbiology*. 69, p. 1124-1131 8 p.

Embryonic liver developmental trajectory revealed by single-cell RNA sequencing in the *Foxa2*^{eGFP} mouse

Mu, T., Xu, L., Zhong, Y., Liu, X., Zhao, Z., Huang, C., Lan, X., Lufei, C., Zhou, Y., Su, Y., Xu, L., Jiang, M., Zhou, H., Lin, X., Wu, L., Peng, S., Liu, S., Brix, S., Dean, M., Dunn, N. R., & 3 othersZaret, K. S., Fu, X-Y. & Hou, Y., 2020, In: *Communications Biology*. 3, 1, 12 p., 642.

Fermentable Dietary Fiber Promotes Helminth Infection and Exacerbates Host Inflammatory Responses

Myhill, L. J., Stolzenbach, S., Mejer, H., Jakobsen, S. R., Hansen, T. V. A., Andersen, D., Brix, S., Hansen, L. H., Krych, L., Nielsen, D. S., Nejsum, P., Thamsborg, S. M. & Williams, A. R., 2020, In: *Journal of Immunology*. 204, 11, p. 3042-3055 14 p.

Metagenome-wide association of gut microbiome features for schizophrenia

Zhu, F., Ju, Y., Wang, W., Wang, Q., Guo, R., Ma, Q., Sun, Q., Fan, Y., Xie, Y., Yang, Z., Jie, Z., Zhao, B., Xiao, L., Yang, L., Zhang, T., Feng, J., Guo, L., He, X., Chen, Y., Chen, C., & 10 othersGao, C., Xu, X., Yang, H., Wang, J., Dang, Y., Madsen, L., Brix, S., Kristiansen, K., Jia, H. & Ma, X., 2020, In: *Nature Communications*. 11, 1, 10 p., 1612.

Prenatal dietary supplements influence the infant airway microbiota in a randomized factorial clinical trial

Hjelmsø, M. H., Shah, S. A., Thorsen, J., Rasmussen, M., Vestergaard, G., Mortensen, M. S., Brejnrod, A., Brix, S., Chawes, B., Bønnelykke, K., Sørensen, S. J., Stokholm, J. & Bisgaard, H., 2020, In: *Nature Communications*. 11, 1, 10 p., 426.

Privatization of Biofilm Matrix in Structurally Heterogeneous Biofilms

Otto, S. B., Martin, M., Schäfer, D., Hartmann, R., Drescher, K., Brix, S., Dragoš, A. & Kovács, Á. T., 2020, In: *mSystems*. 5, 4, 12 p., e00425-20.

Season of Birth Impacts the Neonatal Nasopharyngeal Microbiota

Schoos, A-M. M., Kragh, M., Ahrens, P., Kuhn, K. G., Rasmussen, M. A., Chawes, B. L., Jensen, J. S., Brix, S., Bisgaard, H. & Stokholm, J., 2020, In: Children. 7, 5, 15 p., 45.

The female urinary microbiota in relation to the reproductive tract microbiota

Chen, C., Hao, L., Wei, W., Li, F., Song, L., Zhang, X., Dai, J., Jie, Z., Li, J., Song, X., Wang, Z., Zhang, Z., Zeng, L., Du, H., Tang, H., Zhang, T., Yang, H., Wang, J., Brix, S., Kristiansen, K., & 3 othersXu, X., Wu, R. & Jia, H., 2020, In: Gigabyte. 2020, 15 p., 9.

The intestinal microbiome is a co-determinant of the postprandial plasma glucose response

Søndertoft, N. B., Vogt, J. K., Arumugam, M., Kristensen, M., Gøbel, R. J., Fan, Y., Lyu, L., Bahl, M. I., Eriksen, C., Ängquist, L., Frøkiær, H., Hansen, T. H., Brix, S., Nielsen, H. B., Hansen, T., Vestergaard, H., Gupta, R., Licht, T. R., Lauritzen, L. & Pedersen, O., 2020, In: PLOS ONE. 15, 9, 23 p., e0238648.

Transplantation of microbiota from drug-free patients with schizophrenia causes schizophrenia-like abnormal behaviors and dysregulated kynureneine metabolism in mice

Zhu, F., Guo, R., Wang, W., Ju, Y., Wang, Q., Ma, Q., Sun, Q., Fan, Y., Xie, Y., Yang, Z., Jie, Z., Zhao, B., Xiao, L., Yang, L., Zhang, T., Liu, B., Guo, L., He, X., Chen, Y., Chen, C., & 10 othersGao, C., Xu, X., Yang, H., Wang, J., Dang, Y., Madsen, L., Brix, S., Kristiansen, K., Jia, H. & Ma, X., 2020, In: Molecular Psychiatry. 25, p. 2905–2918

A biomarker of collagen type I degradation is associated with cardiovascular events and mortality in patients with atherosclerosis

Nielsen, S. H., Tengryd, C., Edsfeldt, A., Brix, S., Genovese, F., Bengtsson, E., Karsdal, M., Leeming, D. J., Nilsson, J. & Goncalves, I., 2019, In: Journal of Internal Medicine. 285, 1, p. 118-123 6 p.

Connecting comorbidities with brain-gut-microbiome-stress axis biology in autism spectrum disorder

Yap, C., Wray, N., Brix, S. & Gratten, J., 2019, In: European Neuropsychopharmacology. 29, p. S227-S228 2 p., T16.

Distinct gut metagenomics and metaproteomics signatures in prediabetics and treatment-naïve type 2 diabetics

Zhong, H., Ren, H., Lu, Y., Fang, C., Hou, G., Yang, Z., Chen, B., Yang, F., Zhao, Y., Shi, Z., Zhou, B., Wu, J., Zou, H., Zi, J., Chen, J., Bao, X., Hu, Y., Gao, Y., Zhang, J., Xu, X., & 10 othersHou, Y., Yang, H., Wang, J., Liu, S., Jia, H., Madsen, L., Brix, S., Kristiansen, K., Liu, F. & Li, J., 2019, In: EBioMedicine. 47, p. 373-383 11 p.

Functional strain analysis of the gut microbiota in individuals with IgA deficiency

Moll, J. M., Myers, P. N., Zhang, C., Eriksen, C., Zhao, H., Pan-Hammarström, Q., Cai, K., Jia, H., Nielsen, H. B., Kristiansen, K., Pedersen, S. B. & Hammarström, L., 2019. 1 p.

Immune Mediator Levels in the Upper Airways Predict Response to Azithromycin for Episodes with Asthma-like Symptoms in Young Children

Carlsson, C. J., Rasmussen, M. A., Brix, S., Wang, N., Stokholm, J., Chawes, B., Bonnelykke, K. & Bisgaard, H. F., 2019, In: Pediatric Pulmonology. 54, S1, p. S75-S76 2 p., A-27.

Impact of early events and lifestyle on the gut microbiota and metabolic phenotypes in young school-age children

Zhong, H., Penders, J., Shi, Z., Ren, H., Cai, K., Fang, C., Ding, Q., Thijs, C., Blaak, E. E., Stehouwer, C. D. A., Xu, X., Yang, H., Wang, J., Wang, J., Jonkers, D. M. A. E., Mascllee, A. A. M., Brix, S., Li, J., Arts, I. C. W. & Kristiansen, K., 2019 , In: Microbiome. 7, 14 p., 2.

Infant airway microbiota and topical immune perturbations in the origins of childhood asthma

Thorsen, J., Rasmussen, M. A., Waage, J., Mortensen, M., Brejnrod, A., Bønnelykke, K., Chawes, B. L., Brix, S., Sørensen, S. J., Stokholm, J. & Bisgaard, H. F., 2019, In: Nature Communications. 10, 1, 8 p., 5001.

Interplay between food and gut microbiota in health and disease

Danneskiold-Samsøe, N. B., de Freitas Queiroz Barros, H. D., Santos, R., Bicas, J. L., Cazarin, C. B. B., Madsen, L., Kristiansen, K., Pastore, G. M., Brix, S. & Junior, M. R. M., 2019, In: Food Research International. 115, p. 23-31

Levels of Systemic Low-grade Inflammation in Pregnant Mothers and Their Offspring are Correlated

Fink, N. R., Chawes, B., Bønnelykke, K., Thorsen, J., Stokholm, J., Rasmussen, M. A., Brix, S. & Bisgaard, H., 2019, In: *Scientific Reports*. 9, 1, 9 p., 3043.

Microbial translocation revisited: targeting the endotoxic potential of gut microbes in HIV-infected individuals

Storm-Larsen, C., Stiksrud, B., Eriksen, C., Nowak, P., Holm, K., Thalme, A., Dyrhol-Riise, A. M., Brix, S., Hov, J. R. & Trøseid, M., 2019, In: *AIDS*. 33, 4, p. 645-653

Naïve regulatory T cells in infancy: Associations with perinatal factors and development of food allergy

Collier, F., Ponsonby, A. L., O'Hely, M., Tang, M. L. K., Saffery, R., Molloy, J., Gray, L. E., Ranganathan, S., Burgner, D., Allen, K. J., Brix, S., Vuillermin, P. & Investigator Group, BIS., 2019, In: *Allergy*. 74, 9, p. 1760-1768 8 p.

Overexpression of cyclooxygenase-2 in adipocytes reduces fat accumulation in inguinal white adipose tissue and hepatic steatosis in high-fat fed mice

Banhos Danneskiold-Samsøe, N., Sonne, S. B., Larsen, J. M., Hansen, A. N., Fjære, E., Isidor, M. S., Petersen, S. R., Henningsen, J., Severi, I., Sartini, L., Schober, Y., Wolf, J., Nockher, W. A., Wolfrum, C., Cinti, S., Sina, C., Hansen, J. B., Madsen, L., Brix, S. & Kristiansen, K., 2019, In: *Scientific Reports*. 9, 1, 13 p., 8979.

Reduced IL-2 response from peripheral blood mononuclear cells exposed to bacteria at 6months of age is associated with elevated total-IgE and allergic rhinitis during the first 7years of life

Wang, N., Schoos, A-M. M., Larsen, J. M., Brix Pedersen, S., Thysen, A. H., Rasmussen, M. A., Stokholm, J., Bønnelykke, K., Bisgaard, H. & Chawes, B. L., 2019, In: *EBioMedicine*. 43, p. 587-593 7 p.

Serological Assessment of Activated Fibroblasts by alpha-Smooth Muscle Actin (α-SMA): A Noninvasive Biomarker of Activated Fibroblasts in Lung Disorders

Holm Nielsen, S., Willumsen, N., Leeming, D. J., Daniels, S. J., Brix, S., Karsdal, M. A., Genovese, F. & Nielsen, M. J., 2019, In: *Translational Oncology*. 12, 2, p. 368-374

The Human Milk Microbiota is Modulated by Maternal Diet

Padilha, M., Danneskiold-Samsøe, N. B., Brejnrod, A., Hoffmann, C., Cabral, V. P., Iaucci, J. D. M., Sales, C. H., Fisberg, R. M., Cortez, R. V., Brix, S., Taddei, C. R., Kristiansen, K. & Saad, S. M. I., 2019, In: *Microorganisms*. 7, 11, 18 p., 502.

The impact of lifestyle on the development of the gut microbiome in early life in relation to allergies

Myers, P. N., Mie, A., Moll, J. M., Kristiansen, K., Scheynius, A., Alm, J. & Pedersen, S. B., 2019. 1 p.

Whole grain-rich diet reduces body weight and systemic low-grade inflammation without inducing major changes of the gut microbiome: a randomised cross-over trial

Roager, H. M., Vogt, J. K., Kristensen, M., Hansen, L. B. S., Ibrügger, S., Mærkedahl, R. B., Bahl, M. I., Lind, M. V., Nielsen, R. L., Frøkær, H., Gøbel, R. J., Landberg, R., Ross, A. B., Brix, S., Holck, J., Meyer, A. S., Sparholt, M. H., Christensen, A. F., Carvalho, V., Holst, J. J., & 17 othersRumessen, J. J., Linneberg, A., Sicheritz-Pontén, T., Dalgaard, M. D., Blennow, A., Frandsen, H. L., Villas-Bôas, S. G., Kristiansen, K., Vestergaard, H., Hansen, T., Ekstrøm, C. T., Ritz, C., Nielsen, H. B., Pedersen, O. B., Gupta, R., Lauritzen, L. & Licht, T. R., 2019, In: *Gut*. 68, 1, p. 83-93

Personalized mathematical model of endotoxin-induced inflammatory responses in young men and associated changes in heart rate variability

Brady, R., Frank-Ito, D. O., Tran, H. T., Janum, S., Møller, K., Brix, S., Ottesen, J. T., Mehlsen, J. & Olufsen, M. S., 1 Jan 2018, In: *Mathematical Modelling of Natural Phenomena*. 13, 5, 20 p., 42.

Accelerated collagen turnover in women with angina pectoris without obstructive coronary artery disease: An iPOWER substudy

Nielsen, S. H., Mygind, N. D., Michelsen, M. M., Bechsgaard, D. F., Suhrs, H. E., Genovese, F., Nielsen, H. B., Brix, S., Karsdal, M., Prescott, E. & Kastrup, J., 2018, In: *European Journal of Preventive Cardiology*. 25, 7, p. 719-727 9 p.

A fragment of SPARC reflecting increased collagen affinity shows pathological relevance in lung cancer – implications of a new collagen chaperone function of SPARC

Kehlet, S. N., Manon-Jensen, T., Sun, S., Brix, S., Leeming, D. J., Karsdal, M. A. & Willumsen, N., 2018, In: *Cancer Biology and Therapy*. 19, 10, p. 904-912

Age-related collagen turnover of the interstitial matrix and basement membrane: Implications of age- and sex-dependent remodeling of the extracellular matrix

Kehlet, S. N., Willumsen, N., Armbrecht, G., Dietzel, R., Brix, S., Henriksen, K. & Karsdal, M. A., 2018, In: *PLOS One*. 13, 3, e0194458.

A marker of collagen type I degradation is associated with cardiovascular events and mortality in patients with known atherosclerosis

Nielsen, S. H., Tengryd, C., Pedersen, S. B., Genovese, F., Bengtsson, E., Karsdal, M., Reese-Petersen, A. L., Leeming, D. J., Edsfeldt, A., Nilsson, J. & Goncalves, I., 2018, In: *European Heart Journal*. 39, Suppl 1, p. 1040

A novel biomarker of laminin turnover is associated with disease progression and mortality in chronic kidney disease

Nielsen, S. H., Rasmussen, D. G. K., Brix, S., Fenton, A., Jesky, M., Ferro, C. J., Karsdal, M., Genovese, F. & Cockwell, P., 2018, In: *PLOS ONE*. 13, 10, 13 p., e0204239.

Division of Labor during Biofilm Matrix Production

Dragos, A., Kiesewalter, H. T., Martin, M., Hsu, C. Y., Hartmann, R., Wechsler, T., Eriksen, C., Brix, S., Drescher, K., Stanley-Wall, N., Kümmelri, R. & Kovács, Á. T., 2018, In: *Current Biology*. 28, 12, p. 1903-1913

Genome-wide association and HLA fine-mapping studies identify risk loci and genetic pathways underlying allergic rhinitis

Waage, J., Standl, M., Curtin, J. A., Jessen, L. E., Thorsen, J., Tian, C., Schoettler, N., Flores, C., Abdellaoui, A., Ahluwalia, T. S., Alves, A. C., Amaral, A. F. S., Antó, J. M., Arnold, A., Barreto-Luis, A., Baurecht, H., van Beijsterveldt, C. E. M., Bleeker, E. R., Bonàs-Guarch, S., Boomsma, D. I., & 32 othersBrix, S., Bunyavanich, S., Burchard, E. G., Chen, Z., Curjuric, I., Custovic, A., Den Dekker, H. T., Dharmage, S. C., Dmitrieva, J., Duijts, L., Ege, M. J., Gauderman, W. J., Georges, M., Gieger, C., Gilliland, F., Granell, R., Gui, H., Hansen, T., Heinrich, J., Henderson, J., Hernandez-Pacheco, N., Holt, P., Imboden, M., Jaddoe, V. W. V., Jarvelin, M. R., Jarvis, D. L., Jensen, K. K., Jónsdóttir, I., Kabesch, M., Kaprio, J., The 23andMe Research Team & AAGC collaborators, 2018, In: *Nature Genetics*. 50, 8, p. 1072-1080 9 p.

Integrative data analysis of genotype, microbiome and metabolomics for prediction of response to diet for improved metabolic health

Nielsen, R. L., Helenius, M., Muktupavela, R., Jensen, C. B., Hansen, L. B. S., Roager, H. M., Søndertoft, N. B., Vestergaard, H., Hansen, T., Bahl, M. I., Brix, S., Kristiansen, K., Licht, T. R., Lauritzen, L., Pedersen, O. & Gupta, R., 2018.

Markers of Basement Membrane Remodeling Are Associated With Higher Mortality in Patients With Known Atherosclerosis

Nielsen, S. H., Tengryd, C., Edsfeldt, A., Brix, S., Genovese, F., Bengtsson, E., Karsdal, M., Leeming, D. J., Nilsson, J. & Goncalves, I., 2018, In: *Journal of the American Heart Association*. 7, 21, 10 p., e009193.

Markers of basement membrane remodelling are associated with higher mortality in patients with advanced carotid atherosclerosis

Goncalves, I., Holm Nielsen, S., Tengryd, C., Brix, S., Edsfeldt, A., Genovese, F., Bengtsson, E., Karsdal, M., Julie Leeming, D. & Nilsson, J., 2018, In: *European Heart Journal*. 39, suppl_1, p. 1039-1040 4982.

Neonates colonized with pathogenic bacteria in the airways have a low-grade systemic inflammation

Rahman Fink, N., Chawes, B. L., Thorsen, J., Stokholm, J., Krogfelt, K., Schjørring, S., Kragh, M., Bønnelykke, K., Brix, S. & Bisgaard, H., 2018, In: *Allergy*. 73, 11, p. 2150-2159

Plant Polyphenols Stimulate Adhesion to Intestinal Mucosa and Induce Proteome Changes in the Probiotic *Lactobacillus acidophilus* NCFM

Celebioglu, H. U., Delsoglio, M., Brix, S., Pessione, E. & Svensson, B., 2018, In: *Molecular Nutrition and Food Research*. 62, 4, 1700638.

Plasma ceramide levels are altered in low and normal birth weight men in response to short-term high-fat overfeeding
Ribel-Madsen, A., Ribel-Madsen, R., Nielsen, K. F., Pedersen, S. B., A. Vaag, A. & Brøns, C., 2018, In: *Scientific Reports.* 8, 11 p., 3452 .

The metagenome of the female upper reproductive tract

Li, F., Chen, C., Wei, W., Wang, Z., Dai, J., Hao, L., Song, L., Zhang, X., Zeng, L., Du, H., Tang, H., Liu, N., Yang, H., Wang, J., Madsen, L., Brix, S., Kristiansen, K., Xu, X., Li, J., Wu, R., & 1 othersJia, H., 2018, In: *GigaScience.* 7, 10, 8 p., giy107.

Tumstatin, a Matrikine Derived from Collagen Type IV α 3, is Elevated in Serum from Patients with Non-Small Cell Lung Cancer

Nielsen, S. H., Willumsen, N., Brix, S., Sun, S., Manon-Jensen, T., Karsdal, M. & Genovese, F., 2018, In: *Translational Oncology.* 11, 2, p. 528-534

Two novel blood-based biomarker candidates measuring degradation of tau are associated with dementia: A prospective study

Neergaard, J. S., Dragsbæk, K., Christiansen, C., Karsdal, M. A., Brix, S. & Henriksen, K., 2018, In: *PLOS One.* 13, 4, e0194802.

Allergic Sensitization at School Age is a Systemic Low-grade Inflammatory Disorder

Chawes, B. L., Stokholm, J., Schoos, A-M. M., Fink, N. R., Pedersen, S. B. & Bisgaard, H., 2017, In: *Allergy.* 72, 7, p. 1073-1080

A safflower oil-based high fat/high-sucrose diet modulates the gut microbiota and liver phospholipid profiles associated with early glucose intolerance in the absence of tissue inflammation

Danneskiold-Samsøe, N. B., Andersen, D., Radulescu, I. D., Normann-Hansen, A., Brejnrod, A., Kragh, M., Madsen, T., Nielsen, C., Josefson, K., Fretté, X., Fjaere, E., Madsen, L., Hellgren, L. I., Pedersen, S. B. & Kristiansen, K., 2017, In: *Molecular Nutrition and Food Research.* 61, 5, 19 p., 1600528.

Cathepsin-S degraded decorin are elevated in fibrotic lung disorders - development and biological validation of a new serum biomarker

Kehlet, S. N., Bager, C. L., Willumsen, N., Dasgupta, B., Brodmerkel, C., Curran, M., Pedersen, S. B., Leeming, D. J. & Karsdal, M. A., 2017, In: *BMC Pulmonary Medicine.* 17, 1, 10 p.

Data regarding the growth of *Lactobacillus acidophilus* NCFM on different carbohydrates and recombinant production of elongation factor G and pyruvate kinase

Celebioglu, H. U., Olesen, S. V., Prehn, K., Lahtinen, S. J., Pedersen, S. B., Abou Hachem, M. & Svensson, B., 2017, In: *Data in Brief.* 14, p. 118-122

Delivery of TLR7 agonist to monocytes and dendritic cells by DCIR targeted liposomes induces robust production of anti-cancer cytokines

Klauber, T. C. B., Laursen, J. M., Zucker, D., Pedersen, S. B., Jensen, S. S. & Andresen, T. L., 2017, In: *Acta Biomaterialia.* 53, p. 367-377 11 p.

Effects of Gliadin consumption on the Intestinal Microbiota and Metabolic Homeostasis in Mice Fed a High-fat Diet

Zhang, L., Andersen, D., Roager, H. M., Bahl, M. I., Hansen, C. H. F., Danneskiold-Samsøe, N., Kristiansen, K., Radulescu, I. D., Sina, C., Frandsen, H. L., Hansen, A. K., Pedersen, S. B., Hellgren, L. & Licht, T. R., 2017, In: *Scientific Reports.* 7, 13 p., 44613.

Metabolic Syndrome, Insulin Resistance and Cognitive Dysfunction: Does your metabolic profile affect your brain?

Neergaard, J. S., Møller, K. D., Christiansen, C., Nielsen, H. B., Pedersen, S. B., Karsdal, M. A. & Henriksen, K., 2017, In: *Diabetes.* 66, 7, db161444.

Modifiable risk factors promoting neurodegeneration is associated with two novel brain degradation markers measured in serum

Neergaard, J., Møller, K. D., Christiansen, C., Nielsen, H. B., Workman, C., Pedersen, S. B., Henriksen, K. & Karsdal, M. A., 2017, In: *Neurochemistry International*. 108, p. 303-308 6 p.

Mucin- and carbohydrate-stimulated adhesion and subproteome changes of the probiotic bacterium *Lactobacillus acidophilus NCFM*

Celebioglu, H. U., Olesen, S. V., Prehn, K., Lahtinen, S. J., Pedersen, S. B., Abou Hachem, M. & Svensson, B., 2017, In: *Journal of Proteomics*. 163, p. 102-110

Non-invasive quantification of collagen turnover in renal transplant recipients

Stribos, E. G. D., Nielsen, S. H., Pedersen, S. B., Karsdal, M. A., Seelen, M. A., van Goor, H., Bakker, S. J. L., Olinga, P., Mutsaers, H. A. M., Genovese, F. & Metze, K. (ed.), 2017, In: *PLOS One*. 12, 4, 11 p., e0175898.

Noninvasive Sampling of Mucosal Lining Fluid for the Quantification of In Vivo Upper Airway Immune-mediator Levels

Wolsk, H. M., Chawes, B. L., Thorsen, J., Stokholm, J., Bønnelykke, K., Pedersen, S. B. & Bisgaard, H., 2017, In: *Journal of Visualized Experiments*. 126

Objective Cognitive Impairment and Progression to Dementia in Women: The Prospective Epidemiological Risk Factor Study

Neergaard, J., Dragsbæk, K., Christiansen, C., Karsdal, M. A., Pedersen, S. B. & Henriksen, K., 2017, In: *The journal of prevention of Alzheimer's disease*. 4, 3, p. 194-200

Prediction of endotoxin variants in the human gut microbiome and their relation to metabolic disease

Laursen, J. M., Eriksen, C., Nielsen, H. B., Plichta, D. R., Brunak, S. & Pedersen, S. B., 2017.

Shared genetic variants suggest common pathways in allergy and autoimmune diseases

Kreiner-Møller, E., Waage, J., Standl, M., Pedersen, S. B., Pers, T. H., Couto Alves, A., Warrington, N. M., Tiesler, C. M., Fuertes, E., Franke, L., Hirschhorn, J. N., James, A., Simpson, A., Tung, J. Y., Koppelman, G. H., Postma, D. S., Pennell, C. E., Jarvelin, M-R., Custovic, A., Timpson, N., & 6 othersFerreira, M. A., Strachan, D. P., Henderson, A. J., Hinds, D. A., Bisgaard, H. F. & Bønnelykke, K., 2017, In: *Journal of Allergy and Clinical Immunology*. 140, 3, p. 771-781

The gut microbiome in atherosclerotic cardiovascular disease

Jie, Z., Xia, H., Zhong, S-L., Feng, Q., Li, S., Liang, S., Zhong, H., Liu, Z., Gao, Y., Zhao, H., Zhang, D., Su, Z., Fang, Z., Lan, Z., Li, J., Xiao, L., Li, J., Li, R., Li, X., Li, F., & 22 othersRen, H., Huang, Y., Peng, Y., Li, G., Wen, B., Dong, B., Chen, J-Y., Geng, Q-S., Zhang, Z-W., Yang, H., Wang, J., Wang, J., Zhang, X., Madsen, L., Brix, S., Ning, G., Xu, X., Liu, X., Hou, Y., Jia, H., He, K. & Kristiansen, K., 2017, In: *Nature Communications*. 8, 1, 12 p., 845.

The maternal microbiome during pregnancy and allergic disease in the offspring

Vuillermin, P. J., Macia, L., Nanan, R., Tang, M. L. K., Collier, F. & Brix, S., 2017, In: *Seminars in Immunopathology*. 39, p. 669-675

The microbiota continuum along the female reproductive tract and its relation to uterine-related diseases

Chen, C., Song, X., Wei, W., Zhong, H., Dai, J., Lan, Z., Li, F., Yu, X., Feng, Q., Wang, Z., Xie, H., Chen, X., Zeng, C., Wen, B., Zeng, L., Du, H., Tang, H., Xu, C., Xia, Y., Xia, H., & 10 othersYang, H., Wang, J., Wang, J., Madsen, L., Brix, S., Kristiansen, K., Xu, X., Li, J., Wu, R. & Jia, H., 2017, In: *Nature Communications*. 8, 1, 11 p., 875.

Transcriptional rewiring in human dendritic cells by the gut microbial metabolite butyrate is associated with propagation of a tissue-sustaining type 2-like immune response

Laursen, J. M., Hallenborg, P., Ma, J., Danneskiold-Samsøe, N., Workman, C., Xiao, L., Blagoev, B., Kristiansen, K. & Pedersen, S. B., 2017. 1 p.

Two distinct metacommunities characterize the gut microbiota in Crohn's disease patients

He, Q., Gao, Y., Jie, Z., Yu, X., Laursen, J. M., Xiao, L., Li, Y., Li, L., Zhang, F., Feng, Q., Li, X., Yu, J., Liu, C., Lan, P., Yan, T., Liu, X., Xu, X., Yang, H., Wang, J., Madsen, L., & 4 othersPedersen, S. B., Wang, J., Kristiansen, K. & Jia, H., 2017, In: *GigaScience*. 6, 7, 43 p.

Weight Change and Risk of Hyperglycemia in Elderly Women

Møller, K. D., Neergaard, J., Christiansen, C., Karsdal, M. A., Beck-Nielsen, H., Pedersen, S. B. & Henriksen, K., 2017, In: Aging Clinical and Experimental Research. 29, 6, p. 1095-1104

Delivery of TLR7 agonist to monocytes and dendritic cells by DCIR targeted liposomes induces robust production of anti-cancer cytokines.

Klauber, T. C. B., Laursen, J. M., Zucker, D., Pedersen, S. B., Jensen, S. S. & Andresen, T. L., 2016.

Differential proteome and cellular adhesion analyses of the probiotic bacterium *Lactobacillus acidophilus* NCFM grown on raffinose - an emerging prebiotic

Celebioglu, H. U., Hansen, M. E., Majumder, A., Købler, C., Jun Goh, Y., Thorsen, K., Schmidt, B. G., O'Flaherty, S., Abou Hachem, M., Lahtinen, S. J., Jacobsen, S., Klaenhammer, T. R., Pedersen, S. B., Mølhave, K. & Svensson, B., 2016, In: Proteomics. 16, 9, p. 1361-1375 15 p.

Divergent Response Profile in Activated Cord Blood T cells from First-born Child Implies Birth-order-associated *in Utero* Immune Programming

Kragh, M., Larsen, J. M., Thysen, A. H., Rasmussen, M. A., Wolsk, H. M., Bisgaard, H. F. & Pedersen, S. B., 2016, In: Allergy. 71, 3

Effect of vitamin D₃ supplementation during pregnancy on risk of persistent wheeze in the offspring: a randomised clinical trial

Chawes, B., Bonnelykke, K., Stokholm, J., Heickendorff, L., Pedersen, S. B., Rasmussen, M. & Bisgaard, H., 2016, In: Clinical and Translational Allergy. 6, Suppl. 1, p. 6 1 p., OP10.

Effect of Vitamin D₃ Supplementation During Pregnancy on Risk of Persistent Wheeze in the Offspring A Randomized Clinical Trial: A Randomized Clinical Trial

Chawes, B. L., Bonnelykke, K., Stokholm, J., Vissing, N. H., Bjarnadottir, E., Schoos, A-M. M., Wolsk, H. M., Pedersen, T. M., Vinding, R. K., Thorsteinsdottir, S., Arianto, L., Hallas, H. W., Heickendorff, L., Pedersen, S. B., Rasmussen, M. A. & Bisgaard, H. F., 2016, In: J A M A: The Journal of the American Medical Association. 315, 4, p. 353-361 9 p.

Excessive collagen turnover products are released during colorectal cancer progression and elevated in serum from metastatic colorectal cancer patients

Kehlet, S. N., Sanz-Pamplona, R., Pedersen, S. B., Leeming, D. J., Karsdal, M. A. & Moreno, V., 2016, In: Scientific Reports. 6, 7 p., 30599.

High breast milk IL-1 β level is associated with reduced risk of childhood eczema

Jepsen, A. A., Chawes, B. L., Carson, C. G., Schoos, A-M. M., Thysen, A. H., Waage, J., Pedersen, S. B. & Bisgaard, H., 2016, In: Clinical and Experimental Allergy. 46, p. 1344-1354 11 p.

Human gut microbes impact host serum metabolome and insulin sensitivity

Pedersen, H. K., Gudmundsdottir, V., Nielsen, H. B., Hytönen, T., Nielsen, T., Jensen, B. A. H., Forslund, K., Hildebrand, F., Prifti, E., Falony, G., Le Chatelier, E., Levenez, F., Dore, J., Mattila, I., Plichta, D. R., Poho, P., Hellgren, L., Arumugam, M., Sunagawa, S., Vieira-Silva, S., & 13 others Jørgensen, T., Holm, J. B., Trost, K., Kristiansen, K., Pedersen, S. B., Raes, J., Wang, J., Hansen, T., Bork, P., Brunak, S., Oresic, M., Ehrlich, S. D. & Pedersen, O., 2016, In: Nature. 535, 7612, p. 376-381 20 p.

Identification of differentially IgA-coated bacteria in inflammation-induced colorectal cancer

Eriksen, C., Holm, J. B., Yassin, M., Olsen, J., Pedersen, A. E., Kristiansen, K. & Brix, S., 2016. 1 p.

Metabolic syndrome and subsequent risk of type 2 diabetes and cardiovascular disease in elderly women Challenging the current definition: Challenging the current definition

Møller, K. D., Neergaard, J., Laursen, J. M., Hansen, H. B., Christiansen, C., Beck-Nielsen, H., Karsdal, M. A., Pedersen, S. B. & Henriksen, K., 2016, In: Medicine. 95, 36, 8 p., e4806.

Pan-HER - an antibody mixture targeting EGFR, HER2, and HER3 abrogates preformed and ligand-induced EGFR homo- and heterodimers: Pan-HER abrogates EGFR dimers

Ellebaek, S., Pedersen, S. B., Grandal, M., Lantto, J., Horak, I. D., Kragh, M. & Tuxen Poulsen, T., 2016, In: International Journal of Cancer. 139, 9, p. 2095-2105 11 p.

Picornavirus-Induced Airway Mucosa Immune Profile in Asymptomatic Neonates

Wolsk, H. M., Følsgaard, N. V., Birch, S., Pedersen, S. B., Hansel, T. T., Johnston, S. L., Kebadze, T., Chawes, B. L., Bønnelykke, K. & Bisgaard, H. F., 2016, In: Journal of Infectious Diseases. 213, 8, p. 1262-1270 9 p.

Season of birth shapes neonatal immune function

Thysen, A. H., Rasmussen, M. A., Kreiner-Møller, E., Larsen, J. M., Følsgaard, N. V., Bønnelykke, K., Stokholm, J., Bisgaard, H. F. & Pedersen, S. B., 2016, In: Journal of Allergy and Clinical Immunology. 137, 4, p. 1238-1246.e13 22 p.

Siblings Promote a Type 1/Type 17-oriented immune response in the airways of asymptomatic neonates

Wolsk, H. M., Chawes, B. L., Følsgaard, N. V., Rasmussen, M. A., Pedersen, S. B. & Bisgaard, H. F., 2016, In: Allergy. 71, 6, p. 820-828 9 p.

Susceptibility to Lower Respiratory Infections in Childhood is Associated with Perturbation of the Cytokine Response to Pathogenic Airway Bacteria

Vissing, N. H., Larsen, J. M., Rasmussen, M. A., Chawes, B. L. K., Thysen, A. H., Bønnelykke, K., Pedersen, S. B. & Bisgaard, H. F., 2016, In: Pediatric Infectious Disease Journal. 35, 5, p. 561-566 6 p.

Targeting the DCIR Receptor with a TLR7 Agonist Specifically Activates Monocytes and DCs

Klauber, T. C. B., Laursen, J. M., Maj, R., Pedersen, S. B., Jensen, S. S. & Andresen, T. L., 2016.

Airway Mucosal Immune-suppression in Neonates of Mothers Receiving A(H1N1)pnd09 Vaccination During Pregnancy

Pedersen, S. B., Bischoff, A. L., Folsgaard, N. V., Vissing, N. H., Birch, S. & Bisgaard, H., 2015, In: Pediatric Infectious Disease Journal. 34, 1, p. 84-90 7 p.

Allergic sensitization at school age is a systemic low-grade inflammatory disorder

Chawes, B. L. K., Stokholm, J., Malby-Schoos, A-M., Kreiner-Møller, L., Pedersen, S. B. & Bisgaard, H. F., 2015, In: Allergy: European Journal of Allergy and Clinical Immunology. 70, Suppl. 101, p. 512-512 1 p., 1632.

Breast milk IL-1 β level associates with development of eczema during early childhood

Jepsen, A. A., Chawes, B. L. K., Carson, C. G., Malby-Schoos, A-M., Hammerich Thysen, A., Waage, J., Pedersen, S. B. & Bisgaard, H. F., 2015, In: Allergy. 70, Suppl. 101, p. 405-405 1 p., 1604.

Chronic obstructive pulmonary disease and asthma-associated Proteobacteria, but not commensal *Prevotella* spp., promote Toll-like receptor 2-independent lung inflammation and pathology

Larsen, J. M., Musavian, H. S., Butt, T. M., Ingvorsen, C., Thysen, A. H. & Brix, S., 2015, In: Immunology. 144, 2, p. 333-342 10 p.

Distinct inflammatory and cytopathic characteristics of *Escherichia coli* isolates from inflammatory bowel disease patients

Jensen, S. R., Mirsepasi-Lauridsen, H. C., Thysen, A. H., Brynskov, J., Krogfælt, K. A., Petersen, A. M., Pedersen, A. E. & Brix, S., 2015, In: International Journal of Medical Microbiology. 305, 8, p. 925-936 12 p.

Gliadin affects glucose homeostasis and intestinal metagenome in C57BL6 mice fed a high-fat diet

Zhang, L., Hansen, A. K., Bahl, M. I., Hansen, C. H. F., Andersen, D., Pedersen, S. B., Hellgren, L. & Licht, T. R., 2015. 1 p.

Gliadin intake alters intestinal microbiota, glucose and lipid metabolism, and adipose tissue and liver immune cells

Andersen, D., Zhang, L., Roager, H. M., Danneskiold-Samsøe, N., Hansen, C. H. F., Bahl, M. I., Hansen, A. K., Pedersen, S. B., Hellgren, L. I. & Licht, T. R., 2015, In: Diabetologia. 58, Supplement, p. 314-314

Inflammatory Mediator Profiling of *n*-butanol Exposed Upper Airways in Individuals with Multiple Chemical Sensitivity
Dantoft, T. M., Skovbjerg, S., Andersson, L., Claeson, A-S., Lind, N., Nordin, S. & Pedersen, S. B., 2015, In: PLoS One. 10, 11, 15 p., e0143534.

Maternal fatty acid desaturase genotype correlates with infant immune responses at 6 months
Muc, M., Kreiner-Møller, E., Larsen, J. M., Birch, S., Pedersen, S. B., Bisgaard, H. & Lauritzen, L., 2015, In: British Journal of Nutrition. 114, 6, p. 891-898 8 p.

Metagenomic heterogeneity explains dual immune effects of endotoxins
Pedersen, S. B., Eriksen, C., Larsen, J. M. & Bisgaard, H. F., 2015, In: Journal of Allergy and Clinical Immunology. 135, 1 , p. 277-280

Neonates with reduced neonatal lung function have systemic low-grade inflammation
Chawes, B. L. K., Stokholm, J., Bønnelykke, K., Pedersen, S. B. & Bisgaard, H. F., 2015, In: Journal of Allergy and Clinical Immunology. 135, 6, p. 1450-1456 8 p.

Prelabor cesarean section bypasses natural immune cell maturation
Thysen, A. H., Larsen, J. M., Rasmussen, M. A., Stokholm, J., Bønnelykke, K., Bisgaard, H. F. & Brix, S., 2015, In: Journal of Allergy and Clinical Immunology. 136, 4, p. 1123-1125.e6

Shared genetic origins of allergy and autoimmune diseases
Waage, J. E., Kreiner-Møller, E., Standl, M., Pedersen, S. B., Pers, T. H., Alves, A. C., Warrington, N. M., Tiesler, C. M., Fuertes, E., Franke, L., Hirschhorn, J. N., James, A., Simpson, A., Tung, J. Y., Koppelman, G. H., Postma, D. S., Pennel, C. E., Jarvelin, M-R., Custovic, A., Timpson, N., & 5 others Ferreira, M. A., Strachan, D. P., Hinds, D., Bisgaard, H. F. & Bønnelykke, K., 2015, In: Allergy. 70, Suppl. 101, p. 112-112 1 p., 1526.

The effect of maternal Inflammation on foetal programming of metabolic disease
Ingvorsen, C., Pedersen, S. B., Ozanne, S. E. & Hellgren, L., 2015, In: Acta Physiologica. 214, 4, p. 440-449 10 p.

An elevated pro-inflammatory cytokine profile in multiple chemical sensitivity
Dantoft, T. M., Elberling, J., Brix, S., Szecsi, P. B., Vesterhauge, S. & Skovbjerg, S., 2014, In: Psychoneuroendocrinology. 40, p. 140-150

Cesarean section imprints cord blood immune cell distributions
Thysen, A. H., Larsen, J. M., Rasmussen, M. A., Stokholm, J., Bønnelykke, K., Pedersen, S. B. & Bisgaard, H. F., 2014, In: Allergy. 69, Supplement s99, p. 192-192 1 p., 438.

Children developing asthma by school-age display aberrant immune responses to pathogenic airway bacteria as infants
Larsen, J. M., Pedersen, S. B., Thysen, A. H., Birch, S., Rasmussen, M. A. & Bisgaard, H., 2014, In: Allergy. 69, s99, p. 179-179 1 p., 404.

Children with asthma by school age display aberrant immune responses to pathogenic airway bacteria as infants
Larsen, J. M., Pedersen, S. B., Thysen, A. H., Birch, S., Rasmussen, M. A. & Bisgaard, H. F., 2014, In: Journal of Allergy and Clinical Immunology. 133, 4, p. 1008-1013

Early immune response patterns to pathogenic bacteria are associated to increased risk of lower respiratory infections in children
Vissing, N. H., Larsen, J. M., Rasmussen, M. A., Thysen, A. H., Chawes, B. L., Bønnelykke, K., Pedersen, S. B. & Bisgaard, H. F., 2014, In: Allergy. 69, Supplement s99, p. 37-37 1 p., 84.

Effects of pregnancy on obesity-induced inflammation in a mouse model of fetal programming
Ingvorsen, C., Thysen, A. H., Fernandez-Twinn, D., Nordby, P., Nielsen, K. F., Ozanne, S. E., Pedersen, S. B. & Hellgren, L., 2014, In: International Journal of Obesity. 38, 10, p. 1282-1289

Gliadin affects glucose homeostasis and intestinal metagenome in C57BL/6 mice fed a high-fat diet
Zhang, L., Hansen, A. K., Bahl, M. I., Hansen, C. H. F., Andersen, D., Pedersen, S. B., Hellgren, L. & Licht, T. R., 2014. 1 p.

Interaction of *Lactobacillus acidophilus* NCFM grown on different carbohydrates with human intestinal epithelial cells: Adhesion Properties and roles of S-layer Proteins
Celebioglu, H. U., Lahtinen, S. J., Pedersen, S. B., Abou Hachem, M. & Svensson, B., 2014.

Mycobacterium tuberculosis promotes Th17 expansion via regulation of human dendritic cells toward a high CD14 and low IL-12p70 phenotype that reprograms upon exogenous IFN- γ .
Søndergaard, J. N., Laursen, J. M., Rosholm, L. B. & Pedersen, S. B., 2014, In: International Immunology. 26, 12, p. 705-716

Natural mannosylation of HIV-1 gp120 imposes no immunoregulatory effects in primary human plasmacytoid dendritic cells
Søndergaard, J. N., Vinner, L. & Pedersen, S. B., 2014, In: Molecular Immunology. 59, 2, p. 180-187

Deep phenotyping of the unselected COPSAC2010 birth cohort study
Bisgaard, H. F., Vissing, N. H., Carson, C. G., Bischoff, A. L., Følsgaard, N. V., Kreiner-Møller, E., Chawes, B. L. K., Stokholm, J., Pedersen, L., Bjarnadóttir, E., Thysen, A. H., Nilsson, E., Mortensen, L. J., Olsen, S. F., Schjørring, S., Krogfelt, K. A., Lauritzen, L., Pedersen, S. B. & Bønnelykke, K., 2013, In: Clinical & Experimental Allergy. 43, 12, p. 1384-1394

Effect of gestation on obesity-induced hepatic and placental inflammation in mice
Ingvorsen, C., Thysen, A. H., Fernandez-Twinn, D., Ozanne, S. E., Pedersen, S. B. & Hellgren, L., 2013. 1 p.

Epithelial entry rather than the ensuing systemic immune response determines the pathogenicity of two *Salmonella enterica* serovar *Typhimurium* strains in a mouse model
Sørensen, R. B., Petersen, A., Pedersen, S. B., Licht, T. R. & Frøkiær, H., 2013, In: Microbes and Infection. 15, 13, p. 911-919

Functional Similarities and Disparities in Inflammation-Promoting Abilities of Gut-Derived *Escherichia coli* Strains from Patients with Inflammatory Bowel Diseases and Healthy Individuals
Jensen, S. R., Mirsepasi, H., Thysen, A. H., Brynskov, J., Krogfelt, K., Petersen, A. M., Pedersen, A. E. & Pedersen, S. B., 2013, In: Scandinavian Journal of Immunology. 77, 4, p. 266-267

Gestation reverses obesity-induced hepatic inflammation in mice
Ingvorsen, C., Thysen, A. H., Fernandez-Twinn, D., Ozanne, S. E., Pedersen, S. B. & Hellgren, L., 2013. 1 p.

Gestation reverses obesity-induced hepatic inflammation in mice
Ingvorsen, C., Thysen, A. H., Fernandez-Twinn, D., Ozanne, S. E., Pedersen, S. B. & Hellgren, L., 2013, In: Acta Obstetricia et Gynecologica Scandinavica. 92, SI 160, p. 19-20

Gut Mucosal Regulation of Distinct Macrophage and Dendritic Cell Subsets During Early Stage *Salmonella* Infection
Sørensen, R. B., Petersen, A., Larsen, J. M., Licht, T. R. & Pedersen, S. B., 2013, In: Scandinavian Journal of Immunology. 77, 4, p. 262-263

High-Mannose Glycosylation of Infectious HIV-1 gp120 and Immune Regulation in Human Plasmacytoid Dendritic Cells
Søndergaard, J. N., Vinner, L. & Pedersen, S. B., 2013, In: Scandinavian Journal of Immunology. 77, 4, p. 264-265

Identification of a novel immunoregulatory signaling pathway exploited by *M. tuberculosis* in dendritic cells
Laursen, J. M., Schoof, E., Søndergaard, J. N., Linding, R. & Pedersen, S. B., 2013.

Identification of a novel immunoregulatory signaling pathway exploited by *M. tuberculosis* in dendritic cells
Laursen, J. M., Schoof, E., Søndergaard, J. N., Linding, R. & Pedersen, S. B., 2013.

Identification of a novel immunoregulatory signaling pathway exploited by *M. tuberculosis* in dendritic cells
Laursen, J. M., Schoof, E., Søndergaard, J. N., Linding, R. & Pedersen, S. B., 2013, In: Scandinavian Journal of Immunology. 77, 4, p. 284-285

Identification of A Novel Immunoregulatory Signaling Pathway Exploited by *Mycobacterium tuberculosis* in Dendritic Cells
Laursen, J. M., Schoof, E., Søndergaard, J. N., Linding, R. & Pedersen, S. B., 2013, In: Scandinavian Journal of Immunology. 77, 4, p. 284-285 2 p.

Molecular signaling networks in regulation of immunity and disease
Laursen, J. M., Jensen, S. R., Sørensen, M. & Pedersen, S. B., 2013.

Obesity-induced hepatic and placental inflammation are absent in obese gestating mice compared to control fed dams
Ingvorsen, C., Thysen, A. H., Fernandez-Twinn, D., Ozanne, S. E., Pedersen, S. B. & Hellgren, L., 2013. 1 p.

Pathogenic bacteria colonizing the airways in asymptomatic neonates stimulates topical inflammatory mediator release.
Følsgaard, N. V., Schjørring, S., Chawes, B. L. K., Rasmussen, M., Krogfelt, K. A., Pedersen, S. B. & Bisgaard, H. F., 2013, In: American Journal of Respiratory and Critical Care Medicine. 187, 6, p. 589-595

Perinatal Environmental Effects on the Neonatal Immune System
Thysen, A. H., Pedersen, S. B. & Bisgaard, H., 2013, 118 p.

Perinatal programming of metabolic dysfunction and obesity-induced inflammation
Ingvorsen, C., Hellgren, L. & Pedersen, S. B., 2013, Kgs. Lyngby: Technical University of Denmark. 184 p.

Divergent pro-inflammatory profile of human dendritic cells in response to commensal and pathogenic bacteria associated with the airway microbiota.
Larsen, J. M., Steen-Jensen, D. B., Laursen, J. M., Søndergaard, J. N., Musavian, H. S., Butt, T. M. & Pedersen, S. B., 2012, In: PLoS One. 7, 2, p. e31976

Isolation of IL-12p70-competent human monocyte-derived dendritic cells
Søndergaard, J. N. & Pedersen, S. B., 2012, In: Journal of Immunological Methods. 386, 1-2, p. 112-116

Mucosal adhesion and immune activation by gut bacteria in inflammatory bowel diseases
Jensen, S. R., Pedersen, S. B. & Pedersen, A. E., 2012, University of Copenhagen. Copenhagen.

Neonatal Cytokine Profile in the Airway Mucosal Lining Fluid Is Skewed by Maternal Atopy
Følsgaard, N. V., Chawes, B. L., Rasmussen, M. A., Bischoff, A. L., Carson, C. G., Stokholm, J., Pedersen, L., Hansel, T. T., Bonnelykke, K., Pedersen, S. B. & Bisgaard, H., 2012, In: American Journal of Respiratory and Critical Care Medicine. 185, 3, p. 275-280

Upregulation of TGF-beta 1 in neonates of mothers receiving Influenza A (H1N1) vaccination during pregnancy
Bischoff, A. L., Følsgaard, N., Bisgaard, H., Rasmussen, M. & Pedersen, S. B., 2012, In: Allergy: European Journal of Allergy and Clinical Immunology. 67, s96, p. 475

Are NOD2 polymorphisms linked to a specific disease endophenotype of Crohn's disease?
Jensen, S. R., Nielsen, O. H. & Pedersen, S. B., 2011, In: Inflammatory Bowel Diseases. 17, 11, p. 2392-2401

Comparative analysis of a large panel of non-starch polysaccharides reveals structures with selective regulatory properties in dendritic cells
Wismar, R., Pedersen, S. B., Lærke, H. N. & Frøkiær, H., 2011, In: Molecular Nutrition and Food Research. 55, 3, p. 443-454

Diversion of flux toward sesquiterpene production in *Saccharomyces cerevisiae* by fusion of host and heterologous enzymes.

Albertsen, L., Chen, Y., Bach, L. S., Rattleff, S., Maury, J., Pedersen, S. B., Nielsen, J. & Mortensen, U. H., 2011, In: Applied and Environmental Microbiology. 77, 3, p. 1033-1040

Ex vivo intestinal adhesion of *Escherichia coli* LF82 in Crohn's disease

Jensen, S. R., Fink, L. N., Nielsen, O. H., Brynskov, J. & Pedersen, S. B., 2011, In: Microbial Pathogenesis. 51, 6, p. 426-431

Ileal adhesion of virulent *E. coli* LF82 is not enhanced in Crohn's disease.

Jensen, R. S., Fink, L. N., Pedersen, S. B., Brynskov, J. & Nielsen, H. O., 2011, In: Inflammatory Bowel Diseases. 17, 1, p. S16-S17

Ileal adhesion of virulent *E. coli* LF82 is not enhanced in Crohn's disease

Jensen, R. S., Fink, L. N., Pedersen, S. B., Brynskov, J. & Nielsen, H. O., 2011, In: *Inflammatory Bowel Diseases*. Vol. 17, S1 . p. P-017

Probiotika

Pedersen, S. B., Nielsen, O. H., Kjeldsen, H. C., Johannessen, T. & Løge, I., 2011, *Lægehåndbogen*. sundhed.dk

Quantification of specific *E. coli* in gut mucosa from Crohn's disease patients

Jensen, S. R., Fink, L. N., Struve, C., Sternberg, C., Andersen, J. B., Brynskov, J., Nielsen, O. H. & Pedersen, S. B., 2011 , In: Journal of Microbiological Methods. 86, 1, p. 111-114

The pathogenicity of *S. Typhimurium* SL1344 is coupled to invasiveness and not the ensuing immune response

Brandt, R., Petersen, A., Pedersen, S. B., Licht, T. R. & Frøkiær, H., 2011.

The pathogenicity of *S. Typhimurium* SL1344 is coupled to invasiveness and not the ensuing immune response

Brandt, R., Petersen, A., Pedersen, S. B., Licht, T. R. & Frøkiær, H., 2011.

CD4+ T-cell activation is differentially modulated by bacteria-primed dendritic cells, but is generally down-regulated by n-3 polyunsaturated fatty acids

Pedersen, S. B., Lund, P., Kjær, T., Straarup, E. M., Hellgren, L. & Frøkiær, H., 2010, In: Immunology. 129, 3, p. 338-350

Dietary fibers as immunoregulatory compounds in health and disease

Wismar, R., Brix, S., Frøkiær, H. & Lærke, H. N., 2010, *Foods For Health in the 21st Century: a Road Map For the Future*. Oxford: Blackwell Publishing, p. 70-85 (New York Academy of Sciences. Annals, Vol. 1190).

***Pseudomonas aeruginosa* quorum-sensing signal molecules interfere with dendritic cell-induced T-cell proliferation**

Skindersø, M. E., Zeuthen, L., Pedersen, S. B., Fink, L. N., Lazenby, J., Whittall, C., Williams, P., Diggle, S. P., Frøkiær, H., Cooley, M. & Givskov, M. C., 2009, In: FEMS Immunology and Medical Microbiology. 55, 3, p. 335-345

Allergen specific responses in cord and adult blood are differentially modulated in the presence of endotoxins.

Eiwegger, T., Mayer, E., Pedersen, S. B., Schabussova, I., Dehlink, E., Bohle, B., Barkholt, V. & Szépfalusy, Z., 2008, In: Clinical and Experimental Allergy. 38, 10, p. 1627-1634

Effect on dendritic cells of aloe vera and pomme granate products from Forever Living Products

Pedersen, S. B. & Frøkiær, H., 2008, Forever Living Products.

Fedtsyrebalancen påvirker livsstilssygdomme og allergi

Jørgensen, S. B. (ed.), Hellgren, L. & Pedersen, S. B., 2008, In: FoodDTU Midt i Ugen.

Fedtsyrebalance påvirker livsstilssygdomme og allergi
Hellgren, L. & Pedersen, S. B., 2008, In: FoodDTU. 44

Dietary fibres differentially modulate the bacterially induced maturation of dendritic cells
Wismar, R., Pedersen, S. B., Laerke, H. N. & Frøkiær, H., 2007, In: Annals of Nutrition and Metabolism. 51, Supplement 1 , p. 65-66

Dietary fibres differentially modulate the TLR-induced maturation of dendritic cells
Wismar, R., Pedersen, S. B., Lærke, H. N. & Frøkiær, H., 2007

Influence of gut microbiota on immunological maturation in infancy
Sørensen, R. B., Pedersen, S. B., Boye, M. & Frøkiær, H., 2007.

Influence of gut microbiota on immunological maturation in infancy
Sørensen, R. B., Pedersen, S. B. & Frøkiær, H., 2007, In: Annals of Nutrition and Metabolism. 51, p. 70-71

Influence of gut microbiota on immunological maturation in infancy
Sørensen, R. B., Pedersen, S. B., Boye, M. & Frøkiær, H., 2007.

Influence of gut microbiota on immunological maturation in infancy
Sørensen, R. B., Pedersen, S. B., Boye, M. & Frøkiær, H., 2007

Influence of gut microbiota on immunological maturation in infancy
Sørensen, R. B., Pedersen, S. B., Boye, M. & Frøkiær, H., 2007.

Influence of gut microbiota on immunological maturation in infancy
Sørensen, R. B., Pedersen, S. B. & Frøkiær, H., 2007.

Kan kosten påvirke vores risiko for at udvikle allergi?
Pedersen, S. B. & Frøkiær, H., 2007, In: Miljø og Sundhed.

Proteome-analysis of gut bacteria-matured dendritic cells
Pedersen, S. B., Kragh, M., Søndergaard, J. N., Bjerkan, L., Jacobsen, S. & Frøkiær, H., 2007.

Proteome-analysis of gut bacteria-matured dendritic cells
Pedersen, S. B., Kragh, M., Søndergaard, J. N., Bjerkan, L., Jacobsen, S. & Frøkiær, H., 2007.

The potential of gut bacteria-matured DCs to activate CD4+T cells highly depends on the lipid composition of the T cell membrane
Pedersen, S. B., Lund, P., Kjær, T., Straarup, E. M., Hellgren, L. & Frøkiær, H., 2007, In: Annals of Nutrition and Metabolism. 51, Suppl. 1, p. 65-65

The potential of gut bacteria-matured DCs to activate CD4+ T cells highly depends on the lipid composition of the T cell membrane
Pedersen, S. B., Lund, P., Kjær, T., Straarup, E. M., Hellgren, L. & Frøkiær, H., 2007

Effects of dietary fatty acids on T-cell responses induced by dendritic cells
Pedersen, S. B., Kjær, T., Lund, P., Straarup, E. M., Hellgren, L. & Frøkiær, H., 2006.

Combinatorial effects of dietary fatty acids and probiotics on T-cell responses induced by dendritic cells
Pedersen, S. B., Kjær, T., Straarup, E. M., Hellgren, L. & Frøkiær, H., 2005.

Dietary oil emulsions enhance the absorption of native food allergens without affecting oral tolerance induction unless lipopolysaccharide is present

Pedersen, S. B., Lindved, B. I. K., Christensen, H. R., Kjær, T. & Frøkiær, H., 2005

Effect of maternal dietary cow's milk on the immune response to beta-lactoglobulin in the offspring: A four generation study in mice

Pedersen, S. B., Christensen, H. R., Barkholt, V. & Frøkiær, H., 2005, In: International Archives of Allergy and Immunology. 136, p. 250-257

Effect of prior dietary exposure to cow's milk protein on antigen-specific and nonspecific cellular proliferation in mice

Pedersen, S. B., Magyar, O. H., Barkholt, V. & Frøkiær, H., 2005, In: Journal of Dairy Research. 72, p. 217-225

Milk-derived GM(3) and GD(3) differentially inhibit dendritic cell maturation and effector functionalities

Bronnum, H., Seested, T., Hellgren, L., Pedersen, S. B. & Frokiaer, H., 2005, In: Scandinavian Journal of Immunology. 61 , 6, p. 551-557

Post-weaning maintenance of oral tolerance to β -lactoglobulin: the importance of antigen presence in the diet

Pedersen, S. B., Christensen, H. R., Barkholt, V. & Frøkiær, H., 2005.

Det vi spiser påvirker vores immunforsvar – men hvordan?

Christensen, H. R., Kjær, T. R., Pedersen, S. B. & Frøkiær, H., 2004, In: Dansk Kemi. 84, p. 26-27

Dietary oil emulsions enhance the absorption of native food allergens without affecting oral tolerance induction unless lipopolysaccharide is present

Pedersen, S. B., Lindved, B. I. K., Christensen, H. R., Kjær, T. & Frøkiær, H., 2004.

Immune response in mice to ingested soya protein: antibody production, oral tolerance and maternal transfer

Christensen, H. R., Pedersen, S. B. & Frøkiær, H., 2004, In: British Journal of Nutrition. 91, p. 725-732

Lipopolysaccharide contamination of beta-lactoglobulin affects the immune response against intraperitoneally and orally administered antigen

Pedersen, S. B., Kjær, T. M. R., Barkholt, V. & Frøkiær, H., 2004, In: International Archives of Allergy and Immunology. 135, p. 216-220

Immunomodulatory effects induced by endotoxin present in some commercial β -lactoglobulin preparations

Johansen, S., Bovetto, L., Fritsché, R., Barkholt, V. & Frøkiær, H., 2003.

Immunostimulatory Potential of β -Lactoglobulin Preparations: Effects Caused by Endotoxin Contamination

Pedersen, S. B., Bovetto, L., Fritsche, R., Barkholt, V. & Frøkiær, H., 2003, In: Journal of Allergy and Clinical Immunology. 112, 6, p. 1216-1222

Abolishment of maternally induced oral tolerance to β -lactoglobulin in adult mice by feeding a milk-free diet from weaning

Johansen, S., Christensen, H. R., Barkholt, V. & Frøkiær, H., 2001

Influence of the diet on the specific immune response against soy proteins in mice

Christensen, H. R., Johansen, S. & Frøkiær, H., 2001.

Transfer of tolerance to β -lactoglobulin from mothers to offspring: A four generation study in mice

Johansen, S., Christensen, H. R., Barkholt, V. & Frøkiær, H., 2001.

Analysis of immuno-modulating capacity of peptides from bovine β -casein

Johansen, S., Barkholt, V. & Frøkiær, H., 2000

Characterisation of immunomodulating components in milk

Pedersen, S. B., 2000