

Amsterdam Institute for  
Infection and Immunity

# Facts & Figures 2022





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# RESEARCH BOARD

## DIRECTORS



Theo Geijtenbeek



Yvette van Kooyk



Reina Mebius

## MANAGEMENT SUPPORT



Yvonne Duiker



Tine Sibbing



Esmée Vesseur  
from 1-5-2022



## PROGRAM LEADERS



### Inflammatory Diseases



Derk Amsen



Bianca Blom



Joke den Haan  
from 1-1-2022



Conny van der  
Laken



Reina Mebius  
till 1-3-2022



Sander Tas



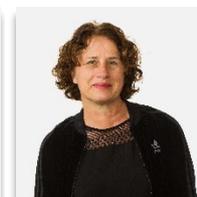
### Infectious Diseases



Jeroen den  
Dunnen



Joppe Hovius



Maria Prins



Colin Russell  
till 12-10-2022



Marceline  
Tutu van Furth



### Cancer Immunology



Idris Bahce



Eric Eldering



Fons van de  
Eertwegh



Marjolein van  
Egmond



Tanja de  
Gruijl



Arnon Kater



Rosalie Luiten



# COMMITTEES

## ANNUAL MEETING / SEMINARS

### Chair:

- Derk Amsen

### Members:

- Tanja de Gruijl
- Vanessa Harris
- Agner Parra Sanchez
- Henk Schallig
- Henry de Vries

## PR & PUBLIC OUTREACH

### Chair:

- Rosalie Luiten

### Members:

- Stefanie Busold
- Marjolein van Egmond
- Rosalie Kempkes
- Maria Prins
- Lotte de Winde

## VALORISATION

### Chair:

- Conny van der Laken

### Members:

- Joppe Hovius
- Rosalie Luiten
- Kwinten Sliepen

## TALENT POLICY

### Chairs:

- Marjolein van Egmond
- Sander Tas

### Members:

- Nieke van der Bolt
- Jan van den Bossche
- Marieke Koelink
- Rieneke van de Ven

## STRATEGY

### Chair:

- Colin Russell (until October 22)

### Members:

- Jan van der Bossche
- Eric Eldering
- Marten Hoeksema
- Joppe Hovius

## EDUCATION

### Chair:

- Bianca Blom

### Members:

- Jeroen den Dunnen
- Juan Garcia Vallejo
- Tessa van Horrik
- Yvonne Pannekoek
- Eddy Wieringa

## GRANTS

### Chair:

- Marceline Tutu van Furth

### Member:

- Joke den Haan
- Elena Rampanelli

## POSTDOC COMMITTEE

- Alsya Affandi
- Merijn Bijlsma
- Kornel Golebski
- Melissa van Gool
- Kwinten Sliepen
- Myrthe van Delft

## PHD STUDENT COMMITTEE

- Tessa van Horrik
- Rosalie Kempkes
- Brigitte-Carole Keumatio Doungtsop
- Suzanne Kuijpers
- Agner Parra Sanchez
- Janani Sundaresan
- Nika Ten
- Aru Wang

## TECHNICIAN COMMITTEE

- Toni van Capel
- Jasmin Ersoz
- Nienke Haverkate
- Tanja Kaptein
- Laura Kruijssen
- Katarina Olesek
- Kim Schipper
- Sander Spiekstra



## SCIENTIFIC MEETINGS

### MEET AND GREET

- April 26, 2022: Postdoc Drinks - Volkshotel Amsterdam
- June 9, 2022: Technicians, Volkshotel Amsterdam
- November 9, 2022: Pubquiz & drinks for Technicians and Postdocs - Volkshotel, Amsterdam

### ALL ANNUAL SYMPOSIUM

- June 23, 2022, Getting it just right', plenary and parallel sessions with speakers from our own institute, followed by a social programma, dinner and party.

### ALL ANNUAL PHD STUDENT RETREAT

- November 3 and 4, 2022: Two day's PhD retreat at Van der Valk Hotel De Bilt, Utrecht, full of networking, scientific presentations, social activities and a party.

### ALL SEMINAR SERIE

- February 1, 2022 (online in studio): **Georg Stary** - 'Delayed antiretroviral therapy in HIV-infected individuals leads to irreversible depletion of skin and mucosa-resident memory T cells'.
- February 8, 2022 (online in studio): **Mihai Netea** - 'Trained immunity: from mechanisms to disease'.
- February 15, 2022 (online in studio): **Christoph Bock** - 'Looking into the past and future of cells'.
- March 8, 2022 (online in studio): Silvia Formenti - 'Looking into the past and future of cells'.
- March 22, 2022 (online in studio): **Stefano Alivernini** - 'Synovial tissue macrophages heterogeneity across disease phases of Rheumatoid Arthritis'.
- April 5, 2022 (online in studio): **Dario Neri** - 'Antibody-Cytokine Fusions: from the bench to the clinic'.

- May 10, 2022 (online in studio): **Andrew Oberst** - 'Antibody-Cytokine Fusions: from the bench to the clinic'.
- May 17, 2022 (online in studio): **Mihalis Lionakis** - 'Novel Insights into APECED syndrome'.
- June 9, 2022 (online in studio): **R.J. Shattock** - 'Developing a self-amplifying RNA vaccine platform in the midst of the COVID pandemic'.
- September 6, 2022 (online in studio): **Marcel van den Brink** - 'The role of the intestinal microbiome in cancer immunotherapy'.
- October 11, 2022 (online in studio): **Gautam Dantas** - 'Antibiotic disruption of the GI tract microbiome and resistome dynamics'.
- November 1, 2022 (Costerzaal AMC): **Ping Chih Ho** - 'Targeting mitochondrial dynamics for tailoring T cell anti-tumor immunity'.

### ALL SYMPOSIA

- December 14, 2022: Infectieziekten Symposium Amsterdam (IDSA), Bimhuis, Amsterdam.

### ALL EDUCATION

Advanced Immunology course

- January 30 - February 10, 2022.

'De infectie Avond'

- February 8, 2022 - 'Notifiable Infectious Diseases', with speakers Tjalling Leenstra, Bram Goorhuis and Hans Zaaijer.

Workshop for All postdocs

- June 27, 2022: Basics of science communication / Impact with science.



## GRANTS PROVIDED BY ALL

### **COLLABORATION GRANT**

€ 20.000 to stimulate new collaboration between research groups of at least 2 locations (AMC/VUmc/GGD/Sanquin/Reade).

#### ***Victor Thijssen and Sandra van Vliet***

Ongoing research of both applicants points towards a novel mechanism of tumor immunomodulation. This immune regulatory circuit involves differential glycosylation and altered expression of galectins in combination with cytokine-mediated modulation of galectin-glycan binding. To further explore this mechanism, both applicants recently initiated a collaborative research line. The current proposal will strengthen this collaboration as it supports the groups of Thijssen and Van Vliet to combine their respective expertise on galectins, tumor glycosylation and immunomodulation.

#### ***Elena Rampanelli, Thijs van Mens and Maria Themeli***

B-cell antibody receptor engineered regulatory T-cells to treat antiphospholipid syndrome. Aspects of the project that are novel for All include expanding the scope of CAR towards regulatory T cells, applying CAR technology to autoimmune disease and a first antigen-based CAR construct.

#### ***Abhijeet Nayak, Marit van Gils and Joppe Hovius***

The goal of the proposed project is to establish a serological platform based on novel *Borrelia* antigens, recently identified as part of screening a whole proteome microarray chip, and its peptide derivatives to improve the diagnosis of Lyme disease. We will identify antigenic and/or peptide combinations to improve diagnosis as well as improve our understanding of the antibody response dynamics throughout the different stages of Lyme disease.

#### ***Theo Geijtenbeek and Alsya Affandi***

Hijack the hijacker: using nanobody technology to block HIV-1 dissemination by targeting CD169. In this proposal, we aim to characterize VHHs targeting the CD169 receptor and to investigate their capacity in blocking HIV-1 transmission to target cells. Using CD169-expressing THP-1 cells, our preliminary data have shown that VHHs differentially affect HIV-1 transmission to HIV-1-susceptible TZM-bl cells. Further experiments are needed to characterize VHHs against CD169 and to assess their therapeutic potential in preventing viral dissemination.

#### ***Hung Jen Chen and Marjolein van Egmond***

This collaboration project focuses on IgA-dependent activation in various crucial cell types in COVID-19. We aim not only to tackle the overactivated immune response in severe COVID-19, but also to investigate the long-overlooked inflammatory function of IgA. This proposal marks a new collaboration between two distinct research groups at AMC and VUMC and enables a new research line combining different expertise.

#### ***Maarten Steinz, Conny van der Laken, Jan van den Bossche, Anneke van der Kooi, and Joost Raaphorst***

Our new All collaboration with expertise in clinical-immunology, muscle pathology/pathophysiology and immunometabolism will be fundamental to unravel the molecular mechanism underlying RMD-associated myopathies. We will experimentally focus on the impact of immune cell released pro-inflammatory cytokines (mimicking chronic inflammation) on muscle mitochondrial respiration along with molecularly examining regulatory enzymes in mitochondrial bioenergetics, including Cytochrome c Oxidase (CcO). The knowledge gathered here will also be relevant for other chronic inflammatory diseases studied within All.



### CLINICAL RESEARCH GRANT

€ 80.000 to support clinical talent in the crucial phase of their innovative research towards successful future grant applications.

- **Merijn Bijlsma** - 'Targeted prevention of group B streptococcal sepsis and meningitis in neonates'

### TRAVEL GRANT

€ 500 to stimulate young talent to attend an international scientific conference to actively build their CV and network.

In 2022, the All Travel Grant was awarded to **69** PhD students.

### WORK VISIT GRANT

€ 5.000 to stimulate young talent within the All to visit a research facility important within the field of Infection & Immunity to actively build their CV and network while also obtaining new knowledge (techniques, samples, data, competences etc.) valuable to All.

- **Marloes Grobben** - Peter Doherty Institute, Melbourne, Australia
- **Eva Philippon** - Uppsala University, Sweden
- **Bob Kullberg** - University of Cambridge, United Kingdom
- **Marta Bermejo Jambrina** - Medical University of Innsbruck, Austria
- **Norbert van Dijk** - Amref and Kacheliba Hospital Nairobi, Kenya
- **Abisola Sholeye** - Stellenbosch University, South Africa

### TECHNICIAN GRANT

€ 5.000 to stimulate technicians within the All to visit a research facility elsewhere to acquire new techniques, skills and knowledge, valuable to the research within All.

- **Saskia van der Velden** - Lund University, Sweden
- **Sarah van Leeuwen** - Princeton University, United States



# HIGHLIGHTS

## A selection of highlights

### **Tumors can hijack embryonic processes to escape immune surveillance**

Researchers from Amsterdam institute for Infection and Immunity and Cancer Center Amsterdam have identified a new mechanism that tumor cells may use to evade immune cells. “The tumor cells hijack biological mechanisms that originally support embryonic development in the mother’s womb,” says immunologist Professor Arjan Griffioen, principal investigator of the study. The findings were published in *Science Immunology*.

### **Antibiotic Ertapenem is alternative drug in treatment of gonorrhea**

For the treatment of gonorrhea, the antibiotic ertapenem appears to work just as well as the current drug of choice, ceftriaxone. This follows from a clinical trial conducted at the Center for Sexual Health of the GGD Amsterdam, among others, by researchers from All. The results appeared today in the authoritative journal *Lancet Infectious Diseases*. Ertapenem is available in many countries and is therefore a possible alternative in the treatment of gonorrhea. The treatment of gonorrhea is threatened by advancing resistance to existing antibiotics.

### **New way of collecting data helps responsible antibiotic use**

Is antibiotic prescribing done according to guidelines? An important question in the fight against resistant bacteria. The A-team (antimicrobial stewardship team) of Amsterdam UMC developed, together with RIVM, a method to find out via the electronic patient file. So that adjustments can be made, if necessary.

### **First dog in the Netherlands successfully treated with vaccine against bone cancer**

Dog Rax had bone cancer, was given a cancer vaccine at the Medical Center for Animals, and seems to be all right. It is hopeful news in the development of a cancer vaccine for humans, says Arjan

Griffioen, professor of Experimental Oncology at Amsterdam UMC. He has been working on the development of this vaccine for some time, he hopes it will eventually benefit humans as well.

### **Data of ICU patients can answer thousands of questions**

In the early days of the coronavirus pandemic, when ICUs in the Netherlands and elsewhere were seeing unprecedented numbers of patients coming in, an ambitious data-sharing project was created. Intensivist Paul Elbers, one of the initiators, is enthusiastic about the project that is entering its next phase - and it’s going far beyond its initial scope.

### **Winning combination of drugs for treating Chronic Lymphocytic Leukemia**

Patients with Chronic Lymphocytic Leukemia (CLL) are better off with a combination treatment with ibrutinib and venetoclax, researchers at Amsterdam UMC Cancer Center Amsterdam discovered. These drugs each inhibit the growth of cancer cells in complementary ways, making their combination more effective than the current treatment standard. The work was published in *The Lancet Oncology* and *NEJM Evidence*.

### **Local injection of immunotherapy for patients with early-stage melanoma**

Locally administered cancer immunotherapy may offer a safe and effective treatment for early-stage melanoma patients, without the severe inflammatory side effects often seen with systemic immunotherapy. This was discovered by tumour immunologist Tanja de Gruijl and medical oncologist Fons van den Eertwegh, who published their results in the leading journal *Science Immunology*.

### **Vaginal bacteria increases risk of HIV infection**

Researchers from Amsterdam UMC and Utrecht UMC discovered that a specific vaginal bacteria greatly increases the risk



of HIV infection. This bacteria, called *Prevotella timonensis*, is found in bacterial vaginosis. This is a disturbance of the natural balance of bacteria and fungi in the vagina.

### **Artificial intelligence supports ICU physicians in patient discharge decision**

What is the right time to transfer a patient from the Intensive Care Unit to the nursing ward? For this decision, doctors at the Intensive Care Unit of Amsterdam UMC are now supported by artificial intelligence, based on large amounts of information from electronic patient records. This allows intensive care treatments to be deployed as optimally as possible: a worldwide first!

### **Life-saving medicine for RS virus infection in babies near at hand**

Every year, 150 to 200 babies with respiratory syncytial virus (RS virus) end up in the ICU in the Netherlands. Worldwide, the RS virus is the second leading cause of death in infants. Researchers at Amsterdam UMC discovered an antibody that protects against this life-threatening virus for newborns. Last month, the EMA issued a positive advice for this antibody drug, called Nirsevimab. One more step to go: once the European Commission has

approved the drug, it can be used in the fight against the RS virus.

### **All Postdoc grant result: Possibility for hepatitis C vaccine in sight by unraveling the spike structure**

Kwinten Sliepen was awarded the All Postdoc Grant in 2021 for his research proposal titled “Structure of the hepatitis C virus E1E2 glycoprotein complex”. On the 20<sup>th</sup> of October his article was published in the prestigious scientific journal Science. Together with researchers at Scripps Research in San Diego, Kwinten and colleagues at Amsterdam UMC unraveled the structure of the spike protein of the hepatitis C virus. Dr. Sliepen: ‘The structure of the spike protein has been a mystery for years. This discovery enables molecular insight into the entry of the hepatitis C virus, therefore allowing us to start designing a vaccine.’



# AWARDS AND PRIZES

## A selection of awards and prizes obtained

### Allergy's Top Reviewer Award

- *Kornel Golebski*. His research is focused on the characterisation of immunological mechanisms behind the pathologies of the airways.

### Amsterdam Young Academy

- *Tiago Matos*, dermatologist and research fellow in the department of dermatology at Amsterdam UMC, has gained academic recognition by becoming a member of the Amsterdam Young Academy (AYA). AYA is an independent platform where talented young scientists from different disciplines lead altruistic work on policy change, create scientific societal impact, and build bridges between science and society.

### Bio Art & Design (BAD) Award

- *Henry de Vries*. A prize of 25,000 Euros to work out, together with artist Kuang-Yi Ku, the project *Filthy Anatomy*, which will be exhibited at the end of this year in MU, Hybrid Art House, located in Eindhoven.

### Carol Nachman Prize for Rheumatology

- *Maarten Boers* received the prize together with *Marie-Antonietta d'Agostino* (Rome). This prize is the second highest medical award in Germany and serves to promote clinical, therapeutic and experimental research work in the field of rheumatology. Since 1972, this prize has been awarded to recognised scientists on the basis of excellent and innovative research.

### Jean Bernard Lifetime Achievement Award

- Since 2008, the Board of the European Hematology Association (EHA) has been presenting the Jean Bernard Lifetime Achievement Award to honor outstanding physicians and scientists for their lifetime contribution to the advancement of hematology. This year, *Gert Ossenkoppele*, Professor of Hematology at the Amsterdam UMC, was chosen to receive the award.

### Jean Julliard Prize

- *Alexander Vlaar*. The International Society of Blood Transfusion awards this prize annually to a clinician or scientist whose (recent) articles make the best contribution to the further development of transfusion medicine.

### Jon van Rood medal

- *Marjolein van Egmond* has been granted the 2022 NVVI DSI honorary member status and received the Jon van Rood medal.

### UvA Thesis Prize

- *Jelmer Savelkoel*, PhD Candidate at the Center for Experimental and Molecular Medicine (CEMM), is one of the two UvA Thesis Prize winners of 2022. In his paper *A call to action: time to recognize melioidosis as a neglected tropical disease*, Jelmer argues for giving melioidosis the status of neglected tropical disease (NTD).

### van Loghem oeuvre award

- *Reina Mebius* received the NVVI oeuvre award to honour her research work in immunology.



# GRANTS

## A selection of grants obtained

### ERC Proof of Concept Grant

- *Arnon Kater* has been awarded the grant of EUR 150,000. This funding will enable Arnon Kater to investigate the commercial or societal potential of his project entitled 'Technical and commercial feasibility of two CD2-based T cell therapies against CLL'.

### Health Holland

- contributed 800.000 Euro to *Vanessa Harris's* research to investigate if a vaccine against rotavirus - a major cause of life-threatening diarrhea in children - reduces inappropriate antibiotic use in Africa.

### Horizon Europe (EU) grant

- Recently, researchers from Amsterdam UMC and other European hospitals, together with several companies and patient organizations, have proposed a revolutionary strategy for the treatment of Crohn's disease and received funding of more than €10 million. The research involves the selection of treatments based on the DNA "methyloome," which is of critical importance to the many Crohn's disease patients who suffer from chronic intestinal inflammation and symptoms such as diarrhea, abdominal pain and weight loss. Led by Professors *Geert D'Haens* and *Wouter de Jonge*, the research is funded by a prestigious European Union (Horizon Europe) grant.

### KWF

- *Marieke Fransen* received KWF funding for fundamental lung cancer research. She will use this funding to research the "Use of spontaneous tumor antibody responses as a biomarker and enhancer of anti-tumor immune responses." She received an amount of €192,450.50 for this purpose.
- *Louis Vermeulen* received € 163.800,00 for his project: 'The classical conditioning of

immunotherapy to improve cancer treatments'.

- *Constantijne Mom, Tanja de Gruijl and Katje Jordanova* received an amount of € 697.183,70 for the project 'ImmunTherapy in CervixCarcinoma (ITHACA): safety, toxicity and immunologic effect of peritumorally injected nivolumab and ipilimumab in patients with early-stage cervical cancer'.
- *Sandra van Vliet* received € 545.827,00 for her project: 'Role of FUT9 in anti-tumor immune activity in colorectal cancer'.
- *Arjan Griffioen* received € 908.857,10 for his project: 'VICI: Overcoming cancer using immunotherapy by removal of the blood vessel barrier.
- *Joke den Haan* received a proof-of-concept grant of € 118.915,75 for her project: 'Development of a flexible vaccine to stimulate the immune response against melanoma'.

### National Growth Fund

- Amsterdam UMC Cancer Center Amsterdam and Immunotherapy Center participate in €325 million Onco-PACT initiative to accelerate and improve oncology drug development.

### NIH/NIAID R34 Clinical Trial Planning Grant

- This grant has been awarded to the Amsterdam UMC departments of Oral and Maxillofacial Surgery (*Derk Jan Jager, Hakki Karagozoglu, Jean-Pierre Ho, and Marco Helder*), Pharmacy (*Imke Bartelink*), and Radiology (*Joost Bot*) to set up a study on the safety and efficacy of a drug (AZD9056) for patients with Sjögren's syndrome. This study will examine whether the drug is able to preserve the function of the salivary glands in patients with Sjögren's syndrome.



### **NWO Vici grant**

- *Klaas van Gisbergen*. T cells are important for our immune system because they clear infected cells and tumor cells. Van Gisbergen and his group will study how T-cells develop and how they work in tumor tissue. They want to use this knowledge to induce these T-cells to attack cancer cells (immunotherapy).

### **ZonMW ZE&GG grant**

- The research group of *Phyllis Spuls* received a ZonMw ZE&GG grant to set up a multicenter randomized controlled trial (RCT). The aim is to study the (cost)effectiveness of phototherapy in the treatment of atopic eczema.



# FUNDING OF PROJECTS

## Projects started in 2022

Location VUmc: about € 2.800.000  
Location AMC: about € 12.500.000

**Total amount of funding: about € 15.300.000**



# ANNUAL FIGURES

Scientific core staff	328
Other scientific staff	262
PhD students	582
Technicians	106
<b>Total # researchers</b>	<b>1278</b>

	Cancer Inflammatory Diseases	Infectious Immunology	Diseases	Total
				1426
Refereed articles	152	653	621	208
Non-refereed articles	58	68	82	17
Books, chapters	2	7	8	14
Professional publication <sup>1</sup>	1	6	7	16
Other research output <sup>2</sup>	10	3	3	75

Note: joint publications location VUmc - AMC: 207  
Source: AMSCO, 16-8-2022`

DISCLAIMER: The data from the PURE research database (community module / AMSCO) has been checked to the best of our abilities, but there may be inconsistencies or flaws in the system.

<sup>1</sup> Publications about results of scientific research aimed at professionally interested people

<sup>2</sup> Contributions in non-scientific journals and newspapers



## TOP PUBLICATIONS

- van der Straten, K, Guerra, D, van Gils, MJ, Bontjer, I, Caniels, TG, van Willigen, HDG, Wynberg, E, Poniman, M, Burger, JA, Bouhuijs, JH, van Rijswijk, J, Olijhoek, W, Liesdek, MH, Lavell, AHA, Appelman, B, Sikkens, JJ, Bomers, MK, Han, AX, Nichols, BE, Prins, M, Vennema, H, Reusken, C, de Jong, MD, de Bree, GJ, Russell, CA, Eggink, D & Sanders, RW 2022, 'Antigenic cartography using sera from sequence-confirmed SARS-CoV-2 variants of concern infections reveals antigenic divergence of Omicron', *Immunity*, vol. 55, no. 9, pp. 1725-1731.e4. <https://doi.org/10.1016/j.immuni.2022.07.018>
- Gringhuis, SI, Kaptein, TM, Remmerswaal, EBM, Drewniak, A, Wevers, BA, Theelen, B, D'Haens, GRAM, Boekhout, T & Geijtenbeek, TBH 2022, 'Fungal sensing by dectin-1 directs the non-pathogenic polarization of TH17 cells through balanced type I IFN responses in human DCs', *Nature immunology*, vol. 23, no. 12, pp. 1735-1748. <https://doi.org/10.1038/s41590-022-01348-2>
- Baarsma, ME, van de Schoor, FR, Gauw, SA, Vrijmoeth, HD, Ursinus, J, Goudriaan, N, Popa, CD, ter Hofstede, HJM, Leeflang, MMG, Kremer, K, van den Wijngaard, CC, Kullberg, B-J, Joosten, LAB & Hovius, JW 2022, 'Diagnostic parameters of cellular tests for Lyme borreliosis in Europe (VICTORY study): a case-control study', *The Lancet Infectious Diseases*, vol. 22, no. 9, pp. 1388-1396. [https://doi.org/10.1016/S1473-3099\(22\)00205-5](https://doi.org/10.1016/S1473-3099(22)00205-5)
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## NEW PROFESSOR APPOINTMENT

- *Gerald de Haan*, appointed Professor Molecular Stem Cell Biology as of March 1, 2022.
- *Conny van der Laken*, appointed Professor of Rheumatology, in particular ‘Imaging of diseases of the musculoskeletal system’ as of April 1, 2022.
- *Sander Tas*, appointed Professor of Rheumatology, in particular ‘The basis and treatment of autoimmune diseases’ as of August 30, 2022.
- *Arjen Dondorp*, appointed Professor Translational Global Health, as of October 11, 2022.
- *Joris Roelofs*, appointed Professor Translational Pathology, in particular ‘of the renal micro vasculature’ as of November 8, 2022.



# PHD GRADUATIONS



## Inflammatory Diseases

- Algera, A. 'Practice of ventilation and the setting of PEEP in critically ill patients without ARDS'
- Blanken, A. 'Arthritis and vascular inflammation made visible'
- Bosmans, L. 'Immune Checkpoints in Atherosclerosis |The atlas is in the palm of your hand'
- Brands, X. 'Immunopathology of Community-Acquired Pneumonia'
- de Bruin, S. 'Transfusion practices and novel blood products |Pre-clinical and clinical studies'
- Eger, K. 'Real-world evaluation of severe asthma treatment |before and during the COVID-19 pandemic'
- Fritz, D. 'Neurosarcoidosis'
- Gao, Z. 'Molecular approaches to peach and Artemisia pollen allergies in China'
- Gerritsma, J. 'Red Blood Cell Transfusion in Sickle Cell Disease'
- Hartman, L. 'Low-dose glucocorticoids as add-on treatment in rheumatoid arthritis: effects, safety, costs, and medication adherence'
- Juschten, J. 'Current challenges in understanding and treating ARDS - three different perspectives'
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