



Amsterdam UMC
Universitair Medische Centra

**Amsterdam
Infection &
Immunity
Institute**

**Facts & Figures
2017/2018**



Cover

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Preface

With great enthusiasm and pride we here present the facts and figures of 2017 and 2018 of our alliance institute AI&I. In this report we summarize the milestones and new developments within the institute.

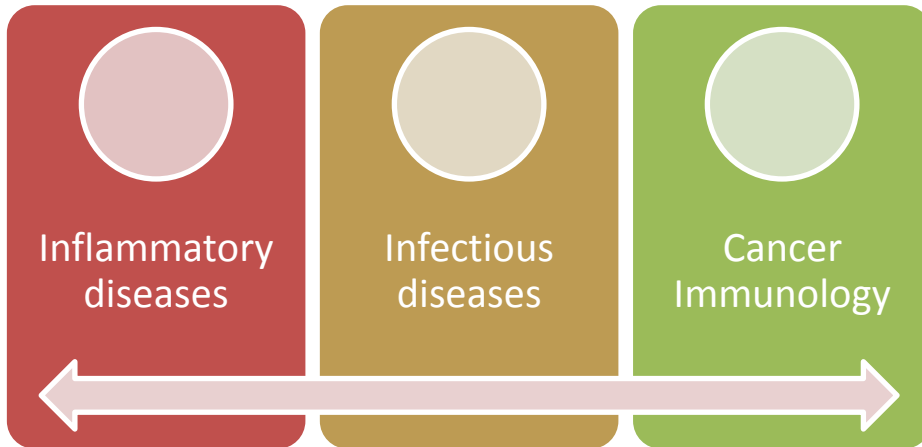
The combined centers employ more than 1000 researchers, including more than 500 PhD students. The joint output per

year averages around 2000 papers and 90 PhD theses.

We are very proud that many of our researchers were able to obtain impressive grants and/or were awarded with significant prizes. In the media we also received a lot of attention.

*Yvette van Kooyk and Theo Geijtenbeek,
directors of Amsterdam Institute for Infection and Immunity*

1. Organization



1.1 Directors



Theo Geijtenbeek
AMC



Yvette van Kooyk
VUmc

1.2 Program leaders

Inflammatory Diseases



Bianca Blom
AMC



Conny van der Laken
VUmc



Reina Mebius
VUmc



Sander Tas
AMC

Infectious Diseases



Wilbert Bitter
VUmc



Marceline Tutu van Furth
VUmc



Joppe Hovius
AMC



Rogier Sanders
AMC

Cancer Immunology



Marjolein van Egmond
VUmc



Eric Eldering
AMC



Tanja de Gruijl
VUmc



Rosalie Luiten
AMC

1.3 AI&I Bureau



Yvonne Duiker
VUmc



Stella Koppel
AMC



Tine Sibbing
AMC

1.4 Committees

PhD Student Committee

- Rianne van Bentum
- (Pana)Giota Bouti
- Ammarina Chuwonpad
- Julia Eder
- Julian Freen-van Heeren
- Melissa van Gool
- Marieke Heineke
- Ivan Ramirez Moral
- Charlotte Rodriguez Neves

Postdoc Committee

- Thijs Crommentuijn
- Rosa de Groot
- Balthasar Heesters
- Martijn Riool
- Adithya Sridhar
- Mara Stemerding
- Anouk Zaal

Annual Meeting Committee

- Marjolein van Egmond
- Melissa van Gool
- Rosa Groot
- Reina Mebius
- Rogier Sander

Network Activities Committee

- Julia Eder
- Joppe Hovius
- Conny van der Laken
- Rosalie Luiten
- Martijn Riool



2. Meetings

- Directory meetings: once a month
- Program leader meetings: once every 2 months

2.1 2017

Kick Off meeting

- 8 March - De Rode Hoed Amsterdam

AI&II seminars

- 2 June - Inflammatory diseases @ Sanquin
- 19 September - Infectious diseases @ AMC
- 21 November - Cancer Immunology @ VUmc

PhD retreat

- 5-6 October @ Heemskerk for and by AI&II PhD students

2.2 2018

Meet and Greet

- 6 February - Volkshotel Amsterdam

2nd Annual meeting

- 19 June - De Rode Hoed Amsterdam

AI&II seminars

- 13 April - Sergey Nejentsev @ VUmc
- 29 May - Infectious diseases @ VUmc
- 18 September - Cancer immunology @ AMC
- 10 December - Inflammatory diseases @ VUmc

PhD retreat

- 26-27 October @ Heemskerk for and by AI&II PhD students



3. Newsletter

In 2017 and 2018 the 5 issues of the AI&II newsletter were published.

4. Website

On [our website](#) you can find information about the institute, coming events, news, grant information, vacancies etc.

5. AI&II Grants

5.1 2017

AI&II travel grants

- € 500 for an AI&II PhD student to visit a conference: 44

AI&II work visit grants

- € 5000 for an AI&II PhD student or postdoc to work at another lab/hospital abroad: 12

AI&II post doc grants

- € 80.000 for a post doc to start or continue their research within AI&II for 1 year with the aim to improve the chance on obtaining subsequent funding by working on their CV and data: 3

5.2 2018

AI&II travel grants

- € 500 for an AI&II PhD student to visit a conference: 35

AI&II work visit grants

- € 5000 for an AI&II PhD student or postdoc to work at another lab/hospital abroad: 6

AI&II post doc grants

- € 80.000 for a post doc to start or continue their research within AI&II for 1 year with the aim to improve the chance on obtaining subsequent funding by working on their CV and data: 4



6. Highlights

6.1 2017

An overview of some of the many highlights of 2017.

3D tumor growth model using fertilized chicken egg

Molecular Cellbiology and Immunology developed a 3D tumor growth model using fertilized chicken egg. Modified this protocol to include immune cell population in tumor microenvironment in vivo. The model is the first 3D tumor model which can be used to study tumor growth-differentiation, angiogenesis, and immune cell differentiation in tumor microenvironment.

HPV

The research of the team has provided important scientific knowledge on HPV screening and triage; with particular focus on the use of host-cell biomarkers. HPV-based cervical cancer screening has been introduced in the Netherlands in 2017. The research efforts have furthermore resulted in valuable methylation biomarkers serving improved (early) cervical cancer detection.

Head and Neck Cancer completed an outcome study on the role of HPV in oropharyngeal cancer with over 1,200 patients.

First tattoo poli

Opening of the first tattoo poli in the Netherlands, supported by NVVA en RIWM of January 13, 2017.

O2 building

Full establishment of the resolution of inflammation research line in the O2 building, initial steps to set up a new lipidomics facility at the VUmc.

First Annual Symposium Core Facilities at O2

We hosted our first Annual Symposium for the Core Facilities at O2 on November 28, both Flow Cytometry and Microscopy. The event was a success with more than 100 attendants, 10 sponsors, internal and external speakers, etc. We also had our first Advanced Cytometry Course (14-16 November).

Dutch Society for Gender and Health

In June 2017, the Dutch Society for Gender and Health was founded by Dr. I. van der Horst-Bruinsma, together with, among others, Prof. I. Klinge, chairman of the Horizon 2020 Advisory Group on Gender and Dr P. Verdonk, with the aim of stimulating scientific research in this area.

Graft versus Host Disease (GvHD) Expertise Centre

We have been appointed 'Graft versus Host Disease (GvHD) Expertise Centre' by the NFU, according to the report because we combine high-grade clinical care of our patients with GvHD with a high-level, basic-translational research program on acute and chronic GvHD

3^e LYMMCARE patiënten symposium

3rd LYMMCARE patient symposium, held on 17 November, in collaboration with the patient association Hematon. LYMMCARE is also mentioned as a good example of integrated research - clinic - patient line in the report of the AMC research evaluation committee a few times.

CAR T cel patient

First CAR T cel patient in the Netherlands in AMC.

Hepatitis C-virus

Together with Clinical Virology (Janke Schinkel) / GGD Amsterdam (Maria Prins / Freke Zuure) / SOA aids NL a large innovative HCV elimination project started to eliminate HCV among men who have sex with men in Amsterdam. Project name MC Free (Amsterdam MSM HCV Free). Online / offline advice regarding HCV risk reduction / interactive risk score with test advice / HCV home test developed and decrease to validate.

Organoids for Picornavirus research

The research of Katja Wolthers on organoids for picornavirus research has been promoted by Stichting Proefdiervrij by an interview in

their member magazine (no 4, 2017) and on the [website](#) of St Proefdiervrij as a project for crowdfunding.

RUBRIC

Patients with rare inflammatory diseases may benefit from treatment with biologicals and other targeted therapies, but clinical trials are not feasible due to small numbers and heterogeneity of the diseases. That is why we have set up a national online register (RUBRIC) to monitor the effectiveness and safety of the treatment. This initiative lead to treatment with these expensive medicines that were previously not reimbursed and now eligible for reimbursement. More information can be found on <https://www.rubricregister.nl/>.

Biological shredder that protects against HIV

Every year HIV association organizes "the best day of the year on HIV". This year Theo Geijtenbeek and Carla Ribeiro were invited for an interview in talk show setting at the royal theater Carre about their discovery of the Biological shredder that protects against HIV. It was a unique opportunity to interact with an important part of our target group and introduce them to our research and the opportunities it offers for the development of new HIV therapies. An inspiring day filled with personal stories, a space for reflexion and togetherness.



6.2 2018

An overview of some of the many highlights of 2018.

New insight into the evolution of tuberculosis bacteria

Although tuberculosis is still one of the most radical and fatal infectious diseases, researchers from VU and VUmc have demonstrated that this bacterium is actually still limited in its virulence. The tuberculosis bacterium has a large number of different proteins on the surface that limit the damage to the host. Apparently the bacterium benefits from a mild virulence. It is alarming that new tuberculosis bacterial strains are now spreading worldwide which, due to a single mutation, no longer produce all these proteins and have therefore become hyper virulent. This change only makes the fight against tuberculosis bacteria even more urgent. The findings are published in the scientific journal *Nature Microbiology* and are the result of an international collaboration between research groups from five countries on four continents, namely the Netherlands, South Africa, France, Mexico and Saudi Arabia led by professor Wilbert Bitter.

3 Lancet papers on HIV drug resistance

AIGHD/Amsterdam UMC researchers publish three Lancet papers on HIV drug resistance. A team of researchers have achieved a significant accomplishment: they published three separate papers in as many months in Lancet journals. The group, which includes researchers from the Amsterdam UMC, Amsterdam Institute for Global Health and Development (AIGHD) and the Joep Lange Institute (JLI), authored an original research article, a review paper and a viewpoint paper, all under the theme of HIV drug resistance. The first paper was published in September in *Lancet HIV* with first author AIGHD-JLI PhD student from Kenya, Seth Inzaule. The paper studied the clinical application of new next-generation sequencing technologies for determining HIV drug resistance. The second, a review paper led by AIGHD/Amsterdam UMC senior researcher Raph Hamers, appeared in October's *Lancet HIV*. This paper provides an overview of contemporary data and trends in HIV drug resistance, highlighting challenges and opportunities for the global HIV response, especially in the poorer parts of the world. A third paper, again led by Kenyan PhD candidate Inzaule in collaboration with the

World Health Organization, is currently in press in the *Lancet Infectious Diseases*. This manuscript is a critical viewpoint on the pros and cons of rolling out the new 'wonder drug' dolutegravir across low-income countries to curb HIV drug resistance.

Collaboration for imaging techniques for chronic inflammatory diseases

Amsterdam UMC is working with university medical centers in Europe and the pharmaceutical company GlaxoSmithKline (GSK) on the innovation and improvement of imaging techniques such as MRI and PET scans for chronic inflammatory diseases. This collaboration is facilitated by The European Infrastructure for Translational Medicine (EATRIS), an institute that brings together university medical centers and pharmacists in a European context to promote scientific research from laboratory to patient care. The aim of the current collaboration is to improve the imaging scans to map and prosecute the activity of chronic inflammatory diseases, such as rheumatism. The scans can thus contribute to the development of the most effective treatment for the individual patient. The first three projects have now been started. One of these projects is being carried out in Amsterdam UMC at the department of rheumatology at the VUmc location (eg Dr. Conny van der Laken, rheumatologist) and the department of clinical immunology & rheumatology at the location AMC (eg Dr. Sander Tas, internist-rheumatologist). This project focuses on PET scans that can be used to identify specific inflammatory cells (macrophages) in the case of rheumatism. The researchers follow these cells during treatment to assess whether the treatment works well with the patient.

Merging Rheumatology VUmc - AMC

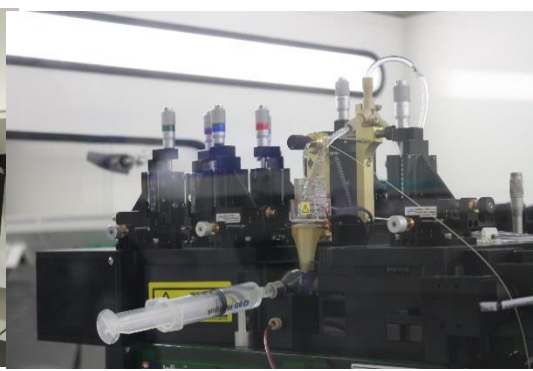
On Friday, November 2, 2018, the Clinical Immunology and Rheumatology Department of AMC and Rheumatology Department of VUmc merged. Together they form the new department of Rheumatology and Clinical Immunology at Amsterdam UMC.

Paper published in Nature

E. Rodríguez, S.T.T. Schetters & Y. van Kooyk (VUmc) -The tumour glyco-code as a novel immune checkpoint for immunotherapy.

The video that accompanies the Nature paper won the Global Short Film Award, which was awarded at the international Cannes film festival on May 19. Cancer immunology research at VUmc shows with the film Glycotreat how cancer vaccines are designed

to effectively use the immune system to attack cancer. These vaccines work best if at the same time the coat of sugar covering the tumor is broken, only then the immune system can destroy the tumor.



7 Awards

A number of researchers of AI&II received an award or were assigned an important function in (inter)national organizations.

An overview can be found in the appendix.

8 Media attention

The research of AI&II is frequently mentioned in the media, such as on television, radio, newspapers, magazines, internet, twitter and blogs.

An overview can be found in the appendix.

9 Funding

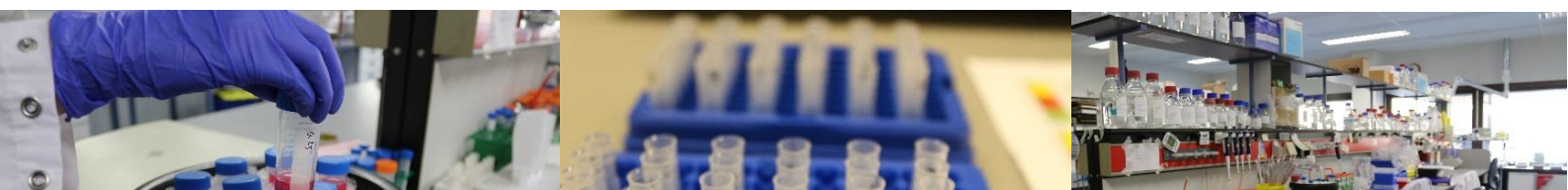
Projects started in 2017

Location VUmc:
Total amount of funding: about 15.000.000
Location AMC:
Total amount of funding: about 33.500.000

Projects started in 2018

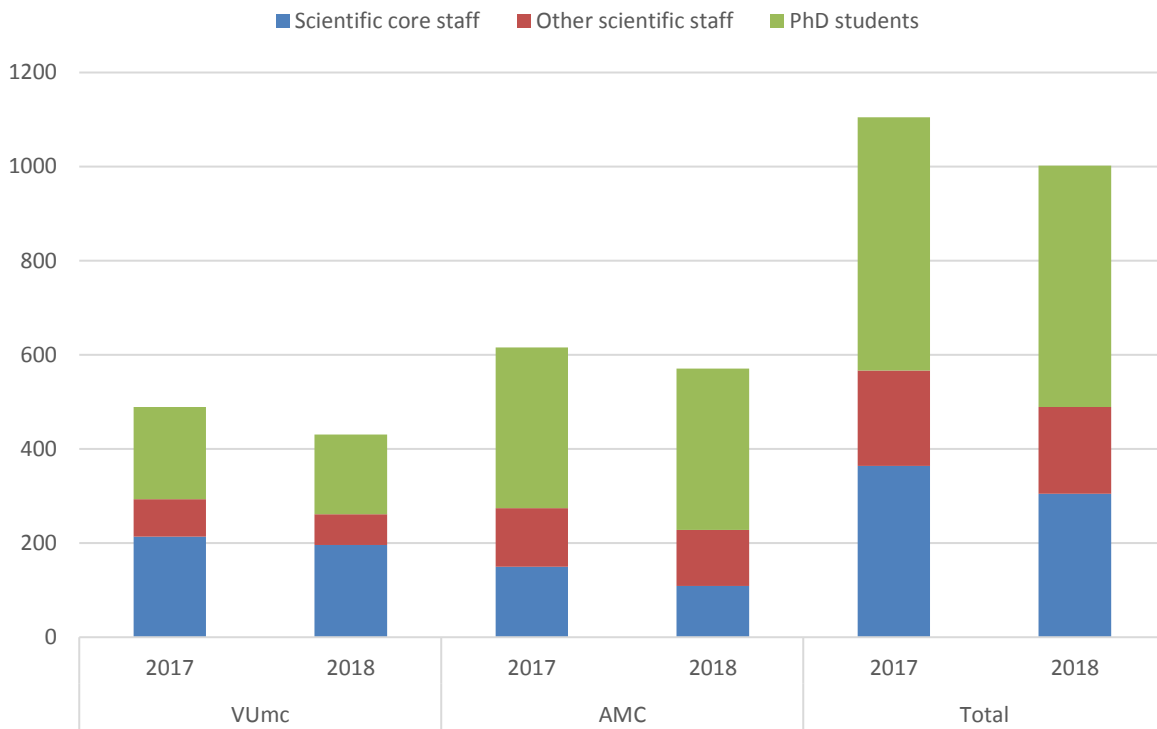
Location VUmc:
Total amount of funding: about 4.000.000
Location AMC:
Total amount of funding: about 41.000.000

The different amount of funding between both locations is due to the different calculation methods at both locations. The aim is to standardize this for 2019.



10 Annual figures

Figure 1: Research staff #

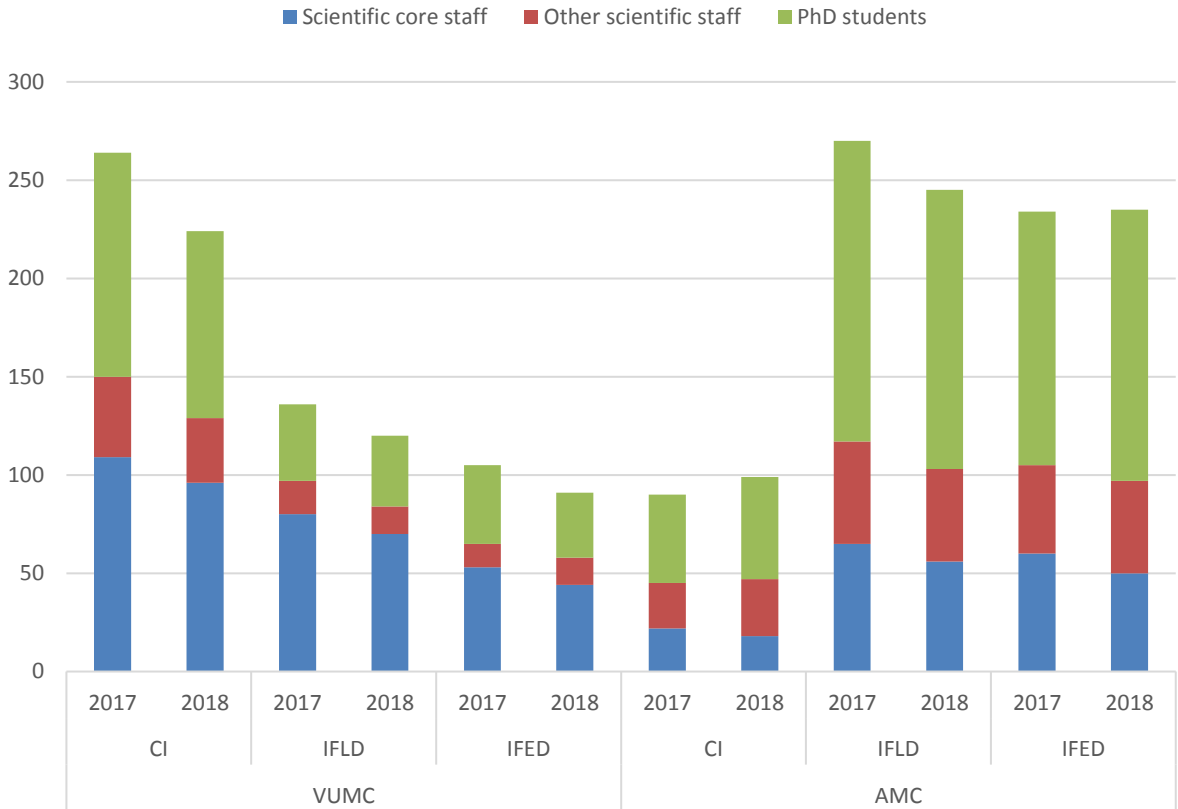


| | VUmc | | AMC | | Total | |
|------------------------|------|------|------|------|-------|------|
| | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 |
| Scientific core staff | 214 | 196 | 150 | 109 | 364 | 305 |
| Other scientific staff | 79 | 65 | 124 | 119 | 203 | 184 |
| PhD students | 196 | 170 | 342 | 343 | 538 | 513 |
| Total researchers | 489 | 431 | 616 | 571 | 1105 | 1002 |

Figure 1a: Research staff # per program

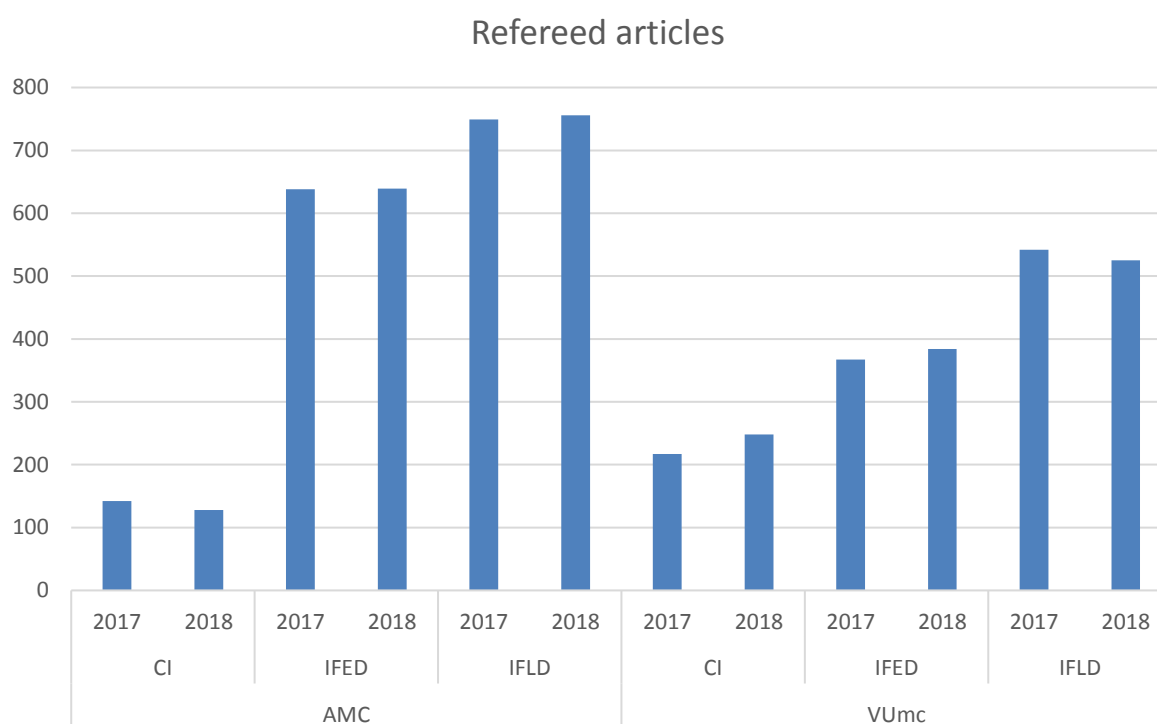
CI: Cancer Immunology
 IFED: Infectious Diseases
 IFLD: Inflammatory Diseases

Note: a researcher can be registered with more than 1 program



| | VUmc | | | | | | AMC | | | | | |
|-----------------------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|------------|------------|------------|------------|
| | CI | | IFLD | | IFED | | CI | | IFLD | | IFED | |
| | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 |
| Scientific core staff | 109 | 96 | 80 | 70 | 53 | 44 | 22 | 18 | 65 | 56 | 60 | 50 |
| Other scientific staff | 41 | 33 | 17 | 14 | 12 | 14 | 23 | 29 | 52 | 47 | 45 | 47 |
| PhD students | 114 | 95 | 39 | 36 | 40 | 33 | 45 | 52 | 153 | 142 | 129 | 138 |
| Total research staff | 264 | 224 | 136 | 120 | 105 | 91 | 90 | 99 | 270 | 245 | 234 | 235 |

Table 2: Main categories of research output



| | VUmc | | | | | | | |
|--|------|------|------|------|------|------|-------|------|
| | CI | | IFED | | IFLD | | total | |
| | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 |
| Refereed articles | 217 | 248 | 367 | 384 | 542 | 525 | 803 | 856 |
| Non-refereed articles | 4 | 11 | 13 | 13 | 11 | 20 | 22 | 32 |
| Scientific publications ¹ | 7 | 2 | 3 | 1 | 15 | 3 | 23 | 6 |
| Professional publications ² | 7 | 8 | 14 | 14 | 28 | 21 | 33 | 26 |
| Other research output ³ | 15 | 13 | 22 | 20 | 49 | 25 | 58 | 37 |
| PhD theses | 7 | 3 | 9 | 10 | 21 | 15 | 34 | 23 |

| | AMC | | | | | | | |
|--|------|------|------|------|------|------|-------|------|
| | CI | | IFED | | IFLD | | total | |
| | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 | 2018 |
| Refereed articles | 142 | 128 | 638 | 639 | 749 | 756 | 1286 | 1315 |
| Non-refereed articles | 17 | 4 | 41 | 41 | 52 | 36 | 84 | 70 |
| Scientific publications ¹ | | 1 | 2 | 3 | - | 1 | 3 | 6 |
| Professional publications ² | 2 | 6 | 21 | 23 | 30 | 25 | 44 | 54 |
| Other research output ³ | - | 1 | 3 | 7 | 6 | 10 | 6 | 15 |
| PhD theses | 3 | 5 | 34 | 41 | 17 | 43 | 54 | 67 |

| | Total AMC & VUmc | |
|--|------------------|------|
| | 2017 | 2018 |
| Refereed articles | 1921 | 2029 |
| Non-refereed articles | 106 | 102 |
| Scientific publications ¹ | 26 | 12 |
| Professional publications ² | 77 | 80 |
| Other research output ³ | 64 | 52 |
| PhD theses | 88 | 90 |

¹ Books, chapters, reports

² Publications about results of scientific research aimed at professionally interested people

³ Contributions in non-scientific journals and newspapers

Note: it is possible that output belongs to both AMC and VUmc. In that case, it is double counted since we are working with 2 separate systems.

11 Top publications

11.1 2017

van der Ree MH, de Vree JM, Stelma F, Willemsen S, van der Valk M, Rietdijk S, Molenkamp R, Schinkel J, van Nuenen AC, Beuers U, Hadi S, Harbers M, van der Veer E, Liu K, Grundy J, Patick AK, Pavlicek A, Blem J, Huang M, Grint P, Neben S, Gibson NW, Kootstra NA, Reesink HW. Safety, tolerability, and antiviral effect of RG-101 in patients with chronic hepatitis C: a phase 1B, double-blind, randomised controlled trial. *Lancet*, 2017, 389; 709-717.

Gringhuis SI, Hertoghs N, Kaptein TM, Zijlstra-Willems EM, Sarrami-Fooroshani R, Sprokholt JK, van Teijlingen NH, Kootstra NA, Boorman T, van Dort KA, Ribeiro CMS, Drewniak A, Geijtenbeek TBH. HIV-1 blocks the signaling adaptor MAVS to evade antiviral host defense after sensing of abortive HIV-1 RNA by the host helicase DDX3. *Nature Immunology*, 2017; 18: 225-235.

de Bruin M, Oberjé EJM, Viechtbauer W, Nobel H-E, Hilgsmann M, van Nieuwkoop C, Veenstra J, Pijnappel FJ, Kroon FP, van Zonneveld L, Groeneveld PHP, van Broekhuizen M, Evers SMAA, Prins JM.

Effectiveness and cost-effectiveness of a nurse-delivered intervention to improve adherence to treatment for HIV: a pragmatic, multicentre, open-label, randomised clinical trial. *Lancet Infectious Diseases*, 2017; 17: 595-604.

Heuvelings CC, de Vries SG, Greve PF, Visser BJ, Bèlard S, Janssen S, Cremers AL, Spijker Ré, Shaw B, Hill RA, Zumla A, Sandgren A, van der Werf MJ, Grobusch MP. Effectiveness of interventions for diagnosis and treatment of tuberculosis in hard-to-reach populations in countries of low and medium tuberculosis incidence: a systematic review. *Lancet Infectious Diseases*, 2017: e144-e158.

de Vries SG, Cremers AL, Heuvelings CC, Greve PF, Visser BJ, Bèlard S, Janssen S, Spijker Ré, Shaw B, Hill RA, Zumla A, van der Werf MJ, Sandgren A, Grobusch MP. Barriers and facilitators to the uptake of tuberculosis diagnostic and treatment services by hard-to-reach populations in countries of low and medium tuberculosis incidence: a systematic review of qualitative literature. *Lancet Infectious Diseases*, 2017; e128-e143.

11.2 2018

Cuadrado, E, van den Biggelaar, M, de Kivit, S, Chen, Y, Slot, M, Doubal, I, Meijer, A, van Lier, RAW, Borst, J & Amsen, D 2018, 'Proteomic Analyses of Human Regulatory T Cells Reveal Adaptations in Signaling Pathways that Protect Cellular Identity', *Immunity*, vol. 48, no. 5, pp. 1046-1059.e6.

de Boer, M, van Leeuwen, FE, Hauptmann, M, Overbeek, LIH, de Boer, JP, Hijmering, NJ, Sernee, A, Klazen, CAH, Lobbes, MBI, van der Hulst, RRWJ, Rakhorst, HA & de Jong, D 2018, 'Breast implants and the risk of anaplastic large-cell lymphoma in the breast', *JAMA Oncology*, vol. 4, no. 3, pp. 335-341.

Harris, VC, Haak, BW, Handley, SA, Jiang, B, Velasquez, DE, Hykes, BL, Droit, L, Berbers, GAM, Kemper, EM, van Leeuwen, EMM, Boele van Hensbroek, M & Wiersinga, WJ 2018, 'Effect of Antibiotic-Mediated Microbiome Modulation on Rotavirus Vaccine Immunogenicity: A Human, Randomized-Control Proof-of-Concept Trial', *Cell host & microbe*, vol. 24, no. 2, pp. 197-207.e4.

Hubers, LM, Vos, H, Schuurman, AR, Erken, R, Oude Elferink, RP, Burgering, B, van de Graaf, SFJ & Beuers, U 2018, 'Annexin A11 is targeted by IgG4 and IgG1 autoantibodies in IgG4-related disease', *Gut*, vol. 67, no. 4, pp. 728-735.

Landewé, R, Sieper, J, Mease, P, Inman, RD, Lambert, RG, Deodhar, A, Marzo-Ortega, H, Magrey, M, Kiltz, U, Wang, X, Li, M, Zhong, S, Mostafa, NM, Lertratanakul, A, Pangan, AL & Anderson, JK 2018, 'Efficacy and safety of continuing versus withdrawing adalimumab therapy in maintaining remission in patients with non-radiographic axial spondyloarthritis (ABILITY-3): a multicentre, randomised, double-blind study', *Lancet*, vol. 392, no. 10142, pp. 134-144.

Salerno, F, Engels, S, van den Biggelaar, M, van Alphen, FPJ, Guislain, A, Zhao, W, Hodge, DL, Bell, SE, Medema, JP, von Lindern, M, Turner, M, Young, HA & Wolkers, MC 2018, 'Translational repression of pre-formed cytokine-encoding mRNA prevents chronic

activation of memory T cells', *Nature immunology*, vol. 19, no. 8, pp. 828-837.

Sciicluna, BP, Wiewel, MA, van Vught, LA, Hoogendijk, AJ, Klarenbeek, AM, Franitza, M, Toliat, MR, Nürnberg, P, Horn, J, Bonten, MJ, Schultz, MJ, Cremer, OL & van der Poll, T 2018, 'A Molecular Biomarker to Assist in Diagnosing Abdominal Sepsis Upon Intensive Care Unit Admission', *American journal of respiratory and critical care medicine*, vol. 197, no. 8, pp. 1070-1073.

Seymour, JF, Kipps, TJ, Eichhorst, B, Hillmen, P, D'Rozario, J, Assouline, S, Owen, C, Gerecitano, J, Robak, T, de la Serna, J, Jaeger, U, Cartron, G, Montillo, M, Humerickhouse, R, Punnoose, EA, Li, Y, Boyer, M, Humphrey, K, Mobasher, M & Kater, AP 2018, 'Venetoclax-rituximab in relapsed or refractory chronic lymphocytic leukemia', *New England journal of medicine*, vol. 378, no. 12, pp. 1107-1120.

van Brunschot, S, van Grinsven, J, van Santvoort, HC, Bakker, OJ, Besselink, MG, Boermeester, MA, Bollen, TL, Bosscha, K, Bouwense, SA, Bruno, MJ, Cappendijk, VC, Consten, EC, Dejong, CH, van Eijck, CH, Erkelens, WG, van Goor, H, van Grevenstein, WMU, Haveman, JW, Hofker, SH, Jansen, JM, Laméris, JS, van Lienden, KP, Meijssen, MA, Mulder, CJ, Nieuwenhuijs, VB, Poley, JW,

Quispel, R, de Ridder, RJ, Roimkens, TE, Scheepers, JJ, Schepers, NJ, Schwartz, MP, Seerden, T, Spanier, BWM, Straathof, JWA, Strijker, M, Timmer, R, Venneman, NG, Vleggaar, FP, Voermans, RP, Witteman, BJ, Gooszen, HG, Dijkgraaf, MG & Fockens, P 2018, 'Endoscopic or surgical step-up approach for infected necrotising pancreatitis: A multicentre randomised trial', *The Lancet*, vol. 391, no. 10115, pp. 51-58.

van der Heijde, DS, Baraliakos, X, Gensler, LS, Maksymowych, WP, Tseluyko, V, Nadashkevich, O, Abi-Saab, W, Tasset, C, Meuleners, L, Besuyen, R, Hendrikx, T, Mozaffarian, N, Liu, K, Greer, JM, Deodhar, A & Landewé, R 2018, 'Efficacy and safety of filgotinib, a selective Janus kinase 1 inhibitor, in patients with active ankylosing spondylitis (TORTUGA): results from a randomised, placebo-controlled, phase 2 trial', *Lancet*, vol. 392, no. 10162, pp. 2378-2387.

van Vollenhoven, RF, Hahn, BH, Tsokos, GC, Wagner, CL, Lipsky, P, Touma, Z, Werth, VP, Gordon, RM, Zhou, B, Hsu, B, Chevrier, M, Triebel, M, Jordan, JL & Rose, S 2018, 'Efficacy and safety of ustekinumab, an IL-12 and IL-23 inhibitor, in patients with active systemic lupus erythematosus: results of a multicentre, double-blind, phase 2, randomised, controlled study', *Lancet*, vol. 392, no. 10155, pp. 1330-1339.

12 Appendix

12.1 Media attention (since there is no specific information available on media attention by AI&I from AMC, this is not mentioned in this report)

2017

| Topic | Medium | Name source | Date | URL | Researcher |
|---|--|---|------------|-------------------------|------------------------|
| Het vakgebied life sciences vraagt specifieke ICT-expertise: Samen bouwen aan een nieuwe onderzoekswereld | internet | | 1-12-2017 | website | Belien J |
| Gold medal life time achievement | Newspaper | Eindhovens dagblad | 27-9-2017 | website | Castelijns JA |
| Gold medal life time achievement | Magazine | Weekblad voor Ouder Amstel | 27-9-2017 | | Castelijns JA |
| Gold medal life time achievement | Magazine | Spui Magazine | 19-12-2017 | website | Castelijns JA |
| Gold medal life time achievement | Magazine | Memorad | 27-9-2017 | website | Castelijns JA |
| local CpG in early-stage melanoma | news paper and lots of news sites -like nu.nl and Interview for Dutch public radio NPO1 "Radio 1 journaal", 2 oktober 2017 | Algemeen Dagblad | 2-10-2017 | website | de Gruijl T |
| De anatomische les voor middelbare scholieren | college | | 2-11-2017 | | de Vries HE |
| Bezoek van KWF en donateurs aan mijn groep | | | 22-12-2017 | | den Haan J |
| De ins en outs van colitis na immuuncheckpointblokkade | internet | Immunoncologie.nl | 1-2-2017 | | Neefjes-Borst A |
| Research into scientific misconduct | Internet | Retraction Watch | 29-9-2017 | website | Peeters CFW |
| Chromium 6 toxicology | internet en public domain | TNO | 1-7-2017 | website | Rustemeyer T |
| Allergietesten | internet | NVDV | 1-6-2017 | website | Rustemeyer T |
| Re-intergratie | internet and published on paper among all Dutch medical specialists | Federatie Medische Specialisten | 1-9-2017 | website | Rustemeyer T |
| Handeczeem | Bijblijven | Springer Verlag | 1-9-2017 | website | Rustemeyer T |
| Allergisch voor shampoo | Television | AvroTros | 21-3-2017 | website | Rustemeyer T |
| Alpe d'Huzes grant | Lifv & internet | KWF | 29-5-2017 | website | Steenbergen R |
| Alpe d'Huzes grant | Radio | KWF | 2-6-2017 | website | Steenbergen R |
| Alpe d'Huzes grant | Facebook | KWF | 29-5-2017 | website | Steenbergen R |
| VIVA 400 | VIVA magazine | | 23-11-2017 | website | Themeli M |
| VIVA 400 | ellines.com | | 1-6-2017 | website | Themeli M |
| Genetic basis for alloimmunisation in SCD | Blood | Editorial (Blood Inside) | 1-11-2017 | - | van den Berg TK |
| M/V verschillen in geneesmiddelen | Volkscrant | | 27-11-2017 | | van der Horst-Bruinsma |
| Gender verschillen in behandeling reumatische ziekten | | Publieksdag alliantie gender Amersfoort | 2017 | | van der Horst-Bruinsma |
| Gender verschillen in behandeling reumatische ziekten | | Publieksdag reumafonds. Leiden | 2017 | | van der Horst-Bruinsma |
| Immuuntherapie. Extra middel in de strijd tegen kanker | Internet | Instant Magazine | | website | van Kooyk Y |
| Cancer Immunotherapy (by Lenneke Cornelissen) | popular scientific magazine | Science Vie | 1-6-2017 | | van Vliets S |
| Establishment of the 'VUmc Women in Science'. Funding to promote women in science. Female PhD's can apply for money to attend conferences | | | | | van Vliet S |

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|--|------------|-----------------|-----------|-------------------------|------------------------|
| Antibiotica niet bij elk wisselasje' | Radio | BNR Nieuwsradio | 27-7-2017 | website | Vandenbroucke-Grauls C |
| Antibioticakuur afmaken is niet altijd nodig | Television | NOS Nieuwsuur | 27-7-2017 | website | Vandenbroucke-Grauls C |

2018

| Topic | Medium | Name source | Date | URL | Researcher |
|---|----------------|--|------------|-------------------------|---------------------------|
| Presentation KWF volunteers | Presentation | KWF | 20-9-2018 | | den Haan J |
| Vetblaasjesvaccin tegen alvleesklierkanker | Interview | KWF | 10-4-2018 | | den Haan J |
| Recent findings in the field of HIV research and the impact of new HIV therapies | Interview | Symposium Power of Love: de leukste dag van het jaar om HIV te hebben - Koninklijk Theater Carré | | | Geijtenbeek T en Ribero C |
| Speeksel moet brandwond sneller genezen | Interview | RTL nieuws | 27-9-2019 | | Gibbs S |
| Brandwonden genezen met eigen speeksel | Interview | NPO radio 2 | 27-9-2018 | | Gibbs S |
| Brandwonden genezen met eigen speeksel | Interview | NPO radio 1 | 27-9-2019 | | Gibbs S |
| Onderzoek naar snellere genezing brandwond met speeksel | Interview | Parool | 27-9-2019 | | Gibbs S |
| Onderzoek naar genezing brandwonden met speeksel | Interview | NH nieuws | 27-9-2019 | | Gibbs S |
| Nederlands onderzoek naar snellere genezing brandwonden met speeksel | Interview | HLN | 27-9-2018 | | Gibbs S |
| Snellere genezing brandwond met speeksel | Interview | Telegraaf | 27-9-2018 | | Gibbs S |
| Brandwond geneest sneller met speeksel | Interview | Skipr | 27-9-2018 | | Gibbs S |
| Brandwonden mogelijk te genezen met eigen speeksel | Interview | Nederlands dagblad | 27-9-2018 | | Gibbs S |
| Onderzoek naar speeksel als brandwondenmedicijn | Interview | Nos.nl | 27-9-2018 | | Gibbs S |
| Sneller genezing brandwond met speeksel | Interview | Panorama: gezond | 27-9-2018 | | Gibbs S |
| Onderzoekers bekijken effect speeksel brandwonden | Interview | NU.nl | 27-9-2018 | | Gibbs S |
| Kan speeksel zorgen voor snellere genezing brandwonden? | Interview | Metrotime | 27-9-2018 | | Gibbs S |
| Werkt kusje erop ook bij brandwonden | Interview | Trouw | 27-9-2018 | | Gibbs S |
| Snellere genezing brandwond met speeksel | Interview | Hart van Nederland | 27-9-2018 | | Gibbs S |
| Werkt 'kusje erop' ook bij brandwonden? Het zou een goedkoop medicijn kunnen zijn | Interview | De Morgen | 27-9-2018 | | Gibbs S |
| Snellere genezing brandwond met speeksel | Interview | MSN | 27-9-2018 | | Gibbs S |
| Eigen speeksel op brandwond | Interview | Reformatorisch Dagblad | 27-9-2018 | | Gibbs S |
| Promotion work to general public | internet | scientistwanted.nl | | website | Heineke M |
| New research to patients with diabetic foot infections | Website | diabetesgeneeskunde.nl | 22-6-2018 | | Peters E |
| Diabetic foot infection | Interview | | 22-2-2018 | | Peters E |
| ADA update diabetic foot infection | Interview | diabetesgeneeskunde.nl | 19-6-2018 | | Peters E |
| TBC de wereld uit | Magazine | AMC magazine | 9-12-2018 | | Tutu van Furth M |
| Feiten en fabels over kanker | Journal | Libelle | 8-8-2018 | | van Egmond M |
| Ons afweersysteem: Hoeder, mediator en verrader | Journal | Biowetenschappen en maatschappij | 3-9-2018 | | van Egmond M |
| Immunologie | | | | | |
| Glyco-immune strategy for Scientific American | Expert comment | Scientific American | 20-11-2018 | | van Kooyk Y |
| The tumour glyco-code as a novel immune checkpoint for immunotherapy | Journal | Nature | 12-3-2018 | | van Kooyk Y |

12.2 Awards, nominations & prizes (since there is no specific information available on awards by AI&I researchers from AMC, this is not mentioned in this report)

2017

| Name award/honor | Awarded by | Date | Place Ceremony | Researcher |
|--|--|------------|---|---------------------------|
| Chulabhorn Award | Chulabhorn Institute | 18-12-2017 | Bangkok | Brakenhoff R |
| Poster price | Gordon Research Seminar - Microbial Adhesion and Signal Transduction | 23-7-2017 | Salve Regina University in Newport RI United States | Burggraaf MJ |
| Gold medal Life time achievement | European Society of head and neck radiology | 29-9-2017 | Lisbon | Castelijns JA |
| PhD award to my PhD student D. van Dinther | Dutch Tumor Immunology meeting | 1-6-2017 | Breukelen | de Haan J |
| Guest Professor, Hebei General Hospital, Shijiazhuang, China | Hebei General Hospital, Shijiazhuang, China | 1-4-2017 | Hebei General Hospital, Shijiazhuang, China | Dekker J |
| Best Presentation Award - Mesothelioma Applied Research Foundation, US | Mesothelioma Applied Research Foundation, US | 28-3-2017 | National Cancer Institute, Bethesda, US | Giovanetti E |
| Best poster presentation | Amsterdam Neuroscience Annual Meeting | 13-10-2017 | Amsterdam Arena | Jim KK |
| Outstanding poster award | 12th ENII EFIS EJI summer school | | Italy | Nadafi R |
| EHA CRTH winner and participant | EHA | 1-11-2017 | via EHA - brussel, Rome and EHA congres in Sweden | Nijhof I |
| 1st Poster Prize VUmc Science Exchange Day 2017 | Vaste Commissie Wetenschap Vumc | 29-9-2017 | Vumc, Amsterdam | Peeters CFW |
| Scientific Director for Advanced Studies in Lung Cancer | University of Zurich and the European School of Oncology | 1-12-2017 | | Senan S |
| Chair, Advanced Radiation Therapy Committee | International Association for the Study of Lung Cancer | 1-12-2017 | | Senan S |
| Honorary fellow American College of Radiology | American College of Radiology | 21-5-2017 | Washington DC | Slotman B |
| Jacob I Fabrikant award | International Stereotactic Radiosurgery Society | 1-6-2017 | Montreux, Switzerland | Slotman B |
| Selected co-president EUROGIN | EUROGIN | 8-12-2017 | Amsterdam | Snijders PJF |
| VIVA-400 knappe koppen | VIVA | 23-11-2017 | Undercurrent.Papaverweg 265 | Themeli M |
| Besloten Paleissymposium | Koninklijk huis | 29-11-2017 | Paleis op de Dam | van der Horst-Bruinsma IE |
| Pfizer research award for best project proposal of imaging of therapeutic effects of anti-TNF on bone formation in psoriatic arthritis | Pfizer | 2017 | | van der Laken C |
| PhD award | Dutch Tumor Immunology meeting | | | van Dinther D |
| Beijerinck Premie 2017 | KNAW | | | van Gils M |
| Membership | KNAW | 8-6-2017 | | van Kooyk Y |
| Fellow for professional excellence and outstanding service to the profession and the society | European Society of Clinical Microbiology and Infectious Diseases | 24-4-2017 | Basel, no Ceremony | Vandenbroucke-Grauls C |
| Ridder in de Orde van de Nederlandse Leeuw | Zijne Majesteit de Koning | 6-10-2017 | Amsterdam | Vandenbroucke-Grauls C |

2018

| Name award/honor | Awarded by | Date | Place Ceremony | Researcher |
|--|-------------------------------|-----------|----------------|------------------------------------|
| Roger Pecoraro Award | American Diabetes Association | 13-7-2018 | | Peters E |
| Joep Lange & Jacqueline van Tongeren Junior Investigator Award | | | | Ribeiro C |
| Membership Amsterdam Young Academy | UvA/VU | | | van Gils M |
| KWF onderzoeker van de week | KWF | | | den Haan J |
| KWF onderzoeker van de week | KWF | | | van Egmond M |
| Are anti-EGFR monoclonal antibodies the magic bullets that remove circulating tumor cells in patients with non-small cell lung cancer (NSCLC)? € 175.000 | KWF | 2018 | | van Egmond M |
| Neutrophils as potential targets to prevent tissue damage in chronic inflammation and autoimmunity- € 270.000 | Health Holland Prize | 2018 | | van Egmond M |
| Novel Immunotherapies to treat cancer - € 300.000 | Foundation Prize | 2018 | | van EWgmond E |
| VUmc profielprijs 2018 | VUmc | 7-1-2018 | | Bulting I - Team SLE and Pregnancy |
| NWO TOP grant - Characterisation of the immunomodulatory effect of stromal cells in health and disease | NWO | 31-1-2018 | | Mebius R en van Baarsen L |
| International Prize - Film: Glycotreat: Cancer Immunology Research | | | | van Kooyk Y |

12.3 Patents / licenses

| Name | Author(s) | Number | Date assigned |
|--|-------------------------|--------------|-------------------------|
| Statines | Jansen G | EP17187127.0 | 21-8-2017 |
| CTI BioPharma - VUmc Option Agreement regarding the patents covering the synergistic therapeutic effect between Statins and Aminopeptidases (including Tosedostat) | Jansen G | 2017-0198 | 14-8-2017 |
| Improved HIV envelope glycoprotein immunogens | Sanders R | | |
| HPV cervix cancer assay with normalised miRNA | Steenbergen R, Meijer C | EU17183100.1 | still under examination |
| Mortality biomarker Sepsis | van der Poll T | | |
| Swarm intelligence-enhanced diagnosis and therapy selection for cancer using tumor-educated platelets (Swarm) | Wurdinger T | NL2018391 | 17-2-2017 |

12.4 Personal grants

2017

Location AMC

VENI

- **Hoe MMP-1 longfibrose verergert**
Dr. J. (Jan Willem) Duitman (m), AMC - Geneeskunde
Longfibrose is een ernstige en dodelijke longaandoening waar weinig behandelopties voor zijn. Een recente doorbraak suggereert dat het eiwit genaamd MMP-1 mede deze ziekte veroorzaakt. Hier zal ik onderzoeken hoe MMP-1 deze kwalijke rol speelt en bepalen of het remmen van dit eiwit een mogelijke nieuwe behandelstrategie zou kunnen zijn.
- **Hoe werken vaccinaties?**
Dr. B.A. (Balthasar) Heesters (m), AMC - Experimentele Immunologie
Door tijdens meerdere rondes het beste antilichaam te selecteren kan het immuunsysteem steeds specifiekere antilichamen krijgen. Hierdoor werken sommige vaccins zo goed. Door het exacte mechanisme achter deze selectie te ontrafelen hoopt de onderzoeker te begrijpen waarom sommige vaccins beter werken dan anderen en met deze kennis vaccinaties te verbeteren.
- **Lokale ondersteuning voor long-residente T-geheugencel functie: Het belang van de locatie**
Dr. P. (Pleun) Hombrink (m), Sanquin - Adaptive Immunity Laboratory
Longen worden tegen pathogenen beschermd door verschillende CD8+ T cel populaties met unieke functionele en uiterlijke kenmerken. De moleculaire mechanismen die hun locatie, functie en overleving reguleren zijn onbekend. Ik wil genomische analyses op individueel cel niveau combineren met immunohistochemie om interacties tussen T cellen en diverse micromilieus te begrijpen.
- **Immuuncellen onder vuur**
Dr. R. (Regina) Stark (v), Sanquin Research - Hematopoiesis
Het immuunsysteem is erg belangrijk om ons gezond te houden. Echter, het immuunsysteem kan tijdens responsen tegen ziekteverwekkers ook schade veroorzaken aan het eigen lichaam. Ik wil onderzoeken hoe deze schade de lokale bescherming door immuuncellen beïnvloedt.

VIDI

- **Fibroblasten als dirigent in ontstekingsreuma**
Dr. E (Lisa) G.M. van Baarsen (v), AMC/UvA - Klinische Immunologie & Reumatologie
Muizenstudies laten zien dat stromale cellen belangrijk zijn voor de ontwikkeling van tolerantie voor lichaamseigen weefsels. Baarsen bestudeert de functie van deze cellen in relatie tot het ontstaan van ontstekingsreuma. Dit zal leiden tot meer inzicht in de ontwikkeling van auto-immuunziekten en mogelijk innovatieve behandelingsstrategieën bieden voor preventieve therapie.
- **Opsporen van voedselallergenen bij Alergische slokdarmontsteking**
Dr. A. (Arjan) J. Bredenoord (m), AMC - Maag-, Darm- en Leverziekten
Eosinofiele oesofagitis (allergische slokdarmontsteking) is een allergische ziekte die ertoe leidt dat de slokdarm steeds nauwer wordt en eten niet meer kan passeren. Kleine stukjes weefsel uit de slokdarm van patiënten zullen worden gebruikt om uit te zoeken welk voedsel de ziekte veroorzaakt, zodat patiënten weten welk eten ze moeten vermijden.
- **Biologische versnipperaar pakt hiv aan**
Dr. C. (Carla) M.S. Ribeiro (v), AMC - Experimentele Immunologie
Speciale afweercellen die als eerste in aanraking komen met hiv bevatten een biologische versnipperaar die hiv afbreekt. Onderzoekers bestuderen dit specifieke hiv afbraak proces wat aanknopingspunten zal geven om hiv infectie te voorkomen of bestrijden.

VICI

- **Nanobiologische training van het aangeboren immuunsysteem op ziekten te bestrijden**
Prof. dr. W.J.M. (Willem) Mulder (m), AMC - Medische Biochemie
Immunotherapie stelt het immuunsysteem in staat om haar natuurlijke rol te vervullen, om ziekte te bestrijden. Dit voorstel richt zich op het ontwikkelen van nanobiologics die het recent ontdekte geheugen van het aspecifieke, aangeboren immuunsysteem ('trained immunity'), programmeren om orgaan afstoting te voorkomen, of kanker te bestrijden.

- **B cellen trainen om breed neutraliserende HIV antilistoffen te ontwikkelen**
Prof. dr. R.W. (Rogier) Sanders (m) AMC-UVA - medische microbiologie
De meeste vaccins tegen virussen wekken beschermende antistoffen op. Dit lukt echter nog niet met de huidige vaccins tegen HIV. Sommige HIV geïnfecteerde mensen maken wel zulke beschermende antistoffen en deze patiënten gaan als voorbeeld dienen om een HIV vaccin te ontwikkelen.

Location VUmc

VENI

- **Maag-slokdarmkankers immuun voor therapie**
Dr. S. (Sarah), Derks (v), VUMC, Medische Oncologie
De behandeling van maag-slokdarmkanker vraagt om een nieuwe aanpak. Nieuwe immunotherapie lijkt veelbelovend, maar behoeft verbetering. De aanvraagster richt zich op het ontmaskeren van mechanismes die maag-slokdarmkankers gebruiken om te ontsnappen aan het immuunsysteem, en deze te gebruiken voor de ontwikkeling van immunotherapie-versterkende middelen en zo de overleving te verbeteren.

2018

Location AMC

VIDI

- **Op zoek naar de Achilles hiel van Hepatitis C virus**
Dr. C.J. (Janke) Schinkel (v), Amsterdam UMC, Locatie AMC
Per jaar sterven er zo'n 500.00 mensen aan leverziekte veroorzaakt door hepatitis C virus. Om deze sterfte te verminderen is een vaccin nodig dat verdere verspreiding voorkomt. Door beter te begrijpen waarom sommige mensen, ondanks frequente blootstelling, nooit chronisch geïnfecteerd raken, kan een belangrijke stap gezet worden in vaccine ontwikkeling.
- **Gesuikerde vetten vallen eiwitten lastig**
Dr. R.M. (Robbert) Spaapen (m), Amsterdam UMC, Locatie AMC
Cellen in het lichaam praten met elkaar door middel van eiwitten. De onderzoeker gaat ontrafelen hoe gesuikerde vetten communicatie eiwitten verstoren. Verder

gaat hij uitzoeken of tumor cellen deze gesuikerde vetten gebruiken om onopgemerkt te blijven door eiwit communicatie te verstoren.

VICI

- **Nieuwe behandeling voor nekkramp**
Prof. dr. D. (Diederik) van de Beek (m), UvA - Geneeskunde, Neurologie
Bacteriële hersenvliesontsteking is een levensbedreigende hersenontsteking. Verschillende ontstekingsfactoren zijn geïdentificeerd met impact op uitkomst maar hoe deze gebruikt kunnen worden als behandeling is nog onduidelijk. In dit onderzoek worden nieuwe behandelingen voor de ziekte uitgetest met als doel levens te redden.
- **Poortwachters van de bloedvaten**
Dr. J.D. (Jaap) van Buul (m), UvA - Sanquin Research and Landsteiner Laboratory
De bloedvatwand vormt de grens tussen het bloed en het omliggend weefsel. In geval van een ontsteking bewegen witte bloedcellen zich door de vaatwand om de ontsteking aan te pakken. Dit voorstel beoogt beter te begrijpen hoe de vaatwand de witte bloedcellen binnenlaat om ziektekiemen te verwijderen.

Location VUmc

VIDI

- **Natuurlijk wapen tegen chronische ontstekingen**
Dr. G. (Gijs) Kooij (m), Amsterdam UMC, locatie VUmc
Chronische ontstekingen ontstaan doordat het natuurlijke proces dat ontstekingen in toom houdt (resolutie) niet optimaal functioneert. De onderzoeker wil uitvinden hoe dit komt om zo op een 'lichaamseigen' manier chronische ontstekingsziekten zoals multiple sclerose aan te pakken.

12.5 Professor appointments

2017

Location AMC

- Joppe Hovius (AMC): hoogleraar Inwendige geneeskunde, ihb vector-overdraagbare infectieziekten
- Ronald van Vollenhoven (AMC): hoogleraar Reumatologie

- Joost Wiersinga (AMC): hoogleraar Inwendige geneeskunde, ihb translationele infectieziekten

Location VUmc

- Michiel van Agtmael (VUmc): hoogleraar Farmacotherapieonderwijs

2018

Location AMC

- M. van Vugt: Internal Medicine, in particular community centered control of tropical infections
- N. de Vries: Reumatologie, i.h.b. de immuno-pathogenese van reumatoïde artritis and andere auto-immuunziekten

Location VUmc

- Irene van der Horst (VUmc): Reumatologie, i.h.b. gendaspekten bij de musculoskeletale ontstekingsziekten
- Fons van den Eertwegh (VUmc): Klinische immuno-oncologie.
- Tuna Mutis (VUmc): Immunotherapie van hemato-oncologische ziekten
- Sergey Nezhentsev (VUmc): Translationele immunologie

12.6 Thesis

2017

Location AMC

- Alberts CJ: HPV in minority populations: Epidemiology and vaccination acceptability
- Anas AA: Cell-specific innate immunity in lung infection and inflammation
- Angiolilli C: Molecular mechanisms of histone deacetylases in rheumatoid arthritis fibroblast-like synoviocytes
- Arabkhazaeli A: Pediatric asthma and allergy; an epidemiological approach
- Avula T: Role of SH3 and BAR domains in fission yeast
- Bartelsman M: Point-of-care management of sexual transmitted infections
- Blokhuis C: Keeping an eye on the brain of perinatally HIV-infected children
- Boerma RS: Prevention, suppression, and resistance: Antiretroviral treatment for children with HIV in Sub-Saharan Africa

- Borgert MJ: Improving patient safety for the critically ill: The challenges of implementation
- Bos JC: Diagnosis and treatment of common infectious diseases in severely ill sub-Saharan African patients: Studies from a hospital floor
- Bruning AHL: Catching the common cold
- Canbaz D: The role of flame retardants in allergic responses to house dust mite
- Cohn-Hokke PE: Hereditary dementia, a clinical genetic perspective
- Cornet ME: Nasal polyposis: Advances in diagnosis and management
- Cortjens B: Neutrophils in respiratory syncytial virus disease: Untangling the NET
- de Groot JC: Adult-onset eosinophilic asthma
- Derks M: Radical surgery for early stage cervical cancer
- de Rooij MFM: Targeting the BCR signalosome in B cell malignancies
- de Taeye SW: Stabilization of HIV-1 envelope glycoprotein trimers to induce neutralizing antibodies
- Dettling DS: The Post-Intensive Care Syndrome (PICS)
- Dhawan S: Neural regulation of innate and adaptive immunity in the gut
- Dietz SM: Connecting the dots: Monitoring strategies and long-term consequences of Kawasaki disease
- Doorenspleet ME: Standing out of the crowd: Adaptive immune cells in the pathogenesis and prediction of rheumatoid arthritis and IgG4-related disease
- Eberl S: Sedation outside the operation room
- Engelhard EAN: Outpatient HIV care in the Netherlands
- Erkens C: Evaluating the effectiveness of interventions for the prevention of tuberculosis in a low-incidence setting
- Gabriel TL: Lysosomal stress: a new player in perturbed lipid metabolism
- Gkourtsa A: Understanding the role of BAR and SH3 domain-containing proteins in fungi
- Gołębski K: Regulation and cross-talk between environmental triggers of local immune responses in airway epithelial cells
- Hazendonk HCAM: Pharmacokinetic-guided dosing of clotting factor concentrates in bleeding disorders : towards individualization of treatment
- Herrera Moro Chao D: Glycosphingolipids and the central regulation of metabolism: Sugar analogues as research tools

- Huis In 't Veld RAG: Riboregulation in *Neisseria meningitidis*
- Issa Y: Chronic pancreatitis: Novel concepts in diagnostics and treatment
- Jahfari S: Tick-borne Diseases: Opening Pandora's Box
- Jansen AHP: Degrade or degenerate: Glial protein degradation in Huntington's disease
- Janssen S: Improving management of HIV-infected patients in Africa
- Jong WMC: Inflammation and acute myocardial ischemia-reperfusion injury using a closed-chest mouse model
- Joore IK: Proactive HIV testing strategies in primary care
- Kadouch DJ: Through the looking glass: Confocal microscopy imaging of basal cell carcinoma
- Kooij FO: Improving peri-operative care using an anaesthesia information management system
- Kooij KW: Comorbidity and ageing in HIV infection
- Koopman FAC: Balancing the autonomic nervous system, towards new therapeutic options for rheumatoid arthritis?
- Langebeek N: Treatment adherence, health related quality of life and aging in HIV-1 infected patients
- Lankelma JM: The role of the intestinal microbiota in pneumonia and sepsis
- Leopold JH: Continuous glucose and exhaled breath analysis in the Intensive Care Unit
- Limperg PF: Growing up with hemophilia: health related quality of life and psychosocial functioning
- Maijer KI: Rheumatoid arthritis: From the at risk phases all the way up to the development of the disease
- Mari L: Barrett's esophagus and esophageal adenocarcinoma: from molecular pathogenesis to novel therapeutic targets
- Marsman G: Factor VII-activating protease: Unraveling the release and regulation of dead cell nuclear damps
- Molenaar RJ: Towards personalised medicine for cancer: From initial therapy to follow-up
- Nagelkerke SQ: A field guide to human Fc-gamma receptors: Genetics, cellular expression and interaction with immunoglobulins
- Nederlof R: Mitochondrial hexokinase and ischemic sensitivity and metabolism of the heart
- Nguyen VT: Antimicrobial drug resistance at the human-animal interface in Vietnam
- Noordenbos T: The role of innate immune cells in tissue inflammation in spondyloarthritis
- Oei AL: Tumor cells can't stand the heat: Boosting the effectiveness of hyperthermia in cervical carcinoma
- Olde Engberink RHG: Clinical impact of nonosmotic sodium storage
- Olthof PB: Enhancement of liver regeneration and liver surgery
- Oudeman J: Diffusion tensor imaging: A diagnostic tool for neuromuscular conditions
- Ouwerkerk W: A systems biology study to tailored treatment in chronic heart failure
- Peters A-L: Blood transfusion: Transfusion-related acute lung injury: back to basics
- Reshetova P: Use of prior knowledge in biological systems modelling
- Riool M: Novel antibacterial strategies to combat biomaterial-associated infection
- Ruizendaal Eé: Malaria in pregnancy: In search of tools for improved prevention
- Sahami S: New concepts in ulcerative colitis
- San Giorgi MRM: Recurrent Respiratory Papillomatosis - clinical course and psychosocial aspects
- Schimmel M: Sickle cell disease: Pathogenesis and biomarkers
- Schouten J: Head and heart in treated HIV infection
- Serpa Neto A: Lung-protective ventilation in intensive care unit and operation room: Tidal volume size, level of positive end-expiratory pressure and driving pressure
- Sins JWR: Therapeutic targets in sickle cell disease
- Smelov V: Urogenital and anal chlamydia trachomatis and human papillomavirus infections: epidemiological, diagnostic and public health aspects
- Smit KF: Organ protection by the noble gas helium
- Ssenooba W: Consequences of *Mycobacterium tuberculosis* genetic diversity in the context of HIV co-infection for laboratory diagnosis of tuberculosis in Africa
- Stelma F: Immune responses in hepatitis B and C virus infection
- Stiekema A: HE4: Clinical applications in gynaecological cancer
- Su T: Cognitive impairment and MRI-findings in patients with HIV on antiretroviral treatment
- Utsch Mendes Gouveia L: Mouse models of allergic inflammation: from allergic sensitization to immunotherapy

- van Attekum MHA: Formation of a tumor-supportive microenvironment in chronic lymphocytic leukemia: Addressing the reciprocal interactions in the CLL–T cell–macrophage triad
- van den Berg SM: A hot interaction between immune cells and adipose tissue
- van den Bogaart E: Visceral leishmaniasis - malaria co-infections: Epidemiological, immunological and parasitological aspects
- van der Bel Ré: Kidney oxygenation under pressure
- van der Leij C: Advanced MRI in inflammatory arthritis
- van der Leij F: Optimizing treatment of low risk breast cancer patients
- van der Ree MH: MicroRNA's in chronic hepatitis B and C virus infection
- Vieira Braga FA: Transcriptional control of cytotoxic lymphocytes
- Visser BJ: Fats & Fakes: Towards improved control of malaria
- Vriend LEM: A double-edged sword: Homologous recombination in genome maintenance and cancer treatment
- Wagemakers A: Tick-host-Borrelia interaction: Implications for host immunity and vaccination strategies
- Wang J: Evaluating medical tests and biomarkers: In primary studies and systematic reviews
- Westerhof GA: Adult-onset asthma: Predictors of clinical course and severity
- Wiewel MA: Host response and outcome of sepsis in the critically ill
- Willemse SB: Clinical studies on hepatitis B, C, and E virus infection
- Wind CM: Neisseria gonorrhoeae: testing, typing and treatment in an era of increased antimicrobial resistance
- Winkels H: The role of the co-stimulatory CD27-CD70 dyad in atherosclerosis
- Witteveen E: Intensive care unit-acquired weakness: Pathophysiology and diagnosis
- Zhao J: Gene-expression profiling to reveal pathogenic mechanisms in disease
- Bomers M: A whiff of C-diff: using scent detection to diagnose Clostridium difficile infection
- Boot M: Stress to progress. learning from antibiotic stress responses to accelerate tuberculosis drug discovery
- Braster, R: Manipulating macrophages: increasing the effectiveness in anti-cancer therapy
- Collignon, PJ: Antimicrobial Resistance: Using "One Health" to better control this life threatening and escalating international problem
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