



Amsterdam Rheumatology Center for Autoimmune Diseases

ARCAID officially launched over one year ago with the successful kick-off meeting in January 2020 in Amsterdam (where the first fellow was already present). After that the recruitment started full-swing and many people were offered a position. However, when the coronavirus pandemic hit Europe and many countries went into complete lock-down many fellows could not travel to Amsterdam and had to start working from home, whether in Amsterdam or even from abroad.

ARCAID courses

As we speak, most fellows are able to work in the lab and have started following courses in the AMC graduate school program.

Next to the courses organized by the AMC graduate school, also our partner organisation EATRIS announced the launch of an ADVANCE Online Course. ADVANCE is a 30-month EU training project, supported by Erasmus Plus with the objective to develop a 3-stage blended learning programme to support early-career biomedical scientists in developing currently missing scientific knowledge, transversal skills and competences to meet the key challenge areas existing in the ATMP (Advanced Therapy Medicinal Products) development cycle. This specific online course consists of interactive lectures and independent hands-on and reading assignments and divided into 4 Units representing the key challenges of the ATMPs development cycle: Scientific, Manufacturing, Reimbursement and

Regulatory. Experts across academia, industry, regulatory sector and patient organisation discuss the key aspects in the ATMP development pipeline. This course was also open for the ARCAID researchers and some fellows indeed participate.

Additionally, the first guest lecture for the consortium was January 28, 2021 on the epidemiology of COVID 19 held by Prof. Robert Landawé, who also provided the second lecture March 18, 2021, on reliability in clinical and experimental research; Kappa's, ICCs and why it is relevant to know something about it..

The next lecture will be June 21st by Prof. Maarten Boers on visualization of data.

ARCAID movie for new years' challenge

At the Amsterdam UMC a New Years' challenge was organized with two prizes; one for the team that has promoted the integration and harmonization of teams "across the Amstel" in a special way and another for a team that has contributed to the external visibility of the Amsterdam UMC in an extraordinary way. As we figured ARCAID is a team of PI's of AMC and VUMC that worked together and succeeded in securing a big EU grant and subsequently managed to recruit 20 (!) promising young PhD candidates from all over the world and as such our project combines both aspects. So, we submitted a video. Unfortunately, it was not nominated, but we are still proud to show it on our website (<https://www.arcaid-h2020.eu/>).

Introduction new fellows

In the first ARCAID newsletter the first fellows (Sona, Armando, Elham and Andrew) introduced themselves. The second group (Adrian, Aiofe, Ihsan, Dimitrios, Daria, Sofia,

Chiara, Fatemeh and Melis) have all started during May-September, and they introduced themselves in the second newsletter. We saved the last fellows (Giulia Frazzei, Ana Merino, Agner Parras, Utkarsh Mahamune, Roozbeh Sanaei, Eva Phillipon and Aiarpi Ezdoglian) for this edition of the newsletter, see below.

Impressions on Amsterdam from the ARCAID fellows that have started after September 2020.

Giulia Frazzei - ESR1



Moving to a different country it's never easy, and in this time of uncertainty even more so. However, Amsterdam is such a vibrant city that it's easy to forget, at least for a while, the times we're in; there is so much to learn even just by walking in the centre or cycling around the channels. I moved to Amsterdam by the end of September and I've been welcomed with open arms by my fellow ARCAID. We're very lucky to be such a huge and variegated group and they've made the transition much easier.

Due to the current situation, getting started to the more practical aspects of my project has been a slower process than normal, but this has given me the chance to explore other aspects of the research. My project aims to initiate a pilot study for the prevention of Rheumatoid Arthritis in individuals at high risk and will have both a clinical and laboratory component. I'm excited to be part of such a translational project because it will give me the change to

explore both aspects of the medical research, from bench to bedside. This pandemic won't last forever, and I look forward to seeing where this experience will lead me in the future.

Agner Parras - ESR2

Coming to Amsterdam for a third time in my life was really exiting, especially coming as a non-tourist this time, and even in the middle of the pandemic we are (still) currently living! Exploring the city almost empty after my arrival was quite a bizarre experience at first, but after a bit of time Christmas lights came and it gave a marvellous feeling and a sense of hope that the times ahead will be better. After being stuck in Mexico during the 2020 pandemic - season 1, it was a shock to come to the old world and see how different the lockdowns and restrictions were handled, and to have more strict measures, given that in most parts of Mexico life was continuing alongside the pandemic as if it did not even exist. December 1st arrived and I got the chance to start my ARCAID project; out of respect for the Amsterdammers' customs, I ride to the AMC in the second-hand bike I purchased two days before; the windy-rainy-cold weather was a great first challenge! I manage to find my way to the entry, and then it came the second challenge: find the D3 floor in the big maze; it only took me 20 min and several calls to Dr. Ronald van Vollenhoven to find his office and start our first meeting. The first month was really exiting, and I got the opportunity to have many "kennismakingsgesprekken" to meet with other fellows and PI's. Everybody was really welcoming and encouraging, and made me gave the ARCAID programme a sense of familiarity.

Having grown up in a tropical region where the only seasons are warmth, heat and roasted, winters are always hard, and this year was no exception. My first time in Amsterdam was also during a hard winter back in 2018 where I had

the opportunity to walk and skate in the frozen canals, it was a marvellous experience that I though, at the time, would never repeat again and even heard someone saying “this only happens once in a lifetime”, it was pretty fun remembering that understatement 3 years later walking again in the frozen canals watching the snow fall. Almost 4 months in now, it has been a really exiting adventure, comparable to a roller coaster ride with many ups and downs, especially for the working from home experience the first months. However, it has given me the time to slowly mature the project so when the time comes, we have our plan ready to go. Most recently, I’ve also got the opportunity to collaborate with other ARCAID fellows and help with their project, this has given me the chance to integrate more and a bit faster, and share our experiences of work during these strange times. The new normal has also become more bearable and afternoon walks or jogs now slowly are becoming part of my daily life, together with long bike rides on the weekends without a specific direction but exploring the beautiful areas that surrounds Amsterdam.

It is really exiting to keep diving in this 4 years’ adventure, especially because of the warmth and welcoming work environment and the nice people in the ARCAID programme that is really helpful and inspiring to bring the best out of us and make a great job!



Roozbeh Sanaei- ESR6

Today, I look back on my journey to be in this position, and I remember how I dreamed about

it. I believe this is where I should be, among international scientists, rewarded with an ambitious project with inspiring supervisors at an outstanding institute in Europe.

2020 and COVID-19 will always be remembered together, reminding us how it changed our work and lifestyle both in good and bad ways. Besides the delayed preparation to leave Iran, my unofficial launch on the project also brought new challenges to me as it’s hard to connect with people you never met live. However, it was necessary for a better understanding of the running projects in our group. Still, I see it as a privilege to work at the comfort of our home, and I would like to stay grateful and responsible while keeping my hopeful thoughts alive that we will overcome this trial together.

Being admitted in early 2020, I was able to move to The Netherlands in December. I could celebrate my start and the beginning of the New Year with my new friends in a beautiful suburb house in Utrecht. For an international student, it could be hard to find enough time to discover the country in the best way. Nevertheless, since I arrived in Amsterdam, I have enjoyed the nice weather, peaceful ambient, and diverse community, which stands as an example of globalization. There is still much to learn and discover, reminding me that I am standing at the beginning of all roads.



Ana Merino Vico- ESR7

It is now one year since Spain declared the national state of alarm. I was then in Barcelona finishing my master in Advanced Immunology, and all my experiments had to stop indefinitely as we all started our self-isolation routine. We all thought that in one month it would be over, but no one knew that we would be three full months at home, only going out for essential purposes. We were not even allowed to do exercise, how crazy is that? But after a long wait, May arrived and new rules applied, making it possible to actually walk the streets again. And I've never been happier. Since that day, I am even more curious than before, eager to explore every corner of every single place I'm at, eager to meet new people and know about their stories, and eager to just live life to the fullest.

And it couldn't have started in a better way. After a long research to decide my future plans, I came across this super interesting ARCAID-PhD position in Amsterdam, investigating the role of B cells in ANCA-associated vasculitis, for which I immediately applied. And in about three weeks, I got accepted! My life was about to change completely, and I could have never imagined such a wonderful event in that strange 2020. I couldn't believe I was going to live in Amsterdam for four years, a city I had already fell in love with two years ago on a short summer visit. So, in mid-October I said goodbye to Madrid to welcome my new city, Amsterdam.

If I would have to describe Amsterdam, I would probably call it 'the city of big windows'. It's so inspiring to just walk around and find those beautiful streets full of houses with big windows that reflect the warmth and how open Dutch people are. And of course, its canals, always welcoming you to sit by them with friends, or maybe on your own to paint or write. Sadly, since I arrived, everything was already closed, so I cannot wait to experience how alive the city is in normal times, enjoying

its museums, cinemas, restaurants, pubs and live events. But I'm still enjoying my time with my new friends, doing more 'gezellig' plans and walking around the city. Also, painting is my passion, so I'm looking forward to taking courses in country where many of the greatest artists were born!

It is always difficult to leave your family and friends behind, especially now when traveling back home is not as easy, but thanks to my friends, lab team and the warm-hearted Dutch I already feel home here as well. Looking forward to better times!



Eva Phillipon- ESR8



My new adventure started 2 months ago, when I joined AMC as the last fellow of the ARCAID program, in the group of Sander Tas. Since I moved to Amsterdam, I have been going through every kind of extreme weather from snowstorm and frozen canals to torrendous rain and blustering winds, without mentioning some beautiful summer days in between. I feel grateful to live in the vibrant neighbourhood De Pijp with my Dutch housemate, Annelies, who helped me a lot to settle in, to feel quickly at home and has now become a really good friend of mine. After getting lost so many times in the innumerable streets of Amsterdam, it finally feels like they become familiar to me, especially since I recently got a second-hand bike, and I am now experiencing the true freedom of an Amsterdammer.

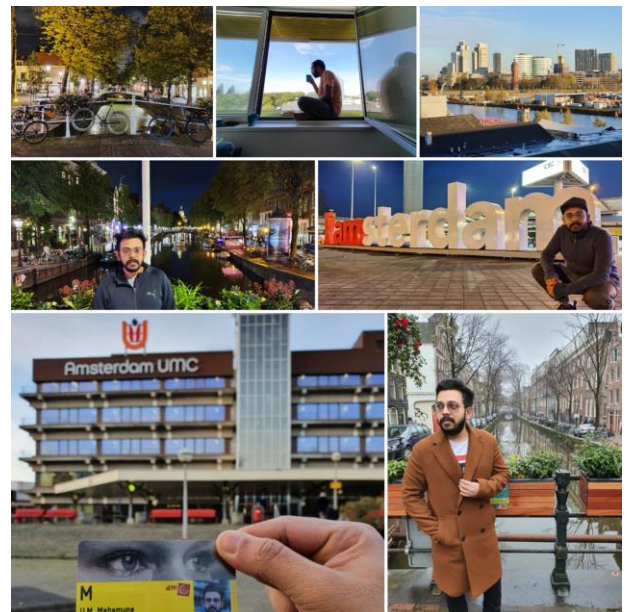
I was very happy to meet some of the ARCAID fellows and I am looking forward to meeting the rest of the group soon. I am glad to be able to work in the lab more often now and spend time with my colleagues, as I am being introduced to different techniques for my project. They are all very kind and helpful, and I love our fun lunch breaks! While I am patiently waiting for exploring shops, museums, cafes, and bars in Amsterdam (my favourite activities), I am improving my cooking and baking skills, and tasting some nice take-away dutch beers and kroketten (lekker!). I also like exploring the different parts of the city while running or walking. I am always up for cool activities to do in the weekend, for example, I went land sailing at IJmuiden with some friends last weekend, it was so much fun!



Let's hope we can fully enjoy the exciting and inspiring vibe of Amsterdam very soon. I am looking forward to making good use of what I learnt in my Dutch language course: "Mag ik een bier, alstublieft?"

Utkarsh Mahamune- ESR12

My journey with ARCAID started around last week of May 2020 when I came across the calls for 2nd round of applications. With a bachelor's degree in Computer Science from India followed by Computational Life Science master's degree in Germany there was exactly one project suitable for me, and I guess that's all I needed. I must be the fastest ARCAID fellow getting onboard with selection in mid-July and actually shifting to Amsterdam in mid-August. I couldn't control my excitement to join and start working in the amazing environment as well as meeting my new fellow mates "ARCAIDers" (yes, that's what we call each other).



The Netherlands is a beautiful country and living in Amsterdam is a dream come true for me. In the very first week I fell in love with the city. The canals, the cycling tracks, the weather (it was mid-August, not talking about the winter months here), the people everything was

very comforting. I couldn't have asked for a better place to do my PhD studies.

I officially started my work in the ARCAID project (ESR 11) from 1st of September 2020 under the supervision of Prof. dr. Antoine van Kampen and Dr. Lisa van Baarsen. As my project mostly involves the computational analysis, working from home was always on the table and thus never had to face any problems.

Setting up a new home amidst all the COVID chaos was certainly not the thing I was looking forward to, my excitement slowly turned into nervousness. Above of all that owing to current situations I would be working at home without any personal contact with people, and that scared me. But thanks to my amazing colleagues, ARCAIDers I never felt lost in the new group, in the new city, in the new country!

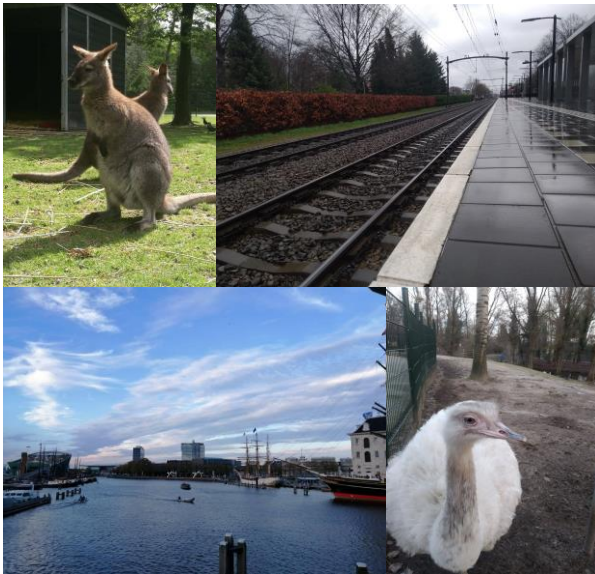
Aiarpi Ezdoglian- ESR17



When I got an offer for this position back in 2020, I decided to visit Netherlands and meet

the group, before accepting the offer. It was exactly the Carnival time when I arrived to Amsterdam and I was amazed by the number of brightly and equivocally dressed people (and sometimes animals) on the streets, it felt like a non-ending party all over the country and no one would ever think that this is going to end the streets will become empty and flights would be cancelled in just a couple of days. The day I left Amsterdam the first Covid case in the Netherlands was registered (what a coincidence). So, I agreed with my supervisors that I'll start in September being sure that covid will be gone by that time, but as you all know, that never happened. From the time I left Amsterdam and the time I came back I was working in different Covid Hospitals and I have seen how cruel this virus can be, so when I finally moved to Amsterdam in September, I did not travel much and tried to keep isolated as much as possible. Once I had a chance to meet some of the ARCAID fellows and we went to the botanic garden, which I really enjoyed. It's a pleasure to realize how great are your colleagues and how much fun we had. Hope very soon we'll be able to do it again.

Despite Covid restrictions I am enjoying the city, the safety of bicycles and the nature. The other day we found kangaroos and lamas in the nearby park and those guys were happy about the weather and coming spring. I got used to doing shopping from the market once a week and I like this tradition of getting food from local farms. There was another Amsterdam thing I faced in the very beginning of my stay, and guess what? I had mice in my apartment, and even though back then I was furious, now I know that this is a normal flow of thing for the city based on canals and water. Now the mice are gone, and the only mice left in my life are the lab animals we are planning to work with, and it's not a big surprise that one of the oldest lab strains are from Amsterdam). I am looking forward to collaborating and meeting all ARCAID fellows, and I wish this spring will bring us effective vaccines and treatments.



Fellow teambuilding in “corona-times”; Quaranteambuilding!

As most fellows have not been able to meet in-person, we wanted to at least create some virtual “team-spirit”, so we have organized a Quaranteambuilding: Friday the 12th of March during 1.5-2 hours the fellows played in virtual teams of 5 people. In the app there are different assignments to do; creative "do-assignments", challenging quiz-questions, brain-wrecking escape games and more. So, something for everybody. Although of course it’s nothing like real face-to-face contact, they had a lot of fun.



The first ARCAID publications!

1. IgG Subclasses Shape Cytokine Responses by Human Myeloid Immune Cells through Differential Metabolic Reprogramming. Willianne Hoepel, **Sona Allahverdiyeva**, Haneen Harbiye, Steven W. de Taeye, Alwin J. van der Ham, Leonie de Boer, Sebastiaan A. J. Zaat, Michel van Weeghel, Dominique L. P. Baeten, Riekelt H. Houtkooper, Bart Everts, Gestur Vidarsson and **Jeroen den Dunnen**. *The Journal of Immunology*, 2020, 205: 000–000, doi:10.4049/jimmunol.2000263.

2. Larsen MD, de Graaf EL, Sonneveld ME, Plomp HR, Nouta J, Hoepel W, Chen HJ, Linty F, Visser R, Brinkhaus M, Šuštić T, de Taeye SW, Bentlage AEH, Toivonen S, Koeleman CAM, Sainio S, Kootstra NA, Brouwer PJM, **Geyer CE**, Derksen NIL, Wolbink G, de Winther M, Sanders RW, van Gils MJ, de Bruin S, Vlaar APJ; Amsterdam UMC COVID-19 biobank study group, Rispens T, **den Dunnen J**, Zaaier HL, Wuhrer M, Ellen van der Schoot C, Vidarsson G. Afucosylated IgG characterizes enveloped viral responses and correlates with COVID-19 severity. *Science*. 2020 Dec 23: eabc8378. doi: 10.1126/science.abc8378. Epub ahead of print. PMID: 33361116.

3. High titers and aberrant glycosylation of early phase anti-SARS-CoV-2 IgG promote hyperinflammation by alveolar macrophages. Willianne Hoepel, Hung-Jen Chen, **Chiara E. Geyer**, **Sona Allahverdiyeva**, Xue D. Manz, Steven W. de Taeye, Jurjan Aman, Guillermo R. Griffith, Peter I. Bonta, Philip J.M. Brouwer, Tom G. Caniels, Maurice Steenhuis, Karlijn van der Straten, Korneliusz Golebski, René E. Jonkers, Mads Larsen, Federica Linty, Jan Nouta, Cindy P.A.A. van Roomen, Frank E.H.P. van Baarle, Amsterdam UMC COVID-19 Biobank, Cornelis M. van Drunen, Alexander P.J. Vlaar, Godelieve J. de Bree, Rogier W. Sanders, Lisa Willemsen, Annette E. Neele, Theo Rispens, Manfred Wuhrer, Harm Jan Bogaard, Marit J. van Gils, Gestur Vidarsson, Menno de Winther, **Jeroen den Dunnen**. (Under revision)

Interesting “Weetjes”/ Titbits

Inspired by her fellow, Roozbeh, Lisa proposed to create a new column in the ARCAID Newsletter, sharing interesting (fun)facts brought to us by all the combined cultures. This edition, a titbit from Iran:

Nowruz is the Iranian New Year, also known as the Persian New Year, which begins on the Spring equinox, marking the first day of

Farvardin, the first month of the Iranian solar calendar. It is celebrated worldwide by various ethno-linguistic groups, and falls on or around March 21 of the Gregorian calendar.

So, if you also have an interesting “titbit” to share, send it to me..

Upcoming ARCAID meetings

As it is, we are planning the next virtual meeting May 19th, 2021 and hopefully, the first ARCAID live meeting for the fellows and PI's to get to know each other in October/November 2021. However, of course we need to await how the situation regarding coronavirus contaminations develop and whether we are allowed to physically meet.

For more information on the network and topics/input for the next newsletter please contact the project manager (Laurian Jongejan);

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