

Allostery in Drug Discovery



IPR Training for Researchers & ESR Presentations on the Progress of their Research

27th February- 1st March, 2024 Beerse, Belgium

Johnson & Johnson Innovative Medicine

https://www.allodd-itn.eu/







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Welcome

Welcome to the IPR Training for Researchers & ESR Presentations on the Progress of their Research in Beerse!



Dr. Vineet Pande

Beerse Training School Organizer

J&J Innovative Medicine, Belgium



Prof. Dr. Herman van Vlijmen

Beerse Training School Organizer

J&J Innovative Medicine, Belgium

Johnson & Johnson Innovative Medicine

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ALLODD Project

The **ALLODD** project is a collaboration between **23 academic** and **industrial organizations** with **14 ESRs**.



Why Allostery in Drug Discovery?

Most current drugs are designed to bind directly to the primary active sites (also known as orthosteric sites) of their biological targets. Allosteric modulators offer a powerful yet underexploited therapeutic approach. They can elicit a richer variety of biological responses and, since they target less conserved binding sites, higher selectivity and less adverse effects may be obtained.



ALLODD aims to train a new generation of scientists in exploiting the concept of allostery in drug design, putting together a whole array of technologies to identify and characterize allosteric modulators of protein function that will be applied to therapeutically relevant systems.



Eyes on the Future

ALLODD approach is based on a combination of experimental and simulation techniques, including fragment Screening with structural characterization (X-ray, NMR, H/D exchange), proteomics (MS/MS), ITC, DNA encoding libraries, Virtual Screening, Molecular Dynamics simulations-based methods, Synthetic Chemistry, and in vitro and cellular assays for the verification of results.

Allosteric targeting need not be achieved solely through the design of synthetic small molecules, but also can be reached via conformationally specific allosteric antibodies, which represents an important field of future research. There are already clear examples of monoclonal antibodies that allosterically target ion channels, GPCRs and RTKs, as well as cytokine and integrin receptors.

Beerse Meeting

The **3rd ALLODD Training School** will be held at the Dr. Paul Janssen Center of Science & Innovation (Beerse, Belgium) during February 27th-March 1st. **Day 1** includes a campus tour and introduction to drug discovery and development at J&J, principles of alliance management, and IP training. **Day 2** is dedicated to a workshop on communication and presentation skills provided by our partner SciCo. **Day 3** will start with "drug hunting" lectures from J&J experts covering areas such as targeted protein degradation, cell therapy, and kinases and end with a seminar titled "How Innovators Can Collaborate With Big Pharma". The training school will end on **Day 4** dedicated to ESR project updates



The entire event will take place at the main entrance building (building 560) of the Dr. Paul Janssen Center of Science & Innovation in Beerse, Belgium

Address: Turnhoutseweg 30, 2340 Beerse, Belgium

You can find the coordinates for the entrance building here.

Main entrance to the J&J site



The **main entrance** to the Beerse site (shown above) is **building 560**. All meetings, lunches and coffee breaks will be in this building. Upon entering the building you will receive your badge which provides you access to only this building.

Please wear your badge visibly at all times and do not take any pictures or make recordings inside the premises.

Program – Day 1

| Day 1 | 08:45 – 9:30 | Registration and coffee |
|------------------|---------------|--|
| Day 1 27.02.2024 | 9:30 – 10:30 | Introduction to R&D at J&J |
| | 10:30 – 12:00 | Live tour of the campus |
| | 12:00 – 12:30 | Visit to JLABS with presentation by an innovation incubation specialist |
| | 12.30- 13:30 | Lunch |
| | 13:30 – 15:00 | Project management and partnerships in practice Wendy Sanderson and Tinne Boeckx |
| | 15:00 – 15:30 | Coffee break |
| | 15:30 – 17:00 | Introduction to intellectual property – IP training with a focus on patents |

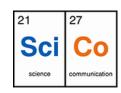


Building 560 Room 116 Centauri

Please note it is not allowed to take pictures or make recordings of the lectures or the J&J premises

Program – Day 2

| Day 2 28.02.2024 | 9.00 –17.00 | Workshop on communication and presentation skills Theo Anagnostopoulos (SciCo) What is the need for science communication? Perceptions on science and variation of public understanding of science in the EU (talk) Examples of creativity in Science Engagement (talk) Tips on public speaking (activity) Present your research as a story (activity) Your research in social media (activity) Communicating science to different target audiences (activity) Fundamentals of networking (activity) |
|---------------------|-------------|--|
| | | Coffee breaks at 11.00 and 15.00 Lunch at 12.30 |





Building 560 room 106 Sirius



Building 560 room 107 Antares and room 108 Castor

Please note it is not allowed to take pictures or make recordings of the J&J premises

Program – Day 3

| Day 3 29.02.2024 | 09:00 – 11:00 | PROTACs and glues in drug discovery and development, status and future prospects Joannes (Jan) T. M. Linders |
|---------------------|---------------|--|
| | 11:00 – 11:30 | Coffee break |
| | 11:30 – 12:30 | Development of chimeric antigen receptor (CAR)-T cell therapies for the treatment of hematological malignancies <u>Elena Lasorsa</u> |
| | 12.30– 13:30 | Lunch |
| | 13:30 – 14:30 | Kinase inhibitor design – a target family approach <u>Edgar Jacoby</u> |
| | 14:30 – 15:00 | Coffee break |
| | 15:00 – 16.30 | How innovators can collaborate with big pharma <u>Tess Korthout</u> |

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Building 560 room 115 Alpha

Please note it is not allowed to take pictures or make recordings of the lectures & the J&J premises

| Social Event | | |
|---------------|--|--|
| 16.30 – 17.00 | Rest and walk together to the restaurant | |
| 17.00 – 21.00 | Drinks reception and dinner | |



Brasserie De Farmasie "Food & Wine", Antwerpsesteenweg 223, 2350 Vosselaar

Program - Day 4 (Hybrid)

Individual research project update (10min+15min)

| Day 4 01.03.2024 | 09:00 – 09.25 | ESR14 – David |
|---------------------|---------------|-----------------------|
| | 09:25 – 09.50 | ESR1 — Francho |
| | 09:50 – 10.15 | ESR2 – Jonathan |
| | 10:15 – 10.40 | ESR11 – Hryhory |
| | 10:40 - 11:10 | Coffee break |
| | 11:10 – 11.35 | ESR10 – Sonja |
| | 11:35 – 12.00 | ESR9 – Bohdana |
| | 12:00 – 12.25 | ESR8 – Nina |
| | 12.25 – 13.30 | Lunch |
| | 13:30 – 13.55 | ESR7 – Vincenzo |
| | 13.55 – 14.20 | ESR6 – Sigrid |
| | 14:20 – 14.45 | ESR5 – Simone |
| | 14.45 – 15.15 | Coffee break |
| | 15:15 – 15.40 | ESR4 – Özge |
| | 15:40 – 16.05 | ESR3 – Varbina |
| | 16:05 – 16.30 | ESR12 – Léxane |
| | 16:30 – 16.55 | ESR13 - Martijn |



Building 560 room 115 Alpha and Teams for those who cannot attend in person

Please note it is not allowed to take pictures or make recordings of the J&J premises



Getting to the J&J site from the airport

IMPORTANT: the <u>J&J site</u> is located in Beerse. This is a small town with almost **NO** accommodation options and **NO** train station. Below you will find how to get from the closest airport (<u>BRU</u>) to the **J&J site** or the two closest cities (**Turnhout** and **Antwerp**) for **lodging**. Please also familiarize yourself with the area around the J&J site using the map below.



Arriving by airplane

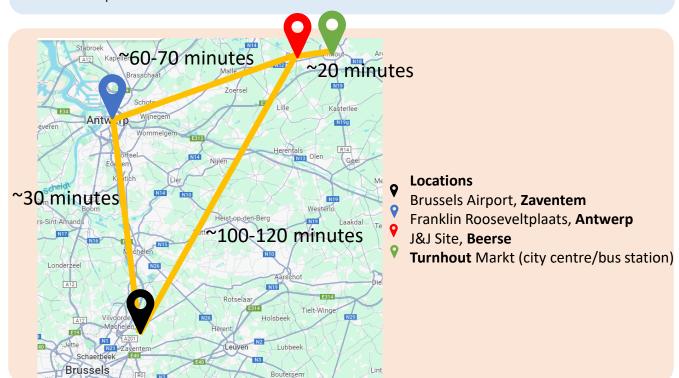


Take a **train** (bottom floor of BRU airport; either buy tickets online from the "<u>SNCB</u>" website/app or on-site at the ticket machines) to **Turnhout** Station. Then take a **bus** from Turnhout to "**Beerse Heibergstraat**": Line number 410, 416 or 417. Alternatively, you can take a taxi from Turnhout to Beerse.



From the Brussels Airport entrance you can also take a <u>taxi</u>, which should take about 55-70 minutes and cost around 100 euros to get to the Beerse/Turnhout area or your place of accomodation, depending on the traffic.

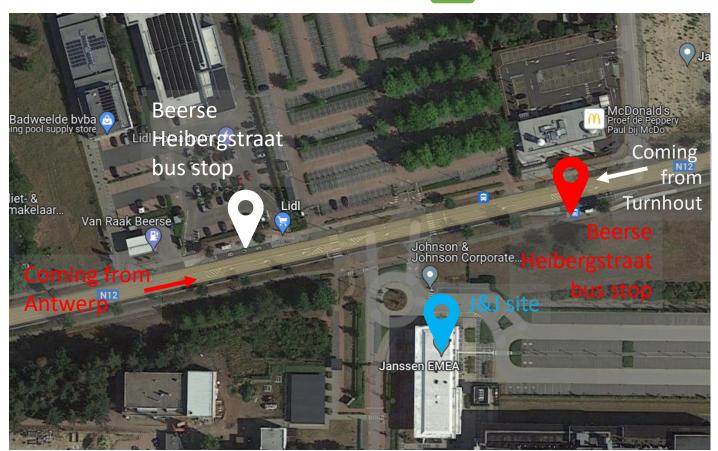
Note: if you decide to lodge in **Antwerp**, you can also take a direct train from BRU airport to Antwerp Central station.



Getting to the J&J site from Antwerp or Turnhout

Getting to the J&J site from Antwerp or Turnhout is best achieved by bus, using lines 416 or 417 noting the following:

- Bus stop "Beerse Heibergstraat" is directly in front of the J&J site
- Most buses do not announce what the next stop will be! It is therefore
 advisable to check your location on your phone to see when you get
 close to the <u>J&J site</u>.
- Coming from Turnhout, the "Beerse Heibergstraat" stop is in front of the Lidl, while coming from Antwerp it is opposite McDonald's (see below)
- Bus line 410 also operates between Antwerp and Turnhout. Traveling between Turnhout and Beerse this line is equally fast as 416 and 417 but traveling between Beerse and Antwerp 410 takes ~30mins longer!



Hotels*

As far as accommodation is concerned, we recommend to stay in **Turnhout**, as this will save time on commuting in the morning. However, if you prefer to stay in the bigger and more active city of **Antwerp** we recommend to stay close to the **Franklin Rooseveltplaats** bus station for easy connections to the **J&J site**.

Turnhout

- Corsendonk Turnova
 Price: around €150/night
- Price: around €130/night
- Turnhout City Hotel

 Price: around €119/night

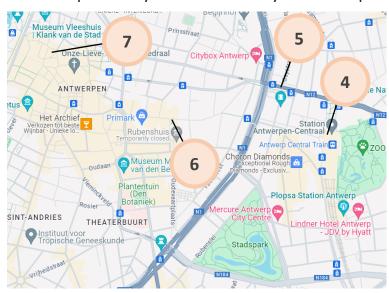


*J&J does not have business relationship with these companies (reservations can not be guaranteed), please check details within their websites and contact details

Antwerp

There are **no recommended hotels** in Antwerp as we advise lodging in Turnhout, but we would like to note the following reference points if you decide to stay in Antwerp:

- 4 <u>Central station</u>
- Franklin Rooseveltplaats
 (bus to Turnhout/J&J site)
- 6 "Meir": main street from the station to city center
- 7 "Grote markt" city center with restaurants and bars



Childcare Arrangements*

Kinderopvang Hilde Pioenstraat 13, 2340 Beerse

Telefoon: +3214620355

https://kinderopvang-beerse.business.site/

vzw Kinderopvang Turnhout Druivenstraat 19 2300 Turnhout +3214474921

https://kinderopvang.turnhout.be/

Kinderopvang Toermalijn Katrien Baaten Bos en Bremdreef 2 2460 Kasterlee +3214828561

https://www.kinderopvangtoermalijn.be/#/

De Toverschommel
Otterstraat 29, 2300 Turnhout
https://detoverschommel.be/
+3214496287

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Workshop Organizers

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ALLODD Beneficiaries

























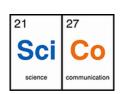






ALLODD Partner Organizations























https://www.allodd-itn.eu/



