



2025

# ANNUAL REPORT

Oncologie Onderzoekschool Amsterdam

**OOA**

Oncology Graduate School Amsterdam



# About the OOA

The training of PhD candidates in oncology at Amsterdam UMC and the NKI-AvL is coordinated by the Oncology Graduate School Amsterdam (Onderzoekschool Oncologie Amsterdam – OOA). As one of the largest and most dynamic graduate schools in the Netherlands, the OOA supports over 1,000 PhD candidates from diverse national and international backgrounds, working at our two world-class research institutes.

Our mission is to provide a broad range of high-quality theoretical and practical courses in oncology, while ensuring excellent supervision and mentoring for all PhD candidates. The fruitful collaboration between the two institutes provides PhD candidates the unique opportunity to learn from – and work alongside – many internationally renowned scientists.

Please watch our [video](#) and check our [website](#) to get a closer look at what makes the OOA such a vibrant and inspiring academic community.



## OOA Institutes



## 1,080 PhD candidates in 2025



50% Amsterdam UMC  
50% NKI-AvL



42% Medicine  
25% Biomedical/molecular/health sciences  
8% Biotechnology/Technical Medicine/Engineering  
6% Pharmacy/Drug Discovery/(Bio)Chemistry  
4% Cancer/Oncology  
15% Other



119 thesis defended



32% institutional funding  
14% public funding  
43% research contracts  
11% other funds



70% Dutch  
30% International

Click [here](#) for more details about all OOA PhD candidates

# From the executive team

In 2025, the OOA Graduate School further strengthened its position through strategic collaborations, organizational development, and enhanced support for our PhD community. A major milestone was the move to the RDC building, which has greatly stimulated interaction between research groups and across the neuro- and oncology domains, fostering new scientific synergies and interdisciplinary exchange. Building on this momentum, OOA deepened its partnership with the ONWAR Graduate School by exchanging parts of our course portfolios, allowing PhD candidates in both oncology and neuroscience to broaden their academic horizons and benefit from complementary expertise. Our collaboration with UMC Utrecht, especially through the graduate school (CTO), was also intensified, supporting translational research training.

The OOA council continued to grow as an engaged and enthusiastic team, organizing the PhD day, supporting the annual retreat, and initiating well-attended social events such as the winter and summer drinks, and a movie night, all of which strengthened community spirit and fostered informal connections among PhD candidates.

Communication and structured guidance throughout the PhD trajectory were further improved, from the starter's package to clearer guidance toward the final stages of the PhD.

During the national Weekend of Science, OOA organized a masterclass on cancer research for 6 VWO students, sharing our expertise with a broader audience and inspiring the next generation of scientists.

Together, these developments reflect our ongoing commitment to collaboration, community, and providing an outstanding training environment for future oncology researchers.



Arjan Griffioen

Director of OOA, Chair

## OOA Team

### Executive team

Prof. dr. Arjan W. Griffioen  
*Chair, Amsterdam UMC*

Prof. Dr. Heinz Jacobs  
*Dean NKI-AVL*

Dr. Marcel Spaargaren  
*Dean Amsterdam UMC*

### Coordination

Dr. Esther M. Ruhé  
Amsterdam UMC

### Staff

Sanjhana Bhusal  
Evelien Bos  
Sarah Stolk  
Jolieke Weijmer

### PhD student council

Ines Avenel, Rosa Dalhuisen, Emily Evans, Marike Geurts, Tamara Jordens, Klaudia Majszczuk, Ben Ooms, Rafael Saxer, Charlotte Smith, Debra van Asten.

### Faculty

OOA has over 200 faculty members. [Click here](#) for a list of all members.

“ The OOA is the glue for all oncology PhD students in Amsterdam and allows for meaningful scientific and social interactions through the provision of courses and events related to science and personal development.  
- *Chavelli Kensen, OOA PhD councilmember*

# Research themes

OOA research has an excellent (inter)national status, as demonstrated by the large number of research projects granted in open (inter)national calls. The faculty is strongly represented in the NWO and KWF grants and participated widely in numerous EU integrated projects and networks of excellence.



## Theme 1: Basic oncology

The transformation of normal cells into cancer cells involves multiple (epi)genetic changes in genes that control cell behavior. By studying these genes and proteins, researchers gain insight into tumor development, progression, and therapy resistance, and can identify markers for early cancer detection and treatment prediction. Innovative tools such as high-throughput (epi)genetic, transcriptomic, and proteomic analyses are improving disease profiling. Cellular processes like communication, migration, and cell death are examined with advanced microscopy and molecular techniques. Mouse models are used to study cancer genetics and test new therapies, including immunological approaches, as well as mechanisms of resistance and metastasis.

## Theme 2: Clinical research

Improvements in care rely on better detection methods and development of innovative, personalized therapies. Advances in molecular imaging and genomics allow for detailed study of tumor biology in individual patients, leading to valuable diagnostic and prognostic indicators. Modern imaging techniques such as MRI, SPECT, and PET provide precise tumor information, while mouse models help track drug sensitivity and develop imaging strategies. Research also focuses on optimizing targeted therapies, improving drug delivery, and developing new immunotherapies. Additionally, there is strong attention to the quality of life for long-term cancer patients and survivors.

*The institutes provide state-of-the-art research facilities. New initiatives are being launched, and innovative technologies are developed and implemented. This often occurs in the context of research programmes in which PhD students are actively involved. Please [click here](#) for an overview of all facilities.*

# PhD training and supervision

To prepare PhD candidates for a successful career inside or outside academia, we provide them all the same solid foundation. All PhD candidates have to complete a uniform training and supervision plan. This plan contains a number of mandatory activities, supplemented by education and activities that can be tailored to each candidate's own interest and needs.



## Personal Training Plan

At the start of their PhD, candidates create a training plan together with their supervisor. This plan can be adjusted as needed throughout the PhD trajectory.

## Monitoring and Certification

Progress is monitored and advice is provided by OOA when necessary. At the end of the program, the training is reviewed and candidates receive an OOA certificate if all requirements are met.

## Clear Procedures and Communication

The procedure and supporting information is clearly described on the website and in the OOA Starters Package. All new PhD candidates are informed about the process upon registration.

## Supervision and Research Environment

PhD candidates receive support from experienced supervisors, postdocs, and technicians within strong research groups. There is strong focus on high-quality supervision, with trainings and advice available for both junior and senior supervisors.

## Training requirements



30 ECTS total



Mandatory 2 ECTS 'Ethics and Integrity in Science' course



≥8 ECT's professional knowledge and general skills courses



≥1 scientific conference



Additional courses and activities, writing articles, teaching, retreats, group meetings, etc.

# Educational Program

For nearly 30 years, we have offered a comprehensive and dynamic educational program for PhD candidates in oncology. Our curriculum provides a solid foundation in cancer research, supports personal and professional development, and encourages collaboration across disciplines. The program is continuously updated to meet the evolving needs of our candidates and the latest advances in the field.



## Basic and Specialized Oncology Training

All first-year PhD candidates start with the Basic Oncology course to build a strong foundation. Afterwards, they can choose from a wide range of specialized courses on advanced topics, tumor types, and new technologies, tailored to their research interests.

## Quality Assurance and Support

Our course program is dynamic. The PhD council regularly surveys candidates to address their specific needs, and all courses are evaluated for continuous improvement. In addition to scientific content, we offer support in the well-being and personal development of our PhD candidates.

## Collaboration and Broad Training Opportunities

We highly value the integration of basic and clinical research. Our annual 3-day retreat fosters collaboration and broadens candidates' perspectives. We work closely with the Amsterdam UMC Doctoral School and also encourage PhD candidates to participate in courses offered by partner schools ONWAR, MGC and CTO. Candidates from these schools also join OOA courses.

# 1.4

Average credits per activity

# 8.6

Average evaluation rate of our courses

# 20

Educational activities organized throughout 2025

# 147

Course organizers and teachers

# 630

Total number of course participants

# Courses organized in 2025



## **Analysis and interpretation of protein structures and functions**

**March 3 - 5, 1.0 ECTS**

This course sought to help the PhD candidates to take advantage of structural information in their research. It gave short introductions on methods (X-ray, cryo-EM, NMR and AI methods), protein folding and interaction, taught how to interpret the quality of experimental structures and predictions, and how to perform, interpret, and extend results from structure prediction methods.



## **2x Basic Microscopy**

**April 14 – 18 and September 29 – October 3, 1.5 ECTS**

This one-week course taught the application of a range of imaging possibilities. These were presented in lectures, discussions and hands-on demonstrations. The projects of the attendants were discussed in relation to the demonstrated techniques, allowing exchange of ideas with participants and microscopy experts and operators.



## **Basic Oncology**

**June 23 - 27, 2.0 ECTS**

This course provided an overview of oncology-related topics, with an emphasis on recent advances relevant to the pathogenesis and treatment of cancer. The course was designed for all first/second year PhD candidates, to provide them a solid base in oncology already at an early stage.



## **Being Able To Work With Your Challenges**

**May 19 and June 5, 0.6 ECTS**

This workshop was organized for PhD candidates who experience stress or are in moments not happy and satisfied in doing their work. Participants were helped to look at things differently, from a broader perspective and with ownership. They looked into stress and how to make it work for instead of against them. They worked with their own challenges and difficult situations and use them as a chance to become more self-aware, find out what they really want and make that happen.



## **BioBusiness**

**October 27 - Nov 6, 3.0 ECTS**

During this two-week course, participants got familiar with the ideas and concepts behind the valorization of research ideas and technology. How to identify of research or research ideas that can be commercialized, and the factors that are crucial for success of entry into the market.

Among these are intellectual property, patenting, indication selection, (pre)clinical testing, regulatory - and financial aspects. The course consisted of seminars, independent learning on the basis of exploring literature and business reports, discussion sessions, assignments and a business pitch for a new start-up company.



## **5x Ethics and Integrity – 2.0 ECTS**

**March 3, May 26, October 27, November 24, December 1**

Each scientist sometimes faces dilemmas. While the extremes of the spectrum - falsifying and fabricating data and plagiarism - are clearly very serious scientific misconducts, a wide range of research practices are in the "grey zone". These issues were addressed during this course including an overview of all available resources and counselors. The course consisted of three parts: an interactive workshop, an online module and writing an essay & discussion with the supervisor.





### **Histopathology of Human Tumors**

**April 10 and 11, 0.6 ECTS**

The aim of this two-day course was to give an introduction in the histology of malignant tumors and their precursor lesions. Structures, growth patterns, grading and staging and cell types present in selected tumor types were explained and discussed by pathologists.



### **ImageJ/Fiji**

**March 26, April 9 and 16, 0.6 ECTS**

ImageJ is a public image processing and analysis program. The objective of this course was to give the user a global understanding of the huge potential of the program. We went through all functionalities of the basic package and present specific tools for use in (cell) biology. We also reviewed concepts and principles of image processing in general, in order to set a theoretical background.



### **2x Peer to peer group coaching**

**1.0 ECTS**

Intervention groups are small groups of professionals working in similar fields, who meet on a regular basis to gain insight into the problems they encounter at work. The participants try not to come up with solutions, but by asking questions, encourage the case provider to gain insight into his own case and how to take action on this. Important elements were to

learn from the experience and ideas of colleague PhD candidates and to discuss problems without any hierarchical differences.



### **PhD day**

**May 7, 0.3 ECTS**

The OOA PhD day offers an opportunity to enhance the soft skills essential for navigating through the PhD journey. Pursuing a PhD requires not only expertise in each of the research area but also challenges the PhD candidates to know how to take care of their wellbeing, communicate effectively in intercultural environments, craft impactful stories, manage their projects and future career paths, and build connections with peers.



### **Proteomics in Medical Research**

**Januari 27 – Feb 7, 1.5 ECTS**

Proteomics plays a vital role in biomedical research in the post-genomic era. With technological developments in mass spectrometry and computational models, proteomics has evolved rapidly and can shed light on complex biomedical problems. A wide range of applications have been developed. This course focused on methodology, data analysis and highlight a range of applications in basic and cutting-edge cancer research including biomarker/target discovery and precision oncology.



### **Radiation Oncology**

**November 10-14, 1.5 ECTS**

This course provided an overview of radiobiological and physical principles of radiation oncology, technical innovation in precision radiotherapy and the route of the patient: from diagnosis to therapy. The course also encompassed three practical trainings: the radiobiology laboratory, computer-based target volume delineation and treatment simulation on a linear accelerator.



### **Retreat 2025**

**October 8 - 10, 2.0 ECTS**

The retreat focused entirely on research conducted by the PhD candidates. Students not only presented their work, they were also in charge of chairing sessions and discussions. The retreat trained important skills and also provided an overview of research conducted within OOA at an early stage of the student's career, contributing significantly to the interaction between the students. The retreat is considered stimulating both scientifically as well as socially.



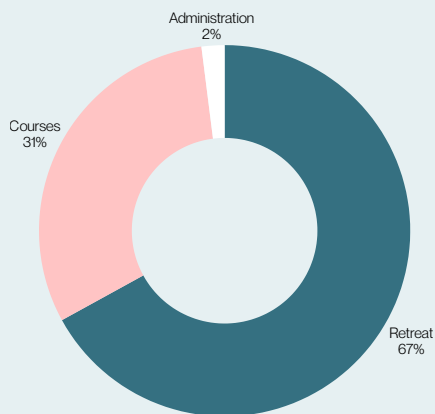
### **Thesis design**

**November 18, 0.1 ECTS**

This workshop was focused on designing the PhD thesis. During the session, organized by Gildeprint, PhD candidates received practical insights, clear examples, and tips to guide them with confidence through the final phase of their PhD.

# Finances

The annual costs of the educational program are financed by Amsterdam UMC and NKI-AvL. In addition, the participating institutes both provide administrative support. Thanks to the contributions of the participating institutes, all OOA PhD candidates can join our activities and courses free of charge.



Total costs 2025:  
€ 96.444,57

Administrative support:  
NKI-AvL: 0.8FTE administration  
Amsterdam UMC: 1.3FTE coordination & administration

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