

ANNUAL REPORT

2024



Contents

1. INTRODUCTION	2
2. CARE Program, Transversal Program of the IIS-IGTP.....	2
3. Executive activities in 2024	3
4. New Structures within the CARE Program	3
4.1 CARE Program Nodes	3
4.1.1 Preclinical Models (Coordinator: Meritxell Carrió).....	3
4.1.2 Immunology/Immunotherapy (Coordinators: Esther Ballana, Joan Climent).....	4
4.1.3 Tumour Heterogeneity & Liquid Biopsy	4
4.1.4 Bioinformatics (Coordinators: Sergio Alonso, Bernat Gel)	4
4.2 CARE Program Multidisciplinary Transversal Networks	5
5. Education and Training	5
5.1 Translational Seminars	5
5.2 Workshops.....	5
5.3 CARE-B·ARGO Oncology Training Sessions.....	5
5.4 CARE Training: Future Perspectives.....	6
6. Networking	6
6.1 Annual Meeting	6
6.2 CARE Participating in the IGTP Retreat.....	6
6.3 CARE Participating in INNOMED.....	6
7. Impact of Program and Future Challenges.....	7

1. INTRODUCTION

The CARE Program (Translational Program in Cancer Research) is a collaborative network of multidisciplinary researchers on the Can Ruti Campus united by shared interests and resources in cancer research. The program is an integral component of the core scientific framework of the IIS-IGTP, a biomedical research center accredited by the Spanish National Health Research Council (ISCIII).

The program focuses on different forms of cancer and fosters the translation of cutting-edge knowledge and technological breakthroughs into practical applications for cancer prevention, diagnosis and treatment. Through a range of activities, the program aims for cancer research excellence with a maximum impact on clinical practice.

2024 was the second full year of activity for the CARE Program and a year of further consolidation along with the development of new activities.

As decided in 2023 three **Research Nodes** were established. These focus on emergent research areas and serve as dedicated platforms for fostering collaboration, stimulating innovation, and facilitating the exchange of knowledge among researchers. The nodes will develop transversal technologies, applicable to the research and treatment of different cancers, across the campus.

Three new research nodes started regular meetings and the planning and organization of their activities. Arising from the Annual Meeting in October 2024 a fourth node was agreed on.

By leveraging the collective expertise and enthusiasm of its members, the CARE Program continues to advance its mission of catalysing breakthroughs in cancer research and translating them into tangible benefits for patients and practitioners alike.

2. CARE Program, Transversal Program of the IIS-IGTP

The CARE Program is an integral part of the IIS-IGTP Structure and is one of the instruments for expanding the collaboration and coordination across the Can Ruti Campus and the Health Institute.

CARE aligns with four of six strategic objectives of the current IGTP Strategic Plan (2023-2027). These are: Objective one: Growing institutional alliances; Objective Two: Scientific model and fostering transversal research programs; Objective Three: Driving Clinical Research and Objective Four: Resource management and capacitation of staff.

3. Executive activities in 2024

The coordination group led by the program directors continued to meet every other week to coordinate the different activities of the program. These include seminars, workshops and mini symposiums. Dialogue continued with the members of the program through meetings and a new survey and activities taking place at the annual meeting in October.

The coordinators also worked closely with the Management of the IGTP and made presentations at the External Advisory Board in October and the Annual IIS-IGTP Retreat on 4 December. Additionally, they continued discussions on resources and structural ways to strengthen the program and worked with the Communications Unit on a communications plan.

4. New Structures within the CARE Program

4.1 CARE Program Nodes

In accordance with decisions taken at the Annual Meeting in 2023 three nodes were set up. The nodes are multi-disciplinary teams from institutions across the campus focusing on specific cutting-edge technologies. Their objectives are to pool resources and increase know-how through training.

4.1.1 Preclinical Models (Coordinator: Meritxell Carrió)

16 basic researchers

Participating Groups

Endocrine Tumours (IGTP)

Resistance, Chemotherapy and Biomarkers (ICO-IGTP)

Hereditary Cancer (IGTP)

Translational Cancer Research (IGTP)

Genetics and Epigenetics of Cancer (IGTP)

B-ARGO (ICO-IGTP)

Lung Immunity Translational Research Group

Childhood Cancer [C-LOG] (IGTP)

Throughout 2024 Preclinical Models Node held monthly meetings and formed three working groups to focus on spaces, resources, protocols, guidelines and sample circuits. The team also delivered three technical seminars (Technical capsules) to researchers on the campus.

4.1.2 Immunology/Immunotherapy (Coordinators: Esther Ballana, Joan Climent)

24 participants

4 Centres

7 Clinical Researchers and 17 basic researchers

Participating Groups

B-ARGO (ICO-IGTP)

Resistance, Chemotherapy and Biomarkers (ICO-IGTP)

Genetics and Epigenetics of Cancer (IGTP)

Virus-Host Interactions (IrsiCaixa)

Tissue Virology (IrsiCaixa)

Neoantigens and Vaccines against Cancer (IrsiCaixa)

Cell Virology and Immunology (IrsiCaixa)

The Immunology/Immunotherapy Node held meetings every two months and concentrated on creating a catalogue of expertise on the campus. Meetings centred on group presentations and troubleshooting sessions.

4.1.3 Tumour Heterogeneity & Liquid Biopsy (Coordinators: Sofia España, Berta Martín)

4 clinical researchers and 6 basic researchers

Participating Groups

B-ARGO Gastrointestinal and Skin Tumours Group (ICO-IGTP)

Hereditary Cancer (IGTP)

Cancer Mechanisms and Pathways (IGTP)

B-ARGO Thoracic Tumours and Sarcomas Group (ICO-IGTP)

The group held monthly meetings in 2024. Their activities included mapping the current status of liquid biopsy handling at the IIS-IGTP, identifying projects with liquid biopsy samples and preparing technical seminars. They are also working on guidelines for sample circuits and are meeting with clinical services to explore synergies.

4.1.4 Bioinformatics (Coordinators: Sergio Alonso, Bernat Gel)

This group was established at the end of 2024 and will start activities in 2025.

4.2 CARE Program Multidisciplinary Transversal Networks

The networks are a forum for researchers and clinicians from across the campus to focus on advances in specific pathologies. They are multidisciplinary and inter-institutional groups that work on problems arising in research and clinical care.

- Taskforce for Colorectal Cancer
- Can Ruti Sarcoma Group

5. Education and Training

Training is an essential element of creating community, sharing technologies and building up the skill sets of staff. The CARE Program continued to deliver on training in 2024.

5.1 Translational Seminars

The translational seminars are platforms for researchers, clinicians and students to discuss cutting-edge advancements in cancer research. In total, 16 seminars were held during 2024.

These are open to all staff on the Can Ruti Campus and approach questions in cancer from both the clinical and basic research aspects.

5.2 Workshops

To fulfil the objectives of the CARE Nodes the CARE program started training capsules in 2024. The pre-clinical Node delivered 3 capsules on iPSC-derived neurofibromaspheres; modelling resistance in *in vivo* and *in vitro* models and cancer genetics and epigenetics. Capsules from the other two nodes formed in 2023 are planned for 2024.

5.3 CARE-B-ARGO Oncology Training Sessions

CARE continued to offer tailored training sessions focussing on specific pathologies during 2024. These events are organized in collaboration with industry and held at the Badalona International Business Centre (BCIN). In 2024 CARE offered 8 courses.

Type of Event	Number
CARE Annual Meeting	1
CARE Translational Seminars	16
CARE Cursos d'oncologia	8
CARE Node Capsules	3
	28

5.4 CARE Training: Future Perspectives

The CARE Program is working with the Talent Management Officer of the IGTP to further improve the visibility and recognition of CARE training.

6. Networking

6.1 Annual Meeting

On 9-10 October 2024 the CARE Program celebrated a year of activities with the annual meeting. On the evening of 9 October, a poster session with flash talks was held in the IGTP, Sala Polivalent, Edifici Mar. 18 posters were exhibited and early career researchers gave flash talks. On 10 October from 14.00 researchers heard about the developments in the CARE Program over the previous year and the three nodes set up in 2023 reported on their activities. The rest of the afternoon was devoted to collaborative activities where participating researchers took part in dynamic brainstorming and sharing activities to contribute to the future planning of the program. A direct result of sessions at the Annual Meeting was the decision to form the Bioinformatics Node of the CARE Program.

6.2 CARE Participating in the IGTP Retreat

The annual event was held 4 December at the International Business Centre Badalona (BCIN). As for previous years the Executive Team presented at the IIS-IGTP Retreat and encouraged anybody interested to contact them. As a new feature of the event there were two dedicated poster sessions. One space was dedicated to Cancer and Cardiology with 21 posters from members of the CARE Program on display.

6.3 CARE Participating in INNOMED

2024 saw the first edition of the INNOMED Awards. INNOMED is a cooperative innovation program designed to share capabilities, connections and resources and encourage the transfer of biomedical projects helping them to generate significant social, economic and clinical impact. Several members of the CARE Program participated and prepared business proposals for their technology.

Two CARE researchers won awards at the pitching event held on 19 June. Mireia Jordà of the IGTP won the Clinical regulatory study award, sponsored by Ingecal, a consultancy company offering training and internal services for management systems for her project *Thyromet*. Carmen Aguilar of IrsiCaixa won the Patentability study award sponsored ZBM Patents & Trademarks for her project *Towards a highly immunogenic vaccine platform for pancreatic cancer*.

7. Impact of Program and Future Challenges

The end of 2024 sees a balance of two years of intense activity to coordinate cancer research on the Can Ruti Campus. The CARE Program has striven to involve basic and clinical researchers, sometimes with very different availabilities and objectives and to provide spaces where they can work together. Using a methodology of consultation, debate and collaboration different structures are being set up. These groups are made up of motivated researchers working on common topics with great energy.

The Executive Committee of the CARE Program firmly believe that without a sound and resilient research structure the program will not be able to secure significant competitive funding for joint ventures or compete effectively. The establishment of the **Nodes** and **Multidisciplinary Transversal Networks** is a good start and is continuing at a good pace. Researchers in these groups are working hard to achieve a solid organization and the nodes are set to increase training available. The involvement of care from basic research design to innovation projects is a very positive sign.

Challenges include a shortage of resources and the executive committee will continue to lobby the IIS-IGTP in 2025 for resources and support for management, organizational activities and training. All members of CARE must continue a high level of quality scientific production to successfully pass their evaluations as researchers and group leaders at their respective institutions and the load required to manage a node or transversal network and the associated administration and reporting is considerable, with little short-term return on investment. The Geopolitical situation is in a state of great instability at the end of 2024 and possible repercussions are unknown.

CARE is a long-term strategic project of the IIS-IGTP, which is in excellent health at the end of 2024. Objectives for 2025 are to strengthen the structure, increase training and secure more resources to continue working to be able to move on to a phase of project submissions, independent funding and resources. This is the way to improve cancer prevention, diagnosis and treatment for people in the community.