



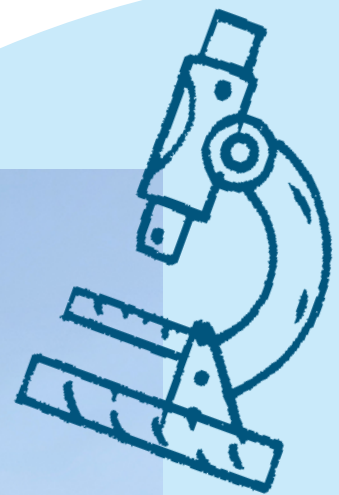
# *Annual* REPORT

# 2023



**CANSEARCH**  
fondation de recherche  
contre le cancer de l'enfant

*Private donations*  
for research makes  
*hope possible*



# Message from the *President*



*Sébastien Joliat*

President of the Foundation Board

Dear friends of the CANSEARCH Foundation,

It is with pride and enthusiasm that the CANSEARCH Foundation presents its 2023 activity report. Once again this year, CANSEARCH and its Research Platform have contributed to major advancements and innovative progress in personalized medicine.

In 2023, the challenges of pediatric oncology remained as urgent as ever. As funding for Childhood Cancer projects in Switzerland is provided exclusively through private donations, statistics remind us daily of the necessity and urgency of our actions: every week, a child dies of cancer in Switzerland. We must act! Various forms of Leukemia, brain tumors, spinal cord tumors, and lymphomas are the most common cancers, responsible for the second leading cause of child mortality. Yet, the exact causes of the disease in children remain largely unexplained. Even after successful treatment, about 80% of cured patients have to face the long-term effects of the disease and the intensive treatments they underwent.

In the face of these challenges and since its inception, the Foundation and its research teams have been tirelessly committed to finding innovative solutions for increasingly effective treatments. These last twelve years of efforts and progress led by CANSEARCH are the result of its diligent and dedicated work. Close-knit teams have worked together tirelessly to

tackle the complexities of the infinitely small precision medicine to constantly progress on the understanding of the disease, improve the effectiveness of current therapies and reduce the side effects related to the toxicity of certain treatments.

I would like to extend my warm thanks to all those who make this hope possible: the Foundation Board, the Scientific Committee, the Honorary Committee, the General Secretariat, the Organizing Committee, the numerous volunteers, as well as the entire teams of the CANSEARCH Research Platform in onco-hematology at the University of Geneva and the Pediatric Onco-Hematology Unit at the Geneva University Hospitals (HUG). Your dedication and expertise are a source of inspiration and essential drivers of our mission and for all of us.

Finally, I would also like to express my deep gratitude to our loyal donors and partners for their invaluable support, which allows us to continue our mission with ambition and confidence for the world we wish to pass on to our children.

Together, we achieved a lot in 2023, but the road ahead is still long. As President of the CANSEARCH Foundation, I am committed to persevering in our mission with determination and passion. We will continue to support research, promote innovation, and provide invaluable support to children and families faced with pediatric cancers.

To all those who stand by our side, I extend my most sincere gratitude for their unwavering commitment to our cause. Together, we can make a real difference in the lives of those who need it most.

With all my appreciation,

Sébastien Joliat



Scholarships  
and international  
collaborations,  
revelators  
of new *talents*.



# A Word from the *Founder*

## *Prof. Marc Ansari*

Head of the Pediatric Oncology and Hematology Unit,  
Director of the CANSEARCH Pediatric Hemato-Oncology Research Platform at the University of Geneva,  
Founder of the CANSEARCH Foundation

Since its inception over twelve years ago, the CANSEARCH Foundation has been relentlessly deploying its efforts to combating pediatric cancers and blood disorders, exceeding our expectations. Profoundly committed to its mission of improving treatments for children with cancer, the Foundation aims for each scientific advancement to bring tangible benefits to young patients. Despite these promising efforts, the harsh reality remains: each year, over 350 new families in Switzerland face the diagnosis of cancer. And sadly, their number is increasing.

Each diagnosis and treatment reveal a resilient young warrior, endowed with admirable courage—supported by a hopeful family. During these trying times, CANSEARCH represents more than just a charitable organization: it is a coalition united around sick children, bringing together families, medical teams, researchers, and donors. Together, we strive for a better future for these young patients. At the crossroads of these efforts, the CANSEARCH Foundation continues to strive, constantly pushing the boundaries of research and care, thus providing a glimmer of hope to children and their families facing the unimaginable.

Today, the outlook is very encouraging. The Pediatric Oncology and Hematology Unit at the Geneva University Hospitals (HUG) is represented by an extraordinary team of 23 physician-researchers, all experts in their field. Thanks to CANSEARCH 2.0 initiatives, which extend beyond pure research, various talent management scholarships and programs are strengthening the care teams, ensuring optimal patient care. In addition, we have opened a dedicated consultation for cancer survivors aimed at anticipating and limiting the side effects of the treatments.

As far as the CANSEARCH Research Platform in pediatric oncology and hematology at the University of Geneva is concerned, it does not stop gaining mo-

mentum and I would like to take this opportunity to praise the diligent and dedicated work of the research team, composed of about 30 collaborators who are working on 8 precision medicine research axes. The scholarships awarded by the Foundation have also strengthened this team of researchers and attracted new talents, from as far as Harvard University, in the highly specialized field of pediatric oncology. With each publication and conference, the demand for international collaborations is increasing. Evidence of this is the BuGenes study, the flagship project of the Platform, which is expanding into different countries. The study on childhood liver tumors (RELIVE), which is recruiting over 300 children worldwide (America, Europe, and Asia), will soon be analyzed to provide insights into potential treatments for these young patients relapsing from liver tumors. Research on the side effects of stem cell transplantation is also gaining new momentum following a collaboration with EPFL.

As for the IndALL project, it will allow us to share our pharmacogenomic expertise in the treatment of acute lymphoblastic leukemia with two academic medical centers in India, benefiting a multitude of



*The CANSEARCH  
Foundation continues  
to strive, thus providing a  
glimmer of hope to children  
and their families facing  
the unimaginable.*

young patients from New Delhi to Pondicherry. Our projects are accredited and co-funded by prestigious institutions such as the Swiss National Science Foundation (SNSF) and the Swiss Cancer League.

The remarkable growth and dynamism of the CANSEARCH Foundation, its Platform, and the Pediatric Oncology and Hematology Unit (UHOP) shine both nationally and globally. However, for this momentum to continue, we need more than ever the support of institutions and private donors.

Dear Friends, dear Patrons, your generosity enables us to advance research in pediatric oncology, and we humbly and most sincerely thank you for providing us with the means to continue our mission. And maybe, thanks to scientific advancements, CANSEARCH Foundation's bold dream will one day become true: a world where the terrible nightmare of a child suffering from cancer is treated as easily as the flu.

Professor Marc Ansari



*We, more than ever, need the support of institutions and private donors more than ever.*





# The *figures* on childhood cancer in Switzerland

*Leading cause*

of disease-related mortality in children



*Less than 2% of funds raised*

for cancer research are allocated to pediatric cancers



*50% of diagnoses*

involve children between the ages of 1 and 4



*Between 300 and 350 new cases*

diagnosed each year in children aged 0-15



*Over 85%*

of children can be saved (across all types of cancer compared to 55% in the 1970s)



*Approximately 2/3 of children*

develop long-term effects in adulthood



*4 out of 5 children and adolescents*

can be cured



*One child*

still dies each week from cancer



The most common cancers in children are:

*33%*

leukemias



*20%*

brain and spinal cord tumors



*12%*

certain lymphomas





# Research Results from the *Platform*

**Over 2,800 children** worldwide benefit from the work of our researchers and our more than 399 collaborations with medical centers.

**38 countries** with which we collaborate.

**20%** increase in survival over 10 years in the context of pediatric HSCT (hematopoietic stem cell transplantation).

**32 research projects** are ongoing at the Platform.

**13 clinical projects** conducted at HUG.

**Over 7,000 aliquots** (DNA samples) stored in the BAHOP biobank.

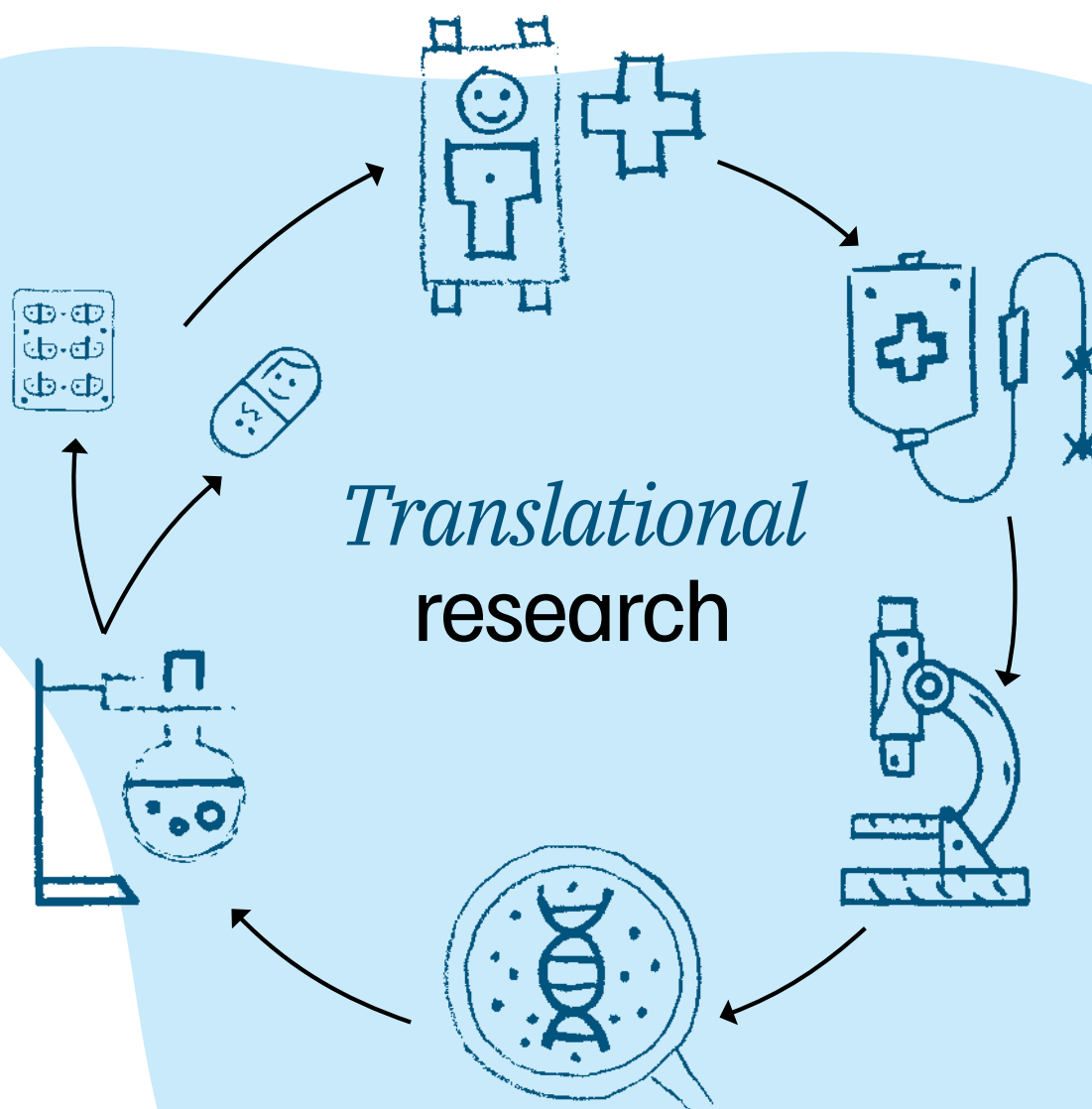
**352 abstracts** presented at conferences and congresses since 2011.

**290 scientific publications**, including in the Journal of Clinical Oncology, the New England Journal of Medicine, Nature, and Blood Advances since 2011.

**Several grants** obtained: Swiss National Science Foundation, Horizon 2020, Swiss and Geneva Cancer Leagues, Oak Foundation.

**CANSEARCH Platform is a member of:**

- Various scientific associations: EBMT, ESPT, SIOP, SIOPE, iBFM, SPT.
- Centers of the Faculty of Medicine at UNIGE: CITB, CRTOH.



# Finances and financial statements



*Phil Lenz*

Treasurer of the CANSEARCH Foundation



Despite the challenges, our determination to make a difference remains steadfast. We are committed to continuing our investment in innovative research projects and support programs for affected families. With your continued support, we are confident in our ability to make a significant impact on the lives of children facing these devastating diseases.

As Treasurer of the CANSEARCH Foundation, I would like to express our deepest gratitude for your trust and undefeatable support. Together, we are a positive force in the fight against pediatric cancers and in improving the world for the children affected.

Sincerely,

Phil Lenz

## *The Challenge of Precision Medicine Research: Long-Term Funding*

Dear donors and partners of the CANSEARCH Foundation,

I am pleased to present the annual financial report for 2023 of the CANSEARCH Foundation. Your invaluable support has been crucial in allowing us to continue our mission of combating various pediatric cancers and improving the well-being of children affected by these diseases.

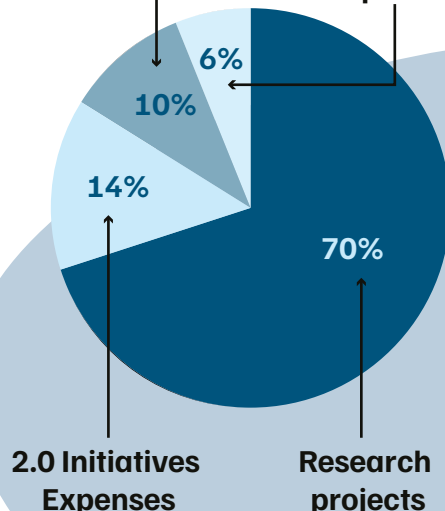
In 2023, our commitment yielded results in several key areas. We raised a total of CHF 3,806,123 in donations, a testament to your unwavering generosity and dedication to our cause. These funds were allocated to various initiatives, with a particular focus on research.

Investments in research have been essential for advancing our fight against pediatric cancers. In 2023, we allocated CHF 2,441,255 to these projects. It is important to note that, given the long-term nature of our research efforts, a portion of the donations collected in 2023 has been set aside to ensure the continued funding of these projects until their completion, for a period of at least three years.

### EXPENSES 2023

**Administrative staff and scientific committee expenses**

**Other general expenses**



# Income Statement

## for *the Fiscal Year 2023*

	2023 (CHF)	2022 (CHF)
<b>Income</b>	<b>3'806'123</b>	<b>3'603'416</b>
Donations collected	3'750'489	3'560'682
Donations collected in kind *	30'734	30'734
Subventions communales et Ville de Genève	24'900	12'000
<b>Direct expenses</b>	<b>2'441'255</b>	<b>2'112'086</b>
Research and support fees	824'986	528'741
Researchers and doctors' fees	1'103'345	1'357'514
Initiatives 2.0	412'095	222'323
Equipment depreciation	100'829	3'507
<b>PROFIT FROM OPERATIONS</b>	<b>1'364'868</b>	<b>1'491'331</b>
<b>General and administration expenses</b>	<b>462'018</b>	<b>839'065</b>
Event expenses	42'098	508'396
Administrative staff costs	283'499	193'586
Scientific committee fees	10'276	10'276
Administrative premises costs	30'734	30'734
General administration costs	68'452	73'030
Fees	26'959	23'044
<b>EARNINGS BEFORE INTERESTS AND TAXES (EBIT)</b>	<b>902'849</b>	<b>652'265</b>
<b>Financial result</b>	<b>15'340</b>	<b>-13'565</b>
Bank charges	- 1'425	-10'829
Creditor interest	25'302	-
Other financial income	1'168	166
Foreign exchange gains and losses	- 9'704	- 2'901
<b>EARNINGS BEFORE FUND AFFECTATION</b>	<b>918'189</b>	<b>638'701</b>
<b>Funds contributions</b>	<b>918'189</b>	<b>638'701</b>
Allocations to funds earmarked for research	797'074	552'326
Allocation to fund for depreciation of research equipment	216'775	86'375
./. Use of funds	-95'660	-
<b>NET PROFIT</b>	<b>0</b>	<b>0</b>

\* In-kind donations include all services provided free of charge (rent, volunteers).

# Governance of the *Foundation*

The Board of Trustees holds the supreme management of the Foundation. It allocates resources, appoints its members as well as those of the Scientific Committee, the General Secretariat, and the Audit Body. It approves the Foundation's budget and financial statements each year. It also elects the members of the Honorary Committee.

The members of the Board of Trustees serve on a voluntary basis. Operating in various fields of expertise, they provide their knowledge and support the successful execution of the Foundation's strategy.



**Prof. Marc Ansari**

Head of the Pediatric Oncology and Hematology Unit, Director of the CANSEARCH Pediatric Hemato-Oncology Research Platform at the University of Geneva, Founder of the CANSEARCH Foundation

## Members of the Board of Trustees



**Sébastien Joliat**  
President  
CFO and Member of the Executive Management at Hyposwiss Private Bank Geneva SA



**Patricia Hübscher Eichenberger**  
Treasurer  
Managing Director of Caran d'Ache SA



**Maurice Machenbaum**  
Founding Member  
Co-founder of Wise Philanthropy Advisors



**Gueric Canonica**  
Member  
Attorney at Canonica, Valticos, de Preux et Associés



**Phil Lenz**  
Member  
Managing Director of Butterfield Trust (Switzerland) Ltd



**Valérie Steck**  
Member  
General Secretary of the CANSEARCH Foundation

## The General Secretariat & Executive Office



**Valérie Steck**  
General Secretary



**Florence Jankovic Schmidt**  
Project and Donor Manager



**Thanh Mai**  
Administrative and Financial Manager

The CANSEARCH Foundation office operates with three positions. Additionally, the Foundation is fortunate to rely on the loyalty and skills of dedicated volunteers.



---

## Members of the Scientific Committee

Once a year, researchers from the CANSEARCH Platform in pediatric oncology and hematology at the University of Geneva present their projects to the members of the Scientific Committee. This committee is international and consists of renowned profes-

sors, each specializing in a specific field to broaden the expertise on ongoing research. The committee is designed to evolve according to the projects. It also has the authority to call upon international experts if needed.



**Prof. Jakob Passweg**  
President

Hematologist, Basel, Switzerland /  
Head of the Hematology Department  
at the University Hospital of Basel



**Prof. Roderick Skinner**

Consultant Pediatric Oncologist / Honorary  
Professor of Childhood Cancer  
Great North Children's Hospital and  
Newcastle University



**Prof. Sylvain Baruchel**

Senior Medical Advisor Innovative  
Therapies / Professor Emeritus University  
of Toronto at hospital for sick children



**Prof. Urs A. Meyer**

Professeur Emeritus en pharmacologie  
Biozentrum, **Bâle**

### A process for reviewing scientific projects ensures the validation of all projects:

1. Each year, by September, researchers from the Platform submit all their projects along with the associated budgets to the CANSEARCH Foundation.
2. The Foundation then forwards them to the Scientific Committee for review.
3. The Scientific Committee analyzes the projects and provides expert opinions based on the expertise of each member. If necessary, they are authorized to consult additional experts.
4. Ultimately, the Board of Trustees either approves or rejects the research projects based on the recommendations of the Scientific Committee.

---

## Event Organization Committee



**Stephanie Ansari**



**Gian Cla Pinösch**



**Alix Rivoire**  
Permanent  
Volunteer



**Cathy Wintsch**  
Permanent  
Volunteer

---

## Honorary Committee

The Foundation is fortunate to have an Honorary Committee composed of committed personalities who support the mission of CANSEARCH:



**Robert Hensler**  
Président

Me Robert Hensler, President, Mme Martha Argerich, the late Mr. Léonard Gianadda, Mme Carole Hubscher, Mr. Raymond Loretan, the late Mr. Claude Picasso, Mr. Bertrand Levrat, ZEP. Mr. & Mme Olivier and Michèle Maus, Mr. Guy Demole, Mr. Romain Grosjean, The Fredy and Franco Knie Family, Mr. Pierre Mottu, Mme Nagwa Said, Mr. & Mme Adam and Chloé Said, Mr. Stan Wawrinka, Mr. Jean Zermatten

We are pleased to welcome two new members to our Honorary Committee:

Adam et Chloé Said :

*"It is a great honor for us to be part of the CANSEARCH journey. This Geneva-based Foundation is essential for its research activities and its care for children with cancer, giving them hope for a return to a carefree life filled with joy and laughter, as it should be for all children. Being able to contribute to raising awareness and supporting its activities in Geneva and beyond is both a tremendous privilege and a responsibility that we take very seriously."*



# Volunteer *Face-to-Face* Meeting

Spotlight on two loyal collaborators for 12 years. Alix Rivoire dedicates her time to the Foundation every Tuesday, working on various projects. Cathy Wintsch manages the website and sends newsletters remotely. Together, they contribute to various fundraising initiatives and co-organize the CANSEARCH charity event. True multitaskers, they are always ready to face new challenges. Both provide tangible support to the Foundation and to children with cancer and their families. Cross-interviews:

## Why did you choose the CANSEARCH cause?

**ALIX RIVOIRE** Childhood cancer is a cause that resonates with me. I have deep respect for Marc (Prof. Ansari) and his medical teams. The nature of their care is truly admirable. I joined the CANSEARCH Foundation during the launch of the first charity event in 2013. At that time in my life, I had three young, healthy children and family projects, and I couldn't imagine returning to work with all the constraints that it involves. However, I wanted to keep a regular, but very part-time activity. I had friends and acquaintances facing pediatric cancers, and it deeply affected me. At the same time, the Foundation's launch event was approaching. I offered to help Stephanie Ansari, whom I knew, and everything fell into place naturally. Marc interviewed me, and I was hired! Since then, I've been working for the Foundation.

**CATHY WINTSCH** For me, it all started when I was asked to help organize a raffle for the charity event. I was driving near the Jardin Anglais in Geneva. I remember clearly the conversation when Marc called me to ask for help, claiming it wouldn't take much time and would be fun – he was definitely right about the fun part! Since then, my role has expanded to include organizing charity events, sending newsletters, managing the website, and participating in various fundraising initiatives. Every activity I undertake allows me to contribute significantly to the Foundation's mission and support children with cancer and their families.

## What inspired you to start volunteering?

**A.R.** My grandmother knitted for charitable causes. From childhood, I was raised with values of solidarity and gratitude. As an adult, with a bit of perspective, I realized their importance. Wonderful encounters have also guided me. I try to instil these values in my children as well. When possible, we should help others in some way.

**C.W.** Volunteering has been an integral part of my life. Since I was a child, I started getting involved in charitable activities while still in school in Ireland. This first experience planted the seed of volunteering in me, and since then, it has become a constant and enriching practice. Volunteering brings me invaluable personal satisfaction as it allows me to contribute to causes I care about and make a real difference in the lives of others.

## What skills are necessary for any volunteer?

**A.R.** Above all, one must be convinced by the cause they wish to support in order to fulfill their commitments. I would say it's important to be open-minded, flexible, and have no expectations. Our role is to provide help where there are needs. I am very fortunate; my role at CANSEARCH is filled with interesting activities, with great autonomy and a wonderful team spirit. Moreover, I have always felt completely integrated into the Foundation.

**C.W.** Key skills for being an effective volunteer include the ability to work as part of a team, communicate effectively, show flexibility and adaptability, and be reliable and committed. It is also important to have a positive attitude and demonstrate empathy towards the beneficiaries of the volunteer work.



*Alix Rivoire*  
Permanent Volunteer

**What experience has marked you the most at CANSEARCH?**

**A.R.** Joining the Foundation gave me a deeper understanding of pediatric cancers, particularly the side effects of treatments, which are much more visible in children who are still growing. I will never forget the beautiful smiles of children, some affected by the illness but standing tall to sing at the Foundation's first launch event.

**C.W.** A particularly memorable experience was my first visit to the pediatric oncology unit. It was a moving moment where I could see up close the challenges faced by children with cancer and their families. This experience strengthened my commitment to the cause and motivated me to redouble my efforts in my volunteer activities.

**Does this activity influence you personally?**

**A.R.** Yes! It's wonderful to be part of a team, even on our modest scale, that works to cure children or improve their quality of life after heavy treatments. I recently faced cancer myself. I believe I can say that these children who fight have been, despite not being directly involved with them, a great example. I often thought of them and their families during my recovery journey. I benefited from the advances in research and an extraordinary medical team, and I know that research saves lives and improves patient comfort. It is crucial to support pediatric research, which does not receive as much support. I continue to invest with unwavering conviction and motivation.

**C.W.** Volunteering is much more than just an activity. It gives me a sense of satisfaction and personal fulfillment, knowing that I am contributing positively to society and making a difference in the lives of others. Volunteering also allows me to develop new skills, build meaningful relationships, and grow outside of my daily life.



*Cathy Wintsch*  
Permanent Volunteer

**How does your environment react to your involvement with the Foundation?**

**A.R.** My husband has always supported and encouraged me, and he immediately embraced my idea of volunteering for CANSEARCH. My children are also very proud of my commitment. As for my surroundings, they are aware and sometimes join me in the Foundation's activities.

**C.W.** My family is proud of my volunteer work and recognizes the importance of giving time to help others. My friends are also supportive, and some have even joined me as regular donors or volunteers to support the Foundation's activities. Their support and encouragement reinforce my motivation to continue my volunteer efforts.

**What essentially sets you apart from a salaried worker?**

**A.R.** Work hours and schedules! This freedom and flexibility are precious and allow me to optimize my time and family organization. But I am happy to work 'overtime' when needed. More seriously, it is extremely motivating to feel useful. The human feedback is extremely rewarding.

**C.W.** The main differences are flexibility and the absence of pressure related to deadlines or performance goals. As a volunteer, I can commit according to my availability and capabilities, which allows me to manage my time more freely while making a significant contribution. The personal satisfaction I get from helping others is a constant source of motivation.





### **What are the challenges the Foundation is facing?**

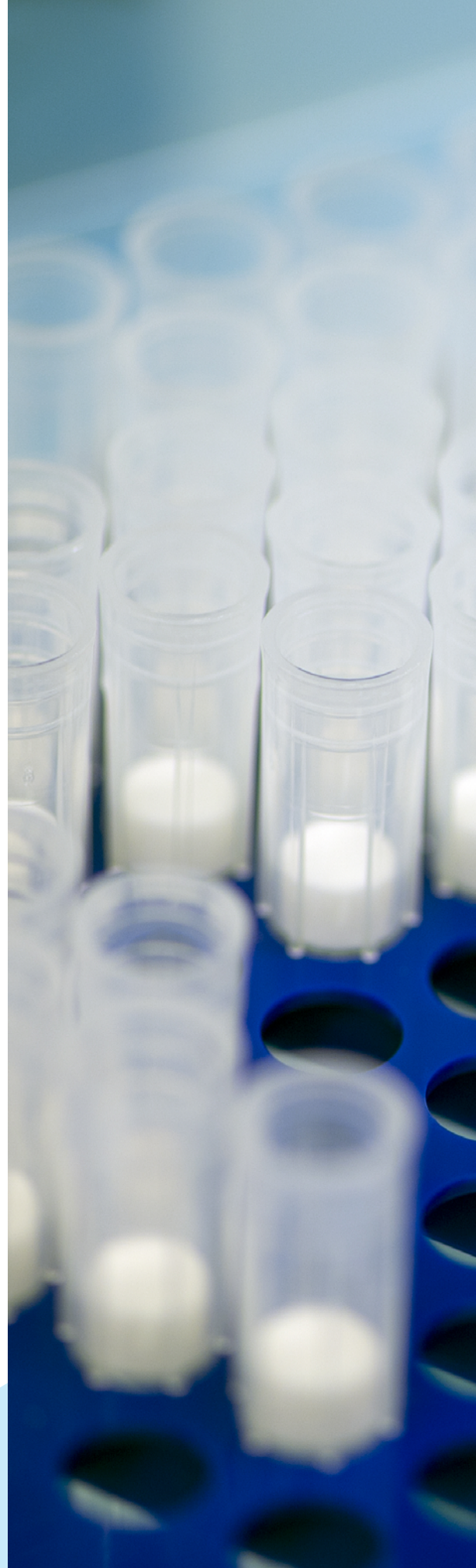
**A.R.** The regulations in place have significantly increased bureaucracy in all areas and professions. There is so much administration everywhere now, and everything has to be documented. Take fundraising, for example. When approaching municipalities, the process has become very time-consuming. This complicates every step. And this is particularly burdensome for small organizations like ours. It slows us down, but we always manage to deliver and achieve our goals.

**C.W.** The main challenge for the Foundation is raising funds to allow us to develop and continue our research projects to treat children with cancer or blood diseases and to conduct research aimed at improving the understanding and treatment of these diseases. To do this, diversifying funding sources, long-term planning, and effective fundraising strategies must be part of the plan. Another challenge is finding the best researchers, which requires building relationships with other academic institutions, offering competitive funding, and promoting research opportunities. By addressing these challenges proactively and implementing strategies to overcome them, the Foundation can strengthen its ability to fund high-impact research projects and advance its mission effectively.

### **What is your motto?**

**A.R.** I am pragmatic and rather optimistic by nature. I love life and try to see the good and the beautiful even in complicated situations...

**C.W.** To stay positive and believe that there is always a solution to every problem. Even when challenges seem insurmountable, I remain optimistic and persistent, knowing that each obstacle can be overcome with determination and creativity.



# CANSEARCH *Research*

## Projects in 2023

Presentation of the Various Research Areas Led by the CANSEARCH Platform Team and Their Practical Benefits for Patients.

Pediatric cancers are very different from tumors observed in adults. While childhood cancers are often described as developmental cell diseases, those in adults are associated with aging. Additionally, the cells of young individuals, who are still growing, multiply at a much faster rate than adult cells, increasing the risk of mutations that evade cellular repair mechanisms. Unlike adult cancers, which are extensively studied, pediatric cancers remain relatively underexplored. This is why they require specific research tailored to their needs.

In terms of treatments, children metabolize chemotherapy drugs differently than adults. Additionally, chemotherapy often has toxic effects, leading to moderate to severe side effects in growing children. Each scientific advancement in this area is crucial for increasing the chances of a cure for young patients and improving their quality of life during

and after the disease. With this ambition, Professor Marc Ansari, in collaboration with the Hôpitaux Universitaires de Genève (HUG) and the University of Geneva, founded the CANSEARCH Foundation and the CANSEARCH Platform for Pediatric Oncology and Hematology, the first structure specifically dedicated to this field.

The main mission of the CANSEARCH Foundation is to fund medical research on childhood cancers and blood disorders, with the goal of better understanding the disease, reducing the toxicity of treatments and their side effects, and improving the effectiveness of current therapies.

Today, the CANSEARCH Research Platform is:



### 25 COLLABORATORS

MD (Medical Doctor) – PhD (Doctoral Researcher) – Technicians – ARC (Apprentice) – Students



### PUBLICATIONS

290 publications and 352 abstracts since 2011



### AFFILIATIONS

CITB – Faculty Center for Translational Biomarker Research in 2021



### COLLABORATION

- SIB
- Campus Biotech Health 2030
- EPFL
- Childhood Cancer Research Group (CCRG), Institute of Social and Preventive Medicine
- CHU Sainte-Justine



### 8 RESEARCH AREAS

- Pharmacogenomics and Personalized Therapy
- Hematopoietic Stem Cell Transplantation
- Liver Tumors
- Neuroblastoma
- Brain Tumors
- Biobank (BaHOP)
- Genetic Predisposition to Cancer
- Benign Hematology



### CLINICAL STUDIES

- More than 30 open studies at the Pediatric Oncology Unit (UOHP)
- Several studies fully integrated into international clinical trials
- Sponsor of multiple studies, including BU-PG/PK, BuGenes, RELIVE, and others

# 1. Personalized Therapy: A Comprehensive Pharmacogenomics Project



## What does personalized therapy bring to patients?

It allows for tailored medication dosing, improving efficacy while reducing toxicity and the risk of relapse.

The research studies conducted by Professor Ansari and his teams within the CANSEARCH Research Platform in Pediatric Oncology and Hematology at the University of Geneva focus on personalized medicine, also known as precision medicine or individualized medicine. Because every cancer is unique, every medical decision or therapeutic treatment is tailored and optimized based on each patient. Each tumor has its own specific characteristics, whether at the level of the tumor cells themselves or their interaction with their environment. Scientific advances allow us to understand the biological mechanisms behind cancer development—i.e., the anomalies—and enable the development of new treatments.

## Pharmacogenomics (PG)

The response to medication is specific to each individual. It depends on our genetic profile, particularly the variations in genes that are expressed at the protein level and dictate the response to medication. Pharmacogenomics is the science that examines the genetic variations in individuals and their responses to medications. It uses this knowledge to predict the effectiveness of a drug treatment, i.e., to foresee whether a patient will have a favorable response, a poor response, or no response at all to the medication.

In oncology, it has been demonstrated that 20% of patients do not respond to standard treatment. Therapeutic agents used in cancer chemotherapy are ideal subjects for pharmacogenomic study, as they are often administered at doses that produce severe toxicity with highly variable individual responses. They must therefore be administered at optimal doses to achieve the best effect. Short-term and long-term toxicity affects more than 40% of cancer patients and can endanger their lives or cause permanent disability. Therefore, pharmacogenomics has the potential to improve the safety and efficacy of medications and increase the survival of children.

Research in pharmacogenomics, particularly around the therapeutic agent busulfan (a component of chemotherapy), is the primary focus of the CANSEARCH Research Platform, and thus the basis for many research projects:

## Summary of Our Pharmacogenomic Studies and Their Utility for Patients

- **BuPGPK** The BuPGPK study aims to personalize busulfan-based chemotherapy treatments before hematopoietic stem cell transplantation for optimal therapeutic response.
- **FORUM** The complementary FORUM study aims to identify genetic variants in patients with Acute Lymphoblastic Leukemia (ALL) who require hematopoietic stem cell transplantation to individualize treatment, improve response, efficacy, and reduce associated toxicities.
- **MyeChild 01 and SCRIPT AML** The pharmacogenomic sub-study of MyeChild 01 and SCRIPT AML aims to identify genetic risk factors in patients with Acute Myeloid Leukemia (AML) to personalize treatment, enhance the effectiveness of anti-leukemic effects, and reduce treatment-related toxicities.
- **BuGenes** The BuGenes study aims to include personalized pharmacogenetic recommendations in future international protocols for personalized dosing of busulfan before hematopoietic stem cell transplantation (HSCT). International protocols will account for genetic differences in young patients to reduce treatment toxicities and increase efficacy. This represents a true personalization of chemotherapy according to each child's genetic profile.
- **CsA** The study of cyclosporine (CsA)—used in pediatric patients undergoing hematopoietic stem cell transplantation to prevent graft-versus-host disease (GvHD)—will contribute to developing a physiological pharmacokinetic model (PBPK model) to calculate the initial personalized CsA dose, the oral switch dose, and each dose adjustment in case of drug interactions to increase treatment efficacy and decrease CsA-related toxicities.
- **Prediction of Pharmacokinetic Drug Interactions in Pediatric Oncology (PIMPOP Project)** This study aims to provide valuable clinical recommendations for optimizing treatments for

children with cancer through physiology-based pharmacokinetic modeling. By using this innovative approach, we can accurately predict the effects of drug combinations in pediatric patients, offering a safe alternative to clinical trials that are often inaccessible or risky for this vulnerable population. Considering factors such as age and genetic variations, we will be able to tailor recommendations to meet each child's individual needs.

- **Mechanistic and Therapeutic Approaches in Pediatric Acute Myeloid Leukemias with CBFA2T3-GLIS2 Fusion Transcript** Targeting these specific genes involved in the cell differentiation process would pave the way for more effective and better-tolerated therapies for patients.
- **GECCOS** The GECCOS project will enhance knowledge about genetic risks (affecting the germline) for developing complications in children with cancer and personalize their care during acute treatment and follow-up.
- **IndALL** The MPG x IndALL study, following the analysis of specific genetic variants in Geneva, aims to identify young Indian patients with

Acute Lymphoblastic Leukemia (ALL) who have an increased susceptibility to chemotherapy-related toxicity, in order to provide them with personalized treatment and thus improve their survival rate.

---

## 2. The Biobank Infrastructure: A Crucial Pillar for Research



### What does this biobank provide to patients?

The BaHOP (Biobank of Hematology and Oncology Pediatrics) allows for the preservation of high-quality biological samples in a highly regulated and secure structure. These samples can be used for research purposes in oncology and hematology at both national and international levels.

The importance of biobanks in cancer research is growing. Biobank registers play a crucial role in advancing research by generating high-quality resources, including precise clinical annotations of biological samples. This rigor ensures the relevance and reliability of the collected data. Consequently, the requirements for providing high-quality samples and managing them are continually increasing.

ences, the Pediatric Oncology and Hematology Unit (UOHP) of the Geneva University Hospitals (HUG) established the Geneva Pediatric Biobank for Oncology and Hematology Research (BaHOP) in 2016. BaHOP was created to promote research aimed at improving prevention, diagnosis, and therapy in the fields of oncology, hematology, and immunology for pediatric diseases. This initiative seeks to enhance the quality and effectiveness of studies, paving the way for significant advancements in the health of children suffering from these serious conditions.

In 2023, BaHOP received the NORMA label from the Swiss Biobanking Platform (SBP), which guarantees the quality of operational processes (collection, transport, receipt, processing, storage, distribution) and the harmonization of practices at the Swiss level. Out of the 13 Geneva biobanks, BaHOP is the second to obtain this certification out of the four accredited. On a national level, only 34 biobanks are certified out of 92.

Moreover, due to SBP's collaboration with the European biobank consortium Biobanking and Bio-Molecular Resources Research Infrastructure - European Research Infrastructure Consortium for Biobanking (BBMRI-ERIC), BaHOP is currently listed in the international BBMRI directory.



### 3. Project on Neuroblastoma

#### What does this study offer to patients?

The neuroblastoma project aims to enhance the understanding of the cellular signalling pathways within neuroblastoma tumor cells and identify key factors involved. This will lead to a better comprehension of the aggressive behavior of the disease and facilitate the development of improved therapeutic strategies.

In addition to these activities, we are also analyzing publicly available data from the INRG consortium to study the clinical significance of certain genetic markers and their combinations.

Neuroblastoma (NB) is the most common extracranial solid tumor in children, representing 7 to 8% of all malignant tumors in childhood and 15% of all cancer-related deaths in this population. It is the most frequently diagnosed cancer in early childhood. The neuroblastoma project aims to enhance understanding of the cellular signaling pathways within neuroblastoma tumor cells and identify important factors to gain a better understanding of the aggressive behavior of this disease and to develop better therapeutic strategies.

In recent years, the Neuroblastoma group within the CANSEARCH research platform has focused on exploring new treatment options for patients with neuroblastoma, particularly in its metastatic forms, which are especially aggressive. We have published some very interesting results, notably on a small molecule, PRIMA-1MET (APR-246 or eprenetapopt), known for reactivating the p53 protein and its interactions with various signalling pathways important in neuroblastoma genesis.

With the rise of CRISPR/Cas9 technology, we now have a new tool to explore new avenues, particularly in the field of synthetic lethality. The goal of our current project is to develop CRISPR/Cas9 library screening technology in neuroblastoma to identify additional synergistic genetic targets in the context of established therapies for neuroblastoma, particularly with eprenetapopt, ALK inhibitors, and cisplatin.



---

## 4. Project on Childhood Liver Tumors – RELIVE



### What does this study offer to patients?

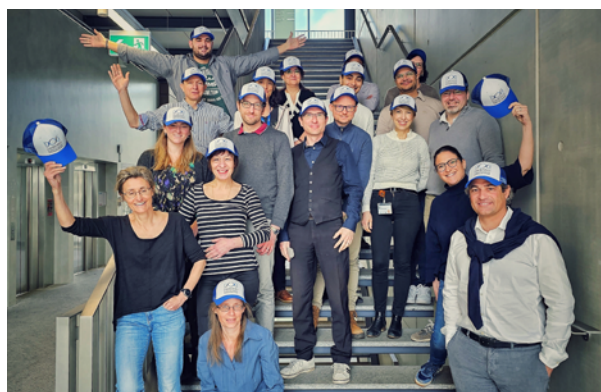
The RELIVE project helps identify the most promising treatments to improve the prognosis for children with refractory or recurrent liver tumors. RELIVE also facilitates the implementation of scientific studies to enhance the understanding of this cancer and its management.

This project is linked to the International Registry of pediatric patients with hepatoblastoma or recurrent or refractory hepatocellular carcinoma.

The RELIVE protocol was approved on September 21, 2020, by the Swiss ethics committee (CE). To date, RELIVE is active in 15 countries: Switzerland, Spain, France, Belgium, the Netherlands, Poland, Germany, the United Kingdom, Ireland, the United States, Canada, Japan, Australia, New Zealand, and Hong Kong. A specific database, developed at the Geneva University Hospitals (HUG), allows for the collection of this information. Each active center has its own secure access and can enter

relevant data. As of May 2024, over 360 children from 15 countries and 64 hospitals have been enrolled in our international database. After an intensive period of data verification with each center, concrete analysis of this data is underway.

The RELIVE project has been presented at the SIOPE (International Society of Pediatric Oncology) and SIOPEL (International Society of Pediatric Oncology for Liver Cancer) congresses annually since spring 2021.



---

## 5. National Registry of Pediatric Patients with Malignant Liver Tumors



### Swiss National Registry for Pediatric Patients with Malignant Liver Tumors - SWISSLIVERRE

### What does this study bring to patients?

The SWISSLIVERRE project aims to standardize therapeutic strategies for liver tumors in Switzerland by establishing a national tumor board. The collection of biological and tissue samples in the Biobank (BaHOP) will help in evaluating prognostic biomarkers and biomarkers associated with toxicity in this population, ultimately improving the prognosis and quality of life for these patients.

conditions such as hepatoblastoma (HB), hepatocellular carcinoma (HCC), unspecified hepatocellular neoplasm (HCN NOS), and undifferentiated embryonal sarcoma (UESL).

The development of a national registry for pediatric patients with liver tumors will provide an overview of clinical, epidemiological, and therapeutic strategies, as well as short- and long-term outcomes. We will prospectively collect clinical, biological, radiological, histological, genetic, and molecular pathology data from patients under 18 years of age with liver tumors diagnosed in Switzerland, using samples from the Geneva Biobank BaHOP. All patients or their legal representatives must sign the consent form. The nine institutions of the Swiss Pediatric Oncology Group (SPOG) - Aarau, Bern, Basel, Bellinzona, Geneva, Lausanne, Lucerne, St. Gall, and Zurich

Hepatic tumors represent the third largest group of intra-abdominal pediatric tumors, following neuroblastomas and renal tumors. They account for approximately 1% of all pediatric tumors and include

- will participate in data collection. We will establish a national tumor board to discuss all cases of liver tumors and develop national recommendations for patient management based on international guidelines following the results of the PHITT study.

The protocol will be submitted for approval by the Swiss Ethics Committee (EC) and will be presented to SPOG.



## 6. Project on Brain Tumors in Children and Infants

### What does this study offer to patients?

The international registry for high-grade gliomas in children aims to improve understanding of this rare condition in order to enhance patient care and survival rates.

Another limitation of these retrospective data is their incomplete nature, which complicates interpretations and underscores the need for a registry that collects well-documented patient data to draw informed conclusions.

The CANSEARCH research platform is keenly interested in identifying under-researched areas. Due to their rarity, pediatric cancers fall into this category, particularly pediatric high-grade gliomas (HGG). This condition is even rarer in young children under the age of 3. Therefore, the creation of an international registry for HGG in young children is of great importance. The aim of the project is to systematically collect epidemiological, clinical, and molecular data from young children with HGG to significantly enhance knowledge about HGG in infants.

To achieve a rapid growth in knowledge, we conducted a retrospective study of available data from patients with hemispheric gliomas in infants. Our study, titled "Meta-analysis of Individual Patient Data on Infantile Hemispheric Gliomas (IHG)," examined the characteristics of infantile hemispheric gliomas (IHG), a specific type of pediatric brain tumor characterized by unique genetic mutations. We analyzed data from over 150 patients with IHG—making it the largest study on this disease—and found that, despite generally favorable survival rates, these patients often experience early disease progression, highlighting the need to define optimal treatment. Complete surgical resection appears to play a crucial role in initial treatment, while a more thorough evaluation of salvage therapeutic options is needed to understand their impact on overall survival. This analysis is ongoing.

*To learn more about our projects, scan the QR code to access detailed descriptions.*



# Portrait of Dr. Aurore Britan-Wood



*Dr. Aurore Britan-Wood*

Operational and Financial Director  
of the CANSEARCH Platform

*As a clinical trial manager, she skilfully oversees the operational and financial aspects of the CANSEARCH research platform with a firm yet gentle hand.*

## **What are your functions?**

I joined the CANSEARCH research platform in pediatric oncology and hematology at the University of Geneva in February 2022, where I manage numerous clinical studies. These studies aim to enhance the effectiveness of treatments for children with cancer while reducing toxicity and lowering the risk of relapse. Since 2023, I have also had the honor of being appointed as the Operational and Financial Director of the Platform, as well as the Operational Director of the BaHOP biobank.

## **What has been your background?**

After earning my PhD in Molecular Genetics and Physiology from Blaise Pascal University (France), I spent several years working in fundamental research at the Faculty of Medicine at the University of Geneva and then at the Swiss Institute of Bioinformatics, where I gained expertise in bioinformatics, biocuration, and human protein databases. I then decided to specialize in clinical research to refocus on applying research findings to real-world scenarios. Following my Continuing Education Diploma in Clinical Trial Management from the University of Geneva, I joined the Clinical Research Center at the

Geneva University Hospitals (HUG) in November 2018, where I participated in coordinating the implementation of the General Consent for Research, its monitoring, and the management of various clinical studies conducted within HUG. I also managed data for numerous clinical studies in compliance with the laws and regulations related to Good Clinical Practice (ICH-GCP) as a Data Manager and was a member of the Swiss Clinical Trials Organization (SCTO) Data Management Platform.

In addition to scientific interest, I ensure the ethical aspects of clinical research within the canton of Geneva as a member of the Cantonal Ethics Commission for Human Research of Geneva (CCER) since 2021.

## **What does the CANSEARCH Foundation represent to you?**

It allows me to work in a stimulating, dynamic, multidisciplinary, and multicultural environment, which is highly enriching. I am very fortunate to work with colleagues who come from diverse backgrounds, with varied but highly complementary skills. Above all, we are driven by the same goal: advancing research to better treat children with cancer. By supporting the CANSEARCH research platform, the CANSEARCH Foundation enables me, as a scientist, to give my best every day, a challenge I strive to meet as best as I can while keeping the children at the heart of our research.





# CANSEARCH 2.0

## *Initiatives*

The CANSEARCH 2.0 initiatives were created to mark the tenth anniversary of the Foundation's success. Since then, the Foundation has expanded its support beyond its original statutes to include other aspects that benefit medical research in pediatric oncology and hematology, extending into clinical domains and beyond the direct work of the CANSEARCH research platform. Various grants and programs have been developed in close collaboration with the Pediatric Oncology and Hematology Unit (UOHP) and the Geneva University Hospitals (HUG). Agreements have been established to define the collaborative framework between CANSEARCH and HUG.

For example, positions for specialized doctors or nurses are subject to HUG regulations, their employer. CANSEARCH funds the salaries and facilitates the process until these grants and programs are potentially taken over by HUG. These roles are essential for the proper functioning of the Unit, maintaining long-term care quality, and ensuring patient well-being.

### The 4 Talent Management Grants

1.

#### **CANSEARCH Research Grant**

This grant is offered to researchers based in French-speaking Switzerland who are studying fields related to pediatric oncology and hematology.

2.

#### **CANMOVE Mobility Grant**

This grant allows sending a clinician/researcher abroad to further their training.

3.

#### **Visiting Doctor Grant**

This grant aims to recruit an internationally renowned physician-researcher to share their expertise within the Platform.

4.

#### **Fellowship Grant, Chief Resident**

This grant is designed to strengthen the medical team of the UHOP Unit at the HUG and to identify future leaders.

### Funds and Programmes

5.

#### **CANHELP**

##### **Family Support Fund**

For additional social support for children and their families: assistance with housing, insurance coverage, therapeutic massages, wheelchairs, translations, funding for transportation or funerals.

8.

#### **CANCHIMIO**

##### **Computerized Chemotherapy Program**

This program facilitates the development of a computerized system for the management of chemotherapy prescriptions, distribution, and administration.

6.

#### **CANSURVIVE Cancer Survivors Follow-Up Program**

To anticipate or reduce side effects caused by treatments and to preserve fertility.

9.

#### **CANDREPANO Sickle Cell Disease Program**

This program aims to improve the care and support of children with this genetic disorder affecting red blood cells.

7.

#### **CANPALLIATIVE Pediatric Palliative Care Program (SPP)**

This program funds the position of a specialized nurse for the particular and palliative care of children and families.

10.

#### **CANCONNECT Fund To Promote International Exchanges**

This fund is intended to develop the organization of symposiums and conferences in Geneva and to participate in international congresses.

# Portraits of five holders of CANSEARCH *Initiatives*

Profiles of doctors, researchers, or nurses who benefit from scholarships and programs funded by the Foundation. Highlighting their activities, daily lives, and career paths.



## **Dr. Fanny Gonzales**

MD, PhD, Clinical Chief in the Pediatric Oncology-Hematology Unit (HUG); Visiting Doctor Fellow in the Talent Management Program of the CANSEARCH Foundation

### **Her Background**

After completing my pediatric medical training at the University of Lille (France), I specialized in pediatric oncology-hematology during my residency. I then served as Clinical Chief in the pediatric hematology department at CHU Lille from 2017 to 2020. Alongside my clinical training, I pursued a PhD in Biology in the “Cancer Heterogeneity, Plasticity, and Resistance to Therapies” unit. In January 2021, with funding from the French National Cancer Institute (InCa) and a research prize from the ARC Foundation, I joined Dr. Kimberly Stegmaier’s team at the Dana-Farber Cancer Institute – Harvard Medical School in Boston (USA) for my postdoctoral research. My research focused on discovering new therapeutic approaches for pediatric acute leukemias. I joined the CANSEARCH Pediatric Oncology-Hematology Research Platform at the University of Geneva in October 2023. I work both in the clinical unit and within the research platform.

### **Her Daily Activities**

My research focuses on megakaryoblastic acute leukemia (AMKL), a rare subtype of leukemia most frequently diagnosed in children. This subtype is associated with a particularly poor prognosis, with a 5-year overall survival rate of 14% and a 5-year

event-free survival rate of 8%. Patients with this fusion rarely have associated mutations, particularly those with poor prognostic significance; as a result, they are treated in a standard treatment group despite their worse prognosis and the high chemoresistance associated with the fusion. My project aims to find targeted therapies for this subtype of disease. This project was initiated at Dana-Farber Cancer Institute at Harvard Medical School in Boston in February 2021 and, thanks to the Visiting Doctor Fellowship from the Talent Management Program of the CANSEARCH Foundation, I am continuing it within the CANSEARCH Platform in collaboration with Dr. Stegmaier’s team.

### **What the CANSEARCH Foundation Represents**

It gives me the opportunity to be the doctor and person I aspire to be. At the hospital, I strive every day to be the best possible doctor for each child and to offer hope to patients and families. However, sometimes the patient is too sick, the disease is too aggressive, or the treatment is too harsh. In these situations, research becomes crucial. Through research, we provide hope to patients. As Albert Einstein said, “The word progress has no meaning while there are unhappy children.”



*Dr. Davide Massano*

Pediatrician, Clinical Chief in the Pediatric Oncology-Hematology Unit (HUG); Fellowship Awardee of the Talent Management Program

#### **His Background**

For nearly a decade, I have been fully dedicated to the sensitive field of pediatric oncology. This vocation began in Italy, where I started my career. During these years, I primarily worked with children suffering from lymphoma, an experience that has shaped my expertise and understanding in this field. My career path led me across borders to the University Hospitals of Geneva (HUG) in September 2023, where I joined the Pediatric Oncology and Hematology Unit (UOHP).

#### **His Daily Activities**

In this new environment, my mission focuses on monitoring patients who have undergone bone marrow transplants, a particularly vulnerable population due to their severely weakened immune systems. As such, they require specialized care and continuous attention. On a daily basis, I conduct outpatient follow-ups for these post-transplant patients, which is crucial for detecting and addressing any potential complications. These patients are very fragile and often visit the hospital several times a month due to post-transplant complications.

However, my role extends beyond immediate follow-up: I am also involved in the long-term monitoring of transplanted patients, seeing them once a year for exams designed to identify early on any complications resulting from their oncological treatments. This proactive approach, focused on early detection of health issues, is essential to provide children and their families with the best possible quality of life after their battle with cancer.

#### **What the CANSEARCH Foundation Represents**

The Foundation represents an opportunity for me to gain experience and enhance my skills, coupled with professional growth. Firstly, it immerses me in a stimulating and dynamic environment, and collaborating with researchers provides me with the chance to continuously learn, deepen my knowledge, and develop specialized skills in pediatric oncology.



*Dr. Laurent Cimasoni*

Associate Physician in the Pediatric Oncology-Hematology Unit (HUG 40%); Sickle Cell Disease Program of the CANSEARCH 2.0 Initiatives

#### **His Background**

I have been working at HUG for 20 years and in pediatric oncology-hematology since 2010. I am also a pediatrician in private practice.

#### **His Daily Activities**

In pediatric oncology-hematology, my role primarily involves supervising internal physicians and managing the care of children with sickle cell disease, a genetic hemoglobin disorder. About fifty children are affected by this disease in Geneva. Their management involves medication, lifestyle advice, and multidisciplinary follow-up to prevent complications. In some cases, a curative treatment with bone marrow transplantation is considered. In 2023, this disease became the first for which gene therapy using a new method called “CRISPR” became available.

#### **What the CANSEARCH Foundation Represents**

Thanks to the CANSEARCH Foundation, I can continue and develop my work and enhance the care and quality of life for these children.





### *Dr. Cécile Choudja Ouabo-Jérôme*

Pediatrician in the Pediatric Oncology-Hematology Unit (HUG 10%); Program on Computerized Chemotherapy of the CANSEARCH 2.0 Initiatives

#### **Her Background**

With training and experience in pediatric hematology-oncology (HOP) gained in France, I arrived in Switzerland in 2008. After working at CHUV in pediatric oncology (and clinical ethics) to provide consultation as an assistant physician in Sion, I briefly joined the UHOP at HUG in the summer of 2016. I was then asked to participate in setting up computerized chemotherapy (with adult oncology, IT, and pharmacy) in a weekly duo with a nurse. This wonderful interdisciplinary project matched my new aspirations as a pediatrician with diverse missions (pediatric hematology in private practice/HFR; clinical ethics and research) while bringing my nearly 15 years of experience in HOP.

#### **Her Daily Activities**

In 2023, I ensured the cohesion of all the work already done to complete the final validation and testing stages of over 300 treatments before production and administration. One of my mentors used to say, "It takes at least 5 years to see a project come to fruition." It's done! The highlight of 2023 was in November when all the efforts culminated: the first computerized prescriptions were ordered by my colleagues and implemented by the nursing team. This marks another step towards greater safety in the care of children.

#### **What the CANSEARCH Foundation Represents**

For me, CANSEARCH is a special place where clinicians and researchers come together to support patients and families affected by serious illness and to offer optimal treatment. It is a dynamic, committed Foundation that one can rely on. Without it, this program could not have continued in 2023, a key year, with goals for maintenance and sustainability in 2024.



### *Jennifer Ramos*

Nurse – CAS in Oncology and Palliative Care within the Pediatric Oncology-Hematology Unit (HUG 30%); Nursing Mandate in Comfort Care

#### **Her Background**

In 2010, I began my work in the pediatric oncology and hematology unit. Over the years, working with children, I discovered the many difficulties families face during intensive treatments. How can we alleviate the daily struggles of families? How can we maintain the best quality of life for the sick child and all family members when risks and restrictions are high? With these questions in mind, I began my "comfort care" mandate in 2021.

#### **Her Daily Activities**

In this role, I participate in consultations, coordinate teams and intra- and extrahospital interventions. Simultaneously, I mobilize all resources from the Geneva and Romandie networks to benefit the families. My goal is to improve support for the families of sick children through a bio-psycho-social approach while facilitating communication between professionals.

Another goal, established in partnership with the medical and nursing team, is to support the child's development by maintaining time for creativity, dreaming, and play, allowing the child to envision their life. This involves ensuring physical comfort through various methods, such as hypnosis. Additionally, "bubbles of life" are integrated through associations for projects imagined by the child, like baking workshops. If the illness progresses beyond treatment options, I intensify support with the referring physician. These moments are extremely challenging for a family, and the focus is on providing the best possible quality of life for the child and everyone around them.

#### **What the CANSEARCH Foundation Represents**

Thanks to the CANSEARCH Foundation, in 2023, ten patients and seven bereaved families who wished to stay connected received close support. It is important to emphasize that the Foundation funds this valuable time for families. Even when doors close for material or financial assistance, CANSEARCH remains present.

# The Year 2023

## *under the Microscope*

A look back at a year filled with activities, conferences, symposiums, and presentations by the research platform team. Notable moments and scientific advancements have marked 2023.

### *January*

→ Researchers from the Platform—Dr. Aurore Britan-Wood, Mr. Khalil Ben Hassine, and Prof. Marc Ansari—participated in the IBFM Interim Meeting, a world-renowned group conducting research on all aspects related to pediatric leukemias and lymphomas held in Milan, Italy. They presented their international and multicentric research projects related to pharmacokinetics and pharmacogenomics (BuGenes and FORUM studies).

### *February*

→ Dr. André von Büren participated in the 5th Oncology and Hematology International Conference Hybrid in Alexandria, Egypt, where he presented his work on high-grade pediatric glioma, a brain tumor that typically develops in the central nervous system.

### *March*

→ The Geneva Pediatric Bank for Oncology and Hematology Research (BaHOP), established within the CANSEARCH Platform and led by Professor Marc Ansari, received the NORMA label. BaHOP has collected DNA samples from over 500 survivors of childhood cancer across Switzerland (BISKIDS project). These samples are stored in the biobank at HUG. The project aims to evaluate genetic predictors of several complications after childhood cancer treatment (GECCOS project). Through their harmonization, these efforts now connect several biobanks (Zurich, Bern, Geneva...) and international entities (supported by the SNF).

→ During the annual retreat of the CANSEARCH Platform in pediatric oncology and hematology at the University of Geneva, the entire team and researchers gathered at the Geneva Medical School on March 9-10. They presented their research and engaged in discussions to foster collaboration and innovation, setting objectives for the next 12 months.

→ Dr. Aurore Britan-Wood and Professor Marc Ansari travelled to Utrecht (Netherlands) to participate in the SIOPEL meeting on March 23-24. They presented the RELIVE project, an international registry on pediatric liver tumors.

### *April*

→ Researchers from CANSEARCH participated in the annual EBMT (European Society for Blood and Marrow Transplantation) conference in Paris from April 23-26. The EBMT is dedicated to advancing knowledge related to hematopoietic stem cell transplantation and transplant procedures. Among the CANSEARCH research team members who attended were Dr. Isabelle Dupanloup, Dr. Yvonne Gloor, Dr. Vid Mlakar, and Mr. Khalil Ben Hassine (PhD student), who presented their work through 2 posters and an oral presentation. Additionally, the EBMT invited Professor Marc Ansari to join the steering committee for the FORUM 2 study.

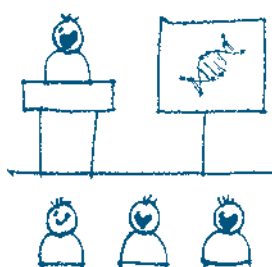


### *Mai*

→ Project IndALL: Dr. Aurore Britan-Wood and Dr. Rao Uppugunduri travelled to India from 2-16 May to conduct an audit of the MPG x IndALL study, one of our pharmacogenomic studies on treatments for acute lymphoblastic leukemia (ALL) in Indian children. The project aims to share the Platform's expertise so that Indian children with ALL can benefit from research. Specific genetic variations have recently been identified as crucial in the response to treatment for ALL. This program uses genetic information to personalize treatments and reduce

treatment-induced toxicities. This visit was a great opportunity for transferring specific clinical research knowledge to our Indian collaborators.

- Prof. Ansari and Dr. Rudolf Maibach participated in the SIOP Europe 2023 (International Society of Paediatric Oncology) conference in Valencia, Spain, from 8-12 May. They presented their preliminary results on the RELIVE registry (liver tumor). Dr. Fabienne Gumy-Pause was also among the participants.
- Dr. Fabienne Gumy-Pause and Dr. Vid Mlakar attended the Advances in Neuroblastoma Research Meeting (ANR) at Beurs van Berlage, Amsterdam, Netherlands, from 15-18 May. During this conference, they presented a poster on the Neuroblastoma project.



## June

- On 1 June, the researchers from the CANSEARCH research platform participated in the Research Day of the Department of Pediatrics, Gynecology, and Obstetrics at HUG.
- Dr. Vid Mlakar represented the Platform and presented his results at the SPOG SSPHO Scientific Meeting 2023 (Annual Scientific Congress of the Swiss Pediatric Oncology Group (SPOG) and the Swiss Society of Pediatric Hematology and Oncology (SSPHO)) held on 2-3 June in Bern, Switzerland. Dr. André von Büren also presented his findings on "Neurological symptom improvement after re-irradiation in patients with diffuse intrinsic pontine glioma (DIPG): A retrospective analysis of the SIOP-E-HGG/DIPG project."
- Dr. Yvonne Gloor and Professor Marc Ansari attended the SCRIPT AML (Acute Myeloid Leukemia) Add-On Study Meeting in Gothenburg (Sweden) from 2-3 June.
- Dr. Frédéric Baleyrier participated in the 2023 European Hematology Association (EHA) Congress in Frankfurt (Germany) from 8-11 June.
- On 26 June, Drs. Yvonne Gloor and Isabelle Dupanloup attended the annual retreat of the CROTOH (Translational Research Centre in Oncology).
- Congratulations to Sven Strebel, a researcher at the CANSEARCH Platform, who obtained his PhD on 30 June in Bern with the highest grade of 6 for his thesis: "Hearing Loss After Treatment for Childhood Cancer."

## July

- Dr. Danai Papangelopoulou earned her medical doctorate in 2023; her doctoral thesis manuscript focused on "Brainstem Tumors in Children Under Three Months: A Palliative Situation?" Dr. Papangelopoulou joined the CANSEARCH research platform in July 2023 to conduct research on "Precision Dosing of Intravenous and Oral Cyclosporin in Pediatric Hematopoietic Stem Cell Transplantation."
- Dr. Rao Uppugunduri participated in the World Congress of Basic & Clinical Pharmacology (WCP) in Glasgow (Scotland) from 2-7 July, where he shared the results of his project on UGT2B10 through an oral presentation and a poster.

## September

- Denis Marino, Administrative Director of the CANSEARCH research platform and Deputy Director for the operational side of the Geneva Pediatric Bank for Onco-Hematology Research (BaHOP), departed for new horizons at Cedars-Sinai Medical Center in Los Angeles. Mr. Marino will continue his collaboration with the Platform (10%) remotely, specifically on BaHOP-related topics.
- Dr. Aurore Britan-Wood, who manages the clinical studies of the Platform and the Pediatric Onco-Hematology Unit at the University of Geneva, has taken over the operational and financial management of the Platform and the operational management of BaHOP.
- Dr. Rao Uppugunduri and Mr. Khalil Ben Hassine presented the Platform's projects at IC-CPP2023 (International Conference on Clinical Pharmacology and Pharmacogenomics) in Mangalore (India). Dr. Uppugunduri also participated in organizing this conference, which took place from 26 August to 2 September.
- Dr. Isabelle Dupanloup presented the results of her project at the Basel Computational Biology Conference in Basel (Switzerland) from 13-15 September.
- From 16-30 September 2023, the CANSEARCH research platform was pleased to welcome Dr. Smita Kayal (All India Institute of Medical Sciences, New Delhi, India) and Dr. Archana Singh (Department of Medical Oncology, Regional Cancer Centre, JIPMER, Pondicherry, India) to the Platform as part of the Indo-Swiss scientific exchange program. This program, established within the context of the IndALL project, aims to implement our know-how in India in terms of research and clinical aspects with patients. Drs. Kayal and Singh also presented their projects to the Platform's physicians and researchers, as well as other researchers at the university, during the CANSEARCH seminar.

- The CANSEARCH research platform was also pleased to welcome Professor Vikram Gota from the Department of Clinical Pharmacology, Advanced Centre for Treatment, Research & Education in Cancer, Mumbai (India), who presented his work on "Therapeutic Challenges in Acute Leukemia and BMT: Indigenous Solutions for Indigenous Problems" during the CANSEARCH seminar on 29th of September.



## October

- Dr. Fanny Gonzales, a researcher from Harvard University specializing in drug profiling (personalized therapy), joined the CANSEARCH research platform. Thanks to the Visiting Doctor Fellowship, which aims to bring an international "physician-researcher" to the CANSEARCH research platform in pediatric oncology and hematology at the University of Geneva to share her expertise.
- Dr. Davide Massano arrived at the Pediatric Onco-Hematology Unit (UOHP) through the Talent Management Fellowship to take on the role of clinical scientist in pediatric onco-hematology at CANSEARCH.
- Mourad Mseddi, a pharmacist, also joined the Platform, beginning his PhD on the pharmacokinetics and pharmacogenomics of fludarabine for dosing in pediatric onco-hematology patients.
- Montserrat Alvarez, a laboratory technician, started with the Platform to assist daily with research activities and participate in managing the biobank samples (BaHOP).
- The CANSEARCH Platform had the honor of hosting Professor Amir Ali Hamidieh, a specialist in pediatric onco-hematology and stem cell transplantation, and Director of the Pediatric Cell and Gene Therapy Research Center at Tehran University of Medical Sciences (Iran). Professor Hamidieh shared his research findings with numerous physicians and researchers during a CANSEARCH seminar from 3-6 October.

## November

- On 10 November, the CANSEARCH research platform had the pleasure of virtually hosting Dr. Sébastien Benzekry, head of the COMPO unit (Computational Pharmacology and Clinical Oncology) at the Marseille Cancer Research Center (France), as part of the CANSEARCH seminars. His presentation was titled "Mechanistic Learning for Clinical Cancer Research."
- Professor Marc Ansari participated in the SFGM 2023 conference (French Society of Bone Marrow Transplantation and Cell Therapy) in Lille (France) from 15-17 November.

- The Platform had the honor of welcoming Professor Michel Duval, Head of the Hematology-Oncology Department at CHU Sainte-Justine, who presented his projects to the researchers at the Platform and the University of Geneva during the CANSEARCH seminar on 22 November. His presentation was titled "Naturally Killer Cells: A Talent to Cultivate / A New Approach to Innate Immune Therapy for Childhood Cancers."
- On 23 & 24 November the 10th Congress of the Francophone Network of Pediatric Palliative Care (RFSP) took place, co-organized by the RFSP (Prof. N. Humbert) and the HUG (Prof. M. Ansari). Professor Marc Ansari opened the congress at the CCIG in Geneva.
- Dr. André von Büren attended the UKBB Hemato-Oncology Training Day in Basel (Switzerland) on 24 November and gave an oral presentation on pediatric high-grade gliomas titled "Diffuse High-Grade Gliomas of the Pediatric Type with a Focus on Infant-Type Hemispheric Gliomas."

## December

- The 65th Annual Meeting of the American Society of Hematology (ASH), the largest global congress in the field, took place from 9-12 December in San Diego, California (USA). Dr. Fanny Gonzales presented, to a full room, advancements in her research on molecular pharmacology and resistance to chemotherapy drugs and components. Several research projects by Professor Ansari were also presented, with Dr. Baleydiere in attendance.

# The *CANdos*: Our Solidarity Actions

The CANSEARCH Foundation benefits from the unwavering support of dedicated individuals. Gathered in action groups, these friends and relatives form "friendraising" networks to raise awareness and mobilize their surroundings in favor of the Foundation's initiatives. Thanks to this innovative model, donors organize various activities to fund the research of the CANSEARCH Platform.

Fundraising events, such as CANNiversaries, where guests are invited to make a donation to CANSEARCH instead of traditional gifts, or CANGOLF events, where part of the course fees or profits is donated to the Foundation, illustrate this dynamic well. Additionally, initiatives like CANWALK and CANART allow participants to contribute creatively and personally.

Every contribution, big or small, supports research efforts to improve treatments for pediatric cancers, thus giving children a better chance of recovery without side effects. For those who wish to launch their own events, the Foundation provides administrative support and promotes initiatives through its social media channels.

*In 2023, these collective efforts raised over CHF 150,690 to advance research.*

## February

### → The Calories Challenge

On February 12 in Bernex (GE), CANSEARCH was the beneficiary of the Calories Challenge 2023 organized by the Antigal Festival. The calories burned by athletes translated into a donation amount. Sweating to advance research against childhood cancer.

### → CANRUN

To mark International Childhood Cancer Day, Patrick Affolter, Founder of LCL Créations, a high-end watchmaking company, decided to run the Seville Marathon in Cansearch's colors. During each difficult moment, he did not forget the children with can-

cer; this thought encouraged him to push himself further. Many joined his challenge on February 21 and contributed to his fundraising efforts. Together, they raised over CHF 1,700. This amount was dedicated to research to better treat sick children.

## March

→ **A Simple Story**, the book co-written by Anne Lamunière and Maria Antonietta Potsios, was presented and sold for the benefit of the CANSEARCH Foundation during a charity dinner held at the Italian restaurant Ciro in Geneva. Bringing together 60 benefactors, this event raised 8,200 CHF.



## April

→ For her **CANNIVERSARY**, Alicia Mottu donated CHF 3,650. To celebrate her 21st birthday, instead of receiving gifts, she invited her friends to make a donation to the CANSEARCH Foundation in her honor. This act of solidarity was a very special tribute to her younger sister, who was affected by pediatric cancer and is dearly remembered.

## June

→ The **Race for Gift X CANSEARCH** was a success! This solidarity race brought together individuals and companies who ran or walked in CANSEARCH's colors. The concept was simple: each participant invited their network to support their athletic efforts by making a donation. The event was a hit for the Foundation's friends, raising nearly CHF 58,500. Numerous prizes were awarded to top fundraisers, including Swissroc, the Steck family, and the CANSEARCH Foundation.





→ **CANART** was a private viewing at the Pace Gallery where photos by artist JR were sold to benefit the Foundation. Director Valentina Volchkova and her team included us in this “Raising Awareness” event with their network of art collectors. This CANART event allowed us to raise CHF 3,600.

## July

→ **CANWALK X CANSEARCH**, a sports or contemplative walk followed by a friendly lunch in Schönried, brought together many loyal supporters. A joyful group of friends, led by Brigitte Crompton, ascended to the Bernese peaks, raising over CHF 21,700 for the Foundation.



## August

→ The back-to-school party, **CANKERMESSE**, organized by the Chuard family in their lakeside garden, delighted both young and old. The fundraiser, with a back-to-school theme, also kept in mind the sick children who cannot return to school. This event raised CHF 1,500.

## September

→ **GEKAN**, The Geneva Camerata musical ensemble highlighted the CANSEARCH Foundation during September, culminating in their Revolta concert. Tickets were generously donated to children who had

undergone treatment and their families, as well as to donors. The event raised CHF 1,030.

→ **The C2C4C - Country to Country for CANCER initiative** was launched by Bristol Myers Squibb, inspired by the Union for International Cancer Control (UICC). Like in 2022 and 2021, C2C4C brought together employees to cycle across various European countries. This challenge raised nearly CHF 30,000 to accelerate the fight against cancer and improve the lives of cancer patients.



## December

→ Coralie Canonica, Caroline Lavizzari, along with their friends and children, spent evenings making beautiful Advent wreaths in memory of children affected by cancer. In the name of **CANFIGHT FOR VICTORIA**, they sold these lovely creations at their stand at the Vandœuvres Christmas market. The profits of CHF 5,800 were donated to the CANSEARCH Foundation.

### → CAN-MITZVAH

Young Isaac Bernheim has a philanthropic spirit. For his Bar Mitzvah, he decided to forgo all gifts and asked his guests to make a donation to the CANSEARCH Foundation in his honour. Thanks to Isaac, CHF 13,040 was raised.

→ In the weeks leading up to Christmas, volunteers assisted us with gift wrapping. With this initiative, each customer who had their gifts wrapped at the CANSEARCH stand made a donation to the Foundation. More than CHF 900 was collected during this **CAN-CADEAUX** event.

To make a donation,  
scan me



# The submarine *Smile* for CANSEARCH drops anchor for the HUG

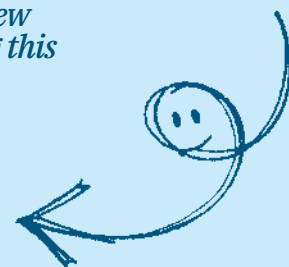
In the month of "September in Gold," numerous activities are carried out to highlight the fight against pediatric cancers. In 2023, actions organized by the Foundation were magnificently punctuated by the installation of the submarine Smile for CANSEARCH at the entrance of the Children's Hospital. This unusual lemon-yellow submarine is a former Royal Navy mine detector, reimaged by Zep, who placed his comic character Titeuf at the helm. Donated by a group of friends of the Foundation, it was acquired at the charity auction of the CANSEARCH event by a generous benefactor. The benefactor then gifted it to the HUG to bring smiles back to hospitalized children.

Many friends of the Foundation came to celebrate the installation of Smile for CANSEARCH. The HUG management, medical staff, patient families, friends, and ambassadors of the Foundation gathered. ZEP took the opportunity to immortalize Titeuf on Professor Ansari's lab coat with a few strokes. Bertrand Levrat, then Director of HUG, praised the CANSEARCH Foundation's action as a fine example of public-private partnership:

*"Thank you to CANSEARCH for everything it embodies and illustrates (...) it is both a meaningful public-private partnership, a mutual trust (..) to work together for a common cause, it is a long-standing partnership that lasts and strengthens over the years (..) What public-private partnership allows is that extra soul, what you enable us to do in research and in supporting our patients, things we couldn't do otherwise. Regarding the hope you bring to patients through cancer research, (..) on behalf of HUG and personally as well, I want to warmly thank you."*



*For the press review published following this event, scan me*





Our sincerest thanks  
to *all our donors*.  
Thanks to your *generosity*  
and *trust*, research  
is moving forward.

---

## BANK ACCOUNT FOR YOUR DONATIONS

Beneficiary: Fondation CANSEARCH

Bank: Banque cantonale de Genève (BCGE) 17 Quai-de-l'Île, PO Box 2251, 1211 Geneva 2

IBAN: CH1000788000050897999

BIC/SWIFT: BCGECHGGXXX

Clearing/CB: 788

---

## FOR ALL INQUIRIES

General Secretary

Valérie Steck – [valerie@cansearch.ch](mailto:valerie@cansearch.ch)

Project and Donor Manager

Florence Schmidt – [florence@cansearch.ch](mailto:florence@cansearch.ch)

Administrative and Financial Manager

Thanh Mai Thi Ngoc – [thanh@cansearch.ch](mailto:thanh@cansearch.ch)

**Photo Copyright**

© CANSEARCH All rights reserved

**Graphic Design**

[www.marc-aymon.ch](http://www.marc-aymon.ch)



---

## CANSEARCH Foundation

Rue de la Corraterie 12 – 1204 Genève  
T. +41 76 679 45 63  
info@cansearch.ch  
www.cansearch.ch

---

## TO STAY UPDATED

Follow us on our website and social media channels



*scan me*