

57357 Children's Cancer Hospital Egypt (CCHE-57357)

CCHE 57357 Training Academy Portfolio

Continuous Education and Outreach

Advancing Excellence through Continuous Education

Vision:

To become the unique worldwide icon of change toward a cancer-free childhood.

Mission:

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Building a sustainable foundation to prevent and combat cancer through **Novel Research**, **Smart Education**, and **Quality Care** provided with passion and justice to alleviate the suffering of children with cancer and their families, free of charge.





Background & Organizational Overview

The Children's Cancer Hospital Egypt 57357(CCHE 57357), widely known as Hospital 57357, is a unique healthcare institution and an ultimate example of what can be achieved when people work together for a common goal.

Since its establishment in 2007, Children's Cancer Hospital Egypt 57357 has been providing freeof-charge treatment to 2,500-3,500 children with cancer annually, based on available resources as the hospital relies solely on public donations. Built through public awareness, 57357 was one of the first major civil society initiatives of its kind in modern Egypt and the region. It contains 300 beds and recently achieves a 71.5% patient survival rate.

As a donation-funded institution, 57357 is committed to preventing and combating childhood cancer through innovative research, smart education, and quality care. The hospital's mission also extends to raising public awareness about pediatric cancer.

Equipped with a strong technological infrastructure, 57357 operates as a fully automated hospital leveraging data systems from Cerner and Oracle, and a dedicated Artificial Intelligence (AI) unit. At the heart of the hospital's operations is a powerful clinical research department responsible for developing cutting-edge treatment protocols, conducting in-depth data mining and analysis, and performing rigorous epidemiological and bio statistical studies to measure patient outcomes. This department's work is supported by a comprehensive, patient-centered database and strong data governance.

Our Continuous Education & Outreach Department

Advancing Excellence through Continuous Education

Our Continuous Education & Outreach Department serves as a sustainable platform for knowledge exchange and innovative hands-on training for our candidates.

Collaborating with esteemed national and international entities, we develop transformative medical and non-medical programs that cultivate leadership and drive innovation.

Our extensive training offerings include in-person, virtual, and hybrid models, ensuring flexibility and accessibility. With over 25 specialized training programs, our comprehensive curriculum spans a wide range of disciplines, from pediatric oncology and clinical pharmacy to nursing, nutrition, infection control, health informatics, biomedical engineering, research, laboratory services and healthcare administration.







International Recognition/Accreditation of the hospital:

- Accredited by JCI since 2016, with three successful reaccreditations.
- Achieved **ASHP Accreditation** in 2022.
- Achieved GAMSAS Accreditation in 2024.
- Achieved CAP Accreditation for Clinical Pathology in 2024.
- Achieved CAP Accreditation for Pathology in 2024.
- Certified under ISO 14001, ISO 45001, and ISO 22001 standards
- Achieved GAHAR Accreditation 2024
- Achieved CCPC Accreditation in brain tumor and pain management 2025

Core Offerings

1. Professional Training Programs and Fellowships

- Comprehensive training across multiple healthcare disciplines.
- Focus on knowledge enhancement, skill development, and professional growth.

2. Internships

- Specialized training opportunities for hands-on learning.
- Programs in oncology, pharmacy, nursing, laboratory services, and more.
- 3. Customized Training for Organizations
 - Tailored training programs designed to meet specific organizational goals.

4. **Observership Opportunities**

 Short-term observership experience to understand healthcare systems and best practices.

Training Modalities

1. In-Person (Live Onsite)

- Face-to-face training sessions conducted at our facilities.
- 2. Virtual Training

57357 learning management system (LMS): To keep pace with global trends in online learning, CCHE 57357 has launched a digital Learning division. Our team craft interactive, personalized online courses featuring animated graphics, scenarios, and inquiry-based learning, ensuring engaging and effective learning experiences tailored to the needs of each candidate.







- Synchronous (real-time) sessions via the 57357 e-Platform.
- Asynchronous (self-paced) learning modules accessible online.
- 3. Hybrid Training
 - A combination of in-person and virtual training sessions.

Target Audience

- Healthcare professionals seeking to enhance their knowledge and skills.
- Organizations looking for customized training solutions.
- Individuals pursuing certification in specialized healthcare fields.

Training Disciplines:

We offer a diverse range of training programs and observerships tailored for various career levels, from students to post-doctoral professionals. The training duration varies from one week to one year, providing flexible learning opportunities. Through the Continuous Education and Outreach Department, we deliver hands-on learning experiences across multiple disciplines, including:



Also, we are to provide "customized training", which is a tailored approach to professional development designed to meet the specific needs of an organization or institution. By aligning the training content, delivery methods, and objectives with the organization's/institution's goals and challenges, customized training ensures relevance and practicality. This approach focuses on building skills, improving competences, and addressing industry-specific demands, enhancing employee engagement and productivity. Whether delivered through in-person workshops, online sessions, or hybrid models, customized training provides flexible, scalable solutions that drive measurable results. By directly addressing specific needs, it helps organizations achieve operational excellence and maintain a competitive edge.







Medical Programs:

Our programs include both short-term and long-term training, offering options to suit different needs and career levels. These programs span between fellowships, courses, and internships providing real-world experience. They are designed for undergraduates looking to build basic knowledge, postgraduates wanting to deepen their skills, and professionals looking to stay current and enhance their expertise. With a variety of options available, our programs support participants in developing their skills, expanding their knowledge, and adapting to the evolving demands of the healthcare industry.



1. Fellowships:

Pediatric Oncology Fellowship

The fellowship is a rigorous one-year program that combines hands-on clinical experience with academic excellence. The training begins with introductory phase, including comprehensive lectures on pediatric oncology fundamentals. Fellows then engage in basic module rotations, gaining experience in clinical pathology, surgical pathology, and radio-diagnosis. After completing these modules, fellows advance to clinical rotations, working closely with expert oncologists in the field, engaging in patient care under mentorship. The program includes continuous development through weekly assignments, lectures, and transformative learning sessions to enhance interpersonal and professional skills. In addition, comprehensive training in clinical research is a cornerstone of the fellowship, enabling fellows to contribute to groundbreaking work in pediatric oncology. Our program places a strong emphasis on translational research, bridging the gap from bench to bedside, ensuring that laboratory discoveries rapidly translate into innovative treatments that directly benefit patients. Thus, upon completion of the fellowship, our active fellows will be enrolled in a pathway to become physician-scientists, poised to drive advancements in both clinical care and cutting-edge research, ultimately shaping the future of pediatric oncology.

Pediatric Neuro-Oncology Fellowship

This sub-specialty fellowship program at 57357 includes a comprehensive 12-month training in neuro-oncology, designed to provide in-depth clinical and research







exposure. Trainees will manage hospitalized patients with CNS tumors and focusing on acute care and multidisciplinary treatment. The fellow will manage long-term patient follow-ups and will conduct a dedicated research project. The program also offers rotation in neuro-pathology, gaining experience in tumor histopathology; neuroradiology focusing on interpreting diagnostic imaging. In addition to a rotation in the basic research laboratories, exploring the molecular and cellular aspects of CNS tumors. Additionally, trainees will complete radiation oncology rotation, exploring the fundamentals of radiation therapy planning and administration for protocol applications, and a neurosurgery rotation, observing surgical procedures for CNS tumors. These structured rotations ensure the trainee acquires a holistic approach to pediatric neuro-oncology. The program also includes a one-month onsite rotation at the University of Alabama, specifically at The Children's Hospital of Alabama, and another one-month rotation at the Dana-Farber Cancer Institute-Boston Children's Hospital.

Hematopoietic Stem Cell Transplant Fellowship

This innovative program will deliver structured clinical training in Pediatric Bone Marrow Transplant at the Children's Cancer Hospital Egypt 57357. This program aims to develop and conduct specialized training in Bone Marrow Transplants for physicians from Egypt, the Middle East, and North Africa (MENA). It is designed to provide clinical education and training, equipping healthcare providers with the skills needed to manage pediatric and young adult patients undergoing HSCT. The program offers extensive clinical and research experience in transplantation and cellular therapy for treating malignant diseases.

Pediatric Infectious Diseases in Immunocompromised Fellowship

This one-year structured training program focuses on pediatric infectious diseases in immunocompromised patients. Individuals who are interested in concentrating their knowledge and expertise in this particular field will gain invaluable knowledge and mentoring from this program. Exceptional national and international leaders in the field are committed to your success; offering training in different aspects of pediatric infectious diseases. Our fellowship will help you develop your clinical and research skills, through a well-structured program, which represents a one of a kind in the MENA region. Through the incorporation of transformative modules, the program prepares you to become a medical expert/clinical decision maker, communicator, collaborator, manager, health advocate, scientist, and ultimately a leader.







Pediatric Radiation Oncology Fellowship

2. Courses:

Pediatric Oncology Preliminary course

The Course is a rigorous six months' program that combines hands-on clinical experience with academic excellence. The training begins with introductory phase, including comprehensive lectures on pediatric oncology fundamentals. Participants then engage in basic module rotations, gaining experience in clinical pathology, surgical pathology, and radio-diagnosis.

Our program places a strong emphasis on translational research, bridging the gap from bench to bedside, ensuring that laboratory discoveries rapidly translate into innovative treatments that directly benefit patients.

Throughout the entire Six months, transformative learning sessions are held weekly to enhance personal, communication, and professional skills. Furthermore, the participants also have comprehensive training in clinical research. This begins during the orientation rotation with an introduction to creating a clinical research project and basic statistic

> Ultrasound-Guided Pediatric Vascular Access Course

This 3-day course covers essential topics in pediatric vascular access, including the selection and use of common vascular devices. Participants will gain insights into guidelines for choosing the appropriate device types. The Difficult Vascular Access (DIVA) score and related guidelines will be defined to address challenging cases effectively. Ultrasound scanning principles, both in-plane and out-of-plane, are fundamental skills participants will acquire for ultrasound-guided peripheral venous and arterial access. Additionally, the program equips participants with expertise in ultrasound-guided central access, offering a comprehensive understanding of complications and their management in pediatric vascular access procedures.

> Infection Prevention & Control Course

This course focuses on developing the physician's knowledge & skills about infection control used in hospital infection control policies, which is the discipline concerned with preventing healthcare-associated infection. It is an essential part of the back-bone structure of any health care organization. Infection control addresses factors related to the spread of infections within the healthcare setting (whether patient-to-patient, from patients to staff and from staff to patients, or among-staff), including prevention







(via hand hygiene/hand washing, cleaning/disinfection/sterilization, vaccination, surveillance), monitoring/investigation of demonstrated or suspected spread of infection within a particular health-care setting (surveillance and outbreak investigation), and management.

Enteral and Parenteral Nutrition Course:

Our program offers applicants the opportunity to observe and gain hands-on experience in nutritional screening and assessment for both pediatric and adult patients. A special focus is placed on enteral and parenteral nutrition, ensuring participants develop a strong foundation in these essential areas of clinical nutrition.

3. Internships

Medical Internship

This 2-week internship is designed for medical students provides valuable exposure to real-world healthcare settings, allowing them to shadow experienced professionals and gain insights into various medical specialties. Through this observership, students have the chance to observe clinical procedures, patient interactions, and healthcare delivery systems. Additionally, they can learn about the interdisciplinary collaboration involved in patient care and witness the application of medical knowledge in diagnosing and treating illnesses. Overall, the observership offers medical students a unique learning experience that compliments their formal education and helps them make informed decisions about their future career paths in medicine.

Clinical Nutrition Internship

This internship will provide a detailed understanding of the basics and key issues of clinical nutrition and provide sufficient training to enable the trainee to identify the malnutrition, to calculate the nutritional requirements, and create a dietary plan.

Radiation Oncology Internship

This training is designed to help participants to form a solid foundation of experience in radiation oncology, through observing the daily work routine, departmental operations, and safety practices of working with the radiation producing equipment.

Clinical Pharmacy Programs:







The CCHE 57357 Clinical Pharmacy is accredited by the American Society of Health System Pharmacists (ASHP) and is dedicated to sharing knowledge and providing the highest standards of care. Our programs include the International Pharmacy Practice Residency (IPPR) and the Clinical Pharmacy Internship, both designed to offer exceptional learning opportunities and professional growth

International Clinical Pharmacy Residency Program:

Accredited by <u>the American Society of Health System Pharmacists (ASHP)</u> The International Pharmacy Practice Residency Program offered by CCHE 57357 is a oneyear professional training program planned and structured according to ASHP residency accreditation standards.

This program is a one-year program that starts by a 15-day orientation followed by rotations in all different competency areas. It will include two types of competency areas; required and electives. Beside the competency areas rotations, the resident will participate in longitudinal experience such as leadership meetings and pharmacy therapeutic committees. The resident also participates in journal clubs, presentation of cases in front of his/her colleagues and preceptors, and by the end of the year he/she must submit a final research project.

Oncology Pharmacy 101 Course

The course will focus on the role of oncology pharmacists and the basic understanding of cancer therapies and different treatment modalities. It will also cover different oncologic emergencies, genetics and molecular testing, and the development of a pharmaceutical care plan individualized for each patient.

Clinical Pharmacy Internship

A clinical pharmacy internship provides pharmacy students or recent graduates with hands-on experience in patient-centered pharmaceutical care. It bridges the gap between academic learning and real-world clinical practice by allowing interns to work alongside pharmacists, physicians, and other healthcare professionals.

Internship consists of multiple rotations, each designed to expose interns to different aspects of patient care. These rotations help interns develop expertise in medication management across different disease states.







These rotations are fundamental to clinical pharmacy training and are usually required for all interns as IV mixture, dispensing pharmacy, internal medicine, ICU, ID and OR pharmacy.

Nursing Programs:

Nursing Pediatric Critical Care Course

This course focuses on essential knowledge and skills to perform effectively and efficiently in the critical care discipline.

It will enable the nurses to build capabilities and competencies required for specific treatment plans of caring for critical illnesses including care planning, health education and follow-up.

This course aims as well to make nurses proficient in the specialized area of critical care where interested nurses can enhance their skills and knowledge and make a career for themselves in this discipline.

Nursing Fundamentals Internship

This training aims to equip undergraduate nurses with the fundamental knowledge and skills necessary to enhance their practical nursing abilities.

It provides a strong foundation for understanding and safely demonstrating essential nursing skills. It also enables students to engage in a clinical environment where theoretical concepts are integrated with practical application, supporting the achievement of program learning outcomes.

Allied Health programs:

Diagnostic Radiology Internship:

In this training, participants will receive an overview of the processes and procedures involved in patient preparation before a radiological exam. Additionally, they will acquire skills related to safe practices and post-processing.

Medical Physics:

The Radiotherapy department offers a two- week observership program to undergraduate medical physicists' students. During this observership, the intern will observe the daily physicist routine work. Also, he will be oriented to the advanced treatment planning techniques and quality assurance of the delivery machines.

Radiation Therapists:







Throughout this training, participants will gain a foundational understanding of the primary role of external beam therapy. The training will highlight the impact of external beam therapy on biological systems and cancer cells, providing a brief discussion on each phase of the radiotherapy treatment process.

Laboratory Services Programs:

Clinical Pathology Internship

During this internship, participants will spend 2 weeks in the clinical pathology department. These will cover all the laboratories functions through using the tools of chemistry, microbiology, hematology and molecular pathology.

Surgical Pathology Internship

During this internship, participants will understand what is peculiar for surgical pathology, types of samples received by any surgical pathology lab, different facilities in pathology lab (surgical pathology, cytopathology, molecular pathology, digital pathology, immunostaining, FISH and special stains) and how to deal with the Laboratory Information System (LIS). They will also get to know more about the standard operation procedures of the lab workflow, quality, infection control and ethics involved in everyday practice.

Blood Transfusion Center Internship

During this training, participants will be able to know more information about blood donation process and management, such as selection of blood and platelets donors, blood component processing, blood grouping, cross matching, blood virology testing and dispensing of blood components.

Quality Management Programs

Quality Residency Program

This program is designed to provide comprehensive education and training on Joint Commission International (JCI) standards for healthcare quality. The program aims to equip participants with the knowledge and skills necessary to understand, implement, and maintain JCI standards within their healthcare organizations.







Quality Fundamentals Course

This Quality Fundamentals Course is designed to give an introduction and overview on quality concepts, functions, practice in healthcare systems.

Mastering Risk Management Course

This program is designed to give in-depth hands-on application on risk management with a strong foundation in identifying, assessing, and mitigating risks. It covers topics such as risk assessment, risk mitigation strategies, and the use of tools and models to identify and manage potential threats. It also covers topics such as patient safety, regulatory compliance, and risk management strategies in healthcare settings.

Quality Data Management & Power BI Course

This program is designed to give in-depth hands-on application on different data management and provides a comprehensive overview of the principles, techniques, and technologies involved in managing data effectively throughout its lifecycle.

Hospital Information System:

Health Informatics Internship

The Health Informatics Internship offers the opportunity to gain hands-on experience in the field of Digital Health. Interns will work with different aspects of health information systems. This internship provides valuable insight into the intersection of healthcare and technology, and can be a stepping stone to a career in health informatics or healthcare administration.

Biomedical Engineering:

Biomedical Engineering Internship

Training in biomedical engineering will allow participants to know the role of a biomedical engineer in a hospital as a clinical engineer, and upgrades their practical experience by an overview of the latest technologies in medical systems. It also gives the student a firm grounding in hospital operations and protocols.

> Clinical Engineering & Healthcare Technology Management course







Clinical engineering is a specialized field of biomedical engineering that applies engineering principles, design concepts, and technology to healthcare and medical facilities. Clinical engineers collaborate with healthcare professionals to develop, implement, and maintain medical equipment, devices, and systems to improve patient care, safety, and outcomes. They also provide training and support to staff on the proper use, maintenance, and repair of medical equipment, as well as contribute to the development of policies and procedures related to medical technology. Clinical engineering plays a vital role in ensuring the effectiveness and efficiency of medical technologies in clinical settings.







