A few words from the Dean, Prof. Karl Skorecki:

As Dean, one of the most gratifying aspects of leading this young and flourishing Faculty of Medicine, is working with the network of Faculty affiliated and university-invested Medical Center research institutes, led by creative and highly accomplished translational medical scientists.

This ensures that the research needs of the entire Galilee community receive a local and effective response. I invite you to read about it and join in the Galilee Research Institute Consortium initiative.
Introduction

Four advanced research institutes have been established in recent years in medical centers affiliated to the Azrieli Faculty of Medicine of Bar-Ilan University, an important part of the vision of the Faculty, located in the Galilee. Substantial resources have been invested in the establishment and advancement of these research institutes, with the generous support of distinguished donors, the Ministry for the Development of the Negev and Galilee and the Ministry of Health. GRIC (Galilee Research Institute Consortium) has been launched as an academic body that coordinates the activities of the research institutes and their directors, the Faculty of Medicine academic leadership, and scientists and physicians leading important research studies.

The purpose of the institutes is to facilitate access to biomedical research and to encourage the research of young interns and residents alongside senior physicians, thus strengthening the research capabilities and profile of physicians trained to engage in studies that empower biomedical research in the Galilee. The research institutes also provide a venue for postgraduate students in medical sciences (M.Sc/PhD), medical students working on their MD theses and postdoctoral fellows from abroad.

The research institutes at the medical centers have defined as a goal the promoting of primarily translational research, i.e., seeing the clinical significance of basic research and developing research based on observations from the point-of-care at the bedside to the laboratory. This applies especially in areas where there are unique research needs and opportunities in the Galilee, and addressing diseases that are responsible for significant local morbidity compared to other areas in Israel. Among these are specifically genetic diseases, diabetes, cancer, infectious diseases, autoimmune diseases, neurodevelopmental and cardiovascular diseases. Taken together, the research institutes of the Galilee leverage clinical facilities of more than 1700 hospital beds, providing fertile ground for basic and clinical medical research. In addition, the diversity of Galilee population isolates comprise a unique human mosaic, enabling genetic and epidemiological research.

Currently, there are 15 research groups in the Galilee’s research institutes, led by scientists affiliated both with the Azrieli Faculty of Medicine and the respective medical centers. These research groups have access to advanced facilities including laboratories equipped with state-of-the-art and unique equipment purchased as part of the Galilee-wide scientific infrastructure of the Azrieli Faculty of Medicine. Galilee-wide translational clinical as well as basic biomedical research seminars, ensure enriching scientific dialogue and communication. Another unique aspect of the GRIC is the placement of University-appointed academic faculty scientists at the GRIC research institutes, when the match facilitates research advancement.
The Galilee Medical Center (GMC) serves as one of the main pillars of the Azrieli Faculty of Medicine in the Galilee of Bar-Ilan University. Most of the Faculty’s medical students in their clinical years find themselves at the Galilee Medical Center at some point for advanced training in the various departments and fields. In addition, a large number of medical students carry out their compulsory research projects, required for their final dissertations, with physicians, laboratories, and researchers from the hospital's Research Institute. These physicians, research coordinators, and clinical and laboratory researchers closely advise and guide the students.

The Galilee Medical Center Research Institute was inaugurated in 2018 thanks to the generous support of not only GMC but also of Mrs. Raya Strauss and the Azrieli Faculty of Medicine. It was an important step in development of research on campus, serving as an expansion of the Elishar Research Laboratory that has been in existence for some three decades. The Research Institute, located on the GMC campus, is the largest and most advanced of its kind in the Galilee. It facilitates the carrying out of medical, basic, and epidemiological research by researchers, scientists, medical students, and graduate students, in addition to medical residents carrying out basic scientific research as part of their medical training. The Research Institute has led to a significant and welcome expansion of research activities at the Galilee Medical Center, and comes as a culmination of a shared dream and vision of GMC and the Azrieli Faculty of Medicine. Both Azrieli and GMC see research, most especially translational research, as an integral part of the development of medical centers and their affiliated clinics, and most crucial for improving the level of medical care provided to the residents of the Galilee.

As a research institute, we always strive to be at the forefront of science and break new ground in medical science. Indeed, this aspiration is realized and made possible thanks to an excellent team of skilled researchers, motivated students, and advanced instrumentation. Another important contribution to the success of the research is the close collaboration between the researchers at the Institute and GMC’s doctors and department heads who devote their time and resources to translational research in their departments.
The research institute was established in 2016, continuing with the activities of the research laboratory that had been in operation at the medical center for some two decades. The institute has 6 research laboratories and interdepartmental equipment rooms that include dedicated rooms for cell culturing, a microscopy unit that offers a variety of microscopes and advanced imaging systems, and a molecular biology unit with production devices, PCR and NGS technologies. The institute also offers unique equipment such as a Mass Spectrometry device and a Fourier Transform Infrared Spectroscopy device, only the second of its kind in Israel.

The Institute includes the following laboratories:

- Heart Diseases and Vascular Biology Laboratory
- Metabolic Diseases and Diabetes Laboratory
- Autoimmune Diseases with an emphasis on skin diseases Laboratory
- Infectious Diseases Laboratory
- Stem Cell laboratory
The medical research institute located within the Holy Family Hospital promotes and conducts both basic and clinical research projects that are designed to address medical issues and investigate the ideas of the medical staff. It performs mainly translational research, in which the basic research is directed to develop clinical, diagnostic and/or therapeutic applications.

The institute was established with the support of the Azrieli Faculty of Medicine of Bar Ilan University and the Ministry for the Development of the Periphery, the Negev and the Galilee, and aims to encourage research in faculty-affiliated hospitals in Nazareth and create an important research center where medical, M.Sc., and PhD students can perform their own research projects. It is the first academic research institute in Nazareth and the region and provides fertile ground for the continuation of the students’ academic programs by providing them with the setting, atmosphere and tools to investigate their ideas.

In light of the advancement of technology and innovation, the research institute aims to be at the forefront, leading high level studies in the field of medicine and science.

The research institute’s vision is to produce a model of a physician-scientist that can improve the level of medicine and treatment in hospitals as well as publish research in high-impact scientific journals.

The institute encourages collaborations among researchers and physicians and supports the sharing of information with national and international colleagues. It promotes collaborative and interdisciplinary research to develop collegiality and creativity among physicians, researchers and graduate students.

The research institute also plays a very important role in society in general. It opens its doors for visits of students from schools and colleges to experience the university research atmosphere. It promotes collaborative and interdisciplinary research to develop collegiality and creativity among physicians, researchers and graduate students.

The Holy Family Hospital Research Institute is funded by competitive research grants of local research foundations (Ministry of Health, and Ministry of Science etc.) and international research foundations. Physicians and researchers are also able to obtain funding and raise resources from pharmaceutical companies. A large part of the laboratory equipment financing came from Bar-Ilan University and as such, the hospital management does not spare any efforts to allocate funds and resources for the ongoing current research.
Ziv Medical Center’s central mission is to provide the residents of northern Israel and anyone seeking our medical care, a complete range of advanced medical services in the heart of the Galilee. Ziv Medical Center realizes this vision of continuous growth by introducing new services which focus on providing the best care for every patient and by increasing our research capacity. Ziv Medical Center is affiliated with the Azrieli Faculty of Medicine. The affiliation provides a seamless research ecosystem and ensures that the next generation of physicians can access outstanding training opportunities.

The Research Center at Ziv, headed by Prof. Michael Edelstein, is a joint endeavor with the Azrieli Faculty of Medicine. It was established as a part of the hospital’s belief that clinical research is an integral part of medical excellence and continuous growth. Staffed by epidemiologists, statisticians, clinical research experts and laboratory scientists and equipped with two research laboratories as well as state of the art equipment, the research center supports clinical teams to translate gaps in clinical knowledge into opportunities for research that will make an impact now and in the future. The research center supports clinical and laboratory research as well as clinical trials in a wide range of disciplines from lab-based teams in the hospital (hematology, genetics, virology) to all clinical specialties with current and planned projects in oncology, infectious diseases, internal medicine, emergency medicine, cardiology, psychiatry, surgery, urology and ENT among others. Ziv Medical Center makes full use of available laboratory and clinical equipment for clinical research, and takes advantage of its diverse population to conduct epidemiological and genetic studies not easily done in other parts of the country. Finally, the research center aims to improve research capacity at the hospital by offering its own research skills course to staff members and by running a competitive research accelerator program called “research stars,” to identify the most promising clinical researchers and support them deliver world-class research. The first “research stars” cohort will begin in October 2021.

Ziv Medical Center is a general hospital in the north of Israel, located in Safed. For the past 111 years, Ziv Medical Center has been serving the health needs of the region including the residents of the Upper Galilee and the Northern Golan Heights. Our patients reflect the diversity of Israel – Jewish, Muslim, Christian, Druze, Circassian, and Bedouin. This diversity is also reflected in our staff who proudly work side by side.
The Azrieli Faculty of Medicine at Bar–Ilan University:
Reaching New Heights in Medicine

The Azrieli Faculty of Medicine is located in the culturally diverse Galilee in the North of Israel. Since its establishment is quickly attained leadership in medical education and in important medical research domains in Israel.

The Faculty is undergoing a growth spurt as it enters its second decade. The symbiosis between the training of future doctors and advanced degree graduate students provides fertile ground for multidisciplinary and interdisciplinary collaborations leading to groundbreaking research. While cultivating local leaders, Azrieli is internationally known for its contributions to science and medicine.

The guiding principle at the Azrieli Faculty of Medicine is to combine basic with translational research – applying targeted research to specific challenges that arise in hospitals and clinics of the region, with international implications.

For more information please contact Prof. Chaim Putterman, Associate Dean for Research, chaim.putterman@biu.ac.il
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