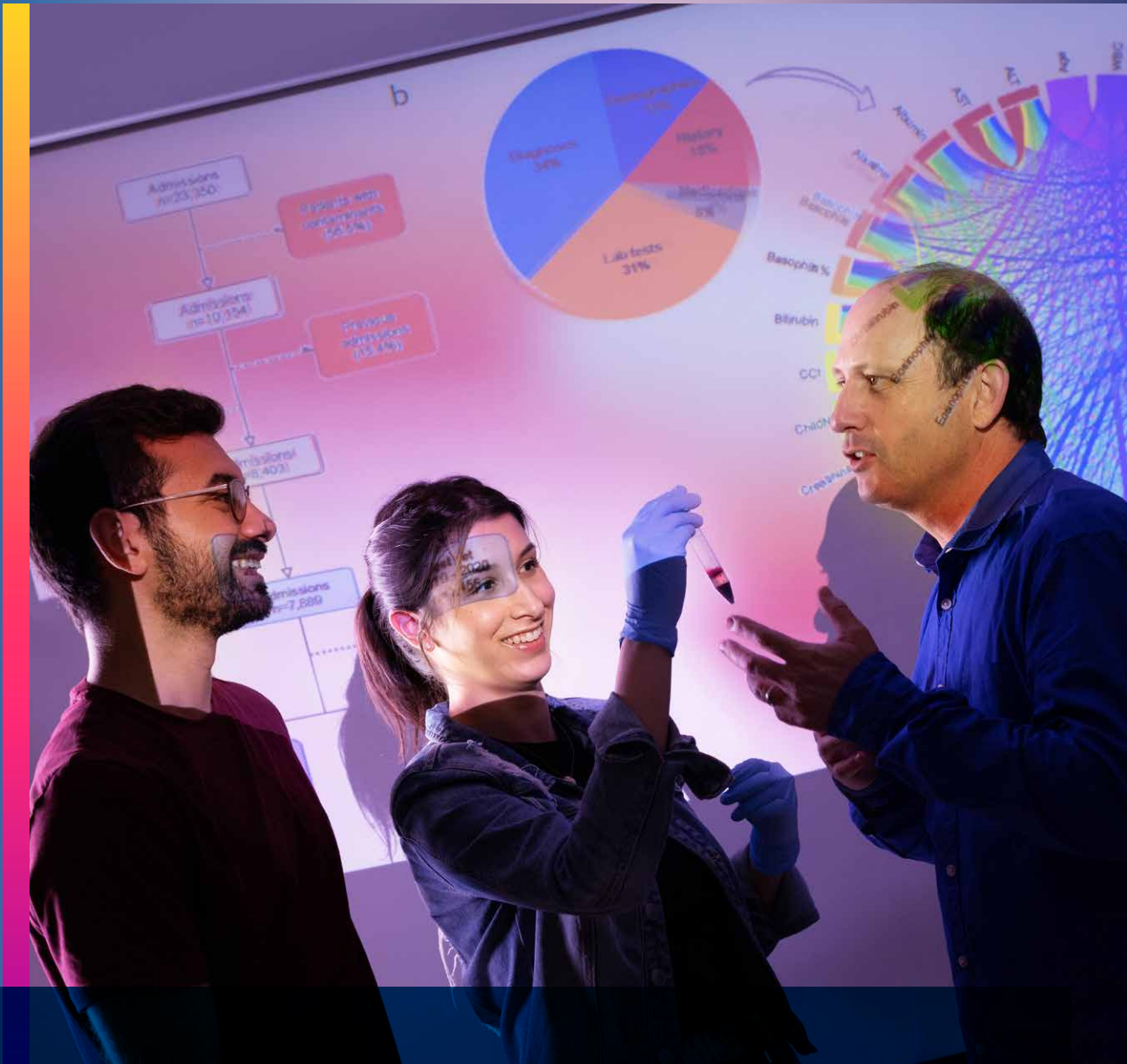




Faculty of Medical
& Health Sciences
Tel Aviv University



THE FACULTY OF MEDICAL & HEALTH SCIENCES AT TEL AVIV UNIVERSITY



TEL AVIV UNIVERSITY

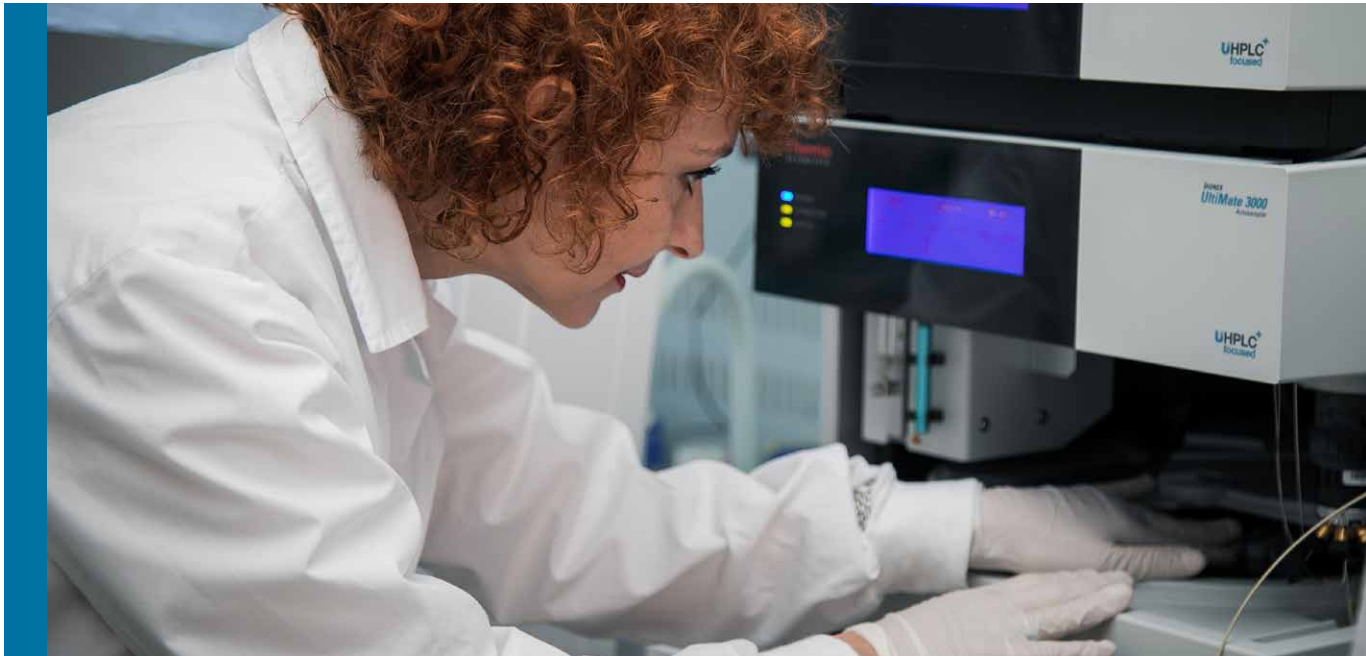
INTERNATIONAL STUDY OPPORTUNITIES IN ENGLISH

- MSc, PhD and post-doc programs
- Master's in Emergency Medicine and Disaster Management
- International Postgraduate Program in Orthodontics
- Epidemiology Summer School with Johns Hopkins
- Summer Research Program in the Sciences



INTRODUCTION

PUSHING THE BOUNDARIES OF KNOWLEDGE



In the heart of Tel Aviv, Israel's high-tech, business and cultural capital, Tel Aviv University's Faculty of Medical & Health Sciences is a hub of research activity and an academic leader in Israel and the world. Here, "dynamic" is more than just a buzzword – it's a way of life. Faculty members combine inventiveness and excellence as part of Israel's topmost institution for scientific publications and a Reuters top 100 innovation university.

With almost 1,500 basic and clinical researchers and 5,000 students, TAU's Faculty of Medical & Health Sciences is Israel's largest complex for health and medical sciences research and training.

The Faculty offers a broad range of study opportunities at all degree levels, spanning the biomedical sciences: basic and clinical medicine, dental medicine, communication disorders, nursing, occupational and physical therapy, and public health.

Our researchers and students regularly publish their breakthroughs in the world's leading scientific journals. They have made strides in the understanding and treatment of brain, breast, colon and skin cancer; developed innovative methods for diagnosing and treating neurodegenerative diseases such as Alzheimer's, Parkinson's, Huntington's, ALS and multiple sclerosis; and much more. Patents, new technologies and startups have emerged from the Faculty over the years.

The Faculty's mission is to expedite medical breakthroughs and translate research into novel treatments and cures. This exciting and hopeful endeavor is one that we hope is contagious!



RESEARCH

UNRAVELING THE SECRETS OF LIFE AND HEALTH

Research at TAU is multidisciplinary and collaborative, with scientists and clinicians joining forces in both basic and clinical research, working in laboratories on campus and at 18 affiliated hospitals. Faculty members head prestigious international research teams, collaborate with world-class institutions including Harvard, Stanford, Yale and the NIH, and publish their findings in prominent scientific journals. Lab findings translate into the discovery and development of breakthrough drugs, new treatment methods and, ultimately, improved human health.

Current research firsts

Cancer: 3D-printed the world's first functional model of glioblastoma brain tumors, developed new methods for predicting relapse of breast cancer, devised a drug cocktail for early prevention of aggressive skin cancer metastasis, redesigned CAR-T immunotherapy therapy to eradicate solid tumors with greater efficiency and fewer side effects.

Neurodegenerative diseases: Applied an FDA-designated drug developed at TAU to Alzheimer's and autism, determined the link between sleep disruption and the onset of dementia and neurodegenerative diseases.

COVID-19 pandemic: Developed a patent-pending antibody cocktail to promote natural immunity to COVID-19, evaluated the effectiveness and impact of vaccines against variant waves of COVID-19.

Spinal injury: Worked on the first-ever emergency neuroprotective treatment for spinal cord injury with a grant from the US Department of Defense.

Hearing: Developed a strategy for treating genetic deafness that restored normal hearing function.

Human evolution: Identified ancient bones of a human previously unknown to science, challenging prevailing theories of the origin of Neanderthals.





PROFESSIONAL TRAINING

EDUCATING OUTSTANDING,
COMPASSIONATE PRACTITIONERS

**FACULTY OF
MEDICAL &
HEALTH SCIENCES**
SCHOOLS AND
DEPARTMENTS

School of Medicine

Anatomy & Anthropology
Cell & Developmental Biology
Human Molecular Genetics & Biochemistry
Clinical Microbiology & Immunology
Pathology
Physiology & Pharmacology

Graduate School of Medicine

Academic Center for Continuing Medical Education

The Faculty of Medical & Health Sciences is unique in the breadth and variety of degrees offered and professional training options provided. It prides itself on producing new generations of researchers and practitioners: scientists, physicians, dentists, occupational therapists, physical therapists, nurses, communication disorder experts and public health specialists.

MD studies

The 6-year and 4-year MD programs train medical students following high school, the army, or an undergraduate degree. Following preclinical training in anatomy, biochemistry, cell biology, genetics, immunology, microbiology, neuroscience, physiology, and pharmacology, the students perform their clinical training in family medicine, surgery, psychiatry, neurology, gynecology, pediatrics, ophthalmology, otolaryngology or cardiology at 18 TAU-affiliated medical centers, hospitals and HMOs.

All Faculty activities, whether basic research or hands-on treatment, are focused on the patient. Medical education forms the basis for studying all aspects of professionalism and compassionate care.

Teaching and learning innovations

Training genetic counselors to provide patients and their families with crucial information for more personalized treatment.

Promoting women in STEM with a special program in which female researchers mentor female students.

Transforming 30% of courses to self-paced, interactive digital learning.

Launching Israel's first student journal exclusively showcasing student publications and giving a voice to the researchers and physicians of tomorrow.



Goldschleger School of Dental Medicine

- Endodontology
- Oral & Maxillofacial Surgery
- Oral Biology
- Oral Pathology & Oral Medicine
- Oral Rehabilitation
- Orthodontics
- Pediatric Dentistry
- Periodontology

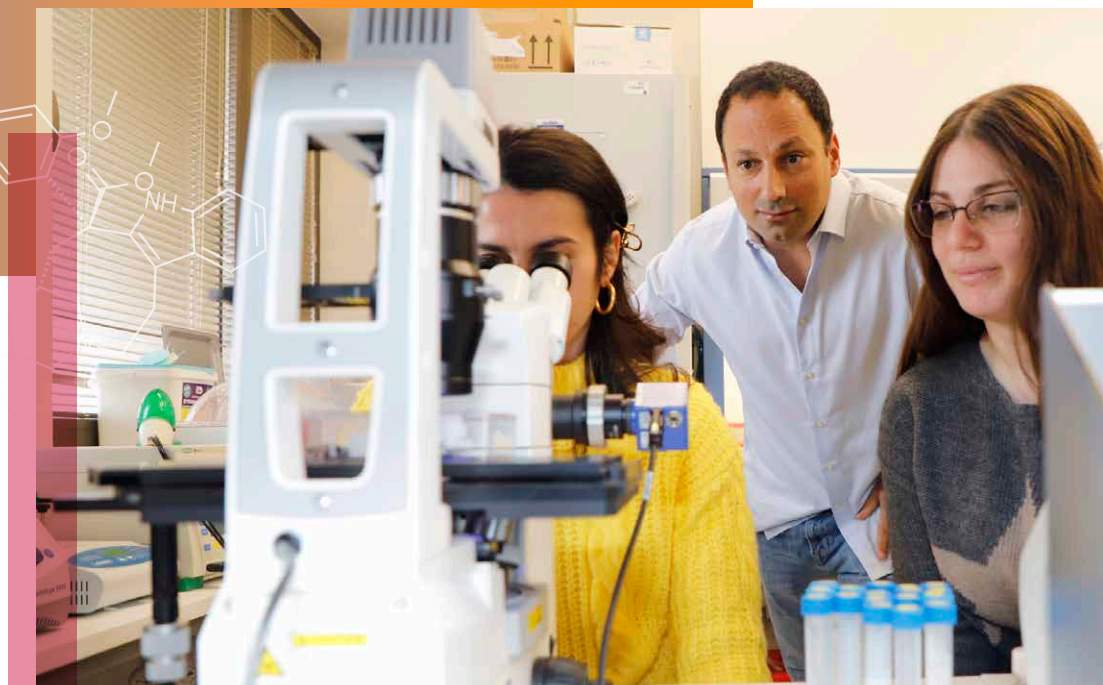
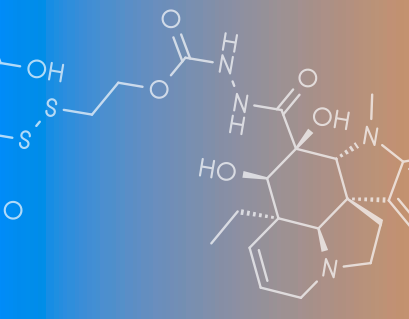
Stanley Steyer School of Health Professions

- Communication Disorders
- Nursing
- Occupational Therapy
- Physical Therapy

School of Public Health

- Disaster Medicine
- Environmental & Occupational Health
- Epidemiology & Preventive Medicine
- Health Promotion

GRADUATE STUDIES



TRAINING THE NEXT GENERATION OF BIOMEDICAL INNOVATORS

The Faculty's graduate programs prepare students for curiosity-driven, multidisciplinary research, as well as for clinically relevant work conducted throughout the Faculty's labs both on campus and at affiliated hospitals.

Master's and doctoral students today are medical inventors tomorrow. They are encouraged to challenge conventional thinking and drive creative solutions for a future of more responsive, effective and personalized medical care.

The Faculty offers the following graduate research programs:

MSc in Medical Sciences

Students select 1-2 areas of specialization from the following list, which prepare them for work in research labs, industry and hospitals, or for doctoral research:

- Cell and Developmental Biology
- Therapeutic Sciences and Regulation
- Human Molecular Genetics and Biochemistry
- Clinical Microbiology and Immunology
- Neuroscience
- Anatomy and Physical Anthropology
- Physiology and Pharmacology

MSc in Dental Medicine

Master's degrees are offered in Orthodontics, Pedodontics, Oral Rehabilitation & Periodontics, Oral Medicine & Oral Pathology, and Endodontics.

MSc in Health Professions

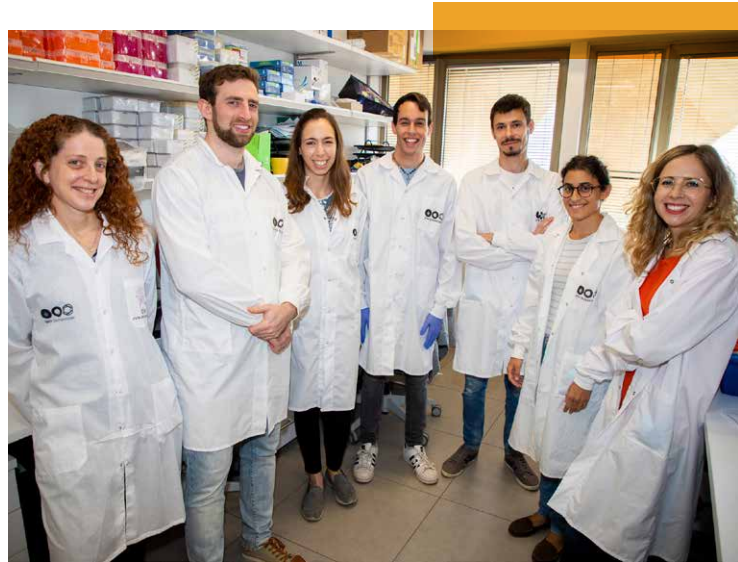
Master's and doctoral programs are offered in Nursing, Communication Disorders, Physical Therapy and Occupational Therapy.

Combined MD-Engineering program

Bioengineering deals with the design and production of technologies that are increasingly used by physicians in clinical practice and research. This 7-year program will train students in bioengineering and medicine toward Engineering and MD degrees.

Combined MD-Computer Science/ Bioinformatics program

Bioinformatics combines biology, computer science, and data science to develop and apply methods for analyzing vast clinical datasets, which are used by physicians as part of clinical practice and research.



MPH in Public Health

Two Master of Public Health programs are offered: MPH in Public Health and MOcCH in Occupational Health. MPH specializations include Community Medicine, Health Promotion, Health System Administration, and Emergency and Disaster Management. Additional MSc degrees offered by the School of Public Health include Epidemiology & Preventive Medicine, and Biostatistics.

Graduate programs

The Faculty's master's and doctoral programs and post-doctoral fellowships are also available to overseas students in English.

MD-PhD program

The aim of this program is to train a new generation of physician-scientists who can combine outstanding medical care with breakthrough research. Students can work at a diverse range of laboratories on campus and at affiliated hospitals that engage in basic and translational research.



ROBUST TIES

WORKING WITH CLINICAL, INDUSTRY AND INTERNATIONAL PARTNERS

At TAU's Faculty of Medical & Health Sciences, promising new discoveries are disseminated locally and globally, and translated into real-world drugs and innovative treatment methods that ease suffering and save lives.

Among the Faculty's 18 affiliated hospitals are Israel's main medical centers serving half the country's population:



Tel Aviv Sourasky Medical Center (Ichilov), with the world's largest and most state-of-the-art emergency room

Chaim Sheba Medical Center (Tel Hashomer), ranked among the world's top 10 hospitals

Rabin Medical Center (Beilinson), with its world-renowned organ transplant, heart, brain and cancer centers

Wolfson Medical Center, host to Save a Child's Heart at their Pediatric Intensive Care Unit

Shamir Medical Center, which runs one of the world's largest hyperbaric medicine centers

Meir Medical Center, recognized for its Orthopedics Department that treats Israeli Olympians

Joint centers and partnerships

Sagol Center for Regenerative Medicine together with researchers at Chaim Sheba Medical Center.

Sleep Research Center in collaboration with the Tel Aviv Sourasky Medical Center.

Healthy Longevity Research Center in cooperation with leading researchers from Johns Hopkins, Stanford, and the Max Planck Institute for Biology of Aging.

Aufzien Family Center for the Prevention & Treatment of Parkinson's Disease with the Tel Aviv Sourasky Medical Center.

Industry startups & collaborations

IdentifAI: Using AI to identify genetic disorders in the embryo with a simple blood test

Trobi x bio: Precision microbiome-based therapeutics

Alpha TAU Medical: Technology for radiation treatment of cancerous tumors

NurExone Biologic: Drug platform to treat damage in the central nervous system

Innocan: Drug delivery platforms using CBD

B sens: Treatment of sensory disorders including pain, tinnitus and seizures

Gray Matter: Non-invasive targeted therapy for mental health disorders



FACTS & FIGURES

- 120 faculty members with campus labs
- 18 affiliated hospitals
- 500 labs on campus and at medical centers
- 1,280 clinician-scientists at hospitals
- 1,000 graduate students
- 4,000 undergraduate students
- \$50 million/yr. in grant funding on average
- 15 research centers and institutes
- 670 patents filed
- Top 100 for medicine globally (Taiwan ranking)

Design: Yael Kfir, TAU Graphic Design Studio | Text: Miri Tanaman | Photos: Yoram Reshef, Assaf Ehenreich, Moshe Bedarshi, Rafael Ben-Menashe

Contact: Deanmedicine@tauex.tau.ac.il | +972-3-6409657