



Academic Year 2025–26

Community Rehabilitation and Research Center

Supporting Long-Term Recovery for War-Injured Soldiers in Northern Israel

Since October 7, more than 12,000 Israeli soldiers and security personnel have entered rehabilitation—an unprecedented national challenge. Each month brings new cases, marking the largest wave of post-combat injuries in Israel’s history. This crisis is defined both by its scale and its unique demographic profile:

- » **51% of those injured are under the age of 30**
- » **66% are reservists**
- » **An estimated 1,800–3,500 injured soldiers currently reside in northern Israel**

While the national system delivers exceptional acute medical care and inpatient rehabilitation, alarming gaps are exposed when injured soldiers return home. Once discharged from medical centers, many injured soldiers struggle with social isolation, disrupted continuity of care, and difficulty reintegrating into civilian life. These challenges are particularly acute in northern Israel, where access to follow-up care is severely limited by geographic distance, workforce shortages, and a lack of coordinated services.

According to Prof. Amitai Ziv, Director of the Sheba Integrated Rehabilitation Hospital, **“Rehabilitation will be the biggest national challenge in the State of Israel** in the coming decades. The journey of the injured and their families has only just begun.”



In response to this growing crisis, the University of Haifa is launching a pioneering Community Rehabilitation and Research Center. The Center will be the first of its kind in Israel to integrate clinical care with applied research, offering specialized rehabilitation programs and harnessing the power of group therapy. Our dynamic model will ensure that every clinical hour advances knowledge and that every research insight immediately improves patient care.

"Rehabilitation doesn't end when the patient is discharged—it begins there. What we do next defines recovery."

- Dr. Hilla Sarig Bahat
Department of Physical Therapy

THE CHALLENGE

The October 7 war has placed tremendous pressure on Israel's rehabilitation system. While the medical system provides excellent acute care and short-term rehabilitation, serious gaps emerge once injured soldiers return home. Thousands—many of them young reservists with orthopedic and neurological impairments—face long waits for physiotherapy, a shortage of trained professionals, and a lack of structured, community-based support. These challenges leave many wounded soldiers feeling disconnected from the very communities they fought to protect.

Nowhere is this crisis more acute than in northern Israel, where long travel distances, a shortage of trained professionals, and ongoing security threats limit access to critical follow-up care. Research consistently shows that peer-supported, community-based rehabilitation significantly improves recovery outcomes—yet such models are largely absent from the national system.

Without intervention, injured individuals risk long-term disability, emotional isolation, and higher risk of secondary complications. The Ministry of Defense currently invests some \$45,000 annually per injured soldier. Without effective community-based programs, many soldiers require extended one-on-one treatments and repeated interventions, driving costs higher while delivering suboptimal outcomes.

THE OPPORTUNITY

The Community Rehabilitation and Research Center brings academic expertise to the challenges faced by injured soldiers, linking clinical care with research so that each strengthens the other. This approach extends into the community through smartphone-based motion sensors, enabling early detection of setbacks and personalized, data-driven rehabilitation. **The result is a responsive system, tailored to individual needs and positioned as a national model for community-led rehabilitation.**

Operating on a hub-and-spoke model, the Center trains University of Haifa professionals to expand programs across northern Israel, bringing recovery closer to home. A peer-support program fosters community connection, with professional monitoring and data-driven follow-up to address challenges as they arise. Programs address war-related injuries—orthopedic, neurological, systemic, and psychological—through structured, group-based rehabilitation sessions. Delivered locally, these sessions promote physical healing, build emotional resilience, and support a smoother return to daily life with independence and dignity.



Program Outcomes:

- 1 Restoring functional independence and improving the quality of life for 300 injured soldiers
- 2 Building sustainable social networks to help participants maintain long-term physical activity and prevent secondary complications
- 3 Reducing long-term healthcare costs through more efficient, community-based rehabilitation
- 4 Creating evidence-based rehabilitation protocols informed by real-world sensor data
- 5 Strengthening collaboration across academic, clinical, government, and IDF disabled veteran sectors [e.g. Beit Halochem]

The Journey to Independence

Our two-year program guides a total of 300 injured soldiers—beginning with 100 participants in year one and expanding to 200 in year two—through a carefully designed 12-month rehabilitation journey, from initial assessment to long-term community reintegration, while generating critical research to inform national rehabilitation standards.

Phase One (Month 1): Laying the Foundation

Recovery begins with a comprehensive assessment of each participant's physical and mental health. Evaluations consider lifestyle, initial performance status, and goals, establishing a clear baseline for individualized rehabilitation plans. This holistic approach ensures that every plan addresses the whole person, creating a strong foundation for sustainable recovery.

Phase Two (Months 2–7): Intensive Group Rehabilitation

Our six-month group rehabilitation program forms the core of the intervention. Participants take part in weekly sessions held within their own communities, combining targeted physical therapy with functional activities in outdoor and local settings. In a supervised group environment, they practice real-world skills,

strengthen functional abilities, and build confidence. This community-based approach enhances physical and mental recovery while empowering participants to regain independence and resilience in daily life.

Phase Three (Months 8–12): Transition and Long-Term Support

The final phase combines real-time monitoring from a distance and peer support to ensure a smooth transition to independent living. Remote sensor-based tools track movement and activity, enabling staff to step in early and keep participants on track when challenges arise. Graduates of the first cohort will serve as peer mentors, guiding new participants and creating a cycle of mutual support. Three in-person events will strengthen social bonds, reminding participants that they belong to a supportive community on the path to lasting independence.

PROJECT TEAM



Dr. Hilla Sarig Bahat, Head of the Orthopedic Division at the Department of Physical Therapy is a musculoskeletal physiotherapist and clinical researcher. Her journey into physiotherapy began as a patient herself, after a serious

car accident during her military service left her with multiple injuries that required surgery and long months of hospitalization and rehabilitation. She now specializes in neck and shoulder pain, sports injuries, movement limitations, and fall prevention. Her interdisciplinary research combines predictive machine learning for fall risk, virtual reality for spinal motion analysis, and remote rehabilitation tools.



Prof. Itzik Klein's Autonomous Navigation and Sensor Fusion Lab at the Charney School of Marine Sciences designs advanced wearable sensor systems that leverage

inertial sensing and AI to accurately monitor and evaluate patient movements. These technologies enable continuous tracking, gait analysis, and rehabilitation progress assessment for patients, supporting improved outcomes through real-time feedback.

2-YEAR BUDGET

ITEM	DETAILS	EXPENSES USD
Field Rehab Team	10 Physiotherapists, 5 physiotherapy graduate students	420,000
Research and Coordination	1 Postdoc; 2 PhD students for data management	152,000
Program Operations	Training workshops, travel to sites, 3 gatherings, administration	145,000
Equipment and Technology	Basic rehab equipment and sensors for 10 sites	100,000
Evaluation & Dissemination	Conferences, presentations, publications	16,500
Oversight, Audit, and Quality Control		166,500
TOTAL:		\$1,000,000

FOR YOUR CONSIDERATION

With your partnership, we can create a powerful legacy—helping injured soldiers rebuild their lives, advancing research that improves care, and positioning northern Israel as a national leader in rehabilitation.

» **A gift of \$1 million over two years (\$500,000 per year)** will provide comprehensive rehabilitation services to 300 injured soldiers over two years—restoring function, dignity, and hope.