Center for the Intrepid (CFI)

VA San Antonio Polytrauma Rehabilitation Center

National Intrepid Center of Excellence (NICoE)
Mission

Each began with the same extraordinary goal: to create, in record time, the world's most technologically advanced, state-of-art, rehabilitation facility to care for and honor our wounded warriors.
Define/Redefine the Organization

Each had an unusual opportunity to define or redefine the concepts of operation.
Teamwork

Each represented teamwork involving the individual and collective commitment of hundreds of stakeholders.
Integration

Each involved all stakeholders in planning, design, and construction. The concepts of operation addressed diagnostics, clinical, research, and education.
Center for the Intrepid (CFI)
Center for the Intrepid (CFI)
National Armed Forces
Rehabilitation Center
“If you’re early you’re on time,
If you’re on time you’re late,
If you’re late, you’re fired!”

Arnold Fisher
With diagnostic, treatment, rehabilitation, and training functions under one roof, no other facility offers soldiers with debilitating injuries a single location in which they can receive physical, occupational, social, mental, and nutritional health services – as well as be fitted, tested, and adjusted for advanced prosthetics.

First of its kind technologies never before integrated under one roof:

- Next generation gait laboratory
- First 300° Computer-Assisted Rehabilitation Environment (CAREN)
- State-of-art prosthetics and fabrication laboratory
- Virtual reality, robotics and simulator technologies
- Flow rider / wave pool and aquatic therapies
Center for the Intrepid
National Armed Forces
Rehabilitation Center
Center for the Intrepid
National Armed Forces
Rehabilitation Center
Center for the Intrepid
National Armed Forces Rehabilitation Center

Project Schedule

06/03/05 First Client Meeting
06/06/05 Initial Site Visit
07/15/05 Pricing Set – CM on Board
09/22/05 Ground Breaking
02/07/06 Construction Documents (16 early packages)
01/29/07 Dedication Ceremony
02/15/07 Operational

Project completed in 18 months
Center for the Intrepid
National Armed Forces Rehabilitation Center

Fisher Houses
Center for the Intrepid (CFI)
Natatorium
Center for the Intrepid
National Armed Forces Rehabilitation Center

Size: 65,000 sf
Cost: $50M
Design/Construction: 18 months
600,000 donors

Firms
SmithGroupJJR
Architecture
Structural
Interiors
Syska & Hennessy
MEP
Syska
Construction
Plaza Construction
Owner Rep
Intrepid Fallen Heroes Fund
Sponsor
Center for the Intrepid
National Armed Forces
Rehabilitation Center
Center for the Intrepid
National Armed Forces
Rehabilitation Center

First Floor
Center for the Intrepid
National Armed Forces
Rehabilitation Center

Second Floor
Center for the Intrepid
National Armed Forces Rehabilitation Center

Fourth Floor
Center for the Intrepid
National Armed Forces
Rehabilitation Center

Public Spaces
Center for the Intrepid
National Armed Forces
Rehabilitation Center

Innovative Technologies CAREN
Computerized Assisted Rehabilitation Environment
Center for the Intrepid
National Armed Forces
Rehabilitation Center

Innovative Technologies Gait Lab
Center for the Intrepid
National Armed Forces Rehabilitation Center

Motivational Therapies Natatorium
Center for the Intrepid
National Armed Forces Rehabilitation Center

Motivational Therapies Flow Rider
Center for the Intrepid
National Armed Forces
Rehabilitation Center

Rehabilitation Training and Exercise Lab/Center
Center for the Intrepid
National Armed Forces
Rehabilitation Center

Simulation Centers
Occupational Therapy
Activities of Daily Living
Center for the Intrepid
National Armed Forces Rehabilitation Center

Prosthetics Fabrication Lab
Center for the Intrepid
National Armed Forces Rehabilitation Center

Outdoor Exercise/Therapy
Center for the Intrepid
National Armed Forces
Rehabilitation Center
Center for the Intrepid
National Armed Forces
Rehabilitation Center
VA San Antonio Polytrauma Rehabilitation Center
Department of Veteran Affairs
Polytrauma Rehabilitation Center

Size: 84,000 sf
Cost: $38M

Team
SmithGroupJJR
- Architecture
- Interiors
- Structural
Marmon Mok
- Associate Architect
Robins & Morton
- Construction
Department of Veteran Affairs
Polytrauma Rehabilitation Center
Department of Veteran Affairs
Polytrauma Rehabilitation Center

Early Concept Sketch
Department of Veteran Affairs
Polytrauma Rehabilitation Center

Ground Floor
• Outpatient Therapy Gym
• Gait Lab
• Driver Training
First Floor
• Outpatient Clinic
• Education
• Administration
• Family Spaces
Department of Veteran Affairs
Polytrauma Rehabilitation Center

Second Floor
- 12-bed unit with therapy
Department of Veteran Affairs
Polytrauma Rehabilitation Center
Department of Veteran Affairs
Polytrauma Rehabilitation Center
Department of Veteran Affairs
Polytrauma Rehabilitation Center
Department of Veteran Affairs
Polytrauma Rehabilitation Center
National Intrepid Center of Excellence (NICoE)
National Intrepid Center of Excellence (NICoE) for Traumatic Brain Injury and Psychological Health

Traumatic Brain Trauma has become the “signature wound of the wars in Afghanistan and Iraq.”

With a mission of Hope, Healing, Discovery and Learning, the NICoE accommodates TBI treatment and research programs, which are not available anywhere else in the world.

NICoE’s goal is to be the world’s most advanced center for world-class psychological health and traumatic brain injury treatment, research, and education.
Team Dynamic

The design team for NICoE went beyond the traditional structure of client, architect, contractor, and subconsultants and includes patient advocates, researchers and clinicians, the Department of Defense, and Veterans Affairs. Each member played an important part of designing and delivering this first-of-its-kind building to the wounded warriors of our nation.

The design/construction team and the DoD operational team evolved concurrently.

DESIGN & CONSTRUCTION TEAM

CLIENT & OPERATIONAL TEAM
Planning Concept
The NICoE was designed to encourage all staff members of the diagnostic and treatment team to listen to the patient and family tell their story once and to continuously collaborate to implement a treatment plan that is achievable for the patient to make strides in their recovery.

Patient Centric Design
“Another thing that I love is that they consider him a part of the team, not just the patient. He is considered an intricate and valuable part of the team with a voice! Why isn’t all medical care this way?”
—Family member of a patient
National Intrepid Center of Excellence
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health
National Intrepid Center
of Excellence
for Traumatic Brain Injury and
Psychological Health

Design Concept
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Design Concepts
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Size: 72,000 sf
Cost: $65M
Construction: April 2009 to June 2010

Team
SmithGroupJJR
- Planning
- Architecture
- Interiors
- MEP

Cagley & Associates
- Structural

Turner Construction
- Contractor

Plaza Construction
- Owner Representative

Intrepid Fallen Heroes Fund
- Sponsor
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Site Plan
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

First Floor
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Transitional Spaces
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Interior Lobby

A variety of ceiling heights, widths and numerous cut-outs and overlooks provide a rich spatial experience and the opportunity for natural light and views to the exterior from any vantage point in the space.
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Family Spaces

Throughout the facility there are a variety of comprehensive support spaces to help patients and their families maximize their potential for recovery. The spaces enable patients and family members to have a place to relax between treatments and provide emotional and spiritual support to one another.
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Imaging

The Center includes the most advanced technology available for medical care. To more precisely diagnose complex brain injuries, the building houses powerful imaging technologies, including a 3 Tesla MRI; 64-Slice PET/CT scanner; an Elekta Neuromag MEG (magnetoencephalography) scanner—one of only nine in clinical use in the U.S.; and Functional Transcranial Doppler Spectroscopy (fTCDS).
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Telehealth/Education
Deep dive media center
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Virtual Reality/CAREN
Computerized Assisted Rehabilitation Environment Simulation Center
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Physical and Occupational Therapy
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Family and Art Therapy
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Central Park
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Outdoor Therapy/Play
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

Lighting
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

Lighting
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health

LEED Silver
National Intrepid Center of Excellence for Traumatic Brain Injury and Psychological Health
National Intrepid Center of Excellence
for Traumatic Brain Injury and Psychological Health

“This is a place of hope and healing. It’s a place of inspiration, and it’s a place that will forever convey to those of us in uniform the unwavering gratitude of the citizens and the nation that we serve.”

—Brigadier General Loree K. Sutton, Former Director, Defense Centers of Excellence
"When I walk into this building, I really feel like someone cares about me."

—OEF/OIF Veteran, September 2010