



QUALITY
OF LIFE+™

PROGRAM OVERVIEW

September 2023



CFC #92314



2023-24
ACADEMIC
YEAR

24
Schools

61
Projects

42
Challengers

360
Students

The QL+ Mission

To challenge university STEM students to create innovative technology solutions that improve the quality of life for injured veterans and first responders.

The QL+ Program is Unmatched in its Impact

Greater independence for veterans and first responders who live with a life-altering disability to overcome daily challenges and get back to the activities they love.

Real-world impact and experience for science, technology, engineering, and math (STEM) students.

A deeper respect for those who serve and protect America, and a chance to give back to those who gave so much for us.

The QL+ Challenger

For American heroes with life-altering injuries and medical conditions, their struggle doesn't end with their service. Many live with disabilities that drastically alter their way of life. For some, the active lifestyle they once enjoyed is now out of reach. For others, even simple tasks become a daily challenge. These men and women sacrificed much for their country—we want to give back to them.

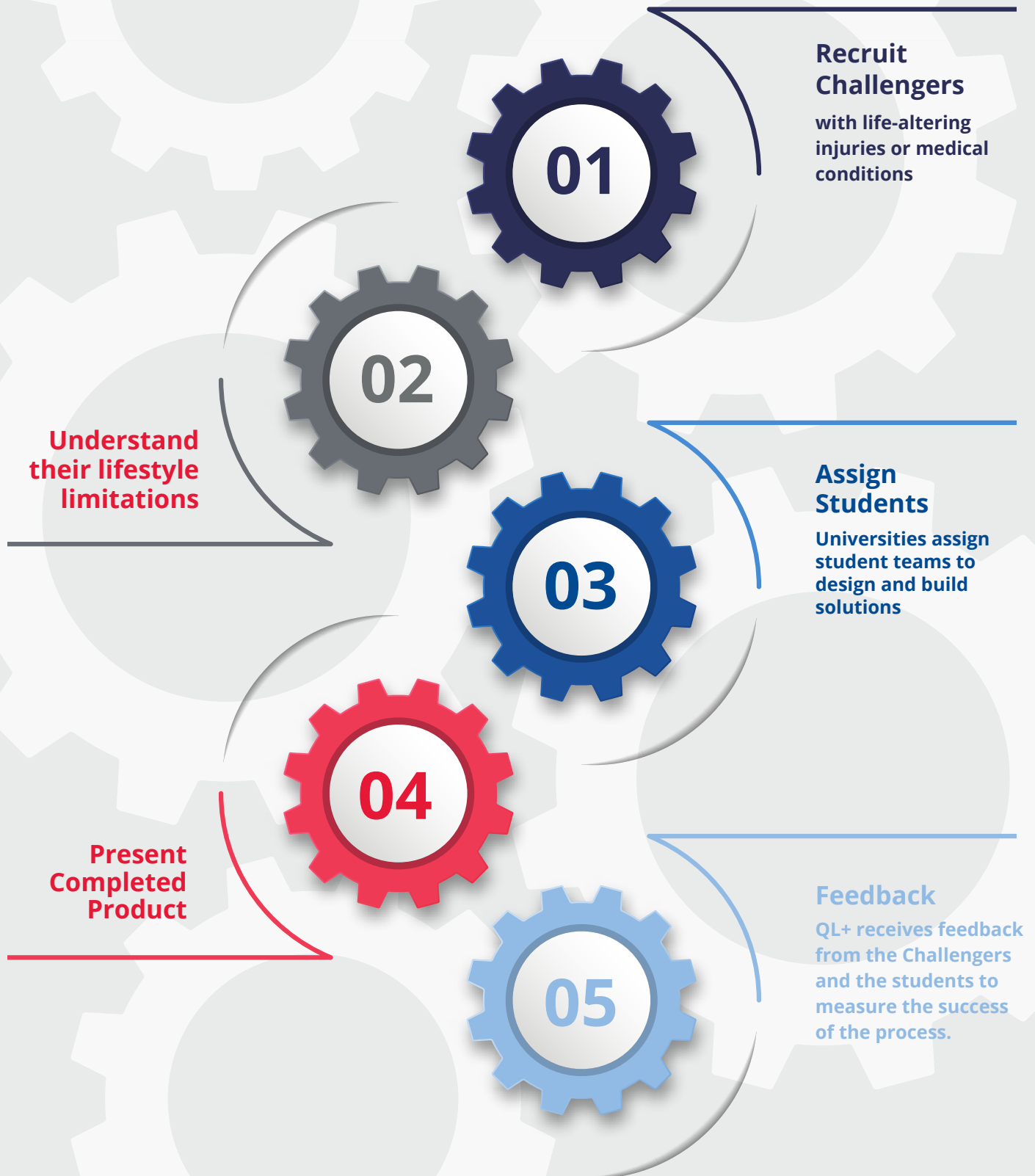
These men and women are the QL+ Challengers

QL+ works to give these heroes the support they deserve. We connect disabled service personnel with students who develop cutting-edge technology to help them improve their quality of life.

Since 2009, QL+ has expanded to universities across the country. Students build solutions that impact real lives, and injured or ill heroes get the support they need to overcome their lifestyle challenges. We are not market-driven; we are people-driven. We want to see lives changed. Come join us.



Student Teams Collaborate with **Military** and **First Responder** Heroes



QL+ Partner Universities



“QL+ challenged my team and I to create a device to help volunteers transport para-athletes and their bobsleds from a transfer truck to the bobsled track. Meeting the athletes and volunteers who will be using our device and seeing how engineering can be applied to improve para-bobsledding gave me a glimpse of how I can use my mechanical engineering skills to positively impact people’s lives.”

—Kate Carrington, Virginia Tech

“I want to highlight how professional the Team Lead and the Team was. I was very impressed with that aspect and I am not easily impressed. Additionally, I want to thank them personally and the organization’s mission to help those like me that want to still lead an active lifestyle and just needed some help to accomplish that goal. I hope that God continues to Bless your endeavors. From the bottom of my heart, thank you!”

From a Challenger



Here are some samples of our life-transforming projects:

Fog Control Box to prevent “freezing of gait” for Korean War veteran with Parkinson’s

Treadmill Centering device for blind veteran

Wheelchair Wheel Change device for Army veteran

Pushup/Plank device for Army veteran whose arm was amputated

Yeager Knife for veterans with diminished hand strength

Wobble Chair for Walter Reed National Military Medical Center

Blind Paddler Slalom Kayak Course for Team River Runner

Voice-activated Bicycle Shifting device for a triple-amputee Marine veteran

Swimmer Lift for swimmers with mobility issues for Travis Mills Foundation

Transfer device to lift a paralyzed Navy veteran from wheelchair to a recumbent bike

Transfer device from Wheelchair to Hockey Sled for a double amputee Marine veteran

Spasticity Brace for Air Force veteran who experienced a stroke

“QL+ gave me the opportunity to show off my skills by giving back to the people who need it. I pursued engineering to be able to do such, and this year-long project encapsulated everything I had hoped for, between building great teamwork skills and challenging myself in creating something from nothing.”

—Ben Knouse (Virginia Tech, Tractor Transfer project)



Innovative and Life-changing Solutions

We are proud of the work QL+ teams have done across the nation. Since the creation of QL+ in 2009, our work has benefited 1,100 American Heroes. QL+ has enjoyed extraordinary growth from 2009 to present, expanding from one university to 24 universities in 11 states and the District of Columbia. In the 2023-24 Academic Year, 360 capstone engineering students are working to find unique solutions to these heroes’ needs.

impact

Support for Veterans and First Responders + STEM Graduates

Because of our programs, QL+ Challengers can achieve a greater level of independence. The devices our student teams design for our heroes who live with life-altering disabilities help them to overcome many of their challenges and get back to doing the things they love. This support can change their lives.

Beyond the benefit to American heroes, QL+ helps develop the next generation of engineers and scientists. Students gain valuable experience and skills, preparing them for their careers.

Our program has real impact. Students get opportunities found in few other programs. Challengers, those men and women who gave so much to serve and protect, receive the tools they need to pursue the lives they want to live.

“It was extra rewarding working on a QL+ project because we were able to work one on one with a Challenger and build a very custom design. In the end, we got to witness the Challenger’s newfound joy as a result of our device. In this end, this made it all worth it for me.”

—Caroline Miko (Virginia Tech Motorized Garden Chair Team)



Our Mission

is to provide innovative solutions to American heroes and their families.

OFFICERS

Lt. Col. Michael Phelps, USAFR (Ret.), Chair
Former Publisher and CEO, *The Washington Examiner*

**LTC Robert (Bob) Wolff, Ph.D., USAR (Ret.),
Treasurer**

Mark E. Robbins, Secretary
Executive Director, QL+

DIRECTORS

Lloyd Caldwell, P.E.
Engineering Management Advisor and Consultant

Julie A. Chase
CEO, ChasePR

Scott Grabill, D.O.
Sentara Orthopedic & Sports Medicine Specialists

Jonathan Grier
Founder and Principal, Grier Forensics, LLC

Greg Jolissant, MD, MS, CPE
CEO and Owner, J Jolissaint Consulting, LLC

COL Joe Manous, Jr., P.E., Ph.D., USA (Ret.)
Director, Institute for Water Resources,
United States Army Corps of Engineers

CAPT Kevin Wensing, USN (Ret.)
Wensing Enterprises

STAFF

Mark E. Robbins
Executive Director
mark.robbins@qlplus.org

Jody Kakacek, Ph.D., MNPM
Program Director
jody.kakacek@qlplus.org

Scott Huyvaert*
Western Program Manager
scott.huyvaert@qlplus.org

Jason Whitman*
Midwest Program Manager
jason.whitman@qlplus.org

Kristie Yelinek
Eastern Program Manager
kristie.yelinek@qlplus.org

*Veteran



QUALITY
OF LIFE+™

QL+ National Office
1544 Spring Hill Road, #9927
McLean, VA 22102
info@qlplus.org
www.qlplus.org