

Request Information

Permalink

# Training Swimwear Garment to Address Injury Risk Factors

Tech ID: 33552 / UC Case 2021-669-0

## ABSTRACT

Researchers at the University of California, Davis ("UC Davis") have developed a unisex swimwear garment designed to prevent swimming-related injuries and to assist in injury recovery during training.

## FULL DESCRIPTION

Swimming-related injuries, including shoulder injuries, are common, with most injuries occurring during training sessions. Such injuries happen for various reasons, including lengthy training sessions, improper stroke movement/patterns, poor posture, and swimmer fatigue. Swimwear manufacturers have focused on addressing these issues by developing technical/high-tech swimsuits for short-duration competitive swimming rather than for extended use during training sessions. In addition to using high-tech swimsuits during competition, other injury prevention/recovery techniques include modifying training routines by resting/decreasing session length, using Kinesio taping of the shoulders, physical therapy, and wearing posture shirts. These methods can increase the amount of training required to maintain peak performance and may only address one cause of an injury (e.g., Kinesio tapes only address shoulder posture, not overall swimmer posture).

Researchers at UC Davis have developed a swimwear garment that can be worn over traditional swimwear or against the skin. The swimwear garment helps to improve form and positioning in the water to reduce injuries and allows injured swimmers to continue training while recovering from their injury. The swimwear garment is focused on addressing injury risk factors by promoting core muscle activation, raising a swimmers body position in the water, improving shoulder posture to help reduce the possibility of injury. and assisting swimmers with posture and maintaining correct form.

## APPLICATIONS

- ▶ Competitive and non-competitive swim training sessions.
- ▶ Recreational swimming.

## FEATURES/BENEFITS

- ▶ FINA garment guidelines do not limit garment design.
- ▶ Zipper provides for easy garment donning/removal, total upper body coverage, and comfort.
- ▶ Can be manufactured using 100% commercially available sun and chlorine resistant materials.

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Published Application	<a href="#">20230000181</a>	01/05/2023	2021-669

## CONTACT

Amir J. Kallas  
[ajkallas@ucdavis.edu](mailto:ajkallas@ucdavis.edu)  
tel: .



## INVENTORS

- ▶ Halsted, Tara

## OTHER INFORMATION

### KEYWORDS

training swimwear,  
compressions, posture,  
training garment,  
swimming apparel,  
swimsuit

### CATEGORIZED AS

- ▶ **Materials & Chemicals**
  - ▶ Other
  - ▶ Textiles
- ▶ **Medical**
  - ▶ Devices
  - ▶ Other
  - ▶ Rehabilitation

### RELATED CASES

2021-669-0

**University of California, Davis**  
**Technology Transfer Office**  
1850 Research Park Drive, Suite 100, ,  
Davis, CA 95618

Tel: 530.754.8649  
[techtransfer@ucdavis.edu](mailto:techtransfer@ucdavis.edu)  
<https://research.ucdavis.edu/technology-transfer/>  
Fax: 530.754.7620

© 2024, The Regents of the University of California  
[Terms of use](#)  
[Privacy Notice](#)