Wearable consumer products such as smart watches, fitness trackers and head-mounted VR/AR devices are gaining popularity. Recent years have also witnessed significant advances in wearables for health and medicine. Next-generation wearable technologies will help transform today's hospital-centered healthcare practice to proactive, individualized care.

This special issue focuses on novel computational research related to any aspect of the design or use of wearables in medicine and health, including wearable hardware design, AI and data analytics algorithms, human-device interaction, security/privacy, and novel applications. We particularly welcome the submissions describing paradigm-shifting methodologies that integrate wearable devices, data analytics algorithms, and novel feedback/intervention into closed-loop systems for medicine and health. According to ACM HEALTH policy, “all submissions must show evidence of their contributions to the computing field as informed by healthcare. We do not publish papers on large pilot studies, diseases, or other medical assessments/results that do not have novel computing research results.”

Prospective authors are invited to submit original manuscripts on the topics including, but not limited to, the following:

- Wearable sensors and actuators for medical and health applications
- E-textiles and clothing-based wearables
- Low-power embedded systems
- Body sensor network designs and protocols
- Social interactions and interventions
- Monitoring and intervention of behavior, psychology, and cognition
- Usability and UI/UX
- Wearable-based virtual and augmented reality
- Human-wearable interaction methods, designs, and evaluation
- Machine learning, data-analytic, and artificial intelligence methods for inferring health-related information
- Datasets, measurement, and performance evaluation
- Privacy and security concerns and solutions

Submission Guidelines

All submissions must follow the HEALTH Information for Authors guidelines at health.acm.org/authors.cfm. When submitting your paper, select the paper type "Special issue on Wearable Technologies for Smart Health" at mc.manuscriptcentral.com/acmhealth.

Important Dates

Submission Deadline: August 1, 2019
Notification to Authors (first round): October 15, 2019
Revision Deadline: December 1, 2019
Final Notification to Authors: January 15, 2020
Publication Date (tentative): Spring 2020

For further information, write to wearabletechnologies-editors@acm.org.