

Special Issue on  
**Computational Challenges in Skin Cancer: From  
Acquisition to Diagnosis**

# CALL FOR PAPERS

Skin cancers are on the rise. According to World Health Organization, the incidence of both nonmelanoma and melanoma skin cancers has been increasing over the past decades. Currently, each year globally more than two million nonmelanoma skin cancers and 132,000 melanoma skin cancers are diagnosed. American Cancer Society predicts that in 2017 there will be 87,110 new cases of melanoma and 9,730 deaths caused by melanoma in the United States.

Skin cancers are amenable to early detection through clinical screening and examinations. The recent advances in biomedical technologies, tools, and methods paved the way for a better diagnostic accuracy. Supported with many different techniques, algorithms, and frameworks, various imaging modalities are benefitted for better understating of the skin cancer. On the other hand, several variables and complex structures of this disease require more attention from researchers to support clinicians to provide more discriminative power in classification, diagnosis, and management of the lesions. Self-examination tools, supported with thorough education, are needed to elevate survival rates of skin cancers. This special issue will primarily approach the computational problems centered on human skin lesions. We aim to provide a diverse set of articles that demonstrate new developments, methodologies, algorithms, and applications in helping clinicians to better detect and analyze various skin cancer subtypes. It is also recommended that the authors submit multimedia materials with their articles as they will significantly increase the visibility of their articles.

This special issue welcomes high-quality research articles on all aspects of computational skin cancer. Original, high-quality contributions that are not yet published or that are not currently under review by other journals or peer-reviewed conferences are sought.

Potential topics include but are not limited to the following:

- ▶ Image acquisition, storage, and retrieval
- ▶ Image enhancement
- ▶ Color models
- ▶ Feature extraction
- ▶ Feature selection
- ▶ Lesion segmentation
- ▶ Predictive models
- ▶ Lesion classification
- ▶ Mobile tools/applications
- ▶ Biopsy-based image processing
- ▶ Lesion evaluation detection
- ▶ Deep learning
- ▶ Real-time lesion analysis
- ▶ Computer aided examination

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jsc/ccsc/>.

**Lead Guest Editor**

Mutlu Mete, Texas A&M  
University-Commerce, Commerce,  
USA  
[mutlu.mete@tamuc.edu](mailto:mutlu.mete@tamuc.edu)

**Guest Editors**

Sinan Kockara, University of Central  
Arkansas, Conway, USA  
[skockara@uca.edu](mailto:skockara@uca.edu)

Quan Wen, University of Electronic  
Science and Technology of China,  
Chengdu, China  
[quanwen@uestc.edu.cn](mailto:quanwen@uestc.edu.cn)

Huiyu Zhou, Queen's University Belfast,  
Belfast, UK  
[h.zhou@qub.ac.uk](mailto:h.zhou@qub.ac.uk)

**Manuscript Due**

Friday, 8 September 2017

**First Round of Reviews**

Friday, 1 December 2017

**Publication Date**

Friday, 26 January 2018