

NCI-ISBI 2013 Grand Challenge

Automated Segmentation of Prostate Structures

When: April 7, 2013

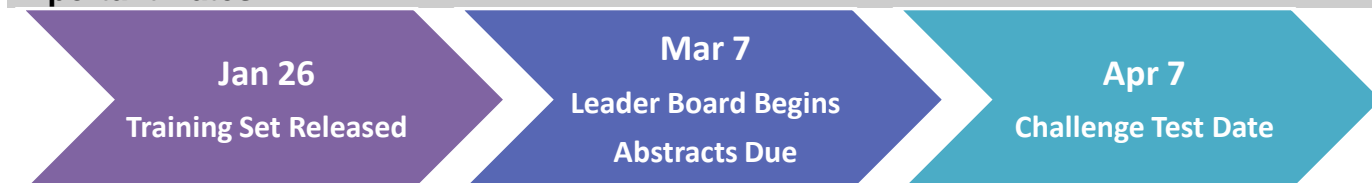
Where: San Francisco, CA

URLs: <http://www.biomedicalimaging.org/2013/program/isbi-challenges/> & <https://wiki.cancerimagingarchive.net/x/8QRp>

Challenge Description

Accurate segmentation of the prostate and its internal structures are crucial to the success of image-guided minimally invasive interventions in prostate cancer. NCI and ISBI challenge participants to automatically segment two clinically relevant adjacent regions of the prostate gland, i.e., the central gland (CG) and the peripheral zone (PZ), on axial T2-weighted MR images hosted on the NCI's Cancer Imaging Archive. Open and closed source solutions operating on multi-center, multi-protocol (e.g. 1.5T and 3T) data will be most welcome.

Important Dates



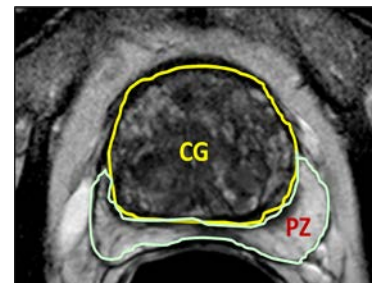
Access to Data and Submission of Entries

Data: Axial T-2 weighted MR images acquired on 1.5T and 3T systems,¹ available for download through the NCI Cancer Image Archive (TCIA):

<https://wiki.cancerimagingarchive.net/x/8QRp>

The Challenge data sets are divided into 3 groups:

1. Training set - 60 cases
2. Leader Board set (pre- Challenge) – 10 cases²
3. Challenge Test set – 10 cases³



Reference Standard: Segmentations performed by prostate imaging experts

Metrics: 95% Hausdorff Distance (HD), and the Dice Similarity Coefficient.⁴

Abstracts: Prospective participants for the Onsite Challenge Test must submit a one page abstract to include title, authors, affiliation, objectives, data, methods, results and conclusions. Format: 11 point font, PDF.

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¹ Data provided courtesy of Boston University (Boston, MA) and Radboud University, Nijmegen Medical Centre, (the Netherlands)

² Leader Board Tests are performed online & participants will receive the results

³ Challenge Tests will be performed at the ISBI meeting on April 7

⁴ Test analyses will be performed using the MIDAS software provided courtesy of Kitware, Inc.