NCI-ISBI 2013 Challenge: Automated Segmentation of Prostate Structures (ISBI-MR-Prostate-2013)

Description

This data set was created for use in the NCI-ISBI 2013 Challenge - Automated Segmentation of Prostate Structures. The challenge data set was divided into 3 parts including training, leaderboard and test data sets. This allowed participants to prepare their algorithms and test their results prior to submitting to a final test phase for selecting the winner.

Image data were selected from PROSTATE-DIAGNOSIS and Prostate-3T collections on TCIA. Cases consist of axial scans with half obtained at 1.5 T (Philips Achieva) with an endo-rectal receiver coil (fromBostonMedicalCenter) and the other half at 3T (Siemens TIM) with a surface coil (from Radboud University Nijmegen Medical Centre [RUNMC], Netherlands). They were acquired as T2-weighted MR axial pulse sequences with either 4 mm thick slices at 3T or 3 mm thick at 1.5T. Each file contains nearly all DICOM acquisition parameters except tags that specifically identify Private Health Information.

Each case has had central gland (CG) and peripheral zone (PZ) outlines marked by Drs. Nicolas Bloch (Boston University School of Medicine) and Mirabela Rusu (Case Western University) or Drs. Henkjan Huisman, Geert Litjens, or Jurgen Futterer at RUNMC Netherlands.

Data Access Data Access

| Data Type | Download all or Query/Filter | License |
|--|------------------------------|-----------|
| NCI Challenge Data - Training (zip, NRRD, 280 kb, 60 subjects) | Download | CC BY 3.0 |
| NCI Challenge Data - Leaderboard (zip, NRRD, 59 kb, 10 subjects) | Download | CC BY 3.0 |
| NCI Challenge Data - Test (zip, NRRD, 53 kb, 10 subjects) | Download | CC BY 3.0 |

Please contact help@cancerimagingarchive.net with any questions regarding usage.

Collections Used in this Third Party Analysis

Below is a list of the Collections used in these analyses:

| Source Data Type | Download all or Query/Filter | License |
|---|------------------------------|-----------|
| Source Image Data - Training (DICOM, 60 subjects, 60 studies, 60 series, 1555 images , 416 MB) | Download | CC BY 3.0 |
| Source Image Data - Leaderboard (DICOM, 10 subjects, 10 studies, 10 series, 261 images , 85 MB) | Download | CC BY 3.0 |
| Source Image Data - Test (DICOM, 10 subjects, 10 studies, 10 series, 271 images , 81 MB) | Download | CC BY 3.0 |

- PROSTATE-DIAGNOSIS,
- Prostate-3T

Detailed Description

Detailed Description

Training Data can be further split by source Collection:

- NCI_ISBI_Challenge-Prostate3T_Training_Segmentations.zip in NRRD format
- NCI_ISBI_Challenge-ProstateDx_Training_Segmentations.zip in NRRD format

Citations & Data Usage Policy

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Data Citation

Bloch N, Madabhushi A, Huisman H, Freymann J, Kirby J, Grauer M, Enquobahrie A, Jaffe C, Clarke L, Farahani K. (2015). NCI-ISBI 2013 Challenge: Automated Segmentation of Prostate Structures. The Cancer Imaging Archive. http://doi.org/10.7937/K9/TCIA.2015.zF0vIOPv



(i) TCIA Citation

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Other Publications Using This Data

TCIA maintains a list of publications that leverage TCIA data. If you have a manuscript you'd like to add please contact the TCIA Helpdesk. **Versions**

Version 1 (Current): 2015/08/20

| Data Type | Download all or Query/Filter | License |
|--|------------------------------|-----------|
| Image Data - Training (DICOM, 60 subjects) | Download | CC BY 3.0 |
| Image Data - Leaderboard (DICOM, 10 subjects) | Download | CC BY 3.0 |
| Image Data - Test (DICOM, 10 subjects) | Download | CC BY 3.0 |
| NCI Challenge Data - Training (NRRD, 60 subjects) | Download | CC BY 3.0 |
| NCI Challenge Data - Leaderboard (NRRD, 10 subjects) | Download | CC BY 3.0 |
| NCI Challenge Data - Test (NRRD, 10 subjects) | Download | CC BY 3.0 |