

## Julie A. Arruda R.T.(R)

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### EDUCATION

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*Massachusetts Bay Community College, Wellesley, MA*

**A.S. in Radiologic Technology** **1986**

Two and a half year program that includes instruction in radiographic positioning, anatomy and physiology, physics and radiation protection.

*St. Elizabeth's Medical Center, Brighton, MA*

**Certificate for Clinical Education in Radiologic Technology** **1986**

Clinical training in all areas of radiology with special emphasis in general radiography.

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### AWARDS

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• Employee Recognition Award/ Massachusetts Eye & Ear Infirmary **2000**

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### RELATED EXPERIENCE

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*Woods Hole Oceanographic Institution, Woods Hole, MA*

**CT Technologist**

**2001 - Present**

Scanning and multi-format post processing of image data with a special interest in 3D imaging. Assists and advises technical staff, students and outside researchers with imaging, publications and presentations relating to CT scanning. Oversees maintenance of CT scanner, and updating archive database.

Assists in the preparation, handling of live animals and necropsies of specimens.

Equipment and Training:

- Siemens Volume Zoom CT scanner
- Siemens Emotion CT scanner
- AMIRA 3D imaging workshop and software

*Massachusetts Eye & Ear Infirmary, Boston, MA*

**Imaging Specialist-MRI, CT and X-ray**

**1986 - Present**

Works as a technologist in all modalities, with an emphasis on MRI and CT in head and neck pathology.

Assists with New England Aquarium in scanning of animals in off hours.

Equipment and Training:

- 3.0 T Philips Achieva MRI scanner
- 1.5T Siemens Magnetom Vision MRI scanner
- Siemens Sensation CT scanner
- Siemens Volume Zoom CT scanner
- Siemens Plus-4 CT scanner

*Massachusetts General Hospital, Boston, MA*

**Per-diem MRI Technologist**

1999

MRI imaging of inpatients and out-patients with GE 1.5T scanner

*St. Elizabeth's Medical Center, Brighton, MA*

**Student X-ray Technologist**

1998

Trauma x-ray in emergency room, evenings and weekends.

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PUBLICATIONS AND PAPERS

- 2007 Ketten, D.R., S. Cramer, and J. Arruda A Manual for the Removal, Fixation, and Preservation of Cetacean Ears, Woods Hole Oceanographic Institution Technical Publication WHOI-xxxx. 27 pp. (in press).
  - 2007 Yamato, M., Ketten, D.R., Arruda, J., Cramer, S. Anatomical Studies of Mysticete Hearing: A Key to Understanding How and What Whales Hear. ASLO 2007 Aquatic Sciences Meeting.
  - 2006 Chadwick, R.S, Manoussaki, D., Dimitriadis, E.K., Shoelson, B., Ketten, D.R., Arruda, J., O'Malley, J.T. Cochlear coiling and low-frequency hearing. (Passive and Active Structural Acoustic Filtering in Cochlear Mechanics, in press)
  - 2006 Ketten, D.R., J. Shoshani, J. O'Malley, J. Arruda, D.Manoussaki, E. K. Dimitriadis, B. Shoelson, R. S. Chadwick. Great Ears: Functional comparisons of land and marine leviathan ears. Assoc. for Research in Otolaryngology
  - 2006 S. Prah, O'Malley, J., Ketten, D.R. , Arruda, J. , Siebert, U. Do Pingers acoustically impact the ears of harbour porpoises? CMM06 Brest, France
  - 2006 Campbell-Malone, R., J. Arruda, J. A. Muller, I. Tsukrov, D. R. Ketten, M. J. Moore. Achilles' Jaw: Morphology and Mechanical Properties of the Right Whale Mandible as a Model Bone for Ship Strike Mortality., American Society of Mammalogists.
  - 2005 Hammock, J. O'Malley, J. Arruda, J. Lytwyn, K. Rifenburg, K. Marshall, J. Dacey, J.W.H., Ketten, D.R. What's a marine nose for? A comparison of the structure and function of the sea otter nasal cavity with those of terrestrial mammals. 16th Biennial Conference on the Biology of Marine Mammals, San Diego, CA.
  - 2005 Ketten, D.; J. Arruda; S. Cramer; J. O'Malley; J. Reidenberg, S. McCall; J. Craig. Experimental Measures of Blast Trauma in Marine Animals. Environmental Consequences of Underwater Sound,. NOPP-ONR Review, Arlington, Virginia
  - 2005 Chadwick, R.S, Manoussaki, D., Dimitriadis, E.K., Shoelson, B., Ketten, D.R., Arruda, J., O'Malley, J.T. Is cochlear coiling a determinant of low-frequency hearing ability? Biophysics of the Cochlea: from Molecules to Models.
  - 2005 Montie, E., Schneider, G., Moore, M., Ketten, D., Arruda, J., Touhey, K., Bogomolni, A., and Hahn, M. Using Magnetic Resonance Imaging (MRI) to Obtain Volume Estimates of Cetacean Brain Regions that Depend on Thyroid Hormones for Maturation. Florida Marine Mammal Health Conference, Gainesville,FL
  - 2005 Ketten, D.R., J. Shoshani, D. P. Domning, J. O'Malley, J. Arruda, S. Cramer, C. O'Connell, and J. Meng Great ears: functional comparisons of land and marine leviathan auditory systems. Invited paper, 9<sup>th</sup> International Mammalogical Congress. Sapporo, Japan
  - 2004 Ketten, D.R., Dolphin, W.F, Williams, R. Arruda, J.O'Malley, J. In vivo imaging correlated with otoacoustic emissions as a metric for ear disease in seals. Invited paper Acoustical Society of America, San Diego.
  - 2004 Montie, E., M. Moore, D. Ketten, J. Arruda, S.Cramer, I. Fischer, K.Touhey. K.Patchett, A. Bogomolni, B. Lentell, B. Sharp, G. Early and M. Hahn. Anatomy, Three-Dimensional Reconstructions, and Volume Estimation of the Brain of the Atlantic White-sided Dolphin (*Lagenorhynchus acutus*) from Magnetic Resonance Images. NE Stranding Conference
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- 2004 Montie, E., M. Moore, D. Ketten, J. Arruda, A. Bogomolni, and M. Hahn. Using Magnetic Resonance Imaging (MRI) to Obtain Shapes and Sizes of Pinniped and Cetacean Brain Regions that Depend on Thyroid Hormones for Maturation. EPA STAR Graduate Fellowship Conference.
  - 2004 Parks, S.E, D.R. Ketten, J.T. O'Malley, and J. Arruda Hearing in the North Atlantic right whale: Anatomical predictions. Acoustical Society of America, New York, NY.
  - 2003 Ketten, D.R., T. Rowles, S. Cramer, J. O'Malley, J. Arruda, and P. Evans. Cranial Trauma in Beaked Whales. Proceedings of the Workshop on Active Sonar and Cetaceans, ECSN, no. 42, pp. 21-27.
  - 2003 Ketten, D.R., J. Arruda; S. Cramer; J. O'Malley; J. Reidenberg, J; S. McCall; V. Naples; J. Craig, Experimental Measures of Blast Trauma in Marine Mammals, Environmental Consequences of Underwater Sound Workshop, San Antonio, Texas.
  - 2001 Marsh, S.E., Fischer, I., Arruda, J. and Ketten, D.R. Morphometric analyses of hearing in two families of pinnipeds, Acoustical Society of America.
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#### MEMBERSHIPS/LICENSES

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- American Registry of Radiologic Technologists ID#209970
- Massachusetts Radiation Control License #02844
- Marine Mammal Society