Research Technician Position in the Department of Biology at East Carolina University

Position description and key responsibilities: The Asch Fisheries Oceanography Lab at East Carolina

rusmon uescripuon and key responsionities: in e Asen rismeres Oceanography Lab at East Carolina University (Iocate in Greenville, NC; https://url/defense.prorofpoint.com/v2/url?us-thtp:3.4\_www.ecu.edu\_cs-2Dcas\_biology\_Rebecca-SFAsch.cfm&d=DwIF-g&c=Ngd-ta5yRYstgeUSEDgxhcqsYYY1Ks5ogLxWPA\_2WIe4&r=e2OJ1azRFn8ihJzb2HxZTOAqoiqLvxfeeaTyN59ZLol&m=80yrp6Coty8adxK4vDnkjOTPn2kyVfy8OHxteNQTEYY&s=bm90-jka(22DV v)G/BdESAWP0\_FSNOMntDqpPHI6hHU&e=) is seeking to hire research technicain for a full-time, temporary position. Our lab is partnering with the Beaufort, North Carolina branch of the National Oceanic and Atmospheric Administration (NOAA) in order to exempt the Ended the Samional the Information Research Burghane Burghane Burghane Burghane Burger Samona the Beaufort Inbuf Ioble Information Research Burghane Burghane Burghane the Beaufort, North Carolina branch of the National Oceanic and Atmospheric Administration (NOAA), in order to expand the Beaufort Intel Ichthyoplankton Sampling Program (BIISP). BIISP has been collecting weekly ichthyoplankton samples at Beaufort Intel during fall through spring months since the year 1987, making it the longest continuously operating ichthyoplankton time series on the east coast of the U.S. The goal of this program is to measure estuarine ingress of larval fish species that spawn offshore but utilize estuarine habitats during the fish's juvenile life history stage. This time series has the potential to provide valuable information on how Load fish communities are responding to climate variability and climate change. The Asch Fisheries Oceanography lab is investigating this question by examining variations in the seasonal timing of larval fish ingress and changes in species composition as a function of a number of climatic and ecological variables. We plan to expand upon the BIISP time series by lengthening the duration of the sampling season so that it is year round, collectine weekly mesozonolankon samples. and conducting YSI profiles of temperature. collecting weekly mesozooplankton samples, and conducting YSI profiles of temperature, salinity, dissolved oxygen, pH, and fluorescence We seek a technician to assist our lab with this work. The technician's responsibilities will initially We seek a technician to assist our nay with this work. The technician's responsibilities with initially focus on analyzing the mesozonapolankton samples using a ZooScan system (https://urldefense.proofpoint.com/v2url?n=http=3A\_\_www.hydroptic.com\_zooscan.html&d=DwIF-g&c=Ngd-ta5yRYsqcUsEDgshcqsYYY1Xs5ogLxWPA\_2Wlc4&r=e2011azRFn8h1/zb2HxZT0AqoiqLvxfceaTyN59ZLol&m=80yrp6Coty8adxK4vDnkjOTPn2kyVfy8OHxteNQTEYY&s=WlsFyhA5TGCmYrrAZGQCA0NtKAvMzGAEitbrjc5iHCl&e= ). A ZooScan consists of a flatbed scanner that is used to electronically scan size-fractionated zooplankton samples. ZooProcess software is then used to semi-automatically identify species in the sample using a machine learning algorithm adapted to local ecological conditions. The technician will be in charge of scanning samples, working with ZooProcess to train the machine learning algorithm, and verifying classification accuracy once the algorithm has been trained. Beginning during spring 2018 and together with other members of the Asch lab, the technician will also be responsible for traveling to Beaufort once a week, collecting the enhanced BIISP samples, and recording and transcribing YSI water quality measurements. Since larval fish are capable of avoiding capture by plankton nets during the day, all sampling will be conducted a night and will be timed to coincide with tidal fluctuations. The technician will also be in charge of sorting and identifying larval and juvenile fishes in 2-4 ichthyoplankton samples collected each week that represent additional sampling beyond the standard BIISP routine. Lastly, it is expected that this technician will take on some duties associated with lab management Lastly, it is expected that this technician will take on some duties associated with lab management including training undergraduate and graduate students in lab protocols, helping to order lab supplies, assuring compliance with lab safety regulations, and maintaining the lab in clean and functioning order. The successful technician will potentially be encouraged to take on additional roles associated with statistical analysis of data, preparation of manuscripts for publication, and the presentation of results at scientific conferences. This will initially be a one-year position, with the potential for renewal contingent upon satisfactory performance and available funding. There will be a two-month probationary period associated with this hire.

Minimum qualifications:

Animum quantrations: B.S. degree in marine science, biology, ecology, oceanography, natural resource management, or similar fields. Must have taken at least introductory coursework in marine ecology. -Some experience working in an ecology lab and using a dissecting microscope. -Some experience working in an econogy tak and using a dustecting iniciosopie.
-Ability to drive state owned vehicles, conduct ecological fieldwork in wet and occasionally uncomfortable conditions at night-time, and carry field equipment weighing up to -30 lbs.
-Independent self-starter who is exciting to learn new skills and has the ability to problem shoot technical challenges.
-Occasionally travel overnight to receive technical training or attend scientific conferences.

Preferred qualifications

-Masters of science degree in marine science, biology, ecology, oceanography, natural resource management, or similar fields.

-1-2 years of experience at the post-baccalaureate level working in a lab focused on conducting marine ecological research.

-Previous experience operating a ZooScan and collecting and processing ichthyoplankton and zooplankton samples in marine and estuarine environments. Experience with identification of ichthyoplankton and zooplankton species, especially those found in the Southeast U.S. -Experience analyzing data and writing computer programs with MATLAB or R. Experience with multivariate ecological statistics.

-Written and published scientific manuscripts and presented scientific results at conferences.

Application instructions: Applications for this position are to be completed online, with full

Application instructions: Applications for fits position are to be completed online, with full instructions available at the following URL: https://uldefases.profopint.com/vj2uf12=https:3A\_\_ecu.peopleadmin.com\_postings\_11157&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA\_2WIc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeaTyN59ZLoI&m=80yrp6Coty8adxK4vDnkjOTPn2kyVfy8OHxteNQTEYY&s=xaj01OxzAVAHNup-jbowQYIAQUAOReNePkDNkkkpa4Y&e=. Please contact Rebecca Asch (aschr16ecu.edu) regarding any questions that you may have about this posting. The deadline for applications is on January 4, 2018.