

Past Tibor T. Polgar Fellowships

The Hudson River estuary stretches from its tidal limit at the Federal Dam at Troy, New York, to its merger with the New York Bight, south of New York City. Within that reach, the estuary displays a broad transition from tidal freshwater to marine conditions that are reflected in its physical composition and the biota it supports. These characteristics present a major opportunity and challenge for researchers to describe the makeup and workings of a complex and dynamic ecosystem. The Tibor T. Polgar Fellowship Program provides funds for graduate and undergraduate students to study selected aspects of the physical, chemical, biological, and public policy realms of the estuary.

Since its inception in 1985, the program has provided approximately \$1 million in funding to 189 students and can boast the involvement of 116 advisors from 64 institutions.

The program is named in memory of Dr. Tibor T. Polgar, an estuarine biologist who was a key advisor to the Hudson River Foundation for Science and Environmental Research when the fellowship program was created. The program is conducted jointly by the Hudson River Foundation and the New York State Department of Environmental Conservation. The fellowships are funded by the Foundation.

Past reports of the Tibor T. Polgar Fellowship program are listed below. Download the entire report or particular sections as PDF files.

[Final Reports of the Tibor T. Polgar Fellowship Program, 2014](#) - Sarah Fernald, David Yozzo, and Helena Andreyko, editors

- I. [Factors for Loss and Restoration of *Vallisneria americana* in the Hudson River - Herbivory and Depth in Sediment](#) - L. Jonas Hamberg, Karin Limburg and Stuart Findlay
- II. [The Conservation Status of Goldenclub \(*Orontium aquaticum*\) in the Freshwater Tidal Wetlands of the Hudson River](#) - Julia C. Les and Erik Kiviat
- III. [Subtidal Survey for the Presence of Oyster Reefs in Portions of Raritan Bay, Arthur Kill, and the Hackensack River of the Hudson River Estuary](#) - Erik Bugenhagen and Tiffany Medley
- IV. [Prey density effects on predator foraging: a comparison of prey loss and implications towards a natural insect community](#) - Katherine Guild, Jeffrey Levinton
- V. [Impact of aquatic toxins on heart development in Atlantic and shortnose sturgeon larvae](#) - Corinna Singleman and Nathalia Holtzman
- VI. [Tidal Community Exchange Between the Hudson River and a Tributary](#) - Alec Schmidt, Karin Limburg and Alison Robbins
- VII. [Interactions between the Alien Oriental Weatherfish \(*Misgurnus anguillicaudatus*\) and Native Fishes in the Klyne Esopus Kill, a Hudson River Tributary](#) - Anastasia Frank, Robert E. Schmidt, Suparna Bhalla and Chris H. Bowser
- VIII. [The Effects of Dams on Densities and Sizes of American Eels in the Bronx River](#) - Richard DeMarte, John Waldman and Michael S. Bednarski

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- I. [Reconstructing Hudson River Sedimentary Signals](#) - Kyle M. Monahan and Dallas Abbott
 - II. [Sea Level Rise and Sediment: Recent Salt Marsh Accretion in the Hudson River Estuary](#) - Troy D. Hill and Shimon C. Anisfeld
 - III. [Nutrient Pollution in Hudson River Marshes: Effects on Greenhouse Gas Production](#) - Angel Montero, Brian Brigham and Gregory D. O'Mullan
 - IV. [Microbial Agents of Concern in Water and Air at the Hudson River Estuary Waterfront](#) - Sherif Kamal and M. Elias Dueker
 - V. [Occurrence and Ecological Effects of Amphetamine Type Stimulants in Wastewater Effluent](#) - Alexis M. Paspalof, Daniel Snow and Emma Rosi-Marshall
 - VI. [The Distribution of Invasive *Celastrus orbiculatus* in an Anthropogenically Disturbed Riparian Ecosystem](#) - Shabana Hoosein and George Robinson
 - VII. [Hypoxia Tolerance of the Invertebrates Associated with Water-chestnut Beds \(*Trapa natans* L.\) in the Hudson River](#) - Mariana Carolina Teixeira and David L. Strayer
 - VIII. [The Distribution and Feeding Ecology of Larval Sea Lampreys in the Hudson River Basin](#) - Thomas M. Evans and Karin E. Limburg
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- I. [Recruitment of Oysters within the Hudson River Estuary](#) - Ryan Carthan and Jeffrey S. Levinton
 - II. [The Impacts of the Zebra Mussel \(*Dreissena polymorpha*\) on the Feeding Ecology of Early Life Stage Striped Bass \(*Morone saxatilis*\)](#) - Grace A. Casselberry and Eric T. Schultz
 - III. [Field and Laboratory Investigations on the Effects of Salinity on Decomposition Dynamics among the Hudson River's Freshwater Tidal Wetlands](#) - Craig T. Connolly, Stuart E.G. Findlay, and William V. Sobczak
 - IV. [Temperature as a Driver of a Size-Structure Shift in Zebra Mussels \(*Dreissena polymorpha*\) in the Hudson River](#) - Jessica A. Gephart, Michael Pace, and David Strayer
 - V. [Who Controls Whom? Linking Predator-Prey Dynamics Between Mud Crabs and Juvenile Oysters to Restoration Efforts in the New York Metropolitan Region](#) - Rebecca E. Kulp and Bradley J. Peterson
 - VI. [Fish Parasites in the Hudson River Estuary's Littoral Habitats: A Prelude to Restoration](#) - Emily C. Ogburn, Karin E. Limburg, and Christopher M. Whipps
 - VII. [Investigation of Estuarine Sediment as a Reservoir for Sewage Associated Bacteria](#) - Erin Schneider and Gregory D. O'Mullan
 - VIII. [Developing a Nonlethal Field Method for Determining Lipid Content of American Eels \(*Anguilla rostrata*\)](#) - Sean O. I. Swift, Robert E. Schmidt, and David R. Myers
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 - III. [Prevalence and Characterization of Cardiac Pathology Induced by the Parasitic Nematode *Philometra saltatrix* in Juvenile Bluefish of the Hudson River Estuary](#) – Sarah Koske and Francis Juanes
 - IV. [Assessment of Temporal and Geographic Population Structuring of *Phragmites australis* Along the Hudson River Using Microsatellite DNA Markers](#) – Daniel Lipus, Joseph Stabile and Isaac Wirgin
 - V. [Pilot Study for Laser Ablation and Stable Isotope Analysis of Feathers, Eggshells, and Prey of Great Blue Herons Sampled Across an Urbanization Gradient in the Mid-Hudson River Valley](#) – Jill Mandel and Karin Limburg
 - VI. [Diet of American Eel \(*Anguilla rostrata*\) Elvers in a Hudson River Tributary](#) – Leah Pitman and Robert Schmidt
 - VII. [The Effects of Salinity Intrusion on the Biogeochemistry of Hudson River Tidal Freshwater Wetlands](#) – Robert Osborne, Stuart Findlay and Melody Bernot
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 - IV. [Invasive-Species Removals and Nitrogen-Removal Ecosystem Services in Freshwater Tidal Marshes](#) – Mary Katherine Alldred and Stephen B. Baines
 - V. [The Effects of an Urbanized Estuary on the Physiology and Metal Storage of the Eastern Oyster, *Crassostrea virginica*](#) – Allison S. Mass and William Wallace
 - VI. [Impact of Silver Nanoparticle Exposure on Crayfish \(*Orconectes virilis*\) Growth, Chemistry and Physiology in Controlled Laboratory Experiment and Hudson River Ecosystem](#) – Allen Clayton and Zofia Gagnon
 - VII. [Quantifying Larval Fish Habitat in Shoreline and Shallow Waters of the Tidal Hudson River](#) – Claire E. Stouthamer and Mark B. Bain
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VIII. [Using Stable Isotopes to Examine Foraging Ecology of New York Harbor Colonial Waterbirds](#) - Elizabeth C. Craig, Paul D. Curtis and Susan B. Elbin

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 - IV. [Soniferous Fishes in Tidal Freshwater Tivoli Bay of the Hudson River](#) - Katie A. Anderson, Rodney Rountree, and Francis Juanes
 - V. [Dispersal and Colonization of *Limnodrilus hoffmeisteri* in a Hudson River Tidal Marsh Cove](#) - Maggie Fung and Jeffrey S. Levinton
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 - VII. [Effects of Summer Temperatures on the Growth and Condition of Juvenile Atlantic Tomcod, *Microgadus tomcod*](#) - Anne F. Bonvegna, David A. Witting, and R. Christopher Chambers
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 - V. [Does Otolith Composition Reflect Early Life History? A Prospective Analysis in Atlantic Tomcod *Microgadus tomcod* and Weakfish *Cynoscion regalis* from the Hudson River Estuary](#) - Jennifer M. Martin and Eric T. Schultz
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 - VI. [Ontogenetic Shifts in Feeding Habits of Juvenile Striped Bass \(*Morone saxatilis*\) in the Mid-Hudson River Estuary](#) - Rebecca C. Jordan and Francis Juanes
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 - VII. [Seasonal Presence and Movements of Fish Populations in the Tidal Reach of Quassaic Creek, a Hudson River Tributary \(HRM 60\): Documentation of Potamodromy, Anadromy, and Residential Components](#) - Thomas R. Lake and Robert E. Schmidt
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