

Samir Harshad Patel, Ph.D.
Coonamessett Farm Foundation, Inc.
spatel@cfarm.org | 508-356-3601

Education

Ph.D., Environmental Science, Drexel University 2008 - 2013

B.A., Biological Sciences, George Washington University 2001 - 2005

Relevant Employment

Coonamessett Farm Foundation, Inc, Senior Research Biologist, East Falmouth, MA Since Aug 2014

Fisheries and Oceans Canada, Data Analyst, Saint Andrews, New Brunswick Feb – Apr 2016

The Leatherback Trust, Post-Doctoral Researcher, Monterey Bay, CA Jan – Jun 2014

Publications

- Hatch JM, Murray KM, **Patel SH**, Smolowitz RJ, Haas HL. 2023. Evaluating simple measures of spatial-temporal overlap as a proxy for encounter risk between a protected species and commercial fishery. *Frontiers in Conservation Science*. 10.3389/fcsc.2023.1118418.
- Forbes ZR, Scro AK, **Patel SH**, Dourdeville KM, Prescott RL, Smolowitz RM. 2023. Fecal and cloacal microbiomes of cold-stunned loggerhead *Caretta caretta*, Kemp's ridley *Lepidochelys kempii*, and green sea turtles *Chelonia mydas*. *Endangered Species Research*. 10.3354/esr01220
- Hatch JM, Haas HL, Sasso CR, **Patel SH**, Smolowitz RJ. 2022. Estimating the complex patterns of survey availability for loggerhead turtles. *The Journal of Wildlife Management*. 86(4):e22208.
- Kot CY, **et al**. 2022. Network analysis of sea turtle movements and connectivity: A tool for conservation prioritization. *Diversity and Distributions* 28.4: 810-829.
- Robinson NJ, García-Párraga D, Stacy BA, Costidis AM, Blanco GS, Clyde-Brockway CE, Haas HL, Harms CA, **Patel SH**, Stacy NI, Fahlman A. 2021. A Baseline Model for Estimating the Risk of Gas Embolism in Sea Turtles During Routine Dives. *Frontiers in Physiology*, 12.
- Patel SH**, Winton MV, Hatch JM, Haas HL, Saba VS, Fay G, Smolowitz RJ. 2021. Projected shifts in loggerhead sea turtle thermal habitat in the Northwest Atlantic Ocean due to climate change. *Scientific Reports*, 11(1).
- Crowe LM, Hatch JM, **Patel SH**, Smolowitz RJ, Haas HL. 2020. Riders on the storm: loggerhead sea turtles detect and respond to a major hurricane in the Northwest Atlantic Ocean. *Movement Ecology*. 8(1):1-3.
- Yang T, Haas HL, **Patel SH**, Smolowitz R, James MC, Williard AS. 2019. Blood biochemistry and haematology of migrating loggerhead turtles (*Caretta caretta*) in the Northwest Atlantic: reference intervals and intra-population comparisons. *Conservation Physiology*. 7(1).
- Patel SH**, Barco SG, Crowe, LH, Manning JP, Matzen E, Smolowitz RJ, Haas HL. 2018. Loggerhead turtles are good ocean-observers in stratified mid-latitude regions. *Estuarine, Coastal and Shelf Science*. 213: 128 – 136.
- Patel SH**, Dodge KL, Haas HL, Smolowitz RJ. 2016 Videography reveals in-water behavior of loggerhead turtles (*Caretta caretta*) at a foraging ground. *Front Mar Sci* 3, 254.
- Patel SH**, Morreale SJ, Saba VS, Panagopoulou A, Margaritoulis D, Spotila JR. 2016. Climate Impacts on Sea Turtle Breeding Phenology in Greece and Associated Foraging Habitats in the Wider Mediterranean Region. *PLoS ONE* 11: e0157170.
- Patel SH**, Morreale SJ, Panagopoulou A, Bailey H, Robinson NJ, Paladino FV, Margaritoulis D, Spotila JR. 2015. Change-point analysis: a new approach for understanding animal movements and behaviors from satellite telemetry data. *Ecosphere* 6: 1-13.
- Patel SH**, Panagopoulou A, Morreale SJ, Kilham SS, Riggall T, Margaritoulis D, Spotila JR. 2015. Fitness differences between postnesting loggerhead sea turtles (*Caretta caretta*) from Rethymno, Crete, Greece. *Mar Eco Prog Ser* 535: 231-241.

Smolowitz RJ, **Patel SH**, Haas HL, Miller SA. 2015. Using a remotely operated vehicle (ROV) to observe loggerhead sea turtle (*Caretta caretta*) behavior on foraging grounds off the mid-Atlantic United States. *Jour Exp Mar Bio Eco* 471: 84-91.

Spotila JR, Saba VS, **Patel SH**, Santidrián Tomillo P. 2015. Warming Climate: A New Threat to Leatherback Turtles. In: *Leatherback Turtles: Biology and Conservation* (eds. Spotila JR and Santidrián Tomillo P) John Hopkins Press, USA.

Grants and Contracts (Total: [REDACTED])

Patel SH, Smolowitz RJ and Siemann L. NOAA Atlantic Sea Scallop Research Set-Aside Program.

Understanding the Impacts of the Atlantic Sea Scallop Fishery on Loggerhead Sea Turtles. **2015:**

[REDACTED]; **2016:** [REDACTED]; **2017:** [REDACTED]; **2018:** [REDACTED]; **2019:** [REDACTED]; **2021:** [REDACTED]; **2022:** [REDACTED]. **2023:** [REDACTED]

L. Siemann and **Patel SH**. 2022. NOAA Atlantic Sea Scallop Research Set-Aside Program. Using Sedimentary eDNA to Track the Presence of Scallop Spat and Predators. [REDACTED].

Patel SH, Komoroske L, Logan, J, Mils S, Robinson N, Dourdeville K, Prescott B, Haas H, Rogers R. 2022. MA Environmental Trust. Understanding the health and distribution of sea turtles within Massachusetts waters. [REDACTED].

Siemann L and **Patel SH**. 2021. NOAA Atlantic Sea Scallop Research Set-Aside Program. Developing a tool to quantify the impact of the scallop fishery on loggerhead sea turtles. [REDACTED].

O'Hara T, Jennings N, Davis F, **Patel S**, Garcia L, Siemann L. 2021-2022. Atlantic States Marine Fisheries Commission. Developing a hybrid learning curriculum for supplemental at-sea monitor training. [REDACTED].

Patel SH and Siemann L. 2020. BOEM Contract 140M0120P0032. Behavioral response of sea turtles from controlled exposures to a mobile impulsive sound. [REDACTED].

Patel SH and Clermont J. 2018. Saltonstall-Kennedy Fund. Improving oceanographic models of bottom temperature within the Mid-Atlantic Bight through novel data assimilation and stakeholder input. [REDACTED].

Patel SH. 2018. Saltonstall-Kennedy Fund. Using climate change scenarios to project loggerhead turtle distributions in the US Mid-Atlantic. [REDACTED].

Carlson A and **Patel SH**. 2018. Chesapeake Bay Fisheries Research Program. Examining the movement ecology and habitat utilization of black sea bass (*Centropristis striata*) in Chesapeake Bay using telemetry techniques. [REDACTED].

Patel SH. 2018. MA Environmental Trust. Nearshore habitat utilization by sea turtles within Massachusetts waters. [REDACTED].

Patel SH and Siemann L. 2017. Bycatch Reduction Engineering Program. Improving the Understanding of Sea Turtle Entanglement in Vertical Lines. [REDACTED].

Siemann L, **Patel SH**, Davis F. 2017. Saltonstall-Kennedy Fund. Developing a method for assessing blueline (*Caulolatilus microps*) and golden (*Lopholatilus chamaeleonticeps*) tilefish stocks using a baited underwater video system. [REDACTED].

Clermont J, Alexander R, **Patel SH**. 2017. Bycatch Reduction Engineering Program. Testing selectivity and raised webbing gillnets on target and non-target species in the northeast haddock fishery. [REDACTED].

Siemann L, **Patel SH**, Davis F. 2017. Marine Mammal Commission. Development and testing of an inexpensive GPS radio buoy system for early notification of whale entanglements. [REDACTED].

Huntsberger C, Siemann L, **Patel SH**, Smolowitz RJ. 2015. Saltonstall-Kennedy Fund. Investigating Offshore Essential Fish Habitat of Southern New England Winter Flounder. [REDACTED].

Ronald Joel Smolowitz

President, Coonamessett Farm, Inc
 277 Hatchville Road, East Falmouth MA 02536
 Phone: 508-648-2018
 email: cfarm@capecod.net

WORK EXPERIENCE

October 1989 - Present	President, Coonamessett Farm, Inc
January 1, 2006 – Present	Treasurer, Coonamessett Farm Foundation, Inc
January 1985 - October 1989	Director, Special Projects, NERO, NMFS
July 1982 - January 1985	Commanding Officer, NOAA Ship ALBATROSS IV
August 1979 - January 1982	OIC, Northeast Marine Support Facility, NOS
August 1977 - June 1982	Technical Projects Coordinator, NEFSC, NMFS
February 1975 - August 1977	CO, NOAA Ship TOWNSEND CROMWELL

EDUCATION

College: State University of New York Maritime College
 Degree conferred: Bachelor of Engineering/Marine (1969)

EXPERTISE

Exploratory fishing and gear development; marine living resource surveys; scallop fishery management; marine protected species gear and behavioral research; small fruit and vegetable farming; oyster aquaculture.

PUBLISHED PAPERS:

Smolowitz, R. J. 1972. Shipboard procedures to decrease lobster mortality. *Comm. Fish. Rev.* 34 (5-6):44-48

Smolowitz, R. J. 1978. Trap design and ghost fishing: An overview. *Mar. Fish. Rev.* 40 (5-6):2-8

Smolowitz, R. J. 1978. Trap design and ghost fishing: Discussion. *Mar. Fish. Rev.* 40 (5-6):59-67

Smolowitz, R. J. 1978. Annotated bibliography on lobster trapping and related subjects. *M. Fish. Rev.* 40 (5-6):68-77

Pecci, K. J., R. A. Cooper, C. D. Newell, R. A. Clifford, and **R. J. Smolowitz** 1978. Ghost fishing of vented and unvented lobster, *Homarus Americanus*, traps. *Mar. Fish. Rev.* 40 (5-6):9-43

Smolowitz, R. J. and F. M. Serchuk 1980. Recent USA lobster-trap gear research: Applications and implications. Canadian Technical Report Fish Aquat. Sci. 932 p73-76

Crossen, J. M. and **R. J. Smolowitz** 1980. Power system requirements of an electro-hydraulic clam dredge. *Mar. Technology* 80. *Mar. Tech. Soc.* p433-438

Twohig, P. and **R. J. Smolowitz** 1980. The application of an underwater color video system to fishing gear research. *Proc Symp on Sci and Tech. Applications of Underwater photography*

Serchuk, F. M. and **R. J. Smolowitz**. 1980. Size selection of sea scallops by an offshore scallop survey dredge. *ICES C.M.* 1980/K:24. 38pp.

Smolowitz, R. J. and V. E. Nulk 1982. The design of an electrohydraulic dredge for clam

surveys. *Marine Fish Rev* 44. 19 pp.

Smolowitz, R. J. 1983. Fisheries engineering and its role in resource management. *MTS Jnal* Vol 17(1):31-41.

Smolowitz, R. J. 1983. Mesh size and the New England ground fishery Applications and implications. NOAA Tech Rep. NMFS SSRF-77-1. 60pp.

Smolowitz, R. J. and R. L. Edwards 1983. The application of technology to the fishing industry. *OCEANS 83 Marine Tech Soc.* p853-856.

Smolowitz, R. J. and F. M. Serchuk, J. Nicolas, and S. E. Wigley 1985. Performance of an offshore scallop survey dredge equipped with rock chains. NAFO SCR DOC 85/89 Serial No N1064. 29pp.

Smolowitz, R. J. and F. M. Serchuk, 1987. Current technical concerns with Sea Scallop management. *OCEANS 87 Proceedings.* P. 639-644.

Smolowitz, R. J. and F. M. Serchuk, 1988. Marine fisheries technology in the United States: Status, trends and future directions. *OCEANS 88 Proceedings.* 5pp.

Smolowitz, R. J. and F. M. Serchuk, 1988. Developments in sea scallop gear design. *Proc World Symposium on Fishing Gear and fishing vessel design.* P. 531-540.

Smolowitz, R. J., F. M. Serchuk, and R.J. Reidman. 1989. The use of a volumetric measure for determining sea scallop meat count. *J. of Shellfish Research*, Vol. 8, No. 1, 151-172.

Serchuk, F. M. and **R. J. Smolowitz.** 1990. Ensuring fisheries management dysfunction: the neglect of science and technology. *Fisheries* 15:4-7.

Smolowitz, R. J. and D. N. Wiley. 1992. A model for conflict resolution in marine mammal/fisheries interactions: The New England Harbor Porpoise Working Group. *MTS 92.* pp 354-360.

Smolowitz, R. J. 2006. Sea Scallop Harvest Gear: Engineering for Sustainability. *J. Mar. Tech. Soc.* Vol. 40; No. 3. P.25-9.

Smolowitz, R. J., H. Haas, H. Milliken, M. Weeks, and E. Matzen. 2010. Using Sea Turtle Carcasses to Assess the Conservation Potential of a Turtle Excluder Dredge. *North American Journal of Fisheries Management.* 30:993–1000.

Smolowitz, R. J., H.O. Milliken, and M. Weeks. 2012. Design, Evolution, and Assessment of a Sea Turtle Deflector Dredge for the U.S. Northwest Atlantic Sea Scallop Fishery: Impacts on Fish Bycatch. *North American Journal of Fisheries Management*, 32: 65-76.

Ceriani, S. A., J. D. Roth, C. R. Sasso, C. M. McClellan, M. C. James, H. L. Haas, **R. J.**

Smolowitz, D. R. Evans, D. S. Addison, D. A. Bagley, L. M. Ehrhart, and J. F. Weishampel. 2014. Modeling and mapping isotopic patterns in the Northwest Atlantic derived from loggerhead sea turtles. *Ecosphere* 5: 1-24.

Smolowitz, R. J., S. H. Patel, H. L. Haas, and S. A. Miller. 2015. Using a remotely operated vehicle (ROV) to observe loggerhead sea turtle (*Caretta caretta*) behavior on foraging grounds off the mid-Atlantic United States. *Journal of Experimental Marine Biology and Ecology* 471: 84-91.

Siemann, L. A., C. J. Parkins, and **R. J. Smolowitz.** 2015. Scallops caught in the headlights: swimming escape behavior of the Atlantic sea scallop (*Placopecten magellanicus*) reduced by artificial light. *ICES Journal of Marine Science* 72: 2700-2706.

Smolowitz, R. J., L. A. Siemann, C. Huntsberger, and D. Boelke. 2016. Application of seasonal closures to reduce flatfish bycatch in the USA Atlantic sea scallop fishery. *Journal of Shellfish Research* 35: 475-480.

Heather Lynn Haas
heather.haas@noaa.gov
 Telephone 508-495-2315

Current Position:

Research Fisheries Biologist, Sea Turtle Ecology Lead, Northeast Fisheries Science Center, National Marine Fisheries Service, Woods Hole, MA 02543

- Lead research program to study sea turtle ecology and behavior
- Participate on research surveys and field work and collect and analyze data on the abundance, distribution, bycatch, biology, and ecology of marine turtles in NW Atlantic;
- Improve marine turtle population studies and management measures;
- Analyze biological and ecological sea turtle data.
- Serve as a consultant on sea turtle issues to various internal and external groups

Education:

Louisiana State University, Baton Rouge, Louisiana (8/97-12/01; GPA 4.0)

Doctor of Philosophy in Oceanography & Coastal Sciences; Minor in Experimental Statistics
 Dissertation: Modeling Shrimp Population Dynamics

University of Massachusetts Dartmouth, South Dartmouth, Massachusetts (8/95-8/97; GPA 4.0)

Master of Science in Marine Biology; Thesis on Bivalve Behavior;

Miami University, Oxford, Ohio (8/87-5/92; GPA 3.6 overall and 4.0 in major)

Bachelor of Philosophy, Major in Interdisciplinary Studies; Biological & Cultural Diversity
 Honors Program Graduate, Honors project in non-human primate behavior

Post-graduate courses: Introduction to Distance Sampling, Advanced Techniques in Distance Sampling, Mixed and Hierarchical Linear Models, Application of Akaike's information criterion (AIC) for model selection, Fast rescue boat training

Research Experience:

Postdoctoral Research Ecologist (1/02-12/03), Marine Biological Laboratory, Woods Hole, MA
 Research Fellow (08/1997- 08/2001) and Research Assistant (08/2001 - 12/2001), Coastal Fisheries Institute, Department of Oceanography and Coastal Sciences, LSU

Honors and Awards:

United States Department of Commerce Silver Medal Award (2007)

Protected Species Award (2003)

Best Student Presentation (Louisiana Chapter of the American Fisheries Society, 2001)

Dr. Theodore Ford Memorial Endowed Scholarship (Department of Oceanography, LSU, 2001) The

Joseph Lipsey Senior Memorial Scholarship (Department of Oceanography, LSU, 2001) Louisiana

Coastal Conservation Association / J Pollard Sealy Memorial Scholarship (2000)

Best Oral Presentation (Aquatic & Marine Science Sym. of LA Univ. Marine Consortium, 2000) Best

Oral Presentation (Department of Oceanography and Coastal Sciences, LSU, fall 1997) Board of

Reagents Graduate Fellowship in Coastal Processes (LSU, 1997-2001)

Selected Papers:

Winton, MV, G Fay, HL Haas, M Arendt, S Barco, M James, C Sasso, R Smolowitz. In Press.

Estimating the distribution and relative density of tagged loggerhead sea turtles in the western North Atlantic from satellite telemetry data using geostatistical mixed effects models. Marine Ecology Progress Series.

Warden, ML, HH Haas, PM Richards, KA Rose, J Hatch. 2017. Should observers walk or fly to monitor trends in sea turtle populations? Endangered Species research 34: 323-337.

Patel, SH, Dodge, KL, Haas, HL, & Smolowitz, RJ. 2016. Videography Reveals In-Water Behavior of

- Loggerhead Turtles (*Caretta caretta*) at a Foraging Ground. *Front. Mar. Sci.* 3, 254.
- Warden, M, HL Haas, KA Rose, PM Richards. 2015. A spatially explicit population model of simulated fisheries impact on loggerhead sea turtles (*Caretta caretta*) in the Northwest Atlantic Ocean. *Ecological Modelling* 299: 23-39.
- Seminoff, JA, CD Allen, GH Balazs, PH Dutton, T Eguchi, HL Haas, SA Hargrove, MP Jensen, DL Klemm, AM Lauritsen, SL MacPherson, P Opay, EE Possardt, SL Pultz, EE Seney, KS Van Houtan, RS Waples. 2015. Status Review of the Green Turtle (*Chelonia mydas*) Under the U.S. Endangered Species Act. NOAA Technical Memorandum, NOAA NMFS-SWFSC-539.
- Smolowitz, RJ, SH Patel, HL Haas, and S Miller. 2015. Using a remotely operated vehicle (ROV) to observe loggerhead sea turtle (*Caretta caretta*) behavior on foraging grounds off the mid-Atlantic United States. *Journal of Experimental Marine Biology and Ecology*.
- Scott-Hayward, L. A. S., Borchers, D. L., Burt, M. L., Barco, S., Haas, H. L., Sasso, C. R., & Smolowitz, R. J. (2014). Use of Zero-and One-Inflated Beta Regression to Model Availability of Loggerhead Turtles off the East Coast of the United States.
- Ceriani, S. A., Roth, J. D., Sasso, C. R., McClellan, C. M., James, M. C., Haas, H. L., ... & Weishampel, J. F. (2014). Modeling and mapping isotopic patterns in the Northwest Atlantic derived from loggerhead sea turtles. *Ecosphere*, 5(9), art122-art122.
- Haas, HL 2010. Using observed interactions between sea turtles and commercial bottom trawling vessels to evaluate the conservation value of trawl gear modifications. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science*. 2:263–276.
- Smolowitz, R, H Haas, M Milliken, M Weeks, E Matzen. 2010. Using sea turtle carcasses to assess the conservation potential of a turtle excluder dredge. *North American Journal of Fisheries Management* 30:993–1000.
- Haas, HL, CJ Freeman, JM Logan, L Deegan, and EF Gaines. 2009. Examining mummichog growth and movement: Are some individuals making intra-season migrations to optimize growth? *Journal of Experimental Marine Biology and Ecology* 369: 8-16.
- Haas, HL, E LaCasella, R LeRoux, H Milliken, and B Hayward. 2008. Characteristics of sea turtles incidentally captured in the U.S. Atlantic sea scallop dredge fishery. *Fisheries Research* 93: 289–295.
- Milliken, HO, L Belskis, W DuPaul, J Gearhart, H Haas, J Mitchell, R Smolowitz, W Teas. 2007. Evaluation of a modified scallop dredge's ability to reduce the likelihood of damage to loggerhead sea turtle carcasses. U.S. Dep. Commer., NEFSC. Ref. Doc. 07-07; 30 p.
- Logan, J, H Haas, L Deegan, E Gaines. 2006. Turnover rates of nitrogen stable isotopes in the salt marsh mummichog *Fundulus heteroclitus*, following a laboratory diet switch. *Oecologia* 147:391-395.
- Haas, HL, KA Rose, B Fry, TJ Minello, and LP Rozas. 2004. Linking estuarine habitats to brown shrimp survival: implications of a spatially-explicit individual-based simulation model. *Ecological Applications* 14(4), pp. 1232-1247.
- Fry, B, DM Baltz, MC Benfield, JW Fleeger, A Gace, HL Haas, and ZJ Quinones. 2003. Chemical indicators of movement and residency for brown shrimp (*Farfantepenaeus aztecus*) in coastal Louisiana marshscapes. *Estuaries* 26:82-97.
- Haas, HL, EC Lamon, KA Rose, and RF Shaw. 2001. Environmental and biological parameters associated with stage-specific brown shrimp abundances in Louisiana: applying a new combination of statistical techniques to recruitment data. *Canadian J. of Fisheries & Aquatic Sciences* 58:2258-2270.
- Haas, HL, RF Shaw, KA Rose, MC Benfield, and WR Keithly. 1999. Regression analysis of the relationships among brown shrimp (*Penaeus aztecus*) and environmental variables in southern Louisiana, USA. *Proceedings of the Gulf and Caribbean Fish. Institute* 52:231-241

Dr. Galit Sharon DVM, PhD, CertAqV, Fish medicine specialist

Address: 202 Fairway Dr., Middletown, RI, 02842

E-mail: galshar70@gmail.com; gsharon@rwu.edu

1. University Education and Additional Training

Dates	Description
1992-1998	DVM - Doctor of Veterinary Medicine at the University of Veterinary Medicine, Kosice, Slovakia. Graduation with distinction. Israeli Veterinary license number for practicing: 1513
2008-2010	M.Sc. thesis in the Agriculture and Biotechnology Department, at the Institute of Desert Research, Ben Gurion University, Midreshet Ben-Gurion, Israel. Title of thesis: Immunization of guppies <i>Poecilia reticulata</i> , against <i>Tetrahymena</i> and the study of their immune response to infection. Supervision by: prof. Dina Zilberg
2010-2015	Ph.D. in Fish Health, Institute of Desert Research, Department of Agriculture and Biotechnology, Ben Gurion University, Israel Title of thesis: Protection of Guppies (<i>Poecilia reticulata</i>) from Infection with <i>Tetrahymena</i> and Study of their Immune Response to the Parasite Supervision by: Prof. Dina Zilberg and Prof. Noah Izakov
April 2018	Certified Aquatic Veterinarian – CertAqV, by the World Aquatic Veterinary medical Association
March 2019	Certified Fish medicine specialist- By the Ministry of Agriculture and Rural Development, Veterinary Services, Israel. Specialist # 561

2. Positions Held and Academic Status

Dates	Description
1998-2001	Veterinary surgeon, Hematological and Pathological Laboratory, diagnosis lab, at the "Center for Animal Medicine", owner and chief, Dr. Zeev Shiner. Five Habonim Street, Ramat-Gan, Israel.
2000-2007	Owner and head of "Animan", a veterinary private clinic, joint partnership with Dr. Ronit Abutbul. Veterinary surgeon and the manager of a small hematological and pathology laboratory for diagnosis. 1 Jabotinsky Street, Tel Aviv, Israel.
2006-2014	Veterinary supervisor for the health and marketing of fish for food, for fish farms in the region. Research and Development (R&D), Center of Ramat Negev district
2008-2014	The Fish Health Laboratory at the Institute of Desert Research, Department of Agriculture and Biotechnology, Ben Gurion University. Diagnosis of fish diseases. Histopathology, parasitological and bacteriological diagnosis. Chief Scientist: Prof. Dina Zilberg.
2015-2022	Research scientist (Assistant professor), Attending veterinarian and Head of the Department of Pathobiology and the Green-Keiser Fish Health Center, Israel Oceanographic & Limnological Research Ltd., National Center for Mariculture, Eilat, Israel
2016-2021	Lecturer at Ben-Gurion University, Eilat campus, Israel.
September 2021-August 2022	Sabbatical leave at Cornell University, Department of Microbiology and Immunology, Veterinary Medical Center, Ithaca, New York, USA. Joining Professor Theodore Clark's laboratory as a visiting scientist.

August 2022- to date	Associate Professor of Marine Biology and Director of the Aquatic Animal Diagnostic Lab (ADL). Department of Biology, Marine Biology & Environmental Science, Feinstein School of Social & Natural Sciences, Roger Williams University, 1 Old Ferry Road, Bristol, RI, USA
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3. Articles in Reviewed Journals

- Sharon, G.,** Pimenta Leibowitz, M., Kumar Chettri, J., Isakov N. and Zilberg D. (2013). Comparative study of infection with *Tetrahymena* of different ornamental fish species. *Journal of Comparative Pathology* 150, pp. 316-324.
- Sharon, G.,** Pimenta-Leibowitz, M., Vilchis, M.C.L., Isakov, N. and Zilberg, D. (2014). Controlled infection of *Poecilia reticulata* Peters (guppy) with *Tetrahymena* by immersion and intra-peritoneal injection. *Journal of Fish Diseases* 38 (1), pp. 67-74.
- Sharon, G.,** Benharroch, D., Kachko, L., Reis-Hevlin, N. and Zilberg, D. (2014). Liposarcoma in Clown Fish (*Amphiprion ocellaris*) produced in indoor aquaculture. *Journal of Fish Diseases* 38 (6), pp. 575-580.
- Sharon, G.,** Nath, P.R., Isakov N. and Zilberg D. (2014). Evaluation of Guppy (*Poecilia reticulata* Peters) immunization against *Tetrahymena* sp. using Enzyme-Linked Immunosorbent Assay (ELISA). *Veterinary Parasitology Journal* 205 (1-2), pp. 28-37.
- Sharon, G.,** Fridman, S., Reiss-Hevlin, N., Sinai, T., Boisot P. and Zilberg, D. (2016). Effects of different commercial diets on growth performance, health and resistance to *Tetrahymena* sp. Infection in Guppies (*Poecilia reticulata* Peters). *Aquaculture Research* 47 (7), pp. 2276-2286.
- Stern, N., Rachmilovitz, E.N., **Sharon, G.** and Diamant, A. (2018). The direct implications of releasing marine ornamental fishes to the wild: first reported case from the Red Sea. *Marine Biodiversity* 48(3)
- Sharon, G.,** Ucko, M., Tamir, B. and Diamant A. (2019) Co-existence of *Myxobolus* spp. (Myxozoa) in grey mullet (*Mugil cephalus*) juveniles from the Mediterranean Sea. *Parasitology research* 118(1)
- Ravid-Peretz, S., Colorni, A., **Sharon, G.,** Ucko, M. (2019) Vaccination of European sea bass *Dicentrarchus labrax* with avirulent *Mycobacterium marinum* (iipA::kan mutant). *Fish and Shellfish Immunology* 90, pp. 317–327. IF 3.185 (doi:10.1016/j.fsi.2019.04.057)
- Davidovich, N., Pretto, T., **Sharon, G.,** Zilberg, D., Blum, S., Baider, Z., Edery, N., Morick, D., Grossman, R., Kaidar-Shwartz, H., Dveyrin, Z., Rorman, E. (2020) Cutaneous appearance of mycobacteriosis caused by *Mycobacterium marinum*, affecting gilthead seabream (*Sparus aurata*) cultured in recirculating aquaculture systems. *Aquaculture*
- Genin, A., Levy, L., **Sharon, G.,** Raitos, D.E., Diamant, A. (2020) Rapid onsets of warming events trigger mass mortality of coral reef fish. *Proceeding of the National Academy of Sciences of the United States of America (PNAS)* 117 (41)
- Al-Ashhab, A., Alexander-Shani, R., Avrahami, Y., Ehrlich, R., Strem, R. I., Meshner, S., Shental, N., **Sharon, G.** (2022) *Sparus aurata* and *Lates calcarifer* skin microbiota under healthy and diseased conditions in UV and non-UV treated water. *Animal Microbiome*
- Inés Strem, R., Ehrlich, R., Shashar, N., Sharon, G. (2023) First description of *Vibrio harveyi* as the causative agent of morbidity and mortality in farmed flathead grey mullet (*Mugil cephalus*). *Diseases of Aquatic Organisms*
- Strem, R., et al. (2023) Evaluation of Flathead Grey Mullet (*Mugil cephalus*) Immunization and Long-Term Protection against *Vibrio harveyi* Infection Using Three Different Vaccine Preparations. *International Journal of Molecular Sciences* (24), 8277.

James Gutowski

1809 Central Ave.
 Box 772
 Barnegat Light NJ 08006
 609-548-50205
 jamesgutowski@comcast.net

Present Position

James Gutowski presently owns and manages two sea scallop vessels in Barnegat Light New Jersey. He also coordinates daily operations and scheduling for five other vessels at Viking Village Fisheries. He has worked successfully with Coonamessett Farm on several turtle projects.


History


Graduated Seton Hall Prep 1979
 University of Rhode Island –Commercial Fisheries and Marine Technology 1979-1980.
 Scallop vessel Captain 1981-1995
 Scallop vessel Owner 1988(F/V Kathy Ann) Kathy Ann Corp
 Scallop vessel Owner 2000(F/V Elizabeth) Thirty Fathom Fish Corp
 New Jersey Agricultural Leadership Development Program Class IV graduate 2003
 Mid Atlantic Fisheries Council Nominee 2005
 A/R Manager/ Sales Manager Viking Village 1996-2007
 Mid Atlantic Fisheries Council Nominee 2005
 Attended Marine Resource Education Program Fall 2004
 Sea Scallop advisory panel February 2008
 Fleet manager of operations and coordination at Viking Fisheries 2008-present

Affiliations

Member Barnegat Light Planning Board
 Member New Jersey Agricultural Society
 Coach Stafford Hockey League Manahawkin New Jersey



 P.O. Box 761
Wanchese, NC 27981

 (252) 982-6488

 obxlocke@aol.com

 fvsalvation

PROFILE

26 years' experience as owner/operator of a commercial fishing business.

12 years' experience as industry collaborator on marine fisheries research.

VISION

To not only provide high-quality seafood to interested consumers but also to assist researchers and fishery managers in obtaining best-available science for managing marine fishery resources for long-term viability and a thriving domestic fishing economy.

SKILLS

Communication ★★★★★

Critical Thinking ★★★★★

Supervisory ★★★★★

Machine Operation ★★★★★

Seamanship ★★★★★

SUMMARY OF QUALIFICATIONS

CHARLIE LOCKE

U.S. Coast Guard Licensed Captain / Commercial Fisherman

OVERVIEW. Full-time, dayboat commercial fisherman harvesting sustainable seafood off the Outer Banks, N.C., using multiple gears including float and anchored gillnet, bottom and surface longline, bandit reel, trolling and fish pot. Harvested species range from inshore net fish, such as sea mullet and Spanish mackerel, to offshore bottom fish which includes black sea bass, tilefish, grouper, and amberjack. One of just roughly a dozen commercial directed shark fishermen in North Carolina.

LICENSES & PERMITS

NOAA Fisheries 2022 Shark Research Fishery Permit (SRF-1-22-A)

NOAA Fisheries South Atlantic King Mackerel (KM-588)

NOAA Fisheries South Atlantic Sea Bass Pot Endorsement (SBPE-16)

NOAA Fisheries South Atlantic Snapper-Group, Unlimited (SG1-28)

NOAA Fisheries South Atlantic Shark Directed (SKD-209)

NOAA Fisheries South Atlantic Open Access Permits:

Dolphin/Wahoo, Smooth-Hound Shark, Spanish Mackerel

NOAA Fisheries Greater Atlantic Federal Permit (150993):

Black Sea Bass, Bluefish, Tilefish

N.C. Standard Commercial Fishing License (140319)

TRAINING & CERTIFICATIONS

Onboard Drill Instructor Course (ALMSEA-334), 2023

NOAA Fisheries Sea Turtle Safe Handling & Release Gear Workshop, 2021

U.S. Coast Guard 50-Ton Master Captain's License, 1995

PADI Open Water Diver, 1989

INDUSTRY SERVICE

NOAA Fisheries Atlantic Large Whale Take Reduction Team

North Carolina Commercial Gillnet Seat

4/06 – present

South Atlantic Fishery Management Council Mackerel Cobia Advisory Panel

North Carolina Commercial Seat

3/20 – present

INDUSTRY SERVICE *(continued)*

Atlantic States Marine Fisheries Commission Bluefish Advisory Panel*Commercial Seat*

4/21 – present

N.C. Marine Fisheries Commission Kingfish FMP Advisory Committee*Commercial Seat*

4/06 – 11/07

N.C. Marine Fisheries Commission Striped Mullet FMP Advisory Committee*Commercial Seat*

3/04 – 4/06

RESEARCH COLLABORATIONS *(select)*

“Greater Amberjack (*Seriola dumerili*) abundance, distribution and movement in the South Atlantic and Gulf of Mexico regions,” Mississippi-Alabama Sea Grant Consortium, NC State Subaward, PI: Jeffrey Buckel, July 2021 – October 2023.

“Refinement and testing of a microprocessor-based shark bycatch reduction device (BRD) using an academic-industry partnership,” National Sea Grant Office Highly Migratory Species Competition, PI: Sara Mirabilio (North Carolina Sea Grant), October 2019 – August 2022.

“Assessing effectiveness of a low-profile gillnet in reducing the bycatch of sea turtles in the commercial large-mesh gillnet fishery for monkfish,” NOAA Fisheries Northeast Fishery Science Center, PI: Henry Milliken, February – March 2017; February 2020 – February 2022.

“Life history, behavioral ecology, and genetic stock structure of elasmobranchs in the South Atlantic,” S.C. Department of Natural Resources, PI: Bryan Frazier, July 2019 – December 2020.

“Post-release survivorship, life history traits, and stock characteristics of scalloped and Carolina hammerhead sharks,” NOAA Fisheries Cooperative Research Program, PI: Dean Grubbs (Florida State University), July-August 2019.

REFERENCES

Eric Matzen, Lead Survey Biologist
National Oceanic & Atmospheric Administration
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543
Em. eric.matzen@noaa.gov
Ph. (508) 495-2316

Bryan Frazier, Wildlife Biologist III
S.C. Department of Natural Resources
Marine Resources Research Institute
217 Fort Johnson Road
Charleston, SC 29412
Em. frazierb@dnr.sc.gov
Ph. (843) 953-9843