

# Marine Biotechnology and Bioinformatics

## for Teachers

### Project Background: The Staff

Whether in the field, the lab or the classroom, the goals of the project staff are to assist, inspire and educate.



#### Principal Investigators



##### Simona Barti

**Role:** Director, Principal Investigator  
**Affiliation:** Moss Landing Marine Laboratories  
**Education:** B.S. Zoology, UC Davis  
 Ph.D. Biology, UC San Diego

Dr. Barti has been using biotechnology and the associated information technology in her research since 1989. She has taught biology classes at the undergraduate and graduate level for 13 years and began a professional development program for teachers in the fall of 1999. Dr. Barti brings extensive experience in research, teaching, program development, and management to this project. She is committed to supporting and improving science and technology education at the K-12 level and enjoys presenting STEM (science, technology, engineering, math) content in the context of current scientific research to diverse audiences.



##### Henrik Kibak

**Role:** Principal Investigator  
**Affiliation:** California State University Monterey Bay  
**Education:** B.S. Plant Science, UC Davis  
 Ph.D. Biology, UC Santa Cruz

Dr. Kibak teaches Biodiversity and Molecular Biology at California State University Monterey Bay (CSUMB). Dr. Kibak has been using technology and the web for instruction since 1989. He is a member of the International Society for Computational Biology and delivers the bioinformatics instruction to the teachers in the workshop. His primary workshop goal is to help teachers with integrating bioinformatics, California State Science Content Standards, and student-friendly datasets into their lessons.



##### Roberta Barba

**Role:** Principal Investigator  
**Affiliation:** San Jose State University  
**Education:** B.S. University of Delaware  
 M.S. University of Delaware  
 Ph.D. Pennsylvania State University

Dr. Barba has worked as a classroom teacher, a science department chair, a district science curriculum supervisor, and a student teacher supervisor. Her expertise includes interactive web site design, advanced computer graphics, interactive instructional video, and web-based learning.

#### Project Staff



##### Helen Gagampang

**Role:** Evaluator  
**Affiliation:** Independent  
**Education:** B.A. Stanford University  
 Ph.D. M.P.P. UC Berkeley

Dr. Gagampang is an independent consultant working in the area of program evaluation. Having retired in 2004 from her position as Principal Research Analyst VI at the Institute for Health Policy Studies, University of California, San Francisco. She has more than 15 years experience directing large program evaluations of adolescent health interventions sponsored by government (California, Federal) and private funding agencies. Her responsibilities included project management, evaluation design, instrument design, data analysis and preparation of reports.



##### Steven McGriff

**Role:** Instructional Designer  
**Affiliation:** San Jose State University  
**Education:** B.A. Art Design, Stanford  
 M.A. Instructional Technology, San Jose State University  
 Ph.D. Instructional Systems, Pennsylvania State University

Dr. McGriff is a graphic design and instructional technology instructor at San Jose State University (SJSU) and has worked in instructional design at Stanford University. His current research interests are teacher education, the use of robotics, and visual literacy. His knowledge and experience are a great resource for the program.

##### Owen Depper, Website Architect

Mr. Depper is a recent graduate of the Instructional Technology Department at SJSU and currently works as the Analyst Programmer for Academic Planning & Budgets at SJSU.



Owen Depper working on computer

Dr. Roberta Barba is using a computer lab, writing and teaching technology in the classroom.



Dr. Roberta Barba prepares to take a gel in the lab



##### Traci Conlin

**Role:** Program Assistant  
**Affiliation:** Moss Landing Marine Laboratories  
**Education:** B.A. UTexas, Austin  
 M.S. CSU Northridge

Ms. Conlin has been working at Moss Landing Marine Laboratories (MLML) with many responsibilities as a program designer and facilitator for multiple projects. Her scientific research has included a study on the effect of algal oil microenvironments on the physiology of juvenile corals in Jamaica. Mrs. Conlin provides valuable coordination and logistical support to the program. She brings enthusiasm to her role and believes that a regular, non-traditional educational experience can make a difference in someone's life.



##### Kalpesh Patel

**Role:** Technical Support  
**Affiliation:** CSU Monterey Bay  
**Education:** B.S. Telecommunications, Multimedia & Applied Computing, CSUMB  
 M.A. Instructional Science and Technology, CSUMB

Mr. Patel provides support and assistance in bringing technology into classrooms for the Teacher Enhancement Program. He also works to expand the wireless web-cast experience for local schoolchildren and teachers who participate in forums and events with educators and experts from MLML and the Elkhorn Slough.

##### Jeevithan Saptista, Technical Support

Mr. Saptista is a student at CSUMB that has been repairing and building computers since 1998. He works with Mr. Patel to establish a wireless connection from MLML to the Elkhorn Slough as well as learning how to run the technology portion of the web-casts to MLML and the Elkhorn Slough.

##### Anneke Walling, Technical Support

Ms. Walling is a second year student attending CSUMB. He is studying multimedia and cinematography. He has a strong background in Information Technology (IT) and has worked as a student network administrator and technology specialist for his high school in Bishop, California for four years.



Moss Landing Marine Laboratories

#### Teaching Assistants



##### Cristie Kirlin

**Role:** Teaching Assistant  
**Affiliation:** Moss Landing Marine Laboratories  
**Education:** B.S. Marine Biology, UC Santa Cruz

Ms. Kirlin is a third year graduate student in the Molecular Ecology lab at MLML. As part of her Master's research, she uses biotechnology as a tool for understanding the ecology of an invasive mussel in Monterey Bay. A learning enthusiast, Ms. Kirlin hopes to teach life science courses at the community college level, it hopes of exploring with others the mystery and awe that science holds.



##### Erin McKeil

**Role:** Teaching Assistant  
**Affiliation:** Moss Landing Marine Laboratories  
**Education:** B.S. Biology, UC Santa Barbara

Ms. McKeil is a graduate student in the Biological Oceanography lab at MLML. The lab skills and scientific knowledge she acquired while working in the pharmaceutical industry complement her current studies in environmental biology. This program has allowed her to combine two of her favorite things: teaching and talking about science.



##### Sarah Smith

**Role:** Teaching Assistant  
**Affiliation:** Moss Landing Marine Laboratories  
**Education:** B.S. Biology, Santa Clara University

Ms. Smith is a graduate student in the Biological Oceanography lab at MLML. She recognizes the value of using and understanding biotechnology and bioinformatics and will apply molecular techniques in current and future research. She brings enthusiasm and experience in both the lab and field to her role as a teaching assistant.

Content Credit:  
Project Staff

Poster Credit:  
Sarah Smith