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**RETHINKING WATER, PLACE & COMMUNITY**

**INNOVATIONS**

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from multiple perspectives within and beyond the academy.

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The cover image is of tending water and listening at Water Bar in Greensboro, North Carolina, courtesy Shanai Matteson, Works Progress, and Water Bar & Public Studio.

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IN REVIEW

# REVIEW OF *UNDERWATER*

By Margaret Flood

*Underwater* is surprising. Lois Hendrickson and Emily Beck, the exhibit's curators, planned the exhibit after a visitor asked if the Wangensteen Historical Library of Biology and Medicine's expansive collection included any materials related to algae. The question led them to

explore the collection's holdings related to ocean, a theme which became "water" to reflect, in part, the University of Minnesota's designation of clean water access as a Grand Challenge. *Underwater*, as Hendrickson and Beck explained to me, is less a crystallized exposition of their collection's



*John Fisk Allen. 1854. Victoria Regia; Or, The Great Water Lily of America. Boston: Printed and Pub. for the author, by Dutton and Wentworth*

curiosities and more a conversation-in-motion on the historical relationships between water, healthy bodies, and natural environments.

Above all, *Underwater* is beautiful. Colorful reproductions of watercolor water lilies, a peep-through exhibit of glow-in-the-dark jellyfish, and a blue sign reading “Underwater” gesture the visitor into the library’s exhibit space. Drawn from the book, manuscript, and artifact holdings of the Wangensteen library, *Underwater* is beautiful, complicated, and surprising. The exhibit plays along varied relationships among water, health, and science, suggesting broader histories of European and American imperialism, urbanization, and modernization, changing trends in medical therapeutics, and the networks of amateur and professional scientists who

have collected, categorized, and “re-created” the floral, faunal, and mineral bodies of the sea. The casual observer will note the old books opened to beautiful illustrations and particularly revealing text, as well as the many objects that surround these books, objects both “real”—that is, old—and “replica”—that is, new: anchors and knotted ropes, seaweeds and coralheads, a narwhal tusk (fake) and a metal mortar and pestle (real.) By presenting side-by-side objects *from* the sixteenth through twentieth centuries and objects that *suggest* these periods, the curators of *Underwater* have re-created the ambience of the old, the moments of their genesis. These historic moments were important, troubling, and complicated: European transatlantic voyages of economic imperialism; the illegal overthrow of the Hawaiian monarchy; the industrial



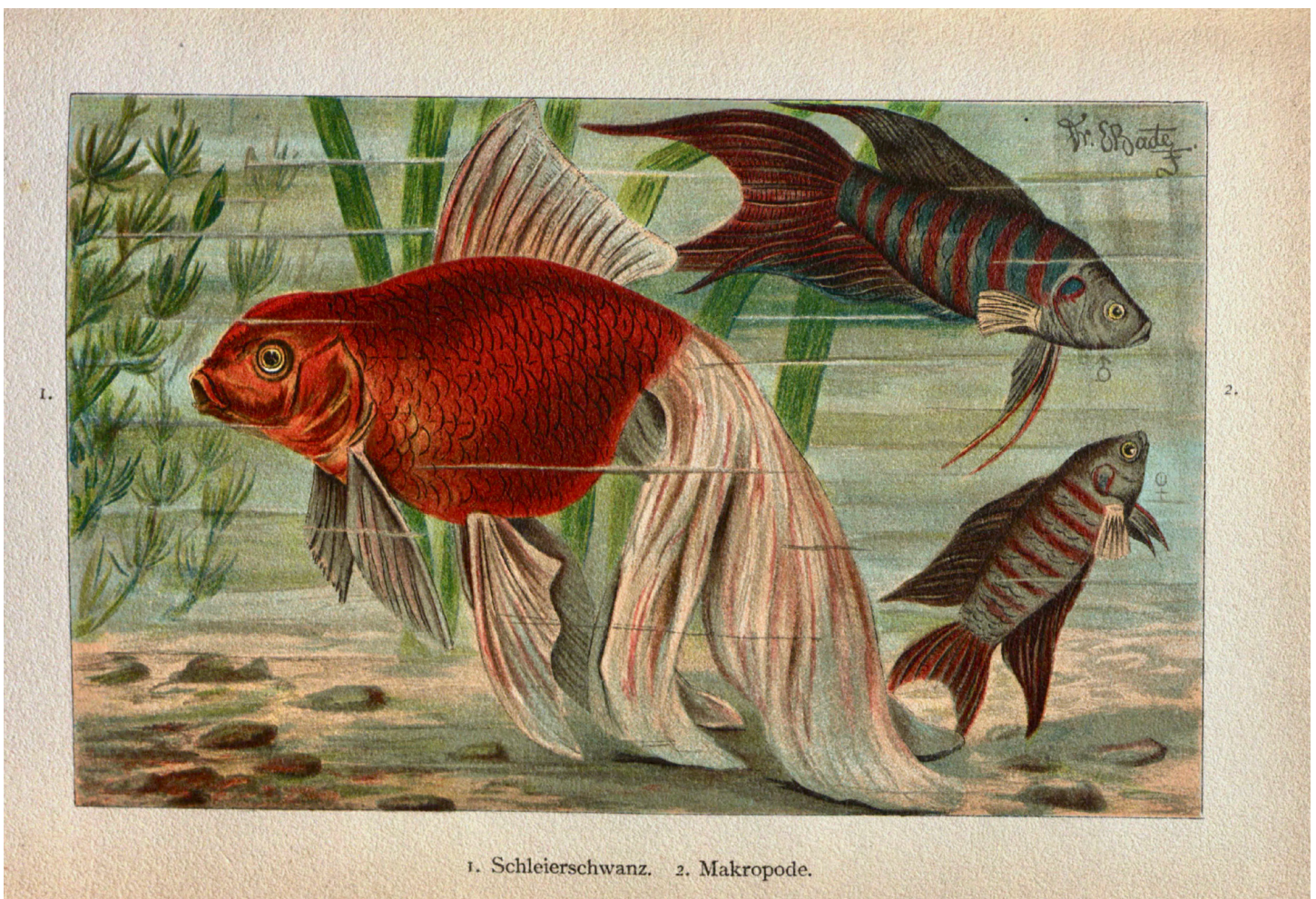
View of “Chapter 2: Oceanic Research” display. Photo credit Christopher Herzberg, Courtesy of the Wangensteen Historical Library. University of Minnesota.

modernization of European and American cities; and the consequences of these things upon the health, sovereignty, and historic voices of the urban poor, the Indigenous, the Black. More atmosphere than argument, suggestion than narrative, the displays that comprise *Underwater* provoke questions that the exhibit does not resolve.

Indeed, *Underwater* is best understood as the beginning of a conversation rather than an exposition of its conclusions. While the information panels walk the attentive through the curators' reasoning, the sheer breadth and arrangement of the materials in *Underwater* ultimately suggest rather than instruct. Given the episodic array of the exhibit and its explicit engagement with

scientific and pharmaceutical categorization in the eighteenth through twentieth centuries, important historical questions regarding categorization, power, the body, and the production of historical silence are unavoidable.

The exhibit is divided into three "chapters," each of which presents a theme and a brief historical overview that binds together the materials in the cases. In the first chapter, "Health of Voyagers," selected works discuss specific health concerns of British transoceanic travel in the eighteenth century. Of the three chapters, this one engages most explicitly with the ways in which racism and colonialism intersected with medical theory in nineteenth-century Western health discourse and the material consequences thereof. For example,



Ernst Bade. 1896. *Das süßwasser-aquarium: Geschichte, flora und fauna des süßwasser-aquariums, seine anlage und pflege*. F. Pfenningstorff.

an excerpt from James Ormiston McWilliam's *Medical History of the Expedition to the Niger* (1843) reads that the "Kroomen" (by implication, laborers of color) were to sleep above deck, though out of the rain, while white sailors were to sleep below deck in order to prevent "unnecessary exposure to the night air." These instructions didn't simply reflect divergent commitments to the crew's health. They were also supported by the long-held western European theory of humoral medicine, which purported that different peoples' bodies were composed of different balances of the four humors and that these balances reflected the physical environments in which they were born. Night air could be dangerous. Water was one of many elements that required balancing. Hence, medical theory, applied through racist power paradigms, complicated sleeping arrangements, all in the name of health.

The second chapter, "Oceanic Research," presents scientific and medical discourses that contributed to or originated from European countries' oceanic voyages for territory, goods, and power. The exhibit is arranged as a cabinet of curiosities, with objects arranged around books and letters relating to botanical and faunal collections and pharmaceutical products, such as red coral, sea sand, and algae. Underlying the themes of voyage and discovery is how these voyages co-created empire and Enlightenment science. The entanglement of empire, science, and medicine is an important theme in the history of medicine. Scholars have deeply explored how medicinal products circulated among different social, cultural, and political groups and what medical attributions and associations these products have gained or lost along the way. *Underwater* suggests, but does not develop, these moments of circulation. For example, one panel displays both a letter and a dissertation relating to different species of *Fucus*, a type of brown algae, describing how specimens were sent between scientists for identification and how people in early nineteenth-century Dublin used the algae to sweeten the breath and kill worms. Exhibit

visitors may wonder about the particularities of this algae's medicinal qualities—how was it used to kill worms? Did scientists trade medicinal as well as morphological information, and from where were these specimens collected? And *why* was *Fucus* understood to be efficacious in the first place?

The final chapter, "In Cities and On Shores," brings the theme of water into the development of urban centers and concerns. A panel on the nineteenth-century medical movement called "water cure" sits alongside a display on waste-water, sewage, and plumbing in nineteenth-century London; beside them is a display on fishing, aquariums, and other forms of recreational activity. This display bears directly on how these texts can illuminate the way power has operated during important historical moments. For example, an excerpt of William Alanson Bryan's *Natural History of Hawaii* (1915), located in the display on recreation, discusses surfing. Presented as a brief observation of a sport in motion, this selection of text obscures any reference to who is doing the surfing, where they are located, and why they are there. Surfing is, in *Underwater*, rendered legible as an activity that the exhibit's observer understands in terms of its contemporary iteration. Yet *why* did Bryan, a white zoologist from Iowa, represent surfing as an aspect of Hawaii's "natural history" and for what audience was his work intended? Indeed, how did he come to be in Hawaii at all? What was Bryan's relationship to the archipelago and its then-recent annexation by the United States, and how did works such as his bear on the categorization of Native Hawaiian or Kānaka Maoli objects or practices as scientific, cultural, or consumable? Such questions, which arise under careful perusal, can be possible jumping-off points into discussions among visiting classes or provocations for the established research of visiting scholars. Such questions open conversations critical in our contemporary moment, in which water politics are essential to issues of Native sovereignty, environmental sustainability, and health equity.

Exhibits such as *Underwater* highlight the relevance of history to contemporary concerns.

*Underwater* can be seen during library hours and by special appointment. Hendrickson and Beck, along with the library's support staff, are typically present. As curator of Wangensteen Library, Hendrickson has a tremendous knowledge of the library's collection and the unexpected connections between those materials.

Beck, co-curator and graduate candidate in the Program in the History of Science, Technology, and Medicine, specializes in early modern medical recipe books and questions of circulation, translation, and authority. Their deep knowledge of the Wangensteen's collections comes through in the many glimpses of watery histories that *Underwater* so beautifully presents.

*See the Underwater exhibit online.*

## *Underwater*

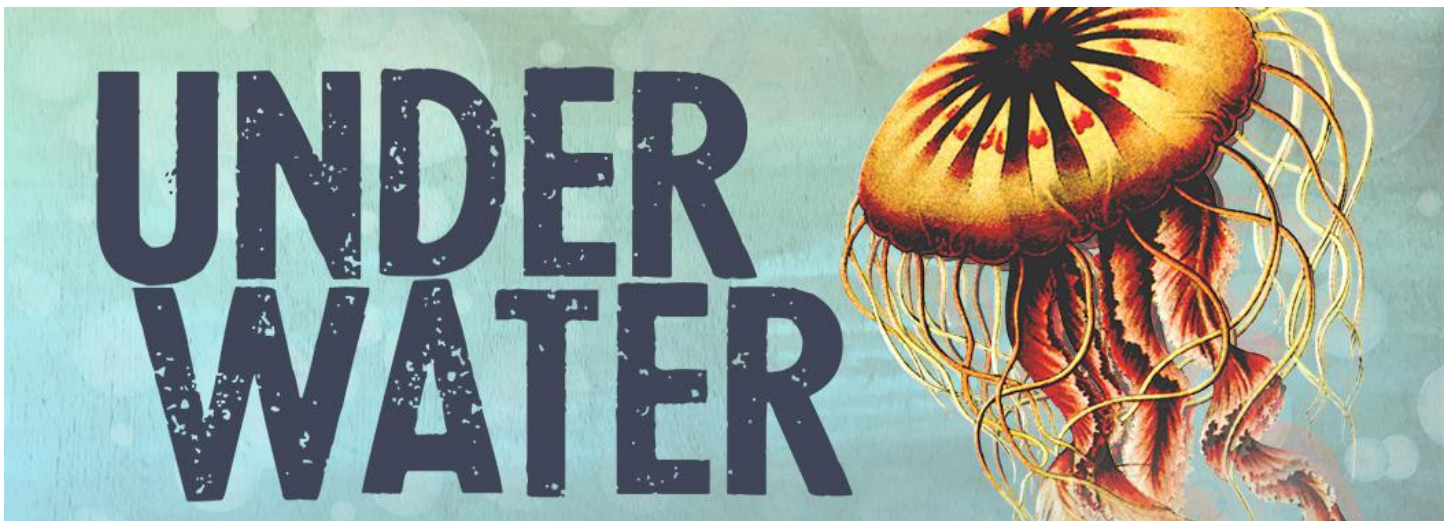
**When:** Sept 11, 2017-May 18, 2018

**Where:** Owen H. Wangensteen Historical Library of Biology and Medicine,  
568 Diehl Hall ([directions](#))

**Hours:** Monday-Friday, 8:00am – 4:30 pm and by appointment

**Online:** See the [Underwater](#) exhibit online.

*Free and open to the public*



*“Underwater” explores humans, health, and science in watery spaces. Discover what voyagers encountered on the sea and how interactions in and around water have been the harbinger of health and illness across the centuries. Viewers will explore topics from sewage treatment and public health to ocean voyages and pharmaceuticals from the sea. Rare books in the exhibit feature striking images of aquatic natural history, various technologies, and experiences of water and health.*



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## About the Author

Margaret (Macey) Flood is a Ph.D. candidate in the History of Science, Technology, and Medicine at the University of Minnesota. She studies botanical medicine and settler colonialism in the nineteenth- and twentieth-century United States.