

Sun Wook Kim

Address: Gehrman Building, Level 8
Marine Palaeoecology Lab
School of Biological Sciences
ARC Centre of Excellence for Coral Reef Studies
The University of Queensland
St. Lucia, QLD 4072
E-mail: sun.w.kim@uq.edu.au, sun.wk.kim@gmail.com
Phone: +61.7.33659753
Fax: +61.7.33654755

Education

- Ph.D.** The University of Queensland, School of Biological Sciences, 2015-Present.
- Ecology and evolution of coral range dynamics
Advisors: John Pandolfi, Cynthia Riginos, Maria Beger, Eugenia Sampayo
- M.S.** University of Guam, Department of Biology, 2007-2010.
- Molecular systematics of the tropical sea cucumbers *Bobadschia* (Holothuriidae: Holothuroidea)
Advisor: Alexander Kerr
- B.S.** Seattle University, College of Science and Engineering, 2002-2007 (with Honours: *cum laude*, President's List, Dean's List).
- Senior dissertation: Ultrastructural investigation of nonfeeding pilidium larva from *Micrura verrilli* (Heteronemertea: Nemertea)
Advisor: Megan Schwartz

Awards

- 2015-2018** Korea Institute of Ocean Science and Technology Research Grant, Korea Institute of Ocean Science and Technology, and Ministry of Oceans and Fisheries. Co-investigator with John Pandolfi (KRW 56,000,000 - approximately AUD 62,000)
- 2015-2018** International Postgraduate Research Scholarship, The University of Queensland
- 2015-2018** University of Queensland Centennial Scholarship, The University of Queensland
- 2016** Australian Coral Reef Society Award (AUD 2,500)
- 2016** School of Biological Sciences Conference Travel Award (AUD 1,600)
- 2007-2010** Marine Laboratory Graduate Fellowship, University of Guam
- 2009** Lerner-Gray Grant, American Museum of Natural History (USD 680)
- 2005** Bannan Scholarship, Seattle University (USD 6,000)

Appointments

- 2015-Present** Tutor (U.S. equivalent to Teaching Assistant) for International Program for Stanford University
- 2015-Present** Tutor (U.S. equivalent to Teaching Assistant) for courses: Marine Ecology and Conservation; Marine Science; Australia's Marine Environment
- 2010-2015** Research Scientist, Korea Institute of Ocean Science and Technology (Supervisor: Heung-sik Park)
- Collections Manager, Korea South Pacific Ocean Research Center (Supervisor: Heung-sik Park)
- 2007-2010** Research Assistant II, Marine Laboratory, University of Guam (Advisor: Alexander Kerr)
- 2008** Visiting Research Fellow, Florida Museum of Natural History, University of Florida (Advisor: Gustav Paulay)
- 2006-2007** Undergraduate Researcher, Kewalo Marine Laboratory, University of Hawai'i at Manoa; Seattle University (Advisors: Michael Hadfield, Megan Schwartz)
- 2004-2006** Teaching Assistant (General Biology, Invertebrate Zoology), Tutor (Calculus), Laboratory Assistant (Molecular Biology), Seattle University

Publications

Peer-reviewed manuscripts

- 2018** **Kim, S.W.**, Blomberg, S.P., Pandolfi, J.M. Transcending data gaps: a framework to reduce inferential errors in ecological analyses. *Ecology Letters* 21: 1200-1210.
- 2015** **Kim, S.W.**, Chung, M., Park, H.-S. Tropical fish species thriving in temperate Korean waters. *Marine Biodiversity* 45(2): 147-148.
- 2014** **Kim, S.W.**, Miller, A.J., Brunson, C., Netchy, K., Clouse, R., Janies, D., Tardy, E., Kerr, A.M. Shallow-water holothuroids (Echinodermata) of Yap, Federated States of Micronesia. *Pacific Science* 68(3): 397-420.
- Shin, H.-J., **Kim, S.W.**, Choi, Y.-U. Morphological and genetic characters of pearl-spot damselfish *Chromis notata* (Teleostei: Pomacentridae) in Korea. *Ocean and Polar Research* 36 (2): 189-197. doi:10.4217/OPR.2014.36.2.189.
- 2013** **Kim, S.W.**, Kerr, A.M., Paulay, G. Colour, confusion and crossing: resolution of species problems in *Bobadschia* (Echinodermata: Holothuroidea). *Zoological Journal of the Linnean Society* 168: 81-97.
- Michonneau, F., Borrero-Perez, G.H., Honey, M., Kamarudin, K.R., Kerr, A.M., **Kim, S.**, Menez, A., Miller, A., Ochoa, J.A., Olavides, R.D., Paulay, G., Samyn, Y., Setyastuti, A., Solis-Marin, F., Starmer, J., VandenSpiegel D. The littoral sea cucumber (Echinodermata: Holothuroidea) fauna of Guam re-assessed – a diversity curve that does not asymptote. *Cashiers de Biologie Marine* 54: 531-540.

Books

- 2018 Kwon, M., Park, H.-S., Baek, S.-K., Kim, J.-W., Lee, J.-H., Ha, J.-H., **Kim, S.W.**, Ahn, C. The last blue ocean: Pacific island states and their leaders. Korea Institute of Ocean Science and Technology Press, Korea.
- 2015 Park, H.-S., Oh, J.H., **Kim, S.W.**, Choi, H.W., Kim, T.H., Kim, T. eds. Environment of the Chuuk Lagoon. Korea Institute of Ocean Science and Technology Press, Korea.
- 2014 **Kim, S.W.**, Choi, Y.-U., Kim, T., Park, H.-S. eds. Coral reefs of Chuuk, Federated States of Micronesia. Korea Institute of Ocean Science and Technology Press, Korea.

Technical reports

- 2016 **Kim, S.W.**, Park, H.-S., Choi, G.-S. Status of coral reefs of Korea. Global Coral Reef Monitoring Network (GCRMN) Report.
- 2013 Park, H.-S., Park, S.-H., Kang, D.-H., Lee, H.-S., Kwon, S.-J., **Kim, S.W.**, Yoon, G., Kim, T., Lee, J.-Y. Climate change, tropicalization and their impact on Korean marine ecosystem: research overview. Ministry of Land, Transport and Maritime Affairs (Korea) Report BSPM57160-10209-3.
- Kerr, A.M., **Kim, S.W.**, Miller, A.J. The Shallow-water holothuroids of Chuuk, Federated States of Micronesia. University of Guam Marine Laboratory Technical Report 155.
- Kerr, A.M., **Kim, S.W.** Selected descriptions of sea cucumbers in the genus *Bobadschia* (Holothuriidae) by Cherbonnier, Jäeger, Ludwig, Panning, Selenka and Semper. University of Guam Marine Laboratory Technical Report 145.
- 2012 Park, H.-S., Choi, Y.-U., Yoon, G., **Kim, S.W.**, Kim, T., Chung, M. Establishing research infrastructure in the tropical Pacific: a synthesis report: Biology. Ministry of Land, Transport and Maritime Affairs (Korea) Report BSPM 56560-10135-7.
- 2008 Kerr, A.M., **Kim, S.W.**, Michonneau, F. The Shallow-water Echinoderms of Kosrae. University of Guam Marine Laboratory Technical Report 123.

Invited Talks

- 2014 Climate change on biodiversity and biogeography. Korea-Italy Bilateral Symposium (hosted by Embassy of Italy in Seoul). Korea Institute of Ocean Science and Technology, Korea.
- 2013 Integrative taxonomy at work: the overview of the genus *Bobadschia*. Marine Science Institute, University of the Philippines Diliman, Quezon City, Philippines.
- Cataloguing Chuuk's underwater beasts. University of Guam, Mangilao, GU. USA.
- The status quo of coral reefs in Chuuk and the role of Korea South Pacific Ocean Research Center (KSORC). University of Guam, Mangilao, GU. USA.

- 2011 Biogeography, biodiversity and molecular phylogenetics: Philippines' importance in the global context. University of the Philippines Visayas, Philippines.

Conference Presentations (*: presenter)

- 2018 **Kim, S.W.***, Sommer, B., Pandolfi, J.M. The role of evolutionary history in the spatial distribution of coral species abundance: an example from coral populations in Australia [oral]. 4th Asia-Pacific Coral Reef Symposium. Cebu, Philippines.
- Cant, J.* , Beger, M., Salguero-Gomez, R., Sims, C., **Kim, S.W.**, Pandolfi, J. Coral community demographics: a predictive framework for the long-term viability of corals at high latitudes [oral]. 4th Asia-Pacific Coral Reef Symposium. Cebu, Philippines.
- Lauchstedt, A.* , Pandolfi, J.M., **Kim, S.W.**, Kiessling, W. Coral traits and their link to extinction risk [oral]. European Geosciences Union General Assembly 2018. Vienna, Austria.
- 2016 **Kim, S.W.***, Blomberg, S., Pandolfi, J.M. Filling the gaps: Imputation of the Coral Trait Database and functional biogeography of scleractinian corals [oral]. 13th International Coral Reef Symposium. Honolulu, HI. U.S.A.
- 2014 **Kim, S.W.***, Park, H.-S. Clash between unique culture and conservation, and reconciliation through science: an effort in Chuuk, FSM [oral]. 3rd Asia-Pacific Coral Reef Symposium. Kenting, Taiwan.
- Kim, S.W.**, Miller, A.K.* , Kerr, A. Holothuroid fauna of Chuuk (Federated States of Micronesia) [poster]. 7th North American Echinoderm Conference. Pensacola, FL. U.S.A.
- 2012 **Kim, S.W.***, Kerr, A.M., Paulay, G. Molecular systematics of the tropical sea cucumbers *Bobadschia* (Holothuriidae: Holothuroidea) [oral]. 12th International Coral Reef Symposium. Cairns, QLD. Australia.
- Borrero-Perez, G.H., Honey, M., Kamarudin, K.R., Kerr, A., **Kim, S.**, Menez, A., Michonneau, F.* , Ochoa, J.A., Olavides, R.D., Paulay, G., Samyn, Y., Setyastuti, A., Solis-Marin, F., Starmer, J., VandenSpiegel, D. The littoral sea cucumber (Echinodermata: Holothuroidea) fauna of Guam re-assessed – a diversity curve that still does not asymptote. 14th International Echinoderm Conference. Brussels, Belgium.
- 2009 Michonneau, F.* , **Kim, S.W.**, Netchy, K., Starmer, J., McPherson, S., Campbell, C.A., Katz, S.G., Kenyon, L., Zill, J., O’Laughlin, M., Kerr, A.M., Paulay, G. Mitochondrial markers reveal many species complexes and non-monophyly in aspidochirotid holothurians. 13th International Echinoderm Conference. University of Tasmania, Tasmania.
- 2008 **Kim, S.W.***, Michonneau, F., Kerr, A.M. Holothurians of Kosrae (Federated States of Micronesia) and Majuro (Republic of the Marshall Islands) [poster]. 5th North American Echinoderm Conference. Melbourne, FL. U.S.A.
- Campbell, C., Honey, M., Kenyon, L., Kerr, A.M., **Kim, S.**, Massin, C., McPherson, S., Mezali, K., Michonneau, F.* , Netchy, K., O’Loughlin, M., Paulay, G., Pawson, D., Rowe, F., Samyn, Y., Smiley, S., Solis-Marin, F., Starmer, J.,

Thandar, A., Van den Spiegel, D., Werner, T. 2008. The Holothurian PEET project and the Aspidochirotid working group: Integrative taxonomy on a large scale. 5th North American Echinoderm Conference. Melbourne, FL. U.S.A.

Kim, S.W.*, Kerr, A.M., Paulay, G. Nocturnal Monsters, *Bobadschia's* Cryptic Diversity (Holothuriidae: Holothuroidea) [poster]. 11th International Coral Reef Symposium. Fort Lauderdale, FL. U.S.A.

Michonneau, F.*, **Kim, S.**, McPherson, S., Netchy, K., Starmer, J., Kerr, A., Paulay, G. 2008. New insights into the biodiversity and evolution of aspidochirotid holothurians [poster]. 11th International Coral Reef Symposium. Fort Lauderdale, FL. U.S.A.

2006 **Kim, S.W.***, Campbell, M.B., Schwartz, M.L. Ultrastructural Investigation of Nonfeeding Pilidium Larva from *Micrura verrilli* (Heteronemertea: Nemertea) [poster]. 7th Larval Biology Symposium. Oregon Institute of Marine Biology, Coos Bay, OR. U.S.A.

Kim, S.W.*, Campbell, M.B., Schwartz, M.L. Ultrastructural Investigation of Nonfeeding Pilidium Larva from *Micrura verrilli* (Heteronemertea: Nemertea) [poster]. 15th Regional Conference on Undergraduate Research of the Murdock College Science Research Program. University of Portland, Portland, OR. U.S.A.

Graduate Student Thesis Committees

Allison Miller, M.S. (University of Guam) 2013-2014.

Hae-jung Shin, M.S. (University of Science and Technology, Korea) 2012-2014.

Scientific Expeditions

- 2017** The Republic of Palau. Coral recruitment experiment
Solitary Islands, Australia. Coral bleaching survey
- 2016** Heron Island, Australia. Coral fragment sampling
Moreton Bay area, Australia. Coral fragment sampling and coral bleaching survey
Cook Island and Julian Rocks, Australia. Coral bleaching survey
Solitary Islands, Australia. Coral fragment sampling and coral bleaching survey
- 2015** The Republic of Palau. Coral coring, and invertebrate sampling and cataloguing training
Heron Island, Australia. Coral fragment sampling
- 2014** Chuuk (Tol and outer atolls), Federated States of Micronesia. Coral diversity survey, invertebrate and fish sampling.
- 2013** Bolinao, Philippines. Invertebrate sampling and cataloguing training
Chuuk, Federated States of Micronesia. Coral diversity survey, invertebrate and fish sampling
- 2012** Kosrae, Federated States of Micronesia. Coral diversity survey and invertebrate sampling
Chuuk, Federated States of Micronesia. Invertebrate sampling

- 2011** Ulleung island, Korea. Invertebrate sampling
 Dokdo island, Korea. Marine reserve biodiversity survey
 Jeju island, Korea. Marine reserve biodiversity survey
 Chuuk, Federated States of Micronesia. Invertebrate biodiversity survey
 Iloilo, Philippines. Invertebrate biodiversity survey and sampling
- 2010** Guam, U.S.A. Invertebrate sampling
- 2009** Wake island, U.S.A. Research Cruise (R/V Hi'ialakai, NOAA). Invertebrate biodiversity survey and sampling
 Yap, Federated States of Micronesia. Invertebrate biodiversity survey and sampling
 Guam, U.S.A. Invertebrate sampling
- 2008** Majuro, Republic of the Marshall Islands. Invertebrate biodiversity survey and sampling
 Kosrae, Federated States of Micronesia. Sea cucumber biodiversity survey and sampling
 Guam, U.S.A. Invertebrate sampling
 Florida Keys, FL. U.S.A. Invertebrate sampling
- 2007** O'ahu, HI. U.S.A. Echinoderm biodiversity survey
- 2006** Seattle, WA. U.S.A. Nemertean sampling

Media Coverage

- 2013-2014** The Last Blue Ocean. June, 2013 – May, 2014 editions. Monthly Chosun.

Outreach, Professional Service and Additional Qualifications

Climate change, Pacific Island science programs:

- 2013** The Last Blue Ocean: conducted government leader interviews – published in Monthly Chosun June, July, September, October and December 2013 and January, February, April, May 2014 editions:
- Hon. Tommy Remengesau (President, the Republic of Palau)
 - Hon. Christopher Loek (President, the Republic of Marshall Islands)
 - Hon. Alik Alik (Vice President, Federated States of Micronesia)
 - Hon. Lorin Robert (Secretary of the Ministry of Foreign Affairs, Federated States of Micronesia)
 - Hon. Johnson Elimo (Governor, Chuuk State, Federated States of Micronesia)
 - Hon. Alanso Cholymay (Senator and Chief at large, Chuuk State, Federated States of Micronesia)
 - Hon. Samiu Kuita Vaipulu (Deputy Prime Minister and Minister of Infrastructure, The Kingdom of Tonga)
 - Hon. Tuilaepa Sailele Malielegaoi (Prime Minister, The Independent State of Samoa)
 - Ms. Myra Moeka'a (Secretary, Ministry of Foreign Affairs and Immigration, The Cook Islands)
 - Hon. Edward Natapei (Minister, Ministry of Foreign Affairs, The Republic of Vanuatu)
 - Hon. Gordon Darcy Lilo (Prime Minister, The Solomon Islands)
 - Hon. Peter Shannel Agovaka (Minister, Ministry of Foreign Affairs, The Solomon Islands)
 - Hon. Anote Tong (President, Republic of the Kiribati)

- Hon. Enele Sopoaga (Prime Minister, Tuvalu)
- Mr. Tevita Boseiwaqa (Secretary, Ministry of Lands and Mineral Resources, Fiji)

2011 Educational Poster for the government of Chuuk State, Federated States of Micronesia:

- Importance of Mangrove forest

Journal Reviewer for:

Zoological Journal of the Linnean Society, Proceedings of the Royal Society B

Workshop and seminar organizations:

- 2014** 3rd Asia Pacific Coral Reef Symposium. Co-chair: Mini-symposium 15 – Reef conservation research in Micronesia. Howard Hotel, Kenting, Taiwan. June 2014.
3rd South Pacific – Asia Marine Science (SPAM) Workshop. Howard Hotel, Kenting, Taiwan. June 2014.
- 2013** 2nd South Pacific – Asia Marine Science (SPAM) Workshop. University of Guam, USA. June 2013.
- 2012** 8th International Coral Reef Initiative (ICRI) East Asia Regional Workshop. Ocean Suites Hotel Jeju, Korea. September 2012.
1st South Pacific – Asia Marine Science (SPAM) Workshop. Korea Institute of Ocean Science and Technology, Korea. April 2012.
- 2010** Seminar Series POETS Coordinator, Marine Laboratory, University of Guam

Diving:

Scuba Diving International (SDI) Divemaster with specialties: Underwater Navigation, Night/Limited Visibility, Deep, and Enriched Air Nitrox

Computing:

R, Python, Unix shell, SQL, Cluster computing – PBS Torque batch system

Histology:

Transmission electron microscopy – sample preparation and microscope operation