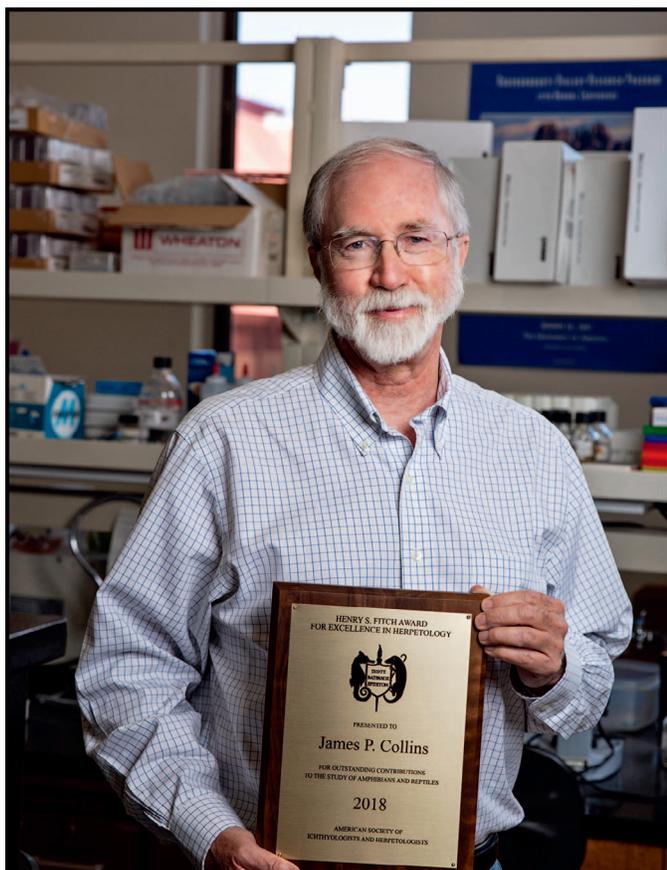


JAMES P. COLLINS

Henry S. Fitch Award for Excellence in Herpetology—2018



It is my great pleasure to announce the 2018 recipient of the Henry S. Fitch Award for Excellence in Herpetology from the American Society of Ichthyologists and Herpetologists.

This award is given annually to recognize “an individual for long-term excellence in the study of amphibian and/or reptile biology, based principally on the quality of the awardee’s research; consideration is also given to educational and service impacts of the individual’s career.”

The award is named after Henry S. Fitch, in recognition of his exceptionally long and productive career in herpetology. It is noteworthy that this year’s pool of applicants (six) was very strong, making our decision even more challenging and this honor particularly significant. I wish to first acknowledge my two colleagues on this committee, Pat Gregory and Mo Donnelly, and to encourage all ASIH members to consider submitting nominations for this award, which are due the first of March each year.

This year’s recipient of the Fitch Award earned his B.S. in Biology from Manhattan College and his M.S. and Ph.D. (both in Zoology) from the University of Michigan. He is currently the Virginia M. Ullman Professor of Natural History and the Environment at Arizona State University, where he’s been an educator, researcher, and mentor to dozens of graduate students and postdocs since 1975.

Early in our recipient’s research career, he studied the development and metamorphosis of amphibian larvae in the

context of evolutionary ecology. His early insights were soon evident. In fact, the second peer-reviewed paper he ever wrote, coauthored with Henry Wilbur and published in *Science*, is undeniably the most influential paper on the ecological tradeoffs associated with amphibian metamorphosis. He and his students and colleagues would subsequently make many discoveries on the early lives of amphibians over the next two decades. One transformative and widely celebrated discovery was the unexpected finding that cannibalistic forms of larval Tiger Salamanders (*Ambystoma tigrinum*) could recognize and thus avoid eating their kin. By the late 1990s, our recipient’s research frame began to shift toward emerging infectious diseases and the consequences of host–pathogen interactions on species declines and extinctions. As the world watched amphibian populations disappear on a global scale, this year’s Fitch Award recipient emerged as a leader in documenting the spread and devastating consequences of pathogenic viruses and fungi, fortified by his profound understanding of the life histories of amphibians. Yet even those many years of confronting the losses of amphibian populations to pathogens proved inspirational, and led to our recipient’s founding of the field of Ecological Ethics.

All told, this year’s Fitch Award recipient has been an exceptionally productive and influential author, mentor, and steward of science at both his home institution and nationally. He has published more than 140 edited volumes, book chapters, and peer-reviewed papers (nine in *Copeia*). And with Marty Crump, he coauthored the popular book, *Extinction in Our Times: Global Amphibian Decline*. He has mentored 23 M.S. and 20 Ph.D. students, ten postdocs, and many dozens of undergraduates. He is deeply committed to supporting the broader research enterprise, having served as a Program Director for the National Science Foundation (NSF) and later as the Director for the NSF Directorate of Biological Sciences, where he oversaw a research and education portfolio that supported disciplines as diverse as molecular and cellular biology to global change. He also served on the National Science and Technology Council under Presidents George W. Bush and Barack Obama and currently Chairs the Board on Life Sciences for the National Academies of Sciences, Engineering, and Medicine. He is a Fellow of the American Association for the Advancement of Science, a Fellow of the Association for Women in Science, and Past President of the American Institute of Biological Sciences.

At this point it will not be surprising for ASIH members to learn that this year’s Fitch Award recipient has received many dozens of regional, national, and international awards and honors (indeed, far too many to list). Likewise, his ability to attract funds to support his research and for student mentoring and development have been nothing short of phenomenal (totaling in the many tens of millions). Naturally, we are very proud to count this eminently impactful herpetologist as one of our own.

So on behalf of the 2018 Henry S. Fitch Award for Excellence in Herpetology Committee, please join me in congratulating Dr. James P. Collins.

Award presented by Robert E. Espinoza, Chair, 2018 Fitch Award Committee.

THOMAS A. MUNROE

Robert H. Gibbs, Jr. Memorial Award for Excellence in Systematic Ichthyology—2018



THE American Society of Ichthyologists and Herpetologists presents the Robert H. Gibbs, Jr. Memorial Award annually to a citizen of a Western Hemisphere nation “for an outstanding body of published work in systematic ichthyology.” Bob’s wife Frigga established the award in his honor, and ASIH has bestowed this recognition continuously since 1989. For 2018, the selection committee (comprising me as committee chair, Kevin Conway, and Melanie Stiassny) considered four highly meritorious nominees.

This year’s winner has been a member of ASIH since 1972 and was previously recognized for excellence within ASIH as a recipient of a Raney Fund Award, a Stoye Award for the best student paper in ichthyology, and election to the ASIH Board of Governors on three separate occasions. At the time of the review,

this year’s award winner had 115 publications including 97 peer-reviewed journal articles and 18 book chapters. An additional eight manuscripts are in press or in review. Fifty-six of these manuscripts are first authored, and 17 of the 18 book chapters are sole-authored. He has co-authored manuscripts with 28 students or post-doctoral researchers as well as numerous international colleagues.

The awardee’s scientific career started with a master’s thesis that focused on helminth parasites of benthic fishes. For his doctoral work, he switched his research focus to taxonomy and systematics of marine fishes, which set the stage for a long and productive career. Beyond his core research area, the awardee has conducted studies focusing on a variety of topics including studies of basic life-history, age and growth, and ecology of marine fishes.

This year’s Gibbs recipient is well known for his involvement in synthetic publications like field guides and taxonomic monographs covering the biology of various groups of marine fishes. He contributed several chapters to the *Fishes of New Zealand*, which was awarded the 2016 Whitley Medal for outstanding publication in *Australasian Zoology* from the Royal Society of New South Wales. He has employed his expertise in marine fish systematics at IUCN workshops over the last ten years in Costa Rica, Senegal, Jamaica, Trinidad and Tobago, Spain, Fiji, and Mexico. This year’s winner has active research projects dealing with the systematics and identification of clupeoid fishes (herrings, shads, anchovies, and their relatives), as well as the conservation of marine fishes. However, it is one particular group of fishes for which he is most well known. One of his letter writers stated that the winner has been regarded as one of the—if not the—go-to person for flatfishes in the broadest sense. Another letter writer referred to him as “Dr. Flatfish” for his long series of papers elucidating the systematics of flatfishes. In particular, he is the world authority on tonguefishes (family Cynoglossidae), and he has made substantial contributions to our knowledge of pleuronectiform fish diversity.

This year’s winner received his Ph.D. at the Virginia Institute of Marine Science under the direction of Drs. John A. Musick and John V. Merriner and then moved to the National Museum of Natural History to work under the direction of the late Richard Vari, where he continued his work on the systematics of cynoglossid flatfishes. He began his career at the National Marine Fisheries Service, National Systematics Laboratory in 1988, where he has spent his entire career. Most recently, he was promoted to Senior Scientist.

It gives me great pleasure to announce the 2018 recipient of the Robert H. Gibbs, Jr. Memorial Award for Excellence in Systematic Ichthyology: Thomas A. Munroe.

Award presented by Kyle Piller, Chair, 2018 Gibbs Award Committee.

GEORGE V. LAUDER

Joseph S. Nelson Lifetime Achievement Award in Ichthyology—2018



THIS year's recipient of the Joseph S. Nelson Lifetime Achievement Award in Ichthyology is a 1977 winner of the Raney Award and a 1978 honorable mention for the Stoye Award (students take note!). He is a creative researcher, an excellent communicator, a highly respected mentor, a prolific author, and an intense scholar. These characteristics were attested to in 11 unanimously enthusiastic and effusive letters of nomination received by the committee, which are quoted here.

The recipient's extensive scholarly record has been called "awe inspiring", and "his work has been [described as] transformational". He "has sustained excellence in research for four decades, producing an astonishing body of empirical, experimental, and conceptual work that has pushed the boundaries of the field of ichthyology forward on many fronts."

His most cited paper is a classic—it is a 100-page co-authored tome on the evolution and systematics of actinopterygian fishes. It is hard to overstate the influence of this paper, which synthesized information from fish phylogenetics and paleontology and made it easily accessible for new students. Early on he was a major force in bringing phylogenetic perspectives into studies of functional morphology. In just the past year, he published two "spectacular" papers in *Proceedings of the National Academy of Sciences*. Both are experimental studies that, like some

of his earlier papers, make major discoveries about long-held paradigms in the biology of fishes.

As the legend goes, "his PhD mentor never failed to mention that the awardee was the best student he had in his career, and that his productivity—even while he was in graduate school—stunned him to the degree that he would (*playfully*) try to sabotage some of his experiments to slow him down, lest his publication rate and impact exceed his own." These efforts (if there is any truth in this legend) failed miserably...

The awardee's lab has been continuously supported by funding from the NSF and the Office of Naval Research over the past 20 years. *Google Scholar* tells us that he has been an author on >400 publications, has edited several scholarly books, and was an author on 34 scholarly contributions in 2017 alone. He has more than 20,000 total citations.

As if that were not enough, the awardee has a highly regarded record in scientific mentorship, which has benefitted his 21 graduate students, and has propelled his 20 post-docs into successful scientific careers.

One letter writer said that "when he teaches, gives seminars, or presents at scientific meetings, he radiates enthusiasm and an infectious and genuine sense of wonder." Another said that "he brings the complexity and beauty of anatomy, physiology, and ichthyology to life for students lucky enough to take his classes." All of the letters mentioned the awardee's generosity, kindness, and his "extremely well developed" sense of humor. "His legacy of successful students, all of whom revere him, is testament to the support he has provided and the roles that he has played in their education and professional development."

It is most notable that the awardee is also a very strong advocate for women in science, especially with respect to work-life balance. Two-thirds of his graduate students and many of his post-docs have been women, nearly all of whom have gone on to successful academic careers.

What distinguishes the awardee's research program is the integration of quantitative and statistical analyses and advanced technologies into experimental work on living fishes. He "is always one step ahead of the field, leaving those of us following behind with 100s of new questions". His use of sophisticated technology allowed us to "investigate bigger questions more deeply, [but more importantly], his research pretty much determined which technologies would be used and which would fall by the wayside." His use of a combination of high-speed video and kinematics, electromyography, particle image velocimetry (DPIV), fluid dynamics, and robotics has allowed him to explore the functional morphology of feeding and locomotion and the biomechanics and evolution of fishes using "a quantifiable, comparative metric of performance".

As a result of his pivotal role in popularizing DPIV among biologists, we now have a deep understanding of the role of a fish's body and fins in aquatic propulsion, stability, and maneuverability.

Most recently, he has validated his work on living fishes using state-of-the-art robotic systems to emulate their motions. This work has pioneered a new model for collaborations between physicists and engineers who study fluid mechanics and biologists who study fishes.

One former graduate student said, "I like to joke with him and say that I hope robots aren't taking over the lab at the expense of actual fishes. [He] always quickly replies that he will always have

fish in his lab, [because] they simply offer up too many unanswered questions.”

In pushing the boundaries of the field of ichthyology, the awardee has created a truly remarkable and diverse body of work that has had, and will continue to have, wide-ranging impacts.

It is my pleasure to announce that the recipient of this year’s Nelson Award for Lifetime Achievement in Ichthyology is Dr. George Lauder.

Award presented by Jacqueline F. Webb, Chair, 2018 Nelson Award Committee.

THEODORE WELLS PIETSCH

Robert K. Johnson Award for Excellence in Service—2018



ON behalf of my committee members Eric Hilton and Emily Taylor, it gives me great pleasure to announce the 2018 winner of the Robert K. Johnson Award for Excellence in Service. The award honors the memory of Bob Johnson who unselfishly served ASIH in numerous ways, including Managing Editor of *Copeia*, Chair of Long Range Planning and Policy Committee, multiple terms on the Board of Governors, and ASIH Secretary until his untimely death in 2000. As chair of LRPP, Bob spearheaded the production of the first guide to ASIH policies and procedures, which, after several major revisions, continues to guide ASIH members. Being able to present this award is particularly meaningful to me since Bob and I had been friends since first meeting as undergraduates in southern California.

The Johnson Award recognizes individuals who have made major contributions to the ASIH through their service to the organization and is awarded to either an ichthyologist or a herpetologist in alternate years. This year's award will be presented to an ichthyologist who will join an illustrious list of previous award winners: Clark Hubbs (2004), Meg Stewart (2005), Carter Gilbert (2006), Al Savitzky (2007), Bob Cashner (2008), Jay Savage (2009), Joe Nelson (2010), Henry Mushinsky (2011), Brooks Burr (2012), Pat Gregory (2013), Larry Page (2014), Michael E. Douglas (2015), Margaret Neighbors (2016), and Maureen Donnelly (2017).

The committee evaluated the nominations of several distinguished and highly qualified ASIH members. The awardee for 2018 has been active in ASIH since first presenting a talk at the 1971 annual meeting in Los Angeles, followed in the late 1970s–early 1980s and continuing to the present, by membership on various committees and leadership responsibilities with a hallmark for seemingly boundless energy and enthusiasm. Major committees and responsibilities have included:

- Long-Range Planning and Policy Committee
- Resolutions Committee (multiple times including chair)
- Nominating Committee (multiple times including chair)
- Committee on Honorary Foreign Members (multiple times)
- Board of Governors (multiple terms and a life member since 1998)
- Gibbs Award Committee (multiple times including chair)
- The Ichthyology and Herpetology Collections and Resources Committee (chair)
- Local Committee for ASIH/JMIH meetings (twice, once as chair)
- Membership on the Editorial Board
- General Ichthyology Editor (serving for five years under Bob Johnson as Managing Editor)
- ASIH President-Elect and President

In addition, our recipient has provided a major service to ASIH by the numerous publications on the history of biological science, especially dealing with works of the French comparative anatomist, Cuvier, and the 17th century unpublished papers of the naturalist and explorer, Charles Plumier.

Our 2018 Robert K. Johnson awardee is Theodore Wells Pietsch.

Award presented by Stephen T. Ross, Chair, 2018 Johnson Award Committee.

KARSTEN HARTEL

Spiritus: Lifetime Achievement Award in Support of Collections—2018



THE *Spiritus* Award was established in 2016 to recognize excellence in service and support of natural history collections of fishes, amphibians, and reptiles. The award alternates between those whose contributions were primarily herpetological (odd years) vs. ichthyological (even years). The inaugural award for an ichthyologist honored Karsten Edward Hartel.

In 2018, Karsten retired from his position as Collection Manager and Curatorial Associate at the Harvard University Museum of Comparative Zoology, a position he held for 43 years. Shortly after arriving at MCZ in 1975, Karsten was invited on board the maiden voyage of the R/V *Oceanus* to conduct deep-benthic trawls and surface collections in the Hudson Canyon and Sargasso Sea. So began his career, assembling at Harvard perhaps the world's best collection of North Atlantic fishes. During Karsten's tenure, the MCZ collection expanded from about 250,000 to nearly 1.5 million specimens. That growth included incorporating the large Woods Hole collection, as well as numerous smaller collections. Managing this level of growth, all while keeping MCZ's historically important holdings accessible to the community, was a logistical tour de force. Karsten was integral to the daily management of the MCZ collection, kindly overseeing countless students, staff, and visiting researchers from around the world. He helped secure at least six NSF collection support grants for MCZ, ensuring its status as a tier one, internationally important ichthyological resource center in North America.

In the late 1970s, Karsten was heavily involved in the nascent Ichthyological and Herpetological Collections Committee of ASIH and co-authored in 1979 a seminal report on current supplies and practices used in curation of fish collections. The following year he developed and served as the first editor of the ASIH *Curation Newsletter* which published 12 issues through 1999. Karsten was among the vanguard responsible for digitizing fish collections, and in 1986, he implemented the first databasing efforts at MCZ. In 1993, he produced the museum's first collection-based home page and on-line database of type specimens. Around this time, Karsten also collaborated with colleagues at six other museums to establish "FishGopher," the first integrated fish collection catalog on the Internet. And in 2000, he developed the first MCZ protocol for linking specimen records to images. Over the course of his productive career, Karsten became the "go-to" source for information on best practices. He is synonymous with the MCZ fish collection and a symbol of leadership in the collection management community.

Collection duties aside, Karsten found the time to contribute his own original research. From 1986 to present, he co-authored peer-reviewed papers on a wide variety of topics including larval and deep-sea fishes, hybridization in darters, faunal checklists and new records, and descriptions of new species in the genera *Eustomias*, *Foetorepus*, *Monognathus*, and *Photostomias*. It is not uncommon for collection managers to become experts on taxa that are well represented in their collecting efforts. Along those lines, Karsten co-authored a total of 25 identification guides for *Bigelow and Schroeder's Fishes of the Gulf of Maine* (Collette and MacPhee, 2002), FAO's *The Living Marine Resources of the Western Central Atlantic* (Carpenter, 2003) and *The Living Marine Resources of the Eastern Central Atlantic* (Carpenter et al., 2016), and *Early Stages of the Atlantic Fishes* (Richards, 2006). In addition, Karsten's own local collecting efforts helped serve his book *Inland Fishes of Massachusetts* (Hartel et al., 2002), the first modern treatment of the state's freshwater fish fauna.

The tremendous respect for Karsten among ichthyologists is evidenced in part by the number of fish taxa named in his honor: *Dolopichthys karsteni* Leipertz and Pietsch, 1987 (ceratioid anglerfish); *Pseudos harteli* Chernova, 2001 (dwarf snailfish); *Astronesthes karsteni* Parin and Borodulina, 2002 (snaggletooth); *Chiasmodon harteli* Melo, 2009 (snaketooth); and the genus *Karsten* Murdy, 2002 (an eel goby).

The wealth of Karsten's contributions to ichthyology are reflected in the 52 personal endorsements for his nomination from colleagues on all continents except Antarctica. Their comments lionized his professionalism in support of collections and ichthyology, particularly among students and fledgling researchers. Melanie Stiassny, Curator of Fishes at the American Museum of Natural History, went so far as to credit her very survival as a young faculty member to Karsten. Perhaps Lynne Parenti, Curator of Fishes at the Smithsonian, put it best in her remark "We may consider Karsten the first ichthyological awardee by acclamation." To Karsten we extend our heartfelt thanks for dedicating his career to ichthyology and the stewardship of collections (photo credit: Andrew Williston).

Award presented by Mark Sabaj, Chair, 2018 *Spiritus* Award Committee.

FREDRIC J. JANZEN

Meritorious Teaching Award in Herpetology—2018

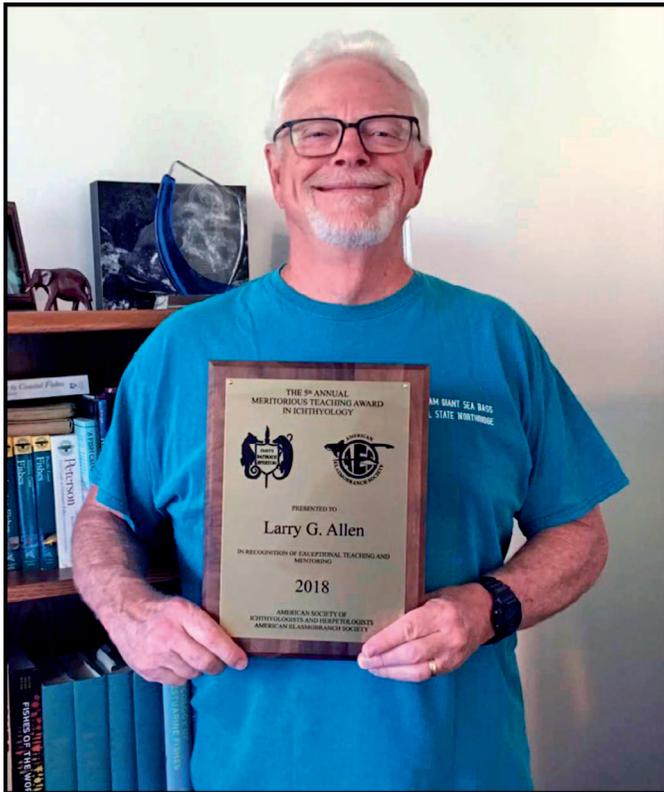


THE 2018 Meritorious Teaching Award in Herpetology winner was presented by the Herpetology Education Committee (HEC), jointly sponsored by the American Society of Ichthyologists and Herpetologists (ASIH), The Herpetologists' League (HL), and the Society for the Study of Amphibians and Reptiles (SSAR). The award recognizes an individual who has made significant, continuing contributions to herpetological education and outreach through her or his teaching and mentoring activities. This year's committee consisted of Lynn Haugen (chair), Erin Muths, Brad Shaffer, and Alex Krohn (student representative). We received 13 superb nominations, ranging from new faculty to distinguished emeritus colleagues, and it was an incredibly difficult choice. Ultimately, however, we came to the unanimous decision that the 2018 award should go to Professor Fredric J. Janzen, in the Department of Ecology, Evolution, and Organismal Biology at Iowa State University. As documented in his nomination and support letters, Professor Janzen has taught a generation of herpetologists at the undergraduate and graduate levels, and his mentees have populated an incredible range of careers spanning the breadth of herpetological professions. However, what clinched the decision was Fred's dedication to his unique "turtle camp," a 30-year project that has exposed undergraduate, graduate, and local high school students to field biology as a career choice. Particularly in the last decade, Professor Janzen has focused on inner city high school students who otherwise might never experience two weeks in a tent, studying reptiles in their home state. It is a program that has made a difference for dozens of students. Add that to his formal teaching and mentoring on campus, and Professor Janzen was the clear choice for this year's award (photo copyright Arizona Board of Regents).

Award presented by Brad Shaffer on behalf of the 2018 Herpetology Education Committee.

LARRY G. ALLEN

Meritorious Teaching Award in Ichthyology—2018



THIS year, we are pleased to present the Meritorious Teaching Award in Ichthyology to an exceedingly deserving candidate. The recipient has been teaching Ichthyology for 36 years and has developed a unique and intensive four-semester sequence of ichthyology and fish biology courses; his (envious?) colleagues have referred to this as an “unrivaled” opportunity for preparing students for both their further education and careers. The recipient has also mentored an astounding number of graduate students; 52 students have earned M.S. degrees under his tutelage, and an impressive 36% of these individuals have gone on to earn doctoral degrees. As such, his influence on the field of ichthyology is both immense and impressive.

His former students speak glowingly of their time working with him, using words like “thorough,” “challenging,” “generous,” “caring,” and “involved” to describe his mentorship. One of his former graduate students movingly described how the recipient supported the student’s desire to pursue a thesis project despite the fact there was no funding available; the recipient simply gathered up resources and called in some favors so that the student could pursue the project he wanted. This former student, perhaps not coincidentally, is himself now a tenure-track faculty member, still pursuing this same line of research, and without a doubt carrying on our recipient’s legacy of educational excellence.

It is thus my pleasure to introduce this year’s recipient of the Meritorious Teaching Award in Ichthyology, Dr. Larry G. Allen. It is with deep gratitude that the ASIH thanks Dr. Allen for donating his award money to the Cashner Student Assistance Fund.

Award presented by Michael J. Pauers, Chair, 2018 Ichthyology Education Committee.

ASIH HONORARY FOREIGN MEMBERS

ASIH has maintained a long-standing tradition of recognizing excellence in ichthyology and herpetology among individuals residing outside of North America. Honorary Foreign Members are elected by the ASIH Board of Governors from among the ichthyologists and herpetologists, located outside of Canada, Mexico, and the United States, who have attained distinction as investigators. George A. Boulenger was elected the first Honorary Foreign Member of the Society in 1935. Honorary Foreign Members comprise a distinct

category of membership as specified by the ASIH Constitution, whose ranks are equally divided between ichthyologists and herpetologists. The following listing by discipline of active foreign members is offered below in recognition of these distinguished scientists and colleagues. A full listing, including the names of deceased honorary members, is provided at <https://www.asih.org/professional-awards/honorary-foreign-members>.



ACTIVE HONORARY FOREIGN MEMBERS

Herpetologists

Angel C. Alcala
Natalia Ananjeva
Edwin Nicholas Arnold
Wolfgang Böhme
Harold G. Cogger
Indraneil Das
Oscar Flores

Célio F. B. Haddad
Murray Littlejohn
Eugenia del Pino V.
J. C. Poynton
Anslem de Silva
Michael B. Thompson

Gerald Allen
Kunio Amaoka
Gloria Arratia
M. L. Bauchot
Phillip Heemstra
Maurice Kottelat
Sven O. Kullander
Helen Larson

Ichthyologists

Luiz R. Malabarba
Keiichi Matsuura
Naercio Menezes
Jørgen Nielsen
John R. Paxton
Paul H. Skelton
Teruya Uyeno