



KUNGL.  
VETENSKAPSAKADEMIEN  
THE ROYAL SWEDISH ACADEMY OF SCIENCES



## Petrus Artedi Tricentennial Symposium on Systematic Ichthyology

13 -14 September 2005

The Beijer Hall, The Royal Swedish Academy of Sciences, Stockholm

Co-organized by  
FishBase Sweden  
The Royal Swedish Academy of Sciences  
The Swedish Museum of Natural History

The year 2005 marks the tricentennial of the birth of Petrus Artedi (1705-1735), founder of modern Ichthyology.

Petrus Artedi was born to the parish of Anundsjö in north Sweden, and grew up in Andundsjö and the nearby town of Nordmaling. In 1724 he matriculated in Uppsala University where he made a lasting acquaintance with Carl Linnaeus. Artedi and Linnaeus both specialized in the study of natural history and pioneered biological systematics as now known. Artedi designed the system of naming organisms by a generic name and a specific epithet, and from that Linnaeus created the binominal nomenclature and hierarchical classification that is still in use for all organisms.

Artedi's life was short. In 1735 he drowned in a canal in Amsterdam, leaving in the aftermath only fragments of knowledge about his person – a few manuscripts, a letter, Linnaeus brief summary of his life and career, but no portrait, no diary, no scientific correspondence. His major manuscript, however, was published by Linnaeus in 1738 as *Ichthyologia sive Opera omnia de piscibus*. It became the starting point for modern descriptive systematics and created a standard for fish taxonomy that is still followed today. Artedi's interaction with Linnaeus was apparently also influential for the development of Linnaeus' achievements in organismal systematics.

The Artedi tricentennial symposium commemorates the birth of Artedi by providing a forum of excellence for summarizing the present state of systematic ichthyology. Invited speakers represent today's frontline of research on the inventory and systematic arrangement of the global fish fauna, as well as phylogenetics and biological information systems.

The programme includes one day of invited lectures, followed by a one-day open workshop on *Collaborative Platforms for Ichthyology*.

Participation in the symposium is free, but registration is required. Lunch is free to participants registered before 1 September 2005. Seats are limited to 190.

This is the final call for the symposium. Last minute information will be made available at:  
[http://artedi.nrm.se/fishbase\\_se/artedi.shtml](http://artedi.nrm.se/fishbase_se/artedi.shtml)

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Inquiries may be directed to:  
Fishbase Sweden, PO Box 50007, SE-104 05 Stockholm, Sweden  
fishbase@nrm.se

# Program

**13 September 2005 Beijer Hall, Royal Swedish Academy of Sciences**

Moderator: *Sven O Kullander*

**0830-0900** Registration

**0900-0910** Opening — Professor *Gunnar Öquist*, Secretary General of the Royal Swedish Academy of Sciences

**0910-0955** Introduction — Professor *Theodore W. Pietsch*, University of Washington

**0955-1040** Artedi Lecture — Dr *G. David Johnson*, Smithsonian Institution

**1040-1125** Artedi Lecture — Dr *Maurice Kottelat*

**1125-1230** Lunch

**1230-1250** Multimedia presentation

**1250-1335** Artedi Lecture — Professor *Richard L. Mayden*, Saint Louis University

**1335-1420** Artedi Lecture — Dr *Lynne R. Parenti*, Smithsonian Institution

**1420-1445** Coffee break

**1445-1530** Artedi Lecture — Professor *Mutsumi Nishida*, University of Tokyo

**1530-1615** Panel discussion — moderator Dr *Ralf Britz*, The Natural History Museum (London)

**1615-1620** Close

Special guest appearance: *Hans Odöo*

## **14 September 2005 Swedish Museum of Natural History**

### **Workshop: Collaborative Platforms for Ichthyology**

With the establishment of the Internet and availability of numerous database tools, including database management systems, tools for creating database driven applications, and data sharing protocols, the ways we manage and use biological data has changed, and the options for new uses of data have increased dramatically.

Ichthyology has a long tradition of digitised museum collections and Internet publication. In this workshop, we explore options for data sharing and applications using shared data in Ichthyology. We will present and demonstrate several available platforms for collaborative work and data sharing, including FishBase, GBIF, the All Catfish Species Inventory, etc. We will examine benefits and drawbacks for individual researchers and institutions, and preferred models for collaboration using shared databases. We will look at what information is available and how it is used, which information we would like to see generally available in the future, and how collaborative platforms can best contribute to scientific progress.

### **Programme**

**0830-0900** Registration Outside main auditorium (“Hörsalen”), with coffee

**0900-0910** Opening by Professor *Stefan Claesson*, head of the Research Department, Swedish Museum of Natural History

Presentations (15 min each) — Moderator Dr *Fang Fang*

**0910-1100** Presentations of collaboration initiatives

**1100-1200** Demonstrations and workshop

1200-1300 Lunch

Discussion — Moderator Dr *Anders Silfvergrip*

**1300-1430** Workshop discussion in groups

**1430-1445** Coffee break

**1445-1530** Plenary discussion and workshop recommendations

### **Confirmed speakers**

- Dr *Carl J. Ferraris, Jr.* — All Catfish Species Inventory
- Professor *Richard L. Mayden* — The Tree of Life Cypriniformes Project
- Dr *Robert Hanner* — Fish-BOL - Fish Barcoding of Life
- Dr *Michael Norén* — FishTrace - Genetic Catalogue, Biological Reference Collections and Online Database of European Marine Fish
- Dr *Maurice Kottelat* — European Ichthyological Society
- Dr *Lars M. Nilsson* — Swedish Research Council
- Dr *Anders Silfvergrip* — FishBase
- Dr *Sven O Kullander* — CLOFFSCA
- Dr *Lynne R. Parenti* — American Society of Ichthyologists and Herpetologists

## **Artedi lectureships**

*For achievements in systematic ichthyology encompassing excellence in documentation, analysis, and dissemination of results.*

**Dr G David Johnson** is Curator of Fishes and Research Scientist with the Division of Fishes, National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Dr Johnson's ichthyological research is concerned with the systematics and early life history of teleost fishes, particularly acanthomorphs, with a central focus on comparative anatomy, ontogeny, phylogenetic reconstruction and classification. His work on the phylogeny of acanthomorph fishes has positioned him as one of the world's leading fish systematists.

Dr Johnson received his PhD in Marine Biology in 1977 from the Scripps Institution of Oceanography, University of California at San Diego. He held research and postdoctoral positions with the Chesapeake Biological Laboratory, University of Maryland, the South Carolina Marine Resources Research Institute, Charleston, and the Smithsonian Institution

Dr Johnson has published 75 peer reviewed articles including several milestone papers on the systematics of higher teleosts. He received several awards, e.g. the Robert H. Gibbs Jr., Memorial Award for an Outstanding Body of Published Work in Systematic Ichthyology and the Smithsonian NMNH Science Achievement Award for an Outstanding Publication.

**Dr Maurice Kottelat** is an independent consultant working from his home in Cornol, Switzerland, and Honorary Research Associate of the Raffles Museum of Biodiversity Research, National University of Singapore.

Dr Kottelat is the world leading authority on the taxonomy of Eurasian fresh water fishes, with a focus on species diversity and classification.

Dr Kottelat graduated from the University of Amsterdam in 1989. He is one of the most experienced field workers in ichthyology with numerous expeditions particularly in Asia, and ranks as the most influential fish systematist in Europe. Dr Kottelat is repeatedly consulted for his expertise on aquatic life in environmental assessments by international funding bodies, including the World Bank. He is both the founder and the editor of the quarterly scientific periodical Ichthyological Explorations of Freshwaters. He is also the current president of the European Ichthyological Society.

Dr Kottelat has produced over 220 scientific publications, including eight books some of which covering entire national freshwater fish faunas. His field research resulted in the discovery and/or description of about 440 fish species new to science.

**Dr Richard L. Mayden** is the chairman of the Department of Biological Sciences with a William S. Barnickel Endowed Chair of Natural Sciences at the Saint Louis University since 2001.

Dr Mayden's research is focused on the fresh water fish diversity. He has conducted large-scale phylogenetic and biogeographic analyses of fishes from the North American fish fauna using a wide variety of techniques including both morphological and molecular data. He is also known for his interest in species concepts and speciation and has published several articles on the topic.

Dr Mayden received his PhD at the University of Kansas in 1987, and was Curator of Fishes at the Ichthyological Collection, University of Alabama between 1987 and 2001.

Dr Mayden has received several large-scale research grants, including for the ongoing collaborative research project "Systematics of Cypriniformes, Earth's Most Diverse Clade of Freshwater Fishes" which involves about 40 scientists from 13 nations.

Dr Mayden has published 123 articles in peer reviewed journals and 17 reports.

**Dr Mutsumi Nishida** is Professor at the Department of Marine Life Science, Ocean Research Institute, The University of Tokyo.

Dr Nishida conducts internationally renowned research on population genetics, phylogenetics, and evolution of aquatic animals, such as fishes and crustaceans. Using molecular techniques, he tries to provide reliable phylogenetic frameworks aiming to understand the evolution of biologically interesting characters, such as morphology, behaviour, or life history, from genetic and genomic viewpoints

Dr Nishida is both a pioneer and an active researcher in molecular studies on the higher level relationship between fishes. He has also demonstrated great interest in population structures, adaptive radiation of fishes, and the speciation of pelagic marine fish species and has published several papers on those topics.

Dr. Mutsumi Nishida received his PhD at Kyoto University, and was Assistant Professor and Professor at University of the Ryukyus and Fukui Prefectural University, respectively. He spent a year and half at University of California, Berkeley as a visiting scientist.

Dr. Mutsumi Nishida is now President of the Japanese Society of Ichthyologists, and serves for the Ocean Research Institute, The University of Tokyo as Vice-Director.

His laboratory employs more than twenty students, graduate students, post-doctoral fellows and collaborators.

Dr Nishida has published 151 articles in peer reviewed journals.

**Dr Lynne R. Parenti** is Curator of Fishes and Research Scientist with the Division of Fishes, National Museum of Natural History, Smithsonian Institution, Washington, D.C., and also Adjunct Professor at the San Francisco State University, and The George Washington University.

Dr Parenti's ichthyological research focuses on the systematics and biogeography of tropical freshwater and coastal fishes, the phylogeny of teleost fishes, and comparative teleost anatomy and development, including application of underutilized character sets to understand the phylogeny and evolution of fishes. Dr Parenti is widely recognized for contributions to the theory and methods of Historical Biogeography.

She graduated in Biology at the City University of New York in 1980, and has since conducted research at the Smithsonian Institution, The Natural History Museum (London) and the California Academy of Sciences (San Francisco).

Dr Parenti is the author of 80 scientific publications, including co-editor of *Interrelationships of Fishes* (1996, Academic Press), and *Ecology of the Marine Fishes of Cuba* (2002, Smithsonian Institution Press), and co-author of *Cladistic biogeography* (1986, 1999, Oxford University Press). She received the Annual Award (2002) from the Academia de Ciencias, Cuba, for an outstanding scientific publication for *Ecology of the Marine Fishes of Cuba*.

Dr Parenti is President of the American Society of Ichthyologists and Herpetologists, and member of the National Academy of Sciences US National Committee/DIVERSITAS. She was elected Honorary Fellow of the California Academy of Sciences in 1989, and Fellow of the American Association for the Advancement of Science in 2001.

## Venue

The Royal Swedish Academy of Sciences (Kungl. Vetenskapsakademien) and the Swedish Museum of Natural History (Naturhistoriska riksmuseet) are located to the north of downtown Stockholm, and conveniently reached by metro to station Universitetet



## Information for visitors

The arrangement include only lunch and meeting organisation. Participants must arrange their own stay in Stockholm.

The following web sites provide information about travel and hotels:

[www.destination-stockholm.se](http://www.destination-stockholm.se)  
[www.stockholmtown.com](http://www.stockholmtown.com)

The following hotels are cheap alternatives used by visitors to the museum. Contact information is available at the web sites listed above.

### **A & Be Hotell AB**

[www.abehotel.com](http://www.abehotel.com)  
Metro: Stadion or Östermalmstorg

### **Wasa Park Hotel**

Metro: St Eriksplan

### **Mälardrottningen Hotel**

Barbara Hutton's yacht now converted to hotel.  
Metro: Gamla Stan