

## The Third Okazaki Biology Conference The Biology of Extinction 2

**Organizing Chair: Tetsukazu Yahara (Kyushu University, Japan)  
Callum Roberts (University of York, USA)**

**March 12 (Sun) ~ 17 (Fri), 2006**

Extinction and speciation are two key processes that contributed to the formation of global patterns of biodiversity. Extinction is, therefore, a natural process. On the other hand, increasing human influence upon global ecosystems is accelerating species extinction. How does extinction occur? How do natural and anthropogenic factors interact upon extinction? What consequences are to be expected following mass extinction? These are critical questions from both basic and applied standpoints.

The purpose of the conference "The Biology of Extinction 2" was to discuss these questions by following up progress in biological sciences related to the extinction of species since the first OBC "The Biology of Extinction" in 2004. The goal of this series of conferences was to explore the possibility of forming a new research field of basic biology centered on the theme of extinction.

We invited nine non-Japanese and five Japanese researchers to attend the first OBC conference and they made significant contributions to its success. In addition, we invited ten new members in order to broaden our perspectives and stimulate discussion.

### Scientific topics:

**Historic and Prehistoric Extinctions  
Patterns and Genetics of Extinction  
Population Perspectives for Extinctions  
Community Perspectives for Extinction  
Invasion and Extinction  
Climate Change, Extinction and Management  
Toward an Integrated Understanding of Extinction**

### Speakers

ARAUJO, Miguel B. (MNCN, Spain), BIELBY, Jon N. (Imperial College London, UK), BRADSHAW, Corey J. A. (Charles Darwin Univ., Australia), BROOK, Barry W. (Charles Darwin Univ., Australia), CALEY, Julian (AIMS, Australia), COURCHAMP, Franck (CNRS, France), DUFFY, David C. (Univ. Hawaii Manoa, USA), FRANKHAM, Richard (Macquarie Univ., Australia), GOLDBERG, Emma E. (Univ. California, San Diego, USA), HALLEY, John M. (Aristotle Univ. Thessaloniki, Greece), HAMER, Keith C. (Univ. Leeds, UK), HANSKI, Ilkka (Univ. Helsinki, Finland), HARRISON, Ian J. (AMNH, USA), HASTINGS, Alan (Univ. California, Davis, USA), HUME, Julian P. (Natural History Museum, England), JACKSON, Jeremy B. C. (Univ. California, San Diego, USA), JETZ, Walter (Univ. California, San Diego, USA), KOH, Lian Pin (Princeton Univ., USA), LANDE, Russell (Univ. California, San Diego, USA), MARTINEZ-MEYER, Enrique (UNAM, Mexico), OLSON, Storrs L. (Smithsonian Inst., NMNH, USA), ORME, David (Imperial College London, UK), PURVIS, Andy (Imperial College London, UK), RIPA, Jorgen (Lund Univ., Sweden), ROBERTS, Callum (Univ. York, USA), SALA, Enric (CMBC, USA), SEKERCIOGLU, Cagan H. (Stanford Univ., USA), SHAFFER, H. Bradley (Univ. California, Davis, USA), SODHI, Navjot S. (National Univ. Singapore, Singapore), STIASSNY, Melanie L. (AMNH, USA), VIE, Jean-Christophe (IUCN, Switzerland), WILMERS, Christopher C. (Univ. California, Davis, USA), HAKOYAMA, Hiroshi (NRIFS, Japan), ISHIHAMA, Fumiko (NIES, Japan), IWASA, Yoh (Kyushu Univ., Japan), KUDO, Gaku (Hokkaido Univ., Japan), MASUDA, Michiko (NIT, Japan), MATSUDA, Hiroyuki (Yokohama National Univ., Japan), NATUHARA, Yoshihiro (Osaka Pref. Univ., Japan), OTA, Hidetoshi, (Univ. Ryukyus, Japan), TAKAGAWA, Shinichi (Univ. Tokyo, Japan), TAKENAKA, Akio (NIES, Japan), TANAKA, Yoshinari (Chuo Univ., Japan), TOKITA, Kei (Osaka Univ., Japan), TOMIMATSU, Hiroshi (TMU, Japan), WASHITANI, Izumi (Univ. Tokyo, Japan), YAHARA, Tetsukazu (Kyushu Univ., Japan), YOKOMIZO, Hiroyuki (Kyushu Univ., Japan)

There were two oral sessions, one in the morning and one in the afternoon, on each day of the conference, excepting Wednesday. These sessions constituted seven sets of papers with specific themes, each of which included three or four speakers. Wednesday afternoon was a time for poster presentations. On Friday morning, eight short talks were given by presenters selected from among the poster presenters. The quality of all of the posters and short talks was very high.

In the seven sessions listed below, we identified some critical progress in our understanding of extinction proneness, the dynamics of extinction, speciation and migration, climatic change effects upon extinction, the role of human psychology upon anthropogenic extinction, and other issues. After the sessions, we had a general discussion about how extinction biology can be developed and synthesized. All of the participants were enthusiastic about participating in the birth of a new research field.

In conclusion, we believe that the meeting was a successful one. This third OBC conference provided an opportunity for experts in different branches of biology to meet and interact productively.



## The Fourth Okazaki Biology Conference Terra Microbiology 2

**Organizing Chair: Kenji Kato (Shizuoka University, Japan)  
Daniel J. Arp (Oregon State University, USA)**  
**September 10 (Sun) ñ 15 (Fri), 2006**

The conference was held at the Okazaki Conference Center and was attended by 54 invited participants from the USA (11), the UK (3), Switzerland (2), the Netherlands (2), Australia (2), Singapore (2), Germany (1), China (1), New Zealand (1) and Japan (29). Inspired by the achievements of the previous conference, the iTerra Microbiology 2i conference was organized with the intention of embodying the results of the conference more directly by initiating several cooperative research programs. A fast developing field of the research on nitrogen metabolism from both metabolic sequence and genome analysis was focused on during Session 1. Session 2 and Session 3 focused on other important

aspects of microbial ecology.

Session 1: Bio-geochemical cycling and microbial function.

Session 2: Gene hopping among microbes, from clinical and environmental evidence to the evolution of life.

Session 3: Bacterial cross talk.

In addition to the intensive discussions, the conference included two keynote lectures, 30 oral presentations, and 27 poster presentations. The development of meta-genomics was one of the principle topics of discussion during the conference.

### Scientific topics:

#### Bio-Geochemical Cycling and Microbial Functions

#### Gene Hopping Among Microbes

-From Clinical and Environmental Evidences to  
Evolution of Life -

#### Bacterial Cross Talk

### Speakers

AMINOV, Rustam (The Rowett Research Institute, UK), ARP, Daniel J. (Oregon State University, USA), BARKAY, Tamar (Rutgers University, USA), BAUER, Wolfgang D. (University of California, USA), EBERL, Leo (University of Zurich, Switzerland), GU, Ji-Dong (The University of Hong Kong, PR China), HENNECKE, Hauke H. (ETH, Switzerland), HETTICH, Robert L. (Oak Ridge National Laboratory, USA), KJELLEBERG, Staffan L. (The University of New South Wales, Australia), KLOTZ, Martin G. (University of Louisville, USA), LAANBROEK, Hendrikus J. (Netherlands Institute of Ecology, The Netherlands), LIU, Wen-Tso (National University of Singapore, Singapore), MURRELL, Colin (University of Warwick, UK), RAINEY, Paul B. (University of Auckland, New Zealand), RIVERA, Maria C. (University of California Los Angeles, USA), ROHWER, Forest (San Diego State University, USA), SALMOND, George P. C. (University of Cambridge, UK), SCHUSTER, Stephan C. (Penn State University, USA), SMALLA, Kornelia (Federal Biological Research Centre for Agriculture and Forestry, Germany), SOBECKY, Patricia A. (Georgia Institute of Technology, USA), SPIRO, Stephen (University of Texas at Dallas, USA), STROUS, Marc (Radboud University Nijmegen, The Netherlands), TIEDJE, James M. (Michigan State University, USA), ZHANG, Lian-Hui (Institute of Molecular and Cell Biology, Singapore), ZHOU, Jizhong (Institute for Environmental Genomics, USA)

ARITA, Masanori (The University of Tokyo, Japan), EDA, Shima (Tohoku University, Japan), FUJIWARA-NAGATA, Erina (Kinki University, Japan), IKEDA, Tsukasa (Utsunomiya University, Japan), KAMAGATA, Yoichi (National Institute of Advanced Industrial Science and Technology (AIST), Japan), KATAYAMA, Yoko (Tokyo University of Agriculture and Technology, Japan), KATO, Kenji (Shizuoka University, Japan), KATO, Junichi (Hiroshima University, Japan), KAWARABAYASI, Yutaka (National Institute of Advanced Industrial Science and Technology (AIST), Japan), KOBAYASHI, Keisuke (Tokyo Institute of Technology, Japan), KUGA, Yukari (Shinshu University, Japan), MINAMISAWA, Kiwamu (Tohoku University, Japan), MIYASHITA, Hideaki (Kyoto University, Japan), MORISAKI, Hisao (Ritsumeikan University, Japan), NANBA, Kenji (Fukushima University, Japan), NASU, Masao (Osaka University, Japan), OHTA, Hiroyuki (Ibaraki University, College of Agriculture, Japan), OHTOMO, Ryo (National Institute of Livestock and Grassland Science, Japan), OKABE, Satoshi (Hokkaido University, Japan), SAITO, Masanori (National Institute for Agro-Environmental Sciences, Japan), SENOO, Keishi (The University of Tokyo, Japan), SHOUN, Hirofumi (The University of Tokyo, Japan), SUNAMURA, Michinari (The University of Tokyo, Japan), SUWA, Yuichi (National Institute of Advanced Industrial Science and Technology (AIST), Japan), SUZUKI, Satoru (Ehime University, Japan), TAKAI, Ken (Japan Agency for Marine-Earth Science & Technology, Japan), UCHIYAMA, Ikuo (National Institute for Basic Biology, Japan), WADA, Minoru (The University of Tokyo, Japan), YOSHINAGA, Ikuo (Graduate School of Agriculture, Kyoto University, Japan), OHMORI, Masayuki (Saitama University, Japan)

