

# Connection and diversity depicted by Biohistory journal archives

## Seeking the path from keyword networks to comprehensive knowledge

The quarterly journal Biohistory has considered biohistory from various entry points, and in 20 years has had 80 issues and more than 700 articles. We have created an overhead view of this accumulation, creating mutual relationships between the contents and words used in the talks, research articles, and researcher introductions. As an example, if we focus on articles having the keywords "Genome" and "Daily life", we can see connections unfold that would never occur to us, such as Genome being connected to Goethe by through Complex system, or Daily life being connected through Climate and culture to Eukaryotes. Musing on "being alive" and from there thinking about how to "live" causes us to see new connections and diversity. This is the starting point of the search for comprehensive knowledge.

### Articles conveyed by the keyword "Genome"

- vol.11 | **Enjoy the romantic age of molecular genetics**  
Haruo Koseki Molecula, Information, Mutant
- vol.33 | **To find out a kind of law hidden in genome sequence**  
Kiyoshi Asai Model, Information, Pattern, Structure
- vol.33 | **Humans from the viewpoint of information**  
Jun-ichi Tsujii Language, Molecule, Artificial intelligence, Mathematics
- vol.33 | **The similarity between language and genomes**  
Masaaki Nagata Model, Language
- vol.38 | **Genome Imprinting - Time Implanted in a Generations**  
Fumitoshi Ishino Epigenetics, Reproduction
- vol.40 | **Life: The universality of diversification**  
Kunihiko Kaneko Clone, Entropy, Complex system
- vol.44 | **The difficulty of both the human body and genome to narrate**  
Tatsuo Sakai Anatomy, Observation, Body, Study, Hierarchy
- vol.45 | **Using observation for hand-drawn illustrations and photography that seeks rediscovery**  
Chihiro Minato Art, Painting, Photos, Observation
- vol.46 | **The form of living creatures as seen from the manner of DNA multiplication**  
Hiroshi Yoshikawa Molecule, Cell, Eukaryotes, Insects
- vol.48 | **An examination from the leaves -The abundant creation of forms understood from a general sense of strangeness**  
Hirokazu Tsukaya Plants, Cell, Observation, Literature
- vol.52 | **An ageless worker with information and a function**  
Yoshikazu Nakamura Molecule, Information, Structure, Complication
- vol.56 | **The genome as a place where genes 'spend their lives'**  
Junichi Obokata Organelle, Network, Symbiosis
- vol.56 | **Horizontal transfer of the genes which supports the biodiversity**  
Mitsuhiro Itaya Diversification, Network, Organelle
- vol.56 | **From development to evolution -Time of living creatures through the study of sea squirt**  
Noriyuki Sato Phylogeny, Morphogenesis, Differentiation
- vol.57 | **Challenge the human cancer virus**  
Mitsuaki Yoshida Chemistry, Molecule, Cancer, Medicine
- vol.57 | **Story of evolution told by the formation of living creatures**  
Shigeru Kuratani Morphogenesis, Natural history, Network
- vol.59 | **Measure the gene composition of the whole intestinal bacteria**  
Masahira Hattori Cell, Symbiosis, Environment, Metabolism
- vol.60 | **Flexibility of genome which changes in response to the environment**  
Yasuhiro Gou Environment, Perception, Phylogeny, Speciation
- vol.67 | **How to find the rules of living things**  
Takeshi Naganuma Origine of life, Molecule, Symmetry
- vol.73 | **Questioning the fundamentals of DNA storage -Freedom generated from the erratic storage**  
Kazuhiro Maeshima Molecule, Structure, Model, Energy
- vol.75 | **Learning from the wisdom of plants**  
Mitsuyasu Hasebe Morphogenesis, Network, Clone
- vol.76 | **Exploring changes in the expression regulatory sequence**  
Haruki Ochi Regulation of gene expression, Diversification, Morphogenesis
- vol.76 | **Wanting to understand the intelligence that is a cell**  
Masaru Tomita Cell, Network, Metabolism

**R** Research  
**SL** Scientist Library  
**T** Talk

### Articles conveyed by the keyword "Daily life"

- vol.35 | **A new wave of human science - Ecological Psychology**  
Masato Sasaki Mind, Body, Perception, Darwin
- vol.37 | **About Love-Wonder and tears are the wellspring of creation**  
Tomonobu Imamichi Language, Learning, Philosophy, Natural philosophy
- vol.41 | **The potential of the science of the wild: Inuit knowledge and modern science**  
Keiichi Omura Humanity, Environment, Tradition, Story
- vol.43 | **The difference among living creatures, "Homo Sapience" and "humans"**  
Junzo Kawada Humanity, Voice, Language, Story, Africa
- vol.47 | **The joys of observing nature and history**  
Terunobu Fujimori Observation, Natural history Jomon, Climate & culture
- vol.49 | **Searching for interrelationships with sound -The whole body senses sound**  
Tsutomu Ohashi×Keiko Nakamura Brain, Music, Body, Perception, Art
- vol.49 | **Searching for the origin of words from the song of the hylobatidae**  
Nobuo Masataka Voice, Communication, Pattern
- vol.50 | **On the future of the Biohistory Journal**  
Motoya Katsuki/National Institute for Basic Biology×Toru Nishigaki Genome, Biopoiesis, Hierarchy
- vol.51 | **21st century culture created by small town people**  
Kenichiro Ohara Family, Tradition, Museum
- vol.51 | **The new culture created by changes in the land**  
Seiichiro Tsuji Humanity, Jomon, Environment, Archaeology
- vol.52 | **Lions as a symbol of other**  
Kazu Yoshi Sugawara Humanity, Africa, Environment, Story
- vol.54 | **A space that living beings can inhabit is created**  
Toyo Ito ×Keiko Nakamura Biopoiesis, Climate and culture, Pattern
- vol.56 | **Listening to the connection of life from the vibration of musical sound**  
Mamoru Fujieda×Keiko Nakamura Music, Archaeology, Tradition, Motif
- vol.58 | **Life is continued by movement and relationship**  
Hideo Kawamoto×Keiko Nakamura Body, Perception, Hierarchy, Rhythm
- vol.59 | **Seek the lateral connection based on the beauty**  
Chieko Suemori×Katsura Funakoshi×Keiko Nakamura Picture book, Generatin, Family, Story
- vol.59 | **Measure the gene composition of the whole intestinal bacteria**  
Masahira Hattori Symbiosis, Environment, Metabolism, Genome
- vol.60 | **A eye on each creature carefully**  
Izumi Washitani×Keiko Nakamura Satoyama, Natural history, Darwin
- vol.60 | **Flexibility of genome which changes in response to the environment**  
Yasuhiro Gou Genome, Environment, Behavior, Plasticity
- vol.61 | **The resourcefulness of the people who transigrate between islands**  
Michiko Intoh×Keiko Nakamura Humanity, Family, Archaeology, Asia
- vol.63 | **Wind and water and living creatures that transigrate on earth**  
Hiroyuki Ishi×Keiko Nakamura Global environment, Material cycle, Humanity
- vol.66 | **Depicting nature by using pictures and words**  
Riko Imahashi×Keiko Nakamura Observation, Painting, Story, Natural history
- vol.68 | **Keeping thinking why animals continue traveling**  
Katsumi Tsukamoto Reproduction, Behavior, Locus, Phylogeny, Classification
- vol.69 | **Playing the ambiguous field**  
Seigo Matsuoka×Keiko Nakamura Story, Learning, Edo period, Asia
- vol.70 | **Tanka (Japanese poetry) and science -Play originated in the fixed form**  
Kazuhiro Nagata×Keiko Nakamura Observation, Literature, Language, Learning
- vol.71 | **In pursuit of the soul-shaking way of life**  
Kiyokazu Agata×Keiko Nakamura Brain, Cell, Learning
- vol.72 | **Seeing the evolution of mind with a spirit of pioneer**  
Tetsuro Matsuzawa Humanity, Mind, Behavior, Family, Perception
- vol.73 | **The place where random chance is changed into necessity**  
Kengo KumaxKeiko Nakamura Climate & culture, Locus, Edo period, Tradition
- vol.77 | **Reconnection of art and science again**  
Aeka Ishihara×Keiko Nakamura Learning, Natural history, Goethe, ColorHumanity, Family, Heritage, Field

