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Associate Professor in Genetics

Deputy Dean for Special Affairs

h-index: 21 (Google Scholar citations; accessed 31 May 2022)

18 (Scopus citations; accessed 31 May 2022)

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EDUCATION

2018	Endeavour Postdoctoral Fellow (Reptile Genomics)	University of Canberra, Australia
2014	Visiting Postdoctoral Fellow (Bird Cytogenetics)	University of Kent, UK
2012	Postdoctoral Fellow (Reptile Cytogenetics)	Nagoya University, Japan
2010	Ph.D. (Genetics)	Kasetsart University, Thailand
2005	B.SC. (Biology), 1 st honor	Kasetsart University, Thailand

POSITION

- Associate Professor (Kasetsart University, Thailand)
- Deputy Dean for Special Affairs, Faculty of Science, Kasetsart University
- National Subcommittee of Bio-Circular-Green Economy (BCG Model) in the Field of Biodiversity
- Institutional Animal Care and Use Committee for Faculty of Science, Kasetsart University
- Visiting Associate Professor, Amphibian Research Center, Hiroshima University, Japan
- Guest Editor: GENES (special issue functional sex chromosome evolution)
- Editorial Board: Genes and Genomics (section Phylogenomics, Conservation Genetics, Diversity)
- Editorial Board: Genomics and Informatics
- Editorial Board: Frontier in Genetics
- 2nd Deputy Secretary-General of Genetics Society of Thailand
- Team Leader, National Betta BioResource Project (NBBRP), Kasetsart University, Bangkok, Thailand

- International Steering Committee of Asian Chromosome Colloquium

EMPLOYMENT HISTORY

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|-------------------|---|
| • 2020 – present | Visiting Associate Professor, Amphibian Research Center,
Hiroshima University, Japan |
| • 2019 – present | Associate Professor, Kasetsart University, Thailand |
| • 2018 (6 months) | Endeavour Postdoctoral Fellow, University of Canberra, Australia |
| • 2014 – 2019 | Assistant Professor, Kasetsart University, Thailand |
| • 2011 – 2012 | Postdoctoral Fellow, Nagoya University, Japan |
| • 2010 – 2013 | Lecturer, Kasetsart University, Thailand |

RESEARCH INTERESTS

The aim of my study is to clarify genome and chromosome structures as well as their evolutionary processes in vertebrates by cytogenetic and molecular biology techniques. I plan to carry out the following research topics:

1. Karyological characterization in vertebrates

To reveal the karyological characterization in vertebrates, the karyotyping, chromosome banding and FISH mapping are performed. The karyological characterization data would inform us the phylogenetic hierarchy of genome evolution in vertebrates and efficiently sustain the favorable selection in animal breeding program.

2. Karyotypic and genomic evolution in vertebrates

To elucidate the process of karyotypic evolution in vertebrates, the chromosome homologies between different species in fish, amphibians, reptiles, birds and mammals are deduced using comparative chromosome mapping.

3. Origin and differentiation of sex chromosomes, diversity of sex-determining systems and sex-determining gene evolution in vertebrates

Mammals and birds have a male heterogametic XX/XY-type sex chromosome, and a female heterogametic ZZ/ZW-type sex chromosome, respectively, whereas amphibians have both XX/XY- and ZZ/ZW-type sex chromosome. By contrast, XX/XY- and ZZ/ZW-type sex chromosome not only co-exist in reptiles and fish as genetic sex determination, but the environmental sex determination such as temperature is also found in both vertebrate groups. To clarify the origin and differentiation of sex chromosomes, the comparative chromosome maps of sex chromosomes are constructed and compared them with other species. Furthermore, sex-determining genes such as *DM* and *SOX* family are proposed to be a candidate gene of sex determination in vertebrates. The orthologues and paralogues of sex-determining gene, therefore, are studied to disclose gene evolution in vertebrate.

4. Organization of repetitive element in vertebrate genome

Repetitive DNA sequences is a good chromosome marker for investigating the process of karyotypic evolution and sex chromosome identification, and for comparing the genomics structure of vertebrate species. This can be also a source for homologous recombination to initiate

various categories of chromosomal rearrangements. Here, the characterization and comparison of organized repetitive element among different species should be conducted to find the common and specific repeats in the evolutionary line.

5. Genetic and genomic diversity

To clarify the step of evolution and population demography in vertebrates, genome wide SNP, mitochondrial genome and nuclear gene analyses is used. The structure and organization are compared among different species within the same class or among population within the same species. The data sets are also scrutinized through cladistic analysis to demonstrate the genetic and genomic diversity among them.

COURSES

- Introduction to Cytogenetics
- Cytogenetics
- Principle of Genetics
- Laboratory in Genetics
- Intensive Genetics
- Research Technique in Genetics

AWARDS

2021	Impact Research Award from Kasetsart University, Thailand
2020	Outstanding Academic Personnel in Research Science Under 40 years from Kasetsart University, Thailand
2018	TWAS Prize for Young Scientists in Thailand (Biology) from the World Academy of Sciences for the advancement of science in developing countries
2016	Innovative Scientist of the year Award-2015 (for outstanding achievement in the field of Reptile Cytogenetics from the Executive Council of SARC (Scientific and Applied Research Center Meerut (U.P.) India
2014	Visiting staff under Lotus Unlimited Project, EU-Asian Mobility (Avian Comparative Genomics) at Prof. Darren Griffin's lab, University of Kent, UK
2014	KU Research Star 2013 (Biological Science)

RESEARCH FUNDINGS

- NRCT fund (National Research Council of Thailand), Thailand
- KURDI fund (Kasetsart University Research and Development Institute), Thailand
- e-Asia Joint Research Program (By collaboration between NSTDA and JST)
- National Science and Technology Development Agency (NSTDA), Thailand
- The National Primate Research Center of Thailand, NPRCT-CU Chulalongkorn University

PUBLICATION

1. Singchat, W., A. Chaiyes, W. Wongloet, N. Ariyaraphong, K. Jaisamut, T. Panthum, S.F. Ahmad, W. Chaleekarn, W. Suksavate, M. Inpota, C. Chaisongkram, N. Kaewsalubnil, N. Muangmai, W. Chamchumroon, Y. Matsuda, P. Duengkae, and **K. Srikulnath**. 2022. Red junglefowl resource management guide: bioresource reintroduction for sustainable food security in Thailand. **Sustainability** 14: 7895. <https://doi.org/10.3390/su14137895>
2. Singchat, W., S.F. Ahmad, K. Jaisamut, T. Panthum, N. Ariyaraphong, E. Kraichak, N. Muangmai, P. Duengkae, S. Payungporn, S. Malaivijitnond, and **K. Srikulnath**. 2022. Population scale analysis of centromeric satellite DNA reveals highly dynamic evolutionary patterns and genomic organization in long-tailed and rhesus macaques. **Cells** 11: 1953. <https://doi.org/10.3390/cells11121953>.
3. Chetruengchai W., W. Singchat, C. Srichomthong, A. Assawapitaksakul, **K. Srikulnath**, S.F. Ahmad, C. Phokaew, and V. Shotelersuk. 2022. Genome of *Varanus salvator macromaculatus* (Asian water monitor) reveals adaptations in the blood coagulation and innate immune system. **Front. Ecol. Evol.** 10: 850817. <https://doi.org/10.3389/fevo.2022.850817>
4. Chaiyes A., P. Duengkae, W. Suksavate, N. Pongpattananurak, S. Wacharapluesadee, K.J. Olival, **K. Srikulnath**, S. Pattanakiat, T. Hemachudha. 2022. Mapping risk of nipah virus transmission from bats to humans in Thailand. **Ecohealth**. <https://doi.org/10.1007/s10393-022-01588-6>
5. Panthum, T. K. Jaisamut, W. Singchat, S.F. Ahmad, L. Kongkaew, W. Wongloet, S. Dokkaew, E. Kraichak, N. Muangmai, P. Duengkae, and **K. Srikulnath**. 2022. Something fishy about Siamese fighting fish (*Betta splendens*) sex: polygenic sex determination or a newly emerged sex-determining region? **Cells** 11: 1764. <https://doi.org/10.3390/cells11111764>
6. **Srikulnath**, K.⁺, S.F. Ahmad, W. Singchat, and T. Panthum⁺. 2022. Do Ty3/Gypsy transposable elements play preferential roles in sex chromosome differentiation? **Life** 12: 522. <https://doi.org/10.3390/life12040522>
7. Nguyen, D.H.M., J. Ponjarat, N. Laopichienpong, T. Panthum, W. Singchat, S.F. Ahmad, E. Kraichak, N. Muangmai, P. Duengkae, S. Peyachoknagul, U. Na-Nakorn, and **K. Srikulnath**. 2022. Genome-wide SNP analysis of hybrid clariid fish reflects the existence of polygenic sex-determination in the lineage. **Front. Genet.** 13: 789573. doi: 10.3389/fgene.2022.789573
8. **Srikulnath**, K.⁺, S.F. Ahmad⁺, T. Panthum, and S. Malaivijitnond. 2022. Importance of Thai macaque bioresources for biological research and human health. **J. Med. Primatol.** 51: 62 – 72. doi: 10.1111/jmp.12555 (Co First Author)
9. Suntronpong, A., T. Panthum, N. Laopichienpong, D.H.M. Nguyen, E. Kraichak, W. Singchat, N. Ariyaraphong, S.F. Ahmad, N. Muangmai, P. Duengkae, S. Peyachoknagul, T. Ezaz, **K. Srikulnath**. 2022. Implications of genome-wide single nucleotide polymorphisms in jade perch (*Scortum barcoo*) reveals the putative XX/XY sex-determination system, facilitating a new chapter of sex control in aquaculture. **Aquaculture** 548: 737587. <https://doi.org/10.1016/j.aquaculture.2021.737587>
10. Thapana, W., N. Ariyaraphong, P. Wongtienchai, N. Laopichienpong, W. Singchat, T. Panthum, S.F. Ahmad, E. Kraichak, N. Muangmai, P. Duengkae, and **K. Srikulnath**. 2022. Concerted and independent evolution of control regions 1 and 2 of water monitor lizards (*Varanus salvator macromaculatus*) and different phylogenetic informative markers. **Animals** 12: 148. doi: 10.3390/ani12020148.

11. Alam, S.M.I., T. Prasongmaneerut, D. Gleeson, A. Georges, S.D. Sarre, **K. Srikulnath**, and T. Ezaz. 2021. Sex-Determination Mechanisms among Populations within Cryptic Species Complex of *Calotes* (Squamata: Agamidae: Draconinae). **DNA**. 1: 49 – 67. <https://doi.org/10.3390/dna1020006>
12. Areesirisuk, P.⁺, **K. Srikulnath**⁺, P. Onsod, J. Jaroensuk, and B. Rerkamnuaychoke. 2021. Haplogroup Distribution of 309 Thais from Admixed Populations across the Country by HV1 and HVII Sanger-Type Sequencing. **Diversity**. 13: 496. <https://doi.org/10.3390/d13100496> (Co First Author)
13. Ahmad, S.F., M. Jehangir, **K. Srikulnath**, and C. Martins. 2021. Fish genomics and its impact on fundamental and applied research of vertebrate biology. **Rev. Fish Biol. Fisheries**. <https://doi.org/10.1007/s11160-021-09691-7>
14. Panthum, T., N. Laopichienpong, E. Kraichak, W. Singchat, D.H.M. Nguyen, N. Ariyaraphong, S.F. Ahmad, N. Muangmai, P. Duengkae, S. Peyachoknagul, T. Ezaz, and **K. Srikulnath**. 2021. The snakeskin gourami (*Trichopodus pectoralis*) tends to exhibit XX/XY sex determination. **Fishes**. 6: 43. <https://doi.org/10.3390/fishes6040043>
15. Panthum, T., W. Singchat, N. Laopichienpong, S.F. Ahmad, E. Kraichak, P. Duengkae, N. Muangmai, N. Kitana, and **K. Srikulnath**. 2021. Genome-wide SNP analysis of male and female rice field frogs, *Hoplobatrachus rugulosus*, supports a non-genetic sex determination system. **Diversity**. 13: 501. <https://doi.org/10.3390/d13100501>
16. Singchat, W.⁺, T. Panthum, S.F. Ahmad, S. Baicharoen, N. Muangmai, P. Duengkae, D.K. Griffin, and **K. Srikulnath**⁺. 2021. Remnant of Unrelated Amniote Sex Chromosomal Linkage Sharing on the Same Chromosome in House Gecko Lizards, Providing a Better Understanding of the Ancestral Super-Sex Chromosome. **Cells**. 10: 2969. <https://doi.org/10.3390/cells10112969> (Co First Author)
17. **Srikulnath, K.**, S.F. Ahmad, W. Singchat, and T. Panthum. 2021. Why Do Some Vertebrates Have Microchromosomes? **Cells**. 10: 2182. doi.org/10.3390/cells10092182
18. Thintip, J., W. Singchat, S.F. Ahmad, N. Ariyaraphong, N. Muangmai, W. Chamchumroon, K. Pitiwong, W. Suksavate, S. Duangjai, P. Duengkae, and **K. Srikulnath**. 2021. Reduced genetic variability in a captive-bred population of the endangered Hume's pheasant (*Syrmaticus humiae*, Hume 1881) revealed by microsatellite genotyping and D-loop sequencing. **PLoS ONE**. 16: e0256573. doi.org/10.1371/journal.pone.0256573
19. Ahmad, S.F., W. Singchat, T. Panthum, and **K. Srikulnath**. 2021. Impact of repetitive DNA elements on snake genome biology and evolution. **Cells**. 10: 1707. doi.org/10.3390/cells10071707
20. Thintip, J.⁺, S.F. Ahmad⁺, W. Singchat, N. Laopichienpong, A. Sunthornphong, T. Pantum, D. H. M. Nguyen, N. Ariyaraphong, N. Muangmai, W. Suksawet, P. Duengkae, and **K. Srikulnath**. 2021. Mitochondrial genome of bronze-winged jacana (*Metopidius indicus*, Latham 1790). **Mitochondrial DNA Part B**. 6: 2251-2253. doi: 10.1080/23802359.2021.1945971 (Co First Author)
21. Ariyaraphong, N., T. Pansrikaew, K. Jangtarwan, J. Thintip, W. Singchat, N. Laopichienpong, T. Pongsanarm, T. Panthum, A. Suntronpong, S.F. Ahmad, N. Muangmai, A. Kongphoemph, A. Wongsodchuen, S. Intapan, W. Chamchumroon, M. Safoowong, P. Duengkae, and **K. Srikulnath**. 2021. Introduction of wild Chinese gorals into a captive population requires careful genetic breeding plan monitoring for successful long-term conservation. **Glob. Ecol. Conserv.** 28: e01675. doi: 10.1016/j.gecco.2021.e01675

22. Nguyen, D.H.M., J. Ponjarat, N. Laopichienpong, E. Kraichak, T. Panthum, W. Singchat, S.F. Ahmad, N. Muangmai, P. Duengkae, S. Peyachoknagul, T. Ezaz, U. Na-Nakorn, and **K. Srikulnath**. 2021. Genome-wide SNP analysis suggests male heterogamety in bighead catfish (*Clarias macrocephalus*, Günther, 1864). **Aquaculture**. 543: 737005. doi: 10.1016/j.aquaculture.2021.737005
23. Ariyaphong, N., N. Laopichienpong, W. Singchat, T. Panthum, S.F. Ahmad, D. Jattawa, P. Duengkae, N. Muangmai, T. Suwanasopee, S. Koonawootrittriron, and **K. Srikulnath**. 2021. High-level gene flow restricts genetic differentiation in dairy cattle populations in Thailand: Insights from large-scale mt D-loop sequencing. **Animals**. 11: 1680. doi: 10.3390/ani11061680
24. Hata, A., M. Nunome, T. Suwanasopee, P. Duengkae, S. Chaiwatana, W. Chamchumroon, T. Suzuki, S. Koonawootrittriron, Y. Matsuda, and **K. Srikulnath**. 2021. Origin and evolutionary history of domestic chickens inferred from a large population study of Thai red junglefowl and indigenous chickens. **Sci. Rep.** 11: 2035. doi: 10.1038/s41598-021-81589-7
25. Laopichienpong, N., S.F. Ahmad, W. Singchat, A. Suntronpong, T. Pongsanarm, K. Jangtarwan, J. Bulan, T. Pansrikaew, T. Panthum, N. Ariyaphong, N. Subpayakom, S. Dokkaew, N. Muangmai, P. Duengkae, and **K. Srikulnath**. 2021. Complete mitochondrial genome of Mekong fighting fish, *Betta smaragdina* (Teleostei: Osphronemidae), **Mitochondrial DNA Part B**. 6: 776-778. doi: 10.1080/23802359.2021.1882893
26. Miura, I., F. Shams, S.M. Lin, M.d.B. Cioffi, T. Liehr, A. Al-Rikabi, C. Kuwana, **K. Srikulnath**, Y. Higaki, and T. Ezaz. 2021. Evolution of a Multiple Sex-Chromosome System by Three-Sequential Translocations among Potential Sex-Chromosomes in the Taiwanese Frog *Odorrana swinhoana*. **Cells**. 10, 661. doi: 10.3390/cells10030661
27. Nguyen, D.H.M., T. Panthum, J. Ponjarat, N. Laopichienpong, E. Kraichak, W. Singchat, S.F. Ahmad, N. Muangmai, S. Peyachoknagul, U. Na-Nakorn, and **K. Srikulnath**. 2021. An Investigation of ZZ/ZW and XX/XY Sex Determination Systems in North African Catfish (*Clarias gariepinus*, Burchell, 1822). **Front. Genet.** 11: 562856. doi: 10.3389/fgene.2020.562856
28. **Srikulnath, K.**, W. Singchat, N. Laopichienpong, S.F. Ahmad, M. Jehangir, N. Subpayakom, A. Suntronpong, K. Jangtarwan, T. Pongsanarm, T. Panthum, N. Ariyaphong, J. Camcuan, P. duengkae, S. Dokkaew, and N. Muangmai. 2021. Overview of the batfish genome regarding species radiation, parental care, behavioral aggression, and pigmentation model relevant to humans. **Genes & Genomics**. 43(2): 91-104. doi: 10.1007/s13258-020-01027-2
29. Laopichienpong, N., E. Kraichak, W. Singchat, S. Sillapaprayoon, N. Muangmai, S. Suntrarachun, S. Baicharoen, S. Peyachoknagul, L. Chanhome, T. Ezaz, and **K. Srikulnath**. 2021. Genome-wide SNP analysis of Siamese cobra (*Naja kaouthia*) reveals the molecular basis of transitions between Z and W sex chromosomes and supports the presence of an ancestral super-sex chromosome in amniotes. **Genomics**. 113: 624-636. doi: 10.1016/j.ygeno.2020.09.058
30. Wongtienchai, P., S. Lapbenjakul, K. Jangtarwan, P. Areeririsuk, R. Mahaprom, N. Subpayakom, W. Singchat, S. Sillapaprayoon, N. Muangmai, R. Songchan, S. Baicharoen, P. Duengkae, S. Peyachoknagul, and **K. Srikulnath**. 2021. Genetic management of a water monitor lizard (*Varanus salvator macromaculatus*) population at Bang Kachao Peninsula as a consequence of urbanization with Varanus Farm Kamphaeng Saen as the first captive research establishment. **J. Zool. Syst. Evol. Res.** 59(2): 484-497. doi: 10.1111/jzs.12436

31. Ahmad, S.F., W. Singchat, M. Jehangir, A. Suntronpong, T. Panthum, S. Malaivijitnond, and **K. Srikulnath**. 2020. Dark matter of primate genomes: satellite DNA repeats and their evolutionary dynamics. **Cells**. 9: 2714. doi:10.3390/cells9122714
32. Ahmad, S.F., N. Laopichienpong, W. Singchat, A. Suntronpong, T. Pongsanarm, T. Panthum, N. Ariyaraphong, J. Bulan, T. Pansrikaew, K. Jangtarwan, N. Subpayakom, S. Dokkaew, N. Muangmai, P. Duengkae, and **K. Srikulnath**. 2020. Next-generation sequencing yields complete mitochondrial genome assembly of peaceful betta fish, *Betta imbellis* (Teleostei: Osphronemidae). **Mitochondrial DNA B Resour.** 5: 3856–3858. <https://doi.org/10.1080/23802359.2020.1841582>
33. Puinongo, W., W. Singchat, S. Petpradub, E. Kraichak, M. Nunome, N. Laopichienpong, R. Thongchum, T. Intarasorn, S. Sillapaprayoon, C. Indananda, N. Muangmai, S. Suntrarachun, S. Baicharoen, L. Chanhome, S. Peyachoknagul, and **K. Srikulnath**. 2020. Existence of Bov-B LINE retrotransposons in snake lineages reveals recent multiple horizontal gene transfers with copy number variation. **Genes**. 11: 1241. <https://doi.org/10.3390/genes11111241>
34. Singchat, W., S.F. Ahmad, N. Laopichienpong, A. Suntronpong, T. Panthum, D.K. Griffin, and **K. Srikulnath**. 2020. Snake W sex chromosome: the shadow of ancestral amniote super-sex chromosome. **Cells**. 9: 2386. doi:10.3390/cells9112386
35. Koomgun, T., N. Laopichienpong, W. Singchat, T. Panthum, R. Phatcharakullawarawat, E. Kraichak, S. Sillapaprayoon, S.F. Ahmad, N. Muangmai, S. Peyachoknagul, P. Duengkae, T. Ezaz, and **K. Srikulnath**. 2020. Genome complexity reduction high-throughput genome sequencing of green iguana (*Iguana iguana*) reveal a paradigm shift in understanding sex-chromosomal linkages on homomorphic X and Y sex chromosomes. **Front. Genet.** doi: 10.3389/fgene.2020.556267
36. Singchat, W., S.F. Ahmad, S. Sillapaprayoon, N. Muangmai, P. Duengkae, S. Peyachoknagul, R.E. O'Connor, D.K. Griffin, and **K. Srikulnath**. 2020. Partial amniote sex chromosomal linkage homologies shared on snake W sex chromosomes support the possibility of ancestral super-sex chromosome evolution in amniotes. **Front. Genet.** 11: 948. doi: 10.3389/fgene.2020.00948
37. Ahmad, S.F., W. Singchat, M. Jehangir, T. Panthum, and **K. Srikulnath**. 2020. Consequence of paradigm shift with repeat landscapes in reptiles: powerful facilitators of chromosomal rearrangements for diversity and evolution (running title: genomic impact of repeats on chromosomal dynamics in reptiles). **Genes**. 11: 827. doi:10.3390/genes11070827
38. Singchat W., S.F. Ahmad, N. Laopichienpong, A. Suntronpong, T. Pongsanarm, T. Panthum, N. Ariyaraphong, N. Subpayakom, S. Dokkaew, N. Muangmai, P. Duengkae, and **K. Srikulnath**. 2020. Complete mitochondrial genome of Mahachai betta, *Betta mahachaiensis* (Teleostei: Osphronemidae). **Mitochondrial DNA B Resour.** 5: 3077–3079. <https://doi.org/10.1080/23802359.2020.1797578>
39. Majtánová, Z., P.J. Unmack, T. Prasongmaneerut, F. Shams, **K. Srikulnath**, P. Ráb, and T. Ezaz. 2020. Evidence of interspecific chromosomal diversification in rainbowfishes (Melanotaeniidae, Teleostei). **Genes**. 11: 818. doi:10.3390/genes11070818
40. Alam, S.M.I., M. Altmanová, T. Prasongmaneerut, A. Georges, S.D. Sarre, S.V. Nielsen, T. Gamble, **K. Srikulnath**, M. Rovatsos, L. Kratochvíl, and T. Ezaz. 2020. Cross-species BAC mapping highlights conservation of chromosome synteny across dragon lizards (Squamata: Agamidae). **Genes**. 11: 698. <https://doi.org/10.3390/genes11060698>

41. Suntronpong, A., W. Singchat, W. Kruasawan, O. Prakhongcheep, S. Sillapaprayoon, N. Muangmai, S. Somyong, C. Indanada, E. Kraichak, S. Peyachoknagul, and **K. Srikulnath**. 2020. Characterization of centromeric satellite DNAs (MALREP) in the Asian swamp eel (*Monopterus albus*) suggests the possible origin of repeats from transposable elements. **Genomics**. 112: 3097 – 3107. <https://doi.org/10.1016/j.ygeno.2020.05.024>
42. Jangtarwan, K., P. Kamsongkram, N. Subpayakom, S. Sillapaprayoon, N. Muangmai, A. Kongphoemph, A. Wongsodchuen, S. Intapan, W. Chamchumroon, M. Safoowong, S. Peyachoknagul, P. Duengkae, **K. Srikulnath**. 2020. Predictive genetic plan for a captive population of the Chinese goral (*Naemorhedus griseus*) and prescriptive action for *ex situ* and *in situ* conservation management in Thailand. **PLoS One**. 15: e0234064. DOI: 10.1371/journal.pone.0234064. PMID: 32497115; PMCID: PMC7272075.
43. Singchat, W., S. Sillapaprayoon, N. Muangmai, S. Baicharoen, C. Indananda, P. Duengkae, S. Peyachoknagul, R.E. O'Connor, D. Griffin, and **K. Srikulnath**. 2020. Do sex chromosomes of snakes, monitor lizards, and iguanian lizards result from multiple fission of an “ancestral amniote super-sex chromosome”? **Chromosome Res.** 28: 209–228. <https://doi.org/10.1007/s10577-020-09631-4>
44. Thongchum, R., H. Nishihara, **K. Srikulnath**, H. Hirai, and A. Koga. 2019. The CENP-B box, a nucleotide motif involved in centromere formation, has multiple origins in New World monkeys. **Genes Genet. Syst.** DOI: 10.1266/ggs.19-00042.
45. Jangtarwan, K., T. Koomgun, T. Prasongmaneerut, R. Thongchum, W. Singchat, P. Tawichasri, T. Fukayama, S. Sillapaprayoon, E. Kraichak, N. Muangmai, S. Baicharoen, C. Punkong, S. Peyachoknagul, P. Duengkae, and **K. Srikulnath**. 2019. Take one step backward to move forward: Assessment of genetic diversity and population structure of captive Asian woolly-necked storks (*Ciconia episcopus*). **PLoS One**. 14: e0223726. DOI: 10.1371/journal.pone.0223726.
46. Thongchum, R., W. Singchat, N. Laopichienpong, P. Tawichasri, E. Kraichak, O. Prakhongcheep, S. Sillapaprayoon, N. Muangmai, S. Baicharoen, S. Suntrarachun, L. Chanhome, S. Peyachoknagul, and **K. Srikulnath**. 2019. Diversity of PBI-DdeI satellite DNA in snakes correlates with rapid independent evolution and different functional roles. **Sci Rep**. 9: 15459. DOI: 10.1038/s41598-019-51863-w
47. Matsubara, K., D. O'Meally, S.D. Sarre, A. Georges, **K. Srikulnath**, and Ezaz, T. 2019. ZW Sex Chromosomes in Australian dragon lizards (Agamidae) originated from a combination of duplication and translocation in the nucleolar organising region. **Genes (Basel)**. 10:861. DOI: 10.3390/genes10110861.
48. Deakin, J.E., S. Potter, R O'Neill, A Ruiz-Herrera, M Cioffi, M.D.B. Eldridge, K. Fukui, J.A. Marshall Graves, D. Griffin, F. Grutzner, L. Kratochvíl, I. Miura, M. Rovatsos, **K. Srikulnath**, E. Wapstra, and T. Ezaz. 2019. Chromosomeomics: bridging the gap between genomes and chromosomes. **Genes (Basel)**. E627. DOI: 10.3390/genes10080627.
49. Singchat, W., E. Kraichak, P. Tawichasri, T. Tawan, A. Suntronpong, S. Sillapaprayoon, R. Phatcharakullawarawat, N. Muangmai, S. Suntrarachun, S. Baicharoen, V. Punyapornwithaya, S. Peyachoknagul, L. Chanhome, and **K. Srikulnath**. 2019. Dynamics of telomere length in captive Siamese cobra (*Naja kaouthia*) related to age and sex. **Eco. Evol.** 00: 1–12. DOI: 10.1002/ECE3.5208
50. Ponjarat, J., W. Singchat, P. Monkheang, A. Suntronpong, P. Tawichasri, S. Sillapaprayoon, S. Ogawa, N. Muangmai, S. Baicharoen, S. Peyachoknagul, I. Parharc, U. Na-Nakorn, and **K. Srikulnath**. 2019. Evidence of dramatic sterility in F₁ male hybrid catfish [male *Clarias*

- gariepinus* (Burchell, 1822) × female *C. macrocephalus* (Günther, 1864)] resulting from the failure of homologous chromosome pairing in meiosis I. **Aquaculture** 505: 84–91. <https://doi.org/10.1016/j.aquaculture.2019.02.035>
51. **Srikulnath, K.**, B. Azad, W. Singchat, and T. Ezaz. 2019. Distribution and amplification of interstitial telomeric sequences (ITSs) in Australian dragon lizards support frequent chromosome fusions in Iguania. **Plos ONE** 14: e0212683. <https://doi.org/10.1371/journal.pone.0212683>
52. Ponjarat, J., P. Areesirisuk, O. Prakhongcheep, S. Dokkaew, S. Sillapaprayoon, N. Muangmai, S. Peyachoknagul, and **K. Srikulnath**. 2019. Complete mitochondrial genome of two mouthbrooding fighting fishes, *Betta apollon* and *B. simplex* (Teleostei: Osphronemidae). **Mitochondrial DNA B Resour.** 4: 672–674. <https://doi.org/10.1080/23802359.2019.1572463>
53. Singchat, W., P. Areesirisuk, S. Sillapaprayoon, N. Muangmai, S. Baicharoen, S. Suntrarachun, L. Chanhome, S. Peyachoknagul, and **K. Srikulnath**. 2019. Complete mitochondrial genome of Siamese cobra (*Naja kaouthia*) determined using next-generation sequencing. **Mitochondrial DNA B Resour.** 4: 577–578. <https://doi.org/10.1080/23802359.2018.1558123>
54. Thongtam Na Ayudhaya, P., P. Areesirisuk, W. Singchat, S. Sillapaprayoon, N. Muangmai, S. Peyachoknagul, and **K. Srikulnath**. 2019. Complete mitochondrial genome of ten anemonefish belonging to *Amphiprion* and *Premnas*. **Mitochondrial DNA B Resour.** 4: 222–224. <https://doi.org/10.1080/23802359.2018.1546145>
55. Lisachov, A., N. Poyarkov, P. Pawangkhanant, P. Borodin, and **K. Srikulnath**. 2018. New karyotype of *Lygosoma bowringii* suggests cryptic diversity. **Herpetol Notes** 11: 1083–1088.
56. Singchat, W., R.E. O'Connor, P. Tawichasri, A. Suntronpong, S. Sillapaprayoon, S. Suntrarachun, N. Muangmai, S. Baicharoen, S. Peyachoknagul, L. Chanhome, D. Griffin, and **K. Srikulnath**. 2018. Chromosome map of the Siamese cobra: did partial synteny of sex chromosomes in the amniote represent "a hypothetical ancestral super-sex chromosome" or random distribution? **BMC Genomics**. 19: 939. <https://doi.org/10.1186/s12864-018-5293-6>
57. Areesirisuk, P., N. Muangmai, K. Kunya, W. Singchat, S. Sillapaprayoon, S. Lapbenjakul, W. Thapana, A. Kantachumpoo, S. Baicharoen, B. Rerkamnuaychoke, S. Peyachoknagul, K. Han, and **K. Srikulnath**. 2018. Characterization of five complete *Cyrtodactylus* mitogenome structures reveals low structural diversity and conservation of repeated sequences in the lineage. **Peer J**. 6: e6121. DOI 10.7717/peerj.6121
58. Boonkaew, T., C. Mongkolsiriwatana, A. Vongvanrungruang, **K. Srikulnath**, and S. Peyachoknagul. 2018. Characterization of *GA20ox* genes in tall and dwarf types coconut (*Cocos nucifera L.*). **Genes Genom.** 40: 735–745. DOI: 10.1007/s13258-018-0682-4.
59. Prakhongcheep, O., N. Muangmai, S. Peyachoknagul, and **K. Srikulnath**. 2018. Complete mitochondrial genome of mouthbrooding fighting fish (*Betta pi*) compared with bubble nesting fighting fish (*B. splendens*). **Mitochondrial DNA B Resour.** 3: 6–8. DOI: 10.1080/23802359.2017.1413294
60. Tawichasri, P., N. Laopichienpong, L. Chanhome, R. Phatcharakullawarawat, W. Singchat, T. Koomgun, T. Prasongmaneerut, W. Rerkamnuaychoke, S. Sillapaprayoon, N. Muangmai, S. Suntrarachun, S. Baicharoen, S. Peyachoknagul, and **K. Srikulnath**. 2017. Using blood

- and non-invasive shed skin samples to identify sex of caenophidian snakes based on multiplex PCR assay. **Zool. Anz.** 271: 6–14. DOI: 10.1016/j.jcz.2017.11.003.
61. Lapbenjakul S, W. Thapana, P. Twilprawat, N. Muangmai, T. Kanchanaketu, Y. Temsiripong, S. Unajak, S. Peyachoknagul, and **K. Srikulnath**. 2017. High genetic diversity and demographic history of captive Siamese and Saltwater crocodiles suggest the first step toward the establishment of a breeding and reintroduction program in Thailand. **Plos ONE** 12: e0184526. DOI: 10.1371/journal.pone.0184526.
62. Prakhongcheep, O., W. Thapana, A. Suntronpong, W. Singchat, K. Pattanatanang, R. Phatcharakullawarawat, N. Muangmai, S. Peyachoknagul, K. Matsubara, T. Ezaz, and **K. Srikulnath**. 2017. Lack of satellite DNA species-specific homogenization and relationship to chromosomal rearrangements in monitor lizards (Varanidae, Squamata). **BMC Evol. Biol.** 17: 193. DOI: 10.1186/s12862-017-1044-6
63. Twilprawat, P., S. Kim, **K. Srikulnath**, and K. Han. 2017. Structural variations generated by simian foamy virus-like (SFV) in *Crocodylus siamensis* **Genes. Genom.** 39: 1129–1138. DOI: 10.1007/s13258-017-0581-0.
64. Suntronpong, A., W. Thapana, P. Twilprawat, O. Prakhongcheep, S. Somyong, N. Muangmai, S. Peyachoknagul, and **K. Srikulnath**. 2017. Karyological characterization and identification of four repetitive element groups (the 18S – 28S rRNA gene, telomeric sequences, microsatellite repeat motifs, *Rex* retroelements) of the Asian swamp eel (*Monopterus albus*). **Comp. Cytogenet.** 11: 435–462. DOI: 10.3897/CompCytogen.v11i3.11739
65. Thongtam na Ayudhaya, P., N. Muangmai, N. Banjongsata, W. Singchat, S. Janekitkarn, S. Peyachoknagul, and **K. Srikulnath**. 2017. Unveiling cryptic diversity of the anemonefish genera *Amphiprion* and *Premnas* (Perciformes: Pomacentridae) in Thailand with mitochondrial DNA barcodes. **Agri. Nat. Resour.** 51: 198–205. DOI: 10.1016/j.anres.2017.07.001
66. Laopichienpong, N., P. Tawichasri, L. Chanhome, R. Phatcharakullawarawat, W. Singchat, N. Muangmai, S. Suntrarachun, K. Matsubara, S. Peyachoknagul and **K. Srikulnath**. 2017. A novel method of caenophidian snake sex identification using molecular markers based on two gametologous genes. **Eco. Evol.** 7: 4661–4669. DOI: 10.1002/ece3.3057.
67. Laopichienpong, N., N. Muangmai, L. Chanhome, S. Suntrarachun, P. Twilprawat, S. Peyachoknagul, and **K. Srikulnath**. 2017. Evolutionary dynamics of the gametologous *CTNNB1* gene on the Z and W chromosomes of snakes. **J. Hered.** 108: 142–151. DOI: 10.1093/jhered/esw074
68. Ezaz, T., **K. Srikulnath**, and JAM Graves. 2017. Origin of amniote sex chromosomes: an ancestral super sex chromosome, or common requirements? **J. Hered.** 108: 94–105. DOI: 10.1093/jhered/esw053
69. Baicharoen, S., Y. Hirai, **K. Srikulnath**, U. Kongprom, and H. Hirai. 2016. Hypervariability of nucleolus organizer regions in Bengal slow lorises, *Nycticebus bengalensis* (Primates, Lorisidae). **Cytogenet. Genome. Res.** 149: 267–273. DOI: 10.1159/000449145
70. Vongvanrungruang, A., C. Mongkolsiriwatana, T. Boonkaew, O. Sawatdichaikul, **K. Srikulnath**, and S. Peyachoknagul. 2016. Single base substitution causing the fragrant phenotype and development of a type-specific marker in aromatic coconut (*Cocos nucifera*). **Genet. Mol. Res.** 15: published online. DOI: <http://dx.doi.org/10.4238/gmr.15038748>

71. Laopichienpong, N., N. Muangmai, A. Supikamolseni, P. Twilprawat, L. Chanhome, S. Suntrarachun, S. Peyachoknagul, and **K. Srikulnath**. 2016. Assessment of snake DNA barcodes based on mitochondrial *COI* and *Cytb* genes revealed multiple putative cryptic species in Thailand. **GENE** 594: 238–247. DOI: 10.1016/j.gene.2016.09.017
72. Singchat, W., E. Hitakomate, B. Rerkarmnuaychoke, A. Suntronpong, B. Fu, W. Bodhisuwan, S. Peyachoknagul, F. Yang, S. Koontongkaew, and **K. Srikulnath**. 2016. Genomic alteration in head and neck squamous cell carcinoma (HNSCC) cell lines inferred from karyotyping, molecular cytogenetics, and array comparative genomic hybridization. **Plos ONE** 11: e0160901. DOI: 10.1371/journal.pone.0160901
73. Suntronpong, A., K. Kugou, H. Masumoto, **K. Srikulnath**, K. Ohshima, H. Hirai, and A. Koga. 2016. CENP-B box, a nucleotide motif involved in centromere formation, occurs in a New World monkey. **Biol. Lett.** 12: 20150817. DOI: 10.1098/rsbl.2015.0817
74. Sujiwattanarat, P., P. Pongsanarakul, Y. Temsiripong, T. Temsiripong, C. Thawornkuno, Y. Uno, S. Unajak, Y. Matsuda, K. Choowongkomon, and **K. Srikulnath**. 2016. Molecular cloning and characterization of Siamese crocodile (*Crocodylus siamensis*) Cu,Zn superoxide dismutase (CSI-Cu,Zn-SOD) gene. **Comp. Biochem. Physiol., Part A: Mol. Integr. Physiol.** 191: 187–195. DOI: 10.1016/j.cbpa.2015.10.028
75. **Srikulnath**, K., W. Thapana, and N. Muangmai. 2015. Role of chromosome changes in crocodilian evolution and diversity. **Genomics Inform.** 13: 102–111. DOI: 10.5808/GI.2015.13.4.102.
76. Unajak, S., N. Pholmanee, N. Songtawee, **K. Srikulnath**, P. Srisapoome, A. Kiataramkul, H. Kondo, I. Hirono, and N. Areechon. 2015. Molecular characterization of Galectin-8 from Nile tilapia (*Oreochromis niloticus* Linn.) and its response to bacterial infection. **Mol. Immunol.** 68: 585–596. DOI: 10.1016/j.molimm.2015.09.012.
77. Matsubara, K., Y. Uno, **K. Srikulnath**, Y. Matsuda, E. Miller, and M. Olsson. 2015. No interstitial telomeres on autosomes but remarkable amplification of telomeric repeats on the W sex chromosome in the sand lizard (*Lacerta agilis*). **J. Hered.** 106: 753–757. DOI: 10.1093/jhered/esv083
78. Matsubara, K., Y. Uno, **K. Srikulnath**, R. Seki, C. Nishida, and Y. Matsuda. 2015. Molecular cloning and characterization of satellite DNA sequences from constitutive heterochromatin of the habu snake (*Protobothrops flavoviridis*, Viperidae) and the Burmese python (*Python bivittatus*, Pythonidae). **Chromosoma** 124: 529–539. DOI: 10.1007/s00412-015-0529-6
79. Supikamolseni, A., N. Ngaoburanawit, M. Sumontha, L. Chanhome, S. Suntrarachun, S. Peyachoknagul, and **K. Srikulnath**. 2015. Molecular barcoding of venomous snakes and species-specific multiplex PCR assay to identify seven snake groups for which antivenom is available in Thailand. **Genet. Mol. Res.** 14: 13981–13997. DOI: 10.4238/2015.October.29.18.
80. **Srikulnath**, K., Y. Uno, C. Nishida, H. Ota, and Y. Matsuda. 2015. Karyotype reorganization in the Hokou Gecko (*Gekko hokouensis*, Gekkonidae): the process of microchromosome disappearance in Gekkota. **Plos ONE** 10: e0134829. DOI: 10.1371/journal.pone.0134829
81. **Srikulnath**, K., S. Sawasdichai, T. K.Jantapanon, P. Pongtongkam, and S. Peyachoknagul. 2015. Phylogenetic relationship of *dendrobium* species in Thailand inferred from chloroplast matK Gene and Nuclear rDNA ITS Region. **Hort. J.** 84: 243–252. DOI: 10.2503/hortj.MI-028

82. Sujiwattanarat, P., W. Thapana, **K. Srikulnath**, Y. Hirai, H. Hirai, and A. Koga. 2015. Higher-order repeat structure in alpha satellite DNA occurs in New World monkeys and is not confined to hominoids. **Sci. Rep.** 5: 10315 DOI: 10.1038/srep10315
83. Trirongjitmoah, S., Z. Juengmunkong, **K. Srikulnath**, and P. Somboon. 2015. Classification of garlic cultivars using an electronic nose. **Comput. Electron. Agric.** 113: 148–153. DOI 10.1016/j.compag.2015.02.007
84. Wannapinpong, S., **K. Srikulnath**, A. Thongpan, K. Choowongkomon, and S. Peyachoknagul. 2015. Molecular cloning and characterization of the *CHS* gene family in turmeric (*Curcuma longa* Linn.). **J. Plant Biochem. Biotechnol.** 24 (1): 25–33. DOI 10.1007/s13562-013-0232-8
85. **Srikulnath, K.**, K. Matsubara, Y. Uno, C. Nishida, M. Olsson, and Y. Matsuda. 2014. Identification of the linkage group of the Z sex chromosomes of the sand lizard (*Lacerta agilis*, Lacertidae) and elucidation of karyotype evolution in lacertid lizards. **Chromosoma** 123: 563–575. DOI 10.1007/s00412-014-0467-8.
86. Thapana, W., P. Sujiwattanarat, **K. Srikulnath**, H. Hirai, and A. Koga. 2014. Reduction in the structural instability of cloned eukaryotic tandem-repeat DNA by low-temperature culturing of host bacteria. **Genet. Res.** 96: e13. DOI: 10.1017/S0016672314000172.
87. Baicharoen, S., T. Miyabe-Nishiwaki, V. Arsaithamkul, Y. Hirai, K. Duangsa-ard, B. Siriaroonrat, H. Domae, **K. Srikulnath**, A. Koga, and H Hirai. 2014. Locational diversity of alpha satellite DNA and intergeneric hybridization aspects in the *Nomascus* and *Hylobates* Genera of small apes. **Plos One** 9: e109151. DOI: 10.1371/journal.pone.0109151.
88. Chailertrit, V., A. Swatdipong, S. Peyachoknagul, J. Salaenoi, and **K. Srikulnath**. 2013. Isolation and characterization of ten novel microsatellite markers from Siamese fighting fish (*Betta splendens*, Osphronemidae, Anabantoidei) and their transferability to related species, *B. smaragdina* and *B. imbellis*. **Genet. Mol. Res.** 13: 7157–7162. DOI: 10.4238/2014.September.5.1.
89. Peyachoknagul, S., C. Nettuwakul, P. Phuekvilai, S. Wannapinpong, and **K. Srikulnath**. 2014. Development of microsatellite markers of vandaceous orchids for species and variety identification. **Genet. Mol. Res.** 13: 5441–5445. DOI: 10.4238/2014.July.24.23.
90. Peyachoknagul, S., C. Mongkolsiriwatana, S. Wannapinpong, P Srifah Huehne, and **K. Srikulnath**. 2014. Identification of Native Dendrobium species in Thailand by PCR-RFLP of the rDNA-ITS and Chloroplast DNA. **Sci. Asia** 40: 113–120. DOI: 10.2306/scienceasia1513-1874.2014.40.113.
91. **Srikulnath, K.**, Y. Uno, C. Nishida, and Y. Matsuda. 2013. Karyotype evolution in monitor lizards: cross-species chromosome mapping of cDNA reveals highly conserved synteny and gene order in the Toxicofera clade. **Chromosome Res.** 21(8): 805–819. DOI: 10.1007/s10577-013-9398-0.
92. Chaiprasertsri, N., Y. Uno, S. Peyachoknagul, O. Prakhongcheep, S. Baicharoen, S. Charernsuk, C. Nishida, Y. Matsuda, A. Koga, and **K. Srikulnath**. 2013. Highly species-specific centromeric repetitive DNA sequences in lizards: molecular cytogenetic characterization of a novel family of satellite DNA sequences isolated from the water monitor lizard (*Varanus salvator macromaculatus*, Platynota). **J. Hered.** 104(6): 798–806. DOI: 10.1093/jhered/est061.

93. Islam, F.B., S. Ishishita, Y. Uno, M.B.R. Mollah, **K. Srikulnath**, and Y. Matsuda. 2013. Male hybrid sterility in the mule duck is associated with meiotic arrest in primary spermatocytes. *J. Poultry Sci.* 50: 311–320. DOI: 10.2141/jpsa.0130011.
94. **Srikulnath, K.** 2013. The dynamics of chromosome evolution in reptiles. *Thai J. Genet.* S(1): 77–79. DOI: 10.14456/tjg.2013.98.
95. Thongtam Na Ayudhaya, P., C. indananda, S. Peyachoknagul, and **K. Srikulnath**. 2013. Mitochondrial genome structure of saddleback anemonefish (*Amphiprion Polymnus*). *Thai J. Genet.* S(1): 343–346. DOI: 10.14456/tjg.2013.49.
96. Prakhongcheep, O., A. Swatdipong, C. indananda, S. Peyachoknagul, and **K. Srikulnath**. 2013. Mitochondrial genome analysis of Siamese fighting fish *Betta splendens*. *Thai J. Genet.* S(1): 119–121. DOI: 10.1080/23802359.2017.1413294.
97. Prakhongcheep, O., N. Chaiprasertsri, S. Terada, Y. Hirai, **K. Srikulnath**, H. Hirai, and A. Koga. 2013. Heterochromatin blocks constituting the entire short arms of acrocentric chromosomes of Azara's Owl Monkey: formation processes inferred from chromosomal locations. *DNA Res.* 20: 461–470. DOI: 10.1093/dnares/dst023.
98. Prakhongcheep, O., Y. Hirai, T. Hara, **K. Srikulnath**, H. Hirai, and A. Koga. 2013. Two types of alpha satellite DNA in distinct chromosomal locations in Azara's Owl Monkey. *DNA Res.* 20: 235–240. DOI: 10.1093/dnares/dst004
99. **Srikulnath, K.**, A. Thongpan, S. Suputtitada, and S. Apisitwanich. 2011. New haplotype of the complete mitochondrial genome of *Crocodylus siamensis* and its species-specific DNA markers: Distinguishing *C. siamensis* from *C. porosus* in Thailand. *Mol. Bio. Rep.* 39: 4709–4717. DOI: 10.1007/s11033-011-1263-7.
100. **Srikulnath, K.**, Y. Uno, K. Matsubara, A. Thongpan, S. Suputtitada, S. Apisitwanich, C. Nishida, and Y. Matsuda. 2011. Chromosomal localization of 18S-28S and 5S rRNA genes and (TTAGGG) n sequences of butterfly lizards (*Leiolepis belliana belliana* and *Leiolepis boehmei*, Agamidae, Squamata). *Genet. Mol. Biol.* 34(4): 582–586. DOI: 10.1590/S1415-47572011005000042.
101. Unajak, S., P. Meesawat, K. Anyamaneeratch, D. Anuwareepong, **K. Srikulnath**, and K. Choowongkomon. 2011. Identification of species (meat and blood samples) using nested-PCR analysis of mitochondrial DNA. *Afr. J. Biotechnology* 10(29): 5670–5676.
102. **Srikulnath, K.** 2010. FISH as a chromosome identification strategy to delineate karyotypic evolution in vertebrates. *Thai J. Genet.* 3(2): 120–136. DOI: 10.14456/tjg.2010.7.
103. **Srikulnath, K.**, K. Matsubara, Y. Uno, A. Thongpan, S. Suputtitada, C. Nishida, Y. Matsuda, and S. Apisitwanich. 2010. Genetic Relationship of three butterfly lizard species (*Leiolepis reevesii rubritaeniata*, *Leiolepis belliana belliana*, *Leiolepis boehmei*, Agamidae, Squamata) inferred from nuclear gene sequence analysis. *Kasetsart J. (Nat. Sci.)* 44: 424–435.
104. **Srikulnath, K.**, C. Nishida, K. Matsubara, Y. Uno, A. Thongpan, S. Suputtitada, S. Apisitwanich, and Y. Matsuda. 2009. Karyotypic evolution in squamate reptiles: comparative gene mapping revealed highly conserved linkage homology between the butterfly lizard (*Leiolepis reevesii rubritaeniata*, Agamidae, Lacertilia) and the Japanese four-strip rat snake (*Elaphe quadriocellata*, Culobiidae, Serpentes). *Chromosome Res.* 17: 975–986.
105. **Srikulnath, K.**, K. Matsubara, Y. Uno, A. Thongpan, S. Suputtitada, S. Apisitwanich, Y. Matsuda, and C. Nishida. 2009. Karyological characterization of the butterfly lizard

(*Leiolepis reevesii rubritaeniata*, Agamidae, Squamata) by molecular cytogenetic approach. **Cytogenet. Genome Res.** 125: 213 – 223. DOI: 10.1159/000230005.

CONFERENCE ORGANIZATION

2022	Local-organizing committee: National Genetics Conference: NGC2022 in Bangkok, Thailand during June 1 – 2, 2022
2020	Local-organizing committee (team leader): International Conference on Innovative Approaches in Applied Sciences and Technologies (iCiAsT- 2020) in Bangkok, Thailand during December 14 – 15, 2020
2019	Chair organizer: The 3rd International Symposium & 2nd International Workshop on Functional Bio-Nanotechnology in Pattaya, Chonburi, Thailand during June 18 – 19, 2019
2019	Local-organizing committee: National Genetics Conference: NGC2019 in Pattaya, Chonburi, Thailand during June 18 – 19, 2019
2018	Local-organizing committee: 6th Asia-Pacific Chromosome Colloquium (APCC6): From Genomes to Chromosomes: Bridging the Gap in Canberra, Australia during July 4 – 5, 2018
2018	Local-organizing committee: International Conference of Agriculture and Natural Resources (ANRES 2018) in Bangkok, Thailand during April 26 – 28, 2018
2017	Local-organizing committee: Animal Genetic Improvement and Biotechnology Conference: Moving Towards Creative Economy in Bangkok, Thailand during July 13 – 14, 2017
2016	Local-organizing committee (team leader): International Conference on Innovative Approaches in Applied Sciences and Technologies (iCiAsT- 2016) in Bangkok, Thailand during February 1 – 4, 2016
2015	Secretary: The 5th Asian Chromosome Colloquium (New Horizon By Unifying of Chromosome Research) in Bangkok, Thailand during April 29 – May 1, 2015
2015	Co-organizer: The 2nd UK-Japan chromosome structure workshop in Bangkok, Thailand during May 1, 2015

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