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Professional Employment

Assistant Professor, West Virginia University
January 2015 – present

Postdoctoral researcher, Indiana University
January 2006 – December 2014

Research assistant, Tokyo Institute of Technology
September 2005 – December 2005

Education

Ph.D. Tokyo Institute of Technology, Japan

Graduate School of Bioscience and Biotechnology
Doctor of Philosophy in Biological Sciences, September 2005

M. S. Tokyo Institute of Technology, Japan

Graduate School of Bioscience and Biotechnology
Master of Science, March 2000

B. E. Tokyo University of Science, Japan

Faculty of Industrial Science and Technology
Bachelor of Engineering, March 1998

Publications

(I) Research Publications

Kijimoto T and Moczek AP 2016. Hedgehog signaling enables nutrition-responsive inhibition of an alternative morph in a polyphenic beetle. *Proceedings of the National Academy of Science USA*. 113(21):5982-7

Kijimoto T, Snell-Rood EC, Rocha G, Pespeni M, Kafadar K, Moczek AP 2014. The nutritionally responsive transcriptome of the polyphenic beetle *Onthophagus taurus* and the importance of sexual dimorphism and body region. **Proceedings of the Royal Society of London, Series B** 281(1797)

Kijimoto T, Moczek AP, and Andrews J 2012. doublesex regulates morph-, sex-, and species-specific expression of beetle horns. *Proceedings of the National Academy of Science USA*. 109(50):20526-20531.

Snell-Rood EC, Cash A, Han MV, **Kijimoto T**, Andrews J, and Moczek AP 2011. Developmental decoupling of alternative phenotypes: Insights from the transcriptomes of horn-polyphenic beetles. *Evolution*. 65(1):231-45.

Choi JH, **Kijimoto T**, Snell-Rood E, Tae H, Yang Y, Moczek AP, and Andrews J 2010. Gene discovery in the horned beetle *Onthophagus taurus*. *BMC Genomics*. 14;11:703. **“Highly accessed” on BMC site**

Kijimoto T, Andrews J, Moczek AP, 2010 Programed cell death shapes the expression of horns within and between species of horned beetles. *Evolution & Development*. 12(5): 449-58.

Kijimoto T, Costello J, Tang Z, Moczek AP, Andrews J 2009. EST and microarray analysis of horn development in *Onthophagus* beetles. *BMC Genomics*. 30;10:504. **“Highly accessed” on BMC site**

Moczek AP, Andrews J, **Kijimoto T**, Yerushalmi Y, Rose DJ 2007. Emerging model systems in evo-devo: horned beetles and the origins of diversity. *Evolution & Development*. 9(4):323-8

Kobayashi N, Watanabe M, **Kijimoto T**, Fujimura K, Nakazawa M, Ikeo K, Kohara Y, Gojobori T, Okada N 2006. magp4 gene may contribute to the diversification of

cichlid morphs and their speciation. *Gene*. 24(373): 126-33

Kijimoto T, Watanabe M, Fujimura K, Nakazawa M, Murakami Y, Kuratani S, Kohara Y, Gojobori T, and Okada N 2005. *cimpl*, a novel astacin family metalloproteinase gene from East African cichlids, is differentially expressed between species during growth. *Molecular Biology and Evolution*. 22(8):1649-1660.

Ishitani R, Nureki O, Fukai S, **Kijimoto T**, Nameki N, Watanabe M, Kondo H, Sekine M, Okada N, Nishimura S, Yokoyama S 2002. Crystal structure of archaeosine tRNA-guanine transglycosylase. *Journal of Molecular Biology*. 318(3): 665-77.

Ishitani R, Nureki O, **Kijimoto T**, Watanabe M, Kondo H, Nameki N, Okada N, Nishimura S, Yokoyama S 2001. Crystallization and preliminary X-ray analysis of the archaeosine tRNA-guanine transglycosylase from *Pyrococcus horikoshii*. *Acta Crystallographica D Biological Crystallography*. 57(11):1659-62.

(II) Review

Kijimoto T, Pespeni MH, Beckers OM, and Moczek AP 2012. Beetle horns and horned beetles: emerging models in developmental evolution and ecology. *WIREs Developmental Biology*. Published Online: DOI: 10.1002/wdev.81
<http://onlinelibrary.wiley.com/doi/10.1002/wdev.81/full>

Moczek AP, **Kijimoto T** 2014. Development and evolution of insect polyphenisms: novel insights through the study of sex determination mechanisms. *Current Topics in Insect Science*, 1: 52-58.

(III) Book Chapter

Moczek AP, **Kijimoto T**, Snell-Rood EC, Rocha G, Pespeni M, Kafadar K 2014. Evolutionary and ecological genomics of developmental plasticity: novel approaches and first insights from the study of horned beetles. In: *Ecological Genomics*; edited by C. Landry and N. Aubin-Horth. Springer Verlag, Berlin.

(IV) Publications in preparation

Research papers

Short, DPG, O'Donnell, K, Stajich, JE, Hulcr, J, **Kijimoto, T**, Berger, MC, Macias, AM, Spahr, EJ, Bateman, CC, Eskalen, A, Lynch, SC, Cognato, AI, Cooperband, MF, and Kasson, MT PCR multiplexes discriminate *Fusarium* symbionts of

invasive Ewallacea ambrosia beetles that inflict damage on numerous tree species throughout the United States.

Beckers OM, **Kijimoto T**, and Moczek AP Effect of the gene *doublesex* on mating behavior in the horned beetle *Onthophagus taurus*

Awards/funding

- Best poster award, Meeting of the European Society for Evolutionary Developmental Biology, Ghent, Belgium (2008)
 - Two-year scholarship from Japan Society for the Promotion of Science (2000-2002) Covered tuition, salary, and research expenses
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Invited Seminars

Murray State University, Department of Biology, Murray, KY (2014)

Invited Internal Seminars

Genomics meeting, West Virginia University, Morgantown, WV (2015)

Meeting Presentations

(I) Invited Speaker

Kijimoto T, Andrews J, Moczek A. Meeting of the European Society for Evolutionary Developmental Biology, Paris, France (2010)

Kijimoto T and Moczek A. The 37th Annual Meeting of the Molecular Biology Society of Japan, Yokohama, Japan (2014)

(II) Oral presentation

Kijimoto T and Moczek AP International Society of Developmental Biologists 17th International Congress of Developmental Biology and 72nd Annual meeting of Society for Developmental Biology, Cancun, Mexico (2013)

* **Selected for platform presentation**

(III) Poster presentations

Kijimoto T and Moczek AP. Inaugural Meeting of the Pan-American Society for Evolutionary Developmental Biology, Berkeley, CA (2015)

Kijimoto T, Andrews J, and Moczek AP. 69th Annual meeting of the Society for Developmental Biology, Albuquerque, NM (2010)

Kijimoto T, Andrews J, and Moczek AP. Meeting of the European Society for Evolutionary Developmental Biology, Ghent, Belgium (2008)

* **Best Poster Award**

Kijimoto T, Andrews J, and Moczek AP. IGERT symposium, Bloomington, IN (2006)

Kijimoto T, Andrews J, and Moczek AP. Meeting of the European Society for Evolutionary Developmental Biology, Prague, Czech Republic (2006)

Kijimoto T, Watanabe M, Fujimura K, Nakazawa M, Murakami Y, Kuratani S, Kohara Y, Gojobori T and Okada N. Developmental Basis of Evolutionary Change Symposium, Chicago (2005)

Kobayashi N, Watanabe M, **Kijimoto T**, Nakazawa M, Murakami Y, Kuratani S, Fujiyama A, Kohara Y, Gojobori T and Okada N. Society of Evolutionary Studies, Japan, Tokyo, Japan (2004)

Kijimoto T, Watanabe M, Fujimura K, Nakazawa M, Murakami Y, Kuratani S, Kohara Y, Gojobori T and Okada N. Society of Evolutionary Studies, Japan, Fukuoka, Japan (2003)

Watanabe M, **Kijimoto T**, Kobayashi N, Fujimura K, Nakazawa M, Murakami Y, Kuratani S, Fujiyama A, Kohara Y, Gojobori T and Okada N. Society of Evolutionary Studies, Fukuoka Japan (2003)

Kobayashi N, Watanabe M, **Kijimoto T**, Nakazawa M, Murakami Y, Kuratani S, Fujiyama A, Kohara Y, Gojobori T and Okada N. 26th Annual Meeting of Japanese Society for Molecular Biology, Yokohama, Japan (2003)

Kijimoto T, Watanabe M, Fujimura K, Nakazawa M, Murakami Y, Kuratani S, Kohara Y, Gojobori T and Okada N. International Conference on Morphogenesis and Pattern Formation in Biological Systems, Nagoya, Japan (2002)

Kijimoto T, Watanabe M, Fujimura K, Nakazawa M, Murakami Y, Kuratani S, Kohara Y, Gojobori T and Okada N. 24th Annual Meeting of Japanese Society for Molecular

Biology, Yokohama Japan (2001)

Watanabe M, **Kijimoto T**, Okada N. Society of Evolutionary Studies Japan, 3rd Annual Meeting, Kyoto Japan (2001)

Teaching, Mentoring, and Outreach

Course taught (West Virginia University)

Principles of Genetics, GEN 371 2015 Spring-

Graduate advisor (West Virginia University)

Logan Zeigler June 16, 2015-

Elaina Spahr January 1, 2016-

Graduate student committee (West Virginia University)

Gregory Boyce (PhD committee)

Roshan Abeyratne (MS committee)

Undergraduate advisor (West Virginia University)

Chrystopher Flynn May 15, 2015-

Audrey Geise May 15, 2015 – May 15, 2016

Elliot Guerra-Blackmer May 24, 2016 – July 31, 2016 (Summer Undergraduate Research Experience program through WVU)

Elliot Guerra-Blackmer August 1, 2016-

Guest lectures at Indiana University

Biology L340, Sep. 2012, “Sex determination mechanisms and development: Current research on gene *doublesex* (*dsx*)”

Informatics capstone, Feb. 2010, “EST/microarray analysis of beetle horn development”

Undergraduate mentoring at Indiana University

Kara Benninger August 16, 2010 – May 10, 2012: Cloning and functional analyses of genes in beetle horn development.

Austin Dicken January 11, 2010 – June 10, 2010: Behavioral consequences of gene knock down, focusing on *dsx* in beetles.

Outreach activity

2016

- Participated in *5th Grade Exploratories* for North Elementary School; June

2013

- Participated in *Science Olympiad Residential Camp* for high schoolers; July
- Participated in the *Jim Holland Summer Enrichment Program* for minority high school students; July
- Outreach presentation to two 4th-6th grade classes at University Elementary School; June and July

2011

- Participated in the *Jim Holland Summer Enrichment Program* for minority high school students

2010

- Big Brother Big Sister (multiple events); outreach presentation to 1st and 2nd grade classes

2009

- Big Brothers Big Sister (multiple events); outreach presentation to 1st and 2nd grade classes

2007

- Participant in the *Howard Hughes Summer Research Institute* Program; helped 2 High School teachers for 2 weeks and integrated them into lab research activities
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