Curriculum Vitae

Marito Araki

Personal

Born 17 August 1971 in Kyoto, JAPAN

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Education

2000 - present	**Post-doctoral fellow**, Howard Hughes Medical Institute, Department of Molecular Genetics and Microbiology, Duke University Medical Center, Durham, NC
1997 - 2000	**Ph.D.**, Institute of Molecular and Cellular Biology, Osaka University, Suita, Osaka, JAPAN
1995 - 1997	**M.S.**, Institute of Molecular and Cellular Biology, Osaka University, Suita, Osaka, JAPAN
1994 - 1995	**Internship**, Cellular Physiology Laboratory, RIKEN, Wako, Saitama, JAPAN
1991 - 1995	**B.A. (Chemistry)**, Tokyo University of Science, Tokyo, JAPAN

Research Experience

2000 - present **Howard Hughes Medical Institute, Department of Molecular Genetics and Microbiology, Duke University Medical Center.**

Post-doctoral fellow in Dr. Robin Wharton's laboratory.

Elucidated the molecular mechanisms of ORC1 (origin recognition protein 1) degradation by the APC (anaphase-promoting complex) in Drosophila melanogaster.

Identified a novel APC-targeting motif, the O-box (ORC1 destruction box).

1995 - 2000 **Institute of Molecular and Cellular Biology, Osaka University.**

Doctoral and Masters thesis conducted with Dr. Fumio Hanaoka.

Reconstitution of the human nucleotide excision repair reaction on chromatin DNA.

Characterization of the Xeroderma Pigmentosum Syndrome group C protein complex.
Identification and characterization of the Xeroderma Pigmentosum Syndrome group V protein (DNA polymerase η (eta)).

1994 - 1995 **Cellular Physiology Laboratory, RIKEN.**
Senior thesis conducted with Dr. Fumio Hanaoka.
Characterization of human RAD23 homologue B protein.

Teaching Experience

1999 - 2000 Supervised Mitsuyo Takemura (undergraduate, Osaka University)
Analysis of Centrin 2 interaction with Xeroderma Pigmentosum group C protein.

Awards and Honors

2004 - 2005 Uehara Memorial Foundation Postdoctoral Fellow
2004 Scholarship from Keystone Symposia: The Cell Cycle and Development (decided by poster presentation)
2002 - 2004 Japan Society for the Promotion of Science Postdoctoral Fellowship for Research Abroad
2000 - 2002 Japan Society for the Promotion of Science Research Fellow
1998 - 2000 Fellowship of the Junior Research Associate (from RIKEN)
1997 - 1998 Fellowship of the Japan Ikueikai

Publications

1. **Araki, M.,** Yu H., and Asano, M. (2005) A novel motif governs APC-dependent degradation of *Drosophila* ORC1 *in vivo*. **Genes Dev.** in press

2. **Araki, M.,** Wharton, R.P., Tang Z., Yu H., and Asano, M. (2003) Degradation of origin recognition complex large subunit by the anaphase-promoting complex in *Drosophila*. **EMBO J.** 22: 6115-6126.

3. Uchida, A., Sugasawa, K., Masutani, C., Dohmae, N., **Araki, M.,** Yokoi, M., Ohkuma, Y., Hanaoka, F. (2002) The carboxy-terminal domain of the XPC protein plays a crucial role in nucleotide excision repair through interactions with transcription factor IIH. **DNA Repair (Amst).** 1:449-461.

4. **Araki, M.,** Masutani, C., Takemura, M., Uchida, A., Sugasawa, K., Kondoh, J., Ohkuma, Y., Hanaoka, F. (2001) Centrosome protein centrin 2/caltractin 1 is part of the xeroderma pigmentosum group C complex that initiates global genome nucleotide excision repair. **J. Biol. Chem.** 276:18665-18672.

5. Ura, K., **Araki, M.,** Saeki, H., Masutani, C., Ito, T., Iwai, S., Mizukoshi, T., Kaneda, Y., Hanaoka, F. (2001) ATP-dependent chromatin remodeling facilitates nucleotide excision repair of UV-induced DNA lesions in synthetic dinucleosomes. **EMBO J.** 20:2004-2014.

6. Kusumoto, R., Masutani, C., Sugasawa, K., Iwai, S., **Araki, M.,** Uchida, A., Mizukoshi, T., Hanaoka, F. (2001) Diversity of the damage recognition step in the global genomic nucleotide excision repair in vitro. **Mutat. Res.** 485:219-227.

7. **Araki, M.,** Masutanim, C., Maekawa, T., Watanabe, Y., Yamada, A., Kusumoto, R., Sakai, D., Sugasawa, K., Ohkuma, Y., and Hanaoka, F. (2000) Reconstitution of damage DNA excision reaction from SV40 minichromosomes with purified nucleotide excision repair. **Mutat. Res.** 459:147-160.

8. Masutani, C., Kusumoto, R., Yamada, A., Yuasa, M., **Araki, M.,** Nogimori, T., Yokoi, M., Eki, T., Iwai, S., Hanaoka, F. (2000) Xeroderma pigmentosum variant: from a human genetic disorder to a novel DNA polymerase (review). **Cold Spring Harb Symp Quant Biol.** 65:71-80.

9. **Araki, M.**, Masutani, C., and Hanaoka, F. (1999) Molecular mechanism of nucleotide excision repair in mammalian cells (review, in Japanese). **Tanpakushitsu Kakusan Koso.** 44:1845-1851.

10. Masutani, C., Kusumoto, R., Yamada, A., Dohmae, N., Yokoi, M., Yuasa, M., **Araki, M.,** Iwai, S., Takio, K., and Hanaoka, F. (1999) The XPV (xeroderma pigmentosum variant) gene encodes human DNA polymerase η (eta) **Nature** 399:700-704.

11. Masutani, C., **Araki, M.,** Yamada, A., Kusumoto, R., Nogimori, T., Maekawa, T., Iwai, S. and Hanaoka, F. (1999) Xeroderma pigmentosum variant (XP-V) correcting protein from HeLa cells has a thymine dimer bypass DNA polymerase activity. **EMBO J.** 12:3491-3501.

12. Masutani, C., **Araki, M.**, Sugasawa, K., van der Spek, P.J., Yamada, A., Uchida, A., Maekawa, T., Bootsma, D., Hoeijmakers, J.H.J. and Hanaoka, F. (1997) Identification and characterization of XPC-binding domain of hHR23B. **Mol Cell Biol.** 12:6915-6923.

Oral presentation and Invited seminars

1. Seminar, RIKEN, Saitama, JAPAN, Dec 2004
2. Seminar, Department of Chemistry and Materials Technology, Kyoto Institute of Technology, Kyoto, JAPAN, Dec 2004
3. Platform speaker, 27th Japan Molecular Biology Meeting, "The role and mechanism of the cell cycle-dependent ORC1 degradation in *Drosophila*", Kobe, JAPAN, Dec 2004

4. Seminar, RIKEN, Saitama, JAPAN, Dec 2002
5. Platform speaker, Cold Spring Harbor Meeting: The Cell Cycle, "The mechanisms of cell cycle-dependent ORC1 degradation in *Drosophila*", Cold Spring Harbor, NY, May 2002

References

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