

Books, Book Chapters & Monographs

- Walter, R.B., LU, Y., Savage, M. (2019) The *Xiphophorus* Genetic Stock Center. "Genetic Resources of Model Organisms – Strategies for Conservation", R. Jarret (ed.), CRC Press/Taylor and Francis Publishing, *In press*.
- Hagedorn, M., Varga, Z., Walter, R.B, Tiersch T.R. (2018). *Workshop Report: Cryopreservation of Aquatic Biomedical Models*, *Cryobiology*, 2018:110.264. <https://doi.org/10.1016/j.cryobiol.2018.10.264>
- Schartl, M., and R.B. Walter (2016). *Xiphophorus and Medaka Cancer Models, Advances in Experimental Medicine and Biology: Cancer and Zebrafish Mechanisms, Techniques and Models*, D. Langenau (ed.), Springer Publishing, pp527-548, Switzerland, https://doi.org/10.1007/978-3-319-30654-4_23
- Lu, Y., Shen, Y., Warren, W., and R. B. Walter (2015). "Next Generation Sequencing in Aquatic Models". In: "Next Generation Sequencing – Advances, Applications, and Challenges", ISBN 978-953-51-4594-3. Jerrzy K. Kuliski, editor, *INTECH Publications*. Janeza Trdine 9, 51000, Rijeka, Croatia. <http://dx.doi.org/10.5772/61657>.
- Walter, R.B., and T. Obara (2015). *Workshop Report: The Medaka Model for Comparative Assessment of Human Disease Mechanisms*, Aquatic Animal Models of Human Disease: Selected Papers and Recommendations form the 7th Conference. *Comparative Biochemistry and Physiology*, Part C, 178: 156-162.
- Fieber, L.A., Tanguay, R.L., Walter, R.B., and D. E. Williams (2012) Aquatic Animal Models of Human Disease: Selected Papers form the 5th Conference. *Comparative Biochemistry and Physiology*, Part C., 155:1-8, <http://ijjkk.com/science/article/pii/S1532045611001165>
- Shen, Y., Garcia, T., and R. B. Walter (2011) "De novo Transcriptome Assembly and Gene Expression Analysis using RNA-Seq from Organisms Lacking Substantial Genomic Resources". In: *Systems and Computational Biology - Molecular and Cellular Experimental Systems*, Ning-Sun Yang (ed.), ISBN 978-953-307-280-7, INTECH publications. Janeza Trdine 9, 51000, Rijeka, Croatia, 24 pages. (<http://www.intechopen.com/articles/show/title/gene-expression-analysis-using-rna-seq-from-organisms-lacking-substantial-genomic-resources>). This paper had over 2,000 downloads in 04-10-13, 3,000 downloads 01-15-15.
- Walter, R.B. (2011) "*Xiphophorus* Fish: Varieties and Resources". In: *Advances in World Aquaculture - Cryopreservation in Aquatic Species 2nd Edition*, Terrence R. Tiersch and Christopher C. Green (Eds.), World Aquaculture Society, Baton Rouge, LA, Section IX: Programmatic Development of Germplasm Repositories, pp. 796-808.
- Yang, Hui-Ping, Walter, R.B., and T. R. Tiersch (2010). Current Status of Sperm Cryopreservation in the Genus *Xiphophorus*. " In: *Viviparous Fishes II*, M. C. Uribe and H. Grier (eds.), New Life Publications (ISBN# 0-9645058-9-1), Homestead, Fl. Pp 403-414.

- Walter, R.B. (2010) "A Homage to Klaus D. Kallman: The Study of Beautiful Things" In: *Viviparous Fishes II*, M. C. Uribe and H. Grier (eds.), New Life Publications (ISBN# 0-9645058-9-1), Homestead, FL. Pp 4-7.
- Yoder, J.A. (2009) Aquatic Animal Models of Human Disease: Selected Papers and Recommendations from the 4th Conference. *Comparative Biochemistry and Physiology*, 149C(2) 121-128. (Also served as Co-Editor of this issue).
- Dong, Q., Huang, C., Hazlewood, L., Walter, R.B. and T.R. Tiersch. (2009) Sperm Cryopreservation of Live-Bearing Fishes of the Genus *Xiphophorus*. In: "Methods in Reproductive Aquaculture: Marine and Freshwater Species". Elsa Cabrita, Vanesa Robles, and Pat Herraes (Eds.), ISBN: 978-0-8493-2. Section V, Protocols for Sperm Cryopreservation. Pp 339-350. CRC Press, Taylor & Francis Group, LLC.
- Walter, R.B., Timmins, G. S., Tilton, S. C., Orner, G. O., Benninghoff, A. D., Bailey, G.S., and D.E. Williams (2008) "Carcinogenesis Models: Focus on *Xiphophorus* and Rainbow Trout". In: "Oceans and Human Health- Risks and Remedies from Books, Book the Sea", Chapter 32, pp 585-612. Pat Walsh Sharon Smith, Lore Fleming, Helena Solo-Gabriele and William Gerwick (Eds.), ISBN: 978-0-12-372584-4, Elsevier - Academic Press, San Diego, CA 92101-4495.
- Walter, R.B. (Spring edition, 2007) "Dead Zones: Are Our Farms Killing Our Oceans?" Research Texas Inc., a publication of Texas Community Newspapers, Fort Worth Business Press, Fort Worth, TX 76107
- Walter, R. B., Hazlewood, L., and S. Kazianis. (2006) 'The *Xiphophorus* Genetic Stock Center Manual', 1st edition, Klaus D. Kallman & Manfred Scharl (Eds.), 113 pages, Texas State University.
- Nairn R.S., Schmale, M.C., Stegman, J., Winn, R.N., and R.B. Walter (2001). "Aquaria Fish Models of Human Disease: Working Group Reports and Recommendations", *Marine Biotech.* 3(S1): 249-259.
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- Walter, R.B. (1996) "DNA Repair in Fish", Research Program Featured in *Biology, 4th edition* by Raven & Johnson (a freshman biology text), Beyond the Classroom, pp. 427.
- Morizot, D. C., Lund, J., Isla, D., and R.B. Walter (1994). "Swordtails and Platyfish: Natural Habitat Destruction and Loss of Diversity". *Tropical Fish Hobbyist*.
- Isla, D., Lund, J., Morizot, D., and R.B. Walter (1994). "Platyfish Go South: *Xiphophorus* Genetic Stock Center Moves to Texas". *Tropical Fish Hobbyist*.
- Walter, R.B. (1993) "A Brief Introduction to Oncogenes". *Applied Genetics Quarterly* 1(3):3-4.

Walter, R.B. (1993) "Human Genome Project: An Update". *Applied Genetics Quarterly* 1(2):6.

Peer Reviewed and Invited Publications:

2019

Boswell, M., Lu, Y., Boswell, W., Savage, M., Hildreth, K., Salinas, R., Walter, C.A, and Walter R.B. (2018). Fluorescent Light Incites a Highly Conserved Immune and Inflammatory Genetic Response within Internal and External Organs of Vertebrates (*Danio rerio*, *Oryzias latipes* and *Mus musculus*), *Submitted*.

Childress, W.M., Bosworth, B., Vhesney, E., Walter, R.B., Tiersch, T.R. (2018). On-site Capabilities of a Mobile Laboratory for Sperm Cryopreservation of Blue Catfish (*Ictalurus furcatus*), *Xiphophorus* species, and red Snapper (*Lutjanus campechanus*), *Submitted*

Lu, Y., Boswell, W., Boswell, M., Klotz, B, Kneitz, S., Regneri, J., Savage, M., Mendoza, C., Postlethwait, J., Warren, W.C., Scharl, M., Walter, R.B. (2018). Application of the Transcriptional Disease Signatures (TDSs) to Screen Melanoma-Effective Compounds in a Small Fish Model, *Scientific Reports*, *Scientific Reports*, 9:530-543. doi.org/10.1038/s44158-018-36656-x.

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Lu, Y., Boswell, M., Boswell, W., Kneitz, S., Klotz, B., Regneri, J., Savage, M., Postlethwait, J., Warren, W., Scharl, S., and R.B. Walter (2018). Gene Expression Variation and Parental Allele Inheritance in a *Xiphophorus* Interspecies Hybridization Model, *PLoS Genetics*, December 26, 2018, <https://doi.org/10.1371/journal.pgen.1007875>

Gonzalez, Trevor J., Lu, Y., Boswell, M., Boswell, William, Medrano, G., Walter, S., Ellis, S., Savage, M., Varga, Z.M., Lawrence, C., and R.B. Walter (2018) Fluorescent Light Exposure Incites Acute and 1 Prolonged Immune Responses in Zebrafish (*Danio rerio*) Skin, *Comp. Biochem. & Physiology, Part C. Toxicology/Pharm.*, 208:87-95. <https://doi.org/10.1016/j.cbpc.2017.09.009>

Boswell, M., Boswell, W., Lu, Y., Savage, M., Mazurek, Z., Chang, J., Muster, J., and R.B. Walter (2018). The Transcriptional Response of Skin to Fluorescent Light Exposure in Viviparous (*Xiphophorus*) and Oviparous (*Danio*, *Oryzias*) Fishes. *Comp. Biochem. & Physiology, Part C*, 208:77-86 <https://doi.org/10.1016/j.cbpc.2017.10.003>

Boswell, W.T., Boswell, M., Walter, D.J., Navarro, K.L., Chang, J., Lu, Y., Savage, M.G., Shen, J., and R.B. Walter (2018). Exposure to 4,100 K Fluorescent Light Elicits Sex Specific Transcriptional Responses in *Xiphophorus maculatus* Skin, *Comp. Biochem. & Physiology, Part C*, 208: 94-104 <https://doi.org/10.1016/j.cbpc.2017.09.008>

Klotz, B., Kneitz, S., Regensburger, M., Dannemann, M., Kelso, J., Lu, Y., Boswell W., Postlethwait, J., Warren, W., Kunz, M., Walter, R.B. and M. Scharl (2018). Expression signatures of early-stage and advanced medaka melanomas. *Comp.*

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<https://doi.org/10.1016/j.cbpc.2017.11.005>

- Lu, Yuan, Reyes, J., Walter, S., Gonzalez, T., Medrano, G., Boswell, M., Boswell, W., Savage, S. and R.B. Walter (2018). Characterization of Basal Gene Expression Trends Over a Diurnal Cycle in *Xiphophorus maculatus* Skin, Brain and Liver. *Comp. Biochem. & Physiology, Part C*, 208:2-11, <https://doi.org/10.1016/j.cbpc.2017.11.013>
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- Warren, W.C., Kuderna, L., Alexander, A., Catchen, J., Pérez-Silva, J.G., López-Otín, Víctor Quesada, C., Minx, P., Tomlinson, C., Montague, M., Farias, F.H.G., Walter, R.B., Marques-Bonet, T., Glenn, T., Kieran, T.J., Wise, S.S., Wise Jr., J.P., Waterhouse, R.M., and J.P. Wise, Sr. (2018). The novel evolution of the sperm whale genome. *Genome Biol. Evolution* 9(12):3260-3264. <https://doi.org/10.1093/gbe/evx187>
- Lu, Y., Boswell, M., Boswell, W., Kneitz, S., Hausmann, M., Klotz, B., Regneri, J., Savage, M., Amores, A., Postlethwait, J., Warren, W., Schartl, M., and R. B. Walter (2018). Comparison of *Xiphophorus* and Human Melanoma Transcriptomes Reveals Conserved Pathway Interactions, *Pigment Cell Melanoma Res.*, 2018:1-13, <https://doi.org/10.1111/pcmr.12686> (Cover photo selection)
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